From: Weerakkody, Sunil
To: Leeds, Eric; Wiggins, Jim
Subject: RE: Question w.r.t. NRC"s New Strategic Plan for Out Years for you to ponder
Date: Thursday, March 17, 2011 12:58:14 PM

I'll have a recommendation for you after the weekend.

Sunil

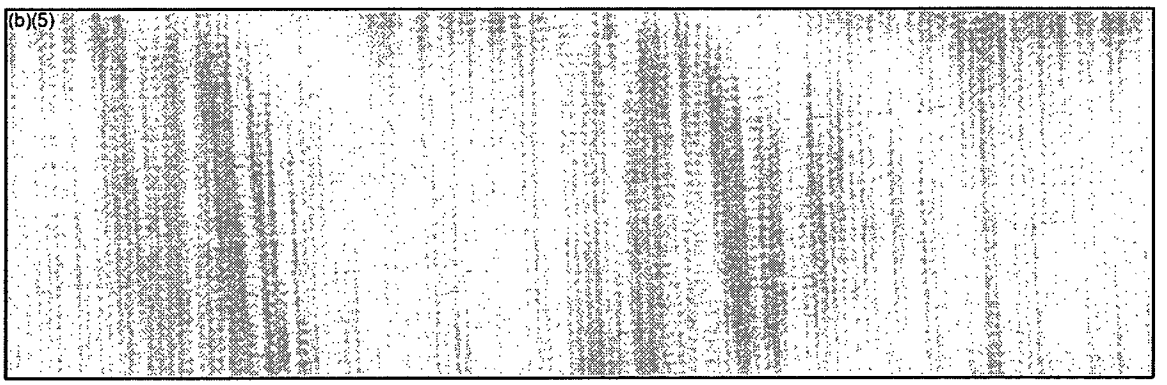
From: Leeds, Eric
Sent: Thursday, March 17, 2011 12:56 PM
To: Wiggins, Jim; Weerakkody, Sunil
Subject: RE: Question w.r.t. NRC's New Strategic Plan for Out Years for you to ponder

(b)(5)

Eric J. Leeds, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
301-415-1270

From: Wiggins, Jim
Sent: Thursday, March 17, 2011 12:51 PM
To: Weerakkody, Sunil
Cc: Leeds, Eric
Subject: RE: Question w.r.t. NRC's New Strategic Plan for Out Years for you to ponder

(b)(5)



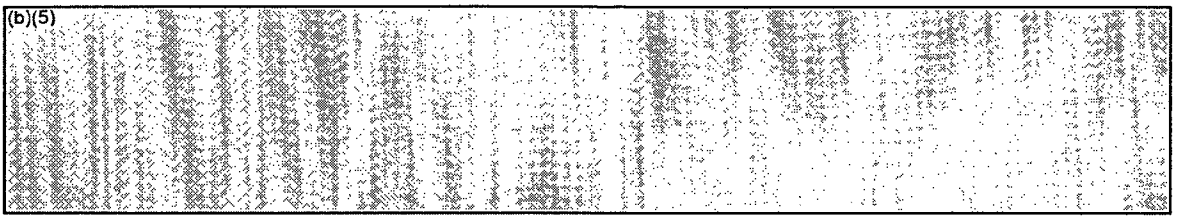
From: Weerakkody, Sunil
Sent: Thursday, March 17, 2011 11:15 AM
To: Leeds, Eric; Boger, Bruce; Grobe, Jack
Cc: Sheron, Brian; Uhle, Jennifer; Wiggins, Jim; Evans, Michele
Subject: Question w.r.t. NRC's New Strategic Plan for Out Years for you to ponder

Eric\Jack\Bruce,

As the NRR representative overseeing the NRC Strategic Plan development activities, I have the following question for you to ponder among yourself and share your views, when time permits, so that I can effectively represent NRR. I will be posing this same question to members of the Steering Group to initiate a dialogue among the members.

BC/191

(b)(5)



Sunil D. Weerakkody
Deputy Director - DRS (Acting)
NRC - RGN I
Tel: 610-337-5128

From: Leeds, Eric
To: Holian, Brian
Cc: Boger, Bruce
Subject: RE: VY...Lic Ren
Date: Thursday, March 17, 2011 2:03:00 PM

Good – see you at 8 am on Monday!

Eric J. Leeds, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
301-415-1270

From: Holian, Brian
Sent: Thursday, March 17, 2011 1:16 PM
To: Leeds, Eric
Cc: Boger, Bruce
Subject: RE: VY...Lic Ren

Eric...How does a first thing in the morning signing strike you...?? Around 8? We are sending a daily note up today stating Monday issuance.

(b)(5) [redacted]

Bruce...Comm plan only has a few questions and answers, but first one does touch on "certificate of public good". That was coordinated with RI. Thanks for checking.

From: Leeds, Eric
Sent: Thursday, March 17, 2011 12:52 PM
To: Holian, Brian
Subject: RE: VY...Lic Ren

Thanks, Brian!

Eric J. Leeds, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
301-415-1270

From: Holian, Brian
Sent: Thursday, March 17, 2011 10:38 AM
To: Lew, David; Dean, Bill; Boger, Bruce; Leeds, Eric
Cc: Galloway, Melanie; Pham, Bo; Burnell, Scott; Dacus, Eugene; Nelson, Robert; Giitter, Joseph; Howe, Allen; Screnci, Diane; Sheehan, Neil; Roberts, Darrell; Wilson, Peter; Spencer, Mary; Pelton, David
Subject: VY...Lic Ren

(b)(5) [redacted]

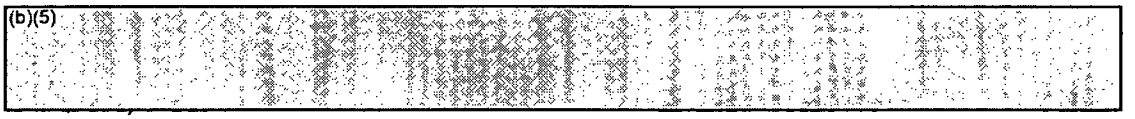
(b)(5) [redacted]

BC/192

to you).

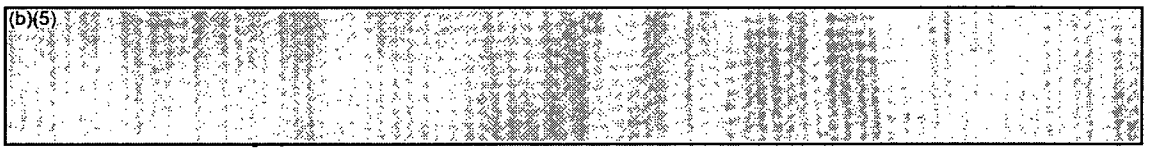
DLR will fax it to the licensee after it is signed.

(b)(5)



The basic answer to questions on "why renew now"....will be that the applicant has satisfied the requirements of Part 54. The staff has completed an extensive review. In light of the event in Japan, the NRC is doing, and will complete, an extensive review – and any regulatory changes (short term or long term) will be applied through Part 50 on the applicable plants (irrespective of whether a plant has gone through license renewal or not).

(b)(5)



- Brian

From: Brown, Frederick
To: Virgilio, Martin; Leeds, Eric; Weber, Michael
Cc: Borchardt, Bill; Boger, Bruce; Grobe, Jack; Ruland, William; Johnson, Michael; Sheron, Brian; Evans, Michele; McHale, John
Subject: Re: NRR Actions: near-term
Date: Thursday, March 17, 2011 2:05:47 PM

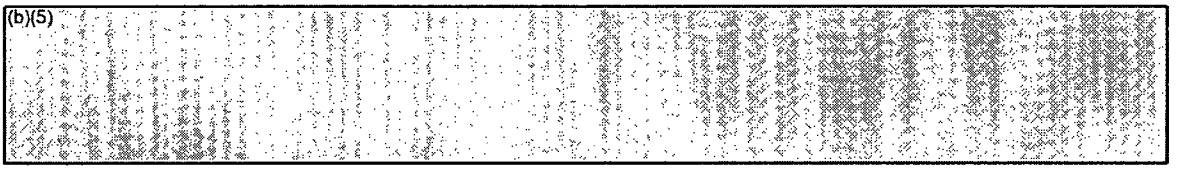
Yep.

Ripe for a new regulatory approach as well (no longer non regulatory).

From: Virgilio, Martin
To: Leeds, Eric; Weber, Michael; Brown, Frederick
Cc: Borchardt, Bill; Boger, Bruce; Grobe, Jack; Ruland, William; Johnson, Michael; Sheron, Brian; Evans, Michele
Sent: Thu Mar 17 06:08:29 2011
Subject: RE: NRR Actions: near-term

Eric

(b)(5)



Marty

From: Leeds, Eric
Sent: Wednesday, March 16, 2011 1:14 PM
To: Virgilio, Martin; Weber, Michael
Cc: Borchardt, Bill; Boger, Bruce; Grobe, Jack; Ruland, William; Johnson, Michael; Sheron, Brian; Evans, Michele
Subject: NRR Actions: near-term
Importance: High

Please see below. NRR has assembled a team, led by an SES manager to evaluate near term actions for the agency's response to the Japanese event. At this time, we are considering inspection as well as a generic communication and a review of "sensitive" licensing actions". I will keep you informed as we go forward I have discussed the current situation in Japan with the RAs and our preliminary thoughts for regulatory actions going forward.

We have also prepared a scheduling note for the commission meeting for next week. We will send it to you.

Eric J. Leeds, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
301-415-1270

BCI 193

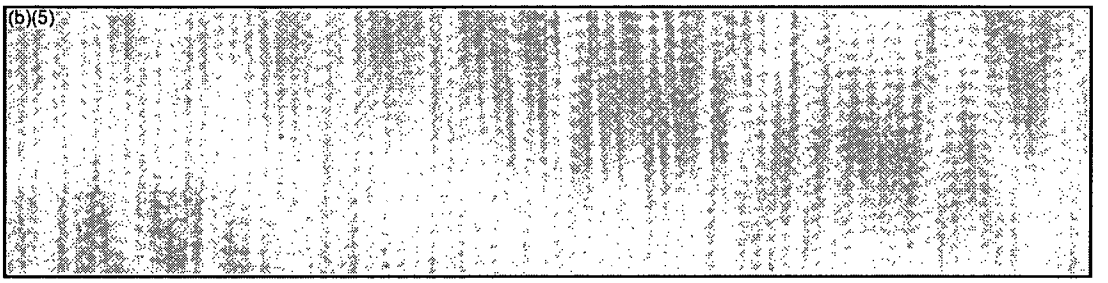
From: Brown, Frederick
Sent: Wednesday, March 16, 2011 11:32 AM
To: Leeds, Eric; Boger, Bruce; Grobe, Jack
Subject: FW: Action: Consider potential on-site activities in near-term
Importance: High

FYI

From: Brown, Frederick
Sent: Wednesday, March 16, 2011 11:17 AM
To: Roberts, Darrell; Clifford, James; Croteau, Rick; Jones, William; Croteau, Rick; Darrell Roberts; James Clifford; Jones, William; Kennedy, Kriss; Shear, Gary; Troy Pruett; West, Steven
Cc: Vegel, Anton; Wilson, Peter; Miller, Chris; Weerakkody, Sunil; OBrien, Kenneth; Reynolds, Steven; Munday, Joel; Moorman, James; Christensen, Harold; Westreich, Barry
Subject: Action: Consider potential on-site activities in near-term
Importance: High

On the DRA call today, I'm going to float the potential for either a smart sample or a TI to look at the following areas:

(b)(5)



If you have thoughts, I'd like to hear them, and you may want to prep your DRAs.

Thanks,
Fred

Beasley, Benjamin

From: Beasley, Benjamin
Sent: Thursday, March 17, 2011 2:34 PM
To: Kauffman, John
Subject: FW: Weekly Report
Attachments: image002.jpg

(b)(5)

From: Wegner, Mary
Sent: Thursday, March 17, 2011 1:53 PM
To: Kauffman, John; Beasley, Benjamin
Subject: Weekly Report

Weekly Report March 14 – 18, 2011

Ongoing major events:

Crystal River 3

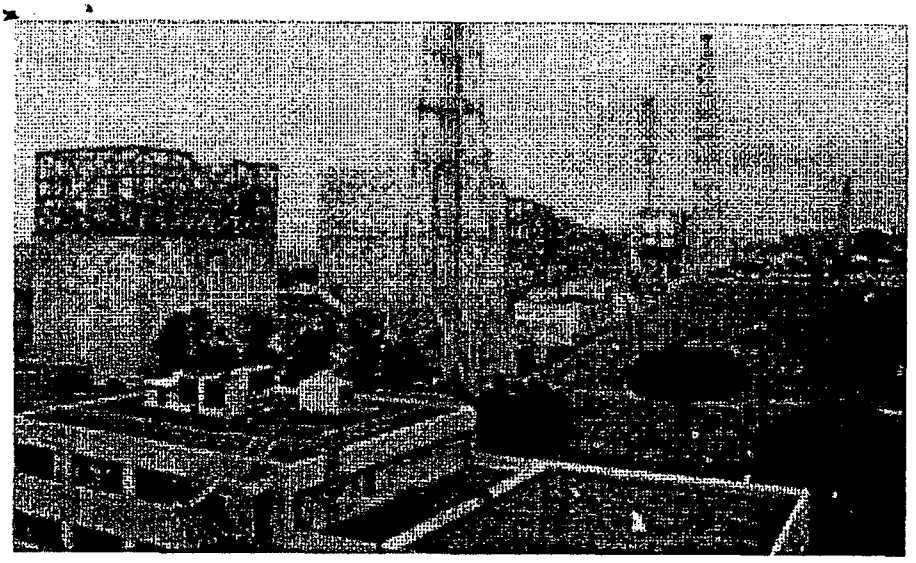
(b)(5)

(b)(5)

Current Events: Earthquake in Japan

Fukushima Daiichi units 1, 2, and 3

BC/194



From: Weber, Michael
To: Virgilio, Martin; Borchardt, Bill
Cc: Casto, Chuck; McDermott, Brian; Wiggins, Jim; Leeds, Eric
Subject: RESPONSE - Assistance requested
Date: Thursday, March 17, 2011 5:44:22 PM

Brian attempted to discuss this with Pete today at the meeting downtown, but could only get to John Kelly, who knew nothing about the idea. Brian shared with John that we appreciate the support, but thought that the team in Japan was working well and we did not want to disturb it by changing the team at this time. John noted that DOE already had a few experts in country. Brian offered to revisit this decision in the future (not specified). I suggested to Brian, if this topic comes up again, (b)(5)

(b)(5)

You should also be aware that Laura Dudes (outgoing RST Director) and Fred Brown (incoming RST (b)(5)

provide appropriate support and guidance. Laura and Fred plan to lean on INPO (as lead coordinator for the industry), and private sector colleagues to do the problem solving and operational planning. This is probably being discussed right now as the team is conducting a conference call with Chuck and other external participants on the mitigating strategies.

From: Virgilio, Martin
Sent: Thursday, March 17, 2011 6:28 AM
To: Borchardt, Bill; Weber, Michael
Cc: Casto, Chuck; McDermott, Brian; Wiggins, Jim
Subject: Assistance requested

Bill/Mike

(b)(5)

time down the road.

We (including Chuck) are working with INPO to identify one individual that has knowledge and field experience in severe accident management strategies and procedures.

Marty

BC/195

From: Leeds, Eric
To: Nelson, Robert
Subject: FYI: EOC MEETINGS
Date: Thursday, March 17, 2011 6:06:00 PM

See below for situational awareness.

Eric J. Leeds, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
301-415-1270

-----Original Message-----
From: Pederson, Cynthia
Sent: Thursday, March 17, 2011 10:13 AM
To: Dean, Bill; McCree, Victor; Leeds, Eric; Collins, Elmo; Satorius, Mark
Cc: Lew, David; Wert, Leonard; Howell, Art; West, Steven; Shear, Gary
Subject: RE: EOC MEETINGS

We are fortunate that we have a little more time than some of you in that our first "meetings" are April 5th and they are open houses. (b)(5) al

(b)(5)

change as events unfold.)

-----Original Message-----
From: Dean, Bill
Sent: Thursday, March 17, 2011 9:08 AM
To: McCree, Victor; Leeds, Eric; Collins, Elmo; Satorius, Mark
Cc: Lew, David; Wert, Leonard; Pederson, Cynthia; Howell, Art
Subject: Re: EOC MEETINGS

(b)(5)

Bill Dean
Regional Administrator
Region I, USNRC
Sent from NRC BlackBerry

----- Original Message -----
From: McCree, Victor
To: Dean, Bill; Leeds, Eric; Collins, Elmo; Satorius, Mark
Cc: Lew, David; Wert, Leonard; Pederson, Cynthia; Howell, Art
Sent: Thu Mar 17 05:28:20 2011
Subject: Re: EOC MEETINGS

Thanks Bill - I understand your concerns, particularly regarding TMI. In fact, during one of my meetings with staff on yesterday, there was a collective groan when I mentioned that TMI would be your first EOC plant.

(b)(5)

BC/196

Vic

This email is being sent from an NRC Blackberry device.

----- Original Message -----
From: Dean, Bill
To: McCree, Victor; Leeds, Eric; Collins, Elmo; Satorius, Mark
Cc: Lew, David
Sent: Wed Mar 16 23:01:50 2011
Subject: RE: EOC MEETINGS

the downside is putting a branch chief, or even an SES manager in a position that they may not be comfortable being in without adequate guidance/direction/information to provide a consistent and approved message. (b)(5) [redacted] (b)(5) [redacted] There is definitely a dichotomy between sites with high interest and what could be expected in terms of protests, media, intervenors, etc. and those that typically receive very little attention. I am suggesting that we ALL have a comfortable feeling that we are appropriately prepared for this evolution. My Branch CHiefs at this point do not feel prepared. Perhaps the recent release of information associated with today;s testimony will help. (b)(5) [redacted] (b)(5) [redacted] events of the past few days.

Additionally, i have asked Eric if there could be materials developed that we all could use to help explain in layman's terms, what has transpired in Japan and he was going to outreach to RES which does well in preparing posters and other similar materials. Not unlike the agency's decision to delay the issuance of the Vermont Yankee license renewal to allow us to appropriately focus on the current events, i feel comfortable in using a similar rationale to delay our assessment meeting a week or so to give us time to be prepared and maybe have in hand some good pictorials that can help explain things.

i included dave lew in the email as he is acting for me the next few days.

From: McCree, Victor
Sent: Wednesday, March 16, 2011 10:33 PM
To: Leeds, Eric; Dean, Bill; Collins, Elmo; Satorius, Mark
Subject: EOC MEETINGS

Gents,

I've been reflecting on our abbreviated conversation today regarding the suggestion to delay the subject meetings. I was unsure where we left the matter..., but given that our EOC meetings are scheduled to begin in 1 week, I wanted to make sure that we're on the same page.

I considered the questions shown below and, after answering them, feel comfortable holding to the current EOC meeting schedule. However, there may be other questions and concerns that ought to be factored into the decision:

(i) What is the downside(s) of holding the EOC meetings as scheduled?

(ii) What, if any, messages would we send to stakeholders if we delay the meetings?

(iii) If we delay the meetings, how long should we wait to reschedule them and/or what information should we possess before holding the meetings?

Your thoughts?

Vic

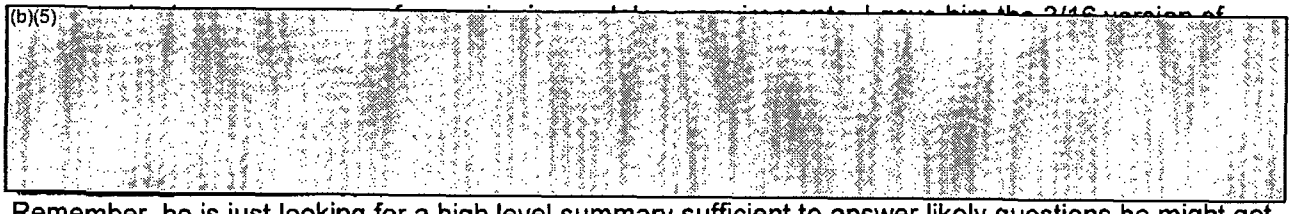
This email is being sent from an NRC Blackberry device.

Murphy, Andrew

From: Sheron, Brian
Sent: Thursday, March 17, 2011 6:52 PM
To: Case, Michael; Richards, Stuart; Kammerer, Annie; Ake, Jon; Murphy, Andrew
Cc: Weber, Michael
Subject: Seismic

1.) Secretary Chu at DOE is scheduled to be interviewed on 5 talk shows Sunday morning. He has

(b)(5)



Remember, he is just looking for a high level summary sufficient to answer likely questions he might get during the interviews.

2.) Can you please e-mail the latest version of your seismic Q&As to Mike Weber.

Thanks.

BC/197

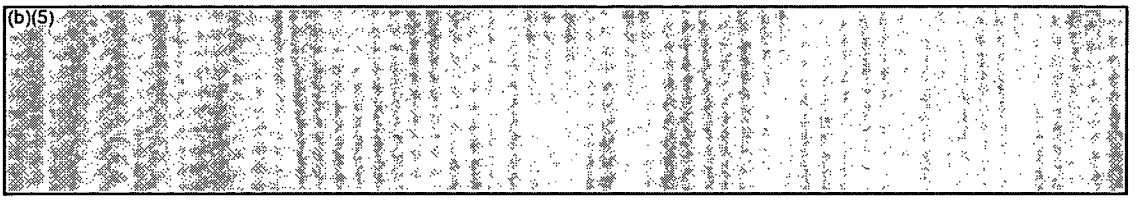
From: Santiago, Patricia
To: Coyne, Kevin; Scott, Michael; Dion, Jeanne
Cc: Gibson, Kathy; Armstrong, Kenneth
Subject: RE: Q&A to support OCM Brief on Japan
Date: Thursday, March 17, 2011 7:32:04 PM

Will do
thanks

From: Coyne, Kevin
Sent: Thursday, March 17, 2011 7:31 PM
To: Santiago, Patricia; Scott, Michael; Dion, Jeanne
Cc: Gibson, Kathy; Armstrong, Kenneth
Subject: RE: Q&A to support OCM Brief on Japan

Pat –

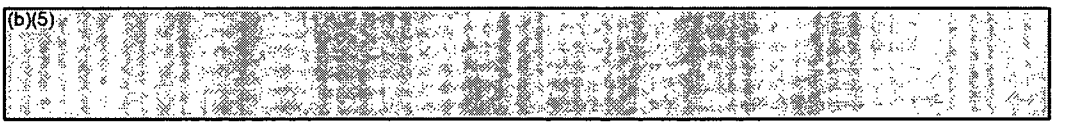
(b)(5)



Kevin

From: Santiago, Patricia
Sent: Thursday, March 17, 2011 7:25 PM
To: Scott, Michael; Dion, Jeanne
Cc: Gibson, Kathy; Armstrong, Kenneth; Coyne, Kevin
Subject: Q&A to support OCM Brief on Japan

(b)(5)



If NRR continues to need support on SAMGs, I will talk to Tina at 9am. The last set of Qs&As from NRR did have a sentence in the document.

Thanks,

Pat

Patricia A. Santiago
Chief, Special Projects Branch
Division of Systems Analysis
Office of Nuclear Regulatory Research
Phone- 301-251-7982
Fax- 301-251-7426
Patricia.Santiago@nrc.gov

BC/198

Dean, Bill

From: Dean, Bill
Sent: Thursday, March 17, 2011 8:23 PM
To: Roberts, Darrell; Lew, David
Cc: Clifford, James; Powell, Raymond
Subject: Re: Recommendation for Region I approach to conducting Annual Assessment Meetings

Good.
Bill Dean
Regional Administrator
Region I, USNRC
Sent from NRC BlackBerry

From: Roberts, Darrell
To: Dean, Bill; Lew, David
Cc: Clifford, James; Powell, Raymond
Sent: Thu Mar 17 18:52:23 2011
Subject: RE: Recommendation for Region I approach to conducting Annual Assessment Meetings

(b)(5) I'll proceed to notify the BCs that this is what we're going with.

DJR

From: Dean, Bill
Sent: Thursday, March 17, 2011 6:49 PM
To: Lew, David; Roberts, Darrell
Cc: Clifford, James; Powell, Raymond
Subject: Re: Recommendation for Region I approach to conducting Annual Assessment Meetings

(b)(5)
Bill Dean
Regional Administrator
Region I, USNRC
Sent from NRC BlackBerry

From: Lew, David
To: Roberts, Darrell; Dean, Bill
Cc: Clifford, James; Powell, Raymond
Sent: Thu Mar 17 18:38:10 2011
Subject: RE: Recommendation for Region I approach to conducting Annual Assessment Meetings

(b)(5)
ongoing NRC response to the Japanese event.

From: Roberts, Darrell
Sent: Thursday, March 17, 2011 6:26 PM
To: Lew, David; Dean, Bill
Cc: Clifford, James; Powell, Raymond
Subject: Recommendation for Region I approach to conducting Annual Assessment Meetings

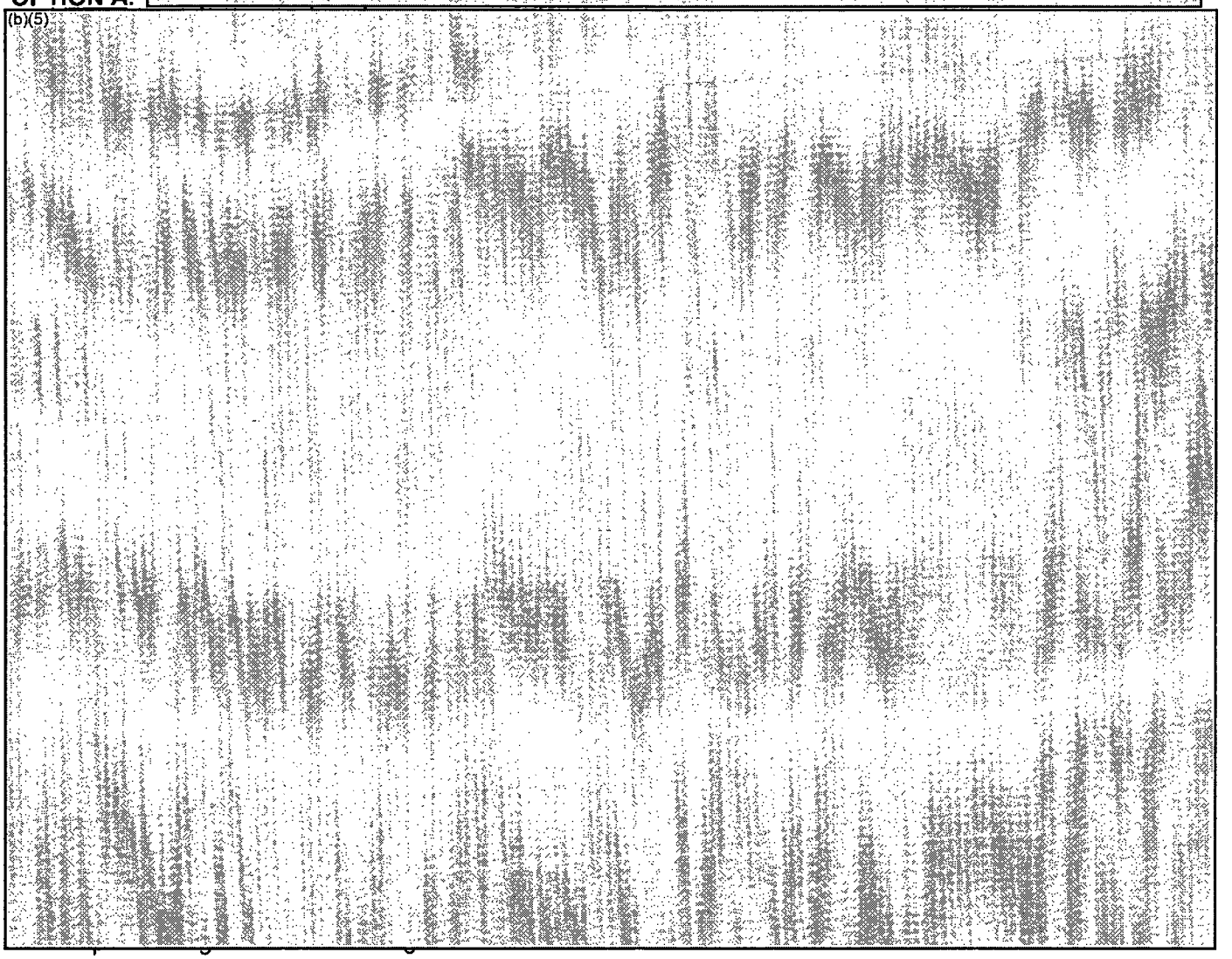
BC/199

Bill/Dave,

I recommend the following approach for region I regarding the plans for conducting our Annual Assessment Meetings/Open Houses in the near term:

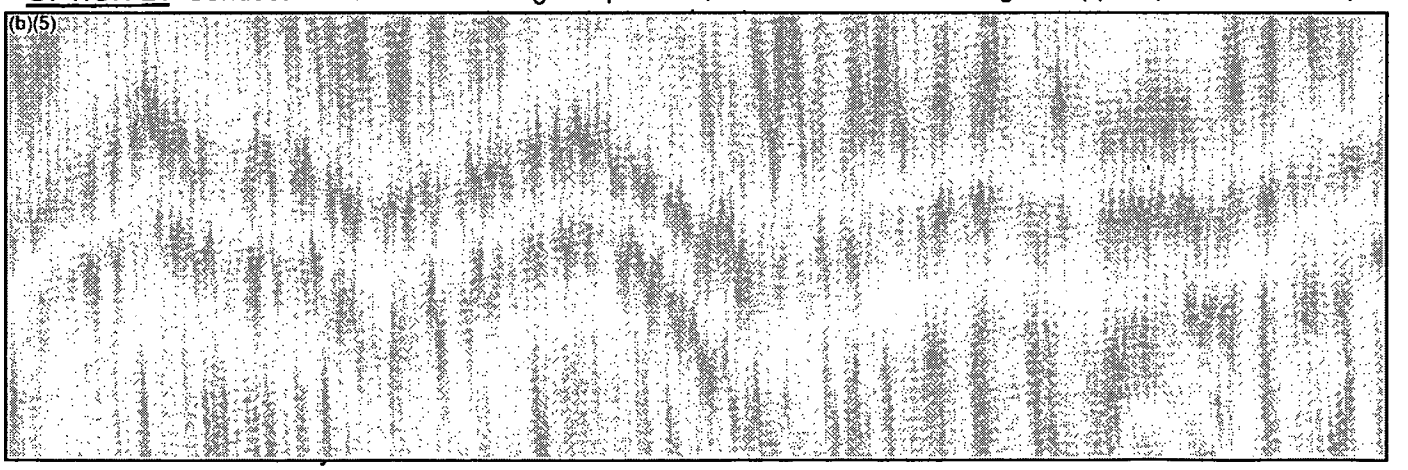
OPTION A: (b)(5)

(b)(5)



OPTION B: (b)(5)

(b)(5)



OPTION C: (b)(5) [redacted]

(b)(5) [redacted]

(b)(5) [redacted]

DJR

From: Brown, Frederick
To: Leeds, Eric; Boger, Bruce; Grube, Jack
Cc: Howe, Allen; Westreich, Barry
Subject: Vision.docx
Date: Friday, March 18, 2011 9:33:04 AM
Attachments: Vision.docx
Importance: High

Eric,

I spoke this morning about the importance of having a foundation to build upon as we move forward in response to the situation in Japan.

Attached is a one-page conceptual model of what the top-tier of such plan might look like. There is no rocket science here, and I'm sure that the work going into the Commission meeting has passed this by already.

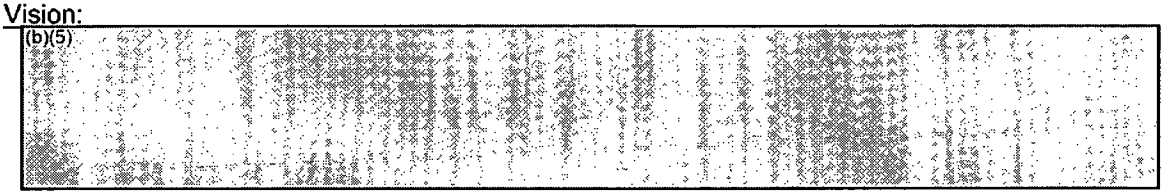
What a one-pager (updated by the folks with real knowledge and vision) could provide would be a communication tool and a "consistency" standard that we could use for ourselves and our staff.

Just a thought for your consideration.

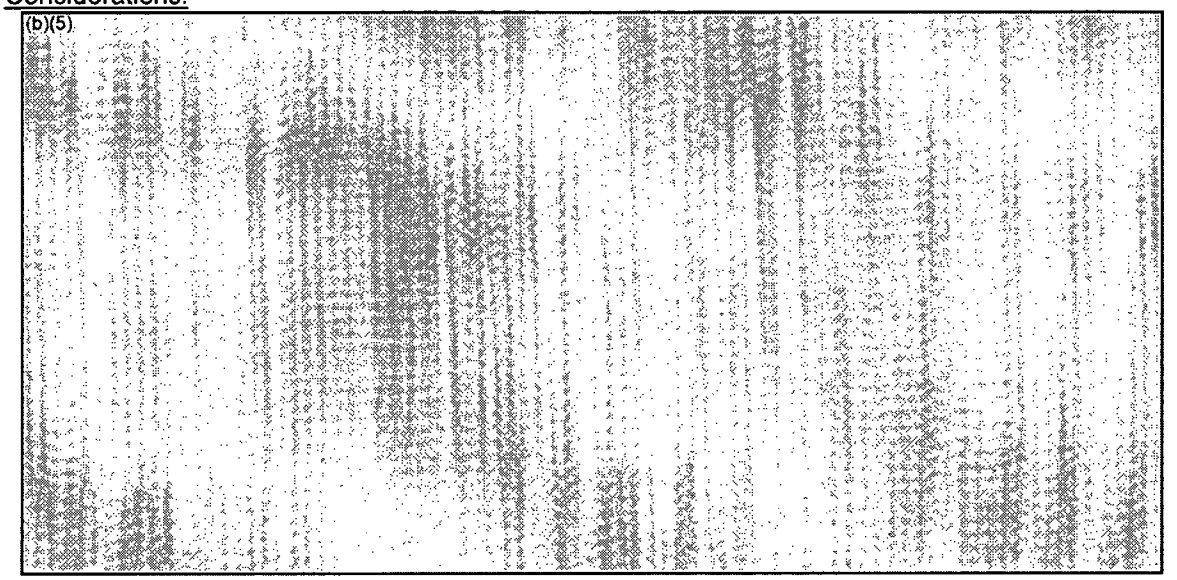
Fred

BC|200

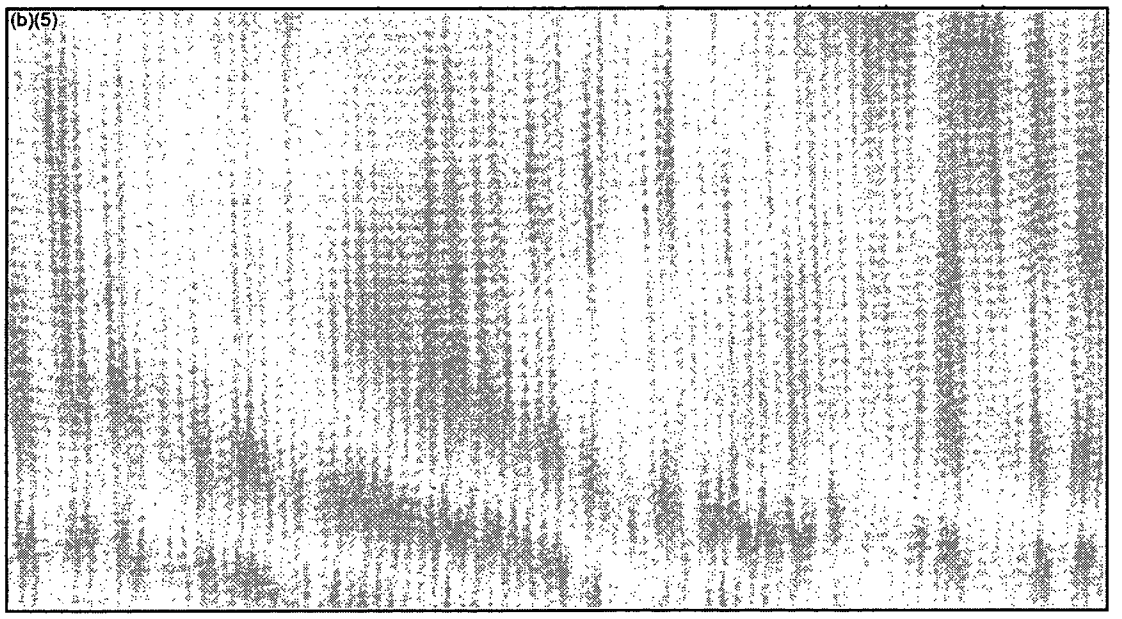
Vision:



Considerations:



Potential framework for long-term, integrated strategy:



From:	Doane, Margaret
To:	Coggins, Angela; Batkin, Joshua
Cc:	Virgilio, Martin; Brenner, Eliot; Borchardt, Bill
Subject:	FW: WikiLeaks: 09 UNVIE 536
Date:	Friday, March 18, 2011 10:00:42 AM

Not sure if we will get asked about this. But, thought you should know.
Margie

From: Schwartzman, Jennifer
Sent: Friday, March 18, 2011 9:51 AM
To: Doane, Margaret; Mamish, Nader
Cc: Fragoyannis, Nancy
Subject: URGENT URGENT Fw: WikiLeaks: 09 UNVIE 536

FYI URGENT
Sent from an NRC Blackberry

From: Shaffer, Mark R <ShafferMr@state.gov>
To: LIA02 Hoc
Cc: Schwartzman, Jennifer
Sent: Fri Mar 18 09:47:06 2011
Subject: Fw: WikiLeaks: 09 UNVIE 536

(b)(5)

From: Hall-Godfrey, Jennifer J
To: Stratford, Richard J; Burkart, Alex R; Connor, Julie G; Milich, Daniel S; Wong, Yvette M; Hanson, Evan A; Cook, Nerissa J; Cooper, Kurtis A; Schlachter, Mark M; Clark, Jeanne L
Cc: Scheland, Mark DL; Cooper, Nathan J; Shaffer, Mark R; Wood, Robert A
Sent: Fri Mar 18 09:34:37 2011
Subject: WikiLeaks: 09 UNVIE 536

(b)(5)

(b)(5)

Reuters: Japanese power companies hid nuclear safety problems: WikiLeaks

BC 201

March 17, 2011

Tom Miles

HEINZ-PETER BADER/REUTERS

BEIJING—Eighteen months before Japan's radiation crisis, U.S. diplomats had lambasted the safety chief of the world's atomic watchdog for incompetence, especially when it came to the nuclear power industry in his homeland, Japan.

Cables sent from the U.S. embassy in Vienna to Washington, which were obtained by WikiLeaks and reviewed by Reuters, singled out Tomihiro Taniuchi, until last year head of safety and security at the International Atomic Energy Agency (IAEA).

"For the past 10 years, the department has suffered tremendously because of (deputy director general) Taniguchi's weak management and leadership skills," said one dispatch on Dec. 1, 2009.

"Taniguchi has been a weak manager and advocate, particularly with respect to confronting Japan's own safety practices, and he is a particular disappointment to the United States for his unloved-step-child treatment of the Office of Nuclear Security," said another, which was sent on July 7, 2009.

The IAEA does not comment on the contents of leaked cables.

The evidence of concern about the Japanese national surfaced as his country scrambled to avert a lethal spread of radiation from earthquake-damaged nuclear reactors north of Tokyo.

Japan's crisis has brought scrutiny of its nuclear authorities and, in particular, the operator of the stricken reactors, which has a history of falsifying data at its plants.

Separate cables quoted a Japanese lawmaker as telling visiting U.S. officials in October 2008 that power companies in Japan were hiding nuclear safety problems and being given an easy ride on commitments to renewable energy by the government.

Taro Kono, a supporter of renewable energy who in 2009 bid unsuccessfully for leadership of his Liberal Democratic Party (LDP), also said Japan had no solution for nuclear waste storage. He asked if there was anywhere appropriate to store waste given that Japan was the "land of volcanoes."

Kono was not immediately available for comment.

TOKYO ELECTRIC HAS ROCKY PAST

The operator of the Fukushima Daiichi plant now at the centre of the crisis – the Tokyo Electric Power Co (TEPCO) – has had a rocky past in an industry plagued by scandal.

Five TEPCO executives resigned in 2002 over suspected falsification of nuclear plant safety records and five reactors were forced to stop operations.

In 2006, the government ordered TEPCO to check past data after it reported finding falsification of coolant water temperatures at its Fukushima Daiichi plant in 1985 and 1988, and that the tweaked data was used in mandatory inspections at the plant, which were completed in October 2005.

The risk of earthquakes and tsunamis was already well known before last Friday's massive earthquake, but many of Japan's nuclear power plants, including the now-crippled Fukushima complex, were built before the most modern safety standards.

An unnamed IAEA official told the G8 Nuclear Safety and Security Group in December 2008 that guidelines for seismic safety had only been revised three times in the past 35 years and that the IAEA was re-examining them, another WikiLeaks cable showed.

"Also, the presenter noted recent earthquakes in some cases have exceeded the design basis for some nuclear plants, and that this is a serious problem that is now driving seismic safety work," the cable said.

'EVERYTHING IS A SECRET'

Leaks of radioactive steam and workers contaminated with radiation are just part of the disturbing catalogue of accidents that have occurred over the years and been belatedly reported to the public, if at all, the Associated Press reports.

In one case, workers hand-mixed uranium in stainless steel buckets, instead of processing by machine, so the fuel could be reused, exposing hundreds of workers to radiation. Two later died.

"Everything is a secret," said Kei Sugaoka, a former nuclear power plant engineer in Japan who now lives in California. "There's not enough transparency in the industry."

Sugaoka worked at the same utility that runs the Fukushima Dai-Ichi nuclear plant where workers are racing to prevent a full meltdown following Friday's 9.0 magnitude quake and tsunami.

In 1989 Sugaoka received an order that horrified him: edit out footage showing cracks in plant steam pipes in video being submitted to regulators. Sugaoka alerted his superiors in

the Tokyo Electric Power Co., but nothing happened. He decided to go public in 2000. Three Tepco executives lost their jobs.

Competence and transparency issues aside, some say it's just too dangerous to build nuclear plants in an earthquake-prone nation like Japan, where land can liquefy during a major temblor.

"You're building on a heap of tofu," said Philip White of Tokyo-based Citizens' Nuclear Information Center, a group of scientists and activists who have opposed nuclear power since 1975.

"There is absolutely no reason to trust them," he said of those that run Japan's nuclear power plants.

REPORT WANTED PLANTS FAR FROM SEA

IAEA Director General Yukiya Amano said on Wednesday before leaving for Japan that the agency had been trying continuously to help improve the safety of nuclear plants against earthquakes.

A draft IAEA report on safety standards, published in October 2009, recommended that nuclear power plants be located more than 10 kilometres from the sea or ocean shoreline, or more than one km from a lake or fjord shoreline; or at an elevation of more than 50 metres from the mean water level.

"To my knowledge, all of the nuclear power plants in Japan are located quite close to the ocean," said Daniel Aldrich, author of *Site fights*, a book about how decisions were taken on where to build nuclear power plants in Japan and elsewhere.

"This is for two reasons: 1) normally, cooling pipes carry in seawater through the reactor unit and cool it off, and then dump the warmer water back in the ocean (these pipes are not functioning normally at this point), and 2) these areas are remote, far from high population density areas, and they have the least resistance from civil society," he said in emailed comments.

The latest IAEA recommendations are far more stringent than the original standards set for Japanese plants. The six reactors at the Daiichi facility were commissioned between 1971 and 1979, while two other Japanese nuclear reactors date back to 1970.

"An anomalous magnitude 9.0 scale is far beyond the assumed safety standard when Fukushima Daiichi Nuclear Power Station started up forty years ago," Yu Shibutani, director of Energy Geopolitics Ltd of Japan, said in an email to Reuters.

"The tsunami walls either should have been built higher, or the generators should have been placed on higher ground to withstand potential flooding, but it has failed.

"The accident exposes shortcomings in risk analysis as well as in engineering, and also the plant didn't meet safety standards in both quake and tsunami wall."

Jennifer Hall Godfrey
Public Affairs Officer
U.S. Mission to International Organizations
Vienna, Austria

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+43-1-31339-4726
http://vienna.usmission.gov

From: Marshall, Jane
Sent: Friday, March 18, 2011 12:08 PM
To: ET05 Hoc
Subject: Fw: ACTION: Daily Tasks

Sent from my NRC Blackberry

From: RMTPACTSU_ELNRC <RMTPACTSU_ELNRC@ofda.gov>
To: PMT01 Hoc; Hoc, PMT12; PMT09 Hoc; LIA11 Hoc; Marshall, Jane; Gott, William
Sent: Fri Mar 18 12:05:08 2011
Subject: ACTION: Daily Tasks

Can the PMT help us with a paragraph on risks (see e-mail below)? We will run what is provided by HHS folks here at USAID.

From: RMTPACTSU_RM
Sent: Friday, March 18, 2011 11:22 AM
To: RMTPACTSU_DMP; RMTPACTSU_DMO; RMTPACTSU_INC; RMTPACTSU_ELNRC; RMTPACTSU_PRO
Cc: RMTPACTSU_HHS
Subject: FW: Daily Tasks

FYI.

Mike, per our discussion earlier, can you guys draft up a paragraph to help us better understand risks on the ground associated with the situation. Looping in also our HHS colleagues.

Gavi, you have 2 and 3.

Rhonda/RG, can you work on 4?

Thanks,
Kathleen

From: RMTPACTSU_RM
Sent: Friday, March 18, 2011 11:20 AM
To: Lindborg, Nancy (DCHA/AA) [USAID]; Bartolini, Mark (DCHA/OFDA) [USAID]
Cc: Guilarte, Mileydi (DCHA/AA) [USAID]; Jaff, Elizabeth (AID/A) [USAID]
Subject: Daily Tasks

Nancy,

Read out from our meeting this morning:

(b)(5)

BC/202

(b)(5)

5. Leg/Media update

(b)(5)

6:00am
6:30am
7:00am
9:00am
2:00pm
6:00pm
8:00pm

(b)(5)

Kathleen Martin
Night Response Manager
Pacific Tsunami Response Management Team
rmtpactsu@ofda.gov
202-712-0039

From: Leeds, Eric
To: Evans, Michele; Mamish, Nader
Subject: FW: Specialized support for Japanese event
Date: Friday, March 18, 2011 12:28:00 PM

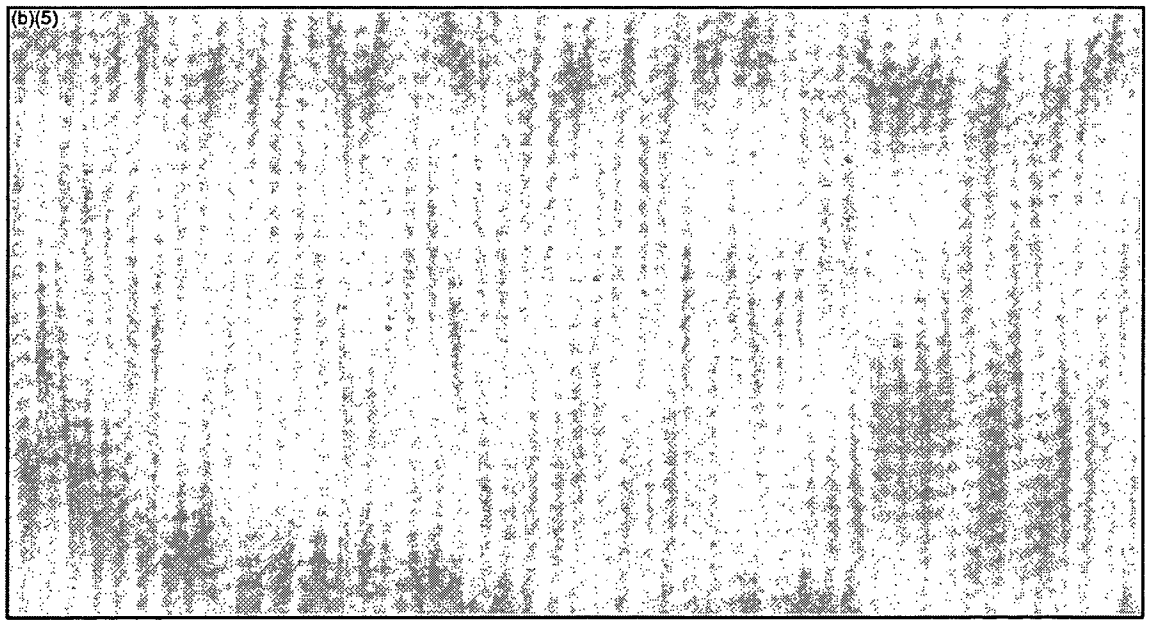
Eric J. Leeds, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
301-415-1270

From: Kokajko, Lawrence
Sent: Friday, March 18, 2011 11:24 AM
To: Ruland, William
Cc: Haney, Catherine; Dorman, Dan; Leeds, Eric; Mohseni, Aby; Davis, Jack; Cao, Tianqing; Hill, Brittain; McCartin, Timothy; Compton, Keith; Rubenstone, James
Subject: Specialized support for Japanese event

Bill:

Cathy asked me to provide you names of those who have specialized expertise that might be useful in responding to the Japanese event on an as needed bases. These names are also on the list provided to the offices by Beth Doolittle earlier.

(b)(5)



BC/203

Beasley, Benjamin

From: Beasley, Benjamin
Sent: Friday, March 18, 2011 1:17 PM
To: Khanna, Meena
Cc: Kauffman, John; Stutzke, Martin; Coyne, Kevin; Ake, Jon
Subject: RE: Highlights of GI-199 and Communications Plan

Meena,

I am going to be a little picky to try to avoid confusion. In your email to Eric below, you refer to the Screening Panel. It should be the Safety / Risk Assessment Panel. The problem is that the GI Program has a Screening stage and screening panels before the Safety / Risk Assessment stage. So, although it was a screening effort in the general sense (and I have described it that way to outsiders), it really is the Safety / Risk Assessment and the conclusions of the Safety / Risk Assessment Panel that supports all the current discussion.

Let us know how we can help.

Ben

From: Khanna, Meena
Sent: Friday, March 18, 2011 12:07 PM
To: Ake, Jon; Beasley, Benjamin
Cc: Uhle, Jennifer
Subject: FW: Highlights of GI-199 and Communications Plan

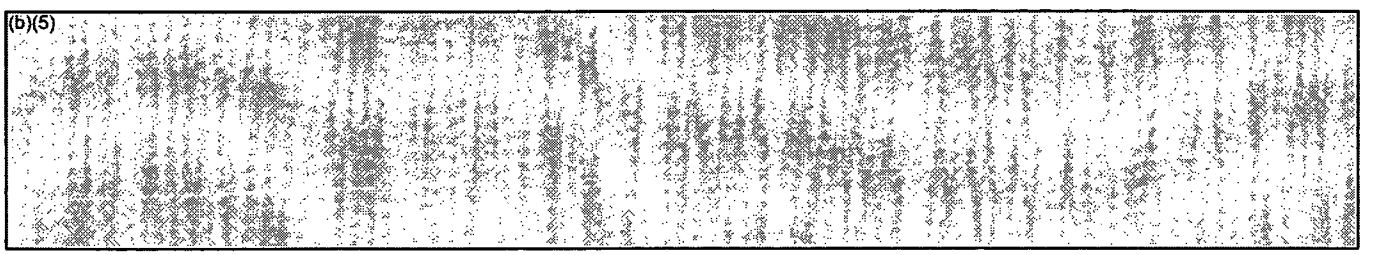
Fyi...

From: Johnson, Michael
Sent: Friday, March 18, 2011 12:05 PM
To: Chokshi, Nilesh; Khanna, Meena; Leeds, Eric; Uhle, Jennifer; Sheron, Brian
Cc: Manoly, Kamal; Wilson, George; Hiland, Patrick; Skeen, David; Giitter, Joseph; Meighan, Sean; Nguyen, Quynh; Flanders, Scott; Holahan, Gary
Subject: Re: Highlights of GI-199 and Communications Plan

Please reach out to RES on this. RES (Jennifer,etc.) has been briefing the Hill on this.
From my blackberry.

From: Chokshi, Nilesh
To: Khanna, Meena; Leeds, Eric
Cc: Manoly, Kamal; Wilson, George; Hiland, Patrick; Skeen, David; Giitter, Joseph; Meighan, Sean; Nguyen, Quynh; Flanders, Scott; Holahan, Gary; Johnson, Michael
Sent: Thu Mar 17 16:13:54 2011
Subject: RE: Highlights of GI-199 and Communications Plan

(b)(5)



I will provide more information to those of us are meeting tomorrow to think about Qs and As at the briefing.

BC/204

Nilesh

From: Khanna, Meena
Sent: Thursday, March 17, 2011 3:25 PM
To: Leeds, Eric
Cc: Manoly, Kamal; Wilson, George; Chokshi, Nilesh; Hiland, Patrick; Skeen, David; Giitter, Joseph; Meighan, Sean; Nguyen, Quynh
Subject: Highlights of GI-199 and Communications Plan

Eric,

As requested, here are some highlights regarding GI-199, which includes the timeline for the issuance of the generic letter. Also attached to the email is the GI-199 Communication Plan.
Pls. contact either George or myself if you need any further information. Thanks.

GENERIC ISSUE 199, "IMPLICATIONS OF UPDATED PROBABILISTIC SEISMIC HAZARD ESTIMATES IN CENTRAL AND EASTERN UNITED STATES ON EXISTING PLANTS"

Objective of GI-199

The objective of the GI-199 Safety/Risk Assessment was to perform a conservative, screening-level assessment to evaluate if further investigations of seismic safety for operating reactors in the central and eastern U.S. (CEUS) are warranted consistent with NRC directives.

- The results of the GI-199 safety risk assessment should not be interpreted as definitive estimates of plant-specific seismic risk.
- The nature of the information used (both seismic hazard data and plant-level fragility information) make these estimates useful only as a screening tool. The NRC does not rank plants by seismic risk.

Key Messages from the GI-199 Communications Plan (slightly revised) are:

(1) In August 2010, the Safety/Risk Assessment for GI-199 was completed. That assessment found that operating nuclear power plants are safe: Plants have adequate safety margin for seismic issues. The NRC's Safety/Risk Assessment confirmed that overall seismic risk estimates remain small and that adequate protection is maintained.
(2) Though still small, some seismic hazard estimates have increased: Updates to seismic data and models indicate increased seismic hazard estimates for some operating nuclear power plant sites in the Central and Eastern United States.
(3) Assessment of GI-199 will continue: Plants are safe (see key message 1), but the NRC has separate criteria for evaluating whether plant improvements may be imposed. The NRC's Safety/Risk Assessment used readily available information and found that for about one-quarter of the currently operating plants, the estimated core damage frequency change is large enough to warrant further attention. Action may include obtaining additional, updated information and developing methods to determine if plant improvements to reduce seismic risk are warranted.

Note: GI-199 Communication Plan is available in ADAMs: ML081850477.

Status of Operating Plants and Need of Additional Actions due to Japanese Event:

- Currently operating nuclear plants in the United States remain safe, with no need for immediate action.
- This determination is based on NRC staff reviews of updated seismic hazard information and the conclusions of the Generic Issue 199 ~~Screening~~ Safety/Risk Assessment Panel.
- Existing plants were designed with considerable margin to be able to withstand the ground motions from the "deterministic" or "scenario earthquake" that accounted for the largest earthquake expected in the area around the plant.

- During the mid-to late-1990s, the NRC staff reassessed the margin beyond the design basis as part of the Individual Plant Examination of External Events (IPEEE) program.
- The results of the GI-199 assessment demonstrate that the probability of exceeding the design basis ground motion may have increased at some sites, but only by a relatively small amount. In addition, the Safety/Risk Assessment stage results indicate that the probabilities of seismic core damage are lower than the guidelines for taking immediate action.
- In summary, US plants are designed for appropriate earthquake levels and are safe. As addressed above, the NRC is conducting a program called Generic Issue 199, which is reviewing the adequacy of the earthquake design of US NPPs in central and eastern North America based on the latest data and analysis techniques. The NRC will look closely at all aspects of the response of the plants in Japan to the earthquake and tsunami to determine if any actions need to be taken in US plants and if any changes are necessary to NRC regulations.

Timeline for Preparation and Issuance of GI-199 Generic Letter:

- The NRC is working on developing a Generic Letter (GL) to request information of all affected plants (96 plants that are east of the Rockies).
- The GL is planned to be issued in draft form within the next 2 months to stimulate discussions with industry in a public meeting.
- Process will be followed, i.e., Committee to Review Generic Requirements, Advisory Committee on Reactor Safeguards Meeting and then GL will be issued as a draft for formal public comments (60 days), followed by a second meeting with ACRS.
- We expect to issue the GL by the end of this calendar year, as the new consensus seismic hazard estimates become available. (This effort is being coordinated with US NRC, DOE, EPRI, and USGS).
- The information from licensees will likely require 3 to 6 months to complete. Staff's review will commence after receiving licensees' responses. Based on staff's review, a determination can be made regarding cost beneficial backfits where it can be justified.

From: Kuritzky, Alan
To: Wood, Jeffery
Cc: Coyne, Kevin; Appignani, Peter
Subject: PRAB turnover
Date: Friday, March 18, 2011 5:15:39 PM
Attachments: Acting - Mar 2011.docx

Jeff,

Attached is the latest tracking list for the branch. Note, it doesn't look like anything else is required of us for the Commission brief on Monday morning. There are still a few actions that I will take care of (the APP input, the OpPlan and Performance Plan feedback, a SPAR request letter, and review of Gabe Taylor's slides for his WGRisk trip). If there are any other items you need help with or have questions on, just stop by.

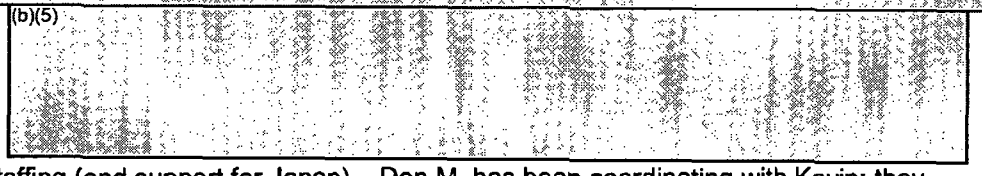
Good luck,
Alan

BC/205

Tracking List

(Also, refer to Kevin's email on 2/28/2011)

General:

- APP (3rd/4th Quarter) – all spending plans need to be updated in ROMA and need to provide remaining FY11 funding needs for all JCNs by 3/22 – **Alan has lead**
- Performance report and OpPlan update – information due to Jose Ibarra by 3/30 – Don requested input from Branch on 2/28; Alan requested input on 3/14 – feedback received from Alan, Jeff, Alysia, Pete, Don, Maggie, Michelle, Selim (need: Walt); Don's input is attached – **Alan has lead**
- ACRS biennial review – need to update spreadsheet for all JCNs by 3/28
- Green tickets anticipated to respond to Congressional correspondence
- NRO dialogue ongoing about FY '13 budget for new reactors – Kevin has been covering this for PRAB
- Dam failure IN revision from NRR – *Kevin sent RES feedback on 3/15 (meeting w/Fernando set up for 3/16)*
- GG-14 vacancy: Alan and Gary are handling interviews.
- Include both WGRisk trips (Coyne and Taylor) in POW on 3/24 (copy info from previous POW)
- (b)(5)
  - (b)(5)
  - 
- IRC staffing (and support for Japan) – Don M. has been coordinating with Kevin; they have provided an initial list of names for the IRC.
- Euratom/the EU's Joint Research Centre has requested a meeting on 4/14 to discuss several topics – Jeff Dehn is coordinating; Don H. relayed his interest to participate in discussions on ASAMPSA2, TH codes, SFP storage, and accident management.
- Piping reliability methodology – Jeff, Michelle, and Charlie are all working on this
- SAPHIRE 8 Rollout (this is also a topic of discussion for bi-weekly DIRS/DRA/RES calls)
  - E-book support being handled by Pete – still a lot of churn on the NRR/Region front (won't be used as a early Phase 2 screening tool per Rani)
  - Lots of ongoing debate about treatment of special initiators and capturing the on-the-margins aspects of the Phase 2 notebooks
  - May 11-12 webinar training of residents (may need more)
  - Proper truncation limit (and its effect on S8 runtime) continues to persist as an issue – via Pete, INL is re-verifying CDF convergence at 1e-11 for SDP/MD8.3/ASP applications – latest salvo was by Pete on 3/4
  - See Kevin's 2/28 email for list of pilot sites
- Travel effects from the CR (see Kevin's 3/2 email for more info)
  - trips approved: Kevin (WGRisk)

- in limbo: Charlie (ASME Nuclear Design Training) – see notes under "Charlie"
- in limbo: Selim (Progress Energy HQ for Harris AHZ model) – Kevin formally requested PMDA authorization on 3/4 – *will follow NRR's lead*
- in limbo: Michelle (EDG course in Wisconsin) 4/4-4/8
- in limbo: Maggie (training) 4/18-4/29

Alan:

- Digital I&C Taxonomy WGRisk item – Gabe is the lead and will be in Paris on 3/28-29

Alysia:

- Coordinating June Halden Board Meeting – to be held at Twinbrook Hilton (may need funds from B7488); Agenda will need to be run by Doug/Brian once it is finalized
- OEDO is polling Commission offices for interest in attending fall Program Group meeting – Chairman has declined (Apostolakis has anecdotally expressed interest)

Charlie:

- Travel:
  - ASME Nuclear Design Training – 3/21-25 – in limbo, but training fees of $2K+ already paid...authorization will likely go through DE and DE is currently deciding what to do (POC = Bret Rini) – *Charlie is in charge of meeting and will probably cancel since it is in Tokyo*
- Validating C-SGTR tube failure probability calculator
- Piping reliability task (mentioned above)
- Coming up to speed on PRA/SAPHIRE
- Check periodically to make sure he is gainfully employed

Dan:

- Remaining IOUs (as of 2/28/11):
  - File certification for N6133
  - SAPHIRE 8.0.7.14 back to the CTF – see Kevin's 2/28 email for additional background – *no feedback as of 3/16*
  - Review of Acceptance Test Plan and Software Project Plan – Dan is currently doing this (it's not Jeff's action) – *Jeff will check on status (3/16)*

Don:

- Annual leave: 3/28-31
- N6780 (Adv L2/3) - has roughly $200K in FY 10 carryover; RES FO/PMDA seem fine with us with no intent to deobligate
- SPAR-ICBM – *request for 189 was sent out on 3/16*
  - RASP UNR Update – See Kevin's 2/28 email for additional background – I've let Don/Sandy know that I'm ready whenever they are

Jeff:

- Travel:

- ICDE – Paris – early April – *just waiting for OCFO approval*
- WGRisk PRA in Design Workshop – workshop is in June; Jeff will be handling the logistics
- Advanced reactor support:
  - Closing out existing contracts and transmitting products to NRO
  - Scoping new follow-on contracts
  - Developing UNR
- LTR items – scoping
  - Dan sent his thoughts on the "advanced PRA" piece on 2/28 (forwarded email from Kevin) – this may turn out to be Don's project if Jeff isn't comfortable with workload
- SAPHIRE 8 request from Calloway – *received Kevin's OK on 3/16; Jeff to authorize INL*

Kevin:

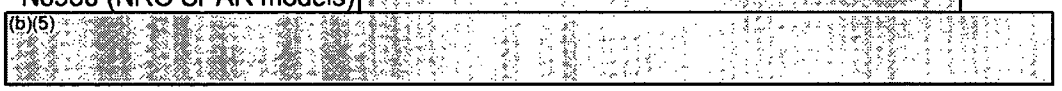
- Travel:
  - WGRisk – 3/28-4/1

Maggie:

- Lots of training
- SPAR HRA task with Don & Alysia
- Intake structure info with Pete & Jeff
- Check periodically to make sure she is gainfully employed

Michelle:

- N6930 (NRO SPAR models) (b)(5)



Pete:

- Working with EPRI to get permission to send Surry Seismic PRA study to INL

Rosie:

- Waiting to hear back on ORNL opportunity; Julie Frampton is the contact and all paperwork has already been completed by Kevin

Selim:

- Travel/Leave:
  - Raleigh – NFPA PRA Model – 3/21-25
  - Grand Gulf – Shutdown – week of 4/4 or 4/11 (tentative)
- ACRS briefing on C-SGTR - April 6th – Selim needs to put together some slides (Kevin requested on 3/1; need to go to Raj by 3/22; meeting to discuss on 3/24) – *Selim sent slides to Raj on 3/8*
  - **This should be added to the POW**

- EE Draft Program Plan – Selim will try to provide input to John Lane by 3/10 [Kevin provided comments on 3/2] – *Selim sent input to John on 3/8*
- Hurricane missile RG & NUREG/CRs – check with Selim on status when he gets back in the office (NRO recently brought up some late-breaking additional comments)
- RES seminar on C-SGTR – April 19th – need to work with Selim and others to make sure logistics are all worked out – see Kevin's 2/28 email for additional background & his 3/1 email forwarding Selim's slides – Don has reviewed slides and provided comments to Selim (on 3/4)

Walt:

- Working on a couple of modifications for the SAPHIRE contracts (V6040 and V6059); will add ~ 1-2 staff months of support – *ASK concurred, back with Chon for PMDA (3/16)*
- Waiting on 189 for V6046 (SPAR all hazards)

2nd Quarter Performance Report Input:

- Briefed ACRS on planned issuance of RG 1.174 and RG 1.177
- Sent NUREG/CR for SAPHIRE 8 to Publications (?) – wait until it is actually published - ?
-

From: Leeds, Eric
To: McCree, Victor
Subject: RE: Chuck Casto
Date: Friday, March 18, 2011 6:04:00 PM

Vic –

I have some intelligence if you have not received a response yet. We are sending Dan Dorman tomorrow, but I think it was to supplement Chuck and not necessarily relieve him right away. Could be OBE by now, but that was the info I had this am.

Eric J. Leeds, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
301-415-1270

From: McCree, Victor
Sent: Friday, March 18, 2011 1:34 PM
To: Virgilio, Martin
Cc: Leeds, Eric; Mamish, Nader; Wiggins, Jim
Subject: Chuck Casto

Hi Marty,

When you have time.... (b)(5)

(b)(5)

Vic

BC/200

From: OST01 HOC
Sent: Monday, April 25, 2011 5:09 PM
To: FOIA Response.hoc Resource
Subject: FW: REPLY: revised guidelines
Attachments: Composite rev 8.docx

From: Milligan, Patricia
Sent: Monday, April 25, 2011 9:25 AM
To: Virgilio, Martin; Gambone, Kimberly; Dudek, Michael; MorganButler, Kimyata; Jackson, Deborah; Weaver, Doug; Hiland, Patrick; Skeen, David; Ciocco, Jeff; Kevern, Thomas; Wiggins, Jim; Evans, Michele; Holahan, Patricia; Tracy, Glenn; Uhle, Jennifer; Carpenter, Cynthia; Johnson, Michael; Kokajko, Lawrence; Weber, Michael; RST01 Hoc; LIA08 Hoc; OST01 HOC; Reynolds, Steven; Holonich, Joseph; Casto, Chuck; PMT_japan Resource; Holahan, Vincent; Zimmerman, Roy; Jones, Cynthia; Boger, Bruce; Layton, Michael; Lewis, Robert; McDermott, Brian; Williams, Kevin
Cc: Merzke, Daniel; Bush-Goddard, Stephanie; Andersen, James; Bowman, Gregory
Subject: RE: REPLY: revised guidelines

I have attached an updated composite (b)(5)

(b)(5)

Please review and comment.

thank you.
Trish

Patricia Milligan, CHP, RPh
Senior Technical Advisor for Preparedness & Response
Office of Nuclear Security and Incident Response
US NRC
MS T B46M
Washington, DC 20555
301-415-2223
Blackberry (b)(6)

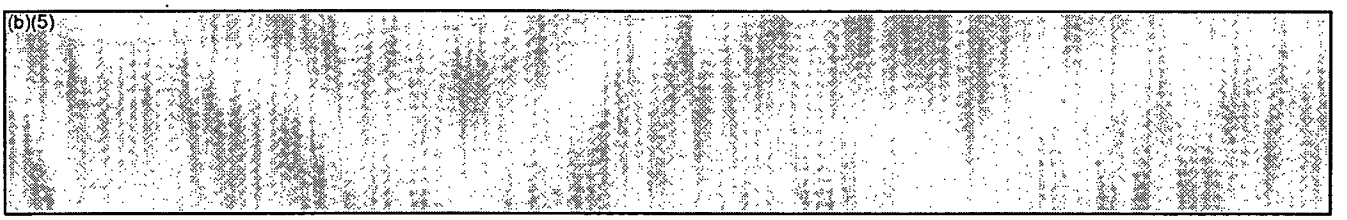
From: Virgilio, Martin
Sent: Sunday, April 24, 2011 12:24 PM
To: Gambone, Kimberly; Dudek, Michael; MorganButler, Kimyata; Jackson, Deborah; Weaver, Doug; Hiland, Patrick; Skeen, David; Ciocco, Jeff; Kevern, Thomas; Wiggins, Jim; Evans, Michele; Holahan, Patricia; Tracy, Glenn; Uhle, Jennifer; Carpenter, Cynthia; Johnson, Michael; Kokajko, Lawrence; Weber, Michael; Holahan, Patricia; RST01 Hoc; LIA08 Hoc; OST01 HOC; Skeen, David; Hiland, Patrick; Reynolds, Steven; Holonich, Joseph; Casto, Chuck; PMT_japan Resource; Holahan, Vincent; Tracy, Glenn; Zimmerman, Roy; Holahan, Patricia; Jones, Cynthia; Boger, Bruce; Wiggins, Jim; Kokajko, Lawrence; Uhle, Jennifer; Layton, Michael; Carpenter, Cynthia; Johnson, Michael; Lewis, Robert; Milligan, Patricia

BC/207

Cc: Merzke, Daniel; Bush-Goddard, Stephanie; Andersen, James; Bowman, Gregory
Subject: REPLY: revised guidelines

All

(b)(5)



Please set of goal at COB Monday for resolving these differences. NSIR lead.

Marty

From: Gambone, Kimberly
Sent: Friday, April 22, 2011 8:02 PM
To: Virgilio, Martin; Dudek, Michael; MorganButler, Kimyata; Jackson, Deborah; Weaver, Doug; Hiland, Patrick; Skeen, David; Ciocco, Jeff; Kevern, Thomas
Cc: Holahan, Vincent; PMT_japan Resource; Tracy, Glenn; Zimmerman, Roy; Boger, Bruce; Wiggins, Jim; Uhle, Jennifer; Layton, Michael; Holonich, Joseph; Kokajko, Lawrence; Carpenter, Cynthia; Johnson, Michael; Lewis, Robert; Holahan, Patricia; Jones, Cynthia
Subject: FW: revised guidelines

All,

Attached is the latest revision of the Composite Paper, i.e., "Recommendations for US citizens on relaxation of the 50 mile evacuation recommendation and re-entry to evacuate areas around Fukushima Daiichi NPP. " NRC Operations Center PMT requests that all line organizations review and provide comment. We strive to release the document to the federal family middle of next week.

Provide comments by COB Tuesday, April 26th to PMT12.hoc@nrc.gov , Cc: Patricia Milligan.

Task Tracker #4969.

Please contact me if you have questions.

Thank you.

V/r,

Kimberly Gambone

PMT/PAAD

Our assessments and recommendations are based on the best available technical information. We acknowledge that the information is subject to change and refinement.

~~OFFICIAL USE ONLY~~

Recommendations for US citizens on relaxation of the 50 mile evacuation recommendation and re-entry to evacuated areas around Fukushima Daiichi NPP

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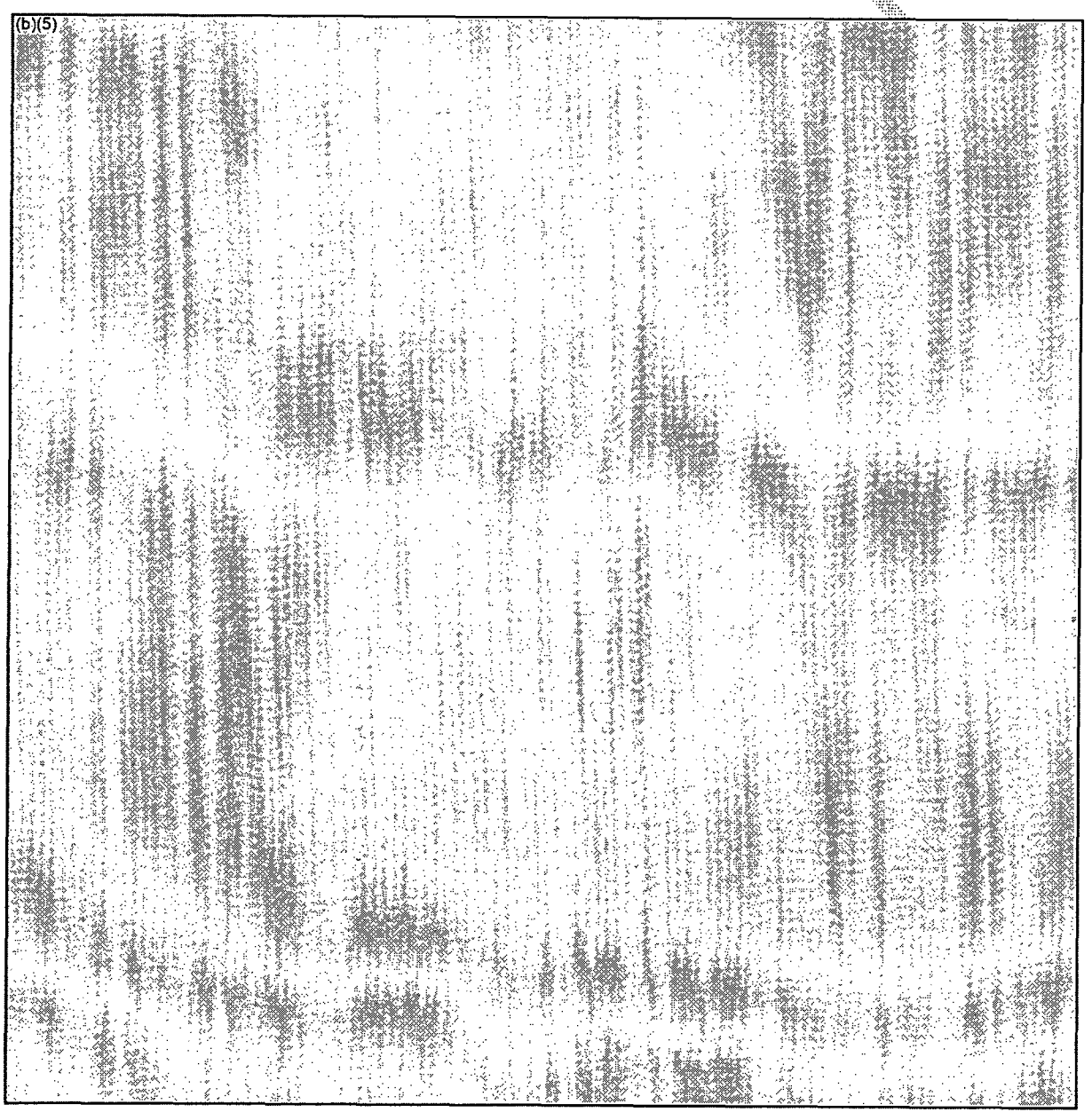

Our assessments and recommendations are based on the best available technical information. We acknowledge that the information is subject to change and refinement.

~~OFFICIAL USE ONLY~~

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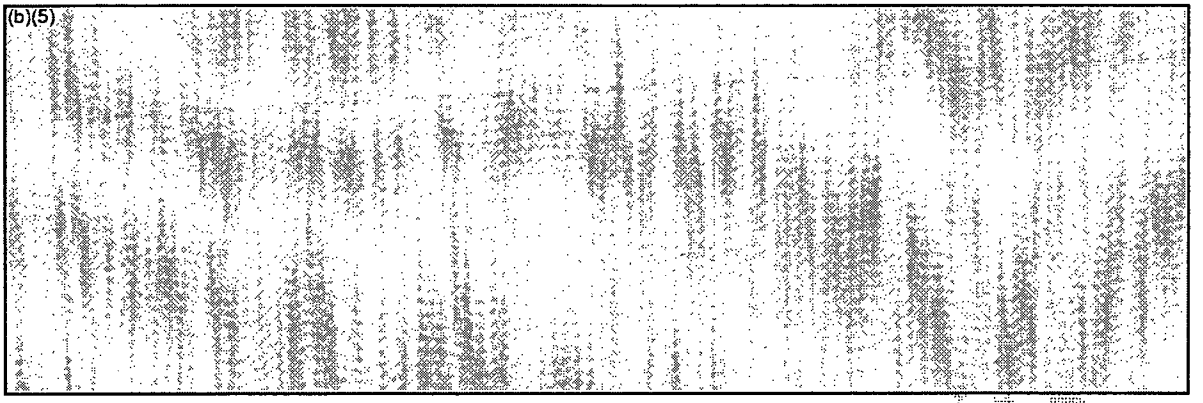


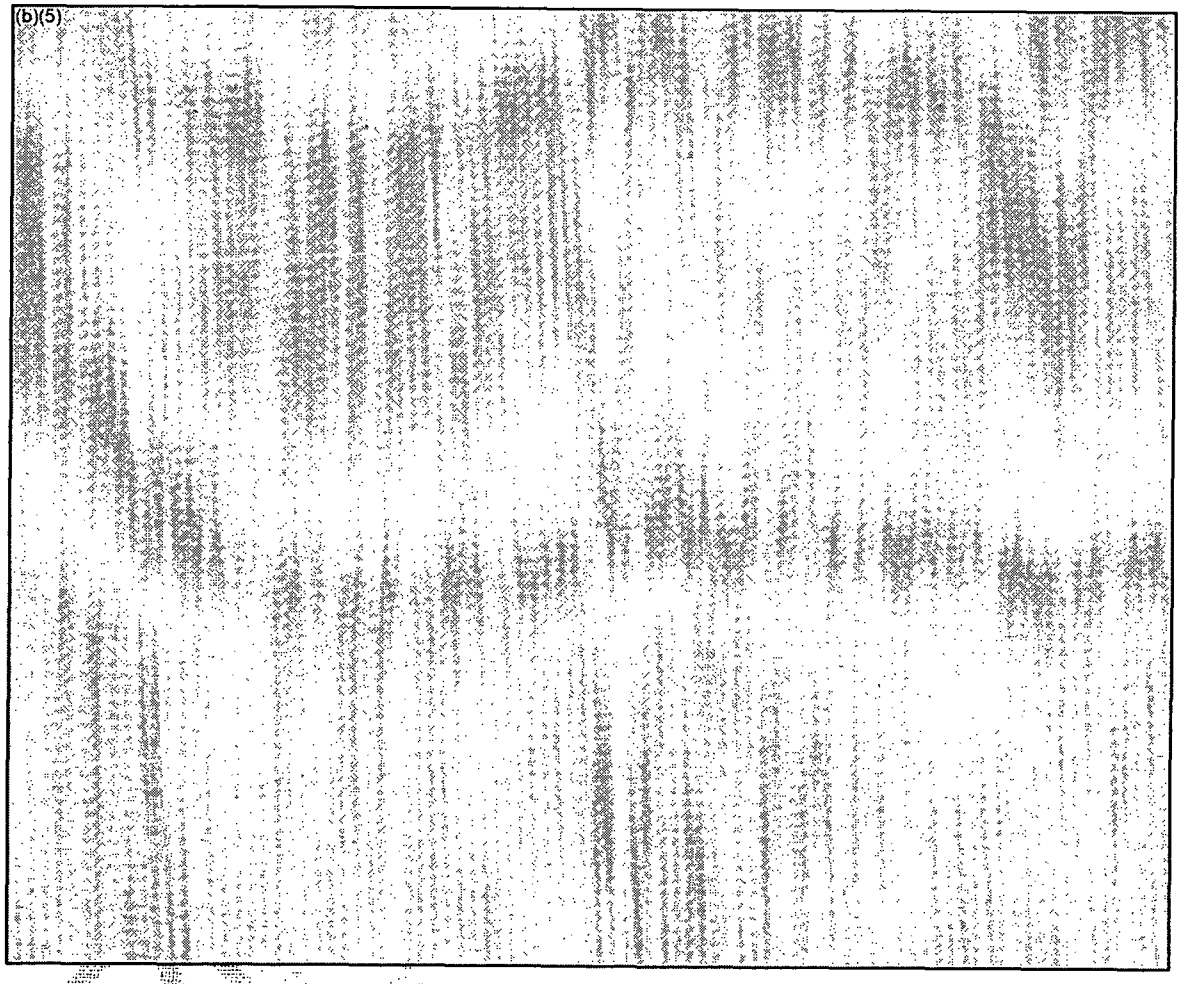
Pre-Decisional

Our assessments and recommendations are based on the best available technical information. We acknowledge that the information is subject to change and refinement.

~~OFFICIAL USE ONLY~~

Decision criteria for Recommending for Reduction of the 50 mile evacuation zone to 25 miles.

(b)(5)



Our assessments and recommendations are based on the best available technical information. We acknowledge that the information is subject to change and refinement.

~~OFFICIAL USE ONLY~~

Radiation Protection Guidelines

(b)(5)

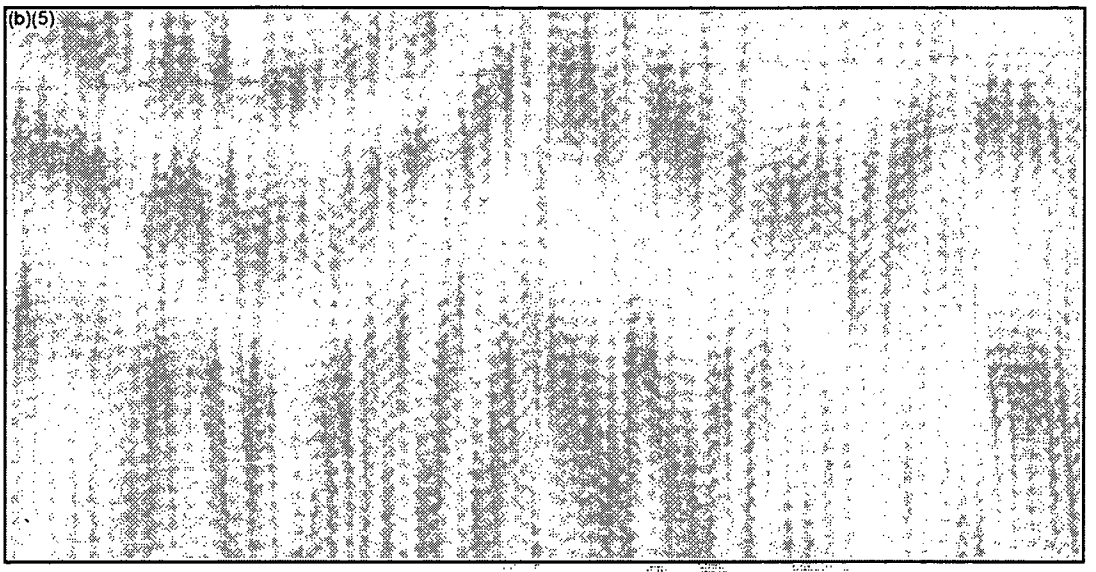
Briefing Information for Members of the Public

(b)(5)

- (b)(5)

Our assessments and recommendations are based on the best available technical information. We acknowledge that the information is subject to change and refinement.

~~OFFICIAL USE ONLY~~

- (b)(5)

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Predecisional

From: Evans, Michele
To: Uhle, Jennifer; Pederson, Cynthia; McCree, Victor; Mamish, Nader; Lew, David; Leeds, Eric
Cc: Sheron, Brian; Satorius, Mark; Wert, Leonard; Doane, Margaret; Grobe, Jack; Johnson, Michael
Subject: ACTION NEEDED: Proposed replacement staff for team in Japan
Date: Friday, March 18, 2011 7:07:18 PM
Attachments: 2nd Staff Deployment to Japan.docx

Please do not share this list any farther, since it has not been finalized/approved. At this point, I have provided the attached to Chuck and asked him to provide any comment by Saturday morning.

Meanwhile, I am **requesting that the appropriate office management contact their staff on the list and confirm that their current medical condition supports this travel to Japan**. When contacting them, it would be fine to indicate that their name is proceeding forward in the process, but it has not been finalized. Please provide the response to me as soon as practicable via email.

To help, I provided the names by office below:

RES: (b)(5)
NRR:
Regi
Regi
Regi
NSIR:
OIP:

Thanks for everyone's support.

Michele

From: Evans, Michele
Sent: Friday, March 18, 2011 6:47 PM
To: Casto, Chuck; Monninger, John; Dorman, Dan
Cc: Weber, Michael; Borchardt, Bill; Virgilio, Martin; Boger, Bruce; Zimmerman, Roy; Wiggins, Jim
Subject: Proposed replacement staff for team in Japan

Chuck,

Based on the input you provided this morning regarding expertise for the next wave of staff going to Japan, we're proposing the attached team.

All the individuals were selected with interpersonal skills in mind and are all available to travel in the required time period.

(b)(5)

The remaining individuals would leave the USA later in the week (target date is March 24), to allow time for turnover and then enable the remaining team members to return to the

BC/208

USA on or around March 28.

If you want to further discuss the skill sets, the staff, the timing, or any other needs please let me know. I can be on the phone in the Ops Center to discuss with you on Saturday morning as early as 7 am Washington time. Please communicate your preference for a discussion with the ET in the Ops Center.

Thanks

Michele

Skill Set	Name/Office/Projected Deployment date
Executive level	(b)(5)
Strong General Technical Knowledge combined with at least very good interpersonal skills	
Strong Interpersonal skills combined with at least very good technical knowledge	
Protective Measures/Dose Assessment	
Structural Engineering Expertise	
Damage Assessment Expertise	
Expertise in Infrared Images	We
International Programs Expertise	

From:	Coe, Doug
To:	Sheron, Brian; Case, Michael
Cc:	Uhle, Jennifer; Coyne, Kevin; Beasley, Benjamin; Stutzke, Martin; McGinty, Tim; Hiland, Patrick; Correia, Richard
Subject:	RE: NYS Delegation Meeting Request
Date:	Friday, March 18, 2011 10:42:06 PM

Brian,
We will work with NRR (Tim McGinty and Pat Hiland) to support this meeting. Likely we'll provide support for technical questions (Marty Stutzke and Jon Ake) and NRR to handle the process description (generic communication process).
Doug

From: Sheron, Brian
Sent: Friday, March 18, 2011 10:26 PM
To: Coe, Doug; Case, Michael
Cc: Uhle, Jennifer
Subject: FW: NYS Delegation Meeting Request

See below. I am not a GI-199 expert. Who do we have that is fluent in GI-199 that can support this meeting?

From: Wittick, Brian
Sent: Friday, March 18, 2011 10:13 PM
To: Dean, Bill; Leeds, Eric; Sheron, Brian
Cc: Muessle, Mary; Lew, David; Grobe, Jack; Boger, Bruce; Uhle, Jennifer; Andersen, James; Virgilio, Martin; Meighan, Sean; Nguyen, Quynh; Weber, Michael; Bowman, Gregory; Miller, Charles
Subject: NYS Delegation Meeting Request

Eric/Brian/Bill,

As noted below, the NYS Lt. Governor, Robert Duffy, NYS Director of Operations, Howard Glaser and NYS Deputy Secretary for Energy, Tom Congdon, will be coming to DC on Tuesday for discussions with NRC senior management. Other attendees at the meeting will include two support staffers and Hilary Jochmans, Director of the NYS Washington Office of the Governor. The original request from NY was to meet with the Chairman, but he is unavailable and asked for senior office level support.

The topic to be discussed is the September 2010 NRC report (Information Notice 2010-18: Generic Issue 199, "Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern U.S. on Existing Plants.") including the status of the follow up review. Link to the report is below.

Given the multiple office involvement in the report NRR and RES participation is recommended, Region 1 participation welcome. The Lt Governor will travel down from NY Tuesday morning and expects to be available late morning or afternoon. Please let me know your availability for the meeting.

Very Respectfully,
Brian Wittick
Executive Technical Assistant for Reactors,
Office of the Executive Director for Operations
U.S. Nuclear Regulatory Commission
301-415-2496(w); [redacted](c)

http://adamswebsearch2.nrc.gov/idmws/DocContent.dll?library=PU_ADAMS^pbntad01&LogonID=76b41771c7675f39f80edfad53e3cf59&id=102500110

From: Dean, Bill
Sent: Friday, March 18, 2011 7:33 PM

BC/2009

To: Wittick, Brian; Leeds, Eric; Andersen, James
Cc: Muessle, Mary; Lew, David; Grobe, Jack; Boger, Bruce; Sheron, Brian; Uhle, Jennifer
Subject: Re: Meeting Request Follow Up

I believe RES assistance may be appropriate for this given the GI-199 subject matter.
Bill Dean
Regional Administrator
Region I, USNRC
Sent from NRC BlackBerry

From: Thomas Hipschman
Sent: Friday, March 18, 2011 3:04 PM
To: Brian Wittick
Subject: FW: Meeting Request Follow Up

FYI – the Chairman has agreed that a senior manager from NRR should meet with them.

Thomas Hipschman
Policy Advisor for Reactors
Office of Chairman Gregory B. Jaczko
301-415-1832

From: Pace, Patti
Sent: Friday, March 18, 2011 1:48 PM
To: Hipschman, Thomas
Cc: Bradford, Anna; Batkin, Joshua; Coggins, Angela
Subject: FW: Meeting Request Follow Up

Hi Tom,

Anna asked me to forward this to you. Can you please work with NRR to make this happen? The folks from NY are eager to confirm something ASAP.

Thanks,

Patti Pace
Assistant to Chairman Gregory B. Jaczko
U.S. Nuclear Regulatory Commission
301-415-1820 (office)
301-415-3504 (fax)

From: Hilary Jochmans [mailto:Hilary.Jochmans@exec.ny.gov]
Sent: Friday, March 18, 2011 1:42 PM
To: Pace, Patti
Cc: Thomas Congdon; Bradford, Anna; Warren, Roberta
Subject: RE: Meeting Request Follow Up

Thank you, Patti. I greatly appreciate your assistance. I certainly understand the constraints on the Chairman's time. We would appreciate a meeting with the Senior Staff you suggest on Tuesday in person. Please let me know what other information you need from me, and then who the staffer will be and when where.
Thanks again,
Hilary

From: Pace, Patti [mailto:Patti.Pace@nrc.gov]
Sent: Friday, March 18, 2011 1:37 PM
To: Hilary Jochmans

Cc: Thomas Congdon; Bradford, Anna; Warren, Roberta
Subject: Meeting Request Follow Up

Dear Hilary,

Chairman Jaczko will not be available for a face to face meeting next week due to his role in the ongoing NRC response to the situation in Japan. He values the very good relationship between the NRC and State of New York. He has offered to make himself available for a phone call next week if that would be acceptable to Lt. Governor Duffy. If the Lt. Governor would prefer to meet with a senior NRC staff person we could work on that as an alternative.

Please let me know how you would like to proceed.

Many thanks,

Patti Pace
Assistant to Chairman Gregory B. Jaczko
U.S. Nuclear Regulatory Commission
301-415-1820 (office)
301-415-3504 (fax)

From: Hilary Jochmans [mailto:Hilary.Jochmans@exec.ny.gov]
Sent: Thursday, March 17, 2011 3:22 PM
To: Pace, Patti
Cc: Thomas Congdon
Subject: Follow up to Conversation

Hi Patti – It was great to chat with you. Glad to hear you are doing well. Thanks so much for your offer to help with this meeting request.

On Tuesday, the NYS Lt. Governor, Robert Duffy, NYS Director of Operations, Howard Glaser and NYS Deputy Secretary for Energy, Tom Congdon, would like to come to Washington to meet with the Chairman. Specifically, they would like to be briefed on the September 2010 NRC report including the status of the follow up review. If the Chairman is not available, they would like to meet with an appropriate Commissioner or senior staffer.

I greatly appreciate your assistance with this request. Please let me know if you need any additional information.

Thanks,
Hilary

Hilary F. Jochmans, Director
New York State Washington Office of the Governor
202-434-7100

From: LIA03 Hoc
To: OIP Distribution
Subject: FW: URGENT-NOTICE TO STAND DOWN: Pumping equipment for Japan now in Australia
Date: Saturday, March 19, 2011 11:29:54 AM

FYI,

Lance

From: CMS TaskForce1C - Coordinator [mailto:1TFC@state.gov] **On Behalf Of** zTask Force 1 Mailbox
Sent: Saturday, March 19, 2011 11:27 AM
To: Hyland, Jason P; Young, Joseph M; zTask Force 1 Mailbox; Campbell, Kurt M; Topa, Kurt W; Deming, Rust M; Loi, James L; Patel, Niray S; Mace, Casey K; LIA02 Hoc; LIA03 Hoc; [redacted] rmt_pactsu@ofda.gov; Seiden, Maya D; [redacted] Johnson, Daniel H.; Duncan, Shawn H.
Cc: Zumwalt, James P; Woodward, Aleisha; Luke, Robert S; Marut, Christopher J; Bleich, Jeffrey L; Donovan, Joseph R; Stockton, Richard C; Yang, Forest; EAP-J-Office-DL
Subject: RE: URGENT-NOTICE TO STAND DOWN: Pumping equipment for Japan now in Australia

I have just finished speaking with Jim Wiggin of the NRC, who has informed me that NRC believes that these pumps would in fact be a secondary, or even tertiary solution. The Japanese (both TEPCO and the fire department) have developed comparable solutions, and have procured comparable pumping equipment locally, so that while the GOJ has indicated it would accept the Bechtel pumps, it is not at all certain they would end up being used. Earlier in the process NRC saw these pumps as the best solution, but that is no longer the case, and thus the notice to stand down is still operational. This is the NRC's considered judgment, and has been cleared through the Chairman.

Jason, Aleisha – please let our Australian colleagues know that we remain grateful for their assistance and appreciate what they did when this was an operational priority.

Simon Schuchat
Coordinator, Japan TF-1

BCL 210

From: Christensen, Brent W <ChristensenWB@state.gov>
Sent: Tuesday, March 22, 2011 6:45 PM
To: Emche, Danielle; Atkinson, David R; LIA02 Hoc; LIA03 Hoc
Cc: Talbot, Nancy E; Schrage, Barbara; Abrams, Charlotte
Subject: RE: Request to share data on Japan event with Taiwan

Danielle:

Thanks for getting back to us on this. As discussed, I think the briefing that AEC and NRC already have scheduled for Thursday should take care of this.

All the best,

Brent

~~SBU~~
This email is UNCLASSIFIED.

From: Emche, Danielle [mailto:Danielle.Emche@nrc.gov]
Sent: Tuesday, March 22, 2011 1:53 PM
To: Atkinson, David R; LIA02 Hoc; LIA03 Hoc
Cc: Christensen, Brent W; Talbot, Nancy E; Schrage, Barbara; Abrams, Charlotte
Subject: RE: Request to share data on Japan event with Taiwan

Hi David,

I just left a message for David. NRC's initial offer still stands. If you would like to discuss further, please call or have someone from your office give me a call.

Best regards,
Danielle Emche
International Relations Specialist
Office of International Programs
US Nuclear Regulatory Commission
Tel.: 301-415-2644
BlackBerry: [redacted]

From: Atkinson, David R [mailto:AtkinsonDR@state.gov]
Sent: Tuesday, March 22, 2011 1:45 PM
To: LIA02 Hoc; Emche, Danielle; LIA03 Hoc
Cc: Christensen, Brent W; Talbot, Nancy E; Schrage, Barbara; Abrams, Charlotte
Subject: Re: Request to share data on Japan event with Taiwan

Danielle,

I haven't been able to catch you on the phone today, but did speak with TECRO vis-a-vis your offer to brief them by phone. They would prefer a face-to-face discussion if possible. They believe it would be best to pass any info NRC can

BC/2/11

share to their AEC rep at the meeting this week, rather than to non-experts tonight.

I am out of the office today, but if we can't accomodate their request to conduct this brief as part of the meeting with AEC this week, please let EAP/TC Director Brent Christensen know. He can be reached at 202-647-7712. Thanks,

David

From: LIA02 Hoc [mailto:LIA02.Hoc@nrc.gov]
Sent: Monday, March 21, 2011 06:44 PM
To: Atkinson, David R; Emche, Danielle <Danielle.Emche@nrc.gov>; LIA03 Hoc <LIA03.Hoc@nrc.gov>
Cc: Christensen, Brent W; Talbot, Nancy E; Schrage, Barbara; Abrams, Charlotte <Charlotte.Abrams@nrc.gov>; LIA03 Hoc <LIA03.Hoc@nrc.gov>
Subject: RE: Request to share data on Japan event with Taiwan

David,

NRC would like to request a teleconference, rather than a face-to-face meeting, which could be scheduled with various TECRO/AIT representatives and NRC experts. Tomorrow evening would be possible for NRC. During the teleconference, NRC will not be able to provide a written packet of information. We can provide you with a description of our approach for the plume modeling. We welcome your questions and will answer them to the best of our ability.

Please understand that this event doesn't quite fit the description of what was envisioned by the NRC/AEC Arrangement for technical exchange because this was not a U.S. event. Therefore, we won't be able to provide the same type of specific data that we would normally provide in technical exchange with TECRO. To put this into context, this would be like NRC presenting to Japan about our assessment of nuclear regulatory activities in Taiwan. Please let me know your interest in/or availability for scheduling a conference call.

Best regards,
Danielle

From: Atkinson, David R [mailto:AtkinsonDR@state.gov]
Sent: Monday, March 21, 2011 5:25 PM
To: Emche, Danielle; LIA02 Hoc; LIA03 Hoc
Cc: Christensen, Brent W; Talbot, Nancy E; Schrage, Barbara
Subject: Request to share data on Japan event with Taiwan

Danielle,

Following up my call this afternoon, we've chatted with TECRO about this a little more today. Since it was an offer to them by Assistant Secretary Campbell to share info under the January agreement, rather than a specific request, they didn't have enumerated questions. However, they would very much welcome any data/projections we've been given by IAEA or other sources that we are willing to share. They did confirm that the meeting with the AEC rep would be an appropriate venue to turn any data we can release over, without prejudicing the actual business goals of that meeting.

My suggested course of action would be to see if NRC could prepare a packet of info that can be released to help AEC and the Taiwan authorities improve or enhance their own analysis as our way of fulfilling the January agreement. Once we're clear on what we can share, we can discuss the right way to present it without disrupting NRC ops. Let me know if this is something NRC is willing to consider, or if other problems come up that we can help out with. Happy to discuss further and thanks for your help this afternoon.

David Atkinson

Deputy Director
Office for Taiwan Coordination (EAP/TC)
202-647-7713 (office)

~~SBU~~
This email is UNCLASSIFIED.

From: RST01 Hoc
Sent: Thursday, March 24, 2011 12:00 AM
To: RST07 Hoc; RST10 Hoc
Subject: FW: Daily Update of Navy Radiological Survey Data 3/23/11 2250 EDT
Attachments: Japan_Combined_Survey_Data.xlsx

-----Original Message-----
From: OST01 HOC
Sent: Wednesday, March 23, 2011 11:08 PM
To: PMT02 Hoc; PMT11 Hoc; Hoc, PMT12; RST01 Hoc
Subject: FW: Daily Update of Navy Radiological Survey Data 3/23/11 2250 EDT

-----Original Message-----
From: HOO Hoc [mailto:HOO.Hoc@nrc.gov]
Sent: Wednesday, March 23, 2011 11:06 PM
To: HOO Hoc; LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: Daily Update of Navy Radiological Survey Data 3/23/11 2250 EDT

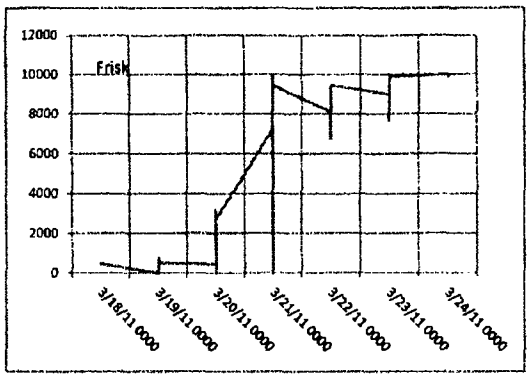
From: NITOPS[SMTP:NITOPS@NNSA.DOE.GOV]
Sent: Wednesday, March 23, 2011 11:06:18 PM
To: CMHT; HOO Hoc; NARAC; PMT01 Hoc; PMT02 Hoc; Hoc, PMT12
Subject: FW: Daily Update of Navy Radiological Survey Data 3/23/11 2250 EDT Auto forwarded by a Rule

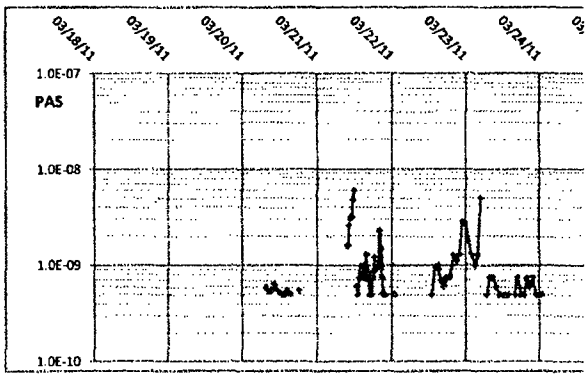
Nuclear Incident Team (NIT)
Office of Emergency Response (NA-42)
National Nuclear Security Administration U.S. Department of Energy nitops@nnsa.doe.gov nit@doe.sgov.gov 202-586-8100

-----Original Message-----
From: Burrows, Charles W SES CIV NAVSEA 08 NR [mailto [redacted]
Sent: Wednesday, March 23, 2011 11:04 PM
To: rst01.hoc@nrc.gov; Mueller, Troy J SES CIV NAVSEA 08 NR; Brown, Courtney M (NST); CooperJD@state.gov; NITOPS; [redacted]
tdykelsord@state.gov
Cc: Conran, Thomas C SES CIV NAVSEA 08 NR; Naples, Elmer M SES SEA 08 NR; Roros, John CIV NAVSEA, 08
Subject: Daily Update of Navy Radiological Survey Data 3/23/11 2250 EDT

All: Attached is the daily update of Navy radiological survey data. It shows diminishing airborne radioactivity levels as the wind shifts. CWB

BC|212





Nanaban Tower (Yokosuka) Locale: LAT. 35.29N, LONG. 139.67E

Date and Time (EDT)	Date and Time (JST)	Radiation (mr/hr)	Frisk (pCi/probe)	PAS (µCi/mL)	RI (µCi/mL)
3/18/11 0924	3/18/11 2224	0.01	450	<5.0E-10	
3/18/11 1030	3/18/11 2330	0.01	450	<5.0E-10	
3/18/11 1130	3/19/11 0030	0.01	<450	<5.0E-10	
3/18/11 1230	3/19/11 0130	0.01	450	<5.0E-10	
3/18/11 1330	3/19/11 0230	0.01	450	<5.0E-10	
3/18/11 1430	3/19/11 0330	0.01	450	<5.0E-10	
3/18/11 1530	3/19/11 0430	0.01	450	<5.0E-10	
3/18/11 1630	3/19/11 0530	0.01	450	<5.0E-10	
3/18/11 1825	3/19/11 0725	0.01	<450	<5.0E-10	
3/18/11 1940	3/19/11 0840	0.01	675	<5.0E-10	
3/18/11 2044	3/19/11 0944	0.01	585	<5.0E-10	
3/18/11 2140	3/19/11 1040	0.01	765	<5.0E-10	
3/18/11 2239	3/19/11 1139	0.01	765	<5.0E-10	
3/18/11 2350	3/19/11 1250	0.01	585	<5.0E-10	
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3/19/11 2128	3/20/11 1028	0.01	495	6.5E-10	
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3/19/11 2338	3/20/11 1238	0.01	540	5.0E-10	
3/20/11 0027	3/20/11 1327	0.01	495	5.0E-10	
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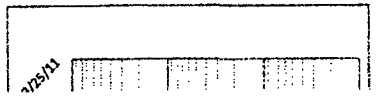
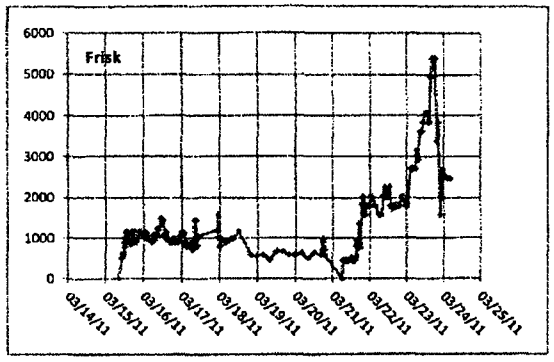
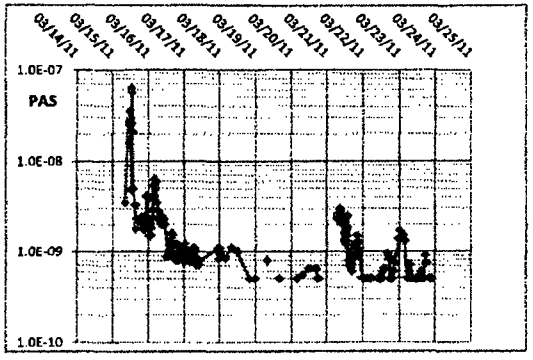
3/21/11 0214	3/21/11 1514	0.01	2250	1.0E-09	
3/21/11 0245	3/21/11 1545	0.01	1800	1.3E-09	
3/21/11 0303	3/21/11 1603	0.01	NONE	7.5E-10	
3/21/11 0325	3/21/11 1625	0.01	1800	8.0E-10	
3/21/11 0345	3/21/11 1645	0.01	1350	7.0E-10	
3/21/11 0402	3/21/11 1702	0.01	900	5.0E-10	
3/21/11 0418	3/21/11 1718	0.01	1800	7.0E-10	
3/21/11 0432	3/21/11 1732	0.01	2250	5.0E-10	
3/21/11 0450	3/21/11 1750	0.01	7200	8.5E-10	

3/21/11 0509	3/21/11 1809	0.01	7200	7.5E-10
3/21/11 0525	3/21/11 1825	0.01	9450	1.2E-09
3/21/11 0545	3/21/11 1845	0.01	9900	1.0E-09
3/21/11 0600	3/21/11 1900	0.01	9900	9.0E-10
3/21/11 0615	3/21/11 1915	0.01	9900	1.0E-09
3/21/11 0630	3/21/11 1930	0.01	9900	1.0E-09
3/21/11 0645	3/21/11 1945	0.01	8550	1.0E-09
3/21/11 0700	3/21/11 2000	0.01	8100	2.3E-09
3/21/11 0715	3/21/11 2015	0.01	7650	2.3E-09
3/21/11 0732	3/21/11 2032	0.01	8100	1.5E-09
3/21/11 0745	3/21/11 2045	0.01	7650	1.0E-09
3/21/11 0800	3/21/11 2100	0.01	8100	7.5E-10
3/21/11 0815	3/21/11 2115	0.01	8100	5.0E-10
3/21/11 0830	3/21/11 2130	0.01	8100	5.0E-10
3/21/11 0845	3/21/11 2145	0.01	8550	5.0E-10
3/21/11 0900	3/21/11 2200	0.01	9450	5.0E-10
3/21/11 0930	3/21/11 2230	0.01	7650	<5.0E-10
3/21/11 1000	3/21/11 2300	0.01	9450	<5.0E-10
3/21/11 1100	3/22/11 0000	0.01	8100	<5.0E-10
3/21/11 1200	3/22/11 0100	0.01	7650	5.0E-10
3/21/11 1300	3/22/11 0200	0.01	8550	<5.0E-10
3/21/11 1400	3/22/11 0300	0.01	7200	<5.0E-10
3/21/11 1500	3/22/11 0400	0.01	7200	<5.0E-10
3/21/11 1600	3/22/11 0500	0.01	6750	<5.0E-10
3/21/11 1700	3/22/11 0600	0.01	7200	<5.0E-10
3/21/11 1755	3/22/11 0655	0.01	7200	<5.0E-10
3/21/11 1900	3/22/11 0800	0.01	7200	<5.0E-10
3/21/11 1958	3/22/11 0858	0.01	7200	<5.0E-10
3/21/11 2100	3/22/11 1000	0.01	7200	<5.0E-10
3/21/11 2200	3/22/11 1100	0.01	7200	<5.0E-10
3/21/11 2300	3/22/11 1200	0.01	7200	<5.0E-10
3/22/11 0000	3/22/11 1300	0.01	7200	5.0E-10
3/22/11 0100	3/22/11 1400	0.01	7200	9.5E-10
3/22/11 0200	3/22/11 1500	0.01	7200	1.0E-09
3/22/11 0300	3/22/11 1600	0.01	7200	7.0E-10
3/22/11 0400	3/22/11 1700	0.01	7200	6.0E-10
3/22/11 0500	3/22/11 1800	0.01	7200	7.5E-10
3/22/11 0600	3/22/11 1900	0.01	7650	7.5E-10
3/22/11 0700	3/22/11 2000	0.01	8550	1.3E-09
3/22/11 0800	3/22/11 2100	0.01	9000	1.1E-09
3/22/11 0900	3/22/11 2200	0.01	8100	1.3E-09
3/22/11 1000	3/22/11 2300	0.01	8550	2.8E-09
3/22/11 1100	3/23/11 0000	0.01	9450	2.8E-09
3/22/11 1200	3/23/11 0100	0.01	9000	1.8E-09
3/22/11 1300	3/23/11 0200	0.01	9450	1.3E-09
3/22/11 1400	3/23/11 0300	0.01	9450	1.0E-09
3/22/11 1500	3/23/11 0400	0.01	9900	1.3E-09

3/22/11 1600	3/23/11 0500	0.01	9450	5.0E-09
3/22/11 1700	3/23/11 0600	0.01	9450	<5.0E-10
3/22/11 1800	3/23/11 0700	0.01	9900	5.0E-10
3/22/11 1900	3/23/11 0800	0.01	9900	7.5E-10
3/22/11 2000	3/23/11 0900	0.01	9900	7.5E-10
3/22/11 2100	3/23/11 1000	0.01	9900	6.0E-10
3/22/11 2200	3/23/11 1100	0.01	9900	5.0E-10
3/22/11 2300	3/23/11 1200	0.01	10000	5.0E-10
3/23/11 0000	3/23/11 1300	0.01	10000	5.0E-10
3/23/11 0100	3/23/11 1400	0.01	10000	5.0E-10
3/23/11 0200	3/23/11 1500	0.01	10000	<5.0E-10
3/23/11 0300	3/23/11 1600	0.01	10000	5.0E-10
3/23/11 0400	3/23/11 1700	0.01	9450	7.5E-10
3/23/11 0500	3/23/11 1800	0.01	9450	5.0E-10
3/23/11 0600	3/23/11 1900	0.01	7650	5.0E-10
3/23/11 0700	3/23/11 2000	0.01	8100	7.5E-10
3/23/11 0800	3/23/11 2100	0.01	8550	6.0E-10
3/23/11 0900	3/23/11 2200	0.01	9000	7.5E-10
3/23/11 1000	3/23/11 2300	0.01	10000	5.0E-10
3/23/11 1100	3/24/11 0000	0.01	9900	5.0E-10
3/23/11 1200	3/24/11 0100	0.01	10000	5.0E-10
3/23/11 1300	3/24/11 0200	0.01	9900	<5.0E-10
3/23/11 1400	3/24/11 0300	0.01	9900	<5.0E-10
3/23/11 1500	3/24/11 0400	0.01	10000	<5.0E-10
3/23/11 1600	3/24/11 0500	0.01	10000	<5.0E-10
3/23/11 1604	3/24/11 0504	0.01	9900	<5.0E-10







Atsugi NAS Locale: LAT 35.42N, LONG. 139.36E

Date and Time (EDT)	Date and Time (JST)	Radiation (mr/hr)	Frisk (pCi/Probe)	PAS (µCi/ml)
3/14/11 1912	3/15/11 0812	NONE	NONE	3.5E-09
3/14/11 2136	3/15/11 1036	0.01	495	2.7E-08
3/14/11 2148	3/15/11 1048	0.01	540	1.6E-08
3/14/11 2205	3/15/11 1105	0.01	585	2.5E-08
3/14/11 2225	3/15/11 1125	0.01	630	3.5E-08
3/14/11 2248	3/15/11 1148	0.01	788	3.6E-08
3/14/11 2302	3/15/11 1202	0.01	900	2.9E-08
3/14/11 2317	3/15/11 1217	0.02	990	4.8E-09
3/14/11 2335	3/15/11 1235	0.02	1035	6.3E-08
3/14/11 2350	3/15/11 1250	0.01	1170	5.6E-08
3/15/11 0004	3/15/11 1304	0.01	1170	2.6E-08
3/15/11 0020	3/15/11 1320	0.01	1170	2.1E-08
3/15/11 0035	3/15/11 1335	0.01	1170	5.0E-09
3/15/11 0200	3/15/11 1500	0.01	1035	3.3E-09
3/15/11 0225	3/15/11 1525	0.01	1125	1.8E-09
3/15/11 0240	3/15/11 1540	0.01	945	2.3E-09
3/15/11 0255	3/15/11 1555	0.01	855	NONE
3/15/11 0315	3/15/11 1615	0.01	1170	NONE
3/15/11 0330	3/15/11 1630	0.01	1080	NONE
3/15/11 0400	3/15/11 1700	0.01	945	NONE
3/15/11 0415	3/15/11 1715	0.01	900	NONE

3/15/11 0445	3/15/11 1745	0.01	945	NONE
3/15/11 0500	3/15/11 1800	0.01	1170	NONE
3/15/11 0515	3/15/11 1815	0.01	990	NONE
3/15/11 0530	3/15/11 1830	0.01	900	NONE
3/15/11 0600	3/15/11 1900	0.01	900	2.3E-09
3/15/11 0615	3/15/11 1915	0.01	990	2.0E-09
3/15/11 0630	3/15/11 1930	0.01	990	2.4E-09
3/15/11 0653	3/15/11 1953	0.01	990	1.8E-09
3/15/11 0700	3/15/11 2000	0.01	1125	2.3E-09
3/15/11 0715	3/15/11 2015	0.01	990	1.8E-09
3/15/11 0730	3/15/11 2030	0.01	1035	1.8E-09
3/15/11 0745	3/15/11 2045	0.01	1125	2.0E-09
3/15/11 0800	3/15/11 2100	0.01	1170	1.8E-09
3/15/11 0830	3/15/11 2130	0.01	1125	1.8E-09
3/15/11 0900	3/15/11 2200	0.01	1170	2.5E-09
3/15/11 0930	3/15/11 2230	0.01	1125	4.2E-09
3/15/11 1000	3/15/11 2300	0.01	1125	4.0E-09
3/15/11 1030	3/15/11 2330	0.01	1125	3.8E-09
3/15/11 1100	3/16/11 0000	0.01	1125	1.5E-09
3/15/11 1130	3/16/11 0030	0.01	1125	2.0E-09
3/15/11 1200	3/16/11 0100	0.01	1125	2.1E-09
3/15/11 1230	3/16/11 0130	0.01	1125	1.5E-09
3/15/11 1300	3/16/11 0200	0.01	990	1.8E-09
3/15/11 1330	3/16/11 0230	0.01	990	2.4E-09
3/15/11 1400	3/16/11 0300	0.01	990	2.9E-09
3/15/11 1430	3/16/11 0330	0.01	990	4.3E-09
3/15/11 1500	3/16/11 0400	0.01	990	5.5E-09
3/15/11 1530	3/16/11 0430	0.01	945	6.4E-09
3/15/11 1600	3/16/11 0500	0.01	945	5.0E-09
3/15/11 1630	3/16/11 0530	0.01	900	6.0E-09
3/15/11 1700	3/16/11 0600	0.01	1080	3.5E-09
3/15/11 1730	3/16/11 0630	0.01	945	2.3E-09
3/15/11 1800	3/16/11 0700	0.01	990	2.8E-09
3/15/11 1830	3/16/11 0730	0.01	1080	2.3E-09

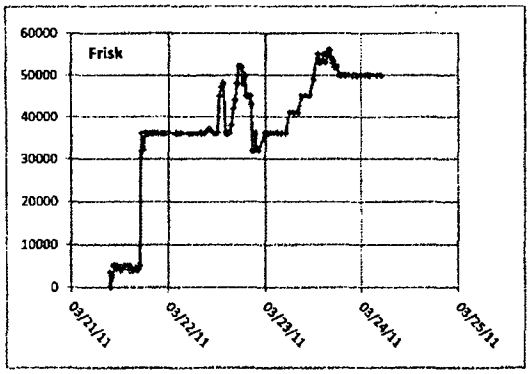
3/15/11 1900	3/16/11 0800	0.01	1080	2.3E-09
3/15/11 1930	3/16/11 0830	0.01	1080	2.5E-09
3/15/11 2000	3/16/11 0900	0.01	1215	2.0E-09
3/15/11 2130	3/16/11 1030	0.01	1305	2.0E-09
3/15/11 2200	3/16/11 1100	0.01	1485	2.3E-09
3/15/11 2330	3/16/11 1230	0.01	1440	8.8E-10
3/16/11 0030	3/16/11 1330	0.01	1080	1.5E-09
3/16/11 0100	3/16/11 1400	0.01	1125	1.5E-09
3/16/11 0130	3/16/11 1430	0.01	990	9.0E-10
3/16/11 0300	3/16/11 1600	0.01	900	1.6E-09
3/16/11 0330	3/16/11 1630	0.01	945	1.5E-09
3/16/11 0400	3/16/11 1700	0.01	900	1.2E-09
3/16/11 0430	3/16/11 1730	0.01	900	1.2E-09
3/16/11 0500	3/16/11 1800	0.01	945	1.0E-09
3/16/11 0530	3/16/11 1830	0.01	900	8.0E-10
3/16/11 0600	3/16/11 1900	0.01	990	8.0E-10
3/16/11 0630	3/16/11 1930	0.01	900	1.2E-09
3/16/11 0700	3/16/11 2000	0.01	945	8.0E-10
3/16/11 0730	3/16/11 2030	0.01	900	9.0E-10
3/16/11 0800	3/16/11 2100	0.01	900	9.3E-10
3/16/11 0830	3/16/11 2130	0.01	990	1.1E-09
3/16/11 0900	3/16/11 2200	0.01	990	8.8E-10
3/16/11 0930	3/16/11 2230	0.01	1035	8.8E-10
3/16/11 1000	3/16/11 2300	0.01	990	9.0E-10
3/16/11 1030	3/16/11 2330	0.01	990	1.0E-09
3/16/11 1100	3/17/11 0000	0.01	1125	8.0E-10
3/16/11 1130	3/17/11 0030	0.01	1080	1.2E-09
3/16/11 1200	3/17/11 0100	0.01	900	1.0E-09
3/16/11 1230	3/17/11 0130	0.01	1125	1.0E-09
3/16/11 1300	3/17/11 0200	0.01	945	9.0E-10
3/16/11 1330	3/17/11 0230	0.01	900	8.8E-10
3/16/11 1400	3/17/11 0300	0.01	810	1.0E-09
3/16/11 1430	3/17/11 0330	0.01	810	9.0E-10
3/16/11 1500	3/17/11 0400	0.01	810	9.0E-10

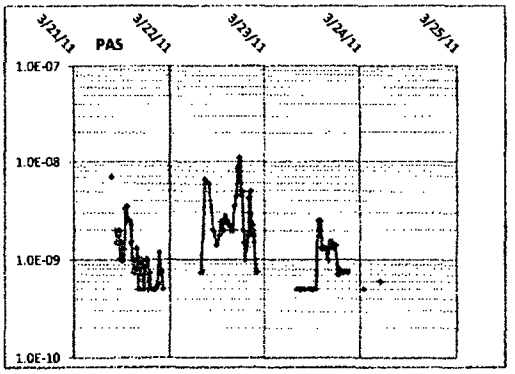
3/16/11 1530	3/17/11 0430	0.01	900	7.5E-10
3/16/11 1600	3/17/11 0500	0.01	945	1.0E-09
3/16/11 1630	3/17/11 0530	0.01	900	9.5E-10
3/16/11 1700	3/17/11 0600	0.01	810	9.0E-10
3/16/11 1730	3/17/11 0630	0.01	810	1.1E-09
3/16/11 1800	3/17/11 0700	0.01	855	1.1E-09
3/16/11 1830	3/17/11 0730	0.01	720	1.0E-09
3/16/11 1900	3/17/11 0800	0.01	1260	7.5E-10
3/16/11 1930	3/17/11 0830	0.01	1440	8.5E-10
3/16/11 2000	3/17/11 0900	0.01	1440	7.0E-10
3/16/11 2030	3/17/11 0930	0.01	810	7.0E-10
3/16/11 2100	3/17/11 1000	0.01	1035	7.5E-10
3/17/11 0930	3/17/11 2230	0.01	1215	1.1E-09
3/17/11 1000	3/17/11 2300	0.01	1575	1.1E-09
3/17/11 1030	3/17/11 2330	0.01	1035	1.0E-09
3/17/11 1100	3/18/11 0000	0.01	810	8.5E-10
3/17/11 1130	3/18/11 0030	0.01	990	1.1E-09
3/17/11 1500	3/18/11 0400	0.01	900	8.5E-10
3/17/11 1900	3/18/11 0800	0.01	990	1.1E-09
3/17/11 2300	3/18/11 1200	0.01	1170	1.0E-09
3/18/11 0700	3/18/11 2000	0.01	585	5.0E-10
3/18/11 1100	3/19/11 0000	0.01	563	5.0E-10
3/18/11 1500	3/19/11 0400	0.01	585	<5.0E-10
3/18/11 1900	3/19/11 0800	0.01	450	8.0E-10
3/18/11 2300	3/19/11 1200	0.01	675	<5.0E-10
3/19/11 0300	3/19/11 1600	0.01	675	5.0E-10
3/19/11 0700	3/19/11 2000	0.01	585	<5.0E-10
3/19/11 1100	3/20/11 0000	0.01	585	<5.0E-10
3/19/11 1500	3/20/11 0400	0.01	630	5.0E-10
3/19/11 1900	3/20/11 0800	0.01	495	5.5E-10
3/19/11 2300	3/20/11 1200	0.01	630	6.5E-10
3/20/11 0330	3/20/11 1630	0.01	585	6.5E-10
3/20/11 0400	3/20/11 1700	0.01	720	6.5E-10
3/20/11 0430	3/20/11 1730	0.01	990	5.0E-10

3/20/11 0500	3/20/11 1800	0.01	900	5.0E-10
3/20/11 0530	3/20/11 1830	0.01	720	5.0E-10
3/20/11 0600	3/20/11 1900	0.01	585	<5.0E-10
3/20/11 1700	3/21/11 0600	0.01	<450	2.3E-09
3/20/11 1800	3/21/11 0700	0.01	450	2.6E-09
3/20/11 1815	3/21/11 0715	0.01	450	2.5E-09
3/20/11 1830	3/21/11 0730	0.01	450	2.3E-09
3/20/11 1845	3/21/11 0745	0.01	450	2.5E-09
3/20/11 1900	3/21/11 0800	0.01	450	2.3E-09
3/20/11 1915	3/21/11 0815	0.01	450	2.3E-09
3/20/11 1930	3/21/11 0830	0.01	450	2.5E-09
3/20/11 1945	3/21/11 0845	0.01	450	3.0E-09
3/20/11 2000	3/21/11 0900	0.01	450	2.8E-09
3/20/11 2015	3/21/11 0915	0.01	450	2.5E-09
3/20/11 2030	3/21/11 0930	0.01	450	2.3E-09
3/20/11 2045	3/21/11 0945	0.01	450	2.0E-09
3/20/11 2100	3/21/11 1000	0.01	450	2.2E-09
3/20/11 2115	3/21/11 1015	0.01	450	2.3E-09
3/20/11 2130	3/21/11 1030	0.01	450	2.1E-09
3/20/11 2145	3/21/11 1045	0.01	450	2.0E-09
3/20/11 2200	3/21/11 1100	0.01	450	1.6E-09
3/20/11 2215	3/21/11 1115	0.01	450	1.3E-09
3/20/11 2230	3/21/11 1130	0.01	450	1.3E-09
3/20/11 2245	3/21/11 1145	0.01	495	1.4E-09
3/20/11 2315	3/21/11 1215	0.01	495	1.6E-09
3/20/11 2330	3/21/11 1230	0.01	450	1.3E-09
3/20/11 2345	3/21/11 1245	0.01	495	1.9E-09
3/21/11 0000	3/21/11 1300	0.01	450	1.2E-09
3/21/11 0015	3/21/11 1315	0.01	450	1.5E-09
3/21/11 0030	3/21/11 1330	0.01	450	1.8E-09
3/21/11 0045	3/21/11 1345	0.01	450	1.8E-09
3/21/11 0100	3/21/11 1400	0.01	450	2.5E-09
3/21/11 0115	3/21/11 1415	0.01	450	1.1E-09
3/21/11 0145	3/21/11 1445	0.01	450	8.0E-10

3/21/11 0200	3/21/11 1500	0.01	810	7.0E-10
3/21/11 0215	3/21/11 1515	0.01	945	9.5E-10
3/21/11 0230	3/21/11 1530	0.01	540	1.2E-09
3/21/11 0245	3/21/11 1545	0.01	900	9.5E-10
3/21/11 0300	3/21/11 1600	0.01	855	8.0E-10
3/21/11 0315	3/21/11 1615	0.01	945	6.5E-10
3/21/11 0330	3/21/11 1630	0.01	1350	8.5E-10
3/21/11 0345	3/21/11 1645	0.01	990	6.0E-10
3/21/11 0400	3/21/11 1700	0.01	900	7.0E-10
3/21/11 0415	3/21/11 1715	0.01	765	8.5E-10
3/21/11 0445	3/21/11 1745	0.01	855	8.5E-10
3/21/11 0545	3/21/11 1845	0.01	1845	1.2E-09
3/21/11 0615	3/21/11 1915	0.01	2025	1.0E-09
3/21/11 0645	3/21/11 1945	0.01	2025	1.5E-09
3/21/11 0715	3/21/11 2015	0.01	1800	1.5E-09
3/21/11 0745	3/21/11 2045	0.01	1575	1.3E-09
3/21/11 0815	3/21/11 2115	0.01	1800	1.3E-09
3/21/11 0845	3/21/11 2145	0.01	1800	1.0E-09
3/21/11 1029	3/21/11 2329	0.01	1800	5.0E-10
3/21/11 1148	3/22/11 0048	0.01	2025	5.0E-10
3/21/11 1430	3/22/11 0330	0.01	1800	5.0E-10
3/21/11 1630	3/22/11 0530	0.01	1575	5.0E-10
3/21/11 1730	3/22/11 0630	0.01	1575	<5.0E-10
3/21/11 1837	3/22/11 0737	0.01	1575	<5.0E-10
3/21/11 1930	3/22/11 0830	0.01	2025	<5.0E-10
3/21/11 2030	3/22/11 0930	0.01	2250	<5.0E-10
3/21/11 2130	3/22/11 1030	0.01	2025	5.0E-10
3/21/11 2230	3/22/11 1130	0.01	2025	5.0E-10
3/21/11 2330	3/22/11 1230	0.01	2250	5.0E-10
3/22/11 0030	3/22/11 1330	0.01	1800	6.0E-10
3/22/11 0130	3/22/11 1430	0.01	1710	6.5E-10
3/22/11 0230	3/22/11 1530	0.01	1800	<5.0E-10
3/22/11 0330	3/22/11 1630	0.01	1800	9.5E-10
3/22/11 0430	3/22/11 1730	0.01	1800	8.5E-10

3/22/11 0530	3/22/11 1830	0.01	1800	5.0E-10
3/22/11 0630	3/22/11 1930	0.01	1800	5.0E-10
3/22/11 0730	3/22/11 2030	0.01	2025	6.0E-10
3/22/11 0830	3/22/11 2130	0.01	2025	7.5E-10
3/22/11 1030	3/22/11 2330	0.01	1800	1.4E-09
3/22/11 1130	3/23/11 0030	0.01	1800	1.7E-09
3/22/11 1330	3/23/11 0230	0.01	2700	1.5E-09
3/22/11 1430	3/23/11 0330	0.01	2700	1.3E-09
3/22/11 1630	3/23/11 0530	0.01	2700	5.0E-10
3/22/11 1730	3/23/11 0630	0.01	3150	6.0E-10
3/22/11 1830	3/23/11 0730	0.01	2925	7.0E-10
3/22/11 1930	3/23/11 0830	0.01	3600	5.0E-10
3/22/11 2030	3/23/11 0930	0.01	3600	5.0E-10
3/22/11 2130	3/23/11 1030	0.01	3825	<5.0E-10
3/22/11 2230	3/23/11 1130	0.01	4050	5.0E-10
3/22/11 2330	3/23/11 1230	0.01	4050	5.0E-10
3/23/11 0030	3/23/11 1330	0.01	4050	5.0E-10
3/23/11 0130	3/23/11 1430	0.01	3825	6.0E-10
3/23/11 0230	3/23/11 1530	0.01	4950	5.0E-10
3/23/11 0330	3/23/11 1630	0.01	5400	5.0E-10
3/23/11 0430	3/23/11 1730	0.01	5400	9.0E-10
3/23/11 0530	3/23/11 1830	0.01	5400	7.5E-10
3/23/11 0630	3/23/11 1930	0.01	3375	<5.0E-10
3/23/11 0730	3/23/11 2030	0.01	3825	5.0E-10
3/23/11 0830	3/23/11 2130	0.01	1575	5.0E-10
3/23/11 1030	3/23/11 2330	0.01	2700	<5.0E-10
3/23/11 1339	3/24/11 0239	0.01	2475	<5.0E-10
3/23/11 1500	3/24/11 0400	0.01	2475	<5.0E-10





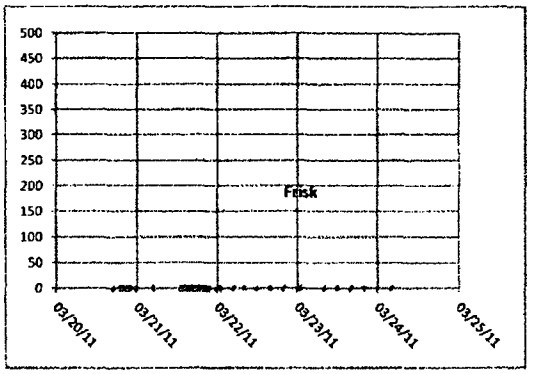
North Advance Team (Ishioka) Locale: 55nm N of Yokosuka, 93nm S of Fukushima; LA1

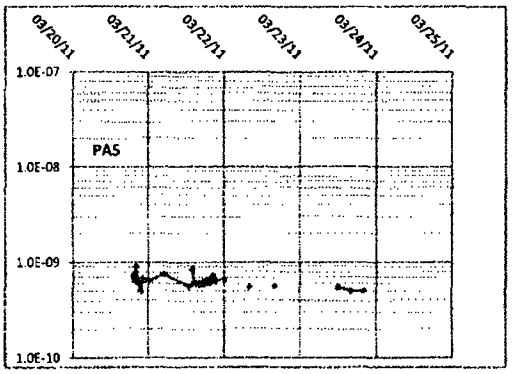
Date and Time (EDT)	Date and Time (JST)	Radiation (mr/hr)	Frisk (pCi/probe)	PAS (µCi/mL)	RI (µCi/mL)
3/20/11 2035	3/21/11 0935	0.04	3600	7.0E-09	
3/20/11 2045	3/21/11 0945	NONE	NONE	NONE	1.60E-07
3/20/11 2200	3/21/11 1100	0.04	5220	1.5E-09	
3/20/11 2125	3/21/11 1025	0.04	5220	2.0E-09	
3/20/11 2230	3/21/11 1130	0.01	4500	2.0E-09	
3/20/11 2245	3/21/11 1145	0.04	4950	1.0E-09	<1.0E-7
3/20/11 2300	3/21/11 1200	0.01	4500	1.5E-09	
3/20/11 2315	3/21/11 1215	0.01	4500	1.0E-09	
3/20/11 2330	3/21/11 1230	0.01	4050	1.1E-09	
3/20/11 2345	3/21/11 1245	0.01	4500	1.3E-09	
3/21/11 0000	3/21/11 1300	0.06	4950	3.3E-09	
3/21/11 0015	3/21/11 1315	0.06	4950	3.5E-09	
3/21/11 0030	3/21/11 1330	0.04	4950	2.5E-09	<1.0E-7
3/21/11 0100	3/21/11 1400	0.04	4950	2.5E-09	
3/21/11 0115	3/21/11 1415	0.04	4950	2.3E-09	
3/21/11 0130	3/21/11 1430	0.04	4950	1.5E-09	
3/21/11 0145	3/21/11 1445	0.02	4050	1.0E-09	
3/21/11 0200	3/21/11 1500	0.02	4500	1.0E-09	
3/21/11 0215	3/21/11 1515	0.02	4050	7.5E-10	
3/21/11 0230	3/21/11 1530	0.02	4050	7.5E-10	
3/21/11 0245	3/21/11 1545	0.02	4500	7.5E-10	
3/21/11 0300	3/21/11 1600	0.02	4500	1.3E-09	
3/21/11 0315	3/21/11 1615	0.02	4050	5.0E-10	
3/21/11 0330	3/21/11 1630	0.01	4050	1.0E-09	
3/21/11 0345	3/21/11 1645	0.01	4950	1.0E-09	
3/21/11 0400	3/21/11 1700	0.01	4950	7.5E-10	
3/21/11 0415	3/21/11 1715	0.01	36000	1.0E-09	
3/21/11 0430	3/21/11 1730	0.01	32000	5.0E-10	
3/21/11 0445	3/21/11 1745	0.01	32000	7.5E-10	
3/21/11 0500	3/21/11 1800	0.01	36000	7.5E-10	
3/21/11 0515	3/21/11 1815	0.01	36000	1.0E-09	
3/21/11 0530	3/21/11 1830	0.01	36000	1.0E-09	
3/21/11 0545	3/21/11 1845	0.01	36000	5.0E-10	
3/21/11 0600	3/21/11 1900	0.01	36000	7.5E-10	

3/21/11 0630	3/21/11 1930	0.01	36000	5.0E-10
3/21/11 0700	3/21/11 2000	0.01	36000	5.0E-10
3/21/11 0730	3/21/11 2030	0.01	36000	5.0E-10
3/21/11 0800	3/21/11 2100	0.01	36000	5.5E-10
3/21/11 0830	3/21/11 2130	0.03	36000	1.2E-09
3/21/11 0900	3/21/11 2200	0.02	36000	7.5E-10
3/21/11 0930	3/21/11 2230	0.01	36000	5.0E-10
3/21/11 1000	3/21/11 2300	0.01	36000	<5.0E-10
3/21/11 1100	3/22/11 0000	0.01	36000	<5.0E-10
3/21/11 1300	3/22/11 0200	0.01	36000	<5.0E-10
3/21/11 1400	3/22/11 0300	0.01	36000	<5.0E-10
3/21/11 1600	3/22/11 0500	0.01	36000	<5.0E-10
3/21/11 1700	3/22/11 0600	0.01	36000	<5.0E-10
3/21/11 1800	3/22/11 0700	0.01	36000	<5.0E-10
3/21/11 1900	3/22/11 0800	0.01	36000	7.5E-10
3/21/11 2000	3/22/11 0900	0.01	36000	6.5E-09
3/21/11 2100	3/22/11 1000	0.02	37000	6.0E-09
3/21/11 2200	3/22/11 1100	0.01	36000	2.0E-09
3/21/11 2300	3/22/11 1200	0.01	36000	1.4E-09
3/21/11 2330	3/22/11 1230	0.01	45000	1.8E-09
3/22/11 0000	3/22/11 1300	0.01	47000	2.5E-09
3/22/11 0030	3/22/11 1330	0.01	48000	2.0E-09
3/22/11 0100	3/22/11 1400	0.01	36000	2.8E-09
3/22/11 0130	3/22/11 1430	0.02	36000	2.5E-09
3/22/11 0200	3/22/11 1500	0.01	36000	2.3E-09
3/22/11 0230	3/22/11 1530	0.01	38000	2.0E-09
3/22/11 0300	3/22/11 1600	0.01	42000	2.0E-09
3/22/11 0330	3/22/11 1630	0.01	44000	3.5E-09
3/22/11 0400	3/22/11 1700	0.01	48000	4.5E-09
3/22/11 0430	3/22/11 1730	0.01	52000	8.5E-09
3/22/11 0445	3/22/11 1745	0.02	52000	1.1E-08
3/22/11 0500	3/22/11 1800	0.02	52000	1.0E-08
3/22/11 0515	3/22/11 1815	0.02	52000	4.5E-09
3/22/11 0530	3/22/11 1830	0.01	48000	5.0E-09
3/22/11 0545	3/22/11 1845	0.02	50000	2.0E-09
3/22/11 0600	3/22/11 1900	0.01	50000	1.5E-09
3/22/11 0615	3/22/11 1915	0.02	45000	1.0E-09
3/22/11 0630	3/22/11 1930	0.02	45000	1.5E-09
3/22/11 0645	3/22/11 1945	0.02	45000	1.3E-09
3/22/11 0700	3/22/11 2000	0.02	45000	1.8E-09
3/22/11 0715	3/22/11 2015	0.02	45000	4.3E-09
3/22/11 0730	3/22/11 2030	0.04	43000	5.0E-09
3/22/11 0745	3/22/11 2045	0.04	32000	2.0E-09
3/22/11 0800	3/22/11 2100	0.04	32000	2.3E-09
3/22/11 0815	3/22/11 2115	0.03	32000	1.8E-09
3/22/11 0830	3/22/11 2130	0.01	36000	1.5E-09
3/22/11 0845	3/22/11 2145	0.03	32000	1.0E-09

3/22/11 0900	3/22/11 2200	0.03	32000	7.5E-10
3/22/11 0915	3/22/11 2215	0.03	32000	7.5E-10
3/22/11 1100	3/23/11 0000	0.03	36000	<5.0E-10
3/22/11 1130	3/23/11 0030	0.02	36000	<5.0E-10
3/22/11 1200	3/23/11 0100	0.02	36000	<5.0E-10
3/22/11 1300	3/23/11 0200	0.02	36000	<5.0E-10
3/22/11 1400	3/23/11 0300	0.02	36000	<5.0E-10
3/22/11 1500	3/23/11 0400	0.01	36000	<5.0E-10
3/22/11 1600	3/23/11 0500	0.02	36000	<5.0E-10
3/22/11 1700	3/23/11 0600	0.01	41000	<5.0E-10
3/22/11 1800	3/23/11 0700	0.03	41000	<5.0E-10
3/22/11 1900	3/23/11 0800	0.03	41000	5.0E-10
3/22/11 2000	3/23/11 0900	0.03	45000	5.0E-10
3/22/11 2100	3/23/11 1000	0.03	45000	5.0E-10
3/22/11 2200	3/23/11 1100	0.03	45000	5.0E-10
3/22/11 2300	3/23/11 1200	0.03	49000	5.0E-10
3/23/11 0000	3/23/11 1300	0.03	55000	5.0E-10
3/23/11 0030	3/23/11 1330	0.03	53000	2.5E-09
3/23/11 0100	3/23/11 1400	0.03	53000	2.5E-09
3/23/11 0130	3/23/11 1430	0.03	55000	1.3E-09
3/23/11 0200	3/23/11 1500	0.03	53000	1.3E-09
3/23/11 0230	3/23/11 1530	0.03	55000	1.3E-09
3/23/11 0300	3/23/11 1600	0.03	56000	1.0E-09
3/23/11 0330	3/23/11 1630	0.03	54000	1.5E-09
3/23/11 0400	3/23/11 1700	0.04	53000	1.5E-09
3/23/11 0430	3/23/11 1730	0.03	52000	1.3E-09
3/23/11 0500	3/23/11 1800	0.03	52000	1.4E-09
3/23/11 0530	3/23/11 1830	0.03	50000	7.0E-10
3/23/11 0600	3/23/11 1900	0.03	50000	8.0E-10
3/23/11 0700	3/23/11 2000	0.03	50000	7.5E-10
3/23/11 0800	3/23/11 2100	0.03	50000	7.5E-10
3/23/11 0900	3/23/11 2200	0.02	50000	<5.0E-10
3/23/11 1000	3/23/11 2300	0.02	50000	<5.0E-10
3/23/11 1100	3/24/11 0000	0.02	50000	<5.0E-10
3/23/11 1200	3/24/11 0100	0.02	50000	5.0E-10
3/23/11 1300	3/24/11 0200	0.02	50000	<5.0E-10
3/23/11 1500	3/24/11 0400	0.02	50000	<5.0E-10
3/23/11 1600	3/24/11 0500	0.02	50000	6.0E-10

Γ. 36.18N, LONG. 140.27E





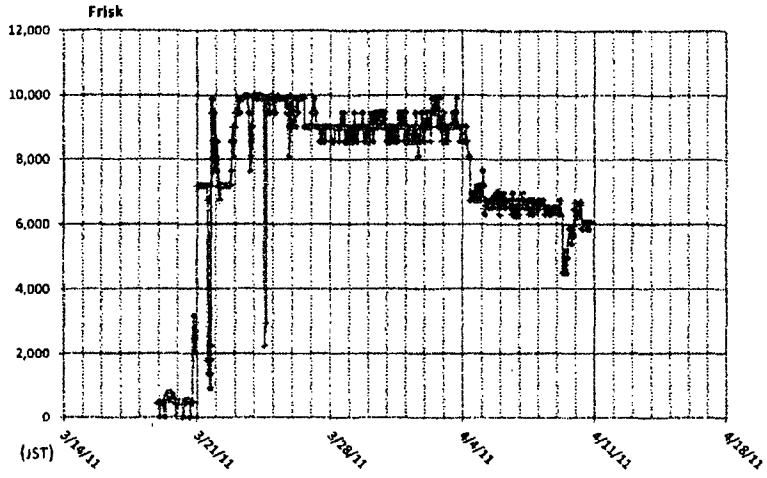
Misawa Locale: LAT. 40.71N, LONG. 141.37E

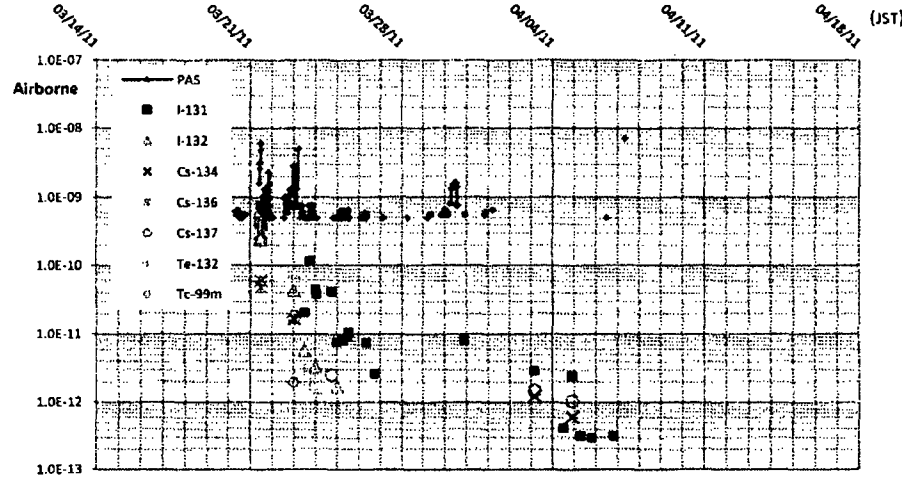
Date and Time (EDT)	Date and Time (JST)	Radiation (mr/hr)	Frisk (pCi/probe)	PAS (µCi/mL)
3/20/11 0400	3/20/11 1700	0.01	<450	<5.0E-10
3/20/11 0600	3/20/11 1900	0.01	<450	7.0E-10
3/20/11 0630	3/20/11 1930	0.01	<450	6.5E-10
3/20/11 0700	3/20/11 2000	0.01	<450	9.0E-10
3/20/11 0730	3/20/11 2030	0.01	<450	6.3E-10
3/20/11 0800	3/20/11 2100	0.01	<450	5.8E-10
3/20/11 0830	3/20/11 2130	0.01	<450	6.5E-10
3/20/11 0845	3/20/11 2145	0.01	<450	5.0E-10
3/20/11 0900	3/20/11 2200	0.01	<450	6.5E-10
3/20/11 0915	3/20/11 2215	0.01	<450	6.8E-10
3/20/11 1049	3/20/11 2349	0.01	<450	6.3E-10
3/20/11 1600	3/21/11 0500	0.01	<450	7.5E-10
3/21/11 0000	3/21/11 1300	0.01	<450	5.6E-10
3/21/11 0030	3/21/11 1330	0.01	<450	<5.0E-10
3/21/11 0100	3/21/11 1400	0.01	<450	8.5E-10
3/21/11 0130	3/21/11 1430	0.01	<450	6.3E-10
3/21/11 0200	3/21/11 1500	0.01	<450	5.9E-10
3/21/11 0230	3/21/11 1530	0.01	<450	<5.0E-10
3/21/11 0300	3/21/11 1600	0.01	<450	6.0E-10
3/21/11 0330	3/21/11 1630	NONE	<450	5.9E-10
3/21/11 0400	3/21/11 1700	0.01	<450	6.3E-10
3/21/11 0430	3/21/11 1730	0.01	<450	6.0E-10
3/21/11 0500	3/21/11 1800	0.01	<450	6.0E-10
3/21/11 0530	3/21/11 1830	0.01	<450	6.5E-10
3/21/11 0600	3/21/11 1900	0.01	<450	6.5E-10
3/21/11 0630	3/21/11 1930	0.01	<450	6.0E-10
3/21/11 0700	3/21/11 2000	0.01	<450	6.5E-10
3/21/11 0730	3/21/11 2030	0.01	<450	7.3E-10
3/21/11 0800	3/21/11 2100	0.01	<450	6.3E-10
3/21/11 0830	3/21/11 2130	0.01	<450	6.5E-10
3/21/11 1100	3/22/11 0000	0.01	<450	6.5E-10
3/21/11 1200	3/22/11 0100	0.01	<450	<5.0E-10
3/21/11 1600	3/22/11 0500	0.01	<450	<5.0E-10
3/21/11 1900	3/22/11 0800	0.01	<450	5.5E-10

3/21/11 2300	3/22/11 1200	0.01	<450	<5.0E-10
3/22/11 0300	3/22/11 1600	0.01	<450	5.7E-10
3/22/11 0700	3/22/11 2000	0.01	<450	<5.0E-10
3/22/11 1100	3/23/11 0000	0.01	<450	<5.0E-10
3/22/11 1200	3/23/11 0100	0.01	<450	<5.0E-10
3/22/11 1900	3/23/11 0800	0.01	<450	<5.0E-10
3/22/11 2300	3/23/11 1200	0.01	<450	5.5E-10
3/23/11 0300	3/23/11 1600	0.01	<450	5.0E-10
3/23/11 0700	3/23/11 2000	0.01	<450	5.0E-10
3/23/11 1514	3/24/11 0414	0.01	<450	<5.0E-10

Nanaban Tower: LAT. 35.29N, LONG. 139.67E

Yokosuka





Date and Time	Date and Time2	Radiation	Frisk	PAS	RI	Notes	Isotopic Analysis						
							I-131	I-132	Cs-134	Cs-136	Cs-137	Te-132	Tc-99m
(EDT)	(JST)	(mr/hr)	(pCi/probe)	(µCi/mL)	(µCi/mL)		(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)
3/18/11 0924	3/18/11 2224	0.01	450	<5.0E-10									
3/18/11 1030	3/18/11 2330	0.01	450	<5.0E-10									
3/18/11 1130	3/19/11 0030	0.01	<450	<5.0E-10									
3/18/11 1230	3/19/11 0130	0.01	450	<5.0E-10									
3/18/11 1330	3/19/11 0230	0.01	450	<5.0E-10									
3/18/11 1430	3/19/11 0330	0.01	450	<5.0E-10									
3/18/11 1530	3/19/11 0430	0.01	450	<5.0E-10									
3/18/11 1630	3/19/11 0530	0.01	450	<5.0E-10									
3/18/11 1825	3/19/11 0725	0.01	<450	<5.0E-10									
3/18/11 1940	3/19/11 0840	0.01	675	<5.0E-10									
3/18/11 2044	3/19/11 0944	0.01	585	<5.0E-10									
3/18/11 2140	3/19/11 1040	0.01	765	<5.0E-10									
3/18/11 2239	3/19/11 1139	0.01	765	<5.0E-10									
3/18/11 2350	3/19/11 1250	0.01	585	<5.0E-10									
3/19/11 0037	3/19/11 1337	0.01	540	<5.0E-10									
3/19/11 0130	3/19/11 1430	0.01	765	<5.0E-10									

3/19/11 0238	3/19/11 1538	0.01	720	<5.0E-10
3/19/11 0335	3/19/11 1635	0.01	675	<5.0E-10
3/19/11 0430	3/19/11 1730	0.01	585	<5.0E-10
3/19/11 0530	3/19/11 1830	0.01	585	<5.0E-10
3/19/11 0630	3/19/11 1930	0.01	450	<5.0E-10
3/19/11 0730	3/19/11 2030	0.01	495	<5.0E-10
3/19/11 0830	3/19/11 2130	0.01	<450	<5.0E-10
3/19/11 0930	3/19/11 2230	0.01	450	<5.0E-10
3/19/11 1030	3/19/11 2330	0.01	495	<5.0E-10
3/19/11 1130	3/20/11 0030	0.01	450	<5.0E-10
3/19/11 1230	3/20/11 0130	0.01	495	<5.0E-10
3/19/11 1330	3/20/11 0230	0.01	495	<5.0E-10
3/19/11 1430	3/20/11 0330	0.01	495	<5.0E-10
3/19/11 1630	3/20/11 0530	0.01	<450	<5.0E-10
3/19/11 1730	3/20/11 0630	0.01	<450	<5.0E-10
3/19/11 1831	3/20/11 0731	0.01	<450	6.0E-10
3/19/11 1932	3/20/11 0832	0.01	540	5.5E-10
3/19/11 2031	3/20/11 0931	0.01	450	5.5E-10
3/19/11 2128	3/20/11 1028	0.01	495	6.5E-10
3/19/11 2228	3/20/11 1128	0.01	450	5.5E-10
3/19/11 2338	3/20/11 1238	0.01	540	5.0E-10
3/20/11 0027	3/20/11 1327	0.01	495	5.0E-10
3/20/11 0130	3/20/11 1430	0.01	450	5.5E-10
3/20/11 0230	3/20/11 1530	0.01	<450	5.0E-10
3/20/11 0325	3/20/11 1625	0.01	450	<5.0E-10
3/20/11 0520	3/20/11 1820	0.01	450	5.5E-10
3/20/11 0630	3/20/11 1930	0.01	3,150	<5.0E-10
3/20/11 0730	3/20/11 2030	0.01	2,475	<5.0E-10
3/20/11 0830	3/20/11 2130	0.01	2,475	<5.0E-10
3/20/11 0930	3/20/11 2230	0.01	2,025	<5.0E-10
3/20/11 1030	3/20/11 2330	0.01	2,700	<5.0E-10
3/20/11 1130	3/21/11 0030	0.01	7,200	<5.0E-10
3/20/11 1230	3/21/11 0130	0.01	7,200	<5.0E-10
3/20/11 1330	3/21/11 0230	0.01	7,200	<5.0E-10

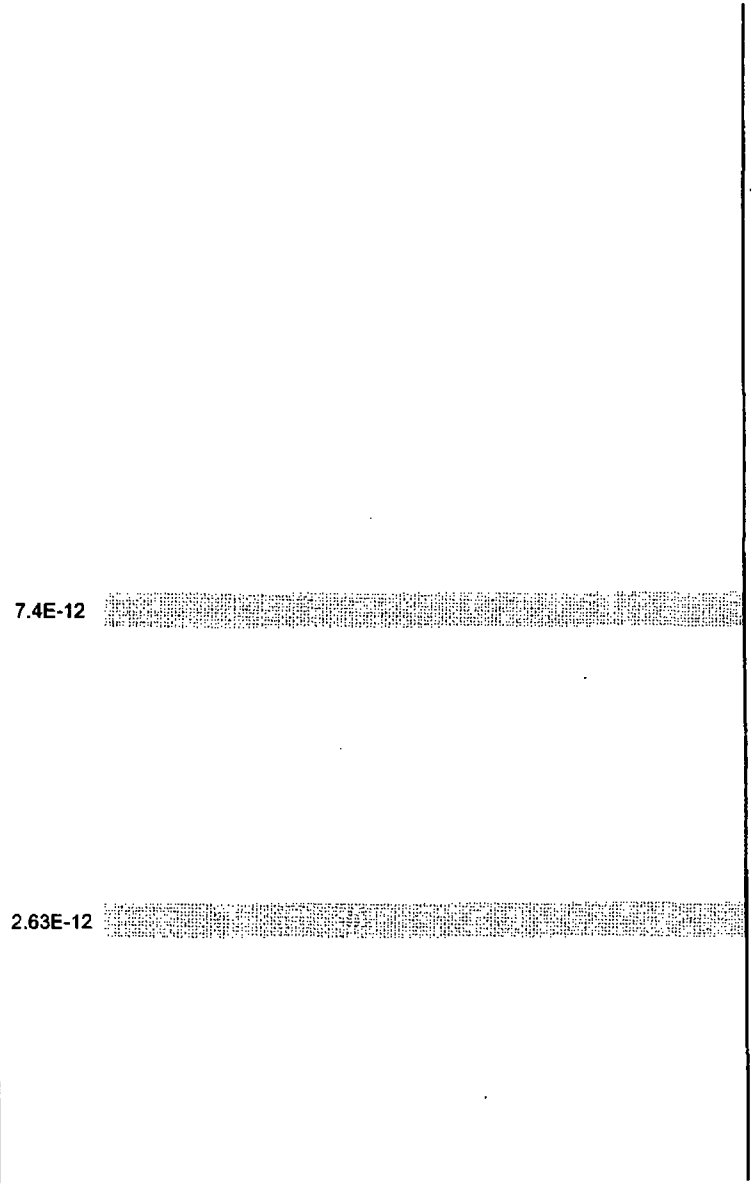
3/20/11 1430	3/21/11 0330	0.01	7,200	<5.0E-10								
3/20/11 1530	3/21/11 0430	0.01	7,200	<5.0E-10								
3/20/11 1630	3/21/11 0530	0.01	7,200	<5.0E-10								
3/20/11 1730	3/21/11 0630	0.01	7,200	<5.0E-10								
3/20/11 1830	3/21/11 0730	0.01	7,200	<5.0E-10								
3/20/11 1928	3/21/11 0828	0.01	7,200	<5.0E-10								
3/20/11 2035	3/21/11 0935	0.01	7,200	1.6E-09								
3/20/11 2058	3/21/11 0958	0.01	7,200	1.6E-09								
3/20/11 2115	3/21/11 1015	0.01	7,200	2.6E-09								
3/20/11 2140	3/21/11 1040	0.01	7,200	3.1E-09								
3/20/11 2200	3/21/11 1100	0.01	7,200	3.2E-09								
3/20/11 2218	3/21/11 1118	0.01	7,200	3.2E-09								
3/20/11 2235	3/21/11 1135	0.01	7,200	4.8E-09	4.38E-10	2.41E-10	3.02E-10	4.85E-11	4.00E-10	3.32E-10	[redacted]	
3/20/11 2257	3/21/11 1157	0.01	7,200	6.0E-09	7.50E-10	2.65E-10	4.01E-10	6.05E-11	5.31E-10	4.27E-10	[redacted]	
3/20/11 2318	3/21/11 1218	0.01	[redacted]	<1.0E-7								
3/20/11 2346	3/21/11 1246	0.01	7,200	6.0E-10								
3/21/11 0012	3/21/11 1312	0.01	7,200	5.0E-10								
3/21/11 0033	3/21/11 1333	0.01	6,750	7.5E-10								
3/21/11 0057	3/21/11 1357	0.01	1,800	1.0E-09								
3/21/11 0120	3/21/11 1420	0.01	1,350	7.5E-10								
3/21/11 0139	3/21/11 1439	0.01	1,800	7.5E-10								
3/21/11 0157	3/21/11 1457	0.01	1,800	8.0E-10								
3/21/11 0214	3/21/11 1514	0.01	2,250	1.0E-09								
3/21/11 0245	3/21/11 1545	0.01	1,800	1.3E-09								
3/21/11 0303	3/21/11 1603	0.01	[redacted]	7.5E-10								
3/21/11 0325	3/21/11 1625	0.01	1,800	8.0E-10								
3/21/11 0345	3/21/11 1645	0.01	1,350	7.0E-10								
3/21/11 0402	3/21/11 1702	0.01	900	5.0E-10								
3/21/11 0418	3/21/11 1718	0.01	1,800	7.0E-10								
3/21/11 0432	3/21/11 1732	0.01	2,250	5.0E-10								
3/21/11 0450	3/21/11 1750	0.01	7,200	8.5E-10								
3/21/11 0509	3/21/11 1809	0.01	7,200	7.5E-10								
3/21/11 0525	3/21/11 1825	0.01	9,450	1.2E-09								
3/21/11 0545	3/21/11 1845	0.01	9,900	1.0E-09								

3/21/11 0600	3/21/11 1900	0.01	9,900	9.0E-10
3/21/11 0615	3/21/11 1915	0.01	9,900	1.0E-09
3/21/11 0630	3/21/11 1930	0.01	9,900	1.0E-09
3/21/11 0645	3/21/11 1945	0.01	8,550	1.0E-09
3/21/11 0700	3/21/11 2000	0.01	8,100	2.3E-09
3/21/11 0715	3/21/11 2015	0.01	7,650	2.3E-09
3/21/11 0732	3/21/11 2032	0.01	8,100	1.5E-09
3/21/11 0745	3/21/11 2045	0.01	7,650	1.0E-09
3/21/11 0800	3/21/11 2100	0.01	8,100	7.5E-10
3/21/11 0815	3/21/11 2115	0.01	8,100	5.0E-10
3/21/11 0830	3/21/11 2130	0.01	8,100	5.0E-10
3/21/11 0845	3/21/11 2145	0.01	8,550	5.0E-10
3/21/11 0900	3/21/11 2200	0.01	9,450	5.0E-10
3/21/11 0930	3/21/11 2230	0.01	7,650	<5.0E-10
3/21/11 1000	3/21/11 2300	0.01	9,450	<5.0E-10
3/21/11 1100	3/22/11 0000	0.01	8,100	<5.0E-10
3/21/11 1200	3/22/11 0100	0.01	7,650	5.0E-10
3/21/11 1300	3/22/11 0200	0.01	8,550	<5.0E-10
3/21/11 1400	3/22/11 0300	0.01	7,200	<5.0E-10
3/21/11 1500	3/22/11 0400	0.01	7,200	<5.0E-10
3/21/11 1600	3/22/11 0500	0.01	6,750	<5.0E-10
3/21/11 1700	3/22/11 0600	0.01	7,200	<5.0E-10
3/21/11 1755	3/22/11 0655	0.01	7,200	<5.0E-10
3/21/11 1900	3/22/11 0800	0.01	7,200	<5.0E-10
3/21/11 1958	3/22/11 0858	0.01	7,200	<5.0E-10
3/21/11 2100	3/22/11 1000	0.01	7,200	<5.0E-10
3/21/11 2200	3/22/11 1100	0.01	7,200	<5.0E-10
3/21/11 2300	3/22/11 1200	0.01	7,200	<5.0E-10
3/22/11 0000	3/22/11 1300	0.01	7,200	5.0E-10
3/22/11 0100	3/22/11 1400	0.01	7,200	9.5E-10
3/22/11 0200	3/22/11 1500	0.01	7,200	1.0E-09
3/22/11 0300	3/22/11 1600	0.01	7,200	7.0E-10
3/22/11 0400	3/22/11 1700	0.01	7,200	6.0E-10
3/22/11 0500	3/22/11 1800	0.01	7,200	7.5E-10

3/22/11 0600	3/22/11 1900	0.01	7,650	7.5E-10								
3/22/11 0700	3/22/11 2000	0.01	8,550	1.3E-09								
3/22/11 0800	3/22/11 2100	0.01	9,000	1.1E-09								
3/22/11 0900	3/22/11 2200	0.01	8,100	1.3E-09								
3/22/11 1000	3/22/11 2300	0.01	8,550	2.8E-09								
3/22/11 1100	3/23/11 0000	0.01	9,450	2.8E-09		7.55E-10	4.36E-11	1.68E-11		1.80E-11	6.64E-11	1.98E-12
3/22/11 1200	3/23/11 0100	0.01	9,000	1.8E-09								
3/22/11 1300	3/23/11 0200	0.01	9,450	1.3E-09								
3/22/11 1400	3/23/11 0300	0.01	9,450	1.0E-09								
3/22/11 1500	3/23/11 0400	0.01	9,900	1.3E-09								
3/22/11 1600	3/23/11 0500	0.01	9,450	5.0E-09								
3/22/11 1700	3/23/11 0600	0.01	9,450	<5.0E-10								
3/22/11 1800	3/23/11 0700	0.01	9,900	5.0E-10								
3/22/11 1900	3/23/11 0800	0.01	9,900	7.5E-10								
3/22/11 2000	3/23/11 0900	0.01	9,900	7.5E-10								
3/22/11 2100	3/23/11 1000	0.01	9,900	6.0E-10								
3/22/11 2200	3/23/11 1100	0.01	9,900	5.0E-10								
3/22/11 2300	3/23/11 1200	0.01	10,000	5.0E-10	(N-1)	2.07E-11	5.76E-12				3.04E-12	
3/23/11 0000	3/23/11 1300	0.01	10,000	5.0E-10								
3/23/11 0100	3/23/11 1400	0.01	10,000	5.0E-10								
3/23/11 0200	3/23/11 1500	0.01	10,000	<5.0E-10								
3/23/11 0300	3/23/11 1600	0.01	10,000	5.0E-10								
3/23/11 0400	3/23/11 1700	0.01	9,450	7.5E-10								
3/23/11 0500	3/23/11 1800	0.01	9,450	5.0E-10	(N-1)	1.17E-10					1.82E-12	
3/23/11 0600	3/23/11 1900	0.01	7,650	5.0E-10								
3/23/11 0700	3/23/11 2000	0.01	8,100	7.5E-10								
3/23/11 0800	3/23/11 2100	0.01	8,550	6.0E-10								
3/23/11 0900	3/23/11 2200	0.01	9,000	7.5E-10								
3/23/11 1000	3/23/11 2300	0.01	10,000	5.0E-10								
3/23/11 1100	3/24/11 0000	0.01	9,900	5.0E-10	(N-1)	4.42E-11	3.27E-12				2.03E-12	
3/23/11 1200	3/24/11 0100	0.01	10,000	5.0E-10	(N-1)	3.85E-11					1.34E-12	
3/23/11 1300	3/24/11 0200	0.01	9,900	<5.0E-10								
3/23/11 1400	3/24/11 0300	0.01	9,900	<5.0E-10								
3/23/11 1500	3/24/11 0400	0.01	10,000	<5.0E-10								

3/23/11 1600	3/24/11 0500	0.01	10,000	<5.0E-10				
3/23/11 1700	3/24/11 0600	0.01	9,900	<5.0E-10				
3/23/11 1800	3/24/11 0700	0.01	10,000	<5.0E-10				
3/23/11 1900	3/24/11 0800	0.01	10,000	<5.0E-10				
3/23/11 2000	3/24/11 0900	0.01	9,900	<5.0E-10				
3/23/11 2100	3/24/11 1000	0.01	9,900	<5.0E-10				
3/23/11 2200	3/24/11 1100	0.01	10,000	<5.0E-10				
3/23/11 2300	3/24/11 1200	0.01	9,900	<5.0E-10				
3/24/11 0000	3/24/11 1300	0.01	9,900	<5.0E-10				
3/24/11 0100	3/24/11 1400	0.01	2,250	<5.0E-10				
3/24/11 0200	3/24/11 1500	0.01	2,925	<5.0E-10				
3/24/11 0300	3/24/11 1600	0.01	9,900	<5.0E-10				
3/24/11 0400	3/24/11 1700	0.01	9,900	<5.0E-10				
3/24/11 0500	3/24/11 1800	0.01	9,900	<5.0E-10	(N-1)	4.11E-11	2.53E-12	
3/24/11 0600	3/24/11 1900	0.01	9,900	<5.0E-10				
3/24/11 0700	3/24/11 2000	0.01	9,450	5.0E-10	(N-2)			
3/24/11 0800	3/24/11 2100	0.01	10,000	<5.0E-10	(N-2)			
3/24/11 0900	3/24/11 2200	0.01	10,000	<5.0E-10	(N-2)			
3/24/11 1000	3/24/11 2300	0.01	9,900	5.0E-10	(N-2)			
3/24/11 1100	3/25/11 0000	0.01	9,900	5.0E-10	(N-1) (N-2)	7.53E-12	1.70E-12	
3/24/11 1200	3/25/11 0100	0.01	9,450	5.0E-10	(N-2)			
3/24/11 1400	3/25/11 0300	0.01	9,450	6.0E-10	(N-2)			
3/24/11 1500	3/25/11 0400	0.01	9,900	5.0E-10	(N-2)			
3/24/11 1600	3/25/11 0500	0.01	9,900	5.0E-10	(N-2)			
3/24/11 1700	3/25/11 0600	0.01	10,000	6.3E-10	(N-1) (N-2)	8.06E-12		
3/24/11 1800	3/25/11 0700	0.01	9,900	<5.0E-10				
3/24/11 1900	3/25/11 0800	0.01	9,900	<5.0E-10				
3/24/11 2000	3/25/11 0900	0.01	9,900	5.0E-10				
3/24/11 2100	3/25/11 1000	0.01	9,900	6.0E-10				
3/24/11 2200	3/25/11 1100	0.01	9,900	6.0E-10				
3/24/11 2300	3/25/11 1200	0.01	9,900	6.5E-10	(N-1)	9.00E-12		
3/25/11 0000	3/25/11 1300	0.01	9,900	5.0E-10	(N-1)	1.07E-11		
3/25/11 0100	3/25/11 1400	0.01	9,900	<5.0E-10				
3/25/11 0200	3/25/11 1500	0.01	9,900	<5.0E-10				

3/25/11 0300	3/25/11 1600	0.01	9,450	<5.0E-10
3/25/11 0400	3/25/11 1700	0.01	9,900	<5.0E-10
3/25/11 0500	3/25/11 1800	0.01	9,900	<5.0E-10
3/25/11 0600	3/25/11 1900	0.01	9,000	<5.0E-10
3/25/11 0700	3/25/11 2000	0.01	8,100	<5.0E-10
3/25/11 0800	3/25/11 2100	0.01	9,000	<5.0E-10
3/25/11 0900	3/25/11 2200	0.01	10,000	<5.0E-10
3/25/11 1000	3/25/11 2300	0.01	9,000	<5.0E-10
3/25/11 1100	3/26/11 0000	0.01	9,450	<5.0E-10
3/25/11 1200	3/26/11 0100	0.01	9,900	<5.0E-10
3/25/11 1300	3/26/11 0200	0.01	9,450	5.0E-10
3/25/11 1400	3/26/11 0300	0.01	9,450	5.0E-10
3/25/11 1500	3/26/11 0400	0.01	9,000	5.0E-10
3/25/11 1600	3/26/11 0500	0.01	9,450	5.0E-10
3/25/11 1700	3/26/11 0600	0.01	9,900	5.0E-10
3/25/11 1800	3/26/11 0700	0.01	9,450	6.0E-10
3/25/11 1900	3/26/11 0800	0.01	9,900	5.0E-10
3/25/11 2000	3/26/11 0900	0.01	9,900	5.5E-10
3/25/11 2100	3/26/11 1000	0.01	9,900	<5.0E-10
3/25/11 2200	3/26/11 1100	0.01	9,900	<5.0E-10
3/25/11 2300	3/26/11 1200	0.01	9,900	<5.0E-10
3/26/11 0000	3/26/11 1300	0.01	9,900	<5.0E-10
3/26/11 0100	3/26/11 1400	0.01	9,900	<5.0E-10
3/26/11 0200	3/26/11 1500	0.01	9,900	<5.0E-10
3/26/11 0300	3/26/11 1600	0.01	9,000	<5.0E-10
3/26/11 0400	3/26/11 1700	0.01	9,000	<5.0E-10
3/26/11 0500	3/26/11 1800	0.01	9,000	<5.0E-10
3/26/11 0600	3/26/11 1900	0.01	9,000	<5.0E-10
3/26/11 0700	3/26/11 2000	0.01	9,000	<5.0E-10
3/26/11 0800	3/26/11 2100	0.01	9,000	<5.0E-10
3/26/11 0900	3/26/11 2200	0.01	9,000	<5.0E-10
3/26/11 1000	3/26/11 2300	0.01	9,000	<5.0E-10
3/26/11 1100	3/27/11 0000	0.01	9,000	<5.0E-10
3/26/11 1200	3/27/11 0100	0.01	9,450	<5.0E-10



3/26/11 1300	3/27/11 0200	0.01	9,450	<5.0E-10
3/26/11 1400	3/27/11 0300	0.01	9,900	5.0E-10
3/26/11 1500	3/27/11 0400	0.01	9,900	5.0E-10
3/26/11 1600	3/27/11 0500	0.01	9,450	<5.0E-10
3/26/11 1700	3/27/11 0600	0.01	9,000	<5.0E-10
3/26/11 1800	3/27/11 0700	0.01	9,000	<5.0E-10
3/26/11 1900	3/27/11 0800	0.01	9,000	<5.0E-10
3/26/11 2000	3/27/11 0900	0.01	9,000	<5.0E-10
3/26/11 2100	3/27/11 1000	0.01	9,000	<5.0E-10
3/26/11 2200	3/27/11 1100	0.01	8,550	<5.0E-10
3/26/11 2300	3/27/11 1200	0.01	8,550	<5.0E-10
3/27/11 0000	3/27/11 1300	0.01	9,000	<5.0E-10
3/27/11 0100	3/27/11 1400	0.01	9,000	<5.0E-10
3/27/11 0200	3/27/11 1500	0.01	8,550	<5.0E-10
3/27/11 0300	3/27/11 1600	0.01	8,550	<5.0E-10
3/27/11 0400	3/27/11 1700	0.01	8,550	<5.0E-10
3/27/11 0500	3/27/11 1800	0.01	9,000	<5.0E-10
3/27/11 0600	3/27/11 1900	0.01	9,000	<5.0E-10
3/27/11 0700	3/27/11 2000	0.01	9,000	<5.0E-10
3/27/11 0800	3/27/11 2100	0.01	9,000	<5.0E-10
3/27/11 0900	3/27/11 2200	0.01	9,000	<5.0E-10
3/27/11 1000	3/27/11 2300	0.01	9,000	<5.0E-10
3/27/11 1100	3/28/11 0000	0.01	9,000	<5.0E-10
3/27/11 1200	3/28/11 0100	0.01	8,550	<5.0E-10
3/27/11 1300	3/28/11 0200	0.01	8,550	<5.0E-10
3/27/11 1400	3/28/11 0300	0.01	8,550	<5.0E-10
3/27/11 1500	3/28/11 0400	0.01	8,550	<5.0E-10
3/27/11 1600	3/28/11 0500	0.01	8,550	<5.0E-10
3/27/11 1700	3/28/11 0600	0.01	9,000	5.0E-10
3/27/11 1800	3/28/11 0700	0.01	9,000	<5.0E-10
3/27/11 1900	3/28/11 0800	0.01	9,000	<5.0E-10
3/27/11 2000	3/28/11 0900	0.01	9,000	<5.0E10
3/27/11 2100	3/28/11 1000	0.01	9,000	<5.0E-10
3/27/11 2200	3/28/11 1100	0.01	8,550	<5.0E-10

3/27/11 2300	3/28/11 1200	0.01	9,000	<5.0E-10	
3/28/11 0000	3/28/11 1300	0.01	9,000	<5.0E-10	
3/28/11 0100	3/28/11 1400	0.01	9,450	<5.0E-10	
3/28/11 0200	3/28/11 1500	0.01	9,000	<5.0E-10	
3/28/11 0300	3/28/11 1600	0.01	9,000	<5.0E-10	
3/28/11 0400	3/28/11 1700	0.01	9,450	<5.0E-10	
3/28/11 0500	3/28/11 1800	0.01	9,450	<5.0E-10	
3/28/11 0600	3/28/11 1900	0.01	8,550	<5.0E-10	
3/28/11 0700	3/28/11 2000	0.01	8,550	<5.0E-10	
3/28/11 0800	3/28/11 2100	0.01	8,550	<5.0E-10	
3/28/11 0900	3/28/11 2200	0.01	9,000	<5.0E-10	
3/28/11 1000	3/28/11 2300	0.01	9,000	<5.0E-10	
3/28/11 1100	3/29/11 0000	0.01	8,550	<5.0E-10	
3/28/11 1200	3/29/11 0100	0.01	8,550	<5.0E-10	
3/28/11 1300	3/29/11 0200	0.01	9,000	<5.0E-10	(N-2)
3/28/11 1400	3/29/11 0300	0.01	8,550	<5.0E-10	(N-2)
3/28/11 1500	3/29/11 0400	0.01	8,550	<5.0E-10	(N-2)
3/28/11 1600	3/29/11 0500	0.01	8,550	5.0E-10	(N-2)
3/28/11 1700	3/29/11 0600	0.01	9,000	5.0E-10	(N-2)
3/28/11 1800	3/29/11 0700	0.01	9,450	5.5E-10	(N-2)
3/28/11 1900	3/29/11 0800	0.01	9,000	<5.0E-10	(N-2)
3/28/11 2000	3/29/11 0900	0.01	8,550	5.5E-10	(N-2)
3/28/11 2100	3/29/11 1000	0.01	8,550	<5.0E-10	(N-2)
3/28/11 2200	3/29/11 1100	0.02	9,000	<5.0E-10	(N-2)
3/28/11 2300	3/29/11 1200	0.01	9,000	<5.0E-10	
3/29/11 0000	3/29/11 1300	0.01	9,000	<5.0E-10	
3/29/11 0100	3/29/11 1400	0.01	9,000	<5.0E-10	
3/29/11 0200	3/29/11 1500	0.01	9,000	<5.0E-10	
3/29/11 0300	3/29/11 1600	0.01	9,000	<5.0E-10	
3/29/11 0400	3/29/11 1700	0.01	9,450	<5.0E-10	
3/29/11 0500	3/29/11 1800	0.01	9,000	<5.0E-10	
3/29/11 0600	3/29/11 1900	0.01	8,550	<5.0E-10	
3/29/11 0700	3/29/11 2000	0.01	8,550	5.5E-10	
3/29/11 0800	3/29/11 2100	0.01	9,000	<5.0E-10	

3/29/11 0900	3/29/11 2200	0.01	9,000	5.5E-10	(N-3)	
3/29/11 1000	3/29/11 2300	0.01	8,550	5.5E-10	(N-3)	
3/29/11 1100	3/30/11 0000	0.01	8,550	6.5E-10	(N-3)	
3/29/11 1200	3/30/11 0100	0.01	9,000	6.5E-10	(N-3)	
3/29/11 1300	3/30/11 0200	0.01	8,550	5.5E-10	(N-3)	
3/29/11 1400	3/30/11 0300	0.01	9,000	6.0E-10	(N-3)	
3/29/11 1500	3/30/11 0400	0.01	9,450	5.5E-10	(N-3)	
3/29/11 1600	3/30/11 0500	0.01	9,000	<5.0E-10	(N-3)	
3/29/11 1700	3/30/11 0600	0.01	9,000	8.0E-10	(N-3)	
3/29/11 1800	3/30/11 0700	0.01	8,550	8.0E-10	(N-3)	
3/29/11 1900	3/30/11 0800	0.01	9,450	1.3E-09	(N-3)	
3/29/11 2000	3/30/11 0900	0.01	9,450	1.5E-09	(N-3)	
3/29/11 2100	3/30/11 1000	0.01	9,000	1.4E-09	(N-3)	
3/29/11 2200	3/30/11 1100	0.01	9,450	1.6E-09	(N-3)	
3/29/11 2300	3/30/11 1200	0.01	9,000	1.6E-09	(N-3)	
3/30/11 0000	3/30/11 1300	0.01	9,450	1.4E-09	(N-3)	
3/30/11 0100	3/30/11 1400	0.01	9,000	7.5E-10	(N-3)	
3/30/11 0200	3/30/11 1500	0.01	9,450	<5.0E-10		
3/30/11 0300	3/30/11 1600	0.01	9,450	<5.0E-10		
3/30/11 0400	3/30/11 1700	0.01	9,000	<5.0E-10		
3/30/11 0500	3/30/11 1800	0.01	9,000	<5.0E-10		
3/30/11 0600	3/30/11 1900	0.01	9,450	<5.0E-10		
3/30/11 0700	3/30/11 2000	0.01	9,450	<5.0E-10		
3/30/11 0800	3/30/11 2100	0.01	9,000	<5.0E-10		
3/30/11 0900	3/30/11 2200	0.01	9,450	5.5E-10		8.21E-12
3/30/11 1000	3/30/11 2300	0.01	8,550	<5.0E-10		
3/30/11 1100	3/31/11 0000	0.01	9,000	<5.0E-10		
3/30/11 1200	3/31/11 0100	0.01	8,550	<5.0E-10		
3/30/11 1300	3/31/11 0200	0.01	9,000	<5.0E-10		
3/30/11 1400	3/31/11 0300	0.01	9,000	<5.0E-10		
3/30/11 1500	3/31/11 0400	0.01	8,550	<5.0E-10		
3/30/11 1600	3/31/11 0500	0.01	9,000	<5.0E-10		
3/30/11 1700	3/31/11 0600	0.01	8,550	<5.0E-10		
3/30/11 1800	3/31/11 0700	0.01	9,000	<5.0E-10		

3/30/11 1900	3/31/11 0800	0.01	9,000	<5.0E-10
3/30/11 2000	3/31/11 0900	0.01	9,000	<5.0E-10
3/30/11 2100	3/31/11 1000	0.01	8,550	<5.0E-10
3/30/11 2200	3/31/11 1100	0.01	8,550	<5.0E-10
3/30/11 2300	3/31/11 1200	0.01	9,000	<5.0E-10
3/31/11 0000	3/31/11 1300	0.01	8,550	<5.0E-10
3/31/11 0045	3/31/11 1345	0.01	9,000	<5.0E-10
3/31/11 0100	3/31/11 1400	0.01	8,550	<5.0E-10
3/31/11 0115	3/31/11 1415	0.01	8,550	<5.0E-10
3/31/11 0200	3/31/11 1500	0.01	9,450	<5.0E-10
3/31/11 0300	3/31/11 1600	0.01	9,450	<5.0E-10
3/31/11 0400	3/31/11 1700	0.01	9,000	<5.0E-10
3/31/11 0500	3/31/11 1800	0.01	9,000	<5.0E-10
3/31/11 0600	3/31/11 1900	0.01	9,450	<5.0E-10
3/31/11 0700	3/31/11 2000	0.01	9,450	5.5E-10
3/31/11 0800	3/31/11 2100	0.01	9,000	6.0E-10
3/31/11 0900	3/31/11 2200	0.01	9,000	<5.0E-10
3/31/11 1000	3/31/11 2300	0.01	8,550	<5.0E-10
3/31/11 1100	4/1/11 0000	0.01	9,450	<5.0E-10
3/31/11 1200	4/1/11 0100	0.01	9,000	<5.0E-10
3/31/11 1300	4/1/11 0200	0.01	8,550	<5.0E-10
3/31/11 1400	4/1/11 0300	0.01	8,550	<5.0E-10
3/31/11 1500	4/1/11 0400	0.01	9,000	<5.0E-10
3/31/11 1600	4/1/11 0500	0.01	8,550	6.5E-10
3/31/11 1700	4/1/11 0600	0.01	8,550	<5.0E-10
3/31/11 1800	4/1/11 0700	0.01	9,000	<5.0E-10
3/31/11 1900	4/1/11 0800	0.01	9,000	<5.0E-10
3/31/11 2000	4/1/11 0900	0.01	8,550	<5.0E-10
3/31/11 2100	4/1/11 1000	0.01	8,550	<5.0E-10
3/31/11 2200	4/1/11 1100	0.01	8,550	<5.0E-10
3/31/11 2300	4/1/11 1200	0.01	9,000	<5.0E-10
4/1/11 0000	4/1/11 1300	0.01	9,450	<5.0E-10
4/1/11 0100	4/1/11 1400	0.01	9,000	<5.0E-10
4/1/11 0200	4/1/11 1500	0.01	8,550	<5.0E-10

4/1/11 0300	4/1/11 1600	0.01	8,100	<5.0E-10
4/1/11 0400	4/1/11 1700	0.01	8,550	<5.0E-10
4/1/11 0500	4/1/11 1800	0.01	8,550	<5.0E-10
4/1/11 0600	4/1/11 1900	0.01	9,000	<5.0E-10
4/1/11 0700	4/1/11 2000	0.01	9,000	<5.0E-10
4/1/11 0800	4/1/11 2100	0.01	9,450	<5.0E-10
4/1/11 0900	4/1/11 2200	0.01	9,000	<5.0E-10
4/1/11 1000	4/1/11 2300	0.01	8,550	<5.0E-10
4/1/11 1100	4/2/11 0000	0.01	8,550	<5.0E-10
4/1/11 1200	4/2/11 0100	0.01	9,000	<5.0E-10
4/1/11 1300	4/2/11 0200	0.01	9,000	<5.0E-10
4/1/11 1400	4/2/11 0300	0.01	9,450	<5.0E-10
4/1/11 1540	4/2/11 0440	0.01	9,000	<5.0E-10
4/1/11 1600	4/2/11 0500	0.01	9,450	<5.0E-10
4/1/11 1700	4/2/11 0600	0.01	9,450	<5.0E-10
4/1/11 1800	4/2/11 0700	0.01	9,000	<5.0E-10
4/1/11 1900	4/2/11 0800	0.01	8,550	<5.0E-10
4/1/11 2000	4/2/11 0900	0.01	9,900	<5.0E-10
4/1/11 2100	4/2/11 1000	0.01	9,450	<5.0E-10
4/1/11 2200	4/2/11 1100	0.01	9,450	<5.0E-10
4/1/11 2300	4/2/11 1200	0.01	9,900	<5.0E-10
4/2/11 0000	4/2/11 1300	0.01	9,450	<5.0E-10
4/2/11 0100	4/2/11 1400	0.01	9,450	<5.0E-10
4/2/11 0200	4/2/11 1500	0.01	9,900	<5.0E-10
4/2/11 0300	4/2/11 1600	0.01	9,900	<5.0E-10
4/2/11 0400	4/2/11 1700	0.01	9,000	<5.0E-10
4/2/11 0500	4/2/11 1800	0.01	9,450	<5.0E-10
4/2/11 0600	4/2/11 1900	0.01	9,900	<5.0E-10
4/2/11 0700	4/2/11 2000	0.01	9,000	<5.0E-10
4/2/11 0800	4/2/11 2100	0.01	9,000	<5.0E-10
4/2/11 0900	4/2/11 2200	0.01	8,550	<5.0E-10
4/2/11 1000	4/2/11 2300	0.01	9,450	<5.0E-10
4/2/11 1100	4/3/11 0000	0.01	9,450	<5.0E-10
4/2/11 1200	4/3/11 0100	0.01	9,450	<5.0E-10

4/2/11 1300	4/3/11 0200	0.01	9,000	<5.0E-10						
4/2/11 1400	4/3/11 0300	0.01	8,550	<5.0E-10						
4/2/11 1500	4/3/11 0400				(N-4)	2.93E-12		1.23E-12	1.47E-12	
4/2/11 1500	4/3/11 0400	0.01	9,000	<5.0E-10						
4/2/11 1600	4/3/11 0500	0.01	8,550	<5.0E-10						
4/2/11 1700	4/3/11 0600	0.01	8,550	<5.0E-10						
4/2/11 1800	4/3/11 0700	0.01	9,000	<5.0E-10						
4/2/11 1900	4/3/11 0800	0.01	9,000	<5.0E-10						
4/2/11 2000	4/3/11 0900	0.01	9,000	<5.0E-10						
4/2/11 2100	4/3/11 1000	0.01	9,000	<5.0E-10						
4/2/11 2200	4/3/11 1100	0.01	9,000	<5.0E-10						
4/2/11 2300	4/3/11 1200	0.01	9,450	<5.0E-10						
4/3/11 0000	4/3/11 1300	0.01	9,000	<5.0E-10						
4/3/11 0100	4/3/11 1400	0.01	9,000	<5.0E-10						
4/3/11 0200	4/3/11 1500	0.01	9,450	<5.0E-10						
4/3/11 0300	4/3/11 1600	0.01	9,900	<5.0E-10						
4/3/11 0400	4/3/11 1700	0.01	9,450	<5.0E-10						
4/3/11 0500	4/3/11 1800	0.01	9,000	<5.0E-10						
4/3/11 0600	4/3/11 1900	0.01	9,000	<5.0E-10						
4/3/11 0700	4/3/11 2000	0.01	9,000	<5.0E-10						
4/3/11 0800	4/3/11 2100	0.01	8,550	<5.0E-10						
4/3/11 0900	4/3/11 2200	0.01	9,000	<5.0E-10						
4/3/11 1000	4/3/11 2300	0.01	8,550	<5.0E-10						
4/3/11 1100	4/4/11 0000	0.01	8,550	<5.0E-10						
4/3/11 1200	4/4/11 0100	0.01	8,550	<5.0E-10						
4/3/11 1300	4/4/11 0200	0.01	8,550	<5.0E-10						
4/3/11 1400	4/4/11 0300	0.01	8,550	<5.0E-10						
4/3/11 1500	4/4/11 0400	0.01	9,000	<5.0E-10						
4/3/11 1600	4/4/11 0500	0.01	8,550	<5.0E-10						
4/3/11 1700	4/4/11 0600	0.01	8,550	<5.0E-10						
4/3/11 1800	4/4/11 0700	0.01	8,100	<5.0E-10						
4/3/11 1900	4/4/11 0800	0.01	8,100	<5.0E-10						
4/3/11 2000	4/4/11 0900	0.01	8,100	<5.0E-10						
4/3/11 2100	4/4/11 1000	0.01	6,750	<5.0E-10						

4/3/11 2200	4/4/11 1100	0.01	6,975	<5.0E-10
4/3/11 2300	4/4/11 1200	0.01	6,975	<5.0E-10
4/3/11 2329	4/4/11 1229			
4/4/11 0000	4/4/11 1300	0.01	6,975	<5.0E-10
4/4/11 0100	4/4/11 1400	0.01	6,975	<5.0E-10
4/4/11 0200	4/4/11 1500	0.01	6,750	<5.0E-10
4/4/11 0300	4/4/11 1600	0.01	6,750	<5.0E-10
4/4/11 0400	4/4/11 1700	0.01	7,200	<5.0E-10
4/4/11 0500	4/4/11 1800	0.01	7,200	<5.0E-10
4/4/11 0600	4/4/11 1900	0.01	6,750	<5.0E-10
4/4/11 0700	4/4/11 2000	0.02	7,200	<5.0E-10
4/4/11 0800	4/4/11 2100	0.01	6,975	<5.0E-10
4/4/11 0900	4/4/11 2200			
4/4/11 0900	4/4/11 2200	0.01	6,750	<5.0E-10
4/4/11 1000	4/4/11 2300	0.01	7,200	<5.0E-10
4/4/11 1100	4/5/11 0000	0.01	6,750	<5.0E-10
4/4/11 1200	4/5/11 0100	0.01	7,650	<5.0E-10
4/4/11 1300	4/5/11 0200	0.01	7,200	<5.0E-10
4/4/11 1400	4/5/11 0300	0.01	7,200	<5.0E-10
4/4/11 1500	4/5/11 0400	0.01	6,300	<5.0E-10
4/4/11 1600	4/5/11 0500	0.01	6,300	<5.0E-10
4/4/11 1700	4/5/11 0600	0.01	6,750	<5.0E-10
4/4/11 1800	4/5/11 0700	0.01	6,750	<5.0E-10
4/4/11 1829	4/5/11 0729			
4/4/11 1900	4/5/11 0800	0.01	6,750	<5.0E-10
4/4/11 2000	4/5/11 0900	0.01	6,525	<5.0E-10
4/4/11 2100	4/5/11 1000	0.01	6,525	<5.0E-10
4/4/11 2200	4/5/11 1100	0.01	6,750	<5.0E-10
4/4/11 2300	4/5/11 1200	0.01	6,750	<5.0E-10
4/5/11 0000	4/5/11 1300	0.01	6,525	<5.0E-10
4/5/11 0100	4/5/11 1400	0.01	6,750	<5.0E-10
4/5/11 0200	4/5/11 1500	0.01	6,660	<5.0E-10
4/5/11 0300	4/5/11 1600	0.01	6,885	<5.0E-10
4/5/11 0400	4/5/11 1700	0.01	6,615	<5.0E-10

(N-5) 4.1E-13

(N-6) 2.42E-12 6.04E-13 1.03E-12

(N-7) 3.18E-13

4/5/11 0500	4/5/11 1800	0.01	6,660	<5.0E-10		
4/5/11 0600	4/5/11 1900	0.01	6,525	<5.0E-10		
4/5/11 0630	4/5/11 1930				(N-8)	2.98E-13
4/5/11 0700	4/5/11 2000	0.01	7,020	<5.0E-10		
4/5/11 0800	4/5/11 2100	0.01	6,570	<5.0E-10		
4/5/11 0900	4/5/11 2200	0.01	6,975	<5.0E-10		
4/5/11 1000	4/5/11 2300	0.01	6,300	<5.0E-10		
4/5/11 1100	4/6/11 0000	0.01	6,750	<5.0E-10		
4/5/11 1200	4/6/11 0100	0.01	6,525	<5.0E-10		
4/5/11 1300	4/6/11 0200	0.01	6,750	<5.0E-10		
4/5/11 1400	4/6/11 0300	0.01	6,750	<5.0E-10		
4/5/11 1500	4/6/11 0400	0.01	6,975	<5.0E-10		
4/5/11 1600	4/6/11 0500	0.01	6,975	<5.0E-10		
4/5/11 1700	4/6/11 0600	0.01	6,525	<5.0E-10		
4/5/11 1800	4/6/11 0700	0.01	6,750	<5.0E-10		
4/5/11 1900	4/6/11 0800	0.01	6,750	<5.0E-10		
4/5/11 2000	4/6/11 0900	0.01	6,750	<5.0E-10		
4/5/11 2100	4/6/11 1000	0.01	6,750	<5.0E-10		
4/5/11 2200	4/6/11 1100	0.01	6,750	<5.0E-10		
4/5/11 2300	4/6/11 1200	0.01	6,750	5.0E-10		
4/6/11 0000	4/6/11 1300	0.01	6,525	<5.0E-10		
4/6/11 0100	4/6/11 1400	0.01	6,750	<5.0E-10		
4/6/11 0200	4/6/11 1500	0.01	6,300	<5.0E-10		
4/6/11 0300	4/6/11 1600	0.01	6,975	<5.0E-10		
4/6/11 0400	4/6/11 1700	0.01	6,300	<5.0E-10		
4/6/11 0500	4/6/11 1800	0.01	6,525	<5.0E-10		
4/6/11 0600	4/6/11 1900	0.01	6,750	<5.0E-10		
4/6/11 0630	4/6/11 1930				(N-9)	3.14E-13
4/6/11 0700	4/6/11 2000	0.01	6,210	<5.0E-10		
4/6/11 0800	4/6/11 2100	0.01	6,750	<5.0E-10		
4/6/11 0900	4/6/11 2200	0.01	6,525	<5.0E-10		
4/6/11 1000	4/6/11 2300	0.01	6,750	<5.0E-10		
4/6/11 1100	4/7/11 0000	0.01	6,300	<5.0E-10		
4/6/11 1200	4/7/11 0100	0.01	6,525	<5.0E-10		

4/6/11 1300	4/7/11 0200	0.01	6,525	<5.0E-10
4/6/11 1400	4/7/11 0300	0.01	6,750	<5.0E-10
4/6/11 1500	4/7/11 0400	0.01	6,750	<5.0E-10
4/6/11 1600	4/7/11 0500	0.01	6,975	<5.0E-10
4/6/11 1700	4/7/11 0600	0.01	6,750	<5.0E-10
4/6/11 1800	4/7/11 0700	0.01	6,525	<5.0E-10
4/6/11 1900	4/7/11 0800	0.01	6,525	7.1E-09
4/6/11 2000	4/7/11 0900	0.01	6,750	<5.0E-10
4/6/11 2100	4/7/11 1000	0.01	6,525	<5.0E-10
4/6/11 2200	4/7/11 1100	0.01	6,750	<5.0E-10
4/6/11 2300	4/7/11 1200	0.01	6,750	<5.0E-10
4/7/11 0000	4/7/11 1300	0.01	6,300	<5.0E-10
4/7/11 0100	4/7/11 1400	0.01	6,750	<5.0E-10
4/7/11 0200	4/7/11 1500	0.01	6,750	<5.0E-10
4/7/11 0300	4/7/11 1600	0.01	6,300	<5.0E-10
4/7/11 0400	4/7/11 1700	0.01	6,525	<5.0E-10
4/7/11 0500	4/7/11 1800	0.01	6,300	<5.0E-10
4/7/11 0600	4/7/11 1900	0.01	6,750	<5.0E-10
4/7/11 0700	4/7/11 2000	0.01	6,390	<5.0E-10
4/7/11 0800	4/7/11 2100	0.01	6,660	<5.0E-10
4/7/11 0900	4/7/11 2200	0.01	6,480	<5.0E-10
4/7/11 1000	4/7/11 2300	0.01	6,390	<5.0E-10
4/7/11 1100	4/8/11 0000	0.01	6,750	<5.0E-10
4/7/11 1200	4/8/11 0100	0.01	6,750	<5.0E-10
4/7/11 1300	4/8/11 0200	0.01	6,750	<5.0E-10
4/7/11 1400	4/8/11 0300	0.01	6,525	<5.0E-10
4/7/11 1500	4/8/11 0400	0.01	6,525	<5.0E-10
4/7/11 1600	4/8/11 0500	0.01	6,525	<5.0E-10
4/7/11 1700	4/8/11 0600	0.01	6,750	<5.0E-10
4/7/11 1800	4/8/11 0700	0.01	6,750	<5.0E-10
4/7/11 1900	4/8/11 0800	0.01	6,525	<5.0E-10
4/7/11 2000	4/8/11 0900	0.01	6,300	<5.0E-10
4/7/11 2100	4/8/11 1000	0.01	6,525	<5.0E-10
4/7/11 2200	4/8/11 1100	0.01	6,525	<5.0E-10

4/7/11 2300	4/8/11 1200	0.01	6,525	<5.0E-10
4/8/11 0000	4/8/11 1300	0.01	6,525	<5.0E-10
4/8/11 0100	4/8/11 1400	0.01	6,300	<5.0E-10
4/8/11 0200	4/8/11 1500	0.01	6,525	<5.0E-10
4/8/11 0300	4/8/11 1600	0.01	6,300	<5.0E-10
4/8/11 0400	4/8/11 1700	0.01	6,300	<5.0E-10
4/8/11 0500	4/8/11 1800	0.01	6,390	<5.0E-10
4/8/11 0600	4/8/11 1900	0.01	6,525	<5.0E-10
4/8/11 0700	4/8/11 2000	0.01	6,435	<5.0E-10
4/8/11 0800	4/8/11 2100	0.01	6,345	<5.0E-10
4/8/11 0900	4/8/11 2200	0.01	6,390	<5.0E-10
4/8/11 1000	4/8/11 2300	0.01	6,480	<5.0E-10
4/8/11 1100	4/9/11 0000	0.01	6,525	<5.0E-10
4/8/11 1200	4/9/11 0100	0.01	6,525	<5.0E-10
4/8/11 1300	4/9/11 0200	0.01	6,300	<5.0E-10
4/8/11 1400	4/9/11 0300	0.01	6,300	<5.0E-10
4/8/11 1500	4/9/11 0400	0.01	6,750	<5.0E-10
4/8/11 1600	4/9/11 0500	0.01	6,750	<5.0E-10
4/8/11 1700	4/9/11 0600	0.01	6,300	<5.0E-10
4/8/11 1800	4/9/11 0700	0.01	6,300	<5.0E-10
4/8/11 1900	4/9/11 0800	0.01	4,500	<5.0E-10
4/8/11 2000	4/9/11 0900	0.01	4,500	<5.0E-10
4/8/11 2100	4/9/11 1000	0.01	4,950	<5.0E-10
4/8/11 2200	4/9/11 1100	0.01	4,950	<5.0E-10
4/8/11 2300	4/9/11 1200	0.01	5,175	<5.0E-10
4/9/11 0000	4/9/11 1300	0.01	4,500	<5.0E-10
4/9/11 0100	4/9/11 1400	0.01	4,950	<5.0E-10
4/9/11 0300	4/9/11 1600	0.01	5,850	<5.0E-10
4/9/11 0400	4/9/11 1700	0.01	5,850	<5.0E-10
4/9/11 0500	4/9/11 1800	0.01	5,850	<5.0E-10
4/9/11 0600	4/9/11 1900	0.01	5,400	<5.0E-10
4/9/11 0700	4/9/11 2000	0.01	5,625	<5.0E-10
4/9/11 0800	4/9/11 2100	0.01	5,625	<5.0E-10
4/9/11 0900	4/9/11 2200	0.01	6,480	<5.0E-10

4/9/11 1000	4/9/11 2300	0.01	6,660	<5.0E-10
4/9/11 1100	4/10/11 0000	0.01	6,660	<5.0E-10
4/9/11 1200	4/10/11 0100	0.01	6,615	<5.0E-10
4/9/11 1300	4/10/11 0200	0.01	6,210	<5.0E-10
4/9/11 1400	4/10/11 0300	0.01	6,300	<5.0E-10
4/9/11 1500	4/10/11 0400	0.01	6,300	<5.0E-10
4/9/11 1600	4/10/11 0500	0.01	6,390	<5.0E-10
4/9/11 1700	4/10/11 0600	0.01	6,615	<5.0E-10
4/9/11 1800	4/10/11 0700	0.01	6,705	<5.0E-10
4/9/11 1900	4/10/11 0800	0.01	5,850	<5.0E-10
4/9/11 2000	4/10/11 0900	0.01	5,850	<5.0E-10
4/9/11 2100	4/10/11 1000	0.01	5,850	<5.0E-10
4/9/11 2200	4/10/11 1100	0.01	6,075	<5.0E-10
4/9/11 2300	4/10/11 1200	0.01	6,075	<5.0E-10
4/10/11 0000	4/10/11 1300	0.01	6,075	<5.0E-10
4/10/11 0100	4/10/11 1400	0.01	6,075	<5.0E-10
4/10/11 0200	4/10/11 1500	0.01	5,850	<5.0E-10
4/10/11 0300	4/10/11 1600	0.01	5,850	<5.0E-10
4/10/11 0400	4/10/11 1700	0.01	5,850	<5.0E-10
4/10/11 0500	4/10/11 1800	0.01	6,075	<5.0E-10

Notes

(N-1) Isotopic analysis samples were identified as OS1 rather than Nanaban Tower in the ECCDDS.

(N-2) NACCC reports elevated air samples are due to natural short-lived Radon daughters as confirmed by half-life determination.

(N-3) 3/29/11 0230 (JST): NACCC reports elevated air samples are due to natural short-lived Radon daughters, as confirmed by half-life determination, as well as a potential plume event.

(N-4) 4/3/11 0400 (JST): 1110 ft3 Large Volume PAS @ Nanaban Tower - 100ccpm

(N-5) 4/4/11 1229 (JST): 1200 ft3 Large Volume PAS @ Nanaban Tower - 30ccpm

(N-6) 4/4/11 2200 (JST): 1350 ft3 Large Volume PAS @ Nanaban Tower - 30ccpm

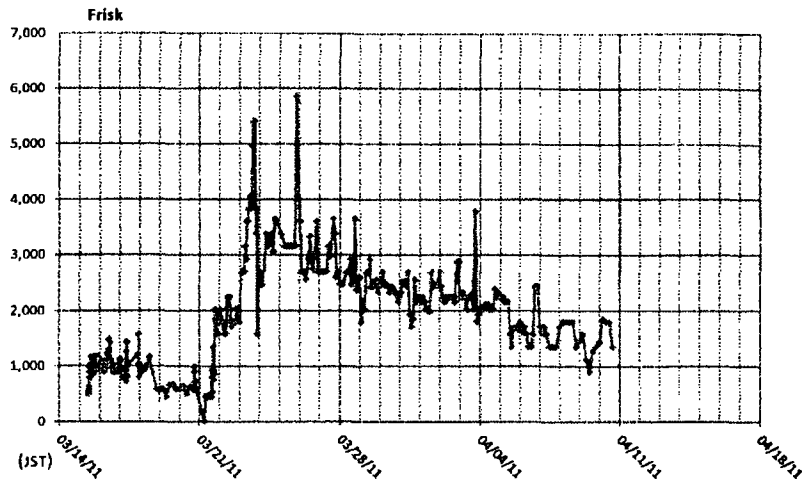
(N-7) 4/5/11 0729 (JST): 1200 ft3 Large Volume PAS @ Nanaban Tower - 0ccpm

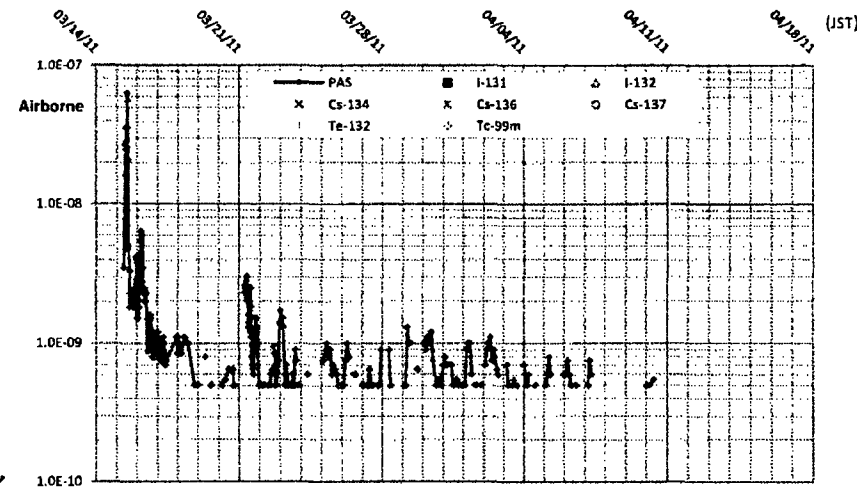
(N-8) 4/5/11 1930 (JST): 1350 ft3 Large Volume PAS @ Nanaban Tower - 40ccpm

(N-9) 4/6/11 1930 (JST): 1260 ft3 Large Volume PAS @ Nanaban Tower - 40ccpm

Atsugi NAS: LAT 35.42N, LONG. 139.36E

Northwest of Yokosuka





Date and Time	Date and Time2	Radiation	Frisk	PAS	RI	Notes	Isotopic Analysis						
							I-131	I-132	Cs-134	Cs-136	Cs-137	Te-132	Tc-99m
(EDT)	(JST)	(mr/hr)	(pCi/probe)	(µCi/mL)	(µCi/mL)		(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)
3/14/11 1912	3/15/11 0812			3.5E-09									
3/14/11 2136	3/15/11 1036	0.01	495	2.7E-08									
3/14/11 2148	3/15/11 1048	0.01	540	1.6E-08									
3/14/11 2205	3/15/11 1105	0.01	585	2.5E-08									
3/14/11 2225	3/15/11 1125	0.01	630	3.5E-08									
3/14/11 2248	3/15/11 1148	0.01	788	3.6E-08									
3/14/11 2302	3/15/11 1202	0.01	900	2.9E-08									
3/14/11 2317	3/15/11 1217	0.02	990	4.8E-09									
3/14/11 2335	3/15/11 1235	0.02	1,035	6.3E-08									
3/14/11 2350	3/15/11 1250	0.01	1,170	5.6E-08									
3/15/11 0004	3/15/11 1304	0.01	1,170	2.6E-08									
3/15/11 0020	3/15/11 1320	0.01	1,170	2.1E-08									
3/15/11 0035	3/15/11 1335	0.01	1,170	5.0E-09									
3/15/11 0200	3/15/11 1500	0.01	1,035	3.3E-09									
3/15/11 0225	3/15/11 1525	0.01	1,125	1.8E-09									
3/15/11 0240	3/15/11 1540	0.01	945	2.3E-09									

3/15/11 0255	3/15/11 1555	0.01	855	
3/15/11 0315	3/15/11 1615	0.01	1,170	
3/15/11 0330	3/15/11 1630	0.01	1,080	
3/15/11 0400	3/15/11 1700	0.01	945	
3/15/11 0415	3/15/11 1715	0.01	900	
3/15/11 0445	3/15/11 1745	0.01	945	
3/15/11 0500	3/15/11 1800	0.01	1,170	
3/15/11 0515	3/15/11 1815	0.01	990	
3/15/11 0530	3/15/11 1830	0.01	900	
3/15/11 0600	3/15/11 1900	0.01	900	2.3E-09
3/15/11 0615	3/15/11 1915	0.01	990	2.0E-09
3/15/11 0630	3/15/11 1930	0.01	990	2.4E-09
3/15/11 0653	3/15/11 1953	0.01	990	1.8E-09
3/15/11 0700	3/15/11 2000	0.01	1,125	2.3E-09
3/15/11 0715	3/15/11 2015	0.01	990	1.8E-09
3/15/11 0730	3/15/11 2030	0.01	1,035	1.8E-09
3/15/11 0745	3/15/11 2045	0.01	1,125	2.0E-09
3/15/11 0800	3/15/11 2100	0.01	1,170	1.8E-09
3/15/11 0830	3/15/11 2130	0.01	1,125	1.8E-09
3/15/11 0900	3/15/11 2200	0.01	1,170	2.5E-09
3/15/11 0930	3/15/11 2230	0.01	1,125	4.2E-09
3/15/11 1000	3/15/11 2300	0.01	1,125	4.0E-09
3/15/11 1030	3/15/11 2330	0.01	1,125	3.8E-09
3/15/11 1100	3/16/11 0000	0.01	1,125	1.5E-09
3/15/11 1130	3/16/11 0030	0.01	1,125	2.0E-09
3/15/11 1200	3/16/11 0100	0.01	1,125	2.1E-09
3/15/11 1230	3/16/11 0130	0.01	1,125	1.5E-09
3/15/11 1300	3/16/11 0200	0.01	990	1.8E-09
3/15/11 1330	3/16/11 0230	0.01	990	2.4E-09
3/15/11 1400	3/16/11 0300	0.01	990	2.9E-09
3/15/11 1430	3/16/11 0330	0.01	990	4.3E-09
3/15/11 1500	3/16/11 0400	0.01	990	5.5E-09
3/15/11 1530	3/16/11 0430	0.01	945	6.4E-09
3/15/11 1600	3/16/11 0500	0.01	945	5.0E-09

3/15/11 1630	3/16/11 0530	0.01	900	6.0E-09
3/15/11 1700	3/16/11 0600	0.01	1,080	3.5E-09
3/15/11 1730	3/16/11 0630	0.01	945	2.3E-09
3/15/11 1800	3/16/11 0700	0.01	990	2.8E-09
3/15/11 1830	3/16/11 0730	0.01	1,080	2.3E-09
3/15/11 1900	3/16/11 0800	0.01	1,080	2.3E-09
3/15/11 1930	3/16/11 0830	0.01	1,080	2.5E-09
3/15/11 2000	3/16/11 0900	0.01	1,215	2.0E-09
3/15/11 2130	3/16/11 1030	0.01	1,305	2.0E-09
3/15/11 2200	3/16/11 1100	0.01	1,485	2.3E-09
3/15/11 2330	3/16/11 1230	0.01	1,440	8.8E-10
3/16/11 0030	3/16/11 1330	0.01	1,080	1.5E-09
3/16/11 0100	3/16/11 1400	0.01	1,125	1.5E-09
3/16/11 0130	3/16/11 1430	0.01	990	9.0E-10
3/16/11 0300	3/16/11 1600	0.01	900	1.6E-09
3/16/11 0330	3/16/11 1630	0.01	945	1.5E-09
3/16/11 0400	3/16/11 1700	0.01	900	1.2E-09
3/16/11 0430	3/16/11 1730	0.01	900	1.2E-09
3/16/11 0500	3/16/11 1800	0.01	945	1.0E-09
3/16/11 0530	3/16/11 1830	0.01	900	8.0E-10
3/16/11 0600	3/16/11 1900	0.01	990	8.0E-10
3/16/11 0630	3/16/11 1930	0.01	900	1.2E-09
3/16/11 0700	3/16/11 2000	0.01	945	8.0E-10
3/16/11 0730	3/16/11 2030	0.01	900	9.0E-10
3/16/11 0800	3/16/11 2100	0.01	900	9.3E-10
3/16/11 0830	3/16/11 2130	0.01	990	1.1E-09
3/16/11 0900	3/16/11 2200	0.01	990	8.8E-10
3/16/11 0930	3/16/11 2230	0.01	1,035	8.8E-10
3/16/11 1000	3/16/11 2300	0.01	990	9.0E-10
3/16/11 1030	3/16/11 2330	0.01	990	1.0E-09
3/16/11 1100	3/17/11 0000	0.01	1,125	8.0E-10
3/16/11 1130	3/17/11 0030	0.01	1,080	1.2E-09
3/16/11 1200	3/17/11 0100	0.01	900	1.0E-09
3/16/11 1230	3/17/11 0130	0.01	1,125	1.0E-09

3/16/11 1300	3/17/11 0200	0.01	945	9.0E-10
3/16/11 1330	3/17/11 0230	0.01	900	8.8E-10
3/16/11 1400	3/17/11 0300	0.01	810	1.0E-09
3/16/11 1430	3/17/11 0330	0.01	810	9.0E-10
3/16/11 1500	3/17/11 0400	0.01	810	9.0E-10
3/16/11 1530	3/17/11 0430	0.01	900	7.5E-10
3/16/11 1600	3/17/11 0500	0.01	945	1.0E-09
3/16/11 1630	3/17/11 0530	0.01	900	9.5E-10
3/16/11 1700	3/17/11 0600	0.01	810	9.0E-10
3/16/11 1730	3/17/11 0630	0.01	810	1.1E-09
3/16/11 1800	3/17/11 0700	0.01	855	1.1E-09
3/16/11 1830	3/17/11 0730	0.01	720	1.0E-09
3/16/11 1900	3/17/11 0800	0.01	1,260	7.5E-10
3/16/11 1930	3/17/11 0830	0.01	1,440	8.5E-10
3/16/11 2000	3/17/11 0900	0.01	1,440	7.0E-10
3/16/11 2030	3/17/11 0930	0.01	810	7.0E-10
3/16/11 2100	3/17/11 1000	0.01	1,035	7.5E-10
3/17/11 0930	3/17/11 2230	0.01	1,215	1.1E-09
3/17/11 1000	3/17/11 2300	0.01	1,575	1.1E-09
3/17/11 1030	3/17/11 2330	0.01	1,035	1.0E-09
3/17/11 1100	3/18/11 0000	0.01	810	8.5E-10
3/17/11 1130	3/18/11 0030	0.01	990	1.1E-09
3/17/11 1500	3/18/11 0400	0.01	900	8.5E-10
3/17/11 1900	3/18/11 0800	0.01	990	1.1E-09
3/17/11 2300	3/18/11 1200	0.01	1,170	1.0E-09
3/18/11 0700	3/18/11 2000	0.01	585	5.0E-10
3/18/11 1100	3/19/11 0000	0.01	563	5.0E-10
3/18/11 1500	3/19/11 0400	0.01	585	<5.0E-10
3/18/11 1900	3/19/11 0800	0.01	450	8.0E-10
3/18/11 2300	3/19/11 1200	0.01	675	<5.0E-10
3/19/11 0300	3/19/11 1600	0.01	675	5.0E-10
3/19/11 0700	3/19/11 2000	0.01	585	<5.0E-10
3/19/11 1100	3/20/11 0000	0.01	585	<5.0E-10
3/19/11 1500	3/20/11 0400	0.01	630	5.0E-10

3/19/11 1900	3/20/11 0800	0.01	495	5.5E-10
3/19/11 2300	3/20/11 1200	0.01	630	6.5E-10
3/20/11 0330	3/20/11 1630	0.01	585	6.5E-10
3/20/11 0400	3/20/11 1700	0.01	720	6.5E-10
3/20/11 0430	3/20/11 1730	0.01	990	5.0E-10
3/20/11 0500	3/20/11 1800	0.01	900	5.0E-10
3/20/11 0530	3/20/11 1830	0.01	720	5.0E-10
3/20/11 0600	3/20/11 1900	0.01	585	<5.0E-10
3/20/11 1700	3/21/11 0600	0.01	<450	2.3E-09
3/20/11 1800	3/21/11 0700	0.01	450	2.6E-09
3/20/11 1815	3/21/11 0715	0.01	450	2.5E-09
3/20/11 1830	3/21/11 0730	0.01	450	2.3E-09
3/20/11 1845	3/21/11 0745	0.01	450	2.5E-09
3/20/11 1900	3/21/11 0800	0.01	450	2.3E-09
3/20/11 1915	3/21/11 0815	0.01	450	2.3E-09
3/20/11 1930	3/21/11 0830	0.01	450	2.5E-09
3/20/11 1945	3/21/11 0845	0.01	450	3.0E-09
3/20/11 2000	3/21/11 0900	0.01	450	2.8E-09
3/20/11 2015	3/21/11 0915	0.01	450	2.5E-09
3/20/11 2030	3/21/11 0930	0.01	450	2.3E-09
3/20/11 2045	3/21/11 0945	0.01	450	2.0E-09
3/20/11 2100	3/21/11 1000	0.01	450	2.2E-09
3/20/11 2115	3/21/11 1015	0.01	450	2.3E-09
3/20/11 2130	3/21/11 1030	0.01	450	2.1E-09
3/20/11 2145	3/21/11 1045	0.01	450	2.0E-09
3/20/11 2200	3/21/11 1100	0.01	450	1.6E-09
3/20/11 2215	3/21/11 1115	0.01	450	1.3E-09
3/20/11 2230	3/21/11 1130	0.01	450	1.3E-09
3/20/11 2245	3/21/11 1145	0.01	495	1.4E-09
3/20/11 2315	3/21/11 1215	0.01	495	1.6E-09
3/20/11 2330	3/21/11 1230	0.01	450	1.3E-09
3/20/11 2345	3/21/11 1245	0.01	495	1.9E-09
3/21/11 0000	3/21/11 1300	0.01	450	1.2E-09
3/21/11 0015	3/21/11 1315	0.01	450	1.5E-09

3/21/11 0030	3/21/11 1330	0.01	450	1.8E-09
3/21/11 0045	3/21/11 1345	0.01	450	1.8E-09
3/21/11 0100	3/21/11 1400	0.01	450	2.5E-09
3/21/11 0115	3/21/11 1415	0.01	450	1.1E-09
3/21/11 0145	3/21/11 1445	0.01	450	8.0E-10
3/21/11 0200	3/21/11 1500	0.01	810	7.0E-10
3/21/11 0215	3/21/11 1515	0.01	945	9.5E-10
3/21/11 0230	3/21/11 1530	0.01	540	1.2E-09
3/21/11 0245	3/21/11 1545	0.01	900	9.5E-10
3/21/11 0300	3/21/11 1600	0.01	855	8.0E-10
3/21/11 0315	3/21/11 1615	0.01	945	6.5E-10
3/21/11 0330	3/21/11 1630	0.01	1,350	8.5E-10
3/21/11 0345	3/21/11 1645	0.01	990	6.0E-10
3/21/11 0400	3/21/11 1700	0.01	900	7.0E-10
3/21/11 0415	3/21/11 1715	0.01	765	8.5E-10
3/21/11 0445	3/21/11 1745	0.01	855	8.5E-10
3/21/11 0545	3/21/11 1845	0.01	1,845	1.2E-09
3/21/11 0615	3/21/11 1915	0.01	2,025	1.0E-09
3/21/11 0645	3/21/11 1945	0.01	2,025	1.5E-09
3/21/11 0715	3/21/11 2015	0.01	1,800	1.5E-09
3/21/11 0745	3/21/11 2045	0.01	1,575	1.3E-09
3/21/11 0815	3/21/11 2115	0.01	1,800	1.3E-09
3/21/11 0845	3/21/11 2145	0.01	1,800	1.0E-09
3/21/11 1029	3/21/11 2329	0.01	1,800	5.0E-10
3/21/11 1148	3/22/11 0048	0.01	2,025	5.0E-10
3/21/11 1430	3/22/11 0330	0.01	1,800	5.0E-10
3/21/11 1630	3/22/11 0530	0.01	1,575	5.0E-10
3/21/11 1730	3/22/11 0630	0.01	1,575	<5.0E-10
3/21/11 1837	3/22/11 0737	0.01	1,575	<5.0E-10
3/21/11 1930	3/22/11 0830	0.01	2,025	<5.0E-10
3/21/11 2030	3/22/11 0930	0.01	2,250	<5.0E-10
3/21/11 2130	3/22/11 1030	0.01	2,025	5.0E-10
3/21/11 2230	3/22/11 1130	0.01	2,025	5.0E-10
3/21/11 2330	3/22/11 1230	0.01	2,250	5.0E-10

3/22/11 0030	3/22/11 1330	0.01	1,800	6.0E-10
3/22/11 0130	3/22/11 1430	0.01	1,710	6.5E-10
3/22/11 0230	3/22/11 1530	0.01	1,800	<5.0E-10
3/22/11 0330	3/22/11 1630	0.01	1,800	9.5E-10
3/22/11 0430	3/22/11 1730	0.01	1,800	8.5E-10
3/22/11 0530	3/22/11 1830	0.01	1,800	5.0E-10
3/22/11 0630	3/22/11 1930	0.01	1,800	5.0E-10
3/22/11 0730	3/22/11 2030	0.01	2,025	6.0E-10
3/22/11 0830	3/22/11 2130	0.01	2,025	7.5E-10
3/22/11 1030	3/22/11 2330	0.01	1,800	1.4E-09
3/22/11 1130	3/23/11 0030	0.01	1,800	1.7E-09
3/22/11 1330	3/23/11 0230	0.01	2,700	1.5E-09
3/22/11 1430	3/23/11 0330	0.01	2,700	1.3E-09
3/22/11 1630	3/23/11 0530	0.01	2,700	5.0E-10
3/22/11 1730	3/23/11 0630	0.01	3,150	6.0E-10
3/22/11 1830	3/23/11 0730	0.01	2,925	7.0E-10
3/22/11 1930	3/23/11 0830	0.01	3,600	5.0E-10
3/22/11 2030	3/23/11 0930	0.01	3,600	5.0E-10
3/22/11 2130	3/23/11 1030	0.01	3,825	<5.0E-10
3/22/11 2230	3/23/11 1130	0.01	4,050	5.0E-10
3/22/11 2330	3/23/11 1230	0.01	4,050	5.0E-10
3/23/11 0030	3/23/11 1330	0.01	4,050	5.0E-10
3/23/11 0130	3/23/11 1430	0.01	3,825	6.0E-10
3/23/11 0230	3/23/11 1530	0.01	4,950	5.0E-10
3/23/11 0330	3/23/11 1630	0.01	5,400	5.0E-10
3/23/11 0430	3/23/11 1730	0.01	5,400	9.0E-10
3/23/11 0530	3/23/11 1830	0.01	5,400	7.5E-10
3/23/11 0630	3/23/11 1930	0.01	3,375	<5.0E-10
3/23/11 0730	3/23/11 2030	0.01	3,825	5.0E-10
3/23/11 0830	3/23/11 2130	0.01	1,575	5.0E-10
3/23/11 1030	3/23/11 2330	0.01	2,700	<5.0E-10
3/23/11 1339	3/24/11 0239	0.01	2,475	<5.0E-10
3/23/11 1500	3/24/11 0400	0.01	2,475	<5.0E-10
3/23/11 1900	3/24/11 0800	0.01	3,375	6.0E-10

3/23/11 2100	3/24/11 1000	0.01	3,150	<5.0E-10	
3/23/11 2300	3/24/11 1200	0.01	3,240	<5.0E-10	
3/24/11 0100	3/24/11 1400	0.01	3,375	<5.0E-10	
3/24/11 0300	3/24/11 1600	0.01	3,060	<5.0E-10	
3/24/11 0500	3/24/11 1800	0.01	3,645	<5.0E-10	
3/24/11 0700	3/24/11 2000	0.01	3,600	<5.0E-10	
3/24/11 1300	3/25/11 0200	0.01	3,375	7.5E-10	(A-1)
3/24/11 1700	3/25/11 0600	0.01	3,150	1.0E-09	(A-1)
3/24/11 1900	3/25/11 0800	0.01	3,150	8.0E-10	(A-1)
3/24/11 2100	3/25/11 1000	0.01	3,150	9.0E-10	(A-1)
3/24/11 2300	3/25/11 1200	0.01	3,150	6.0E-10	(A-1)
3/25/11 0100	3/25/11 1400	0.01	3,150	7.0E-10	(A-1)
3/25/11 0300	3/25/11 1600	0.01	3,150	6.5E-10	(A-1)
3/25/11 0500	3/25/11 1800	0.01	3,150	6.0E-10	(A-1)
3/25/11 0700	3/25/11 2000	0.01	5,850	5.0E-10	
3/25/11 1100	3/26/11 0000	0.01	3,600	5.0E-10	
3/25/11 1300	3/26/11 0200	0.01	2,700	5.0E-10	
3/25/11 1500	3/26/11 0400	0.01	2,700	7.5E-10	
3/25/11 1500	3/26/11 0400	0.01	2,700	7.5E-10	
3/25/11 1700	3/26/11 0600	0.01	2,700	1.0E-09	
3/25/11 1900	3/26/11 0800	0.01	2,565	8.0E-10	
3/25/11 2100	3/26/11 1000	0.01	2,925	<5.0E-10	
3/25/11 2300	3/26/11 1200	0.01	3,330	<5.0E-10	
3/26/11 0100	3/26/11 1400	0.01	2,880	6.0E-10	
3/26/11 0300	3/26/11 1600	0.01	2,745	6.0E-10	
3/26/11 0500	3/26/11 1800	0.01	3,015	<5.0E-10	
3/26/11 0700	3/26/11 2000	0.01	3,600	<5.0E-10	
3/26/11 0900	3/26/11 2200	0.01	2,700	<5.0E-10	
3/26/11 1100	3/27/11 0000	0.01	2,700	5.0E-10	
3/26/11 1300	3/27/11 0200	0.01	2,700	5.0E-10	
3/26/11 1500	3/27/11 0400	0.01	2,700	<5.0E-10	
3/26/11 1700	3/27/11 0600	0.01	2,700	5.0E-10	
3/26/11 1900	3/27/11 0800	0.01	2,700	6.5E-10	
3/26/11 2100	3/27/11 1000	0.01	3,150	5.0E-10	

3/26/11 2300	3/27/11 1200	0.01	2,970	5.0E-10	
3/27/11 0300	3/27/11 1600	0.01	3,645	<5.0E-10	
3/27/11 0500	3/27/11 1800	0.01	3,375	5.0E-10	
3/27/11 0700	3/27/11 2000	0.01	2,610	5.0E-10	
3/27/11 0900	3/27/11 2200	0.01	2,700	9.0E-10	
3/27/11 1100	3/28/11 0000	0.01	2,475	<5.0E-10	
3/27/11 1300	3/28/11 0200	0.01	2,475	<5.0E-10	
3/27/11 1500	3/28/11 0400	0.01	2,475	<5.0E-10	
3/27/11 1900	3/28/11 0800	0.01	2,700	9.0E-10	
3/27/11 2100	3/28/11 1000	0.01	2,700	5.0E-10	
3/27/11 2300	3/28/11 1200	0.01	2,925	<5.0E-10	
3/28/11 0100	3/28/11 1400	0.01	2,475	<5.0E-10	
3/28/11 0300	3/28/11 1600	0.01	2,565	<5.0E-10	
3/28/11 0500	3/28/11 1800	0.01	3,645	<5.0E-10	
3/28/11 0700	3/28/11 2000	0.01	2,385	<5.0E-10	
3/28/11 0900	3/28/11 2200	0.01	2,565	<5.0E-10	
3/28/11 1100	3/29/11 0000	0.01	2,610	<5.0E-10	
3/28/11 1300	3/29/11 0200	0.01	1,800	5.0E-10	(A-1)
3/28/11 1500	3/29/11 0400	0.01	2,160	5.0E-10	(A-1)
3/28/11 1700	3/29/11 0600	0.01	2,025	1.3E-09	(A-1)
3/28/11 1900	3/29/11 0800	0.01	2,700	1.0E-09	(A-1)
3/28/11 2100	3/29/11 1000	0.01	2,700	1.0E-09	(A-1)
3/28/11 2300	3/29/11 1200	0.01	2,925	<5.0E-10	
3/29/11 0100	3/29/11 1400	0.01	2,430	<5.0E-10	
3/29/11 0300	3/29/11 1600	0.01	2,430	<5.0E-10	
3/29/11 0500	3/29/11 1800	0.01	2,475	6.5E-10	
3/29/11 0700	3/29/11 2000	0.01	2,565	<5.0E-10	
3/29/11 0900	3/29/11 2200	0.01	2,340	<5.0E-10	(A-2)
3/29/11 1100	3/30/11 0000	0.01	2,475	<5.0E-10	(A-2)
3/29/11 1300	3/30/11 0200	0.01	2,475	1.0E-09	(A-2)
3/29/11 1500	3/30/11 0400	0.01	2,700	9.0E-10	(A-2)
3/29/11 1700	3/30/11 0600	0.01	2,475	1.1E-09	(A-2)
3/29/11 1900	3/30/11 0800	0.01	2,475	1.0E-09	(A-2)
3/29/11 2100	3/30/11 1000	0.01	2,475	1.2E-09	(A-2)

3/29/11 2300	3/30/11 1200	0.01	2,340	7.5E-10	(A-2)
3/30/11 0300	3/30/11 1600	0.01	2,430	5.0E-10	
3/30/11 0500	3/30/11 1800	0.01	2,340	5.0E-10	
3/30/11 0600	3/30/11 1900	0.01	2,340	5.5E-10	
3/30/11 0700	3/30/11 2000	0.01	2,340	5.5E-10	
3/30/11 0900	3/30/11 2200	0.01	2,160	5.0E-10	
3/30/11 1100	3/31/11 0000	0.01	2,250	7.0E-10	(A-1)
3/30/11 1300	3/31/11 0200	0.01	2,340	8.0E-10	(A-1)
3/30/11 1500	3/31/11 0400	0.01	2,520	7.0E-10	(A-1)
3/30/11 1700	3/31/11 0600	0.01	2,520	7.0E-10	(A-1)
3/30/11 1900	3/31/11 0800	0.01	2,475	<5.0E-10	(A-1)
3/30/11 2100	3/31/11 1000	0.01	2,700	7.0E-10	(A-1)
3/30/11 2300	3/31/11 1200	0.01	1,935	5.0E-10	(A-1)
3/31/11 0100	3/31/11 1400	0.01	1,710	5.0E-10	(A-1)
3/31/11 0300	3/31/11 1600	0.01	1,845	5.5E-10	(A-1)
3/31/11 0500	3/31/11 1800	0.01	2,565	5.0E-10	
3/31/11 0700	3/31/11 2000	0.01	2,160	5.0E-10	
3/31/11 0900	3/31/11 2200	0.01	2,250	5.0E-10	
3/31/11 1100	4/1/11 0000	0.01	2,250	<5.0E-10	
3/31/11 1300	4/1/11 0200	0.01	2,160	5.0E-10	
3/31/11 1500	4/1/11 0400	0.01	2,250	9.0E-10	(A-1)
3/31/11 1700	4/1/11 0600	0.01	2,160	1.0E-09	(A-1)
3/31/11 1900	4/1/11 0800	0.01	2,025	1.0E-09	(A-1)
3/31/11 2100	4/1/11 1000	0.01	2,025	6.0E-10	
3/31/11 2300	4/1/11 1200	0.01	1,980	<5.0E-10	
4/1/11 0100	4/1/11 1400	0.01	2,700	5.0E-10	
4/1/11 0300	4/1/11 1600	0.01	2,430	5.0E-10	
4/1/11 0500	4/1/11 1800	0.01	2,475	<5.0E-10	
4/1/11 0700	4/1/11 2000	0.01	2,475	<5.0E-10	
4/1/11 0900	4/1/11 2200	0.01	2,475	5.0E-10	
4/1/11 1100	4/2/11 0000	0.01	2,700	<5.0E-10	
4/1/11 1300	4/2/11 0200	0.01	2,430	7.0E-10	
4/1/11 1500	4/2/11 0400	0.01	2,250	9.0E-10	
4/1/11 1700	4/2/11 0600	0.01	2,160	1.0E-09	

4/1/11 1900	4/2/11 0800	0.01	2,250	1.1E-09	
4/1/11 2100	4/2/11 1000	0.01	2,250	7.5E-10	
4/1/11 2300	4/2/11 1200	0.01	2,250	9.0E-10	
4/2/11 0100	4/2/11 1400	0.01	2,250	8.0E-10	
4/2/11 0300	4/2/11 1600	0.01	2,250	6.5E-10	
4/2/11 0500	4/2/11 1800	0.01	2,160	6.0E-10	
4/2/11 0700	4/2/11 2000	0.01	2,880	<5.0E-10	
4/2/11 0900	4/2/11 2200	0.01	2,880	<5.0E-10	
4/2/11 1100	4/3/11 0000	0.01	2,250	<5.0E-10	
4/2/11 1300	4/3/11 0200	0.01	2,250	<5.0E-10	
4/2/11 1500	4/3/11 0400	0.01	2,340	7.0E-10	
4/2/11 1700	4/3/11 0600	0.01	2,250	5.0E-10	
4/2/11 1900	4/3/11 0800	0.01	2,025	<5.0E-10	
4/2/11 2100	4/3/11 1000	0.01	2,250	5.0E-10	
4/2/11 2300	4/3/11 1200	0.01	2,250	5.5E-10	
4/3/11 0100	4/3/11 1400	0.01	2,295	<5.0E-10	
4/3/11 0300	4/3/11 1600	0.01	2,025	5.0E-10	
4/3/11 0500	4/3/11 1800	0.01	3,780	<5.0E-10	
4/3/11 0700	4/3/11 2000	0.01	1,800	<5.0E-10	
4/3/11 0900	4/3/11 2200	0.01	1,935	<5.0E-10	
4/3/11 1100	4/4/11 0000	0.01	2,025	7.0E-10	
4/3/11 1300	4/4/11 0200	0.01	2,025	6.0E-10	
4/3/11 1500	4/4/11 0400	0.01	2,025	5.0E-10	
4/3/11 1700	4/4/11 0600	0.01	2,115	6.0E-10	
4/3/11 1900	4/4/11 0800	0.01	2,115	<5.0E-10	
4/3/11 2100	4/4/11 1000	0.01	2,115	<5.0E-10	
4/3/11 2300	4/4/11 1200	0.01	2,025	<5.0E-10	
4/4/11 0100	4/4/11 1400	0.01	2,025	5.0E-10	
4/4/11 0300	4/4/11 1600	0.01	2,025	<5.0E-10	
4/4/11 0500	4/4/11 1800	0.01	2,385	<5.0E-10	
4/4/11 0700	4/4/11 2000	0.01	2,250	<5.0E-10	
4/4/11 0900	4/4/11 2200	0.01	2,340	<5.0E-10	
4/4/11 1100	4/5/11 0000	0.01	2,250	<5.0E-10	
4/4/11 1300	4/5/11 0200	0.01	2,250	5.0E-10	(A-3)

4/4/11 1500	4/5/11 0400	0.01	2,250	6.0E-10
4/4/11 1700	4/5/11 0600	0.01	2,160	8.0E-10
4/4/11 1900	4/5/11 0800	0.01	2,160	6.0E-10
4/4/11 2100	4/5/11 1000	0.01	2,160	<5.0E-10
4/4/11 2300	4/5/11 1200	0.01	1,575	<5.0E-10
4/5/11 0100	4/5/11 1400	0.01	1,350	<5.0E-10
4/5/11 0300	4/5/11 1600	0.01	1,688	<5.0E-10
4/5/11 0500	4/5/11 1800	0.01	1,688	<5.0E-10
4/5/11 0700	4/5/11 2000	0.01	1,710	<5.0E-10
4/5/11 0900	4/5/11 2200	0.01	1,665	<5.0E-10
4/5/11 1100	4/6/11 0000	0.01	1,800	6.0E-10
4/5/11 1300	4/6/11 0200	0.01	1,620	6.0E-10
4/5/11 1500	4/6/11 0400	0.01	1,710	7.5E-10
4/5/11 1700	4/6/11 0600	0.01	1,710	6.0E-10
4/5/11 1900	4/6/11 0800	0.01	1,575	5.0E-10
4/5/11 2100	4/6/11 1000	0.01	1,350	<5.0E-10
4/5/11 2300	4/6/11 1200	0.01	1,350	<5.0E-10
4/6/11 0100	4/6/11 1400	0.01	1,350	5.0E-10
4/6/11 0300	4/6/11 1600	0.01	1,575	<5.0E-10
4/6/11 0500	4/6/11 1800	0.01	2,430	<5.0E-10
4/6/11 0700	4/6/11 2000	0.01	2,430	<5.0E-10
4/6/11 0900	4/6/11 2200	0.01	2,430	<5.0E-10
4/6/11 1100	4/7/11 0000	0.01	1,710	<5.0E-10
4/6/11 1300	4/7/11 0200	0.01	1,620	<5.0E-10
4/6/11 1500	4/7/11 0400	0.01	1,710	5.0E-10
4/6/11 1700	4/7/11 0600	0.01	1,710	7.5E-10
4/6/11 1900	4/7/11 0800	0.01	1,575	6.0E-10
4/6/11 2300	4/7/11 1200	0.01	1,350	<5.0E-10
4/7/11 0300	4/7/11 1600	0.01	1,350	<5.0E-10
4/7/11 0700	4/7/11 2000	0.01	1,350	<5.0E-10
4/7/11 1100	4/8/11 0000	0.01	1,710	<5.0E-10
4/7/11 1500	4/8/11 0400	0.01	1,800	<5.0E-10
4/7/11 1900	4/8/11 0800	0.01	1,800	<5.0E-10
4/7/11 2300	4/8/11 1200	0.01	1,800	<5.0E-10

4/8/11 0300	4/8/11 1600	0.01	1,800	<5.0E-10
4/8/11 0700	4/8/11 2000	0.01	1,350	<5.0E-10
4/8/11 1100	4/9/11 0000	0.01	1,463	<5.0E-10
4/8/11 1500	4/9/11 0400	0.01	1,575	<5.0E-10
4/8/11 1900	4/9/11 0800	0.01	1,125	<5.0E-10
4/8/11 2300	4/9/11 1200	0.01	900	<5.0E-10
4/9/11 0300	4/9/11 1600	0.01	1,260	<5.0E-10
4/9/11 0700	4/9/11 2000	0.01	1,350	<5.0E-10
4/9/11 1100	4/10/11 0000	0.01	1,440	5.0E-10
4/9/11 1500	4/10/11 0400	0.01	1,845	5.0E-10
4/9/11 1900	4/10/11 0800	0.01	1,800	5.5E-10
4/9/11 2300	4/10/11 1200	0.01	1,800	<5.0E-10
4/10/11 0300	4/10/11 1600	0.01	1,350	<5.0E-10

Notes

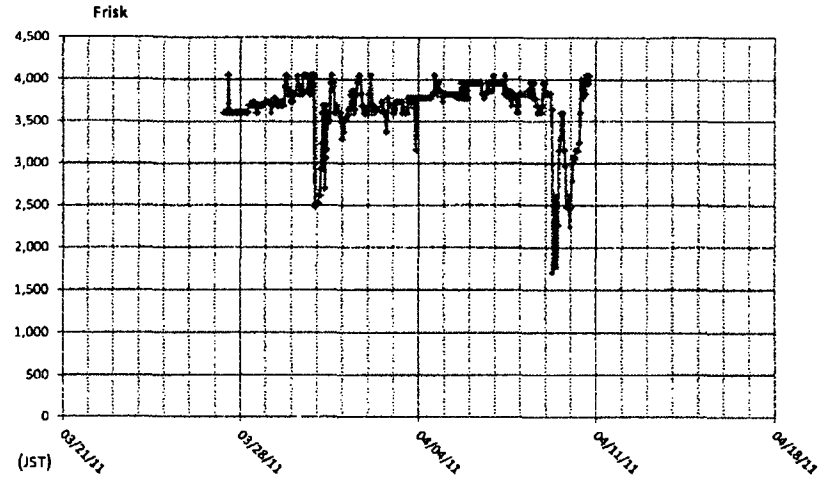
(A-1) NACCC reports elevated air samples are due to natural short-lived Radon daughters as confirmed by alpha meter readings.

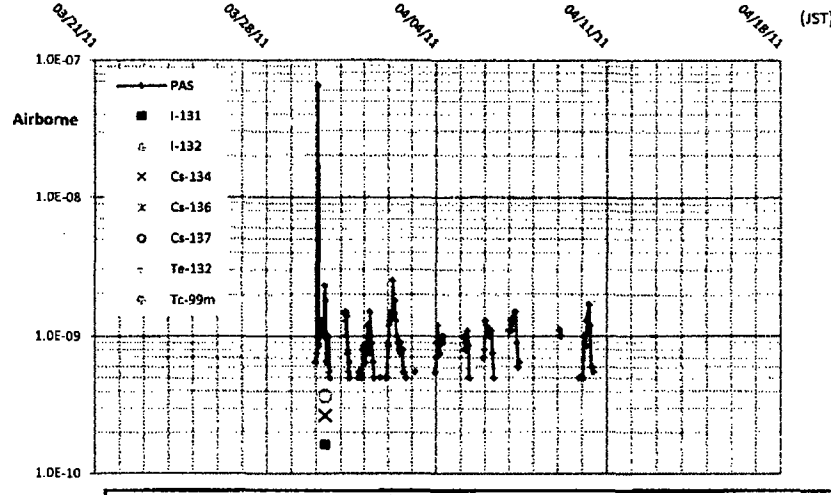
(A-2) 3/28/11 0230 (JST): NACCC reports elevated air samples are due to natural short-lived Radon daughters, as confirmed by alpha meter readings, as well as a potential plume event.

(A-3) 4/5/11 0200 (JST): NACCC Reports Elevated Air Samples Due to Short-Lived Activity.

Mito: LAT. 36.3710N, LONG. 140.4762E (Team Previously Located @ Ishioka)

Northeast of Ishioka





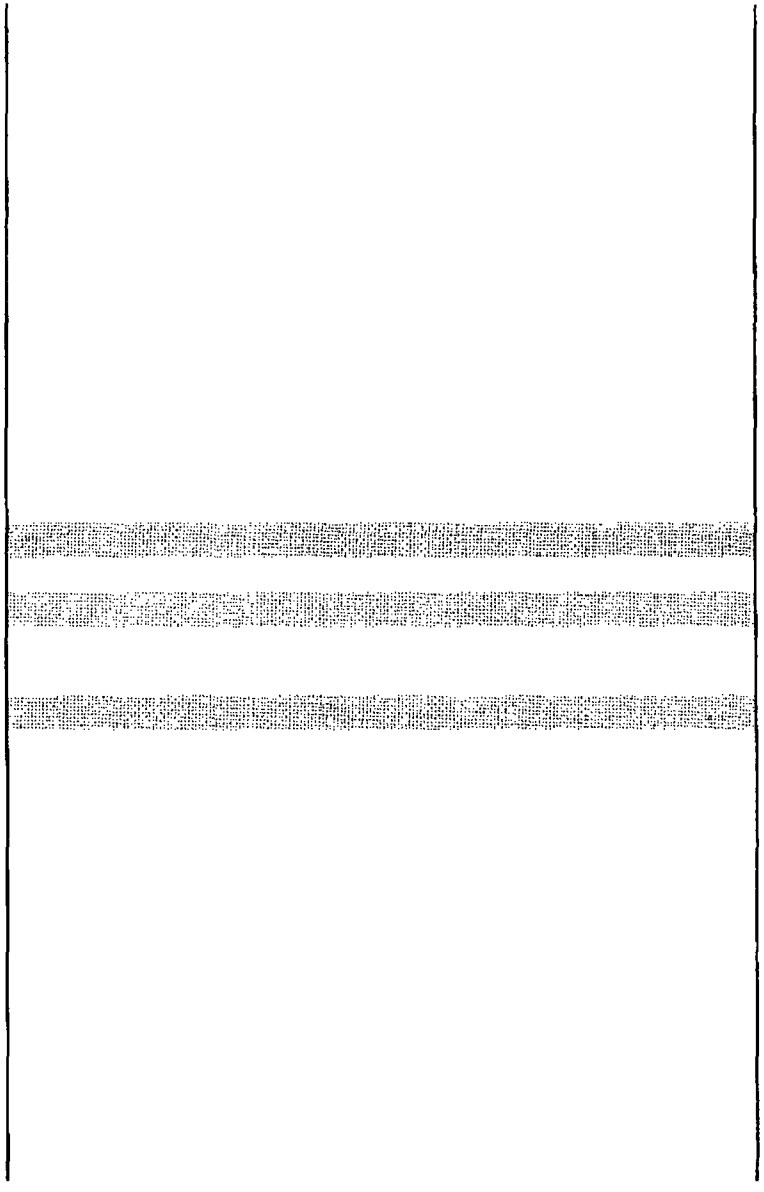
Date and Time	Date and Time2	Radiation	Frisk	PAS	RI	Notes	Isotopic Analysis						
							I-131	I-132	Cs-134	Cs-136	Cs-137	Te-132	Tc-99m
(EDT)	(JST)	(mr/hr)	(pCi/probe)	(µCi/mL)	(µCi/mL)		(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)
3/26/11 1900	3/27/11 0800	0.02	3,600	<5.0E-10									
3/26/11 2000	3/27/11 0900	0.01	3,600	<5.0E-10									
3/26/11 2100	3/27/11 1000	0.02	3,600	<5.0E-10									
3/26/11 2200	3/27/11 1100	0.01	3,600	<5.0E-10									
3/26/11 2300	3/27/11 1200	0.01	3,600	<5.0E-10									
3/27/11 0000	3/27/11 1300	0.01	4,050	<5.0E-10									
3/27/11 0100	3/27/11 1400	0.01	3,600	<5.0E-10									
3/27/11 0200	3/27/11 1500	0.01	3,600	<5.0E-10									
3/27/11 0300	3/27/11 1600	0.01	3,600	<5.0E-10									
3/27/11 0400	3/27/11 1700	0.01	3,600	<5.0E-10									
3/27/11 0500	3/27/11 1800	0.01	3,600	<5.0E-10									
3/27/11 0600	3/27/11 1900	0.01	3,600	<5.0E-10									
3/27/11 0700	3/27/11 2000	0.01	3,600	<5.0E-10									
3/27/11 0800	3/27/11 2100	0.01	3,600	<5.0E-10									
3/27/11 0900	3/27/11 2200	0.01	3,600	<5.0E-10									
3/27/11 1000	3/27/11 2300	0.01	3,600	<5.0E-10									

3/27/11 1100	3/28/11 0000	0.01	3,600	<5.0E-10	
3/27/11 1200	3/28/11 0100	0.01	3,600	<5.0E-10	
3/27/11 1300	3/28/11 0200	0.01	3,600	<5.0E-10	
3/27/11 1400	3/28/11 0300	0.01	3,600	<5.0E-10	
3/27/11 1500	3/28/11 0400	0.01	3,600	<5.0E-10	
3/27/11 1600	3/28/11 0500	0.01	3,600	<5.0E-10	
3/27/11 1700	3/28/11 0600	0.01	3,600	<5.0E-10	
3/27/11 1800	3/28/11 0700	0.01	3,600	<5.0E-10	
3/27/11 1900	3/28/11 0800	0.01	3,690	<5.0E-10	
3/27/11 2000	3/28/11 0900	0.01	3,690	<5.0E-10	
3/27/11 2100	3/28/11 1000	0.01	3,690	<5.0E-10	
3/27/11 2200	3/28/11 1100	0.01	3,690	<5.0E-10	
3/27/11 2300	3/28/11 1200	0.01	3,735	<5.0E-10	
3/28/11 0000	3/28/11 1300	0.01	3,735	<5.0E-10	
3/28/11 0100	3/28/11 1400	0.01	3,735	<5.0E-10	
3/28/11 0200	3/28/11 1500	0.01	3,600	<5.0E-10	
3/28/11 0300	3/28/11 1600	0.01	3,600	<5.0E-10	
3/28/11 0400	3/28/11 1700	0.01	3,690	<5.0E-10	
3/28/11 0500	3/28/11 1800	0.01	3,690	<5.0E-10	
3/28/11 0600	3/28/11 1900	0.01	3,690	<5.0E-10	
3/28/11 0700	3/28/11 2000	0.01	3,690	<5.0E-10	
3/28/11 0800	3/28/11 2100	0.01	3,690	<5.0E-10	
3/28/11 0900	3/28/11 2200	0.01	3,690	<5.0E-10	
3/28/11 1000	3/28/11 2300	0.01	3,735	<5.0E-10	
3/28/11 1100	3/29/11 0000	0.01	3,735	<5.0E-10	
3/28/11 1200	3/29/11 0100	0.01	3,735	<5.0E-10	
3/28/11 1300	3/29/11 0200	0.01	3,735	<5.0E-10	(Mit-1)
3/28/11 1400	3/29/11 0300	0.01	3,735	<5.0E-10	(Mit-1)
3/28/11 1500	3/29/11 0400	0.01	3,735	<5.0E-10	(Mit-1)
3/28/11 1600	3/29/11 0500	0.02	3,600	<5.0E-10	(Mit-1)
3/28/11 1700	3/29/11 0600	0.02	3,735	<5.0E-10	(Mit-1)
3/28/11 1800	3/29/11 0700	0.01	3,690	<5.0E-10	(Mit-1)
3/28/11 1900	3/29/11 0800	0.01	3,780	<5.0E-10	(Mit-1)
3/28/11 2000	3/29/11 0900	0.01	3,780	<5.0E-10	(Mit-1)

3/28/11 2100	3/29/11 1000	0.01	3,735	<5.0E-10	(Mit-1)						
3/28/11 2200	3/29/11 1100	0.01	3,690	<5.0E-10	(Mit-1)						
3/28/11 2300	3/29/11 1200	0.01	3,690	<5.0E-10							
3/29/11 0000	3/29/11 1300	0.01	3,690	<5.0E-10							
3/29/11 0100	3/29/11 1400	0.01	3,735	<5.0E-10							
3/29/11 0200	3/29/11 1500	0.01	3,690	<5.0E-10							
3/29/11 0300	3/29/11 1600	0.01	3,690	<5.0E-10							
3/29/11 0400	3/29/11 1700	0.01	3,690	<5.0E-10							
3/29/11 0500	3/29/11 1800	0.01	3,915	<5.0E-10							
3/29/11 0600	3/29/11 1900	0.01	4,050	<5.0E-10							
3/29/11 0700	3/29/11 2000	0.01	4,050	<5.0E-10							
3/29/11 0800	3/29/11 2100	0.01	3,825	<5.0E-10							
3/29/11 0900	3/29/11 2200	0.01	3,870	<5.0E-10	(Mit-2)						
3/29/11 1000	3/29/11 2300	0.01	3,825	<5.0E-10	(Mit-2)						
3/29/11 1100	3/30/11 0000	0.02	3,735	6.5E-10	(Mit-2)						
3/29/11 1200	3/30/11 0100	0.01	3,735	7.5E-10	(Mit-2)						
3/29/11 1300	3/30/11 0200	0.02	3,735	6.5E-08	(Mit-2)						
3/29/11 1400	3/30/11 0300	0.02	3,825	8.5E-10	(Mit-2)						
3/29/11 1500	3/30/11 0400	0.02	3,825	1.0E-09	(Mit-2)						
3/29/11 1600	3/30/11 0500	0.02	3,825	1.3E-09	(Mit-2)						
3/29/11 1700	3/30/11 0600	0.02	4,050	1.3E-09	(Mit-2)						
3/29/11 1800	3/30/11 0700	0.01	3,825	1.3E-09	(Mit-2)						
3/29/11 1900	3/30/11 0800	0.01	3,915	1.0E-09	(Mit-2)						
3/29/11 2000	3/30/11 0900	0.01	3,825	2.3E-09	(Mit-2)	1.62E-10	[redacted]	2.65E-10	1.40E-11	3.69E-10	1.29E-11 [redacted]
3/29/11 2030	3/30/11 0930	0.01	3,825	1.0E-09	(Mit-2)						
3/29/11 2100	3/30/11 1000	0.01	3,825	1.8E-09	(Mit-2)						
3/29/11 2130	3/30/11 1030	0.01	3,825	6.5E-10	(Mit-2)						
3/29/11 2200	3/30/11 1100	0.01	4,050	7.5E-10	(Mit-2)						
3/29/11 2230	3/30/11 1130	0.01	4,050	1.0E-09	(Mit-2)						
3/29/11 2300	3/30/11 1200	0.01	4,050	1.0E-09	(Mit-2)						
3/29/11 2330	3/30/11 1230	0.01	4,050	1.0E-09	(Mit-2)						
3/30/11 0000	3/30/11 1300	0.01	4,050	5.5E-10	(Mit-2)						
3/30/11 0030	3/30/11 1330	0.01	4,050	5.0E-10	(Mit-2)						
3/30/11 0100	3/30/11 1400	0.01	4,050	<5.0E-10							

3/30/11 0200	3/30/11 1500	0.01	4,050	<5.0E-10
3/30/11 0300	3/30/11 1600	0.01	3,870	<5.0E-10
3/30/11 0400	3/30/11 1700	0.01	3,825	<5.0E-10
3/30/11 0500	3/30/11 1800	0.01	3,825	<5.0E-10
3/30/11 0600	3/30/11 1900	0.01	4,050	<5.0E-10
3/30/11 0700	3/30/11 2000	0.01	4,050	<5.0E-10
3/30/11 0800	3/30/11 2100	0.01	4,050	<5.0E-10
3/30/11 0900	3/30/11 2200	0.01	2,475	<5.0E-10
3/30/11 1000	3/30/11 2300	0.01	2,520	<5.0E-10
3/30/11 1100	3/31/11 0000	0.02	2,520	<5.0E-10
3/30/11 1200	3/31/11 0100	0.02	2,520	<5.0E-10
3/30/11 1300	3/31/11 0200	0.01	2,610	<5.0E-10
3/30/11 1400	3/31/11 0300	0.01	2,610	<5.0E-10
3/30/11 1500	3/31/11 0400	0.01	2,925	1.5E-09
3/30/11 1600	3/31/11 0500	0.02	3,240	1.3E-09
3/30/11 1630	3/31/11 0530	0.02	3,600	1.0E-09
3/30/11 1700	3/31/11 0600	0.01	3,690	1.5E-09
3/30/11 1730	3/31/11 0630	0.01	3,375	1.4E-09
3/30/11 1800	3/31/11 0700	0.01	3,375	7.5E-10
3/30/11 1830	3/31/11 0730	0.01	2,700	8.0E-10
3/30/11 1845	3/31/11 0745	0.01	3,060	5.5E-10
3/30/11 1900	3/31/11 0800	0.01	3,060	5.0E-10
3/30/11 1915	3/31/11 0815	0.01	3,690	5.0E-10
3/30/11 1930	3/31/11 0830	0.01	3,465	5.0E-10
3/30/11 1945	3/31/11 0845	0.01	3,465	6.5E-10
3/30/11 2000	3/31/11 0900	0.01	3,150	<5.0E-10
3/30/11 2015	3/31/11 0915	0.01	3,150	<5.0E-10
3/30/11 2030	3/31/11 0930	0.01	3,150	5.0E-10
3/30/11 2045	3/31/11 0945	0.01	3,600	<5.0E-10
3/30/11 2100	3/31/11 1000	0.01	3,600	<5.0E-10
3/30/11 2130	3/31/11 1030	0.01	3,600	<5.0E-10
3/30/11 2200	3/31/11 1100	0.01	3,600	<5.0E-10
3/30/11 2230	3/31/11 1130	0.01	3,600	<5.0E-10
3/30/11 2300	3/31/11 1200	0.01	3,510	<5.0E-10

3/31/11 0000	3/31/11 1300	0.01	3,960	<5.0E-10	
3/31/11 0100	3/31/11 1400	0.01	4,050	<5.0E-10	
3/31/11 0200	3/31/11 1500	0.01	3,915	<5.0E-10	
3/31/11 0300	3/31/11 1600	0.01	3,960	<5.0E-10	
3/31/11 0400	3/31/11 1700	0.01	3,600	<5.0E-10	
3/31/11 0500	3/31/11 1800	0.01	3,600	5.0E-10	
3/31/11 0600	3/31/11 1900	0.01	3,690	5.5E-10	
3/31/11 0700	3/31/11 2000	0.01	3,600	<5.0E-10	
3/31/11 0800	3/31/11 2100	0.01	3,600	5.0E-10	
3/31/11 0900	3/31/11 2200	0.01	3,600	5.0E-10	
3/31/11 1000	3/31/11 2300	0.01	3,510	8.0E-10	(Mit-3)
3/31/11 1100	4/1/11 0000	0.01	3,285	8.5E-10	(Mit-3)
3/31/11 1200	4/1/11 0100	0.01	3,375	6.5E-10	(Mit-3)
3/31/11 1300	4/1/11 0200	0.01	3,510	7.5E-10	(Mit-3)
3/31/11 1400	4/1/11 0300	0.01	3,510	9.0E-10	(Mit-3)
3/31/11 1500	4/1/11 0400	0.02	3,555	1.2E-09	(Mit-3, 4)
3/31/11 1600	4/1/11 0500	0.02	3,645	7.5E-10	(Mit-3)
3/31/11 1700	4/1/11 0600	0.01	3,645	1.5E-09	(Mit-3, 4)
3/31/11 1800	4/1/11 0700	0.01	3,600	1.0E-09	(Mit-3)
3/31/11 1900	4/1/11 0800	0.01	3,825	9.0E-10	(Mit-3)
3/31/11 2000	4/1/11 0900	0.01	3,870	6.5E-10	(Mit-3, 4)
3/31/11 2100	4/1/11 1000	0.01	3,690	5.0E-10	
3/31/11 2200	4/1/11 1100	0.01	3,600	<5.0E-10	
3/31/11 2300	4/1/11 1200	0.01	3,645	<5.0E-10	
4/1/11 0000	4/1/11 1300	0.01	3,825	<5.0E-10	
4/1/11 0030	4/1/11 1330	0.01	3,825	<5.0E-10	
4/1/11 0100	4/1/11 1400	0.01	3,960	<5.0E-10	
4/1/11 0130	4/1/11 1430	0.01	3,960	<5.0E-10	
4/1/11 0200	4/1/11 1500	0.01	4,050	<5.0E-10	
4/1/11 0300	4/1/11 1600	0.01	4,050	5.0E-10	
4/1/11 0400	4/1/11 1700	0.01	4,050	<5.0E-10	
4/1/11 0500	4/1/11 1800	0.01	3,825	<5.0E-10	
4/1/11 0600	4/1/11 1900	0.01	3,690	<5.0E-10	
4/1/11 0700	4/1/11 2000	0.01	3,600	<5.0E-10	



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4/1/11 0900	4/1/11 2200	0.01	3,600	5.0E-10
4/1/11 1000	4/1/11 2300	0.01	3,645	5.0E-10
4/1/11 1100	4/2/11 0000	0.01	3,600	8.5E-10
4/1/11 1200	4/2/11 0100	0.01	3,825	1.2E-09
4/1/11 1300	4/2/11 0200	0.01	3,825	1.3E-09
4/1/11 1400	4/2/11 0300	0.01	4,050	1.5E-09
4/1/11 1500	4/2/11 0400	0.01	3,600	1.4E-09
4/1/11 1600	4/2/11 0500	0.01	3,690	2.5E-09
4/1/11 1700	4/2/11 0600	0.01	3,600	1.8E-09
4/1/11 1800	4/2/11 0700	0.01	3,645	1.8E-09
4/1/11 1900	4/2/11 0800	0.01	3,645	1.3E-09
4/1/11 2000	4/2/11 0900	0.02	3,645	1.0E-09
4/1/11 2100	4/2/11 1000	0.01	3,645	9.0E-10
4/1/11 2200	4/2/11 1100	0.02	3,645	8.0E-10
4/1/11 2300	4/2/11 1200	0.02	3,645	9.0E-10
4/2/11 0000	4/2/11 1300	0.01	3,735	7.5E-10
4/2/11 0100	4/2/11 1400	0.01	3,735	8.0E-10
4/2/11 0200	4/2/11 1500	0.01	3,600	5.5E-10
4/2/11 0300	4/2/11 1600	0.01	3,600	5.5E-10
4/2/11 0400	4/2/11 1700	0.01	3,375	<5.0E-10
4/2/11 0500	4/2/11 1800	0.01	3,375	5.0E-10
4/2/11 0600	4/2/11 1900	0.01	3,780	<5.0E-10
4/2/11 0700	4/2/11 2000	0.01	3,690	<5.0E-10
4/2/11 0800	4/2/11 2100	0.01	3,690	<5.0E-10
4/2/11 0900	4/2/11 2200	0.01	3,690	<5.0E-10
4/2/11 1000	4/2/11 2300	0.01	3,690	<5.0E-10
4/2/11 1100	4/3/11 0000	0.01	3,600	<5.0E-10
4/2/11 1200	4/3/11 0100	0.01	3,600	<5.0E-10
4/2/11 1300	4/3/11 0200	0.01	3,645	<5.0E-10
4/2/11 1400	4/3/11 0300	0.01	3,735	5.5E-10
4/2/11 1500	4/3/11 0400	0.01	3,735	<5.0E-10
4/2/11 1600	4/3/11 0500	0.01	3,735	<5.0E-10
4/2/11 1700	4/3/11 0600	0.01	3,735	<5.0E-10

4/2/11 1800	4/3/11 0700	0.01	3,735	<5.0E-10
4/2/11 1900	4/3/11 0800	0.01	3,735	<5.0E-10
4/2/11 2000	4/3/11 0900	0.01	3,600	<5.0E-10
4/2/11 2100	4/3/11 1000	0.01	3,645	<5.0E-10
4/2/11 2200	4/3/11 1100	0.01	3,600	<5.0E-10
4/2/11 2300	4/3/11 1200	0.01	3,645	<5.0E-10
4/3/11 0000	4/3/11 1300	0.01	3,600	<5.0E-10
4/3/11 0100	4/3/11 1400	0.01	3,780	<5.0E-10
4/3/11 0200	4/3/11 1500	0.01	3,780	<5.0E-10
4/3/11 0300	4/3/11 1600	0.01	3,780	<5.0E-10
4/3/11 0400	4/3/11 1700	0.01	3,690	<5.0E-10
4/3/11 0500	4/3/11 1800	0.01	3,780	<5.0E-10
4/3/11 0600	4/3/11 1900	0.01	3,780	<5.0E-10
4/3/11 0700	4/3/11 2000	0.01	3,690	<5.0E-10
4/3/11 0800	4/3/11 2100	0.01	3,150	<5.0E-10
4/3/11 0900	4/3/11 2200	0.01	3,780	<5.0E-10
4/3/11 1000	4/3/11 2300	0.01	3,780	5.5E-10
4/3/11 1100	4/4/11 0000	0.01	3,780	7.0E-10
4/3/11 1130	4/4/11 0030	0.01	3,780	9.0E-10
4/3/11 1200	4/4/11 0100	0.01	3,780	9.0E-10
4/3/11 1230	4/4/11 0130	0.01	3,780	1.2E-09
4/3/11 1300	4/4/11 0200	0.01	3,780	1.0E-09
4/3/11 1330	4/4/11 0230	0.01	3,780	9.0E-10
4/3/11 1400	4/4/11 0300	0.01	3,780	8.5E-10
4/3/11 1430	4/4/11 0330	0.01	3,780	7.5E-10
4/3/11 1500	4/4/11 0400	0.01	3,780	9.5E-10
4/3/11 1530	4/4/11 0430	0.01	3,780	9.0E-10
4/3/11 1600	4/4/11 0500	0.01	3,780	9.0E-10
4/3/11 1630	4/4/11 0530	0.01	3,780	9.5E-10
4/3/11 1700	4/4/11 0600	0.01	3,780	1.0E-09
4/3/11 1730	4/4/11 0630	0.01	3,780	9.0E-10
4/3/11 1800	4/4/11 0700	0.01	3,780	1.0E-09
4/3/11 1830	4/4/11 0730	0.01	3,780	1.0E-09
4/3/11 1900	4/4/11 0800	0.01	3,780	<5.0E-10

4/3/11 1930	4/4/11 0830	0.01	3,780	<5.0E-10	
4/3/11 2000	4/4/11 0900	0.01	3,780	<5.0E-10	
4/3/11 2100	4/4/11 1000	0.01	3,780	<5.0E-10	
4/3/11 2200	4/4/11 1100	0.01	3,780	<5.0E-10	
4/3/11 2300	4/4/11 1200	0.01	3,780	<5.0E-10	
4/4/11 0000	4/4/11 1300	0.01	3,825	<5.0E-10	
4/4/11 0106	4/4/11 1406	<0.01	3,825	<5.0E-10	
4/4/11 0200	4/4/11 1500	0.01	4,050	<5.0E-10	
4/4/11 0300	4/4/11 1600	0.01	3,960	<5.0E-10	
4/4/11 0400	4/4/11 1700	0.01	3,870	<5.0E-10	
4/4/11 0500	4/4/11 1800	0.01	3,825	<5.0E-10	
4/4/11 0600	4/4/11 1900	0.01	3,960	<5.0E-10	
4/4/11 0700	4/4/11 2000	0.01	3,825	<5.0E-10	
4/4/11 0800	4/4/11 2100	0.01	3,870	<5.0E-10	
4/4/11 0900	4/4/11 2200	0.01	3,825	<5.0E-10	
4/4/11 1000	4/4/11 2300	0.01	3,735	<5.0E-10	
4/4/11 1100	4/5/11 0000	0.01	3,825	<5.0E-10	
4/4/11 1200	4/5/11 0100	0.01	3,825	<5.0E-10	
4/4/11 1300	4/5/11 0200	0.01	3,825	<5.0E-10	
4/4/11 1400	4/5/11 0300	0.01	3,825	<5.0E-10	
4/4/11 1500	4/5/11 0400	0.01	3,825	1.0E-09	
4/4/11 1530	4/5/11 0430	0.01	3,825	8.0E-10	
4/4/11 1600	4/5/11 0500	0.01	3,825	9.0E-10	(Mit-5)
4/4/11 1700	4/5/11 0600	0.01	3,825	8.0E-10	(Mit-5)
4/4/11 1800	4/5/11 0700	0.01	3,825	1.1E-09	
4/4/11 1900	4/5/11 0800	0.01	3,825	8.5E-10	
4/4/11 1930	4/5/11 0830	0.01	3,825	5.0E-10	
4/4/11 2000	4/5/11 0900	0.01	3,825	5.0E-10	
4/4/11 2100	4/5/11 1000	0.01	3,825	<5.0E-10	
4/4/11 2200	4/5/11 1100	0.01	3,825	<5.0E-10	
4/4/11 2300	4/5/11 1200	0.01	3,825	<5.0E-10	
4/5/11 0000	4/5/11 1300	0.01	3,780	<5.0E-10	
4/5/11 0100	4/5/11 1400	0.01	3,780	<5.0E-10	
4/5/11 0200	4/5/11 1500	0.01	3,825	<5.0E-10	

4/5/11 0300	4/5/11 1600	0.01	3,960	<5.0E-10
4/5/11 0400	4/5/11 1700	0.01	3,780	<5.0E-10
4/5/11 0500	4/5/11 1800	0.01	3,960	<5.0E-10
4/5/11 0600	4/5/11 1900	0.01	3,780	<5.0E-10
4/5/11 0700	4/5/11 2000	0.01	3,960	<5.0E-10
4/5/11 0800	4/5/11 2100	0.01	3,825	<5.0E-10
4/5/11 0900	4/5/11 2200	0.01	3,780	<5.0E-10
4/5/11 1000	4/5/11 2300	0.01	3,960	7.0E-10
4/5/11 1030	4/5/11 2330	0.01	3,960	7.0E-10
4/5/11 1100	4/6/11 0000	0.01	3,960	8.0E-10
4/5/11 1200	4/6/11 0100	0.01	3,960	1.3E-09
4/5/11 1300	4/6/11 0200	0.01	3,960	1.2E-09
4/5/11 1400	4/6/11 0300	0.01	3,960	1.1E-09
4/5/11 1500	4/6/11 0400	0.01	3,960	1.1E-09
4/5/11 1600	4/6/11 0500	0.01	3,960	1.0E-09
4/5/11 1700	4/6/11 0600	0.01	3,960	1.1E-09
4/5/11 1800	4/6/11 0700	0.01	3,960	1.1E-09
4/5/11 1900	4/6/11 0800	0.01	3,960	7.5E-10
4/5/11 2000	4/6/11 0900	0.01	3,960	5.0E-10
4/5/11 2100	4/6/11 1000	0.01	3,960	<5.0E-10
4/5/11 2200	4/6/11 1100	0.01	3,960	<5.0E-10
4/5/11 2300	4/6/11 1200	0.01	3,825	<5.0E-10
4/6/11 0000	4/6/11 1300	0.01	3,825	<5.0E-10
4/6/11 0100	4/6/11 1400	<0.01	3,780	<5.0E-10
4/6/11 0200	4/6/11 1500	0.01	3,825	<5.0E-10
4/6/11 0300	4/6/11 1600	0.01	3,825	<5.0E-10
4/6/11 0400	4/6/11 1700	<0.01	3,960	<5.0E-10
4/6/11 0500	4/6/11 1800	<0.01	3,870	<5.0E-10
4/6/11 0600	4/6/11 1900	0.01	3,960	<5.0E-10
4/6/11 0700	4/6/11 2000	0.01	3,870	<5.0E-10
4/6/11 0800	4/6/11 2100	0.01	3,870	<5.0E-10
4/6/11 0900	4/6/11 2200	0.01	4,050	<5.0E-10
4/6/11 1000	4/6/11 2300	0.01	4,050	<5.0E-10
4/6/11 1100	4/7/11 0000	0.01	3,960	1.1E-09

4/6/11 1200	4/7/11 0100	0.01	3,960	1.1E-09
4/6/11 1300	4/7/11 0200	0.01	3,960	1.3E-09
4/6/11 1400	4/7/11 0300	0.01	3,960	1.1E-09
4/6/11 1500	4/7/11 0400	0.01	3,960	1.3E-09
4/6/11 1600	4/7/11 0500	0.01	3,960	1.4E-09
4/6/11 1700	4/7/11 0600	0.01	3,960	1.5E-09
4/6/11 1800	4/7/11 0700	0.01	3,960	1.5E-09
4/6/11 1900	4/7/11 0800	0.01	3,960	9.0E-10
4/6/11 2000	4/7/11 0900	0.01	3,825	6.0E-10
4/6/11 2100	4/7/11 1000	0.01	4,050	6.5E-10
4/6/11 2200	4/7/11 1100	0.01	3,825	<5.0E-10
4/6/11 2300	4/7/11 1200	0.01	3,825	<5.0E-10
4/7/11 0000	4/7/11 1300	0.01	3,780	<5.0E-10
4/7/11 0100	4/7/11 1400	0.01	3,870	<5.0E-10
4/7/11 0200	4/7/11 1500	0.01	3,870	<5.0E-10
4/7/11 0300	4/7/11 1600	0.01	3,690	<5.0E-10
4/7/11 0400	4/7/11 1700	0.01	3,825	<5.0E-10
4/7/11 0500	4/7/11 1800	0.01	3,825	<5.0E-10
4/7/11 0600	4/7/11 1900	0.01	3,825	<5.0E-10
4/7/11 0700	4/7/11 2000	0.01	3,780	<5.0E-10
4/7/11 0800	4/7/11 2100	0.01	3,600	<5.0E-10
4/7/11 0900	4/7/11 2200	0.01	3,600	<5.0E-10
4/7/11 1000	4/7/11 2300	0.01	3,690	<5.0E-10
4/7/11 1100	4/8/11 0000	0.01	3,825	<5.0E-10
4/7/11 1200	4/8/11 0100	0.01	3,825	<5.0E-10
4/7/11 1300	4/8/11 0200	0.01	3,825	<5.0E-10
4/7/11 1400	4/8/11 0300	0.01	3,825	<5.0E-10
4/7/11 1500	4/8/11 0400	0.01	3,825	<5.0E-10
4/7/11 1600	4/8/11 0500	0.01	3,825	<5.0E-10
4/7/11 1700	4/8/11 0600	0.01	3,825	<5.0E-10
4/7/11 1800	4/8/11 0700	0.01	3,825	<5.0E-10
4/7/11 1900	4/8/11 0800	0.01	3,870	<5.0E-10
4/7/11 2000	4/8/11 0900	0.01	3,825	<5.0E-10
4/7/11 2100	4/8/11 1000	0.01	3,960	<5.0E-10

4/7/11 2200	4/8/11 1100	0.01	3,960	<5.0E-10
4/7/11 2300	4/8/11 1200	0.01	3,780	<5.0E-10
4/8/11 0000	4/8/11 1300	0.01	3,960	<5.0E-10
4/8/11 0100	4/8/11 1400	0.01	3,780	<5.0E-10
4/8/11 0200	4/8/11 1500	0.01	3,780	<5.0E-10
4/8/11 0300	4/8/11 1600	0.01	3,690	<5.0E-10
4/8/11 0400	4/8/11 1700	0.01	3,600	<5.0E-10
4/8/11 0500	4/8/11 1800	0.01	3,600	<5.0E-10
4/8/11 0600	4/8/11 1900	0.01	3,645	<5.0E-10
4/8/11 0700	4/8/11 2000	0.01	3,600	<5.0E-10
4/8/11 0800	4/8/11 2100	0.01	3,690	<5.0E-10
4/8/11 0900	4/8/11 2200	0.01	3,960	<5.0E-10
4/8/11 1000	4/8/11 2300	0.01	3,960	<5.0E-10
4/8/11 1100	4/9/11 0000	0.01	3,960	<5.0E-10
4/8/11 1200	4/9/11 0100	0.01	3,825	<5.0E-10
4/8/11 1300	4/9/11 0200	0.01	3,825	1.1E-09
4/8/11 1400	4/9/11 0300	0.01	3,825	1.0E-09
4/8/11 1500	4/9/11 0400	0.01	3,825	<5.0E-10
4/8/11 1600	4/9/11 0500	0.01	3,825	<5.0E-10
4/8/11 1700	4/9/11 0600	0.01	3,645	<5.0E-10
4/8/11 1800	4/9/11 0700	0.01	1,710	<5.0E-10
4/8/11 1900	4/9/11 0800	0.01	1,800	<5.0E-10
4/8/11 2000	4/9/11 0900	0.01	1,800	<5.0E-10
4/8/11 2100	4/9/11 1000	0.01	2,610	<5.0E-10
4/8/11 2200	4/9/11 1100	0.01	1,778	<5.0E-10
4/8/11 2300	4/9/11 1200	0.01	2,273	<5.0E-10
4/9/11 0000	4/9/11 1300	0.01	3,150	<5.0E-10
4/9/11 0100	4/9/11 1400	0.01	3,285	<5.0E-10
4/9/11 0200	4/9/11 1500	0.01	3,600	<5.0E-10
4/9/11 0300	4/9/11 1600	0.01	3,375	<5.0E-10
4/9/11 0400	4/9/11 1700	0.01	3,600	<5.0E-10
4/9/11 0500	4/9/11 1800	0.01	3,150	<5.0E-10
4/9/11 0600	4/9/11 1900	0.01	2,970	<5.0E-10
4/9/11 0700	4/9/11 2000	0.01	2,475	<5.0E-10

4/9/11 0800	4/9/11 2100	0.01	2,475	5.0E-10
4/9/11 0900	4/9/11 2200	0.01	2,610	<5.0E-10
4/9/11 1000	4/9/11 2300	0.01	2,250	5.0E-10
4/9/11 1100	4/10/11 0000	0.01	2,475	5.0E-10
4/9/11 1200	4/10/11 0100	0.01	2,790	5.0E-10
4/9/11 1300	4/10/11 0200	0.01	3,060	1.0E-09
4/9/11 1400	4/10/11 0300	0.01	3,060	1.0E-09
4/9/11 1500	4/10/11 0400	0.01	3,060	8.5E-10
4/9/11 1600	4/10/11 0500	0.01	3,150	1.3E-09
4/9/11 1700	4/10/11 0600	0.01	3,150	1.4E-09
4/9/11 1800	4/10/11 0700	0.01	3,150	1.7E-09
4/9/11 1900	4/10/11 0800	0.01	3,240	1.2E-09
4/9/11 2000	4/10/11 0900	0.01	3,600	6.0E-10
4/9/11 2100	4/10/11 1000	0.01	4,005	6.0E-10
4/9/11 2200	4/10/11 1100	0.01	3,780	5.5E-10
4/9/11 2300	4/10/11 1200	0.01	3,960	<5.0E-10
4/10/11 0000	4/10/11 1300	0.01	3,960	<5.0E-10
4/10/11 0100	4/10/11 1400	0.01	3,825	<5.0E-10
4/10/11 0200	4/10/11 1500	0.01	4,050	<5.0E-10
4/10/11 0300	4/10/11 1600	0.01	4,050	<5.0E-10
4/10/11 0400	4/10/11 1700	0.01	3,960	<5.0E-10
4/10/11 0500	4/10/11 1800	0.01	4,050	<5.0E-10

Notes

(Mit-1) NACCC reports elevated air samples are due to natural short-lived Radon daughters as confirmed by half-life determination.

(Mit-2) 3/29/11 0230 (JST): NACCC reports elevated air samples are due to natural short-lived Radon daughters, as confirmed by half-life determination, as well as a potential plume event.

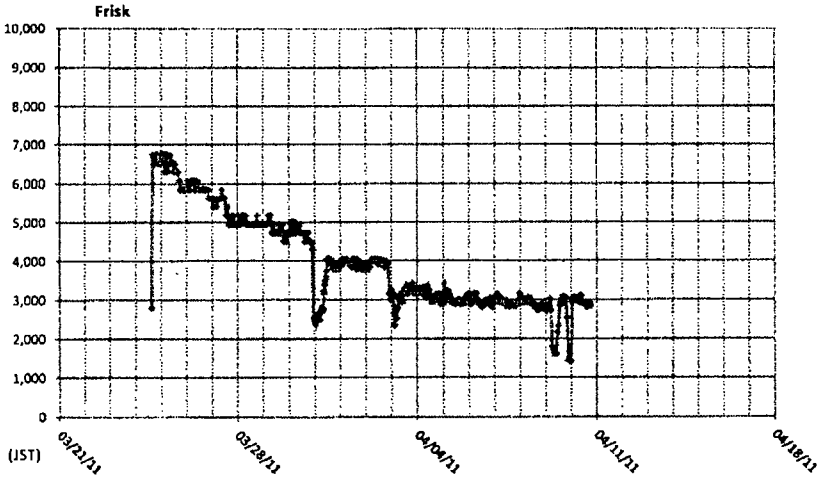
(Mit-3) NACCC reports elevated air samples are due to a possible plume event.

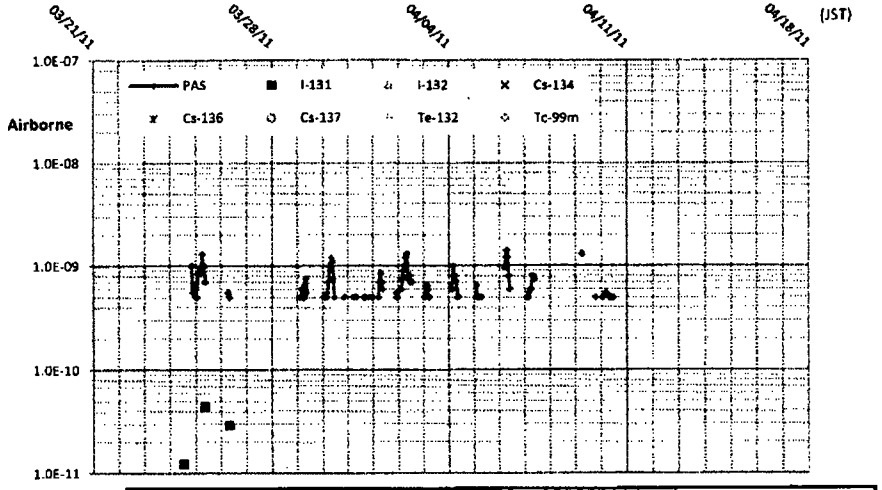
(Mit-4) Isotopic analysis performed on portable air sample filter and no Isotopes detected.

(Mit-5) NACCC reports samples recounted and did not identify a decay trend consistent with Radon daughters.

Tsukuba: LAT. 36.04N, LONG. 140.06E

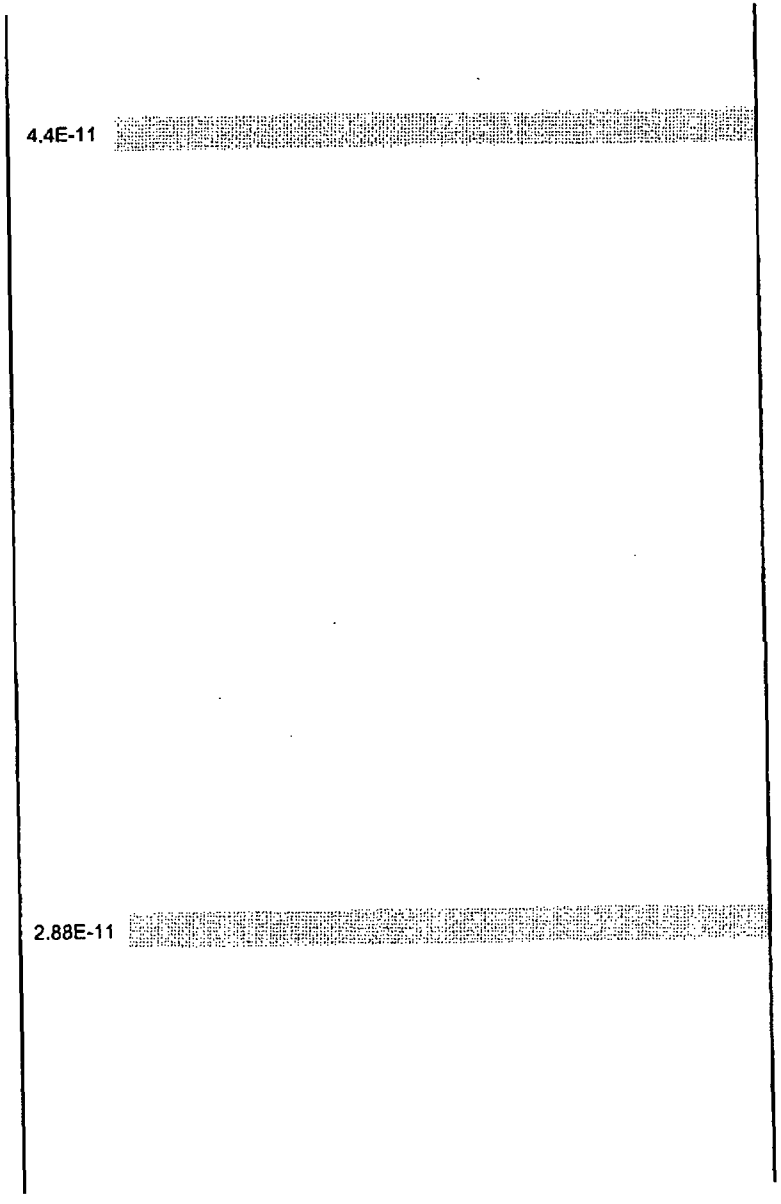
~60 miles north-east of Yokosha and 106 miles south of Fukushima





Date and Time	Date and Time2	Radiation	Frisk	PAS	RI	Notes	Isotopic Analysis						
							I-131	I-132	Cs-134	Cs-136	Cs-137	Te-132	Tc-99m
(EDT)	(JST)	(mr/hr)	(pCi/probe)	(µCi/mL)	(µCi/mL)		(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)
3/23/11 2330	3/24/11 1230	0.01		<5.0E-10									
3/24/11 0000	3/24/11 1300	0.01		<5.0E-10		(T-1)	1.2E-11						
3/24/11 0200	3/24/11 1500	0.01	2,790	<5.0E-10									
3/24/11 0300	3/24/11 1600	0.01	6,750	<5.0E-10									
3/24/11 0400	3/24/11 1700	0.01	6,525	<5.0E-10									
3/24/11 0500	3/24/11 1800	0.01	6,525	<5.0E-10									
3/24/11 0600	3/24/11 1900	0.01	6,750	<5.0E-10									
3/24/11 0700	3/24/11 2000	0.01	6,750	1.0E-09									
3/24/11 0800	3/24/11 2100	0.01	6,525	5.5E-10									
3/24/11 0900	3/24/11 2200	0.01	6,525	6.3E-10		(T-2)							
3/24/11 1000	3/24/11 2300	0.01	6,525	6.0E-10		(T-2)							
3/24/11 1100	3/25/11 0000	0.01	6,750	<5.0E-10		(T-2)							
3/24/11 1200	3/25/11 0100	0.01	6,750	5.0E-10		(T-2)							
3/24/11 1300	3/25/11 0200	0.01	6,750	8.5E-10		(T-2)							
3/24/11 1500	3/25/11 0400	0.01	6,300	8.5E-10		(T-2)							
3/24/11 1600	3/25/11 0500	0.01	6,750	9.5E-10		(T-2)							

3/24/11 1700	3/25/11 0600	0.01	6,300	1.3E-09	(T-2)
3/24/11 1800	3/25/11 0700	0.01	6,525	1.0E-09	(T-2)
3/24/11 1900	3/25/11 0800	0.01	6,525	1.0E-09	
3/24/11 2000	3/25/11 0900	0.01	6,750	7.0E-10	
3/24/11 2100	3/25/11 1000	0.01	6,525	<5.0E-10	
3/24/11 2200	3/25/11 1100	0.01	6,525	<5.0E-10	
3/24/11 2300	3/25/11 1200	0.01	6,300	<5.0E-10	
3/25/11 0000	3/25/11 1300	0.01	6,525	<5.0E-10	
3/25/11 0100	3/25/11 1400	0.01	6,300	<5.0E-10	
3/25/11 0200	3/25/11 1500	0.01	6,300	<5.0E-10	
3/25/11 0300	3/25/11 1600	0.01	6,300	<5.0E-10	
3/25/11 0400	3/25/11 1700	0.01	6,075	<5.0E-10	
3/25/11 0500	3/25/11 1800	0.01	5,850	<5.0E-10	
3/25/11 0600	3/25/11 1900	0.01	5,850	<5.0E-10	
3/25/11 0700	3/25/11 2000	0.01	5,850	<5.0E-10	
3/25/11 0800	3/25/11 2100	0.01	5,850	<5.0E-10	
3/25/11 0900	3/25/11 2200	0.01	5,850	<5.0E-10	
3/25/11 1000	3/25/11 2300	0.01	5,850	<5.0E-10	
3/25/11 1100	3/26/11 0000	0.01	5,850	<5.0E-10	
3/25/11 1200	3/26/11 0100	0.01	6,075	<5.0E-10	
3/25/11 1300	3/26/11 0200	0.01	5,850	<5.0E-10	
3/25/11 1400	3/26/11 0300	0.01	5,850	<5.0E-10	
3/25/11 1500	3/26/11 0400	0.01	6,075	<5.0E-10	
3/25/11 1600	3/26/11 0500	0.01	6,075	<5.0E-10	
3/25/11 1700	3/26/11 0600	0.01	6,075	<5.0E-10	
3/25/11 1800	3/26/11 0700	0.01	5,850	5.5E-10	
3/25/11 1900	3/26/11 0800	0.01	6,075	5.0E-10	
3/25/11 2000	3/26/11 0900	0.01	5,850	<5.0E-10	
3/25/11 2100	3/26/11 1000	0.01	6,075	<5.0E-10	
3/25/11 2200	3/26/11 1100	0.01	5,850	<5.0E-10	
3/25/11 2300	3/26/11 1200	0.01	5,850	<5.0E-10	
3/26/11 0000	3/26/11 1300	0.01	5,850	<5.0E-10	
3/26/11 0100	3/26/11 1400	0.01	5,850	<5.0E-10	
3/26/11 0200	3/26/11 1500	0.01	5,850	<5.0E-10	



3/26/11 0300	3/26/11 1600	0.01	5,850	<5.0E-10
3/26/11 0400	3/26/11 1700	0.01	5,850	<5.0E-10
3/26/11 0500	3/26/11 1800	0.01	5,850	<5.0E-10
3/26/11 0600	3/26/11 1900	0.01	5,850	<5.0E-10
3/26/11 0700	3/26/11 2000	0.01	5,850	<5.0E-10
3/26/11 0800	3/26/11 2100	0.01	5,625	<5.0E-10
3/26/11 0900	3/26/11 2200	0.01	5,625	<5.0E-10
3/26/11 1000	3/26/11 2300	0.01	5,625	<5.0E-10
3/26/11 1100	3/27/11 0000	0.01	5,625	<5.0E-10
3/26/11 1200	3/27/11 0100	0.01	5,400	<5.0E-10
3/26/11 1300	3/27/11 0200	0.01	5,580	<5.0E-10
3/26/11 1400	3/27/11 0300	0.01	5,580	<5.0E-10
3/26/11 1500	3/27/11 0400	0.01	5,400	<5.0E-10
3/26/11 1600	3/27/11 0500	0.01	5,580	<5.0E-10
3/26/11 1700	3/27/11 0600	0.01	5,580	<5.0E-10
3/26/11 1800	3/27/11 0700	0.01	5,625	<5.0E-10
3/26/11 1900	3/27/11 0800	0.01	5,625	<5.0E-10
3/26/11 2000	3/27/11 0900	0.01	5,850	<5.0E-10
3/26/11 2100	3/27/11 1000	0.01	5,625	<5.0E-10
3/26/11 2200	3/27/11 1100	0.01	5,625	<5.0E-10
3/26/11 2300	3/27/11 1200	0.01	5,625	<5.0E-10
3/27/11 0000	3/27/11 1300	0.01	5,175	<5.0E-10
3/27/11 0100	3/27/11 1400	0.01	5,400	<5.0E-10
3/27/11 0200	3/27/11 1500	0.01	5,400	<5.0E-10
3/27/11 0300	3/27/11 1600	0.01	4,950	<5.0E-10
3/27/11 0400	3/27/11 1700	0.01	4,950	<5.0E-10
3/27/11 0500	3/27/11 1800	0.01	4,950	<5.0E-10
3/27/11 0600	3/27/11 1900	0.01	5,175	<5.0E-10
3/27/11 0700	3/27/11 2000	0.01	5,175	<5.0E-10
3/27/11 0800	3/27/11 2100	0.01	4,950	<5.0E-10
3/27/11 0900	3/27/11 2200	0.01	4,950	<5.0E-10
3/27/11 1000	3/27/11 2300	0.01	4,950	<5.0E-10
3/27/11 1100	3/28/11 0000	0.01	4,950	<5.0E-10
3/27/11 1200	3/28/11 0100	0.01	5,175	<5.0E-10

3/27/11 1300	3/28/11 0200	0.01	4,950	<5.0E-10	
3/27/11 1400	3/28/11 0300	0.01	4,950	<5.0E-10	
3/27/11 1500	3/28/11 0400	0.01	5,175	<5.0E-10	
3/27/11 1600	3/28/11 0500	0.01	5,175	<5.0E-10	
3/27/11 1700	3/28/11 0600	0.01	5,175	<5.0E-10	
3/27/11 1800	3/28/11 0700	0.01	4,950	<5.0E-10	
3/27/11 1900	3/28/11 0800	0.01	5,175	<5.0E-10	
3/27/11 2000	3/28/11 0900	0.01	4,950	<5.0E-10	
3/27/11 2100	3/28/11 1000	0.01	4,950	<5.0E-10	
3/27/11 2200	3/28/11 1100	0.01	4,950	<5.0E-10	
3/27/11 2300	3/28/11 1200	0.01	4,950	<5.0E-10	
3/28/11 0000	3/28/11 1300	0.01	4,950	<5.0E-10	
3/28/11 0100	3/28/11 1400	0.01	4,950	<5.0E-10	
3/28/11 0200	3/28/11 1500	0.01	4,950	<5.0E-10	
3/28/11 0300	3/28/11 1600	0.01	4,950	<5.0E-10	
3/28/11 0400	3/28/11 1700	0.01	4,950	<5.0E-10	
3/28/11 0500	3/28/11 1800	0.01	5,175	<5.0E-10	
3/28/11 0600	3/28/11 1900	0.01	4,950	<5.0E-10	
3/28/11 0700	3/28/11 2000	0.01	4,950	<5.0E-10	
3/28/11 0800	3/28/11 2100	0.01	4,950	<5.0E-10	
3/28/11 0900	3/28/11 2200	0.01	4,950	<5.0E-10	
3/28/11 1000	3/28/11 2300	0.01	4,950	<5.0E-10	
3/28/11 1100	3/29/11 0000	0.01	4,950	<5.0E-10	
3/28/11 1200	3/29/11 0100	0.01	4,950	<5.0E-10	
3/28/11 1300	3/29/11 0200	0.01	4,950	<5.0E-10	(T-2)
3/28/11 1400	3/29/11 0300	0.01	4,950	5.0E-10	(T-2)
3/28/11 1500	3/29/11 0400	0.01	4,950	6.0E-10	(T-2)
3/28/11 1600	3/29/11 0500	0.01	5,175	5.0E-10	(T-2)
3/28/11 1700	3/29/11 0600	0.01	5,175	5.0E-10	(T-2)
3/28/11 1800	3/29/11 0700	0.01	5,175	6.5E-10	(T-2)
3/28/11 1900	3/29/11 0800	0.01	4,725	7.5E-10	(T-2)
3/28/11 2000	3/29/11 0900	0.01	4,725	5.5E-10	(T-2)
3/28/11 2100	3/29/11 1000	0.01	4,950	<5.0E-10	(T-2)
3/28/11 2200	3/29/11 1100	0.01	4,725	<5.0E-10	(T-2)

3/28/11 2300	3/29/11 1200	0.01	4,725	<5.0E-10	
3/29/11 0000	3/29/11 1300	0.01	4,725	<5.0E-10	
3/29/11 0100	3/29/11 1400	0.01	4,725	<5.0E-10	
3/29/11 0200	3/29/11 1500	0.01	4,950	<5.0E-10	
3/29/11 0300	3/29/11 1600	0.01	4,725	<5.0E-10	
3/29/11 0400	3/29/11 1700	0.01	4,725	<5.0E-10	
3/29/11 0500	3/29/11 1800	0.01	4,950	<5.0E-10	
3/29/11 0600	3/29/11 1900	0.01	4,500	<5.0E-10	
3/29/11 0700	3/29/11 2000	0.01	4,500	<5.0E-10	
3/29/11 0800	3/29/11 2100	0.01	4,725	<5.0E-10	
3/29/11 0900	3/29/11 2200	0.01	4,500	<5.0E-10	
3/29/11 1000	3/29/11 2300	0.01	4,725	<5.0E-10	
3/29/11 1100	3/30/11 0000	0.01	4,725	<5.0E-10	
3/29/11 1200	3/30/11 0100	0.01	4,725	5.0E-10	(T-3)
3/29/11 1300	3/30/11 0200	0.01	4,950	5.0E-10	(T-3)
3/29/11 1400	3/30/11 0300	0.01	4,725	5.0E-10	(T-3)
3/29/11 1500	3/30/11 0400	0.01	5,040	5.5E-10	(T-3)
3/29/11 1600	3/30/11 0500	0.01	4,950	7.0E-10	(T-3)
3/29/11 1700	3/30/11 0600	0.01	4,725	1.0E-09	(T-3)
3/29/11 1800	3/30/11 0700	0.01	4,950	1.0E-09	(T-3)
3/29/11 1900	3/30/11 0800	0.01	4,950	1.2E-09	(T-3)
3/29/11 2000	3/30/11 0900	0.01	4,770	1.1E-09	(T-3)
3/29/11 2100	3/30/11 1000	0.01	4,950	7.5E-10	(T-3)
3/29/11 2200	3/30/11 1100	0.01	4,725	5.0E-10	(T-3)
3/29/11 2300	3/30/11 1200	0.01	4,725	<5.0E-10	
3/30/11 0000	3/30/11 1300	0.01	4,725	<5.0E-10	
3/30/11 0100	3/30/11 1400	0.01	4,725	<5.0E-10	
3/30/11 0200	3/30/11 1500	0.01	4,500	<5.0E-10	
3/30/11 0300	3/30/11 1600	0.01	4,500	<5.0E-10	
3/30/11 0400	3/30/11 1700	0.01	4,725	<5.0E-10	
3/30/11 0500	3/30/11 1800	0.01	4,725	<5.0E-10	
3/30/11 0600	3/30/11 1900	0.01	4,500	<5.0E-10	
3/30/11 0700	3/30/11 2000	0.01	4,500	<5.0E-10	
3/30/11 0800	3/30/11 2100	0.01	4,500	5.0E-10	

3/30/11 0900	3/30/11 2200	0.01	4,275	<5.0E-10
3/30/11 1000	3/30/11 2300	0.01	2,520	<5.0E-10
3/30/11 1100	3/31/11 0000	0.01	2,430	<5.0E-10
3/30/11 1200	3/31/11 0100	0.01	2,340	<5.0E-10
3/30/11 1300	3/31/11 0200	0.01	2,610	<5.0E-10
3/30/11 1400	3/31/11 0300	0.01	2,520	<5.0E-10
3/30/11 1500	3/31/11 0400	0.01	2,610	<5.0E-10
3/30/11 1600	3/31/11 0500	0.01	2,475	5.0E-10
3/30/11 1700	3/31/11 0600	0.01	2,700	5.0E-10
3/30/11 1800	3/31/11 0700	0.01	2,790	<5.0E-10
3/30/11 1830	3/31/11 0730	0.01	2,700	<5.0E-10
3/30/11 1845	3/31/11 0745	0.01	2,700	<5.0E-10
3/30/11 1900	3/31/11 0800	0.01	2,745	<5.0E-10
3/30/11 1915	3/31/11 0815	0.01	2,745	5.0E-10
3/30/11 1930	3/31/11 0830	0.01	3,150	5.0E-10
3/30/11 1945	3/31/11 0845	0.01	3,195	<5.0E-10
3/30/11 2000	3/31/11 0900	0.01	3,240	<5.0E-10
3/30/11 2015	3/31/11 0915	0.01	3,375	<5.0E-10
3/30/11 2030	3/31/11 0930	0.01	3,420	<5.0E-10
3/30/11 2045	3/31/11 0945	0.01	3,375	<5.0E-10
3/30/11 2100	3/31/11 1000	0.01	3,510	<5.0E-10
3/30/11 2130	3/31/11 1030	0.01	3,600	<5.0E-10
3/30/11 2200	3/31/11 1100	0.01	3,735	<5.0E-10
3/30/11 2230	3/31/11 1130	0.01	4,050	<5.0E-10
3/30/11 2300	3/31/11 1200	0.01	4,050	<5.0E-10
3/31/11 0000	3/31/11 1300	0.01	4,095	<5.0E-10
3/31/11 0100	3/31/11 1400	0.01	4,005	<5.0E-10
3/31/11 0200	3/31/11 1500	0.01	4,050	<5.0E-10
3/31/11 0300	3/31/11 1600	0.01	3,870	5.0E-10
3/31/11 0400	3/31/11 1700	0.01	3,780	5.0E-10
3/31/11 0500	3/31/11 1800	0.01	3,960	<5.0E-10
3/31/11 0600	3/31/11 1900	0.01	3,780	<5.0E-10
3/31/11 0700	3/31/11 2000	0.01	3,870	5.0E-10
3/31/11 0800	3/31/11 2100	0.01	3,915	<5.0E-10

3/31/11 0900	3/31/11 2200	0.01	3,870	<5.0E-10	
3/31/11 1000	3/31/11 2300	0.01	3,780	5.0E-10	
3/31/11 1100	4/1/11 0000	0.01	3,870	<5.0E-10	
3/31/11 1200	4/1/11 0100	0.01	3,870	<5.0E-10	
3/31/11 1300	4/1/11 0200	0.01	4,050	<5.0E-10	
3/31/11 1400	4/1/11 0300	0.01	3,960	<5.0E-10	
3/31/11 1500	4/1/11 0400	0.01	4,050	<5.0E-10	
3/31/11 1600	4/1/11 0500	0.01	4,005	5.0E-10	(T-4)
3/31/11 1700	4/1/11 0600	0.01	4,050	7.0E-10	(T-4)
3/31/11 1800	4/1/11 0700	0.01	3,960	8.5E-10	(T-4, T-6)
3/31/11 1900	4/1/11 0800	0.01	4,005	7.0E-10	(T-4)
3/31/11 2000	4/1/11 0900	0.01	3,960	6.0E-10	(T-4)
3/31/11 2100	4/1/11 1000	0.01	3,870	<5.0E-10	
3/31/11 2200	4/1/11 1100	0.01	3,825	<5.0E-10	
3/31/11 2300	4/1/11 1200	0.01	4,050	<5.0E-10	
4/1/11 0000	4/1/11 1300	0.01	3,960	<5.0E-10	
4/1/11 0100	4/1/11 1400	0.01	4,005	<5.0E-10	
4/1/11 0200	4/1/11 1500	0.01	4,050	<5.0E-10	
4/1/11 0300	4/1/11 1600	0.01	3,780	<5.0E-10	
4/1/11 0400	4/1/11 1700	0.01	3,870	<5.0E-10	
4/1/11 0500	4/1/11 1800	0.01	3,870	<5.0E-10	
4/1/11 0600	4/1/11 1900	0.01	3,960	<5.0E-10	
4/1/11 0700	4/1/11 2000	0.01	3,780	<5.0E-10	
4/1/11 0800	4/1/11 2100	0.01	3,780	<5.0E-10	
4/1/11 0900	4/1/11 2200	0.01	3,870	5.5E-10	
4/1/11 1000	4/1/11 2300	0.01	3,780	5.0E-10	
4/1/11 1100	4/2/11 0000	0.01	3,780	<5.0E-10	
4/1/11 1200	4/2/11 0100	0.01	3,780	<5.0E-10	
4/1/11 1300	4/2/11 0200	0.01	3,915	6.0E-10	(T-5)
4/1/11 1400	4/2/11 0300	0.01	3,780	6.0E-10	(T-5)
4/1/11 1500	4/2/11 0400	0.01	3,825	7.5E-10	(T-5)
4/1/11 1600	4/2/11 0500	0.01	3,960	9.0E-10	(T-5)
4/1/11 1700	4/2/11 0600	0.01	4,050	1.0E-09	(T-5)
4/1/11 1800	4/2/11 0700	0.01	4,050	1.2E-09	(T-5)

4/1/11 1900	4/2/11 0800	0.01	4,005	1.3E-09	(T-5)
4/1/11 2000	4/2/11 0900	0.01	4,050	7.5E-10	(T-5)
4/1/11 2100	4/2/11 1000	0.01	3,950	7.5E-10	(T-5)
4/1/11 2200	4/2/11 1100	0.01	4,050	8.0E-10	
4/1/11 2300	4/2/11 1200	0.01	3,915	7.0E-10	
4/2/11 0000	4/2/11 1300	0.01	4,005	7.0E-10	
4/2/11 0100	4/2/11 1400	0.01	4,050	<5.0E-10	
4/2/11 0200	4/2/11 1500	0.01	3,960	<5.0E-10	
4/2/11 0300	4/2/11 1600	0.01	3,870	<5.0E-10	
4/2/11 0400	4/2/11 1700	0.01	3,825	<5.0E-10	
4/2/11 0500	4/2/11 1800	0.01	3,870	<5.0E-10	
4/2/11 0600	4/2/11 1900	0.01	3,960	<5.0E-10	
4/2/11 0700	4/2/11 2000	0.01	4,005	<5.0E-10	
4/2/11 0800	4/2/11 2100	0.01	3,915	<5.0E-10	
4/2/11 0900	4/2/11 2200	0.01	3,150	<5.0E-10	
4/2/11 1000	4/2/11 2300	0.01	3,015	<5.0E-10	
4/2/11 1100	4/3/11 0000	0.01	3,240	<5.0E-10	
4/2/11 1200	4/3/11 0100	0.01	3,150	5.0E-10	
4/2/11 1300	4/3/11 0200	0.01	3,060	6.5E-10	
4/2/11 1400	4/3/11 0300	0.01	2,340	6.5E-10	
4/2/11 1500	4/3/11 0400	0.01	2,700	6.0E-10	
4/2/11 1600	4/3/11 0500	0.01	2,520	5.0E-10	
4/2/11 1700	4/3/11 0600	0.01	2,790	<5.0E-10	
4/2/11 1800	4/3/11 0700	0.01	3,060	<5.0E-10	
4/2/11 1900	4/3/11 0800	0.01	3,150	<5.0E-10	
4/2/11 2000	4/3/11 0900	0.01	3,060	<5.0E-10	
4/2/11 2100	4/3/11 1000	0.01	2,925	<5.0E-10	
4/2/11 2200	4/3/11 1100	0.01	3,150	<5.0E-10	
4/2/11 2300	4/3/11 1200	0.01	3,285	<5.0E-10	
4/3/11 0000	4/3/11 1300	0.01	3,240	<5.0E-10	
4/3/11 0100	4/3/11 1400	0.01	3,375	<5.0E-10	
4/3/11 0200	4/3/11 1500	0.01	3,150	<5.0E-10	
4/3/11 0300	4/3/11 1600	0.01	3,285	<5.0E-10	
4/3/11 0400	4/3/11 1700	0.01	3,240	<5.0E-10	

4/3/11 0500	4/3/11 1800	0.01	3,330	<5.0E-10	
4/3/11 0600	4/3/11 1900	0.01	3,420	<5.0E-10	
4/3/11 0700	4/3/11 2000	0.01	3,285	<5.0E-10	
4/3/11 0800	4/3/11 2100	0.01	3,150	<5.0E-10	
4/3/11 0900	4/3/11 2200	0.01	3,240	<5.0E-10	
4/3/11 1000	4/3/11 2300	0.01	3,285	<5.0E-10	
4/3/11 1100	4/4/11 0000	0.01	3,330	<5.0E-10	
4/3/11 1200	4/4/11 0100	0.01	3,150	<5.0E-10	
4/3/11 1300	4/4/11 0200	0.01	3,285	<5.0E-10	
4/3/11 1400	4/4/11 0300	0.01	3,240	6.0E-10	
4/3/11 1500	4/4/11 0400	0.01	3,150	1.0E-09	
4/3/11 1600	4/4/11 0500	0.01	3,330	8.0E-10	
4/3/11 1700	4/4/11 0600	0.01	3,150	8.0E-10	
4/3/11 1800	4/4/11 0700	0.01	3,240	7.0E-10	
4/3/11 1900	4/4/11 0800	0.01	3,060	5.0E-10	
4/3/11 2000	4/4/11 0900	0.01	3,150	5.0E-10	
4/3/11 2100	4/4/11 1000	0.01	3,375	<5.0E-10	
4/3/11 2200	4/4/11 1100	0.01	3,240	<5.0E-10	
4/3/11 2300	4/4/11 1200	0.01	3,060	<5.0E-10	
4/4/11 0000	4/4/11 1300	0.01	2,925	<5.0E-10	
4/4/11 0100	4/4/11 1400	0.01	3,060	<5.0E-10	
4/4/11 0200	4/4/11 1500	0.01	3,060	<5.0E-10	
4/4/11 0300	4/4/11 1600	0.01	2,970	<5.0E-10	
4/4/11 0400	4/4/11 1700	0.01	3,060	<5.0E-10	
4/4/11 0500	4/4/11 1800	0.01	3,150	<5.0E-10	
4/4/11 0600	4/4/11 1900	0.01	3,060	<5.0E-10	
4/4/11 0700	4/4/11 2000	0.01	3,150	<5.0E-10	
4/4/11 0800	4/4/11 2100	0.01	2,970	<5.0E-10	
4/4/11 0900	4/4/11 2200	0.01	2,880	<5.0E-10	
4/4/11 1000	4/4/11 2300	0.01	3,060	<5.0E-10	
4/4/11 1100	4/5/11 0000	0.01	3,150	<5.0E-10	
4/4/11 1200	4/5/11 0100	0.01	3,420	<5.0E-10	
4/4/11 1300	4/5/11 0200	0.01	2,925	6.5E-10	(T-7)
4/4/11 1400	4/5/11 0300	0.01	2,970	5.0E-10	

4/4/11 1500	4/5/11 0400	0.01	3,150	5.0E-10
4/4/11 1600	4/5/11 0500	0.01	3,240	<5.0E-10
4/4/11 1700	4/5/11 0600	0.01	3,150	5.0E-10
4/4/11 1800	4/5/11 0700	0.01	3,060	5.0E-10
4/4/11 1830	4/5/11 0730	0.01	2,925	<5.0E-10
4/4/11 1900	4/5/11 0800	0.01	2,970	<5.0E-10
4/4/11 1930	4/5/11 0830	0.01	2,925	<5.0E-10
4/4/11 2100	4/5/11 1000	0.01	2,925	<5.0E-10
4/4/11 2200	4/5/11 1100	0.01	2,880	<5.0E-10
4/4/11 2300	4/5/11 1200	0.01	2,880	<5.0E-10
4/5/11 0000	4/5/11 1300	0.01	2,925	<5.0E-10
4/5/11 0100	4/5/11 1400	0.01	3,015	<5.0E-10
4/5/11 0200	4/5/11 1500	0.01	2,925	<5.0E-10
4/5/11 0300	4/5/11 1600	0.01	2,880	<5.0E-10
4/5/11 0400	4/5/11 1700	0.01	2,925	<5.0E-10
4/5/11 0500	4/5/11 1800	0.01	2,925	<5.0E-10
4/5/11 0600	4/5/11 1900	0.01	2,880	<5.0E-10
4/5/11 0700	4/5/11 2000	0.01	3,015	<5.0E-10
4/5/11 0800	4/5/11 2100	0.01	3,060	<5.0E-10
4/5/11 0900	4/5/11 2200	0.01	3,105	<5.0E-10
4/5/11 1000	4/5/11 2300	0.01	3,150	<5.0E-10
4/5/11 1100	4/6/11 0000	0.01	3,015	<5.0E-10
4/5/11 1200	4/6/11 0100	0.01	3,150	<5.0E-10
4/5/11 1300	4/6/11 0200	0.01	2,880	<5.0E-10
4/5/11 1400	4/6/11 0300	0.01	2,925	<5.0E-10
4/5/11 1500	4/6/11 0400	0.01	3,015	<5.0E-10
4/5/11 1600	4/6/11 0500	0.01	3,150	9.5E-10
4/5/11 1700	4/6/11 0600	0.01	3,060	1.2E-09
4/5/11 1800	4/6/11 0700	0.01	3,150	1.4E-09
4/5/11 1900	4/6/11 0800	0.01	2,925	1.2E-09
4/5/11 2000	4/6/11 0900	0.01	2,970	8.0E-10
4/5/11 2100	4/6/11 1000	0.01	2,925	6.0E-10
4/5/11 2200	4/6/11 1100	0.01	2,835	<5.0E-10
4/5/11 2300	4/6/11 1200	0.01	2,790	<5.0E-10

4/6/11 0000	4/6/11 1300	0.01	2,835	<5.0E-10
4/6/11 0100	4/6/11 1400	0.01	2,925	<5.0E-10
4/6/11 0200	4/6/11 1500	0.01	2,970	<5.0E-10
4/6/11 0300	4/6/11 1600	0.01	2,925	<5.0E-10
4/6/11 0400	4/6/11 1700	0.01	2,925	<5.0E-10
4/6/11 0500	4/6/11 1800	0.01	2,970	<5.0E-10
4/6/11 0600	4/6/11 1900	0.01	2,880	<5.0E-10
4/6/11 0700	4/6/11 2000	0.01	3,060	<5.0E-10
4/6/11 0800	4/6/11 2100	0.01	2,790	<5.0E-10
4/6/11 0900	4/6/11 2200	0.01	2,880	<5.0E-10
4/6/11 1000	4/6/11 2300	0.01	3,015	<5.0E-10
4/6/11 1100	4/7/11 0000	0.01	2,925	<5.0E-10
4/6/11 1200	4/7/11 0100	0.01	3,060	<5.0E-10
4/6/11 1300	4/7/11 0200	0.01	3,015	5.0E-10
4/6/11 1400	4/7/11 0300	0.01	3,150	5.0E-10
4/6/11 1500	4/7/11 0400	0.01	2,925	5.5E-10
4/6/11 1600	4/7/11 0500	0.01	2,970	<5.0E-10
4/6/11 1700	4/7/11 0600	0.01	2,925	6.0E-10
4/6/11 1800	4/7/11 0700	0.01	3,015	8.0E-10
4/6/11 1900	4/7/11 0800	0.01	2,880	8.0E-10
4/6/11 2000	4/7/11 0900	0.01	2,925	7.5E-10
4/6/11 2100	4/7/11 1000	0.01	2,835	<5.0E-10
4/6/11 2200	4/7/11 1100	0.01	2,970	<5.0E-10
4/6/11 2300	4/7/11 1200	0.01	2,925	<5.0E-10
4/7/11 0000	4/7/11 1300	0.01	2,880	<5.0E-10
4/7/11 0100	4/7/11 1400	0.01	2,790	<5.0E-10
4/7/11 0200	4/7/11 1500	0.01	2,835	<5.0E-10
4/7/11 0300	4/7/11 1600	0.01	2,925	<5.0E-10
4/7/11 0400	4/7/11 1700	0.01	2,880	<5.0E-10
4/7/11 0500	4/7/11 1800	0.01	2,835	<5.0E-10
4/7/11 0600	4/7/11 1900	0.01	2,880	<5.0E-10
4/7/11 0700	4/7/11 2000	0.01	2,835	<5.0E-10
4/7/11 0800	4/7/11 2100	0.01	2,925	<5.0E-10
4/7/11 0900	4/7/11 2200	0.01	2,970	<5.0E-10

4/7/11 1000	4/7/11 2300	0.01	3,150	<5.0E-10	
4/7/11 1100	4/8/11 0000	0.01	3,060	<5.0E-10	
4/7/11 1200	4/8/11 0100	0.01	3,015	<5.0E-10	
4/7/11 1300	4/8/11 0200	0.01	2,925	<5.0E-10	
4/7/11 1400	4/8/11 0300	0.01	2,970	<5.0E-10	
4/7/11 1500	4/8/11 0400	0.01	2,925	<5.0E-10	
4/7/11 1600	4/8/11 0500	0.01	3,015	<5.0E-10	
4/7/11 1700	4/8/11 0600	0.01	2,925	<5.0E-10	
4/7/11 1800	4/8/11 0700	0.01	3,060	<5.0E-10	
4/7/11 1900	4/8/11 0800	0.01	2,970	<5.0E-10	
4/7/11 2000	4/8/11 0900	0.01	2,925	<5.0E-10	
4/7/11 2100	4/8/11 1000	0.01	3,015	<5.0E-10	
4/7/11 2200	4/8/11 1100	0.01	2,880	<5.0E-10	
4/7/11 2300	4/8/11 1200	0.01	2,835	<5.0E-10	
4/8/11 0000	4/8/11 1300	0.01	2,835	<5.0E-10	
4/8/11 0100	4/8/11 1400	0.01	2,880	<5.0E-10	
4/8/11 0200	4/8/11 1500	0.01	2,835	<5.0E-10	
4/8/11 0300	4/8/11 1600	0.01	2,700	<5.0E-10	
4/8/11 0400	4/8/11 1700	0.01	2,745	<5.0E-10	
4/8/11 0500	4/8/11 1800	0.01	2,790	<5.0E-10	
4/8/11 0600	4/8/11 1900	0.01	2,745	<5.0E-10	
4/8/11 0700	4/8/11 2000	0.01	2,835	<5.0E-10	
4/8/11 0800	4/8/11 2100	0.01	2,925	<5.0E-10	
4/8/11 0900	4/8/11 2200	0.01	2,880	<5.0E-10	
4/8/11 1000	4/8/11 2300	0.01	2,880	<5.0E-10	
4/8/11 1100	4/9/11 0000	0.01	2,745	<5.0E-10	
4/8/11 1200	4/9/11 0100	0.01	2,700	<5.0E-10	
4/8/11 1300	4/9/11 0200	0.01	2,835	<5.0E-10	
4/8/11 1400	4/9/11 0300	0.01	2,880	<5.0E-10	
4/8/11 1500	4/9/11 0400	0.01	3,015	<5.0E-10	
4/8/11 1600	4/9/11 0500	0.01	2,700	<5.0E-10	
4/8/11 1700	4/9/11 0600	0.01	1,800	1.3E-09	(T-8)
4/8/11 1800	4/9/11 0700	0.01	1,710	<5.0E-10	
4/8/11 1900	4/9/11 0800	0.01	1,620	<5.0E-10	

4/8/11 2000	4/9/11 0900	0.01	1,575	<5.0E-10
4/8/11 2100	4/9/11 1000	0.01	1,620	<5.0E-10
4/8/11 2200	4/9/11 1100	0.01	2,160	<5.0E-10
4/8/11 2300	4/9/11 1200	0.01	2,340	<5.0E-10
4/9/11 0000	4/9/11 1300	0.01	2,835	<5.0E-10
4/9/11 0100	4/9/11 1400	0.01	2,925	<5.0E-10
4/9/11 0200	4/9/11 1500	0.01	3,060	<5.0E-10
4/9/11 0300	4/9/11 1600	0.01	3,015	<5.0E-10
4/9/11 0400	4/9/11 1700	0.01	3,060	<5.0E-10
4/9/11 0500	4/9/11 1800	0.01	2,925	<5.0E-10
4/9/11 0600	4/9/11 1900	0.01	3,060	5.0E-10
4/9/11 0700	4/9/11 2000	0.01	2,520	<5.0E-10
4/9/11 0800	4/9/11 2100	0.01	1,440	<5.0E-10
4/9/11 0900	4/9/11 2200	0.01	1,530	<5.0E-10
4/9/11 1000	4/9/11 2300	0.01	1,395	<5.0E-10
4/9/11 1100	4/10/11 0000	0.01	1,440	<5.0E-10
4/9/11 1200	4/10/11 0100	0.01	2,925	<5.0E-10
4/9/11 1300	4/10/11 0200	0.01	3,060	5.0E-10
4/9/11 1400	4/10/11 0300	0.01	3,060	<5.0E-10
4/9/11 1500	4/10/11 0400	0.01	3,011	<5.0E-10
4/9/11 1600	4/10/11 0500	0.01	2,970	5.5E-10
4/9/11 1700	4/10/11 0600	0.01	3,060	<5.0E-10
4/9/11 1800	4/10/11 0700	0.01	2,925	<5.0E-10
4/9/11 1900	4/10/11 0800	0.01	3,015	5.0E-10
4/9/11 2000	4/10/11 0900	0.01	3,105	<5.0E-10
4/9/11 2100	4/10/11 1000	0.01	2,925	5.0E-10
4/9/11 2200	4/10/11 1100	0.01	2,880	5.0E-10
4/9/11 2300	4/10/11 1200	0.01	2,925	<5.0E-10
4/10/11 0000	4/10/11 1300	0.01	2,835	<5.0E-10
4/10/11 0100	4/10/11 1400	0.01	2,790	<5.0E-10
4/10/11 0200	4/10/11 1500	0.01	2,835	<5.0E-10
4/10/11 0300	4/10/11 1600	0.01	2,880	<5.0E-10
4/10/11 0400	4/10/11 1700	0.01	2,925	<5.0E-10
4/10/11 0500	4/10/11 1800	0.01	2,835	<5.0E-10

Notes

(T-1) The 1300 air sample was analyzed via full isotopic analysis, and contained I-131.

(T-2) NACCC reports elevated air samples are due to natural short-lived Radon daughters as confirmed by half-life determination.

(T-3) 3/30/11 0100 (JST): NACCC reports elevated air samples are due to natural short-lived Radon daughters, as confirmed by half-life determination, as well as a potential plume event.

(T-4) NACCC reports elevated air samples are due to a possible plume event.

(T-5) 4/2/11 0751 (JST): NACCC reports elevated air samples are due to short-lived activity.

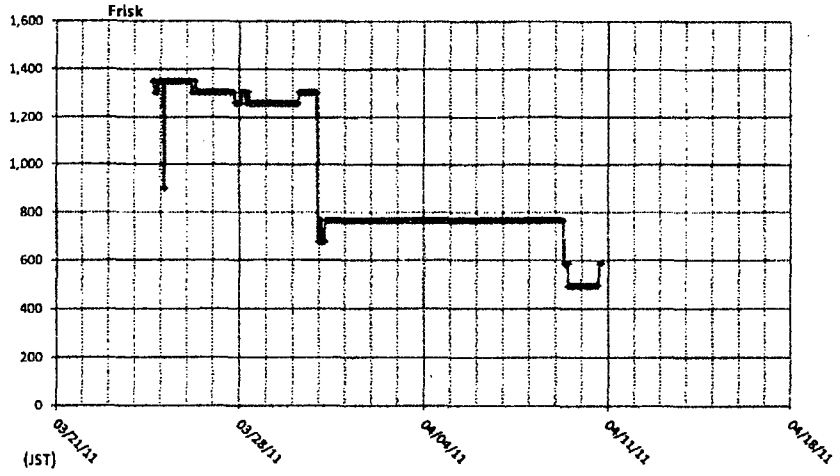
(T-6) Isotopic analysis performed on portable air sample filter and no Isotopes detected.

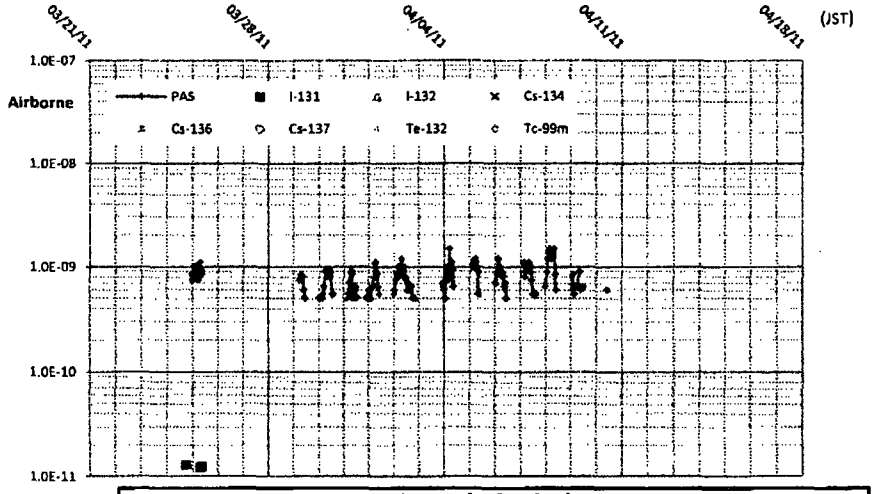
(T-7) 4/5/11 0200 (JST): NACCC Reports Elevated Air Samples Due to Short-Lived Activity.

(T-8) 4/8/11 0600 (JST): NACCC Reports Elevated Air Sample (250ccpm); Sample will be recounted in 30 mins to determine if activity due to Radon Daughters, Currently Lightly Raining.

Oyama: LAT. 36.2975N, LONG. 139.82199E

~72 miles north of Yokosuka and 100 miles south of Fukushima





Date and Time	Date and Time2	Radiation	Frisk	PAS	RI	Notes	Isotopic Analysis						
							I-131	I-132	Cs-134	Cs-136	Cs-137	Te-132	Tc-99m
(EDT)	(JST)	(mr/hr)	(pCi/probe)	(µCi/mL)	(µCi/mL)		(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)
3/24/11 0330	3/24/11 1630	0.01		<5.0E-10									
3/24/11 0400	3/24/11 1700	0.01	1,350	<5.0E-10									
3/24/11 0500	3/24/11 1800	0.01	1,350	<5.0E-10			1.3E-11						
3/24/11 0600	3/24/11 1900	0.01	1,305	<5.0E-10									
3/24/11 0700	3/24/11 2000	0.01	1,305	<5.0E-10									
3/24/11 0800	3/24/11 2100	0.01	1,305	<5.0E-10		(O-1)							
3/24/11 0900	3/24/11 2200	0.01	1,350	<5.0E-10		(O-1)							
3/24/11 1000	3/24/11 2300	0.01	1,350	8.5E-10		(O-1)							
3/24/11 1100	3/25/11 0000	0.01	1,350	7.5E-10		(O-1)							
3/24/11 1200	3/25/11 0100	0.01	1,350	1.0E-09		(O-1)							
3/24/11 1300	3/25/11 0200	0.01	1,350	1.0E-09		(O-1)							
3/24/11 1330	3/25/11 0230	0.01	1,350	1.0E-09		(O-1)							
3/24/11 1430	3/25/11 0330	0.01	900	8.0E-10		(O-1)							
3/24/11 1500	3/25/11 0400	0.01	1,350	8.0E-10		(O-1)							
3/24/11 1630	3/25/11 0530	0.01	1,350	7.5E-10		(O-1)							
3/24/11 1700	3/25/11 0600	0.01	1,350	8.0E-10		(O-1)							

3/24/11 1730	3/25/11 0630	0.01	1,350	1.1E-09	(O-1)		
3/24/11 1800	3/25/11 0700	0.01	1,350	9.5E-10	(O-1)	1.2E-11	
3/24/11 1830	3/25/11 0730	0.01	1,350	9.5E-10	(O-1)		
3/24/11 1900	3/25/11 0800	0.01	1,350	8.5E-10	(O-1)		
3/24/11 1930	3/25/11 0830	0.01	1,350	8.5E-10	(O-1)	1.2E-11	
3/24/11 2000	3/25/11 0900	0.01	1,350	<5.0E-10			
3/24/11 2030	3/25/11 0930	0.01	1,350	<5.0E-10			
3/24/11 2100	3/25/11 1000	0.01	1,350	<5.0E-10			
3/24/11 2130	3/25/11 1030	0.01	1,350	<5.0E-10			
3/24/11 2200	3/25/11 1100	0.01	1,350	<5.0E-10			
3/24/11 2300	3/25/11 1200	0.01	1,350	<5.0E-10			
3/25/11 0000	3/25/11 1300	0.01	1,350	<5.0E-10			
3/25/11 0100	3/25/11 1400	0.01	1,350	<5.0E-10			
3/25/11 0200	3/25/11 1500	0.01	1,350	<5.0E-10			
3/25/11 0300	3/25/11 1600	0.01	1,350	<5.0E-10			
3/25/11 0400	3/25/11 1700	0.01	1,350	<5.0E-10			
3/25/11 0500	3/25/11 1800	0.01	1,350	<5.0E-10			
3/25/11 0600	3/25/11 1900	0.01	1,350	<5.0E-10			
3/25/11 0700	3/25/11 2000	0.01	1,350	<5.0E-10			
3/25/11 0800	3/25/11 2100	0.01	1,350	<5.0E-10			
3/25/11 0900	3/25/11 2200	0.01	1,350	<5.0E-10			
3/25/11 1000	3/25/11 2300	0.01	1,350	<5.0E-10			
3/25/11 1100	3/26/11 0000	0.01	1,350	<5.0E-10			
3/25/11 1200	3/26/11 0100	0.01	1,350	<5.0E-10			
3/25/11 1300	3/26/11 0200	0.01	1,350	<5.0E-10			
3/25/11 1400	3/26/11 0300	0.01	1,350	<5.0E-10			
3/25/11 1500	3/26/11 0400	0.01	1,350	<5.0E-10			
3/25/11 1600	3/26/11 0500	0.01	1,305	<5.0E-10			
3/25/11 1700	3/26/11 0600	0.01	1,305	<5.0E-10			
3/25/11 1800	3/26/11 0700	0.01	1,305	<5.0E-10			
3/25/11 1900	3/26/11 0800	0.01	1,350	<5.0E-10			
3/25/11 2000	3/26/11 0900	0.01	1,305	<5.0E-10			
3/25/11 2100	3/26/11 1000	0.01	1,305	<5.0E-10			
3/25/11 2200	3/26/11 1100	0.01	1,305	<5.0E-10			
3/25/11 2300	3/26/11 1200	0.01	1,305	<5.0E-10			

3/26/11 0000	3/26/11 1300	0.01	1,305	<5.0E-10
3/26/11 0100	3/26/11 1400	0.01	1,305	<5.0E-10
3/26/11 0200	3/26/11 1500	0.01	1,305	<5.0E-10
3/26/11 0300	3/26/11 1600	0.01	1,305	<5.0E-10
3/26/11 0400	3/26/11 1700	0.01	1,305	<5.0E-10
3/26/11 0500	3/26/11 1800	0.01	1,305	<5.0E-10
3/26/11 0600	3/26/11 1900	0.01	1,305	<5.0E-10
3/26/11 0700	3/26/11 2000	0.01	1,305	<5.0E-10
3/26/11 0800	3/26/11 2100	0.01	1,305	<5.0E-10
3/26/11 0900	3/26/11 2200	0.01	1,305	<5.0E-10
3/26/11 1000	3/26/11 2300	0.01	1,305	<5.0E-10
3/26/11 1100	3/27/11 0000	0.01	1,305	<5.0E-10
3/26/11 1200	3/27/11 0100	0.01	1,305	<5.0E-10
3/26/11 1300	3/27/11 0200	0.01	1,305	<5.0E-10
3/26/11 1400	3/27/11 0300	0.01	1,305	<5.0E-10
3/26/11 1500	3/27/11 0400	0.01	1,305	<5.0E-10
3/26/11 1600	3/27/11 0500	0.01	1,305	<5.0E-10
3/26/11 1700	3/27/11 0600	0.01	1,305	<5.0E-10
3/26/11 1800	3/27/11 0700	0.01	1,305	<5.0E-10
3/26/11 1900	3/27/11 0800	0.01	1,305	<5.0E-10
3/26/11 2000	3/27/11 0900	0.01	1,305	<5.0E-10
3/26/11 2100	3/27/11 1000	0.01	1,305	<5.0E-10
3/26/11 2200	3/27/11 1100	0.01	1,305	<5.0E-10
3/26/11 2300	3/27/11 1200	0.01	1,305	<5.0E-10
3/27/11 0000	3/27/11 1300	0.10	1,305	<5.0E-10
3/27/11 0100	3/27/11 1400	0.01	1,305	<5.0E-10
3/27/11 0200	3/27/11 1500	0.01	1,305	<5.0E-10
3/27/11 0300	3/27/11 1600	0.01	1,305	<5.0E-10
3/27/11 0400	3/27/11 1700	0.01	1,305	<5.0E-10
3/27/11 0500	3/27/11 1800	0.01	1,305	<5.0E-10
3/27/11 0600	3/27/11 1900	0.01	1,305	<5.0E-10
3/27/11 0700	3/27/11 2000	0.01	1,260	<5.0E-10
3/27/11 0800	3/27/11 2100	0.01	1,260	<5.0E-10
3/27/11 0900	3/27/11 2200	0.01	1,260	<5.0E-10

3/27/11 1000	3/27/11 2300	0.01	1,260	<5.0E-10	
3/27/11 1100	3/28/11 0000	0.01	1,260	<5.0E-10	
3/27/11 1200	3/28/11 0100	0.01	1,260	<5.0E-10	
3/27/11 1300	3/28/11 0200	0.01	1,305	<5.0E-10	
3/27/11 1400	3/28/11 0300	0.01	1,305	<5.0E-10	
3/27/11 1500	3/28/11 0400	0.01	1,305	<5.0E-10	
3/27/11 1600	3/28/11 0500	0.01	1,305	<5.0E-10	
3/27/11 1700	3/28/11 0600	0.01	1,260	<5.0E-10	
3/27/11 1800	3/28/11 0700	0.01	1,260	<5.0E-10	
3/27/11 1900	3/28/11 0800	0.01	1,305	<5.0E-10	
3/27/11 2000	3/28/11 0900	0.01	1,260	<5.0E-10	
3/27/11 2100	3/28/11 1000	0.01	1,260	<5.0E-10	
3/27/11 2200	3/28/11 1100	0.01	1,260	<5.0E-10	
3/27/11 2300	3/28/11 1200	0.01	1,260	<5.0E-10	
3/28/11 0000	3/28/11 1300	0.01	1,260	<5.0E-10	
3/28/11 0100	3/28/11 1400	0.01	1,260	<5.0E-10	
3/28/11 0200	3/28/11 1500	0.01	1,260	<5.0E-10	
3/28/11 0300	3/28/11 1600	0.01	1,260	<5.0E-10	
3/28/11 0400	3/28/11 1700	0.01	1,260	<5.0E-10	
3/28/11 0500	3/28/11 1800	0.01	1,260	<5.0E-10	
3/28/11 0600	3/28/11 1900	0.01	1,260	<5.0E-10	
3/28/11 0700	3/28/11 2000	0.01	1,260	<5.0E-10	
3/28/11 0800	3/28/11 2100	0.01	1,260	<5.0E-10	
3/28/11 0900	3/28/11 2200	0.01	1,260	<5.0E-10	
3/28/11 1000	3/28/11 2300	0.01	1,260	<5.0E-10	
3/28/11 1100	3/29/11 0000	0.01	1,260	<5.0E-10	
3/28/11 1200	3/29/11 0100	0.01	1,260	<5.0E-10	
3/28/11 1300	3/29/11 0200	0.01	1,260	<5.0E-10	(O-1)
3/28/11 1400	3/29/11 0300	0.01	1,260	<5.0E-10	(O-1)
3/28/11 1500	3/29/11 0400	0.01	1,260	<5.0E-10	(O-1)
3/28/11 1600	3/29/11 0500	0.01	1,260	<5.0E-10	(O-1)
3/28/11 1700	3/29/11 0600	0.01	1,260	7.5E-10	(O-1)
3/28/11 1800	3/29/11 0700	0.01	1,260	8.5E-10	(O-1)
3/28/11 1900	3/29/11 0800	0.01	1,260	8.0E-10	(O-1)

3/28/11 2000	3/29/11 0900	0.01	1,260	8.0E-10	(O-1)
3/28/11 2100	3/29/11 1000	0.01	1,260	6.0E-10	(O-1)
3/28/11 2200	3/29/11 1100	0.01	1,260	5.0E-10	(O-1)
3/28/11 2300	3/29/11 1200	0.01	1,260	<5.0E-10	
3/29/11 0000	3/29/11 1300	0.01	1,260	<5.0E-10	
3/29/11 0100	3/29/11 1400	0.01	1,260	<5.0E-10	
3/29/11 0200	3/29/11 1500	0.01	1,260	<5.0E-10	
3/29/11 0300	3/29/11 1600	<0.01	1,260	<5.0E-10	
3/29/11 0400	3/29/11 1700	0.01	1,260	<5.0E-10	
3/29/11 0500	3/29/11 1800	0.01	1,260	<5.0E-10	
3/29/11 0600	3/29/11 1900	0.01	1,260	<5.0E-10	
3/29/11 0700	3/29/11 2000	0.01	1,260	<5.0E-10	
3/29/11 0800	3/29/11 2100	0.01	1,260	<5.0E-10	
3/29/11 0900	3/29/11 2200	0.01	1,260	<5.0E-10	
3/29/11 1000	3/29/11 2300	0.01	1,260	<5.0E-10	
3/29/11 1100	3/30/11 0000	0.01	1,260	5.0E-10	(O-2)
3/29/11 1200	3/30/11 0100	0.01	1,260	5.0E-10	(O-2)
3/29/11 1300	3/30/11 0200	0.01	1,260	5.0E-10	(O-2)
3/29/11 1400	3/30/11 0300	0.01	1,260	5.0E-10	(O-2)
3/29/11 1500	3/30/11 0400	0.01	1,260	5.5E-10	(O-2)
3/29/11 1600	3/30/11 0500	0.01	1,260	6.5E-10	(O-2)
3/29/11 1700	3/30/11 0600	0.01	1,305	9.0E-10	(O-2)
3/29/11 1800	3/30/11 0700	0.01	1,305	9.5E-10	(O-2)
3/29/11 1900	3/30/11 0800	0.01	1,305	8.0E-10	(O-2)
3/29/11 2000	3/30/11 0900	0.01	1,305	8.5E-10	(O-2)
3/29/11 2100	3/30/11 1000	0.01	1,305	8.5E-10	(O-2)
3/29/11 2200	3/30/11 1100	0.01	1,305	8.0E-10	(O-2)
3/29/11 2300	3/30/11 1200	0.01	1,305	9.0E-10	(O-2)
3/30/11 0000	3/30/11 1300	0.01	1,305	5.5E-10	(O-2)
3/30/11 0100	3/30/11 1400	0.01	1,305	5.5E-10	(O-2)
3/30/11 0200	3/30/11 1500	0.01	1,305	<5.0E-10	
3/30/11 0300	3/30/11 1600	0.01	1,305	<5.0E-10	
3/30/11 0400	3/30/11 1700	0.01	1,305	<5.0E-10	
3/30/11 0500	3/30/11 1800	0.01	1,305	<5.0E-10	

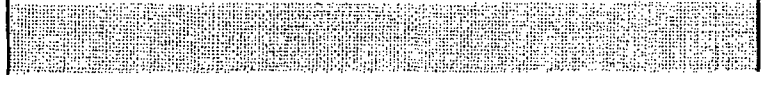
3/30/11 0600	3/30/11 1900	0.01	1,305	<5.0E-10
3/30/11 0700	3/30/11 2000	0.01	1,305	<5.0E-10
3/30/11 0800	3/30/11 2100	0.01	1,305	<5.0E-10
3/30/11 0900	3/30/11 2200	0.01	1,305	<5.0E-10
3/30/11 1000	3/30/11 2300	0.01	675	<5.0E-10
3/30/11 1100	3/31/11 0000	0.01	675	<5.0E-10
3/30/11 1200	3/31/11 0100	0.01	675	<5.0E-10
3/30/11 1300	3/31/11 0200	0.01	765	<5.0E-10
3/30/11 1400	3/31/11 0300	0.01	675	<5.0E-10
3/30/11 1500	3/31/11 0400	0.01	675	5.0E-10
3/30/11 1600	3/31/11 0500	0.01	675	5.5E-10
3/30/11 1700	3/31/11 0600	0.01	765	7.0E-10
3/30/11 1800	3/31/11 0700	0.01	765	9.0E-10
3/30/11 1830	3/31/11 0730	0.01	765	8.5E-10
3/30/11 1845	3/31/11 0745	0.01	765	9.0E-10
3/30/11 1900	3/31/11 0800	0.01	765	8.5E-10
3/30/11 1915	3/31/11 0815	0.01	765	5.5E-10
3/30/11 1930	3/31/11 0830	0.01	765	5.0E-10
3/30/11 1945	3/31/11 0845	0.01	765	5.5E-10
3/30/11 2000	3/31/11 0900	0.01	765	6.5E-10
3/30/11 2015	3/31/11 0915	0.01	765	5.0E-10
3/30/11 2030	3/31/11 0930	0.01	765	5.5E-10
3/30/11 2045	3/31/11 0945	0.01	765	6.5E-10
3/30/11 2100	3/31/11 1000	0.01	765	5.5E-10
3/30/11 2130	3/31/11 1030	0.01	765	6.0E-10
3/30/11 2200	3/31/11 1100	0.01	765	6.0E-10
3/30/11 2230	3/31/11 1130	0.01	765	6.5E-10
3/30/11 2300	3/31/11 1200	0.01	765	5.0E-10
3/31/11 0000	3/31/11 1300	0.01	765	5.0E-10
3/31/11 0100	3/31/11 1400	0.01	765	<5.0E-10
3/31/11 0200	3/31/11 1500	0.01	765	<5.0E-10
3/31/11 0300	3/31/11 1600	0.01	765	<5.0E-10
3/31/11 0400	3/31/11 1700	0.01	765	<5.0E-10
3/31/11 0500	3/31/11 1800	0.01	765	<5.0E-10

3/31/11 0600	3/31/11 1900	0.01	765	<5.0E-10	
3/31/11 0700	3/31/11 2000	0.01	765	<5.0E-10	
3/31/11 0800	3/31/11 2100	0.01	765	<5.0E-10	
3/31/11 0900	3/31/11 2200	0.01	765	5.0E-10	
3/31/11 1000	3/31/11 2300	0.01	765	5.0E-10	
3/31/11 1100	4/1/11 0000	0.01	765	6.0E-10	(O-3)
3/31/11 1200	4/1/11 0100	0.01	765	6.0E-10	(O-3)
3/31/11 1300	4/1/11 0200	0.01	765	5.0E-10	(O-3)
3/31/11 1400	4/1/11 0300	0.01	765	6.5E-10	(O-3)
3/31/11 1500	4/1/11 0400	0.01	765	6.5E-10	(O-3)
3/31/11 1600	4/1/11 0500	0.01	765	8.0E-10	(O-3)
3/31/11 1700	4/1/11 0600	0.01	765	1.1E-09	(O-3)
3/31/11 1800	4/1/11 0700	0.01	765	9.0E-10	(O-3)
3/31/11 1900	4/1/11 0800	0.01	765	8.5E-10	(O-3)
3/31/11 2000	4/1/11 0900	0.01	765	6.5E-10	(O-3, 4)
3/31/11 2100	4/1/11 1000	0.01	765	5.5E-10	
3/31/11 2200	4/1/11 1100	0.01	765	<5.0E-10	
3/31/11 2300	4/1/11 1200	0.01	765	<5.0E-10	
4/1/11 0000	4/1/11 1300	0.01	765	<5.0E-10	
4/1/11 0100	4/1/11 1400	0.01	765	<5.0E-10	
4/1/11 0200	4/1/11 1500	0.01	765	<5.0E-10	
4/1/11 0300	4/1/11 1600	0.01	765	<5.0E-10	
4/1/11 0400	4/1/11 1700	0.01	765	<5.0E-10	
4/1/11 0500	4/1/11 1800	0.01	765	<5.0E-10	
4/1/11 0600	4/1/11 1900	0.01	765	<5.0E-10	
4/1/11 0700	4/1/11 2000	0.01	765	<5.0E-10	
4/1/11 0800	4/1/11 2100	0.01	765	<5.0E-10	
4/1/11 0900	4/1/11 2200	0.01	765	<5.0E-10	
4/1/11 1000	4/1/11 2300	0.01	765	<5.0E-10	
4/1/11 1100	4/2/11 0000	0.01	765	5.5E-10	
4/1/11 1200	4/2/11 0100	0.01	765	6.0E-10	
4/1/11 1300	4/2/11 0200	0.01	765	7.5E-10	
4/1/11 1400	4/2/11 0300	0.01	765	8.5E-10	
4/1/11 1500	4/2/11 0400	0.01	765	1.0E-09	

4/1/11 1600	4/2/11 0500	0.01	765	8.0E-10
4/1/11 1700	4/2/11 0600	0.01	765	9.0E-10
4/1/11 1800	4/2/11 0700	0.01	765	1.2E-09
4/1/11 1900	4/2/11 0800	0.01	765	8.5E-10
4/1/11 2000	4/2/11 0900	0.01	765	9.0E-10
4/1/11 2100	4/2/11 1000	0.01	765	1.0E-09
4/1/11 2200	4/2/11 1100	0.01	765	8.0E-10
4/1/11 2300	4/2/11 1200	0.01	765	7.5E-10
4/2/11 0000	4/2/11 1300	0.01	765	6.0E-10
4/2/11 0100	4/2/11 1400	0.01	765	7.0E-10
4/2/11 0200	4/2/11 1500	0.01	765	6.0E-10
4/2/11 0300	4/2/11 1600	0.01	765	6.5E-10
4/2/11 0400	4/2/11 1700	0.01	765	6.5E-10
4/2/11 0500	4/2/11 1800	0.01	765	5.0E-10
4/2/11 0600	4/2/11 1900	0.01	765	<5.0E-10
4/2/11 0700	4/2/11 2000	0.01	765	5.0E-10
4/2/11 0800	4/2/11 2100	0.01	765	<5.0E-10
4/2/11 0900	4/2/11 2200	0.01	765	<5.0E-10
4/2/11 1000	4/2/11 2300	0.01	765	<5.0E-10
4/2/11 1100	4/3/11 0000	0.01	765	<5.0E-10
4/2/11 1200	4/3/11 0100	0.01	765	<5.0E-10
4/2/11 1300	4/3/11 0200	0.01	765	<5.0E-10
4/2/11 1400	4/3/11 0300	0.01	765	<5.0E-10
4/2/11 1500	4/3/11 0400	0.01	765	<5.0E-10
4/2/11 1600	4/3/11 0500	0.01	765	<5.0E-10
4/2/11 1700	4/3/11 0600	0.01	765	<5.0E-10
4/2/11 1800	4/3/11 0700	0.01	765	<5.0E-10
4/2/11 1900	4/3/11 0800	0.01	765	<5.0E-10
4/2/11 2000	4/3/11 0900	0.01	765	<5.0E-10
4/2/11 2100	4/3/11 1000	0.01	765	<5.0E-10
4/2/11 2200	4/3/11 1100	0.01	765	<5.0E-10
4/2/11 2300	4/3/11 1200	0.01	765	<5.0E-10
4/3/11 0000	4/3/11 1300	0.01	765	<5.0E-10
4/3/11 0100	4/3/11 1400	0.01	765	<5.0E-10

4/3/11 0200	4/3/11 1500	0.01	765	<5.0E-10
4/3/11 0300	4/3/11 1600	0.01	765	<5.0E-10
4/3/11 0400	4/3/11 1700	0.01	765	<5.0E-10
4/3/11 0500	4/3/11 1800	0.01	765	<5.0E-10
4/3/11 0600	4/3/11 1900	0.01	765	<5.0E-10
4/3/11 0700	4/3/11 2000	0.01	765	<5.0E-10
4/3/11 0800	4/3/11 2100	0.01	765	<5.0E-10
4/3/11 0900	4/3/11 2200	0.01	765	<5.0E-10
4/3/11 1000	4/3/11 2300	0.01	765	7.0E-10
4/3/11 1030	4/3/11 2330	0.01	765	6.5E-10
4/3/11 1100	4/4/11 0000	0.01	765	6.0E-10
4/3/11 1200	4/4/11 0100	0.01	765	5.0E-10
4/3/11 1300	4/4/11 0200	0.01	765	8.5E-10
4/3/11 1400	4/4/11 0300	0.01	765	1.0E-09
4/3/11 1500	4/4/11 0400	0.01	765	7.5E-10
4/3/11 1600	4/4/11 0500	0.01	765	1.5E-09
4/3/11 1700	4/4/11 0600	0.01	765	8.5E-10
4/3/11 1800	4/4/11 0700	0.01	765	1.1E-09
4/3/11 1900	4/4/11 0800	0.01	765	9.5E-10
4/3/11 2000	4/4/11 0900	0.01	765	6.5E-10
4/3/11 2100	4/4/11 1000	0.01	765	<5.0E-10
4/3/11 2200	4/4/11 1100	0.01	765	<5.0E-10
4/3/11 2300	4/4/11 1200	0.01	765	<5.0E-10
4/4/11 0000	4/4/11 1300	0.01	765	<5.0E-10
4/4/11 0100	4/4/11 1400	0.01	765	<5.0E-10
4/4/11 0200	4/4/11 1500	0.01	765	<5.0E-10
4/4/11 0300	4/4/11 1600	0.01	765	<5.0E-10
4/4/11 0400	4/4/11 1700	0.01	765	<5.0E-10
4/4/11 0500	4/4/11 1800	0.01	765	<5.0E-10
4/4/11 0600	4/4/11 1900	0.01	765	<5.0E-10
4/4/11 0700	4/4/11 2000	0.01	765	<5.0E-10
4/4/11 0800	4/4/11 2100	0.01	765	<5.0E-10
4/4/11 0900	4/4/11 2200	0.01	765	<5.0E-10
4/4/11 1000	4/4/11 2300	0.01	765	<5.0E-10

4/4/11 1100	4/5/11 0000	0.01	765	<5.0E-10	
4/4/11 1200	4/5/11 0100	0.01	765	<5.0E-10	
4/4/11 1300	4/5/11 0200	0.01	765	<5.0E-10	
4/4/11 1400	4/5/11 0300	0.01	765	1.0E-09	
4/4/11 1500	4/5/11 0400	0.01	765	1.1E-09	
4/4/11 1600	4/5/11 0500	0.01	765	1.2E-09	
4/4/11 1700	4/5/11 0600	0.01	765	1.1E-09	
4/4/11 1800	4/5/11 0700	0.01	765	1.0E-09	
4/4/11 1830	4/5/11 0730	0.01	765	1.0E-09	
4/4/11 1900	4/5/11 0800	0.01	765	9.0E-10	
4/4/11 1930	4/5/11 0830	0.01	765	5.5E-10	
4/4/11 2000	4/5/11 0900	0.01	765	<5.0E-10	
4/4/11 2100	4/5/11 1000	0.01	765	<5.0E-10	
4/4/11 2200	4/5/11 1100	0.01	765	<5.0E-10	
4/4/11 2300	4/5/11 1200	0.01	765	<5.0E-10	
4/5/11 0000	4/5/11 1300	0.01	765	<5.0E-10	
4/5/11 0100	4/5/11 1400	0.01	765	<5.0E-10	
4/5/11 0200	4/5/11 1500	0.01	765	<5.0E-10	
4/5/11 0300	4/5/11 1600	0.01	765	<5.0E-10	
4/5/11 0400	4/5/11 1700	0.01	765	<5.0E-10	
4/5/11 0500	4/5/11 1800	0.01	765	<5.0E-10	
4/5/11 0600	4/5/11 1900	0.01	765	<5.0E-10	
4/5/11 0700	4/5/11 2000	0.01	765	<5.0E-10	
4/5/11 0800	4/5/11 2100	0.01	765	<5.0E-10	
4/5/11 0900	4/5/11 2200	0.01	765	<5.0E-10	
4/5/11 1000	4/5/11 2300	0.01	765	<5.0E-10	
4/5/11 1100	4/6/11 0000	0.01	765	<5.0E-10	
4/5/11 1200	4/6/11 0100	0.01	765	7.0E-10	
4/5/11 1300	4/6/11 0200	0.01	765	8.5E-10	
4/5/11 1400	4/6/11 0300	0.01	765	1.2E-09	
4/5/11 1500	4/6/11 0400	0.01	765	8.5E-10	
4/5/11 1600	4/6/11 0500	0.01	765	1.0E-09	
4/5/11 1700	4/6/11 0600	0.01	765	8.5E-10	(O-4)
4/5/11 1800	4/6/11 0700	0.01	765	9.0E-10	(O-4)



(O-4)

4/6/11 1830	4/7/11 0730			
4/5/11 1900	4/6/11 0800	0.01	765	8.0E-10
4/5/11 2000	4/6/11 0900	0.01	765	6.5E-10
4/5/11 2100	4/6/11 1000	0.01	765	7.0E-10
4/5/11 2200	4/6/11 1100	0.01	765	5.0E-10
4/5/11 2300	4/6/11 1200	0.01	765	<5.0E-10
4/6/11 0000	4/6/11 1300	0.01	765	<5.0E-10
4/6/11 0100	4/6/11 1400	0.01	765	<5.0E-10
4/6/11 0200	4/6/11 1500	0.01	765	<5.0E-10
4/6/11 0300	4/6/11 1600	0.01	765	<5.0E-10
4/6/11 0400	4/6/11 1700	0.01	765	<5.0E-10
4/6/11 0500	4/6/11 1800	0.01	765	<5.0E-10
4/6/11 0600	4/6/11 1900	0.01	765	<5.0E-10
4/6/11 0700	4/6/11 2000	0.01	765	<5.0E-10
4/6/11 0800	4/6/11 2100	0.01	765	<5.0E-10
4/6/11 0900	4/6/11 2200	0.01	765	<5.0E-10
4/6/11 1000	4/6/11 2300	0.01	765	<5.0E-10
4/6/11 1100	4/7/11 0000	0.01	765	<5.0E-10
4/6/11 1200	4/7/11 0100	0.01	765	<5.0E-10
4/6/11 1300	4/7/11 0200	0.01	765	<5.0E-10
4/6/11 1400	4/7/11 0300	0.01	765	1.1E-09
4/6/11 1500	4/7/11 0400	0.01	765	8.0E-10
4/6/11 1600	4/7/11 0500	0.01	765	9.0E-10
4/6/11 1700	4/7/11 0600	0.01	765	1.0E-09
4/6/11 1800	4/7/11 0700	0.01	765	9.5E-10
4/6/11 1900	4/7/11 0800	0.01	765	1.1E-09
4/6/11 2000	4/7/11 0900	0.01	765	9.0E-10
4/6/11 2100	4/7/11 1000	0.01	765	1.0E-09
4/6/11 2200	4/7/11 1100	0.01	765	7.5E-10
4/6/11 2300	4/7/11 1200	0.01	765	5.5E-10
4/7/11 0000	4/7/11 1300	0.01	765	<5.0E-10
4/7/11 0100	4/7/11 1400	0.01	765	<5.0E-10
4/7/11 0200	4/7/11 1500	0.01	765	5.5E-10
4/7/11 0300	4/7/11 1600	0.01	765	<5.0E-10

4/7/11 0400	4/7/11 1700	0.01	765	<5.0E-10
4/7/11 0500	4/7/11 1800	0.01	765	<5.0E-10
4/7/11 0600	4/7/11 1900	0.01	765	<5.0E-10
4/7/11 0700	4/7/11 2000	0.01	765	<5.0E-10
4/7/11 0800	4/7/11 2100	0.01	765	<5.0E-10
4/7/11 0900	4/7/11 2200	0.01	765	<5.0E-10
4/7/11 1000	4/7/11 2300	0.01	765	<5.0E-10
4/7/11 1100	4/8/11 0000	0.01	765	6.5E-10
4/7/11 1200	4/8/11 0100	0.01	765	9.0E-10
4/7/11 1300	4/8/11 0200	0.01	765	1.2E-09
4/7/11 1400	4/8/11 0300	0.01	765	1.4E-09
4/7/11 1500	4/8/11 0400	0.01	765	1.5E-09
4/7/11 1600	4/8/11 0500	0.01	765	1.2E-09
4/7/11 1700	4/8/11 0600	0.01	765	1.3E-09
4/7/11 1800	4/8/11 0700	0.01	765	1.4E-09
4/7/11 1900	4/8/11 0800	0.01	765	1.5E-09
4/7/11 2000	4/8/11 0900	0.01	765	8.5E-10
4/7/11 2100	4/8/11 1000	0.01	765	6.0E-10
4/7/11 2200	4/8/11 1100	0.01	765	<5.0E-10
4/7/11 2300	4/8/11 1200	0.01	765	<5.0E-10
4/8/11 0000	4/8/11 1300	0.01	765	<5.0E-10
4/8/11 0100	4/8/11 1400	0.01	765	<5.0E-10
4/8/11 0200	4/8/11 1500	0.01	765	<5.0E-10
4/8/11 0300	4/8/11 1600	0.01	765	<5.0E-10
4/8/11 0400	4/8/11 1700	0.01	765	<5.0E-10
4/8/11 0500	4/8/11 1800	0.01	765	<5.0E-10
4/8/11 0600	4/8/11 1900	0.01	765	<5.0E-10
4/8/11 0700	4/8/11 2000	0.01	765	<5.0E-10
4/8/11 0800	4/8/11 2100	0.01	765	<5.0E-10
4/8/11 0900	4/8/11 2200	0.01	765	<5.0E-10
4/8/11 1000	4/8/11 2300	0.01	765	<5.0E-10
4/8/11 1100	4/9/11 0000	0.01	765	<5.0E-10
4/8/11 1200	4/9/11 0100	0.01	765	<5.0E-10
4/8/11 1300	4/9/11 0200	0.01	765	8.5E-10

4/8/11 1400	4/9/11 0300	0.01	765	6.0E-10
4/8/11 1500	4/9/11 0400	0.01	765	5.5E-10
4/8/11 1600	4/9/11 0500	0.01	765	<5.0E-10
4/8/11 1700	4/9/11 0600	0.01	765	<5.0E-10
4/8/11 1800	4/9/11 0700	0.01	765	6.5E-10
4/8/11 1900	4/9/11 0800	0.01	585	9.0E-10
4/8/11 2000	4/9/11 0900	0.01	585	<5.0E-10
4/8/11 2100	4/9/11 1000	0.01	585	6.0E-10
4/8/11 2200	4/9/11 1100	0.01	585	<5.0E-10
4/8/11 2300	4/9/11 1200	0.01	495	6.5E-10
4/9/11 0000	4/9/11 1300	0.01	495	<5.0E-10
4/9/11 0100	4/9/11 1400	0.01	495	<5.0E-10
4/9/11 0200	4/9/11 1500	0.01	495	<5.0E-10
4/9/11 0300	4/9/11 1600	0.01	495	<5.0E-10
4/9/11 0400	4/9/11 1700	0.01	495	<5.0E-10
4/9/11 0500	4/9/11 1800	0.01	495	<5.0E-10
4/9/11 0600	4/9/11 1900	0.01	495	<5.0E-10
4/9/11 0700	4/9/11 2000	0.01	495	<5.0E-10
4/9/11 0800	4/9/11 2100	0.01	495	<5.0E-10
4/9/11 0900	4/9/11 2200	0.01	495	<5.0E-10
4/9/11 1000	4/9/11 2300	0.01	495	<5.0E-10
4/9/11 1100	4/10/11 0000	0.01	495	<5.0E-10
4/9/11 1200	4/10/11 0100	0.01	495	<5.0E-10
4/9/11 1300	4/10/11 0200	0.01	495	<5.0E-10
4/9/11 1400	4/10/11 0300	0.01	495	<5.0E-10
4/9/11 1500	4/10/11 0400	0.01	495	<5.0E-10
4/9/11 1600	4/10/11 0500	0.01	495	<5.0E-10
4/9/11 1700	4/10/11 0600	0.01	495	<5.0E-10
4/9/11 1800	4/10/11 0700	0.01	495	<5.0E-10
4/9/11 1900	4/10/11 0800	0.01	495	<5.0E-10
4/9/11 2000	4/10/11 0900	0.01	495	<5.0E-10
4/9/11 2100	4/10/11 1000	0.01	495	6.0E-10
4/9/11 2200	4/10/11 1100	0.01	495	<5.0E-10
4/9/11 2300	4/10/11 1200	0.01	495	<5.0E-10

4/10/11 0000	4/10/11 1300	0.01	495	<5.0E-10
4/10/11 0100	4/10/11 1400	0.01	495	<5.0E-10
4/10/11 0200	4/10/11 1500	0.01	495	<5.0E-10
4/10/11 0300	4/10/11 1600	0.01	585	<5.0E-10
4/10/11 0400	4/10/11 1700	0.01	585	<5.0E-10
4/10/11 0500	4/10/11 1800	0.01	585	<5.0E-10

Notes

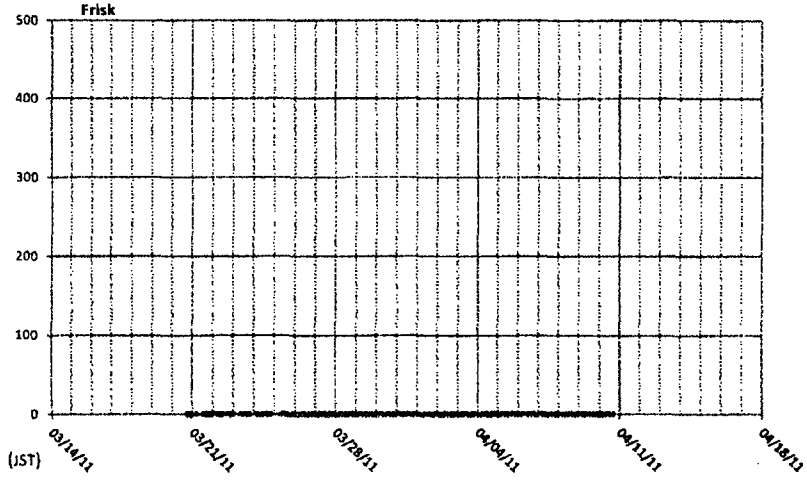
(O-1) NACCC reports elevated air samples are due to natural short-lived Radon daughters as confirmed by half-life determination.

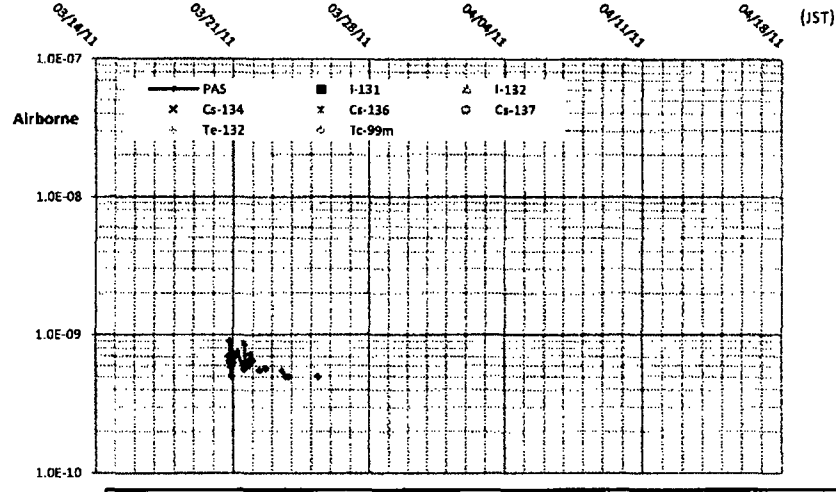
(O-2) 3/30/11 0000 (JST): NACCC reports elevated air samples are due to natural short-lived Radon daughters, as confirmed by half-life determination, as well as a potential plume event.

(O-3) NACCC reports elevated air samples are due to a possible plume event.

(O-4) Isotopic analysis performed on portable air sample filter and no Isotopes detected.

Misawa NAS: LAT. 40.71N, LONG. 141.37E





Date and Time	Date and Time2	Radiation	Frisk	PAS	RI	Notes	Isotopic Analysis						
							I-131	I-132	Cs-134	Cs-136	Cs-137	Te-132	Tc-99m
(EDT)	(JST)	(mr/hr)	(pCi/probe)	(µCi/mL)	(µCi/mL)		(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)
3/20/11 0400	3/20/11 1700	0.01	<450	<5.0E-10									
3/20/11 0600	3/20/11 1900	0.01	<450	7.0E-10									
3/20/11 0630	3/20/11 1930	0.01	<450	6.5E-10									
3/20/11 0700	3/20/11 2000	0.01	<450	9.0E-10									
3/20/11 0730	3/20/11 2030	0.01	<450	6.3E-10									
3/20/11 0800	3/20/11 2100	0.01	<450	5.8E-10									
3/20/11 0830	3/20/11 2130	0.01	<450	6.5E-10									
3/20/11 0845	3/20/11 2145	0.01	<450	5.0E-10									
3/20/11 0900	3/20/11 2200	0.01	<450	6.5E-10									
3/20/11 0915	3/20/11 2215	0.01	<450	6.8E-10									
3/20/11 1049	3/20/11 2349	0.01	<450	6.3E-10									
3/20/11 1600	3/21/11 0500	0.01	<450	7.5E-10									
3/21/11 0000	3/21/11 1300	0.01	<450	5.6E-10									
3/21/11 0030	3/21/11 1330	0.01	<450	<5.0E-10									
3/21/11 0100	3/21/11 1400	0.01	<450	8.5E-10									
3/21/11 0130	3/21/11 1430	0.01	<450	6.3E-10									

3/21/11 0200	3/21/11 1500	0.01	<450	5.9E-10
3/21/11 0230	3/21/11 1530	0.01	<450	<5.0E-10
3/21/11 0300	3/21/11 1600	0.01	<450	6.0E-10
3/21/11 0330	3/21/11 1630	[redacted]	<450	5.9E-10
3/21/11 0400	3/21/11 1700	0.01	<450	6.3E-10
3/21/11 0430	3/21/11 1730	0.01	<450	6.0E-10
3/21/11 0500	3/21/11 1800	0.01	<450	6.0E-10
3/21/11 0530	3/21/11 1830	0.01	<450	6.5E-10
3/21/11 0600	3/21/11 1900	0.01	<450	6.5E-10
3/21/11 0630	3/21/11 1930	0.01	<450	6.0E-10
3/21/11 0700	3/21/11 2000	0.01	<450	6.5E-10
3/21/11 0730	3/21/11 2030	0.01	<450	7.3E-10
3/21/11 0800	3/21/11 2100	0.01	<450	6.3E-10
3/21/11 0830	3/21/11 2130	0.01	<450	6.5E-10
3/21/11 1100	3/22/11 0000	0.01	<450	6.5E-10
3/21/11 1200	3/22/11 0100	0.01	<450	<5.0E-10
3/21/11 1600	3/22/11 0500	0.01	<450	<5.0E-10
3/21/11 1900	3/22/11 0800	0.01	<450	5.5E-10
3/21/11 2300	3/22/11 1200	0.01	<450	<5.0E-10
3/22/11 0300	3/22/11 1600	0.01	<450	5.7E-10
3/22/11 0700	3/22/11 2000	0.01	<450	<5.0E-10
3/22/11 1100	3/23/11 0000	0.01	<450	<5.0E-10
3/22/11 1200	3/23/11 0100	0.01	<450	<5.0E-10
3/22/11 1900	3/23/11 0800	0.01	<450	<5.0E-10
3/22/11 2300	3/23/11 1200	0.01	<450	5.5E-10
3/23/11 0300	3/23/11 1600	0.01	<450	5.0E-10
3/23/11 0700	3/23/11 2000	0.01	<450	5.0E-10
3/23/11 1514	3/24/11 0414	0.01	<450	<5.0E-10
3/23/11 1900	3/24/11 0800	0.01	<450	<5.0E-10
3/23/11 2300	3/24/11 1200	0.01	<450	<5.0E-10
3/24/11 0300	3/24/11 1600	0.01	<450	<5.0E-10
3/24/11 0700	3/24/11 2000	0.01	<450	<5.0E-10
3/24/11 1900	3/25/11 0800	0.01	<450	5.0E-10
3/24/11 2300	3/25/11 1200	0.01	<450	<5.0E-10

3/25/11 0300	3/25/11 1600	0.01	<450	<5.0E-10
3/25/11 0700	3/25/11 2000	0.01	<450	<5.0E-10
3/25/11 1100	3/26/11 0000	0.01	<450	<5.0E-10
3/25/11 1500	3/26/11 0400	0.01	<450	<5.0E-10
3/25/11 1900	3/26/11 0800	0.01	<450	<5.0E-10
3/25/11 2300	3/26/11 1200	0.01	<450	<5.0E-10
3/26/11 0300	3/26/11 1600	0.01	<450	<5.0E-10
3/26/11 0700	3/26/11 2000	0.01	<450	<5.0E-10
3/26/11 1100	3/27/11 0000	0.01	<450	<5.0E-10
3/26/11 1500	3/27/11 0400	0.01	<450	<5.0E-10
3/26/11 1900	3/27/11 0800	0.01	<450	<5.0E-10
3/26/11 2300	3/27/11 1200	0.01	<450	<5.0E-10
3/27/11 0300	3/27/11 1600	0.01	<450	<5.0E-10
3/27/11 0700	3/27/11 2000	0.01	<450	<5.0E-10
3/27/11 1100	3/28/11 0000	0.01	<450	<5.0E-10
3/27/11 1500	3/28/11 0400	0.01	<450	<5.0E-10
3/27/11 1900	3/28/11 0800	0.01	<450	<5.0E-10
3/27/11 2300	3/28/11 1200	0.01	<450	<5.0E-10
3/28/11 0300	3/28/11 1600	0.01	<450	<5.0E-10
3/28/11 0700	3/28/11 2000	0.01	<450	<5.0E-10
3/28/11 1100	3/29/11 0000	0.01	<450	<5.0E-10
3/28/11 1500	3/29/11 0400	0.01	<450	<5.0E-10
3/28/11 1900	3/29/11 0800	0.01	<450	<5.0E-10
3/28/11 2300	3/29/11 1200	0.01	<450	<5.0E-10
3/29/11 0300	3/29/11 1600	0.01	<450	<5.0E-10
3/29/11 0700	3/29/11 2000	0.01	<450	<5.0E-10
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3/29/11 1500	3/30/11 0400	0.01	<450	<5.0E-10
3/29/11 1900	3/30/11 0800	0.01	<450	<5.0E-10
3/29/11 2300	3/30/11 1200	0.01	<450	<5.0E-10
3/30/11 0300	3/30/11 1600	0.01	<450	<5.0E-10
3/30/11 0700	3/30/11 2000	0.01	<450	<5.0E-10
3/30/11 1100	3/31/11 0000	0.01	<450	<5.0E-10
3/30/11 1500	3/31/11 0400	0.01	<450	<5.0E-10

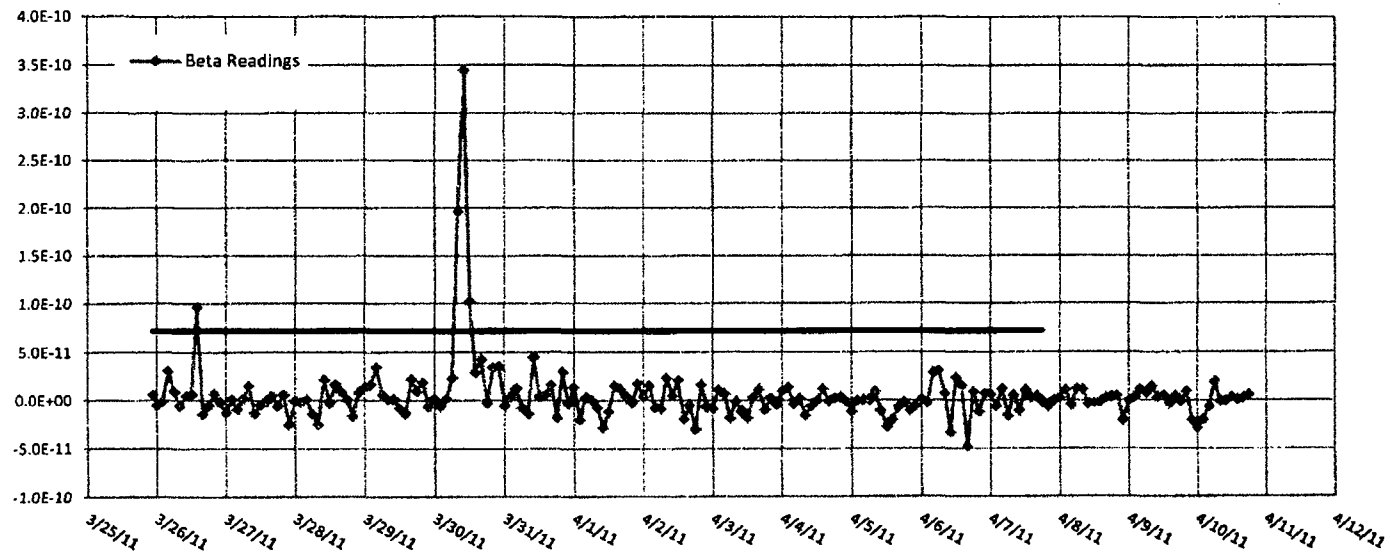
3/30/11 1900	3/31/11 0800	0.01	<450	<5.0E-10
3/30/11 2300	3/31/11 1200	0.01	<450	<5.0E-10
3/31/11 0300	3/31/11 1600	0.01	<450	<5.0E-10
3/31/11 0700	3/31/11 2000	0.01	<450	<5.0E-10
3/31/11 1100	4/1/11 0000	0.01	<450	<5.0E-10
3/31/11 1500	4/1/11 0400	0.01	<450	<5.0E-10
3/31/11 1900	4/1/11 0800	0.01	<450	<5.0E-10
3/31/11 2300	4/1/11 1200	0.01	<450	<5.0E-10
4/1/11 0300	4/1/11 1600	0.01	<450	<5.0E-10
4/1/11 0700	4/1/11 2000	0.01	<450	<5.0E-10
4/1/11 1100	4/2/11 0000	0.01	<450	<5.0E-10
4/1/11 1500	4/2/11 0400	0.01	<450	<5.0E-10
4/1/11 1900	4/2/11 0800	0.01	<450	<5.0E-10
4/1/11 2300	4/2/11 1200	0.01	<450	<5.0E-10
4/2/11 0300	4/2/11 1600	0.01	<450	<5.0E-10
4/2/11 0700	4/2/11 2000	0.01	<450	<5.0E-10
4/2/11 1100	4/3/11 0000	0.01	<450	<5.0E-10
4/2/11 1500	4/3/11 0400	0.01	<450	<5.0E-10
4/2/11 1900	4/3/11 0800	0.01	<450	<5.0E-10
4/2/11 2300	4/3/11 1200	0.01	<450	<5.0E-10
4/3/11 0300	4/3/11 1600	0.01	<450	<5.0E-10
4/3/11 0700	4/3/11 2000	0.01	<450	<5.0E-10
4/3/11 1100	4/4/11 0000	0.01	<450	<5.0E-10
4/3/11 1500	4/4/11 0400	0.01	<450	<5.0E-10
4/3/11 1900	4/4/11 0800	0.01	<450	<5.0E-10
4/3/11 2300	4/4/11 1200	0.01	<450	<5.0E-10
4/4/11 0300	4/4/11 1600	0.01	<450	<5.0E-10
4/4/11 0700	4/4/11 2000	0.01	<450	<5.0E-10
4/4/11 1100	4/5/11 0000	0.01	<450	<5.0E-10
4/4/11 1500	4/5/11 0400	0.01	<450	<5.0E-10
4/4/11 1900	4/5/11 0800	0.01	<450	<5.0E-10
4/4/11 2300	4/5/11 1200	0.01	<450	<5.0E-10
4/5/11 0300	4/5/11 1600	0.01	<450	<5.0E-10
4/5/11 0700	4/5/11 2000	0.01	<450	<5.0E-10

4/5/11 1100	4/6/11 0000	0.01	<450	<5.0E-10
4/5/11 1500	4/6/11 0400	0.01	<450	<5.0E-10
4/5/11 1900	4/6/11 0800	0.01	<450	<5.0E-10
4/5/11 2300	4/6/11 1200	0.01	<450	<5.0E-10
4/6/11 0300	4/6/11 1600	0.01	<450	<5.0E-10
4/6/11 0700	4/6/11 2000	0.01	<450	<5.0E-10
4/6/11 1100	4/7/11 0000	0.01	<450	<5.0E-10
4/6/11 1500	4/7/11 0400	0.01	<450	<5.0E-10
4/6/11 1900	4/7/11 0800	0.01	<450	<5.0E-10
4/6/11 2300	4/7/11 1200	0.01	<450	<5.0E-10
4/7/11 0300	4/7/11 1600	0.01	<450	<5.0E-10
4/7/11 0700	4/7/11 2000	0.01	<450	<5.0E-10
4/7/11 1100	4/8/11 0000	0.01	<450	<5.0E-10
4/7/11 1500	4/8/11 0400	0.01	<450	<5.0E-10
4/7/11 1900	4/8/11 0800	0.01	<450	<5.0E-10
4/7/11 2300	4/8/11 1200	0.01	<450	<5.0E-10
4/8/11 0300	4/8/11 1600	0.01	<450	<5.0E-10
4/8/11 0700	4/8/11 2000	0.01	<450	<5.0E-10
4/8/11 1100	4/9/11 0000	0.01	<450	<5.0E-10
4/8/11 1500	4/9/11 0400	0.01	<450	<5.0E-10
4/8/11 1900	4/9/11 0800	0.01	<450	<5.0E-10
4/8/11 2300	4/9/11 1200	0.01	<450	<5.0E-10
4/9/11 0300	4/9/11 1600	0.01	<450	<5.0E-10
4/9/11 0700	4/9/11 2000	0.01	<450	<5.0E-10
4/9/11 1100	4/10/11 0000	0.01	<450	<5.0E-10
4/9/11 1500	4/10/11 0400	0.01	<450	<5.0E-10
4/9/11 1900	4/10/11 0800	0.01	<450	<5.0E-10
4/9/11 2300	4/10/11 1200	0.01	<450	<5.0E-10
4/10/11 0300	4/10/11 1600	0.01	<450	<5.0E-10

Notes

Tokyo Embassy: LAT. 35.67N, LONG. 139.74E

Tokyo: iCAM Air Sampler



The investigation level calculated is Ave + 2σ.

Date and Time (JST)	Alpha (µCi/mL)	Beta (µCi/mL)	Alpha (µCi/mL)	Beta (µCi/mL)	Investigation (µCi/mL)	Air Flow (CFM)
3/25/11 2240	N/A	N/A	3.34E-13	5.33E-12	7.17E-11	N/A
3/26/11 0001	N/A	N/A	2.31E-13	-5.31E-12	7.17E-11	N/A
3/26/11 0200	N/A	N/A	2.61E-13	-1.3E-12	7.17E-11	N/A
3/26/11 0400	N/A	N/A	-2.99E-13	3.03E-11	7.17E-11	N/A
3/26/11 0600	N/A	N/A	-8.68E-13	8.65E-12	7.17E-11	N/A
3/26/11 0800	N/A	N/A	4.31E-13	-5.72E-12	7.17E-11	N/A
3/26/11 1020	N/A	N/A	-3.86E-13	5.23E-12	7.17E-11	N/A
3/26/11 1200	N/A	N/A	3.31E-13	6.06E-12	7.17E-11	1.3
3/26/11 1400	N/A	N/A	-5.29E-13	9.64E-11	7.17E-11	1.2
3/26/11 1600	N/A	N/A	-4.41E-13	-1.42E-11	7.17E-11	1.2
3/26/11 1800	N/A	N/A	8.24E-13	-6.38E-12	7.17E-11	1.2
3/26/11 2000	N/A	N/A	-3.33E-13	6.88E-12	7.17E-11	1.2
3/26/11 2200	N/A	N/A	6.32E-13	-2.27E-12	7.17E-11	1.2

Beta Average
5.18E-12

Standard Deviation
3.33E-11

Investigation Level
7.17E-11

3/27/11 0001	N/A	N/A	-1.32E-13	-1.33E-11	7.17E-11	1.1
3/27/11 0200	N/A	N/A	-4.72E-13	9.2E-13	7.17E-11	1.1
3/27/11 0400	N/A	N/A	1.09E-12	-9.51E-12	7.17E-11	1.2
3/27/11 0600	N/A	N/A	4.85E-13	1.68E-12	7.17E-11	1.1
3/27/11 0800	N/A	N/A	-2.11E-12	1.5E-11	7.17E-11	1.1
3/27/11 1000	N/A	N/A	5.84E-14	-1.36E-11	7.17E-11	1.1
3/27/11 1200	N/A	N/A	-7.93E-14	-5.14E-12	7.17E-11	1.2
3/27/11 1400	N/A	N/A	7.44E-14	-1.22E-12	7.17E-11	1.2
3/27/11 1600	N/A	N/A	-4.42E-14	4.48E-12	7.17E-11	1.2
3/27/11 1800	N/A	N/A	1.86E-13	-5.93E-12	7.17E-11	1.2
3/27/11 2000	N/A	N/A	-8.02E-13	5.73E-12	7.17E-11	1.2
3/27/11 2200	N/A	N/A	-4.16E-13	-2.51E-11	7.17E-11	1.2
3/28/11 0001	N/A	N/A	1.35E-14	-5.2E-13	7.17E-11	1.2
3/28/11 0200	N/A	N/A	1.25E-13	-2.12E-12	7.17E-11	1.2
3/28/11 0400	N/A	N/A	2.82E-13	1.38E-12	7.17E-11	1.2
3/28/11 0600	N/A	N/A	5.43E-13	-1.42E-11	7.17E-11	1.1
3/28/11 0800	N/A	N/A	7.39E-13	-2.48E-11	7.17E-11	1.0
3/28/11 1000	N/A	N/A	1.74E-12	2.15E-11	7.17E-11	1.0
3/28/11 1200	N/A	N/A	1.49E-13	-2.71E-12	7.17E-11	1.1
3/28/11 1400	N/A	N/A	-2.2E-13	1.63E-11	7.17E-11	1.2
3/28/11 1600	N/A	N/A	-2.63E-13	8.89E-12	7.17E-11	1.1
3/28/11 1800	N/A	N/A	-3.05E-13	6.43E-14	7.17E-11	1.1
3/28/11 2000	N/A	N/A	1.01E-12	-1.64E-11	7.17E-11	1.1
3/28/11 2200	N/A	N/A	4.08E-13	8.55E-12	7.17E-11	1.1
3/29/11 0001	N/A	N/A	-5.13E-13	1.38E-11	7.17E-11	1.1
3/29/11 0200	N/A	N/A	4.05E-13	1.64E-11	7.17E-11	1.1
3/29/11 0400	N/A	N/A	-2.37E-13	3.43E-11	7.17E-11	1.0
3/29/11 0600	N/A	N/A	2.32E-13	6.18E-12	7.17E-11	1.4
3/29/11 0800	N/A	N/A	5.12E-13	8.56E-13	7.17E-11	1.3
3/29/11 1000	N/A	N/A	-3.18E-13	8.56E-13	7.17E-11	1.1
3/29/11 1200	N/A	N/A	3.72E-14	-9.07E-12	7.17E-11	1.1
3/29/11 1400	N/A	N/A	7.06E-13	-1.33E-11	7.17E-11	1.2
3/29/11 1600	N/A	N/A	-5.26E-14	2.16E-11	7.17E-11	1.1
3/29/11 1800	N/A	N/A	-3.04E-13	9.38E-12	7.17E-11	1.1

3/29/11 2000	N/A	N/A	-3.6E-14	1.89E-11	7.17E-11	1.0
3/29/11 2200	N/A	N/A	8.68E-14	-6.9E-12	7.17E-11	0.9
3/30/11 0001	N/A	N/A	-6.3E-13	1.49E-12	7.17E-11	1.3
3/30/11 0200	9.44E-11	2.22E-10	-1.82E-13	-5.59E-12	7.17E-11	1.2
3/30/11 0400	1.13E-10	2.23E-10	-6.68E-13	1.23E-12	7.17E-11	1.1
3/30/11 0600	1.23E-10	2.85E-10	2.31E-12	2.31E-11	7.17E-11	0.9
3/30/11 0800	1.05E-10	2.45E-10	5.5E-13	1.96E-10	7.17E-11	1.2
3/30/11 1000	1.01E-10	2.47E-10	-2.85E-13	3.44E-10	7.17E-11	1.1
3/30/11 1200	6.76E-11	1.79E-10	-2.8E-13	1.02E-10	7.17E-11	1.0
3/30/11 1400	4.57E-11	1.34E-10	5.36E-13	2.92E-11	7.17E-11	1.0
3/30/11 1600	4.62E-11	1.33E-10	4.08E-13	4.25E-11	7.17E-11	1.0
3/30/11 1800	5.21E-11	1.47E-10	-1.3E-12	-3.45E-12	7.17E-11	1.0
3/30/11 2000	4.17E-11	1.08E-10	-3.01E-13	3.39E-11	7.17E-11	1.2
3/30/11 2200	5.24E-11	3.36E-10	3.61E-11	3.48E-11	7.17E-11	1.2
3/31/11 0001	4.8E-11	1.23E-10	1.43E-12	-6.05E-12	7.17E-11	1.2
3/31/11 0200	5.24E-11	1.34E-10	4.43E-13	3.69E-12	7.17E-11	1.2
3/31/11 0400	6.66E-11	1.12E-10	3.13E-13	1.21E-11	7.17E-11	1.2
3/31/11 0600	6.09E-11	1.51E-10	-4.66E-13	-8.47E-12	7.17E-11	1.1
3/31/11 0800	7.12E-11	1.79E-10	4.3E-13	-1.37E-11	7.17E-11	1.1
3/31/11 1000	3.36E-11	2.49E-10	6.38E-13	4.49E-11	7.17E-11	1.1
3/31/11 1200	1.73E-13	3.98E-12	1.77E-17	3.62E-12	7.17E-11	1.3
3/31/11 1400	7.99E-11	1.89E-10	9.9E-13	5.36E-12	7.17E-11	1.2
3/31/11 1600	-7.07E-11	1.68E-10	-2.97E-13	1.57E-11	7.17E-11	1.2
3/31/11 1800	7.74E-11	1.86E-10	-7.68E-13	-1.78E-11	7.17E-11	1.2
3/31/11 2000	7.38E-11	1.77E-10	1.01E-10	2.95E-11	7.17E-11	1.2
3/31/11 2200	6.58E-11	1.56E-10	-7E-14	-3.09E-12	7.17E-11	1.0
4/1/11 0000	7.11E-11	1.76E-10	-1.03E-12	1.39E-11	7.17E-11	1.1
4/1/11 0200	8.68E-11	1.96E-10	-3.36E-13	-1.99E-11	7.17E-11	1.1
4/1/11 0400	8.99E-11	2.12E-10	8.37E-13	2.88E-12	7.17E-11	1.0
4/1/11 0600	9.83E-13	2.33E-10	-9.1E-13	2.95E-13	7.17E-11	1.4
4/1/11 0800	8.29E-11	1.96E-10	-2.88E-13	-7.26E-12	7.17E-11	1.2
4/1/11 1000	9.74E-11	2.17E-10	-6.19E-13	-2.79E-11	7.17E-11	1.2
4/1/11 1200	7.9E-11	1.95E-10	-5.31E-13	-1.19E-11	7.17E-11	1.1
4/1/11 1400	7.14E-11	1.7E-10	-2.09E-14	1.54E-11	7.17E-11	1.1

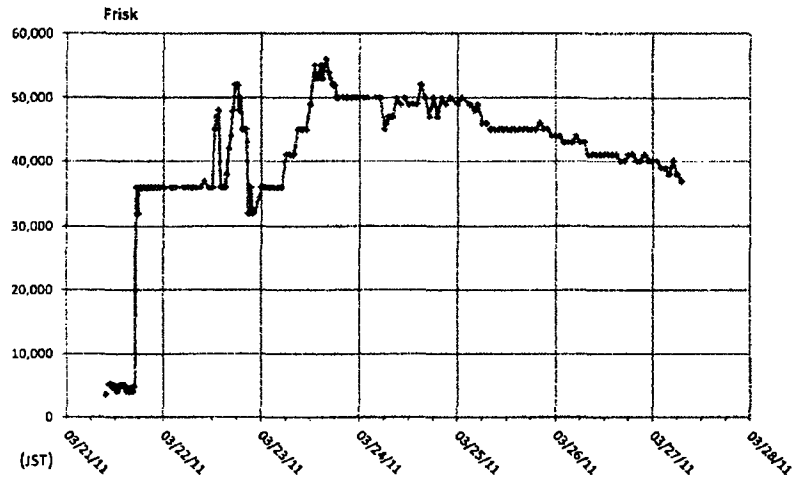
4/1/11 1600	7.43E-11	1.77E-10	4.65E-13	1.18E-11	7.17E-11	1.1
4/1/11 1800	6.8E-11	1.61E-10	1.53E-12	4.32E-12	7.17E-11	1.1
4/1/11 2000	6.02E-11	1.5E-10	2.93E-13	-3.18E-12	7.17E-11	1.2
4/1/11 2200	6.29E-11	1.51E-10	1.21E-12	1.76E-11	7.17E-11	1.1
4/2/11 0001	6.04E-11	1.49E-11	3.60E-13	4.08E-12	7.17E-11	1.1
4/2/11 0200	7.49E-11	1.55E-10	-3.03E-13	1.55E-11	7.17E-11	1.1
4/2/11 0400	7.72E-11	1.82E-10	-1.78E-12	-7.32E-12	7.17E-11	1.1
4/2/11 0600	1.13E-10	2.64E-10	-1.59E-12	-8.91E-12	7.17E-11	1.0
4/2/11 0800	1.41E-10	3.31E-10	-1.44E-12	2.32E-11	7.17E-11	0.9
4/2/11 1000	1.22E-10	2.79E-10	1.08E-12	4.60E-12	7.17E-11	1.2
4/2/11 1200	1.16E-10	2.65E-10	-1.04E-13	2.08E-11	7.17E-11	1.1
4/2/11 1400	1.04E-10	2.39E-10	2.48E-13	-1.96E-11	7.17E-11	1.0
4/2/11 1600	9.92E-11	2.29E-10	-5.58E-13	-5.61E-12	7.17E-11	1.0
4/2/11 1800	9.63E-11	2.25E-10	-9.55E-13	-2.99E-11	7.17E-11	1.0
4/2/11 2000	9.68E-11	2.30E-10	1.60E-12	1.63E-11	7.17E-11	1.0
4/2/11 2200	6.88E-11	1.63E-10	1.65E-13	-6.57E-12	7.17E-11	0.9
4/3/11 0001	4.71E-11	1.16E-10	-3.10E-13	-8.50E-12	7.17E-11	1.2
4/3/11 0200	3.52E-11	9.25E-11	1.75E-12	1.09E-11	7.17E-11	1.2
4/3/11 0400	3.20E-11	8.41E-11	-4.07E-13	6.80E-12	7.17E-11	1.2
4/3/11 0600	3.50E-11	8.90E-11	5.62E-13	-1.85E-11	7.17E-11	1.2
4/3/11 0800	3.56E-11	9.38E-11	-4.60E-13	-7.93E-13	7.17E-11	1.1
4/3/11 1000	2.79E-11	7.81E-11	1.50E-12	-1.14E-11	7.17E-11	1.1
4/3/11 1200	3.52E-11	9.55E-11	7.53E-14	-1.82E-11	7.17E-11	1.1
4/3/11 1400	3.83E-11	9.85E-11	3.35E-13	3.22E-12	7.17E-11	1.1
4/3/11 1600	3.32E-11	8.98E-11	2.60E-13	1.15E-11	7.17E-11	1.1
4/3/11 1800	3.77E-11	1.01E-10	-5.67E-13	-9.46E-12	7.17E-11	1.1
4/3/11 2000	3.97E-11	1.06E-10	-1.95E-12	2.40E-12	7.17E-11	1.1
4/3/11 2200	3.53E-11	9.29E-11	-1.92E-13	-4.71E-12	7.17E-11	1.3
4/4/11 0000	3.86E-11	9.95E-11	6.86E-13	1.01E-11	7.17E-11	1.2
4/4/11 0200	5.72E-11	1.43E-10	3.38E-13	1.29E-11	7.17E-11	1.2
4/4/11 0400	7.21E-11	1.74E-10	4.42E-13	-3.71E-12	7.17E-11	1.1
4/4/11 0600	6.86E-11	1.72E-10	-1.11E-12	1.80E-12	7.17E-11	1.1
4/4/11 0800	6.35E-11	1.63E-10	-8.77E-13	-1.56E-11	7.17E-11	1.0
4/4/11 1000	5.03E-11	1.33E-10	-1.26E-12	-5.79E-12	7.17E-11	0.9

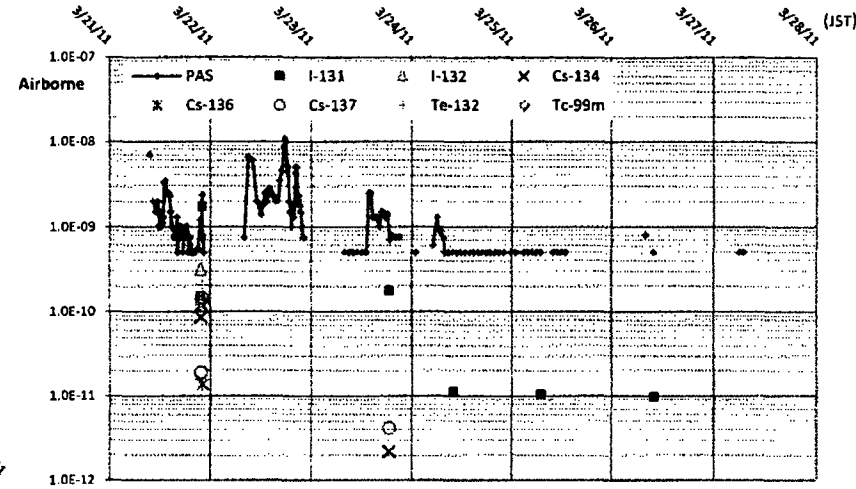
4/4/11 1200	4.54E-11	1.24E-10	-1.85E-12	-4.97E-14	7.17E-11	0.9
4/4/11 1400	7.26E-12	3.08E-11	3.19E-13	1.17E-11	7.17E-11	1.3
4/4/11 1600	1.24E-11	4.22E-11	2.50E-13	-1.07E-12	7.17E-11	1.3
4/4/11 1800	2.99E-11	8.19E-11	-1.19E-13	2.46E-12	7.17E-11	1.2
4/4/11 2000	2.63E-11	7.28E-11	-2.48E-13	3.13E-12	7.17E-11	1.2
4/4/11 2200	1.86E-11	9.21E-11	3.47E-11	-1.14E-12	7.17E-11	1.2
4/5/11 0000	3.28E-11	8.80E-11	1.56E-12	-1.13E-11	7.17E-11	1.2
4/5/11 0200	4.41E-11	1.15E-10	1.79E-13	-2.68E-12	7.17E-11	1.2
4/5/11 0400	4.16E-11	1.05E-10	1.08E-12	1.54E-11	7.17E-11	1.2
4/5/11 0600	2.26E-11	1.11E-10	8.26E-13	2.18E-13	7.17E-11	1.1
4/5/11 0800	5.39E-11	1.37E-10	-2.39E-13	8.84E-12	7.17E-11	1.1
4/5/11 1000	6.32E-11	1.57E-10	-2.83E-13	-1.05E-11	7.17E-11	1.0
4/5/11 1200	5.26E-11	1.39E-11	-4.80E-11	-2.72E-11	7.17E-11	1.0
4/5/11 1400	5.34E-11	1.87E-10	-3.65E-13	-1.96E-11	7.17E-11	1.0
4/5/11 1600	3.78E-11	1.00E-10	-2.12E-13	-7.00E-12	7.17E-11	1.1
4/5/11 1800	4.25E-11	1.14E-10	-1.27E-13	-2.16E-12	7.17E-11	1.1
4/5/11 2000	4.09E-11	1.07E-10	5.54E-14	-1.04E-11	7.17E-11	1.1
4/5/11 2200	4.43E-11	1.17E-10	1.70E-13	-5.45E-12	7.17E-11	1.1
4/6/11 0007	4.45E-11	1.19E-10	2.43E-13	1.05E-12	7.17E-11	1.1
4/6/11 0210	6.08E-11	1.51E-10	-4.20E-13	-2.95E-12	7.17E-11	1.0
4/6/11 0407	9.27E-11	2.21E-10	-8.81E-13	2.88E-11	7.17E-11	1.0
4/6/11 0600	6.10E-11	1.45E-10	2.59E-13	3.10E-11	7.17E-11	1.2
4/6/11 0800	1.12E-10	2.58E-10	-9.64E-13	7.30E-12	7.17E-11	1.1
4/6/11 1000	9.56E-11	2.19E-10	3.62E-13	-3.35E-11	7.17E-11	1.1
4/6/11 1200	7.10E-11	1.72E-10	1.04E-12	2.39E-11	7.17E-11	1.0
4/6/11 1400	5.94E-11	1.54E-10	8.24E-13	1.54E-11	7.17E-11	0.9
4/6/11 1600	5.66E-11	1.42E-10	7.36E-13	-4.75E-11	7.17E-11	0.9
4/6/11 1800	4.29E-11	1.16E-10	-4.35E-13	8.79E-12	7.17E-11	0.9
4/6/11 2000	5.56E-11	1.50E-10	2.16E-13	-1.21E-11	7.17E-11	0.9
4/6/11 2200	6.03E-11	1.48E-10	-1.19E-10	7.09E-12	7.17E-11	0.9
4/7/11 0001	3.76E-11	9.49E-11	3.70E-13	6.33E-12	7.17E-11	1.3
4/7/11 0200	5.71E-11	1.39E-10	8.85E-13	-6.38E-12	7.17E-11	1.2
4/7/11 0400	9.84E-11	2.28E-10	2.30E-14	1.15E-11	7.17E-11	1.2
4/7/11 0600	1.21E-10	2.72E-10	1.24E-12	-1.58E-11	7.17E-11	1.0

4/7/11 0800	1.43E-11	4.63E-11	-2.27E-13	4.80E-12	7.17E-11	1.3
4/7/11 1000	5.15E-11	1.26E-10	-2.07E-14	-1.1E-11	7.17E-11	1.3
4/7/11 1200	3.57E-11	9.34E-11	1.07E-13	1.07E-11	7.17E-11	1.3
4/7/11 1400	4.42E-11	1.09E-10	3.9E-13	2.79E-12	7.17E-11	1.1
4/7/11 1600	3.72E-11	9.95E-11	-4.26E-13	4.37E-12	7.17E-11	1.1
4/7/11 1800	2.53E-11	6.93E-11	-3.24E-11	-1.79E-12	7.17E-11	1.1
4/7/11 2000	2.33E-11	6.94E-11	6.83E-13	-7.00E-12	7.17E-11	1.1
4/7/11 2200	2.52E-11	7.01E-11	-8.12E-13	-9.27E-14	7.17E-11	1.1
4/8/11 0000	2.06E-11	6.24E-11	-1.14E-12	2.76E-12	7.17E-11	1.1
4/8/11 0200	2.44E-11	7.03E-11	-1.61E-12	1.1E-11	7.17E-11	1.1

Ishioka (North Advance Team): LAT. 36.18N, LONG. 140.27E

55nm N of Yokosuka, 93nm S of Fukushima





Date and Time	Date and Time2	Radiation	Frisk	PAS	RI	Notes	Isotopic Analysis						
							I-131	I-132	Cs-134	Cs-136	Cs-137	Te-132	Tc-99m
(EDT)	(JST)	(mr/hr)	(pCi/probe)	(µCi/mL)	(µCi/mL)		(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)	(µCi/mL)
3/20/11 2035	3/21/11 0935	0.04	3,600	7.0E-09									
3/20/11 2045	3/21/11 0945				1.60E-07	(I-1)							
3/20/11 2200	3/21/11 1100	0.04	5,220	1.5E-09									
3/20/11 2125	3/21/11 1025	0.04	5,220	2.0E-09									
3/20/11 2230	3/21/11 1130	0.01	4,500	2.0E-09									
3/20/11 2245	3/21/11 1145	0.04	4,950	1.0E-09	<1.0E-7								
3/20/11 2300	3/21/11 1200	0.01	4,500	1.5E-09									
3/20/11 2315	3/21/11 1215	0.01	4,500	1.0E-09									
3/20/11 2330	3/21/11 1230	0.01	4,050	1.1E-09									
3/20/11 2345	3/21/11 1245	0.01	4,500	1.3E-09									
3/21/11 0000	3/21/11 1300	0.06	4,950	3.3E-09									
3/21/11 0015	3/21/11 1315	0.06	4,950	3.5E-09									
3/21/11 0030	3/21/11 1330	0.04	4,950	2.5E-09	<1.0E-7								
3/21/11 0100	3/21/11 1400	0.04	4,950	2.5E-09									
3/21/11 0115	3/21/11 1415	0.04	4,950	2.3E-09									
3/21/11 0130	3/21/11 1430	0.04	4,950	1.5E-09									

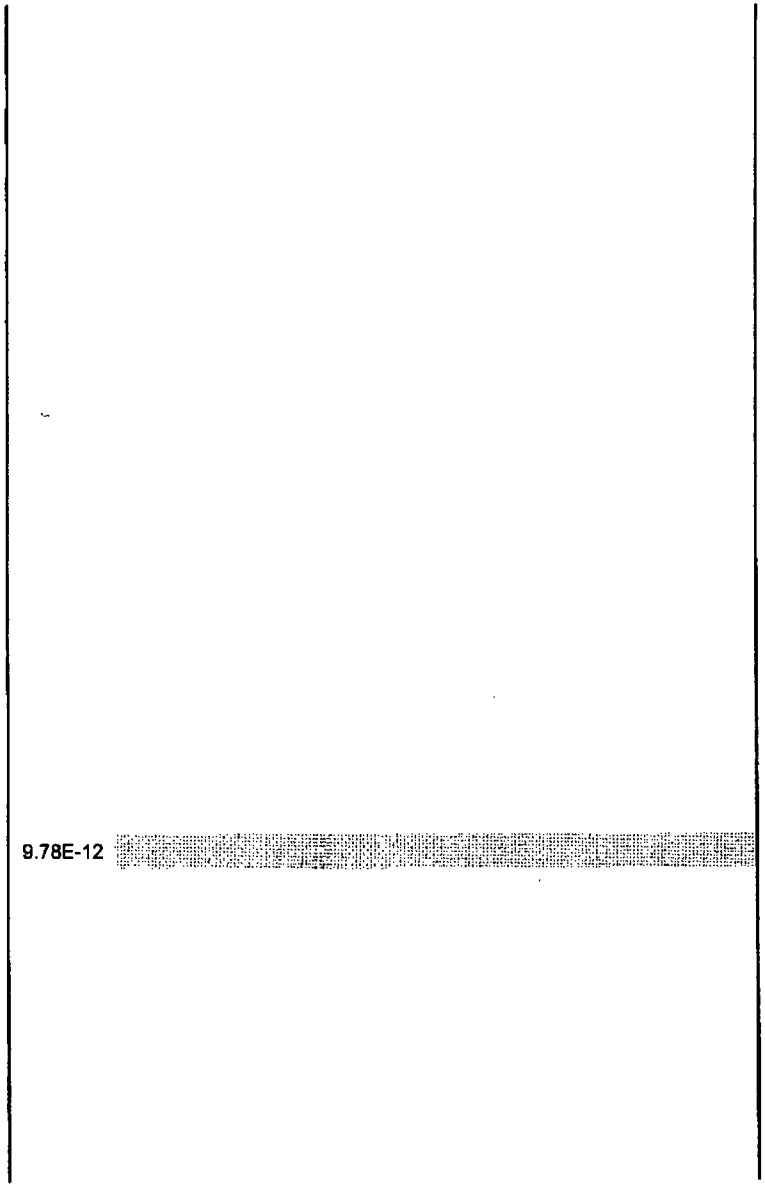
3/21/11 0145	3/21/11 1445	0.02	4,050	1.0E-09								
3/21/11 0200	3/21/11 1500	0.02	4,500	1.0E-09								
3/21/11 0215	3/21/11 1515	0.02	4,050	7.5E-10								
3/21/11 0230	3/21/11 1530	0.02	4,050	7.5E-10								
3/21/11 0245	3/21/11 1545	0.02	4,500	7.5E-10								
3/21/11 0300	3/21/11 1600	0.02	4,500	1.3E-09								
3/21/11 0315	3/21/11 1615	0.02	4,050	5.0E-10								
3/21/11 0330	3/21/11 1630	0.01	4,050	1.0E-09								
3/21/11 0345	3/21/11 1645	0.01	4,950	1.0E-09								
3/21/11 0400	3/21/11 1700	0.01	4,950	7.5E-10								
3/21/11 0415	3/21/11 1715	0.01	36,000	1.0E-09								
3/21/11 0430	3/21/11 1730	0.01	32,000	5.0E-10								
3/21/11 0445	3/21/11 1745	0.01	32,000	7.5E-10								
3/21/11 0500	3/21/11 1800	0.01	36,000	7.5E-10								
3/21/11 0515	3/21/11 1815	0.01	36,000	1.0E-09								
3/21/11 0530	3/21/11 1830	0.01	36,000	1.0E-09								
3/21/11 0545	3/21/11 1845	0.01	36,000	5.0E-10								
3/21/11 0600	3/21/11 1900	0.01	36,000	7.5E-10								
3/21/11 0630	3/21/11 1930	0.01	36,000	5.0E-10								
3/21/11 0700	3/21/11 2000	0.01	36,000	5.0E-10								
3/21/11 0730	3/21/11 2030	0.01	36,000	5.0E-10								
3/21/11 0800	3/21/11 2100	0.01	36,000	5.5E-10								
3/21/11 0830	3/21/11 2130	0.03	36,000	1.2E-09								
3/21/11 0845	3/21/11 2145			8.2E-10	1.51E-10	3.16E-10	8.63E-11	1.22E-10	1.90E-11	1.26E-10		
3/21/11 0900	3/21/11 2200			2.4E-09	1.72E-09	1.43E-10	1.16E-10	1.38E-11	1.46E-10	2.07E-10		
3/21/11 0900	3/21/11 2200	0.02	36,000	7.5E-10								
3/21/11 0930	3/21/11 2230	0.01	36,000	5.0E-10								
3/21/11 1000	3/21/11 2300	0.01	36,000	<5.0E-10								
3/21/11 1100	3/22/11 0000	0.01	36,000	<5.0E-10								
3/21/11 1300	3/22/11 0200	0.01	36,000	<5.0E-10								
3/21/11 1400	3/22/11 0300	0.01	36,000	<5.0E-10								
3/21/11 1600	3/22/11 0500	0.01	36,000	<5.0E-10								
3/21/11 1700	3/22/11 0600	0.01	36,000	<5.0E-10								
3/21/11 1800	3/22/11 0700	0.01	36,000	<5.0E-10								

3/21/11 1900	3/22/11 0800	0.01	36,000	7.5E-10
3/21/11 2000	3/22/11 0900	0.01	36,000	6.5E-09
3/21/11 2100	3/22/11 1000	0.02	37,000	6.0E-09
3/21/11 2200	3/22/11 1100	0.01	36,000	2.0E-09
3/21/11 2300	3/22/11 1200	0.01	36,000	1.4E-09
3/21/11 2330	3/22/11 1230	0.01	45,000	1.8E-09
3/22/11 0000	3/22/11 1300	0.01	47,000	2.5E-09
3/22/11 0030	3/22/11 1330	0.01	48,000	2.0E-09
3/22/11 0100	3/22/11 1400	0.01	36,000	2.8E-09
3/22/11 0130	3/22/11 1430	0.02	36,000	2.5E-09
3/22/11 0200	3/22/11 1500	0.01	36,000	2.3E-09
3/22/11 0230	3/22/11 1530	0.01	38,000	2.0E-09
3/22/11 0300	3/22/11 1600	0.01	42,000	2.0E-09
3/22/11 0330	3/22/11 1630	0.01	44,000	3.5E-09
3/22/11 0400	3/22/11 1700	0.01	48,000	4.5E-09
3/22/11 0430	3/22/11 1730	0.01	52,000	8.5E-09
3/22/11 0445	3/22/11 1745	0.02	52,000	1.1E-08
3/22/11 0500	3/22/11 1800	0.02	52,000	1.0E-08
3/22/11 0515	3/22/11 1815	0.02	52,000	4.5E-09
3/22/11 0530	3/22/11 1830	0.01	48,000	5.0E-09
3/22/11 0545	3/22/11 1845	0.02	50,000	2.0E-09
3/22/11 0600	3/22/11 1900	0.01	50,000	1.5E-09
3/22/11 0615	3/22/11 1915	0.02	45,000	1.0E-09
3/22/11 0630	3/22/11 1930	0.02	45,000	1.5E-09
3/22/11 0645	3/22/11 1945	0.02	45,000	1.3E-09
3/22/11 0700	3/22/11 2000	0.02	45,000	1.8E-09
3/22/11 0715	3/22/11 2015	0.02	45,000	4.3E-09
3/22/11 0730	3/22/11 2030	0.04	43,000	5.0E-09
3/22/11 0745	3/22/11 2045	0.04	32,000	2.0E-09
3/22/11 0800	3/22/11 2100	0.04	32,000	2.3E-09
3/22/11 0815	3/22/11 2115	0.03	32,000	1.8E-09
3/22/11 0830	3/22/11 2130	0.01	36,000	1.5E-09
3/22/11 0845	3/22/11 2145	0.03	32,000	1.0E-09
3/22/11 0900	3/22/11 2200	0.03	32,000	7.5E-10

3/22/11 0915	3/22/11 2215	0.03	32,000	7.5E-10
3/22/11 1100	3/23/11 0000	0.03	36,000	<5.0E-10
3/22/11 1130	3/23/11 0030	0.02	36,000	<5.0E-10
3/22/11 1200	3/23/11 0100	0.02	36,000	<5.0E-10
3/22/11 1300	3/23/11 0200	0.02	36,000	<5.0E-10
3/22/11 1400	3/23/11 0300	0.02	36,000	<5.0E-10
3/22/11 1500	3/23/11 0400	0.01	36,000	<5.0E-10
3/22/11 1600	3/23/11 0500	0.02	36,000	<5.0E-10
3/22/11 1700	3/23/11 0600	0.01	41,000	<5.0E-10
3/22/11 1800	3/23/11 0700	0.03	41,000	<5.0E-10
3/22/11 1900	3/23/11 0800	0.03	41,000	5.0E-10
3/22/11 2000	3/23/11 0900	0.03	45,000	5.0E-10
3/22/11 2100	3/23/11 1000	0.03	45,000	5.0E-10
3/22/11 2200	3/23/11 1100	0.03	45,000	5.0E-10
3/22/11 2300	3/23/11 1200	0.03	49,000	5.0E-10
3/23/11 0000	3/23/11 1300	0.03	55,000	5.0E-10
3/23/11 0030	3/23/11 1330	0.03	53,000	2.5E-09
3/23/11 0100	3/23/11 1400	0.03	53,000	2.5E-09
3/23/11 0130	3/23/11 1430	0.03	55,000	1.3E-09
3/23/11 0200	3/23/11 1500	0.03	53,000	1.3E-09
3/23/11 0230	3/23/11 1530	0.03	55,000	1.3E-09
3/23/11 0300	3/23/11 1600	0.03	56,000	1.0E-09
3/23/11 0330	3/23/11 1630	0.03	54,000	1.5E-09
3/23/11 0400	3/23/11 1700	0.04	53,000	1.5E-09
3/23/11 0430	3/23/11 1730	0.03	52,000	1.3E-09
3/23/11 0500	3/23/11 1800	0.03	52,000	1.4E-09
3/23/11 0530	3/23/11 1830	0.03	50,000	7.0E-10
3/23/11 0530	3/23/11 1830			1.75E-10 2.19E-12 4.13E-12
3/23/11 0600	3/23/11 1900	0.03	50,000	8.0E-10
3/23/11 0700	3/23/11 2000	0.03	50,000	7.5E-10
3/23/11 0800	3/23/11 2100	0.03	50,000	7.5E-10
3/23/11 0900	3/23/11 2200	0.02	50,000	<5.0E-10
3/23/11 1000	3/23/11 2300	0.02	50,000	<5.0E-10
3/23/11 1100	3/24/11 0000	0.02	50,000	<5.0E-10

3/23/11 1200	3/24/11 0100	0.02	50,000	5.0E-10		
3/23/11 1300	3/24/11 0200	0.02	50,000	<5.0E-10		
3/23/11 1500	3/24/11 0400	0.02	50,000	<5.0E-10		
3/23/11 1600	3/24/11 0500	0.02	50,000	6.0E-10		
3/23/11 1700	3/24/11 0600	0.01	45,000	1.3E-09		
3/23/11 1730	3/24/11 0630	0.02	46,000	9.0E-10		
3/23/11 1800	3/24/11 0700	0.02	47,000	9.0E-10		
3/23/11 1830	3/24/11 0730	0.02	47,000	7.5E-10		
3/23/11 1900	3/24/11 0800	0.02	47,000	5.0E-10		
3/23/11 2000	3/24/11 0900	0.02	50,000	5.0E-10		
3/23/11 2100	3/24/11 1000	0.02	49,000	5.0E-10		
3/23/11 2100	3/24/11 1000	[redacted]			1.1E-11	[redacted]
3/23/11 2200	3/24/11 1100	0.03	50,000	5.0E-10		
3/23/11 2300	3/24/11 1200	0.03	49,000	5.0E-10		
3/24/11 0000	3/24/11 1300	0.03	49,000	5.0E-10		
3/24/11 0100	3/24/11 1400	0.01	49,000	5.0E-10		
3/24/11 0200	3/24/11 1500	0.03	52,000	5.0E-10		
3/24/11 0300	3/24/11 1600	0.03	50,000	5.0E-10		
3/24/11 0400	3/24/11 1700	0.03	47,000	5.0E-10		
3/24/11 0500	3/24/11 1800	0.03	50,000	5.0E-10		
3/24/11 0600	3/24/11 1900	0.03	47,000	5.0E-10		
3/24/11 0700	3/24/11 2000	0.03	50,000	5.0E-10		
3/24/11 0800	3/24/11 2100	0.03	49,000	5.0E-10	(I-2)	
3/24/11 0913	3/24/11 2213	0.03	50,000	5.0E-10	(I-2)	
3/24/11 1100	3/25/11 0000	0.03	49,000	5.0E-10	(I-2)	
3/24/11 1200	3/25/11 0100	0.03	50,000	5.0E-10	(I-2)	
3/24/11 1400	3/25/11 0300	0.03	49,000	5.0E-10	(I-2)	
3/24/11 1500	3/25/11 0400	0.03	48,000	5.0E-10	(I-2)	
3/24/11 1600	3/25/11 0500	0.03	49,000	5.0E-10	(I-2)	
3/24/11 1700	3/25/11 0600	0.03	46,000	5.0E-10	(I-2)	
3/24/11 1800	3/25/11 0700	0.03	46,000	5.0E-10	(I-2)	
3/24/11 1800	3/25/11 0700	[redacted]			1.1E-11	[redacted]
3/24/11 1900	3/25/11 0800	0.03	45,000	<5.0E-10	(I-2)	
3/24/11 2000	3/25/11 0900	0.03	45,000	<5.0E-10		

3/24/11 2100	3/25/11 1000	0.03	45,000	5.0E-10
3/24/11 2200	3/25/11 1100	0.03	45,000	5.0E-10
3/24/11 2300	3/25/11 1200	0.03	45,000	5.0E-10
3/25/11 0000	3/25/11 1300	0.03	45,000	5.0E-10
3/25/11 0100	3/25/11 1400	0.03	45,000	<5.0E-10
3/25/11 0200	3/25/11 1500	0.03	45,000	<5.0E-10
3/25/11 0300	3/25/11 1600	0.03	45,000	<5.0E-10
3/25/11 0400	3/25/11 1700	0.03	45,000	<5.0E-10
3/25/11 0500	3/25/11 1800	0.03	45,000	<5.0E-10
3/25/11 0600	3/25/11 1900	0.03	45,000	<5.0E-10
3/25/11 0700	3/25/11 2000	0.03	46,000	<5.0E-10
3/25/11 0800	3/25/11 2100	0.03	45,000	<5.0E-10
3/25/11 0900	3/25/11 2200	0.03	45,000	<5.0E-10
3/25/11 1000	3/25/11 2300	0.03	44,000	<5.0E-10
3/25/11 1100	3/26/11 0000	0.03	44,000	<5.0E-10
3/25/11 1200	3/26/11 0100	0.03	44,000	<5.0E-10
3/25/11 1300	3/26/11 0200	0.03	43,000	<5.0E-10
3/25/11 1400	3/26/11 0300	0.03	43,000	<5.0E-10
3/25/11 1500	3/26/11 0400	0.03	43,000	<5.0E-10
3/25/11 1600	3/26/11 0500	0.03	44,000	<5.0E-10
3/25/11 1700	3/26/11 0600	0.03	43,000	<5.0E-10
3/25/11 1800	3/26/11 0700	0.01	43,000	<5.0E-10
3/25/11 1900	3/26/11 0800	0.03	41,000	8.0E-10
3/25/11 2000	3/26/11 0900	0.03	41,000	<5.0E-10
3/25/11 2100	3/26/11 1000	0.03	41,000	5.0E-10
3/25/11 2200	3/26/11 1100	0.03	41,000	<5.0E-10
3/25/11 2300	3/26/11 1200	0.03	41,000	<5.0E-10
3/26/11 0000	3/26/11 1300	0.03	41,000	<5.0E-10
3/26/11 0100	3/26/11 1400	0.03	41,000	<5.0E-10
3/26/11 0200	3/26/11 1500	0.03	41,000	<5.0E-10
3/26/11 0300	3/26/11 1600	0.03	40,000	<5.0E-10
3/26/11 0400	3/26/11 1700	0.03	40,000	<5.0E-10
3/26/11 0500	3/26/11 1800	0.03	41,000	<5.0E-10
3/26/11 0600	3/26/11 1900	0.03	41,000	<5.0E-10



3/26/11 0700	3/26/11 2000	0.03	40,000	<5.0E-10		
3/26/11 0800	3/26/11 2100	0.03	40,000	<5.0E-10		
3/26/11 0900	3/26/11 2200	0.03	41,000	<5.0E-10		
3/26/11 1000	3/26/11 2300	0.03	40,000	<5.0E-10		
3/26/11 1100	3/27/11 0000	0.03	40,000	<5.0E-10		
3/26/11 1200	3/27/11 0100	0.03	40,000	<5.0E-10		
3/26/11 1300	3/27/11 0200	0.03	39,000	<5.0E-10		
3/26/11 1400	3/27/11 0300	0.03	39,000	<5.0E-10		
3/26/11 1500	3/27/11 0400	0.03	38,000	<5.0E-10		
3/26/11 1600	3/27/11 0500	0.03	40,000	<5.0E-10		
3/26/11 1700	3/27/11 0600	0.03	38,000	5.0E-10		
3/26/11 1800	3/27/11 0700	0.03	37,000	5.0E-10	(I-3)	

Notes

(I-1) 3/21/11 0945 (JST): RI results considered to be in error due to sample/analysis error. Subsequent RI samples at 2245 and 0030 on 3/21/11 were negative. Recount of the 2045 RI

(I-2) 3/25/11 0545 (JST): NACCC reports possible temperature inversion for air samples over past 6 to 8 hours. NACCC update pending.

(I-3) 3/27/11 0800 (JST): Final sample; team re-deployed to Mito.

Yokota

Date & Time	Location	Radiation	Frisker Reading at 1m	Direct frisk of normal walking surface [DT-304]	Normal Walking Surface	Direct frisk of non-normal walking surface [DT-304]	Non-Normal Walking Surface	Direct frisk of normal walking surface [DT-681]	Direct frisk of non-normal walking surface [DT-681]	Soil Sample
(JST)		(mr/hr)	(ccpm)	(ccpm)	Type of Surface	(ccpm)	Type of Surface	(ccpm)	(ccpm)	(ccpm)
3/31/11 1557	Exchange	0.01	50	500	Concrete	500	Grass	0	0	500
3/31/11 1655	Middle School	0.01	30	500	Concrete	120	Dirt	1	0	120
3/31/11 1655	Middle School					200	Grass			
3/31/11 1739	Elementary School	0.01	60	550	Concrete	350	Grass	4	0	300
3/31/11 1805	Rec Center	0.01	100	600	Concrete	400	Grass	1	0	250
3/31/11 1805	Rec Center		50				Grass			

From: McIntyre, David
To: Harrington, Holly
Subject: SNF Talking Points and Qs.docx
Date: Tuesday, April 12, 2011 10:27:00 AM
Attachments: SNF Talking Points and Qs.docx

These have been vetted by NRR and NMSS. There is generic language regarding security post-9/11 – do you think we need to run it by NSIR?

BC/213

OPA Talking Points and Qs&As

Spent Fuel Pools and Storage

[Revision 2, April 12, 2011]

Talking Points:

1. All U.S. nuclear power plants store spent nuclear fuel in "spent fuel pools." These pools are robust constructions made of reinforced concrete several feet thick, with steel liners. The water is typically about 40 feet deep, and serves both to shield the radiation and cool the rods.

2. As the pools near capacity, utilities move some of the older spent fuel into "dry cask" storage. Fuel is typically cooled at least 5 years in the pool before transfer to cask. NRC has authorized transfer as early as 3 years; the industry norm is about 10 years.

3. The NRC believes spent fuel pools and dry casks both provide adequate protection of the public health and safety and the environment. Therefore there is no pressing safety or security reason to mandate earlier transfer of fuel from pool to cask. (b)(5)
(b)(5)

4. After the September 11, 2001, terrorist attacks, the NRC issued orders to plant operators requiring several measures aimed at mitigating the effects of a large fire, explosion, or accident that damages a spent fuel pool. These were meant to deal with the aftermath of a terrorist attack or plane crash; however, they would also be effective in responding to natural phenomena such as tornadoes, earthquakes or tsunami. These mitigating measures include:

    a. Controlling the configuration of fuel assemblies in the pool to enhance the ability to keep the fuel cool and recover from damage to the pool.
    b. Establishing emergency spent fuel cooling capability.
    c. Staging emergency response equipment nearby so it can be deployed quickly

5. According to the Congressional Research Service (using NEI data), there were 62,683 metric tons of commercial spent fuel accumulated in the United States as of the end of 2009.
    a. Of that total, 48,818 metric tons – or about 78 percent – were in pools.
    b. 13,856 metric tons – or about 22 percent – were stored in dry casks.

c. The total increases by 2,000 to 2,400 tons annually.

Questions and Answers - General

Q1: What is spent nuclear fuel?
A1: "Spent nuclear fuel" refers to fuel elements that have been used at commercial nuclear reactors, but that are no longer capable of economically sustaining a nuclear reaction. Periodically, about one-third of the nuclear fuel in an operating reactor needs to be unloaded and replaced with fresh fuel.

Q2: Why is spent fuel hot?
A2: Spent fuel generates what is called "residual heat" because of radioactive decay of the elements inside the fuel. After the fission reaction is stopped and the reactor is shut down, the products left over from the fuel's time in the reactor are still radioactive and emit heat as they decay into more stable elements. Although the heat production drops rapidly at first, heat is still generated many years after shutdown. Therefore, the NRC sets requirements on the handling and storage of this fuel to ensure protection of the public and the environment.

Questions and Answers - Spent Fuel Inventories

Q3: Why doesn't the NRC have up-to-date figures on how much spent fuel is stored at U.S. nuclear plants? Doesn't the regulator have a clue about how much of this stuff is out there?
A3: The NRC and Department of Energy (NNSA) operate the Nuclear Material Management and Safeguards System (NMMSS), a database that tracks Special Nuclear Material (enriched uranium and plutonium). This database does not distinguish between fresh and irradiated material, and the information is withheld from the public for security reasons. That's why figures on spent fuel inventory come from the industry.

Q4: How much fuel is currently in dry cask storage?
A4: As of November 2010, there were 63 "independent spent fuel storage installations" (or ISFSIs) licensed to operate at 57 sites in 33 states. These locations are shown on a map on the NRC website at: http://www.nrc.gov/waste/spent-fuel-storage/locations.pdf. Over 1400 casks are stored in these independent facilities.

Q5: How much fuel is stored at decommissioned reactors? Is it in pools or casks?
A5: There are currently 10 decommissioned nuclear power reactors at 9 sites with no other nuclear operations. According to a 2008 Department of Energy report to Congress, approximately 2800 metric tons of spent fuel is stored at these nine sites. As of the writing of

that report, seven of the sites had independent spent fuel storage installations, or ISFSIs. Two additional sites had approximately 1000 metric tons of spent fuel remaining in pool storage.

Questions and Answers - ISFSIs

Q6: What is dry cask storage?
A6: Dry cask storage allows spent fuel that has already been cooled in the spent fuel pool for several years to be surrounded by inert gas inside a container called a cask. The casks are typically steel cylinders that are either welded or bolted closed. The steel cylinder provides containment of the spent fuel. Each cylinder is surrounded by additional steel, concrete, or other material to provide radiation shielding to workers and members of the public.

Q7: What is an "ISFSI"?
A7: An independent spent fuel storage installation, or ISFSI, is a facility that is designed and constructed for the interim storage of spent nuclear fuel. These facilities are licensed separately from a nuclear power plant and are considered independent even though they may be located on the site of another NRC-licensed facility.

Q8: What kind of license is required for an ISFSI?
A8: NRC authorizes storage of spent nuclear fuel at an ISFSI in two ways: site-specific or general license. For site-specific applications, the NRC reviews the safety, environmental, physical security and financial aspects of the licensee and proposed ISFSI and, if we conclude it can operate safely, we issue a license valid. This license contains requirements on topics such as leak testing and monitoring and specifies the quantity and type of material the licensee is authorized to store at the site. A general license authorizes storage of spent fuel in casks previously approved by the NRC at a site already licensed to possess fuel for or operate a nuclear power plant. Licensees must show the NRC that it is safe to store spent fuel in dry casks at their site, including analysis of earthquake intensity and tornado missiles. Licensees also review their programs (such as security or emergency planning) and make any changes needed to incorporate an ISFSI at their site. Of the currently licensed ISFSIs, 48 are operating under general licenses and 15 have specific licenses.

Questions and Answers - Dry Cask Safety

Q9: How do you know the dry casks are safe? Does the NRC inspect these facilities, or just the reactor and spent fuel pool?
A9: The NRC is responsible for inspection of dry cask storage. Before casks are loaded, inspectors with specific knowledge of ISFSI operations assess the adequacy of a "dry run" by the

licensee; they then observe all initial cask loadings. The on-site resident inspectors or region-based inspectors may observe later cask loadings, and the regional offices also perform periodic inspections of routine ISFSI operations.

Q10: What keeps fuel cool in dry casks?
A10: Fuel is often moved to dry cask storage after several years in spent fuel pools, so the residual heat given off by the fuel has significantly decreased. These casks are typically thick, leak-tight steel containers inside a robust steel or concrete overpack. The fuel is cooled by natural airflow around the cask.

Questions and Answers – Spent Fuel Pool Safety

Q11: What do you look at when you license a fuel storage facility? How do I know it can withstand a natural disaster?
A11: The NRC's requirements for both wet and dry storage can be found in Title 10 of the Code of Federal Regulations (10 CFR), including the general design criteria in Appendix A to Part 50 and the spent-fuel storage requirements in Part 72. The staff uses these rules to determine that the fuel will remain safe under anticipated operating and accident conditions. There are requirements on topics such as radiation shielding, heat removal, and criticality. In addition, the staff reviews fuel storage designs for protection against:

- natural phenomena, such as seismic events, tornados, and flooding
- dynamic effects, such as flying debris or drops from fuel handling equipment and drops of fuel storage and handling equipment
- hazards to the storage site from nearby activities

Q12: How do you know the fuel pools are safe? Does the NRC inspect these facilities, or just the reactor itself?
A12: NRC inspectors are responsible for verifying that spent fuel pools and related operations are consistent with a plant's license. For example, our staff inspects spent fuel pool operations during each refueling outage. We also performed specialized inspections to verify that new spent fuel cooling capabilities and operating practices were being implemented properly.

Q13: What would happen to a spent fuel pool during an earthquake? How can I be sure the pool wouldn't be damaged?
A13: All spent fuel pools are designed to seismic standards consistent with other important safety-related structures on the site. The pool and its supporting systems are located within structures that protect against natural phenomena and flying debris. The pools' thick walls and floors provide structural integrity and further protection of the fuel from natural phenomena and debris. In addition, the deep water above the stored fuel (typically more than 20 feet above the top of the spent fuel rods) would absorb the energy of debris that could fall into the pool. Finally,

the racks that support the fuel are designed to keep the fuel in its designed configuration after a seismic event.

Q14: Can spent fuel pools leak?
A14: Spent fuel pools lined with stainless steel are designed to protect against a substantial loss of the water that cools the fuel. Pipes typically enter the pool above the level of the stored fuel, so that the fuel would stay covered even if there were a problem with one of the pipes. The only exceptions are small leakage-detection lines and, at two pressurized water reactor (PWR) sites, robust fuel transfer tubes that enter the spent fuel pool directly. The liner normally prevents water from being lost through the leak detection lines, and isolation valves or plugs are available if the liner experiences a large leak or tear.

Q15: How would you know about a leak in such a large pool of water?
A15: The spent fuel pools associated with all but one operating reactor have liner leakage collection to allow detection of very small leaks. In addition, the spent fuel pool and fuel storage area have diverse instruments to alert operators to possible large losses of water, which could be indicated by low water level, high water temperature, or high radiation levels.

Q16: How can operators get water back in the pool if there is a leak or a failure?
A16: All plants have systems available to replace water that could evaporate or leak from a spent fuel pool. Most plants have at least one system designed to be available following a design basis earthquake. In addition, the industry's experience indicates that systems not specifically designed to meet seismic criteria are likely to survive a design basis earthquake and be available to replenish water to the spent fuel pools. Furthermore, plant operators can use emergency and accident procedures that identify temporary systems to provide water to the spent fuel pool if normal systems are unavailable. In some cases, operators would need to connect hoses or install short pipes between systems. The fuel is unlikely to become uncovered rapidly because of the large water volume in the pool, the robust design of the pool structure, and the limited paths for loss of water from the pool.

Q17: Do U.S. nuclear power plants store their fuel above grade? Why is this considered safe?
A17: For boiling water reactor (BWR) Mark I and II designs, the spent fuel pool structures are located in the reactor building at an elevation several stories above the ground (about 50 to 60 feet above ground for the Mark I reactors). The spent fuel pools at other operating reactors in the U.S. are typically located with the bottom of the pool at or below plant grade level. Regardless of the location of the pool, its robust construction provides the potential for the structure to withstand events well beyond those considered in the original design. In addition, there are multiple means of restoring water to the spent fuel pools in the unlikely event that any is lost.

Q18: How are spent fuel pools kept cool? What happens if the cooling system fails?

A18: The spent fuel pool is cooled by an attached cooling system. The system keeps fuel temperatures low enough that, even if cooling were lost, operators would have substantial time to recover cooling before boiling could occur in the spent fuel pool. Licensees also have backup ways to cool the spent fuel pool, using temporary equipment that would be available even after fires, explosions, or other unlikely events that could damage large portions of the facility and prevent operation of normal cooling systems. Operators have been trained to use this backup equipment, and it has been evaluated to provide adequate cooling even if the pool structure loses its water-tight integrity.

Q19: What keeps spent fuel from re-starting a nuclear chain reaction in the pool?
A19: Spent fuel pools are designed with appropriate space between fuel assemblies and neutron-absorbing plates attached to the storage rack between each fuel assembly. Under normal conditions, these design features mean that there is substantial margin to prevent criticality (i.e., a condition where nuclear fission would become self-sustaining). Calculations demonstrate that some margin to criticality is maintained for a variety of abnormal conditions, including fuel handling accidents involving a dropped fuel assembly.

Questions and Answers – Waste Confidence & Future Plans

Q20: How long is spent fuel allowed to be stored in a pool or cask?
A20: NRC regulations do not specify a maximum time for storing spent fuel in pool or cask. The agency's "waste confidence decision" expresses the Commission's confidence that the fuel can be stored safely in either pool or cask for at least 60 years beyond the licensed life of any reactor without significant environmental effects. At current licensing terms (40 years of initial reactor operation plus 20 of extended operation), that would amount to at least 120 years of safe storage.

However, it is important to note that this does not mean NRC "allows" or "permits" storage for that period. Dry casks are licensed or certified for 20 years, with possible renewals of up to 40 years. This shorter licensing term means the casks are reviewed and inspected, and the NRC ensures the licensee has an adequate aging management program to maintain the facility.

Q21: The most recent waste confidence findings say that fuel can be stored safely for 60 years beyond the reactor's licensed life. Does this mean fuel will be unsafe starting in 2059 [60 years after Dresden 1's original license ended]? What if the spent fuel pool runs out of room even before the end of a reactor license? What is the NRC going to do about this?
A21: The NRC staff is currently developing an extended storage and transportation (EST) regulatory program. One aspect of this program is a safety and environmental analysis to support long-term (up to 300 years) storage and handling of spent fuel, as well as associated updates to the "waste confidence" rulemaking. This analysis will include an Environmental Impact Statement (EIS) on the environmental impacts of extended storage of fuel. The 300-year

timeframe is appropriate for characterizing and predicting aging effects and aging management issues for EST. The staff plans to consider a variety of cask technologies, storage scenarios, handling activities, site characteristics, and aging phenomena—a complex assessment that relies on multiple supporting technical analyses. Any revisions to the waste confidence rulemaking, however, would not be an "approval" for waste to be stored longer than before—we do that through the licensing and certification of ISFSIs and casks. More information on the staff's plan can be found in SECY-11-0029.

Q22: Does the waste confidence decision mean that a particular cask is safe?
A22: Not specifically. When the NRC issues of certificates and licenses for specific dry cask storage systems, the staff makes a determination that the designs provide reasonable assurance that the waste will be stored safely for the term of the license or certificate. The Commission's Waste Confidence Decision is a generic action where the Commission found reasonable assurance that the waste from the nation's nuclear facilities can be stored safely and with minimal environmental impacts until a repository becomes available.

Q23: The waste-confidence revision seems like a long-term effort. What is the NRC doing to improve safety of spent fuel storage now?
A23: The NRC staff is currently reviewing its processes to identify near-term ways to improve efficiency and effectiveness in licensing, inspection, and enforcement. We expect to identify enhancements to the certification and licensing of storage casks, to the integration of inspection and licensing, and to our internal procedures and guidance. More information on the staff's plans can be found in COMSECY-10-0007.

Q24: The NRC is reviewing applications for new nuclear power plants. What is the environmental impact of all that extra fuel?
A24: Continued use and potential growth of nuclear power is expected to increase the amount of waste in storage. This increased amount of spent fuel affects the environmental impacts to be assessed by the NRC staff, such as the need for larger storage capacities. In the staff's plan to develop an environmental impact statement for longer-term spent fuel storage, a preliminary scoping assumption is that nuclear power grows at a "medium" rate (as defined by the Department of Energy), in which nuclear power continues to supply about 20 percent of U.S. electricity production.

Questions and Answers - Security

Q25: What about security? How do you know terrorists won't use all of this waste against us?
A25: For spent fuel, as with reactors, the NRC sets security requirements and licensees are responsible for providing the protection. We constantly remain aware of the capabilities of potential adversaries and threats to facilities, material, and activities, and we focus on physically protecting and controlling spent fuel to prevent sabotage, theft, and diversion. Some key features

of these protection programs include intrusion detection, assessment of alarms, response to intrusions, and offsite assistance when necessary. Over the last 20 years, there have been no radiation releases that have affected the public. There have also been no known or suspected attempts to sabotage spent fuel casks or storage facilities. The NRC responded to the terrorist attacks on September 11, 2001, by promptly requiring security enhancements for spent fuel storage, both in spent fuel pools and dry casks.

From: NITOPS <NITOPS@nnsa.doe.gov>
Sent: Saturday, March 26, 2011 2:24 PM
To: DL-Policy Working Group; CMHT; HOO Hoc; NARAC; PMT01 Hoc; PMT02 Hoc; Hoc, PMT12
Cc: NITOPS
Subject: FW: IAEA distributed documents
Attachments: On_site_radiation_Monitoring_Data.pdf; Radionuclide_analysis_results_in_seawater.pdf; Plant_Data_by_Unit_March26_0600.pdf; On-site_Monitoring_data_March26_0621(JP).pdf

Nuclear Incident Team (NIT)
Office of Emergency Response (NA-42)
National Nuclear Security Administration
U.S. Department of Energy
nitops@nnsa.doe.gov
nit@doe.sgov.gov
202-586-8100

From: Kenagy, W David [mailto:KenagyWD@state.gov]
Sent: Saturday, March 26, 2011 2:07 PM
To: Kenagy, W David; McClelland, Vince; veronica.rodriguez@nrc.gov; Heinrich, Ann; hoo1@nrc.gov; hoo2@nrc.gov; wch@nrc.gov; decair.sara@epamail.epa.gov; timothy.greten@dhs.gov; maria.marinissen@hhs.gov; (b)(6) DOE HQ EOC; hhs.soc@hhs.gov; james.kish@dhs.gov; hoo.hoc@nrc.gov; brooke.smith@nrc.gov; Zubarev, Jill; Shaffer, Mark R; NITOPS; Skypek, Thomas M; (b)(6) (b)(6) Stern, Warren
Subject: RE: IAEA distributed documents

BC | 214

海水核種分析結果

確定版

試料採取日時刻	平成23年3月25日　8時30分			
採取場所	1F 南放水口付近（1～4u放水口から南側に約330m地点）			
測定方法	試料500mlを福島第二へ運搬し，Ge半導体検出器で測定			
測定時間	1,000秒			
検出核種 (半減期)	①試料濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	③炉規則告示濃度限度 Bq/cm^3 (別表第2第六欄周辺監視区域外の水中の濃度限度)	倍率 (①/③)
Co-60 (約5年)	5.9E-02	2.0E-02	2E-01	0.3
Mo-99 (約66時間)	2.1E-01	1.7E-01	1E+00	0.2
I-131 (約8日)	5.0E+01	6.2E-02	4E-02	1250.0
I-132 (約2時間)	3.3E+00	7.7E-02	3E+00	1.1
Te-132 (約3日)	2.2E-01	4.0E-02	2E-01	1.1
Cs-134 (約2年)	7.0E+00	3.9E-02	6E-02	117.3
Cs-136 (約13日)	8.0E-01	3.9E-02	3E-01	2.7
Cs-137 (約30年)	7.2E+00	3.5E-02	9E-02	79.6
Ba-140 (約13日)	1.2E+00	1.5E-01	3E-01	3.9
La-140 (約2日)	5.8E-01	1.3E-02	4E-01	1.4

※　O.OE－Oとは、O.O×10－Oと同じ意味である。

3月26日　　福島第一(1F)

測定場所　①事務本館北(2号機より北西約0．5キロ)　②体育館付近(MP－5東側)(2号機より西北西約0．9キロ)
③西門付近（MP-5付近)(2号機より西約1．1キロ)　④正門付近前(MP-6付近)(2号機より西南西約1．0キロ)
⑤免震棟前(2号機より北西約0．5キロ)　⑥事務本館南側　⑦正門
MC:モニタリングカー　可搬:可搬型MP

測定場所		④																							
時間		0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50
MC	測定値(μSv/h)	184.4	184.0	183.8	183.2	182.8	182.7	182.5	182.4	182.3	182.1	181.8	180.8	179.9	178.1	176.6	175.5	174.4	173.0	172.4	171.0	170.7	169.8	169.2	169.5
	中性子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
可搬	⑥本館南(μSv/h)	1,460	—	—	1,460	—	—	1,450	—	—	1,440	—	—	1,440	—	—	1,420	—	—	1,390	—	—	1,370	—	—
	⑦正門(μSv/h)	241	—	—	238	—	—	235	—	—	235	—	—	233	—	—	230	—	—	224	—	—	221	—	—
	③西門(μSv/h)	117	—	—	117	—	—	114	—	—	115	—	—	114	—	—	110	—	—	109	—	—	108	—	—
風向		北西	北西	西	北西	北北西	北北西	北西	北西	西	北西	北西	北西	北	北北西	北北西	北	北北西	北	北	北北西	北北西	北西	北西	北西
風速(m/s)		2.3	1.8	2.5	2.2	2.6	3.2	3.2	2.7	2.4	2.7	1.9	3.0	5.3	4.0	2.9	3.5	3.2	5.0	5.9	3.7	3.0	3.0	2.7	2.9

測定場所		④																							
時間		4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:50
MC	測定値(μSv/h)	169.2	169.1	168.1	167.8	167.1	167.1	166.9	167.1	167.4	167.6														
	中性子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D														
可搬	⑥本館南(μSv/h)	1,370	—	—	1,360	—	—	1,360	—	—	1,370														
	⑦正門(μSv/h)	219	—	—	217	—	—	218	—	—	217														
	③西門(μSv/h)	107	—	—	105	—	—	106	—	—	105														
風向		北西	北西	北西	北西	北西	北	北西	北	北北西	北西														
風速(m/s)		2.6	2.8	2.6	2.3	2.7	3.2	6.1	3.4	3.0	2.7														

測定場所		④																							
時間		8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50
MC	測定値(μSv/h)																								
	中性子																								
可搬	⑥本館南(μSv/h)																								
	⑦正門(μSv/h)																								
	③西門(μSv/h)																								
風向																									
風速(m/s)																									

3月25日　　福島第一(1F)

測定場所　①事務本館北(2号機より北西約0．5キロ)　②体育館付近(MP－5東側)(2号機より西北西約0．9キロ)
③西門付近（MP-5付近)(2号機より西約1．1キロ)　④正門付近前(MP-6付近)(2号機より西南西約1．0キロ)
⑤免震棟前(2号機より北西約0．5キロ)　⑥事務本館南側　⑦正門
MC:モニタリングカー　可搬:可搬型MP

測定場所	④																							
時間	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15:50
測定値(μSv/h)	235.8	232.8	231.6	229.5	226.7	224.5	222.3	221.2	218.8	216.4	216.2	213.7	212.6	210.8	209.0	208.0	207.2	206.6	205.8	204.8	203.6	202.5	201.7	199.5
中性子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
⑥本館南(μSv/h)	1,730	—	—	1,720	—	—	1,920	—	—	2,460	—	—	2,060	—	—	1,950	—	—	1,920	—	—	1,820	—	—
⑦正門(μSv/h)	310	—	—	298	—	—	289	—	—	280	—	—	273	—	—	267	—	—	266	—	—	261	—	—
⑧西門(μSv/h)	202	—	—	191	—	—	173	—	—	162	—	—	158	—	—	149	—	—	145	—	—	142	—	—
風向	南南東	南東	南東	南	東南東	南東	南東	南東	南東	南東	南東	南東	東	南	南南東	南東	東	南東	南東	東	南	南東	南東	南東
風速(m/s)	3.7	3.5	3.3	3.0	2.9	3.3	2.5	2.5	3.0	2.7	2.8	2.7	2.9	2.9	2.7	2.6	2.1	2.5	2.2	2.2	2.2	2.1	2.6	1.8

測定場所	④																							
時間	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10	18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19:50
測定値(μSv/h)	197.4	196.9	197.6	196.1	197.2	196.8	196.0	195.9	194.9	195.4	194.5	195.6	194.7	194.4	193.6	199.5	194.4	193.6	199.5	261.7	221.9	225.0	215.4	243.0
中性子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
⑥本館南(μSv/h)	1,790	—	—	1,810	—	—	1,710	—	—	1,680	—	—	1,660	—	—	1,620	—	—	1,600	—	—	1,590	—	—
⑦正門(μSv/h)	257	—	—	256	—	—	252	—	—	249	—	—	247	—	—	317	—	—	324	—	—	272	—	—
⑧西門(μSv/h)	134	—	—	132	—	—	159	—	—	170	—	—	193	—	—	153	—	—	145	—	—	142	—	—
風向	南	東南東	南東	南東	南東	南	南東	南東	南東	東	東	東	東	東南東	東南東	南東	東南東	東南東	南東	北北東	東	東南東	南東	東
風速(m/s)	2.0	2.1	2.1	1.6	1.5	1.9	2.6	1.8	1.6	1.8	2.0	2.2	1.7	1.6	1.7	1.3	1.5	1.7	1.9	1.1	1.1	1.0	1.1	1.0

測定場所	④																							
時間	20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50
測定値(μSv/h)	213.9	206.3	205.2	228.4	205.9	239.6	204.9	199.5	196.4	194.4	193.0	192.3	191.4	190.4	190.1	189.6	189.2	187.6	187.0	186.4	186.0	185.3	184.8	184.7
中性子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
⑥本館南(μSv/h)	1,570	—	—	1,550	—	—	1,510	—	—	1,500	—	—	1,490	—	—	1,480	—	—	1,480	—	—	1,470	—	—
⑦正門(μSv/h)	309	—	—	289	—	—	282	—	—	254	—	—	249	—	—	244	—	—	243	—	—	238	—	—
⑧西門(μSv/h)	139	—	—	144	—	—	134	—	—	127	—	—	126	—	—	123	—	—	119	—	—	116	—	—
風向	東	南東	東南東	南東	北東	南東	北	北	北	北北東	北	北北西	北北西	北北西	北北西	北北西	北	北北西	北西	北西	北西	西	北西	北西
風速(m/s)	1.5	2.8	2.2	1.6	0.7	0.7	0.9	1.0	1.2	1.9	1.3	1.8	1.6	1.3	1.5	1.5	1.6	2.3	1.9	1.7	1.8	1.6	2.2	2.6

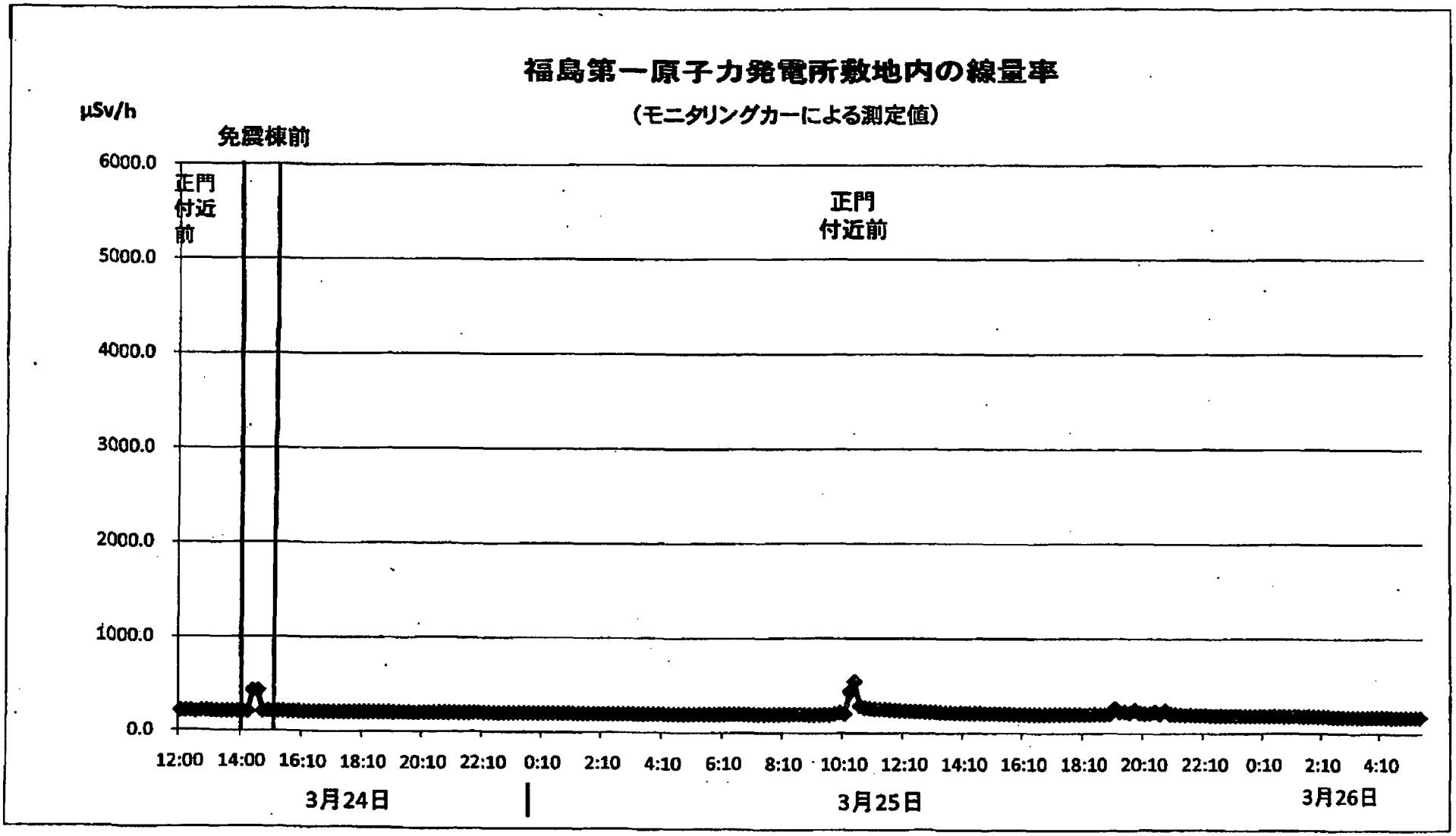
3月25日　　福島第一(1F)

測定場所　①事務本館北(2号機より北西約0．5キロ)　②体育館付近(MP－5東側)(2号機より西北西約0．9キロ)
③西門付近 (MP-5付近)(2号機より西約1．1キロ)　④正門付近前(MP-6付近)(2号機より西南西約1．0キロ)
⑤免震棟前(2号機より北西約0．5キロ)　⑥事務本館南側　⑦正門
MC:モニタリングカー　可搬:可搬型MP

測定場所	④																							
時間	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50
測定値(μSv/h)	199.5	199.3	199.0	199.0	198.9	198.8	198.6	197.7	197.0	196.9	196.5	196.5	196.5	196.4	196.3	196.1	195.9	195.8	195.7	195.7	195.6	195.6	195.5	195.1
中性子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
⑥本館南(μSv/h)	1,720	—	—	1,710	—	—	1,680	—	—	1,670	—	—	1,660	—	—	1,660	—	—	1,640	—	—	1,630	—	—
⑦正門(μSv/h)	252	—	—	253	—	—	252	—	—	252	—	—	252	—	—	252	—	—	250	—	—	251	—	—
⑧西門(μSv/h)	119	—	—	118	—	—	118	—	—	119	—	—	120	—	—	120	—	—	118	—	—	116	—	—
風向	北西	西	西	西	北西	西北西	西	西南西	西	南西	南西	西	南東	南南西	北北西	西	西南西	西	西	西	西	北西	北西	北
風速(m/s)	1.3	0.8	0.8	0.5	0.8	0.7	1.0	0.7	0.5	0.5	0.6	0.6	0.5	0.5	0.7	0.5	0.5	0.7	1.0	1.0	0.8	1.8	1.1	1.0

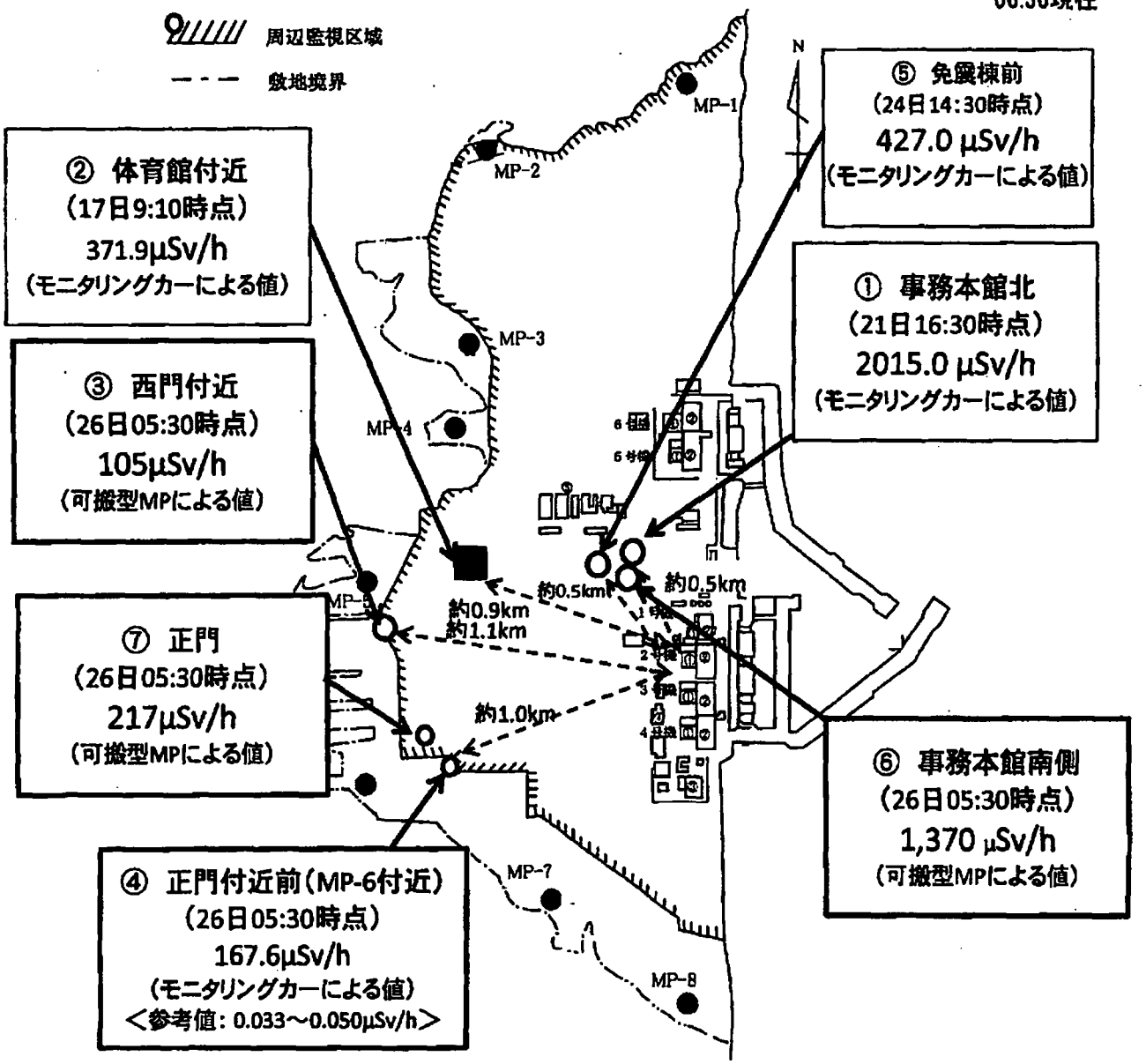
測定場所	④																							
時間	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:50
測定値(μSv/h)	196.1	195.0	195.0	195.0	194.5	194.5	194.4	194.4	194.3	194.2	194.1	193.8	193.8	193.6	193.0	192.9	193.0	192.5	192.6	192.5	192.7	192.3	192.5	193.3
中性子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
⑥本館南(μSv/h)	1,620	—	—	1,610	—	—	1,610	—	—	1,600	—	—	1,600	—	—	1,590	—	—	1,580	—	—	1,580	—	—
⑦正門(μSv/h)	249	—	—	252	—	—	248	—	—	249	—	—	248	—	—	248	—	—	249	—	—	250	—	—
⑧西門(μSv/h)	119	—	—	117	—	—	116	—	—	119	—	—	118	—	—	117	—	—	116	—	—	117	—	—
風向	西	北西	北西	北北西	北	北	西北西	北北西	北西	北西	北西	西北西	西北西	西北西	西北西	西北西	西	北西	西	北北西	北北西	北北西	北北西	北
風速(m/s)	0.8	1.7	1.2	1.1	0.9	0.8	0.9	0.8	0.9	0.9	1.8	1.6	1.5	1.0	1.1	0.9	1.0	1.1	0.9	0.9	0.8	1.1	1.3	1.2

測定場所	④																							
時間	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50
測定値(μSv/h)	193.8	193.9	193.3	196.3	196.3	192.8	192.6	192.3	192.5	193.7	191.7	204.2	216.2	203.2	430.8	540.0	286.5	264.7	259.0	255.2	250.9	248.6	244.3	240.0
中性子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
⑥本館南(μSv/h)	1,570	—	—	1,560	—	—	1,530	—	—	1,520	—	—	1,510	—	—	1,510	—	—	1,590	—	—	1,570	—	—
⑦正門(μSv/h)	249	—	—	250	—	—	251	—	—	247	—	—	267	—	—	528	—	—	334	—	—	320	—	—
⑧西門(μSv/h)	115	—	—	116	—	—	115	—	—	115	—	—	115	—	—	126	—	—	263	—	—	235	—	—
風向	北北西	北	北	北	北東	北北東	北	北	北東	北	東	北東	東	東北東	東	東	東南東	東南東	東南東	南東	南東	東南東	南東	東
風速(m/s)	1.0	1.3	1.6	1.1	1.1	1.4	1.9	3.1	2.3	2.3	2.2	1.6	1.7	1.7	2.0	1.9	2.1	2.4	2.8	2.9	3.4	2.8	3.2	3.0


福島第一原子力発電所敷地内の線量率
（モニタリングカーによる測定値）
μSv/h
免震棟前
正門
付近
前
正門
付近前
6000.0
5000.0
4000.0
3000.0
2000.0
1000.0
0.0
12:00
14:00
16:10
18:10
20:10
22:10
0:10
2:10
4:10
6:10
8:10
10:10
12:10
14:10
16:10
18:10
20:10
22:10
0:10
2:10
4:10
3月24日
3月25日
3月26日

福島第一原子力発電所

2011/3/26
06:30現在



第二(2F)(事業者のモニタリングポスト)

月26日																								
タリングポスト	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:
P1(μSv/h)	12.000	11.997	11.893	11.827	11.803	11.773	11.713	11.747	11.680	11.640	11.613	11.600	11.560	11.477	11.473	11.427	11.417	11.330	11.327	11.270	11.213	11.253	11.150	11.16
P2(μSv/h)	6.910	6.897	6.823	6.780	6.763	6.790	6.757	6.743	6.727	6.693	6.700	6.643	6.617	6.593	6.577	6.517	6.510	6.460	6.447	6.390	6.353	6.347	6.353	6.34
P3(μSv/h)	11.343	11.310	11.237	11.237	11.183	11.143	11.107	11.140	11.077	11.060	11.017	11.020	10.987	10.953	10.893	10.893	10.877	10.807	10.767	10.723	10.700	10.620	10.630	10.57
P4(μSv/h)	8.537	8.567	8.523	8.480	8.477	8.460	8.430	8.413	8.393	8.413	8.393	8.343	8.363	8.320	8.313	8.280	8.230	8.200	8.163	8.150	8.120	8.070	8.113	8.08
P5(μSv/h)	7.947	7.940	7.940	7.893	7.840	7.873	7.847	7.847	7.800	7.833	7.800	7.747	7.747	7.727	7.693	7.700	7.633	7.607	7.547	7.453	7.453	7.453	7.453	7.45
P6(μSv/h)	9.150	9.100	9.090	9.083	9.040	9.033	9.000	8.977	8.983	8.970	8.957	8.937	8.917	8.857	8.870	8.813	8.827	8.737	8.697	8.643	8.610	8.563	8.550	8.54
P7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠
風向	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北	北北西	北北西	北西	北北西	北北西	北西	北北西	北北西	北北西	北北
風速(m/s)	8.2	8.0	8.7	8.1	8.9	7.5	8.3	8.3	8.5	8.3	9.0	9.1	8.8	9.2	8.1	8.1	6.5	9.9	8.6	9.0	9.3	9.9	10.3	10

月26日																								
タリングポスト	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:
P1(μSv/h)	11.170	11.113	11.153	11.127	11.050	11.037	11.043	11.053	11.000	11.003														
P2(μSv/h)	6.330	6.303	6.290	6.283	6.263	6.243	6.277	6.250	6.213	6.263														
P3(μSv/h)	10.613	10.580	10.610	10.530	10.487	10.527	10.493	10.503	10.480	10.473														
P4(μSv/h)	8.060	8.067	8.037	8.037	8.020	8.003	7.983	7.993	8.000	8.000														
P5(μSv/h)	7.347	7.380	7.353	7.353	7.353	7.353	7.347	7.353	7.353	7.353														
P6(μSv/h)	8.547	8.547	8.520	8.497	8.477	8.483	8.447	8.460	8.443	8.453														
P7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測														
風向	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西														
風速(m/s)	10.8	9.7	9.7	10.2	9.5	10.1	9.2	9.1	9.4	8.8														

月26日																								
タリングポスト	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:
P1(μSv/h)																								
P2(μSv/h)																								
P3(μSv/h)																								
P4(μSv/h)																								
P5(μSv/h)																								
P6(μSv/h)																								
P7(μSv/h)																								
風向																								
風速(m/s)																								

第二(2F)(事業者のモニタリングポスト)

月25日																							
タリングポスト	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15:
P1(μSv/h)	13.683	13.563	13.430	13.390	13.297	13.167	13.107	12.997	12.943	12.907	12.777	12.793	12.677	12.590	12.560	12.457	12.483	12.457	12.397	12.360	12.287	12.283	12.260	12.22
P2(μSv/h)	7.600	7.517	7.510	7.437	7.390	7.383	7.357	7.313	7.303	7.267	7.237	7.220	7.193	7.187	7.147	7.133	7.107	7.080	7.057	7.060	7.013	7.020	7.010	6.97
P3(μSv/h)	12.233	12.147	12.103	12.033	11.983	11.967	11.920	11.853	11.827	11.803	11.737	11.737	11.673	11.640	11.627	11.597	11.610	11.540	11.527	11.540	11.497	11.450	11.453	11.41
P4(μSv/h)	9.390	9.310	9.243	9.243	9.223	9.183	9.157	9.117	9.107	9.083	9.040	9.017	9.013	8.973	8.960	8.960	8.930	8.873	8.860	8.847	8.833	8.833	8.820	8.80
P5(μSv/h)	8.820	8.767	8.727	8.673	8.640	8.627	8.627	8.580	8.533	8.527	8.527	8.447	8.427	8.427	8.373	8.387	8.333	8.333	8.280	8.293	8.287	8.233	8.233	8.24
P6(μSv/h)	10.013	9.923	9.910	9.870	9.827	9.783	9.770	9.777	9.723	9.693	9.697	9.677	9.677	9.630	9.593	9.577	9.600	9.543	9.510	9.483	9.483	9.450	9.463	9.41
P7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	5.300	欠測	欠測	欠測	欠測	欠測
風向	東南東	南東	南東	東南東	南東	南東	南南東	南東	東南東	南東	南東	南東	南南東	南東	南東	南東	南東	南東	南南東	東南東	東	東	東	南東
風速(m/s)	4.2	3.1	3.2	2.5	4.8	5.3	3.4	3.3	2.7	2.5	3.7	3.4	2.1	3.7	2.2	2.7	3.2	3.0	2.1	2.2	2.0	1.1	2.5	2

月25日																							
タリングポスト	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10	18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19:
P1(μSv/h)	12.200	12.147	12.080	12.033	12.017	12.000	11.980	11.933	11.937	11.907	11.863	11.873	11.840	11.800	11.800	11.763	11.757	11.743	11.693	11.673	11.680	11.653	11.577	11.56
P2(μSv/h)	7.000	6.970	6.940	6.943	6.920	6.917	6.907	6.870	6.890	6.830	6.837	6.853	6.830	6.820	6.813	6.820	6.776	6.790	6.757	6.787	6.733	6.747	6.693	6.64
P3(μSv/h)	11.383	11.407	11.370	11.343	11.300	11.293	11.253	11.267	11.240	11.247	11.197	11.217	11.233	11.173	11.170	11.177	11.183	11.163	11.160	11.100	11.077	11.113	11.033	10.92
P4(μSv/h)	8.753	8.763	8.757	8.727	8.687	8.727	8.693	8.687	8.647	8.673	8.630	8.627	8.680	8.653	8.613	8.590	8.627	8.590	8.600	8.623	8.577	8.573	8.467	8.46
P5(μSv/h)	8.193	8.233	8.187	8.153	8.140	8.140	8.133	8.133	8.033	8.133	8.127	8.053	8.040	8.040	8.040	8.040	8.040	8.040	8.033	7.993	8.040	7.987	7.940	7.84
P6(μSv/h)	9.413	9.407	9.413	9.393	9.400	9.340	9.333	9.303	9.313	9.300	9.307	9.307	9.270	9.293	9.273	9.260	9.260	9.220	9.233	9.227	9.210	9.193	9.100	9.08
P7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	南東	南東	南南東	南南東	東南東	東	東	東	東南東	東南東	東	南東	東	南南東	東南東	東	東	西	北東	東北東	東	東北東	東北東	東北
風速(m/s)	2.8	2.6	1.8	3.3	2.5	3.5	4.3	1.7	1.8	2.0	2.9	1.7	0.8	1.1	1.9	1.9	3.2	2.1	0.4	0.8	2.4	2.5	3.3	4

月25日																							
タリングポスト	20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:
P1(μSv/h)	11.530	11.530	11.420	11.363	11.380	11.377	11.337	11.327	11.317	11.300	11.307	11.313	11.277	12.673	13.247	12.557	12.433	12.280	12.597	12.240	12.303	12.123	12.033	11.98
P2(μSv/h)	6.607	6.557	6.523	6.490	6.517	6.473	6.483	6.470	6.433	6.493	6.467	6.463	6.473	8.323	8.137	7.173	7.180	7.063	7.093	7.023	7.093	7.013	6.897	6.87
P3(μSv/h)	10.937	10.853	11.840	10.823	10.777	10.773	10.757	10.737	10.810	10.737	10.740	10.750	10.733	12.833	12.213	11.607	11.780	11.680	11.557	11.457	11.480	11.453	11.323	11.36
P4(μSv/h)	8.427	8.363	8.343	8.280	8.263	8.263	8.223	8.253	8.270	8.283	8.257	8.257	8.267	9.620	9.103	8.657	8.853	8.760	8.737	8.593	8.637	8.623	8.567	8.53
P5(μSv/h)	7.840	7.740	7.647	7.647	7.647	7.647	7.647	7.647	7.647	7.647	7.647	7.647	7.647	9.100	8.433	8.033	8.193	8.120	8.093	7.987	8.033	8.033	7.940	7.94
P6(μSv/h)	9.043	8.967	8.877	8.870	8.840	8.803	8.793	8.810	8.823	8.820	8.803	8.820	8.830	9.623	9.757	9.253	9.297	9.187	9.140	9.170	9.190	9.193	9.120	9.10
P7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測
風向	東	東北東	北東	北北東	北東	北東	北北東	北北東	北	北	北	北	北北西	北	北	北西	北西	北北西	北北西	北北西	北北西	北北西	北北西	北北
風速(m/s)	3.6	5.0	2.9	5.3	3.7	4.2	5.4	6.2	5.3	4.8	5.2	5.2	6.2	6.7	6.1	6.6	7.7	7.2	6.0	6.8	7.5	7.2	6.9	7

第二(2F)(事業者のモニタリングポスト)

月25日																								
タリングポスト	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:
1(μSv/h)	12.297	12.297	12.280	12.287	12.277	12.227	12.247	12.217	12.220	12.200	12.237	12.210	12.190	12.177	12.170	12.203	12.173	12.120	12.133	12.143	12.097	12.133	12.100	12.07
2(μSv/h)	7.220	7.217	7.213	7.187	7.193	7.183	7.173	7.170	7.183	7.167	7.150	7.177	7.173	7.180	7.140	7.150	7.143	7.113	7.133	7.137	7.113	7.100	7.097	7.11
3(μSv/h)	11.890	11.933	11.887	11.887	11.890	11.887	11.847	11.853	11.843	11.847	11.867	11.827	11.840	11.803	11.857	11.810	11.760	11.770	11.753	11.810	11.783	11.750	11.760	11.68
4(μSv/h)	9.293	9.307	9.307	9.297	9.277	9.230	9.240	9.267	9.213	9.247	9.200	9.200	9.207	9.203	9.200	9.180	9.173	9.197	9.133	9.183	9.180	9.143	9.130	9.12
5(μSv/h)	8.627	8.627	8.627	8.627	8.627	8.627	8.627	8.627	8.627	8.627	8.627	8.627	8.613	8.627	8.567	8.533	8.533	8.533	8.533	8.527	8.533	8.533	8.493	8.53
6(μSv/h)	9.877	9.827	9.870	9.823	9.803	9.800	9.823	9.820	9.803	9.827	9.793	9.803	9.783	9.743	9.777	9.757	9.767	9.717	9.727	9.733	9.713	9.727	9.700	9.69
7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠
風向	西北西	西北西	西北西	西北西	南西	南南西	南南西	南南東	南南西	南南東	東	北北西	北西	北北西	北	北	北	北	北	北北西	北北西	北北西	北北西	北北
速(m/s)	4.7	4.4	3.4	1.9	2.5	2.8	1.9	0.9	0.9	0.8	0.4	0.9	3.9	4.1	2.4	2.2	3.0	2.6	2.6	3.3	3.7	4.7	5.2	3

月25日																								
タリングポスト	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:
1(μSv/h)	12.087	12.093	12.070	12.087	12.043	12.033	12.067	12.020	12.033	13.777	12.993	18.173	12.717	13.137	13.803	12.203	12.093	12.067	12.040	12.010	12.047	12.010	12.013	12.01
2(μSv/h)	7.090	7.093	7.077	7.080	7.060	7.063	7.067	7.030	7.053	7.290	7.293	10.597	7.447	7.297	7.153	7.070	7.057	7.040	7.007	6.997	7.027	7.003	6.983	7.04
3(μSv/h)	11.677	11.680	11.677	11.667	11.680	11.690	11.687	11.647	11.710	11.660	11.670	11.663	12.203	11.687	11.657	11.613	11.640	11.610	11.550	11.573	11.543	11.567	11.543	11.54
4(μSv/h)	9.113	9.133	9.090	9.090	9.087	9.107	9.073	9.067	9.060	9.057	9.063	9.077	10.970	9.577	9.183	9.173	9.147	9.110	9.143	9.120	9.117	9.093	9.057	9.07
5(μSv/h)	8.533	8.480	8.447	8.473	8.473	8.473	8.433	8.433	8.433	8.427	8.433	8.433	10.520	9.407	8.720	8.667	8.627	8.627	8.567	8.560	8.527	8.533	8.533	8.50
6(μSv/h)	9.717	9.670	9.683	9.663	9.633	9.660	9.667	9.667	9.623	9.620	9.613	9.640	11.540	10.490	9.743	9.667	9.643	9.607	9.617	9.567	9.593	9.607	9.570	9.58
7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠
風向	北西	北北西	北北西	北西	北西	北西	北西	北西	北	北北西	西北西	北西	北西	北西	北西	北西	北西	北西	北西	北北西	北西	北西	北北西	北北
速(m/s)	4.3	5.0	5.1	5.7	6.1	6.3	5.5	1.1	1.1	2.1	4.0	2.5	2.2	2.0	2.6	2.5	2.2	2.5	2.2	3.3	3.5	3.6	3.5	3

月25日																								
タリングポスト	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:
1(μSv/h)	12.040	18.670	21.737	24.850	18.083	17.560	17.270	16.780	16.937	16.317	16.040	15.727	15.543	15.277	15.040	14.877	14.737	14.507	14.423	14.283	14.107	14.030	13.870	13.77
2(μSv/h)	7.020	9.087	14.597	21.447	9.993	9.200	9.117	8.793	9.190	8.757	8.573	8.447	8.290	8.187	8.093	8.043	7.977	7.880	7.837	7.797	7.763	7.707	7.667	7.63
3(μSv/h)	11.567	11.663	15.243	17.277	17.533	14.967	13.917	13.703	13.870	13.583	13.360	13.300	13.110	12.990	12.880	12.817	12.680	12.613	12.553	12.503	12.397	12.423	12.327	12.28
4(μSv/h)	9.047	9.083	12.067	13.833	13.113	11.620	10.737	10.587	10.540	10.407	10.170	10.150	10.077	9.973	9.853	9.763	9.707	9.687	9.590	9.550	9.550	9.507	9.473	9.43
5(μSv/h)	8.527	8.533	10.887	14.713	13.507	11.373	10.573	10.287	10.153	10.073	9.787	9.607	9.700	9.607	9.407	9.287	9.220	9.167	9.120	9.087	9.020	8.973	8.920	8.82
6(μSv/h)	9.547	9.570	11.673	13.677	14.300	11.567	11.173	11.023	10.933	10.897	10.667	10.660	10.647	10.573	10.463	10.380	10.323	10.310	10.213	10.180	10.167	10.140	10.117	10.02
7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠
風向	北	北	北	北北西	北北東	北北東	北北東	北東	北東	東北東	北東	東北東	北東	東北東	北東	東	東	東南東	東	東南東	東南東	東南東	南東	南東
速(m/s)	3.5	2.3	2.2	3.6	5.1	5.1	5.0	4.3	3.3	4.1	5.3	4.1	4.5	2.1	2.6	3.1	3.6	3.1	3.5	3.1	3.2	3.3	1.4	3

福島第二原子力発電所

2011/3/26
06:30現在

MP1：11.003μSv/h
(参考値:0.035～0.054μSv/h)

MP2：6.263μSv/h
(参考値:0.042～0.062μSv/h)

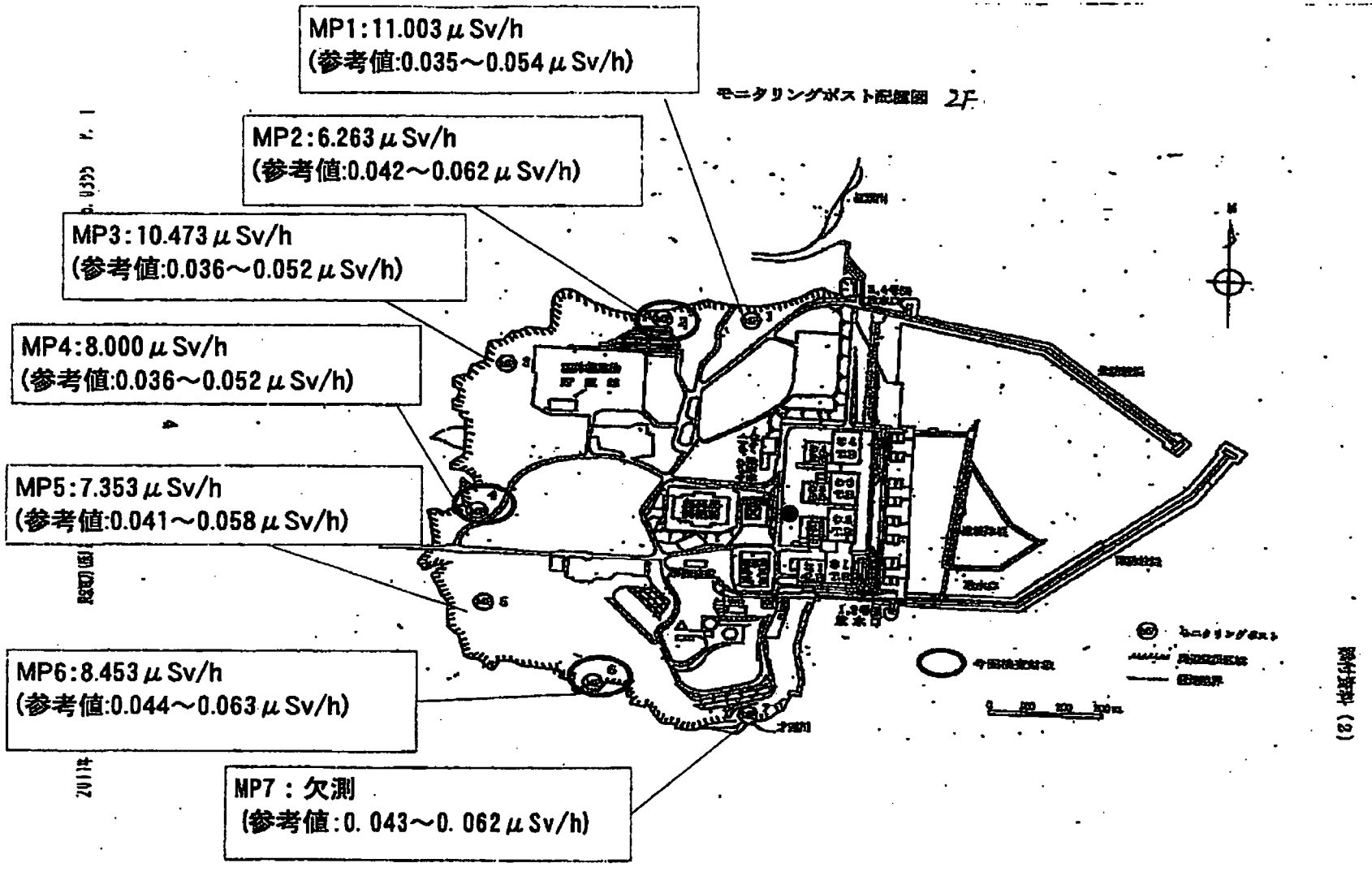
MP3：10.473μSv/h
(参考値:0.036～0.052μSv/h)

MP4：8.000μSv/h
(参考値:0.036～0.052μSv/h)

MP5：7.353μSv/h
(参考値:0.041～0.058μSv/h)

MP6：8.453μSv/h
(参考値:0.044～0.063μSv/h)

MP7：欠測
(参考値:0.043～0.062μSv/h)



各発電所等の環境モニタリング結果

単位：μSv/h

通常の平常値の範囲	会社名	発電所名	3月25日 0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00
0.023～0.027	北海道電力㈱	泊発電所	0.026	0.027	0.026	0.026	0.026	0.029	0.031	0.038	0.029	0.031	0.028	0.026
0.024～0.060	東北電力㈱	女川原子力発電所	1.100	1.100	1.100	1.100	1.100	1.000	1.000	1.000	1.000	1.000	1.00	1.00
0.012～0.060		東通原子力発電所	0.017	0.017	0.017	0.017	0.018	0.017	0.021	0.019	0.018	0.017	0.017	0.017
0.033～0.050	東京電力㈱	福島第一原子力発電所※	199.6	198.6	196.5	195.7	195.1	194.4	193.8	192.6	193.8	192.6	216.2	259
0.036～0.052		福島第二原子力発電所	11.890	11.847	11.840	11.753	11.677	11.687	12.203	11.550	11.567	13.917	13.11	12.553
0.011～0.159		柏崎刈羽原子力発電所	0.067	0.065	0.065	0.065	0.070	0.066	0.065	0.065	0.065	0.067	0.065	0.065
0.036～0.053	日本原子力発電㈱	東海第二発電所	0.920	0.921	0.918	0.907	0.911	0.910	0.907	0.903	0.905	0.899	0.904	0.903
0.039～0.110		敦賀発電所	0.073	0.073	0.073	0.073	0.074	0.073	0.073	0.073	0.073	0.074	0.074	0.072
0.064～0.108	中部電力㈱	浜岡原子力発電所	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.081	0.081	0.081	0.081	0.080
0.0207～0.132	北陸電力㈱	志賀原子力発電所	0.036	0.038	0.034	0.033	0.032	0.033	0.032	0.032	0.035	0.033	0.033	0.033
0.028～0.130	中国電力㈱	島根原子力発電所	0.027	0.030	0.030	0.030	0.031	0.031	0.037	0.034	0.040	0.041	0.034	0.031
0.070～0.077	関西電力㈱	美浜発電所	0.074	0.071	0.072	0.072	0.072	0.073	0.070	0.073	0.071	0.072	0.073	0.071
0.045～0.047		高浜発電所	0.042	0.042	0.043	0.043	0.042	0.043	0.042	0.043	0.043	0.044	0.043	0.043
0.036～0.040		大飯発電所	0.035	0.035	0.036	0.037	0.037	0.038	0.037	0.036	0.035	0.035	0.035	0.035
0.011～0.080	四国電力㈱	伊方発電所	0.014	0.013	0.014	0.014	0.014	0.014	0.014	0.014	0.015	0.015	0.014	0.015
0.023～0.087	九州電力㈱	玄海原子力発電所	0.026	0.025	0.027	0.031	0.028	0.029	0.028	0.027	0.025	0.026	0.027	0.027
0.034～0.120		川内原子力発電所	0.037	0.037	0.038	0.035	0.034	0.036	0.037	0.038	0.040	0.038	0.039	0.037
0.009～0.069	日本原燃(株)	六ヶ所 再処理事業所	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
0.009～0.071		六ヶ所 埋設事業所	0.021	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020

※福島第一原子力発電所については、作業状況により若干測定時間のずれ及び測定位置の変更が生じることもございます。

通常の平常値の範囲	会社名	発電所名	3月25日 12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
0.023～0.027	北海道電力㈱	泊発電所	0.025	0.025	0.026	0.028	0.026	0.025	0.024	0.025	0.033	0.034		
0.024～0.060	東北電力㈱	女川原子力発電所	1.00	0.99	0.99	0.99	0.98	0.98	0.97	0.97	0.97	0.97		
0.012～0.060		東通原子力発電所	0.017	0.018	0.018	0.017	0.017	0.017	0.017	0.017	0.017	0.017		
0.033～0.050	東京電力㈱	福島第一原子力発電所※	235.8	222.3	212.6	205.8	197.4	196	194.7	199.5	213.9	204.9		
0.036～0.052		福島第二原子力発電所	12.233	11.920	11.673	11.527	11.383	11.253	11.233	11.160	10.937	10.757		
0.011～0.159		柏崎刈羽原子力発電所	0.066	0.067	0.065	0.066	0.065	0.066	0.067	0.074	0.078	0.073		
0.036～0.053	日本原子力発電㈱	東海第二発電所	0.903	0.899	0.899	0.887	0.882	0.881	0.878	0.874	0.865	0.866		
0.039～0.110		敦賀発電所	0.073	0.073	0.074	0.075	0.073	0.080	0.091	0.090	0.078	0.074		
0.064～0.108	中部電力㈱	浜岡原子力発電所	0.080	0.080	0.080	0.081	0.086	0.083	0.081	0.081	0.083	0.081		
0.0207～0.132	北陸電力㈱	志賀原子力発電所	0.032	0.034	0.034	0.034	0.042	0.047	0.040	0.035	0.033	0.033		
0.028～0.130	中国電力㈱	島根原子力発電所	0.028	0.030	0.031	0.029	0.029	0.029	0.029	0.033	0.039	0.037		
0.070～0.077	関西電力㈱	美浜発電所	0.073	0.072	0.072	0.071	0.074	0.079	0.087	0.079	0.074	0.073		
0.045～0.047		高浜発電所	0.043	0.044	0.044	0.043	0.044	0.050	0.045	0.044	0.043	0.050		
0.036～0.040		大飯発電所	0.035	0.034	0.035	0.035	0.035	0.045	0.042	0.038	0.036	0.042		
0.011～0.080	四国電力㈱	伊方発電所	0.014	0.014	0.013	0.013	0.014	0.014	0.014	0.013	0.014	0.013		
0.023～0.087	九州電力㈱	玄海原子力発電所	0.026	0.026	0.026	0.027	0.027	0.027	0.027	0.025	0.026	0.027		
0.034～0.120		川内原子力発電所	0.035	0.037	0.037	0.038	0.036	0.039	0.037	0.036	0.038	0.036		
0.009～0.069	日本原燃(株)	六ヶ所 再処理事業所	0.017	0.016	0.016	0.016	0.016	0.016	0.017	0.017	0.016	0.016		
0.009～0.071		六ヶ所 埋設事業所	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.019		

※福島第一原子力発電所については、作業状況により若干測定時間のずれ及び測定位置の変更が生じることもございます。

東京電力福島第一原子力発電所敷地内の核種分析結果

採取方法：モニタリングカーにてダスト採取
測定方法：試料を2Fに持ち込みGe半導体型核種分析装置にて分析（1日1回測定）
測定時間：500秒

核種		3月19日 事務本館北側 採取時間(11:53～12:13)＊放水前 測定時間(14:12～)			3月20日 事務本館北側 採取時間(1:41～2:01) 測定時間(13:28～)			3月21日 事務本館北側 採取時間(10:19～10:39) 測定時間(13:28～)			③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm^3)※
		①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	
揮発性	I-131	5.940E-03	3.374E-05	5.94	2.303E-03	1.256E-05	2.30	1.516E-03	1.134E-05	1.52	1.0E-03
	I-132	2.203E-03	8.816E-05	0.03	N.D			2.539E-04	2.702E-05	0.00	7.0E-02
	I-133	3.773E-05	2.861E-05	0.01	N.D			N.D			5.0E-03
粒子状	Cs-134	2.165E-05	1.692E-05	0.01	2.840E-05	4.755E-06	0.01	3.383E-05	5.364E-06	0.02	2.0E-03
	Cs-136	N.D			5.629E-06	5.447E-06	0.001	4.529E-06	3.321E-06	0.0005	1.0E-02
	Cs-137	2.437E-05	1.771E-05	0.01	2.892E-05	5.003E-06	0.01	3.801E-05	4.671E-06	0.01	3.0E-03

核種		3月22日 正門 採取時間(1:10～1:30) 測定時間(14:50～)			3月23日 正門 採取時間(2:01～2:21) 測定時間(14:54～)						③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm^3)※
		①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)				
揮発性	I-131	2.2E-03	1.569E-05	2.24	6.7E-04	9.6E-06	0.67				1.0E-03
	I-132	N.D			3.0E-04	8.8E-06	0.00				7.0E-02
	I-133	N.D			N.D						5.0E-03
粒子状	Co-58	N.D			5.1E-06	5.1E-06	0.00				1.0E-02
	Cs-134	1.591E-05	5.853E-06	0.01	1.7E-05	4.2E-06	0.01				2.0E-03
	Cs-136	N.D			3.0E-06	2.7E-06	0.00				1.0E-02
	Cs-137	1.889E-05	5.295E-06	0.01	1.3E-05	4.2E-06	0.00				3.0E-03
その他	Te-129	N.D			2.3E-01	1.2E-01	0.58				4.0E-01
	Te-132	6.680E-05	1.116E-05	0.01	4.3E-04	4.5E-06	0.06				7.0E-03
	Ce-144	6.680E-05	1.116E-05	0.10	1.3E-03	3.7E-04	1.86				7.0E-04

※人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度

核種		3月24日 免震棟前 採取時間(14:16～14:36) 測定時間(17:41～)			③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm^3)※
		①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	
揮発性	Co-58	6.5E-05	3.4E-05	0.007	1.0E-02
	I-131	2.2E-03	3.5E-05	2.2	1.0E-03
	I-132	8.4E-03	9.8E-05	0.1	7.0E-02
	I-133	N.D			5.0E-03
	Cs-134	N.D			2.0E-03
	Cs-137	3.4E-05	3.2E-05		3.0E-03
粒子状	Co-58	1.6E-04	3.5E-05	0.02	1.0E-02
	I-131	2.3E-03	2.7E-05	2.3	1.0E-03
	I-132	1.6E-02	6.8E-05	0.2	7.0E-02
	Cs-134	N.D			2.0E-03
	Cs-136	N.D			1.0E-02
	Cs-137	3.0E-05	2.8E-06	0.01	3.0E-03
その他	Ru-105	1.1E-04	7.1E-05	0.001	8.0E-02
	Ru-106	1.8E-03	2.3E-04	3.0	6.0E-04
	Te-132	8.1E-05	2.0E-05	0.01	7.0E-03
	Ba-142	3.7E+00	9.6E-01	6.2	6.0E-01

採取方法:海水を汲みあげ採取
測定方法:試料500mlを福島第二に運搬し、Ge半導体検出器で測定
測定時間:1,000秒

核種	3月21日 14:30 1F南放水口付近(1～4u放水口から南側約330m地点)			3月22日 6:30 1F南放水口付近(1～4u放水口から南側約330m地点)			3月23日 8:50 1F南放水口付近(1～4u放水口から南側約330m地点)			③周辺監視区域外の水中の濃度限度 (Bq/cm³)
	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	
Co-58	5.955E-02	3.349E-02	0.1	1.668E-02	2.138E-02	0.0	5.0E-02	2.6E-02	-	1E+00
I-131	5.066E+00	4.245E-02	126.7	1.190E+00	2.293E-02	29.8	5.9E+00	3.6E-02	146.9	4E-02
I-132	2.136E+00	1.925E-01	0.7	1.362E+00	7.721E-02	0.5	5.4E+00	1.4E-01	1.8	3E+00
Cs-134	1.486E+00	4.030E-02	24.8	1.504E-01	1.769E-02	2.5	2.5E-01	2.7E-02	4.2	6E-02
Cs-136	2.132E-01	2.358E-02	0.7	2.350E-02	1.056E-02	0.1	2.5E-02	2.4E-02	0.1	3E-01
Cs-137	1.484E+00	4.204E-02	16.5	1.535E-01	1.626E-02	1.7	2.5E-01	2.7E-02	2.8	9E-02
Zr-95							2.3E-01	7.8E-02	0.3	9E-01
Ru-105							8.7E-01	6.2E-01	0.3	3E+00
Ru-106							3.7E-01	2.0E-01	3.7	1E-01
Te-129							4.0E+00	3.9E+00	0.4	1E+01
Te-132							4.0E-02	3.6E-02	2.0	2E-01
La-140							1.3E-02	1.0E-02	0.0	4E-01

核種	3月23日 9:10 1F 5～6放水口北側(5～6u放水口から北側約30m地点)			3月24日 10:25 1F南放水口付近(1～4u放水口から南側約330m地点)			3月24日 10:40 1F 5～6放水口北側(5～6u放水口から北側約30m地点)			③周辺監視区域外の水中の濃度限度 (Bq/cm³)
	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	
Co-58	5.000E-02	3.100E-02	0.1							1E+00
I-131	2.700E+00	2.500E-02	66.6	4.200E+00	2.300E-02	103.9	9.500E-01	1.300E-02	23.7	4E-02
I-132	2.900E+00	7.700E-02	1.0	1.700E+00	4.300E-01	0.6	4.500E-01	2.100E-01	0.2	3E+00
Cs-134	1.800E+00	2.400E-02	29.9	4.500E-01	1.700E-02	7.4	1.100E-01	9.200E-03	1.8	6E-02
Cs-136	2.300E-01	2.500E-02	0.8	6.100E-02	1.700E-02	0.2	1.100E-02	6.500E-03	0.0	3E-01
Cs-137	1.900E+00	2.400E-02	21.4	4.400E-01	1.500E-02	4.9	1.100E-01	8.700E-03	1.2	9E-02
Tc-99m	8.300E-02	2.500E-02	0.0							4E+01
Te-129	7.300E+00	3.800E+00	0.7							1E+01
Te-129m	1.300E+00	6.100E-01	4.2							3E-01
Te-132	1.600E+00	2.100E-02	7.8	8.000E-02	2.100E-02	0.4	1.400E-01	1.000E-02	0.7	2E-01
Ba-140	1.300E-01	9.400E-02	0.4							3E-01
La-140	5.500E-02	1.200E-02	0.1	2.100E-02	1.200E-02	0.1				4E-01

採取方法：海水をくみ上げ採取
測定方法：試料500mlをGe半導体検出器で測定
測定時間：1，000秒

核種	3月21日 23:15 2F北放水口付近（3、4号放水口付近）			3月22日 15:06 2F岩沢海岸付近（1,2号放水口から南側に約7，000m地点）			3月22日 0:38 2F富岡川河口付近（3,4u放水口から北側約2，000m地点）			③周辺監視区域外の水中の濃度限度 (Bq/cm^3)
	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	水中濃度限度に対する割合 (①/③)	
Co-58	5.704E-03	7.570E-03	0.0	N.D	1.301E-02		1.028E-02	1.253E-02	0.0	1.0E+00
I-131	1.085E+00	1.284E-02	27.1	6.664E-01	1.862E-02	16.7	3.211E+00	1.694E-02	80.3	4.0E-02
I-132	1.597E-01	4.392E-02	0.1	N.D	7.915E-02		8.761E-01	4.236E-02	0.3	3.0E+00
Cs-134	4.815E-02	9.213E-03	0.8	3.926E-02	1.135E-02	0.7	7.535E-02	1.102E-02	1.3	6.0E-02
Cs-136	6.682E-03	4.722E-03	0.0	N.D	6.784E-03		1.159E-02	7.718E-02	0.0	3.0E-01
Cs-137	5.283E-02	8.822E-03	0.6	4.361E-02	1.129E-02	0.5	7.760E-02	1.186E-02	0.9	9.0E-02

核種	3月22日 14:28 2F北放水口付近（3、4号放水口付近）			3月23日 13:51 2F北放水口付近（3,4号放水口付近）			3月23日 14:25 2F岩沢海岸付近（1,2号放水口から南側に約7，000m地点）			③周辺監視区域外の水中の濃度限度 (Bq/cm^3)
	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	水中濃度限度に対する割合 (①/③)	
Co-58	N.D	1.526E-02								
Ru-105				3.4E-02	2.5E-02	0.01	3.3E-02	2.8E-02	0.01	3E+00
Ru-106							1.2E-01	1.2E-01	1.25	1E-01
I-131	1.138E+00	1.993E-02	28.5	7.4E-01	2.7E-02	18.6	7.6E-01	2.7E-02	19.1	4E-02
I-132	N.D	8.791E-02		2.0E-01	5.8E-02	0.1	3.3E-01	5.3E-02	0.1	3E+00
Cs-134	4.631E-02	1.350E-02	0.8	5.1E-02	2.0E-02	0.8	3.3E-02	2.1E-02	0.5	6E-02
Cs-136	N.D	7.849E-03								
Cs-137	3.962E-02	1.406E-02	0.4	5.5E-02	2.0E-02	0.6	4.3E-02	2.1E-02	0.5	9E-02

採取方法：海水をくみ上げ採取
測定方法：試料500mlをGe半導体検出器で測定
測定時間：1，000秒

核種	3月24日 9:30 2F北放水口付近（3、4号放水口付近）			3月24日 8:45 2F岩沢海岸付近（1.2号放水口から南側に約7，000m地点）						③周辺監視区域外の水中の濃度限度 (Bq/cm^3)
	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	水中濃度限度に対する割合 (①/③)				
Ru-105	5.6E-02	4.4E-02	0.02							3.0E+00
I-131	1.1E+00	5.2E-02	28.4	5.0E-01	1.0E-02	12.50				4.0E-02
I-132	1.2E-01	8.8E-02	0.04	N.D	1.9E-02					3.0E+00
Cs-134	9.9E-02	3.8E-02	1.6	3.5E-02	7.0E-03	0.6				6.0E-02
Cs-136	6.8E-02	4.9E-02	0.2	5.3E-03	5.1E-03	0.0				3.0E-01
Cs-137	9.4E-02	4.1E-02	1.0	3.8E-02	7.0E-03	0.4				9.0E-02

東京電力福島第二原子力発電所敷地内の核種分析結果

採取方法：モニタリングカーにてダスト採取
測定方法：試料を2Fに持ち込みGe半導体型核種分析装置にて分析（1日2回測定）

核種		3月16日 情報棟東側 採取時間(7:56～8:06) 測定時間(8:47～) 500秒			3月16日 免震建屋1階入口 採取時間(10:00～10:10) 測定時間(11:59～) 500秒			3月17日 MP-1 採取時間(13:50～14:00) 測定時間(22:01～) 1000秒			③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm³)※
		①放射能濃度(Bq/cm³)	②検出限界濃度(Bq/cm³)	空気中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm³)	②検出限界濃度(Bq/cm³)	空気中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm³)	②検出限界濃度(Bq/cm³)	空気中濃度限度に対する割合(①/③)	
揮発性	I-131	3.432E-04	2.559E-05	0.34	6.889E-04	1.268E-05	0.69	9.432E-05	3.351E-06	0.09	1.0E-03
	I-132	1.149E-03	2.812E-05	0.02	7.528E-04	1.986E-05	0.01	N.D			7.0E-02
	I-133	3.448E-05	2.687E-05	0.01	4.395E-05	1.497E-05	0.01	3.304E-06	4.478E-06	0.00	5.0E-03
粒子状	Co-58	N.D			4.943E-05	2.685E-05	0.00	2.494E-05	2.061E-05	0.00	1.0E-02
	Cs-134	1.237E-04	1.449E-05	0.06	4.163E-04	2.469E-05	0.21	3.314E-04	1.680E-05	0.17	2.0E-03
	Cs-136	2.699E-05	9.412E-06	0.00	7.504E-05	1.495E-05	0.01	6.107E-05	1.296E-05	0.01	1.0E-02
	Cs-137	1.227E-04	1.311E-05	0.04	3.861E-04	2.057E-05	0.13	3.232E-04	1.702E-05	0.11	3.0E-03

核種		3月18日 MP-1 採取時間(8:22～8:32) 測定時間(9:40～) 1000秒			3月18日 MP-1 採取時間(15:09～15:19) 測定時間(17:12～) 1000秒			3月19日 MP-1 採取時間(9:15～9:25) 測定時間(10:39～) 1000秒			③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm³)※
		①放射能濃度(Bq/cm³)	②検出限界濃度(Bq/cm³)	空気中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm³)	②検出限界濃度(Bq/cm³)	空気中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm³)	②検出限界濃度(Bq/cm³)	空気中濃度限度に対する割合(①/③)	
揮発性	I-131	8.630E-04	3.145E-05	0.86	4.298E-03	4.993E-05	4.30	2.695E-04	5.585E-05	0.27	1.0E-03
	I-132	1.720E-03	3.821E-05	0.02	2.625E-03	9.359E-05	0.04	N.D			7.0E-02
	I-133	N.D			5.246E-05	4.213E-05	0.01	N.D			5.0E-03
粒子状	Co-58	3.080E-05	2.048E-05	0.00	1.578E-04	1.435E-05	0.02	N.D			1.0E-02
	Cs-134	3.345E-04	1.666E-05	0.17	4.863E-04	1.538E-05	0.24	N.D			2.0E-03
	Cs-136	5.882E-05	1.012E-05	0.01	8.416E-05	1.436E-05	0.01	N.D			1.0E-02
	Cs-137	3.147E-04	1.683E-05	0.10	4.306E-04	1.715E-05	0.14	N.D			3.0E-03

※人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度

核種		3月19日 MP-1 採取時間(18:18～18:28) 測定時間(19:08～) 1000秒			3月20日 MP-1 採取時間(11:27～11:37) 測定時間(16:17～) 500秒			3月20日 MP－1 採取時間(17:10～17:20) 測定時間(21:11～) 500秒			③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm^3)※
		①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	
揮発性	I-131	2.513E-04	5.665E-05	0.25	5.254E-05	1.155E-05	0.05	2.230E-04	4.286E-05	0.22	1.0E-03
	I-132	1.229E-04	1.226E-04	0.00	N.D			N.D			7.0E-02
	I-133	N.D			N.D			N.D			5.0E-03
粒子状	Co-58	N.D			N.D			N.D			1.0E-02
	Cs-134	N.D			N.D			N.D			2.0E-03
	Cs-136	N.D			N.D			N.D			1.0E-02
	Cs-137	N.D			N.D			N.D			3.0E-03

核種		3月21日 MP-1 採取時間(10:40～10:50) 測定時間(12:15～) 500秒			3月21日 MP-1 採取時間(18:11～18:19) 測定時間(19:00～) 500秒			3月23日 MP-1 採取時間(16:06～16:14) 測定時間(17:38～) 500秒			③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm^3)※
		①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	
揮発性	I-131	2.250E-04	1.687E-05	0.23	1.580E-04	1.931E-05	0.16	2.1E-04	1.4E-05	0.21	1.0E-03
	I-132	2.420E-04	2.401E-05	0.00	8.097E-04	1.937E-05	0.01	2.8E-04	2.8E-05	0.00	7.0E-02
	I-133	N.D			N.D			N.D			5.0E-03
粒子状	Co-58	1.065E-05	1.138E-05	0.00	1.341E-05	9.886E-06	0.00	N.D			1.0E-02
	Cs-134	4.410E-05	9.294E-06	0.02	3.017E-05	1.005E-05	0.02	1.7E-05	8.5E-06	0.01	2.0E-03
	Cs-136	N.D			N.D			3.7E-06	5.2E-06	0.00	1.0E-02
	Cs-137	4.711E-05	7.959E-06	0.02	3.306E-05	9.703E-06	0.01	1.7E-05	6.9E-06	0.01	3.0E-03
その他の検出核種	Te-129							9.3E-04	2.6E-04	0.93	1.0E-03
	Te-132							7.1E-04	6.5E-06	0.10	7.0E-03
	Ru-106							8.2E-05	5.7E-05	0.14	6.0E-04

※人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度

核種		3月22日 MP-1 採取時間(10:02～10:10) 測定時間(11:53～) 500秒			3月22日 MP-1 採取時間(16:43～16:51) 測定時間(17:32～) 500秒			3月23日 MP-1 採取時間(16:06～16:14) 測定時間(17:38～) 500秒			③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm^3)※
		①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	
揮発性	I-131	1.416E-04	2.272E-05	0.14	1.349E-04	2.216E-05	0.13	2.1E-04	1.4E-05	0.21	1.0E-03
	I-132	N.D			N.D			2.8E-04	2.8E-05	0.00	7.0E-02
	I-133	N.D			N.D			N.D			5.0E-03
粒子状	Co-58	N.D			N.D			N.D			1.0E-02
	Cs-134	1.293E-05	9.476E-06	0.01	1.353E-05	9.812E-06	0.01	1.7E-05	8.5E-06	0.01	2.0E-03
	Cs-136	N.D			N.D			3.7E-06	5.2E-06	0.00	1.0E-02
	Cs-137	1.024E-05	8.838E-06	0.003	1.369E-05	8.361E-06	0.005	1.7E-05	6.9E-06	0.01	3.0E-03
その他	Te-129	2.316E-03	1.784E-03	0.01	N.D			9.3E-04	2.6E-04	0.00	4.0E-01
	Te-132	2.191E-05	1.649E-05	0.003	N.D			7.1E-04	6.5E-06	0.10	7.0E-03
	Ru-106	N.D			N.D			8.2E-05	5.7E-05	0.14	6.0E-04

※人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度

採取方法：海水をくみ上げ採取
測定方法：試料500mlをGe半導体検出器で測定
測定時間：1，000秒

核種	3月21日 23:15 2F北放水口付近（3、4号放水口付近）			3月22日 15:06 2F岩沢海岸付近（1.2号放水口から南側に約7，000m地点）			3月22日 0:38 2F富岡川河口付近（3.4u放水口から北側約2，000m地点）			③周辺監視区域外の水中の濃度限度 (Bq/cm^3)
	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	水中濃度限度に対する割合 (①/③)	
Co-58	5.704E-03	7.570E-03	0.0	N.D	1.301E-02		1.028E-02	1.253E-02	0.0	1.0E+00
I-131	1.085E+00	1.284E-02	27.1	6.664E-01	1.862E-02	16.7	3.211E+00	1.694E-02	80.3	4.0E-02
I-132	1.597E-01	4.392E-02	0.1	N.D	7.915E-02		8.761E-01	4.236E-02	0.3	3.0E+00
Cs-134	4.815E-02	9.213E-03	0.8	3.925E-02	1.135E-02	0.7	7.535E-02	1.102E-02	1.3	6.0E-02
Cs-136	6.682E-03	4.722E-03	0.0	N.D	6.784E-03		1.159E-02	7.718E-02	0.0	3.0E-01
Cs-137	5.283E-02	8.822E-03	0.6	4.361E-02	1.129E-02	0.5	7.760E-02	1.186E-02	0.9	9.0E-02

核種	3月22日 14:28 2F北放水口付近（3、4号放水口付近）			3月23日 13:51 2F岩沢海岸付近（1.2号放水口から南側に約7，000m地点）			3月23日 14:25 2F岩沢海岸付近（1.2号放水口から南側に約7，000m地点）			③周辺監視区域外の水中の濃度限度 (Bq/cm^3)
	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	水中濃度限度に対する割合 (①/③)	
Co-58	N.D	1.526E-02								
Ru-105				3.4E-02	2.5E-02		3.3E-02	2.8E-02	0.01	3E+00
Ru-106							1.2E-01	1.2E-01	1.25	1E-01
I-131	1.138E+00	1.993E-02	28.5	7.4E-01	2.7E-02	16.7	7.6E-01	2.7E-02	19.1	4E-02
I-132	N.D	8.791E-02		2.0E-01	5.8E-02		3.3E-01	5.3E-02	0.1	3E+00
Cs-134	4.631E-02	1.350E-02	0.8	5.1E-02	2.0E-02	0.7	3.3E-02	2.1E-02	0.5	6E-02
Cs-136	N.D	7.849E-03								
Cs-137	3.962E-02	1.406E-02	0.4	5.5E-02	2.0E-02	0.5	4.3E-02	2.1E-02	0.5	9E-02

平成23年3月25日
東京電力株式会社

発電所敷地内における空気中放射性物質の核種分析結果について　(3/24修正版)

当社福島第一原子力発電所における空気中放射性物質の測定結果をお知らせいたします。

1. 採取・測定条件

試料採取	場所	福島第一　事務本館北側		
	日時	3月19日	3月20日	3月21日
		11:53～12:13(放水前)	1:41～2:01	10:19～10:39
	採取方法	モニタリングカーにてダスト採取		
	風向・風速	W 4.7m/s (11:50現在)	SW 2.1m/s (1:40現在)	NW 2.6m (10:10現在)
試料測定	日時	3/19 14:12～	3/21 13:28～	3/21 13:48～
	測定方法	試料を2Fに持ち込みGe半導体型核種分析装置にて分析		
	測定時間	500s		

2. 結果

	核種	3月19日採取分			3月20日採取分			3月21日採取分			③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm3)※
		①放射能濃度 (Bq/cm3)	②検出限界濃度 (Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度 (Bq/cm3)	②検出限界濃度 (Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度 (Bq/cm3)	②検出限界濃度 (Bq/cm3)	空気中濃度限度に対する割合(①／③)	
揮発性	I-131	5.9E-03	3.4E-05	5.94	2.3E-03	1.3E-05	2.30	1.5E-03	1.1E-05	1.52	1.0E-03
	I-132	2.2E-03	8.8E-05	0.03	ND	-	-	2.5E-04	2.7E-05	0.004	7.0E-02
	I-133	3.8E-05	2.9E-05	0.01	ND	-	-	ND	-	-	5.0E-03
	Cs-134	ND	-	-	4.0E-05	8.3E-06	0.02	3.1E-05	8.6E-06	0.016	2.0E-03
	Cs-137	ND	-	-	3.9E-05	8.4E-06	0.01	3.6E-05	7.9E-06	0.01	3.0E-03
粒子状	Co-58	ND	-	-	ND	-	-	ND	-	-	1.0E-02
	I-131	1.1E-03	1.6E-05	1.07	1.3E-03	6.8E-06	1.29	9.2E-06	5.0E-06	0.01	1.0E-03
	I-132	3.8E-04	5.0E-05	0.01	ND	-	-	1.1E-04	1.2E-05	0.00	7.0E-02
	Cs-134	2.2E-05	1.7E-05	0.01	2.8E-05	4.8E-06	0.01	3.4E-05	5.4E-06	0.02	2.0E-03
	Cs-136	ND	-	-	5.6E-06	5.4E-06	0.001	4.5E-06	3.3E-06	0.0005	1.0E-02
	Cs-137	2.4E-05	1.8E-05	0.01	2.9E-05	5.0E-06	0.01	3.8E-05	4.7E-06	0.01	3.0E-03
その他の検出核種	Ru-106	2.1E-04	2.1E-04	0.36	3.8E-05	3.4E-05	0.06	ND	-	-	6.0E-04
	Te-129	ND	-	-	ND	-	-	1.3E-03	3.8E-04	0.00	4.0E-01
	Te-129m	ND	-	-	1.4E-04	1.2E-04	0.03	ND	-	-	4.0E-03
	Te-132	6.7E-05	1.8E-05	0.01	5.1E-04	6.0E-06	0.07	3.9E-04	4.3E-05	0.06	7.0E-03
	Ce-144	ND	-	-	5.0E-03	4.6E-04	7.08	ND	-	-	7.0E-04

※ 人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※ ○.○E－○とは、○.○×$10^{-○}$と同じ意味である。

1FGe(0319.20.21)

平成23年3月25日
東京電力株式会社

発電所敷地内における空気中放射性物質の核種分析結果について　（3/24修正版）

当社福島第一原子力発電所における空気中放射性物質の測定結果をお知らせいたします。

1．採取・測定条件

試料採取	場所	福島第一　正門		
	日時	3/22 1:10～1:30	3/23 2:1～2:21	
	採取方法	モニタリングカーにてダスト採取		
	風向・風速	W　0.5m/s（1:10現在）	N 3.2m/s(2:00現在)	
試料測定	日時	3/22　14:50～	3/23 14:54～	
	測定方法	試料を2Fに持ち込みGe半導体型核種分析装置にて分析		
	測定時間	500s		

2．結果

	核種	3/22採取分			3/23採取分			3/24採取分			③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm3)※
		①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)				
揮発性	I-131	2.2E-03	1.6E-05	2.24	6.7E-04	9.6E-06	0.67				1.0E-03
	I-132	ND	－	－	ND	－	－				7.0E-02
	I-133	ND	－	－	ND	－	－				5.0E-03
	Cs-134	1.1E-05	1.1E-05	0.01	2.2E-05	7.6E-06	0.01				2.0E-03
	Cs-137	1.3E-05	1.0E-05	0.00	2.3E-05	7.6E-06	0.01				3.0E-03
粒子状	Co-58	ND	－	－	5.1E-06	5.1E-06	0.00				1.0E-02
	I-131	4.7E-04	7.4E-06	0.47	4.3E-04	5.0E-06	0.43				1.0E-03
	Cs-134	1.6E-05	5.9E-06	0.01	1.7E-05	4.2E-06	0.01				2.0E-03
	Cs-136	ND	－	－	3.0E-06	2.7E-06	0.00				1.0E-02
	Cs-137	1.9E-05	5.3E-06	0.01	1.3E-05	4.2E-06	0.00				3.0E-03
その他の検出核種	Te-129	ND	－	－	2.3E-01	1.2E-01	0.58				4.0E-01
	Te-132	6.7E-05	1.1E-05	0.01	4.3E-04	4.5E-06	0.06				7.0E-03
	Ce-144	ND	－	－	1.3E-03	3.7E-04	1.89				7.0E-04

※　人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※　○.○E－○とは、'○.○×10$^{-○}$と同じ意味である。

1FGe(0322・23)

平成23年3月25日
東京電力株式会社

発電所敷地内における空気中放射性物質の核種分析結果について

当社福島第一原子力発電所における空気中放射性物質の測定結果をお知らせいたします。

1. 採取・測定条件

試料採取	場所	福島第一 正門		
	日時	3/24 5:27～5:47		
	採取方法	モニタリングカーにてダスト採取		
	風向・風速	ESE 0.8m/s (5:30現在)		
試料測定	日時	3/24 22:03～		
	測定方法	試料を2Fに持ち込みGe半導体型核種分析装置にて分析		
	測定時間	500s		

2. 結果

	核種	3/24採取分									③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm3)※
		①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)							
揮発性	Co-58	ND	－	－							1.0E-02
	I-131	1.5E-03	1.0E-05	1.49							1.0E-03
	I-132	ND	－	－							7.0E-02
	I-133	ND	－	－							5.0E-03
	Cs-134	3.2E-05	7.9E-06	0.02							2.0E-03
	Cs-137	3.1E-05	7.3E-06	0.01							3.0E-03
粒子状	Co-58	ND	－	－							1.0E-02
	I-131	5.0E-04	4.8E-06	0.50							1.0E-03
	I-132	ND	－	－							7.0E-02
	Cs-134	1.1E-05	4.6E-06	0.01							2.0E-03
	Cs-136	ND	－	－							1.0E-02
	Cs-137	1.2E-05	3.8E-06	0.00							3.0E-03
その他の検出核種	Zr-95	2.5E-05	6.0E-06	0.00							8.0E-02
	Te-129	4.6E+00	9.5E-01	11.4							4.0E-01
	Te-129m	3.4E-04	9.9E-05	0.08							4.0E-03
	Te-132	3.6E-04	4.4E-04	0.05							7.0E-03

※ 人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。
※ ○.○E－○とは、○.○×10$^{-○}$と同じ意味である。

平成23年3月24日
東京電力株式会社

発電所敷地内における空気中放射性物質の核種分析結果について　（3/24修正版）

当社福島第二原子力発電所における空気中放射性物質の測定結果をお知らせいたします。

1. 採取・測定条件

試料採取	場所	福島第二 MP－1	福島第二 MP－1	福島第二 MP－1	福島第二 MP－1
	日時	3月19日	3月19日	3月20日	3月20日
		9:15～9:25	18:18～18:28	11:27～11:37	17:10～17:20
	採取方法	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取
	風向・風速	－	－	－	－
試料測定	日時	3/19 10:39～	3/19 19:08～	3/20 16:17～	3/20 21:11～
	測定方法	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析
	測定時間	1000s	1000s	500s	500s

2. 結果

	核種	3月19日 採取分①			3月19日 採取分②			3月20日 採取分①			3月20日 採取分②			③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm3)※
		①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	
揮発性	I-131	2.7E-04	5.6E-05	0.27	2.6E-04	5.7E-05	0.25	5.3E-05	1.2E-05	0.05	2.2E-04	4.3E-05	0.22	1.0E-03
	I-132	2.4E-04	1.7E-04	0.00	1.2E-04	1.2E-04	0.00	ND	－	－	2.6E-04	2.5E-04	0.00	7.0E-02
	I-133	ND	－	－	ND	－	－	ND	－	－	ND	－	－	5.0E-03
	Cs-134	6.3E-05	5.9E-05	1.06	ND	－	－	ND	－	－	ND	－	－	2.0E-03
	Cs-136	ND	－	－	1.7E-04	1.6E-04	0.02	ND	－	－	ND	－	－	1.0E-02
粒子状	Co-58	ND	－	－	ND	－	－	ND	－	－	ND	－	－	1.0E-02
	I-131	1.4E-04	3.1E-05	0.14	1.3E-04	3.1E-05	0.13	2.6E-05	6.0E-06	0.03	ND	－	－	1.0E-03
	I-132	1.2E-04	9.0E-05	0.00	ND	－	－	ND	－	－	1.8E-03	8.9E-04	0.03	7.0E-02
	I-133	ND	－	－	2.4E-04	2.2E-04	0.05	ND	－	－	ND	－	－	5.0E-03
	Cs-134	ND	－	－	ND	－	－	ND	－	－	ND	－	－	2.0E-03
	Cs-136	ND	－	－	ND	－	－	ND	－	－	ND	－	－	1.0E-02
	Cs-137	ND	－	－	ND	－	－	ND	－	－	ND	－	－	3.0E-03
その他核種	Ru-105	ND	－	－	2.1E-04	2.0E-04	0.00	ND	－	－	ND	－	－	8.0E-02
	Te-132	ND	－	－	ND	－	－	4.2E-06	3.4E-06	0.00	ND	－	－	7.0E-03

※ 人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※ O.OE－Oとは、O.O×10^{-O}と同じ意味である。

平成23年3月24日
東京電力株式会社

発電所敷地内における空気中放射性物質の核種分析結果について　（3/24修正版）

当社福島第二原子力発電所における空気中放射性物質の測定結果をお知らせいたします。

1. 採取・測定条件

試料採取	場所	福島第二 MP－1	福島第二 MP－1		
	日時	3月21日	3月21日		
		10:40～10:50	18:11～18:19		
	採取方法	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取		
	風向・風速	－	－		
試料測定	日時	3/21 12:15～	3/21 19:00～		
	測定方法	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析		
	測定時間	500s	500s		

2. 結果

	核種	3月21日 採取分①			3月21日 採取分②									③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm3)※
		①放射能濃度 (Bq/cm3)	②検出限界濃度 (Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度 (Bq/cm3)	②検出限界濃度 (Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度 (Bq/cm3)	②検出限界濃度 (Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度 (Bq/cm3)	②検出限界濃度 (Bq/cm3)	空気中濃度限度に対する割合(①／③)	
揮発性	Co-58	ND	－	－	2.9E-05	2.1E-05	0.00							4.0E-01
	I-131	2.3E-04	1.7E-05	0.23	1.6E-04	1.9E-05	0.16							1.0E-03
	I-132	2.4E-04	2.4E-05	0.003	8.1E-04	1.9E-05	0.01							7.0E-02
	I-133	ND	－	－	ND	－	－							5.0E-03
	Cs-134	ND	－	－	1.7E-05	1.7E-05	0.01							2.0E-03
	Cs-137	1.8E-05	1.3E-05	0.01	ND	－	－							3.0E-03
粒子状	Co-58	ND	－	－	1.3E-05	9.9E-06	0.00							1.0E-02
	I-131	1.5E-04	9.6E-06	0.151	1.2E-04	1.0E-05	0.12							1.0E-03
	I-132	2.5E-04	1.3E-05	0.004	3.9E-04	1.6E-05	0.01							7.0E-02
	Cs-134	4.4E-05	9.3E-06	0.02	3.0E-05	1.0E-05	0.02							2.0E-03
	Cs-136	ND	－	－	ND	－	－							1.0E-02
	Cs-137	4.7E-05	8.0E-06	0.02	3.3E-05	9.7E-06	0.01							3.0E-03
その他核種	Ru-105	ND	－	－	1.2E-04	8.6E-05	0.00							8.0E-02
	Ru-106	ND	－	－	1.4E-04	7.6E-05	0.24							6.0E-04
	Te-129	4.5E-04	2.9E-04	0.00	9.3E-04	2.2E-04	0.00							4.0E-01
	Te-129m	6.4E-04	2.0E-04	0.16	ND	－	－							4.0E-03
	Te-132	7.6E-04	6.6E-04	0.11	1.4E-03	6.8E-06	0.21							7.0E-03

※ 人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。
※ ○.○E－○とは、○.○×10$^{-○}$と同じ意味である。

平成23年3月24日
東京電力株式会社

発電所敷地内における空気中放射性物質の核種分析結果について　（3/24修正版）

当社福島第二原子力発電所における空気中放射性物質の測定結果をお知らせいたします。

1. 採取・測定条件

試料採取	場所	福島第二 MP－1	福島第二 MP－1	福島第二 MP－1	福島第二 MP－1
	日時	3/22 10:02～10:10	3/22 16:43～16:51	3/23 9:40～9:48	3/23 16:06～16:14
	採取方法	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取
	風向・風速	－	－	－	－
試料測定	日時	3/22 11:53～	3/22 17:32～	3/23 15:00～	3/23 17:38～
	測定方法	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析
	測定時間	500s	500s	500s	500s

2. 結果　（データ集約3/22）

	核種	3/22採取分①			3/22採取分②			3/23採取分①			3/23採取分②			③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm3)※
		①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	
揮発性	Co-58	ND	－	－	ND	－	－	ND	－	－	1.5E-05	1.4E-05	0.00	1.0E-02
	I-131	1.4E-04	2.3E-05	0.14	1.3E-04	2.2E-05	0.13	2.7E-04	3.9E-05	0.27	2.1E-04	1.4E-05	0.21	1.0E-03
	I-132	ND	－	－	ND	－	－	2.8E-04	2.2E-04	0.00	2.8E-04	2.8E-05	0.00	7.0E-02
	I-133	ND	－	－	ND	－	－	ND	－	－	ND	－	－	5.0E-03
	Cs-134	2.6E-05	1.6E-05	0.01	1.9E-05	1.7E-05	0.01	4.3E-05	3.0E-05	0.02	2.3E-05	1.2E-05	0.01	2.0E-03
	Cs-137	2.3E-05	1.7E-05	0.01	2.1E-05	1.7E-05	0.01	ND	－	－	2.0E-05	1.3E-05	0.01	3.0E-03
粒子状	Co-58	ND	－	－	ND	－	－	ND	－	－	ND	－	－	1.0E-02
	I-131	6.9E-05	1.2E-05	0.07	7.9E-05	1.2E-05	0.08	1.5E-04	2.1E-05	0.15	8.2E-05	7.9E-06	0.08	1.0E-03
	I-132	ND	－	－	4.2E-05	3.4E-05	0.00	ND	－	－	2.6E-04	1.5E-05	0.00	7.0E-02
	Cs-134	1.3E-05	9.5E-06	0.01	1.4E-05	9.8E-06	0.01	ND	－	－	1.7E-05	8.5E-06	0.01	2.0E-03
	Cs-136	ND	－	－	ND	－	－	ND	－	－	ND	－	－	1.0E-02
	Cs-137	1.0E-05	8.8E-06	0.00	1.4E-05	8.4E-06	0.00	ND	－	－	1.7E-05	6.9E-06	0.01	3.0E-03
その他の検出核種	Ru-106	ND	－	－	ND	－	－	ND	－	－	8.2E-05	5.7E-05	0.14	6.0E-04
	Te-129	2.3E-03	1.8E-03	0.01	ND	－	－	ND	－	－	9.3E-04	2.6E-04	0.00	4.0E-01
	Te-132	2.2E-05	1.6E-05	0.00	ND	－	－	1.6E-04	2.2E-05	0.02	7.1E-04	6.5E-06	0.10	7.0E-03

※ 人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※ O.OE－Oとは、$O.O \times 10^{-O}$と同じ意味である。

平成23年3月25日
東京電力株式会社

発電所敷地内における空気中放射性物質の核種分析結果について

当社福島第二原子力発電所における空気中放射性物質の測定結果をお知らせいたします。

1．採取・測定条件

試料採取	場所	福島第二 MP－1	福島第二 MP－1		
	日時	3/24 9:47～9:55	3/24 17:46～17:54		
	採取方法	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取		
	風向・風速	－	－		
試料測定	日時	3/24 10:39～	3/25 0:40～		
	測定方法	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析		
	測定時間	500s	500s		

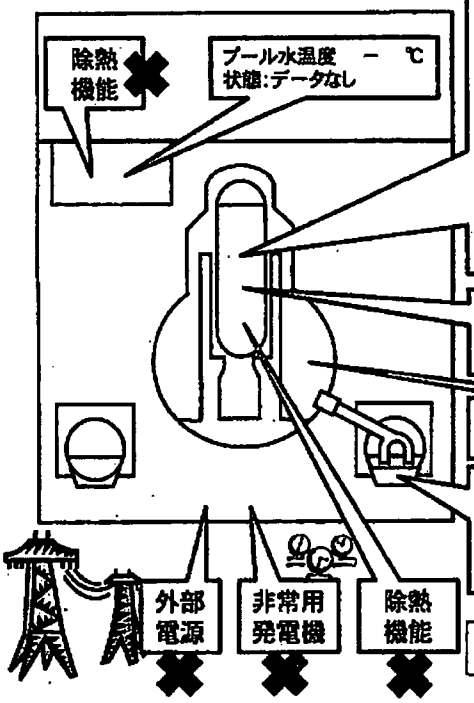
2．結果

	核種	3/24採取分①			3/24採取分②									③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm3)※
		①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)							
揮発性	Co-58	ND	－	－	ND	－	－							1.0E-02
	I-131	1.9E-04	1.5E-05	0.19	1.7E-04	1.4E-05	0.17							1.0E-03
	I-132	3.0E-04	2.5E-05	0.004	ND	－	－							7.0E-02
	I-133	ND	－	－	ND	－	－							5.0E-03
	Cs-134	2.8E-05	1.3E-05	0.01	1.6E-05	1.2E-05	0.01							2.0E-03
	Cs-137	3.0E-05	1.2E-05	0.01	2.9E-05	1.1E-05	0.01							3.0E-03
粒子状	Co-58	ND	－	－	ND	－	－							1.0E-02
	I-131	1.1E-04	7.3E-06	0.11	6.4E-05	2.1E-05	0.06							1.0E-03
	I-132	1.7E-04	1.0E-05	0.002	ND	－	－							7.0E-02
	Cs-134	2.1E-05	6.7E-06	0.01	ND	－	－							2.0E-03
	Cs-136	ND	－	－	ND	－	－							1.0E-02
	Cs-137	2.0E-05	6.6E-06	0.01	2.1E-05	1.7E-05	0.01							3.0E-03
その他の検出核種	Ru-106	ND	－	－	ND	－	－							6.0E-04
	Te-129	7.6E-04	1.3E-04	0.002	1.4E-02	9.5E-03	0.04							4.0E-01
	Te-129m	5.7E-04	1.7E-04	0.14	4.6E-04	2.8E-04	0.11							4.0E-03
	Te-132	5.6E-04	5.7E-06	0.08	3.5E-04	1.1E-05	0.05							7.0E-03

※ 人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※ ○.○E－○とは、○.○×$10^{-○}$と同じ意味である。

福島第一原子力発電所1号機の状況
（3月26日　06:00現在）



原子炉圧力A　0.454MPa※
原子炉圧力B　0.461Mpa※
状態:下降傾向
※:絶対圧に換算

原子炉水位A　－1650mm
原子炉水位B　－1600mm
状態:燃料頂部から上記水位が冠水していない。

原子炉水温度　－　℃
状態:データなし

原子炉圧力容器温度:
給水ノズル温度　209.4℃
圧力容器下部温度　144.3℃

原子炉格納容器圧力　0.270MPa
状態:下降傾向

S/P水温　－　℃
状態:データなし

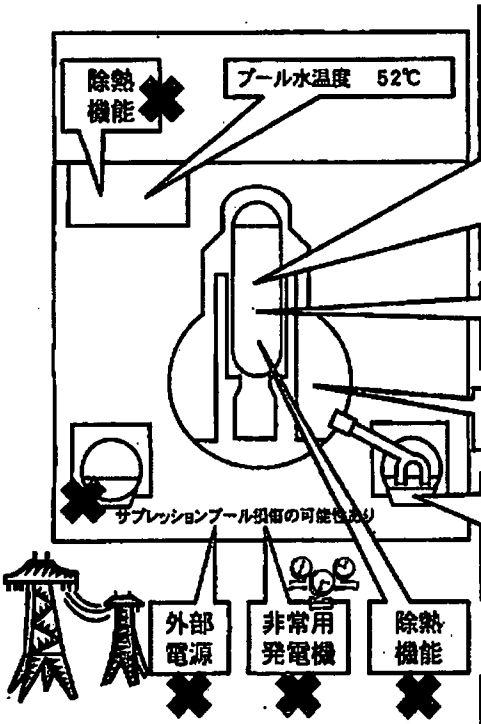
S/P圧力　0.270MPa
状態:下降傾向

発生後の主要なできごと

11日14:46　運転中、地震により自動停止
11日15:42　10条通報(全交流電源喪失)
11日16:36　15条事象の発生
（非常用炉心冷却装置注水不能）
12日01:20　15条事象の発生
（格納容器圧力異常上昇）
12日10:17　ベント開始
12日15:36　爆発音
12日20:20　海水及びホウ酸の炉心注入開始
23日02:33　消火系に加え、給水系を使うことにより炉心への注水量を増量（2m³/h→18m³/h）。9:00に給水系のみに切替(18m³/h→11m³/h)
24日11:30　中央制御室の照明復帰
25日15:37　淡水の炉心注入開始

現状:炉心への淡水注入を継続

福島第一原子力発電所2号機の状況
（3月26日　06:00現在）



原子炉圧力A　0.087MPa※
原子炉圧力B　0.087Mpa※
状態:大きな変動なし
※:絶対圧に換算

原子炉水位A　－1000mm
状態:燃料頂部から上記水位が冠水していない。

原子炉水温度　－　℃
状態:データなし

原子炉圧力容器温度:
給水ノズル温度　109℃
圧力容器下部温度　100℃

原子炉格納容器圧力　0.12MPa
状態:大きな変動なし

S/P水温　－　℃
状態:データなし

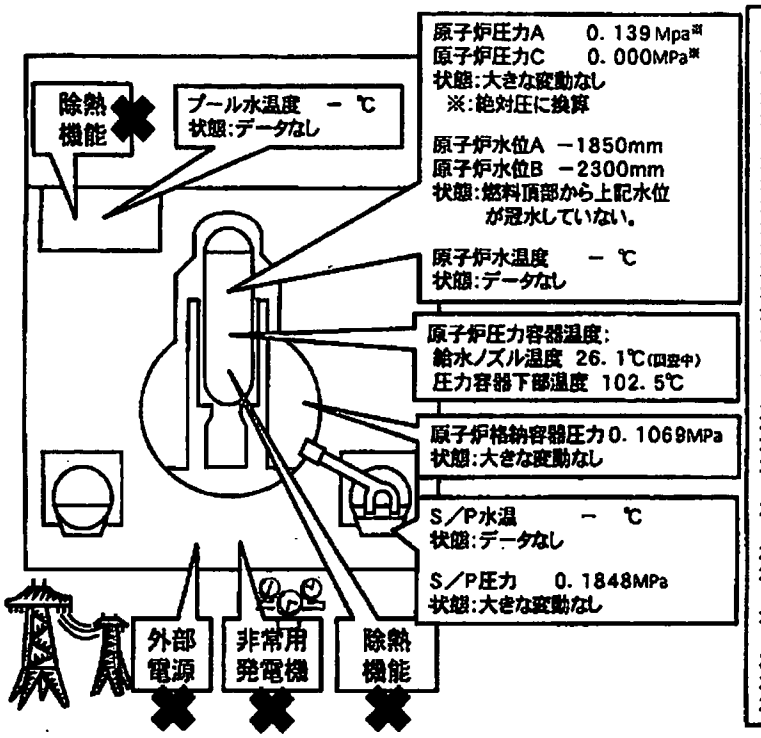
S/P圧力　－　MPa
状態:ダウンスケール

発生後の主要なできごと

11日14:46　運転中、地震により自動停止
11日15:42　10条通報(全交流電源喪失)
11日16:36　15条事象の発生
（非常用炉心冷却装置注水不能）
13日11:00　ベント開始
14日13:25　15条事象の発生
（原子炉冷却機能喪失）
14日16:34　海水の炉心注入開始
14日22:50　15条事象の発生
（格納容器圧力異常上昇）
15日0:02　ベント開始
15日06:10　爆発音発生
15日06:20頃　サプレッションプール(圧力抑制室)損傷の可能性あり
20日15:05～17:20　使用済燃料プール冷却系(FPC)から使用済燃料プール(SFP)に約40tの海水を注水
20日15:46　パワーセンター受電
21日18:22　白煙が発生。22日7:11にほとんど見えない程度に減少
22日16:07　SFPに約18tの海水を注水
25日10:30～12:19　FPCからSFPに海水を注水

現状:プール及び炉心への海水注入を継続

福島第一原子力発電所3号機の状況
（3月26日　06:00現在）



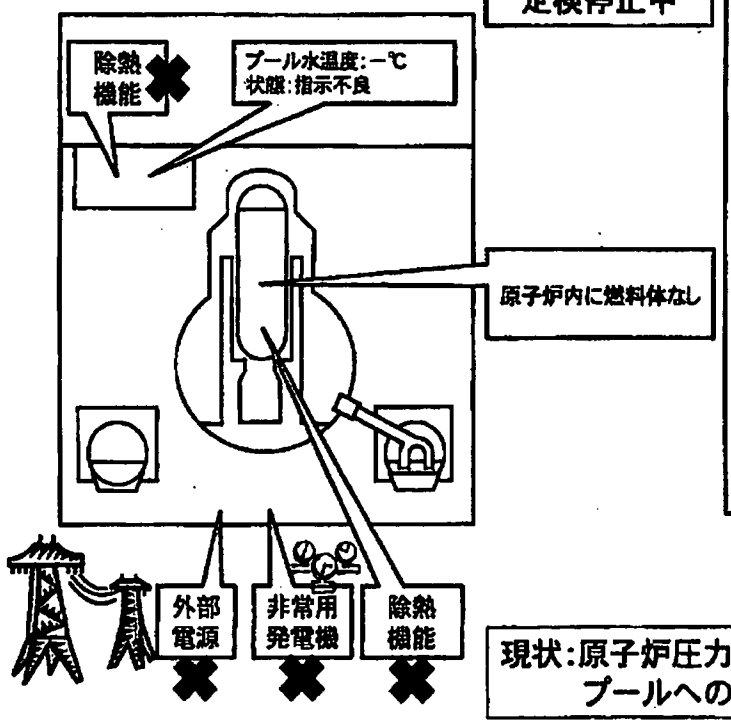
発生後の主要なできごと

11日14:46　運転中、地震により自動停止
11日15:42　10条通報(全交流電源喪失)
12日20:41　ベント開始
13日05:10　15条事象の発生
(非常用炉心冷却装置注水不能)
13日09:20　ベント開始
13日13:12　海水及びホウ酸の炉心注入開始
14日05:20　ベント開始
14日07:44　15条事象の発生(格納容器圧力異常上昇)
14日11:01　爆発音
16日08:30頃　白煙が発生
17日09:48～10:01　自衛隊ヘリによる放水
17日19:05～20:07　高圧放水車による散水
18日14時前～14:38　自衛隊消防車6台による地上放水
～14:45　米軍消防車1台による地上放水
19日0:30～01:10　東京消防庁ハイパーレスキュー隊放水
19日14:10～20日3:40　東京消防庁ハイパーレスキュー隊放水
20日 11:00　格納容器内圧力が上昇(320kPa)。その後、低下。
20日21:36～21日3:58　東京消防庁ハイパーレスキュー隊放水
21日15:55頃　灰色がかった煙が発生。17:55に煙が収まっていることを確認
22日15:10～16:00　東京消防庁ハイパーレスキュー隊及び大阪市消防局放水
22日22:43　中央制御室の照明復帰
23日11:03～13:20　使用済燃料プール冷却系(FPC)から使用済燃料プール(SFP)に約35tの海水を注水
23日16:20頃　黒煙が発生。23:30頃及び24日4:50に煙の発生が止んでいることを確認。
24日05:35～16:05　FPCからSFPに約120tの海水を注水
25日13:28～16:00　川崎市消防局による放水
25日18:02　淡水の炉心注入開始

現状:プールへの海水注入及び炉心への淡水注入を継続

福島第一原子力発電所4号機の状況
（3月26日　06:00現在）

定検停止中

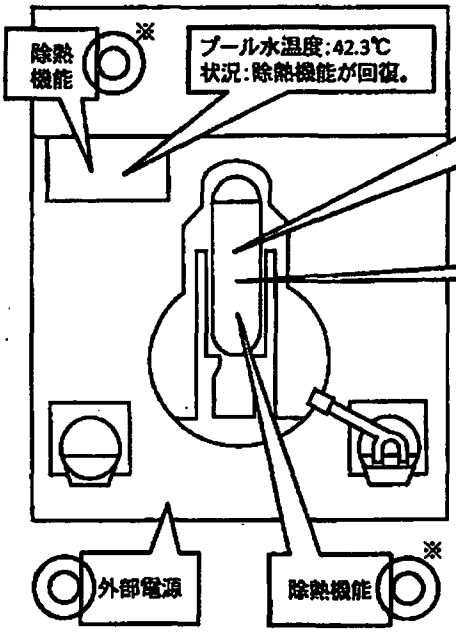


発生後の主要なできごと

地震発生時、定期検査により停止中
11日15:42　第10条通報(全交流電源喪失)
14日04:08　使用済燃料プール温度84℃
15日06:14　4Fの壁が一部破損の確認
15日09:38　3階部分で火災(12:25鎮火)
16日05:45　4号機で火災。事業者によると現場での火は確認できず(06:15)
20日08:21～9:40　自衛隊による使用済燃料プール(SFP)への放水
20日18:30頃～19:46　自衛隊によるSFPへの放水
21日06:37～08:41　自衛隊によるSFPへの放水
21日15:00頃　パワーセンターまでのケーブル敷設完了
22日10:35　パワーセンター受電
22日17:17～20:32　コンクリートポンプ車による放水
23日10:00～13:02　コンクリートポンプ車による放水
24日14:36～17:30　コンクリートポンプ車による放水
25日06:05～10:20　使用済燃料プール冷却系(FPC)からSFPに海水を注入
25日19:05～22:07　コンクリートポンプ車による放水

現状:原子炉圧力容器に燃料体が存在しない
プールへの海水注入を継続

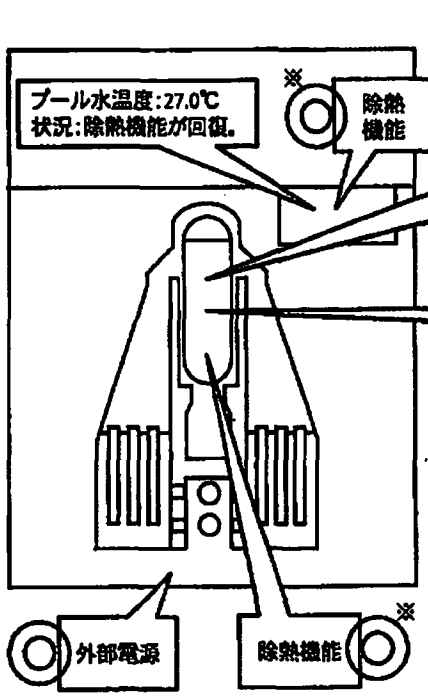
福島第一原子力発電所5号機の状況
（3月26日　06:00現在）



現状:20日14:30　冷温停止。
21日11:36　外部電源から受電開始。
23日17:24　残留熱除去海水系(RHRS)ポンプが、仮設から本設の電源への切り替えの際に自動停止。
24日16:14　RHRSポンプの修理完了。
24日16:35　冷却開始。

※　炉水とプール水を切替えて除熱

福島第一原子力発電所6号機の状況
（3月26日　06:00現在）



現状:20日19:27　冷温停止。
22日19:17　外部電源から受電開始。

※　炉水とプール水を切替えて除熱

3月26日　　福島第一(1F)

測定場所　①事務本館北(2号機より北西約0．5キロ)　②体育館付近(MP－5東側)(2号機より西北西約0．9キロ)
③西門付近（MP-5付近)(2号機より西約1．1キロ)　④正門付近前(MP-6付近)(2号機より西南西約1．0キロ)
⑤免震棟前(2号機より北西約0．5キロ)　⑥事務本館南側　⑦正門
MC:モニタリングカー　可搬:可搬型MP

測定場所	④																							
時間	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50
測定値(μSv/h)	184.4	184.0	183.8	183.2	182.8	182.7	182.5	182.4	182.3	182.1	181.8	180.8	179.9	178.1	176.6	175.5	174.4	173.0	172.4	171.0	170.7	169.8	169.2	169.5
中性子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
⑥本館南(μSv/h)	1,460	—	—	1,460	—	—	1,450	—	—	1,440	—	—	1,440	—	—	1,420	—	—	1,390	—	—	1,370	—	—
⑦正門(μSv/h)	241	—	—	238	—	—	235	—	—	236	—	—	233	—	—	230	—	—	224	—	—	221	—	—
③西門(μSv/h)	117	—	—	117	—	—	114	—	—	115	—	—	114	—	—	110	—	—	109	—	—	108	—	—
風向	北西	北西	西	北西	北北西	北北西	北西	北西	西	北西	北西	北西	北	北北西	北北西	北	北北西	北	北	北北西	北北西	北西	北西	北西
風速(m/s)	2.3	1.8	2.5	2.2	2.6	3.2	3.2	2.7	2.4	2.7	1.9	3.0	5.3	4.0	2.9	3.5	3.2	5.0	5.9	3.7	3.0	3.0	2.7	2.9

測定場所	④																							
時間	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:50
測定値(μSv/h)	169.2	169.1	168.1	167.8	167.1	167.1	166.9	167.1	167.4	167.6	167.8	168.0	169.0	168.0	168.3	169.2	169.6	169.7	169.5					
中性子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D					
⑥本館南(μSv/h)	1,370	—	—	1,360	—	—	1,360	—	—	1,370	—	—	1,370	—	—	1,380	—	—	1,370					
⑦正門(μSv/h)	219	—	—	217	—	—	218	—	—	217	—	—	221	—	—	221	—	—	219					
③西門(μSv/h)	107	—	—	105	—	—	105	—	—	105	—	—	108	—	—	105	—	—	106					
風向	北西	北西	北西	北西	北西	北	北西	北	北北西	北西	北西	北西	北西	西北西	北西	北西	北北西	北西	西北西					
風速(m/s)	2.6	2.8	2.6	2.3	2.7	3.2	6.1	3.4	3.0	2.7	2.7	2.9	2.5	2.7	2.7	2.5	2.2	2.4	2.3					

測定場所	④																							
時間	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50
測定値(μSv/h)																								
中性子																								
⑥本館南(μSv/h)																								
⑦正門(μSv/h)																								
③西門(μSv/h)																								
風向																								
風速(m/s)																								

3月25日　　福島第一(1F)

測定場所　①事務本館北(2号機より北西約0．5キロ)　②体育館付近(MP－5東側)(2号機より西北西約0．9キロ)
③西門付近 (MP-5付近)(2号機より西約1．1キロ)　④正門付近前(MP-6付近)(2号機より西南西約1．0キロ)
⑤免震棟前(2号機より北西約0．5キロ)　⑥事務本館南側　⑦正門
MC:モニタリングカー　可搬:可搬型MP

定場所	④																							
間	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15:50
測定値(μSv/h)	235.8	232.8	231.6	229.5	226.7	224.5	222.3	221.2	218.8	216.4	216.2	213.7	212.6	210.8	209.0	209.0	207.2	206.6	205.8	204.8	203.6	202.5	201.7	199.5
中性子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
⑥本館南(μSv/h)	1,730	—	—	1,720	—	—	1,920	—	—	2,460	—	—	2,060	—	—	1,950	—	—	1,920	—	—	1,820	—	—
⑦正門(μSv/h)	310	—	—	298	—	—	289	—	—	280	—	—	273	—	—	267	—	—	266	—	—	261	—	—
③西門(μSv/h)	202	—	—	191	—	—	173	—	—	162	—	—	158	—	—	149	—	—	145	—	—	142	—	—
風向	南南東	南東	南東	南	東南東	南東	南東	南東	南東	南東	南東	南東	東	南	南南東	南東	東	南東	南東	東	南	南東	南東	南東
風速(m/s)	3.7	3.5	3.3	3.0	2.9	3.3	2.6	2.5	3.0	2.7	2.8	2.7	2.9	2.9	2.7	2.6	2.1	2.5	2.2	2.2	2.2	2.1	2.6	1.8

定場所	④																							
間	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10	18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19:50
測定値(μSv/h)	197.4	195.9	197.6	196.1	197.2	196.8	196.0	195.9	194.9	195.4	194.5	195.6	194.7	194.4	193.6	199.5	194.4	193.6	199.5	261.7	221.9	225.0	216.4	243.0
中性子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
⑥本館南(μSv/h)	1,790	—	—	1,810	—	—	1,710	—	—	1,680	—	—	1,660	—	—	1,620	—	—	1,600	—	—	1,590	—	—
⑦正門(μSv/h)	257	—	—	256	—	—	252	—	—	249	—	—	247	—	—	317	—	—	324	—	—	272	—	—
③西門(μSv/h)	134	—	—	132	—	—	159	—	—	170	—	—	193	—	—	153	—	—	145	—	—	142	—	—
風向	南	東南東	南東	南東	南東	南	南東	南東	南東	東	東	東	東	東南東	東南東	南東	東南東	東南東	南東	北北東	東	東南東	南東	東
風速(m/s)	2.0	2.1	2.1	1.6	1.5	1.9	2.6	1.8	1.6	1.8	2.0	2.2	1.7	1.6	1.7	1.3	1.6	1.7	1.3	1.1	1.1	1.0	1.1	1.0

定場所	④																							
間	20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50
測定値(μSv/h)	213.9	206.3	205.2	228.4	205.9	239.6	204.9	199.5	195.4	194.4	193.0	192.3	191.4	190.4	190.1	189.6	189.2	187.6	187.0	186.4	186.0	185.3	184.8	184.7
中性子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
⑥本館南(μSv/h)	1,570	—	—	1,550	—	—	1,510	—	—	1,500	—	—	1,490	—	—	1,480	—	—	1,480	—	—	1,470	—	—
⑦正門(μSv/h)	309	—	—	289	—	—	282	—	—	254	—	—	249	—	—	244	—	—	243	—	—	238	—	—
③西門(μSv/h)	139	—	—	144	—	—	134	—	—	127	—	—	125	—	—	123	—	—	119	—	—	116	—	—
風向	東	南東	東南東	南東	北東	南東	北	北	北	北北東	北	北北西	北北西	北北西	北北西	北北西	北	北北西	北西	北西	北西	西	北西	北西
風速(m/s)	1.5	2.8	2.2	1.5	0.7	0.7	0.9	1.0	1.2	1.9	1.3	1.8	1.5	1.3	1.5	1.5	1.6	2.3	1.9	1.7	1.8	1.6	2.2	2.6

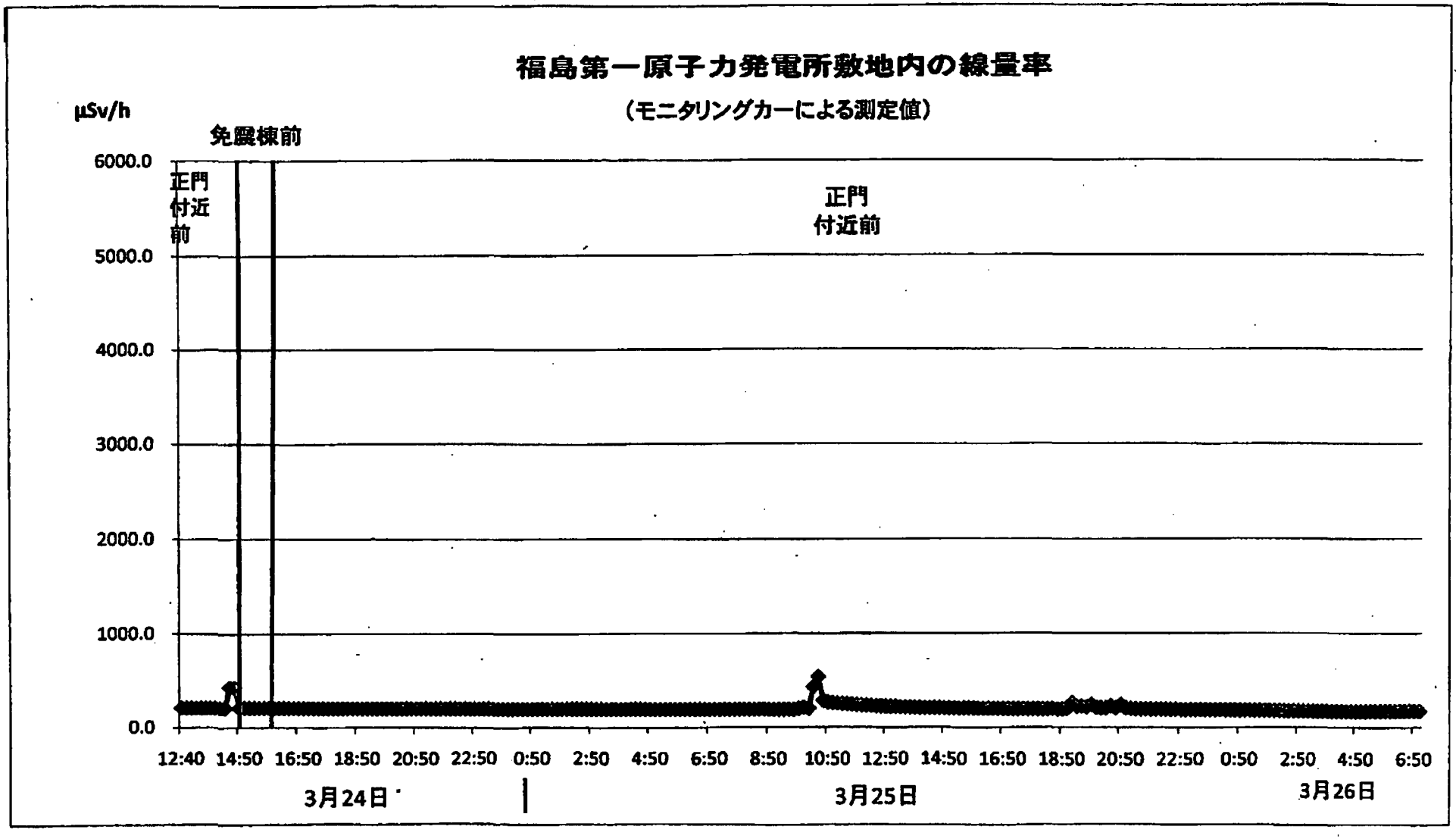
3月25日　　福島第一(1F)

測定場所　①事務本館北(2号機より北西約0．5キロ)　②体育館付近(MP－5東側)(2号機より西北西約0．9キロ)
③西門付近 (MP-5付近)(2号機より西約1．1キロ)　④正門付近前(MP-6付近)(2号機より西南西約1．0キロ)
⑤免震棟前(2号機より北西約0．5キロ)　⑥事務本館南側　⑦正門
MC:モニタリングカー　可搬:可搬型MP

定場所	④																							
時間	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50
測定値(μSv/h)	199.5	199.3	199.0	199.0	198.9	198.8	198.6	197.7	197.0	196.9	196.5	196.5	196.5	196.4	196.3	196.1	195.9	195.8	195.7	195.7	195.6	195.6	195.5	195.1
中性子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
⑥本館南(μSv/h)	1,720	—	—	1,710	—	—	1,680	—	—	1,670	—	—	1,660	—	—	1,660	—	—	1,640	—	—	1,630	—	—
⑦正門(μSv/h)	252	—	—	253	—	—	252	—	—	252	—	—	252	—	—	252	—	—	250	—	—	251	—	—
⑧西門(μSv/h)	119	—	—	118	—	—	118	—	—	119	—	—	120	—	—	120	—	—	118	—	—	115	—	—
風向	北西	西	西	西	北西	西北西	西	西南西	西	南西	南西	西	南東	南南西	北北西	西	西南西	西	西	西	西	北西	北西	北
風速(m/s)	1.3	0.8	0.8	0.5	0.8	0.7	1.0	0.7	0.5	0.5	0.6	0.6	0.5	0.5	0.7	0.5	0.5	0.7	1.0	1.0	0.8	1.8	1.1	1.0

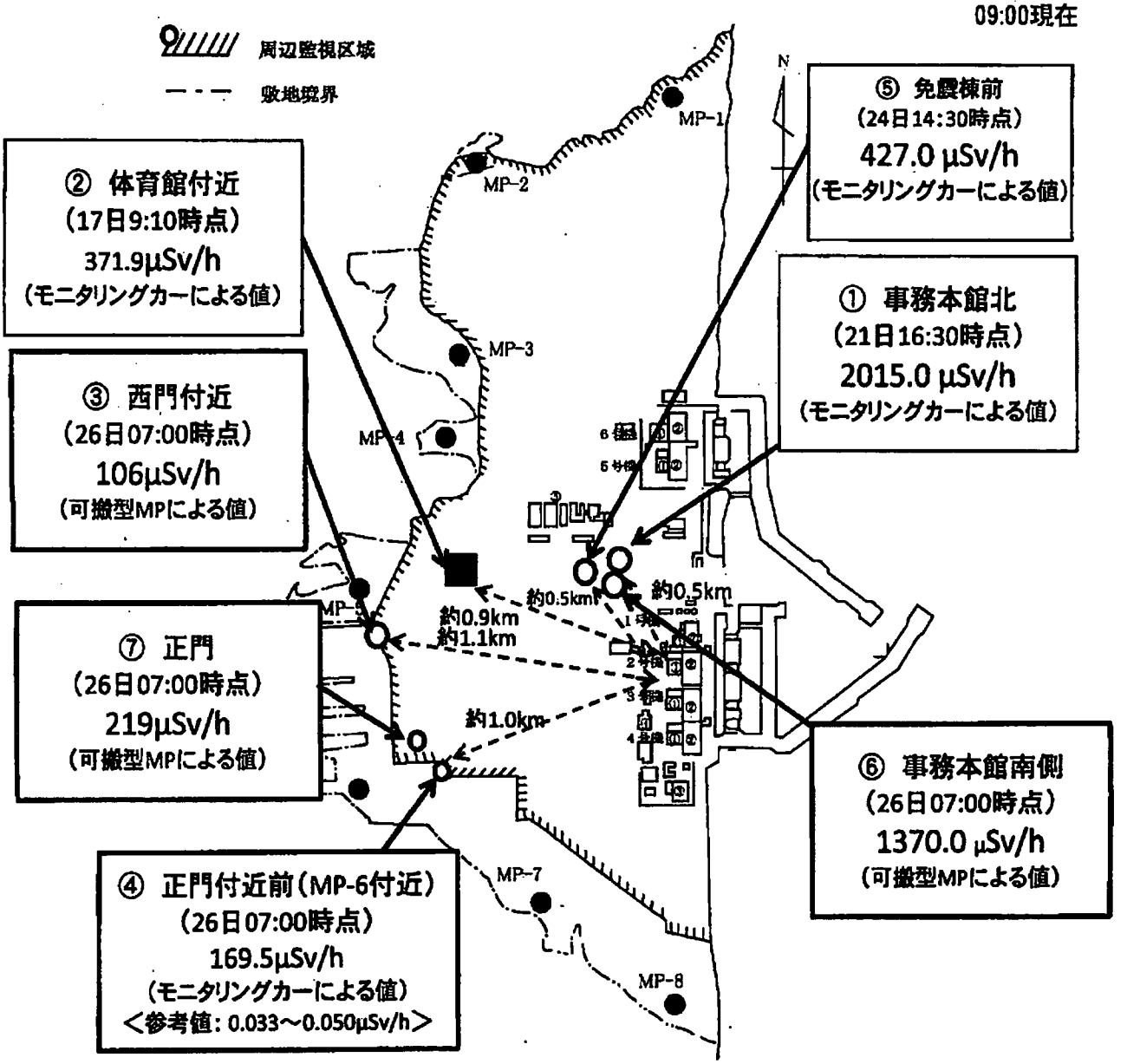
定場所	④																							
時間	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:50
測定値(μSv/h)	195.1	195.0	195.0	195.0	194.5	194.5	194.4	194.4	194.3	194.2	194.1	193.8	193.8	193.6	193.0	192.9	193.0	192.6	192.6	192.5	192.7	192.3	192.6	193.3
中性子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
⑥本館南(μSv/h)	1,620	—	—	1,610	—	—	1,610	—	—	1,600	—	—	1,600	—	—	1,590	—	—	1,580	—	—	1,580	—	—
⑦正門(μSv/h)	249	—	—	252	—	—	248	—	—	249	—	—	248	—	—	248	—	—	249	—	—	250	—	—
⑧西門(μSv/h)	119	—	—	117	—	—	116	—	—	119	—	—	118	—	—	117	—	—	116	—	—	117	—	—
風向	西	北西	北西	北北西	北	北	西北西	北北西	北西	北西	北西	西北西	西北西	西北西	西北西	西北西	西	北西	西	北北西	北北西	北北西	北北西	北
風速(m/s)	0.8	1.7	1.2	1.1	0.9	0.8	0.9	0.8	0.9	0.9	1.8	1.6	1.5	1.0	1.1	0.9	1.0	1.1	0.9	0.9	0.8	1.1	1.3	1.2

定場所	④																							
時間	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50
測定値(μSv/h)	193.8	193.9	193.3	196.3	196.3	192.8	192.6	192.3	192.5	193.7	191.7	204.2	216.2	203.2	430.8	540.0	286.5	264.7	259.0	255.2	250.9	248.6	244.3	240.0
中性子	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
⑥本館南(μSv/h)	1,570	—	—	1,560	—	—	1,530	—	—	1,520	—	—	1,510	—	—	1,510	—	—	1,590	—	—	1,570	—	—
⑦正門(μSv/h)	249	—	—	250	—	—	251	—	—	247	—	—	257	—	—	528	—	—	334	—	—	320	—	—
⑧西門(μSv/h)	115	—	—	116	—	—	115	—	—	115	—	—	115	—	—	126	—	—	263	—	—	235	—	—
風向	北北西	北	北	北	北東	北北東	北	北	北東	北	東	北東	東	東北東	東	東	東南東	東南東	東南東	南東	南東	東南東	南東	東
風速(m/s)	1.0	1.3	1.6	1.1	1.1	1.4	1.9	3.1	2.3	2.3	2.2	1.6	1.7	1.7	2.0	1.9	2.1	2.4	2.8	2.9	3.4	2.8	3.2	3.0


福島第一原子力発電所敷地内の線量率
（モニタリングカーによる測定値）
μSv/h
免震棟前
正門
付近
前
正門
付近前
6000.0
5000.0
4000.0
3000.0
2000.0
1000.0
0.0
12:40 14:50 16:50 18:50 20:50 22:50 0:50 2:50 4:50 6:50 8:50 10:50 12:50 14:50 16:50 18:50 20:50 22:50 0:50 2:50 4:50 6:50
3月24日
3月25日
3月26日

福島第一原子力発電所

2011/3/26
09:00現在



2011/3/26

福島第二(2F)(事業者のモニタリングポスト)

3月26日																							
ニタリングポスト	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3
MP1(μSv/h)	12.000	11.997	11.893	11.827	11.803	11.773	11.713	11.747	11.680	11.640	11.613	11.600	11.560	11.477	11.473	11.427	11.417	11.330	11.327	11.270	11.213	11.253	11.150	11.1
MP2(μSv/h)	6.910	6.897	6.823	6.780	6.763	6.790	6.757	6.743	6.727	6.693	6.700	6.643	6.617	6.593	6.577	6.517	6.510	6.460	6.447	6.390	6.353	6.347	6.353	6.3
MP3(μSv/h)	11.343	11.310	11.237	11.237	11.183	11.143	11.107	11.140	11.077	11.060	11.017	11.020	10.987	10.953	10.893	10.893	10.877	10.807	10.767	10.723	10.700	10.620	10.630	10.5
MP4(μSv/h)	8.537	8.567	8.523	8.480	8.477	8.460	8.430	8.413	8.393	8.413	8.393	8.343	8.363	8.320	8.313	8.280	8.230	8.200	8.163	8.150	8.120	8.070	8.113	8.0
MP5(μSv/h)	7.947	7.940	7.940	7.893	7.840	7.873	7.847	7.847	7.800	7.833	7.800	7.747	7.747	7.727	7.693	7.700	7.633	7.607	7.547	7.453	7.453	7.453	7.453	7.4
MP6(μSv/h)	9.150	9.100	9.090	9.083	9.040	9.033	9.000	8.977	8.983	8.970	8.957	8.937	8.917	8.857	8.870	8.813	8.827	8.737	8.697	8.643	8.610	8.563	8.550	8.5
MP7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠
風向	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北	北北西	北北西	北西	北北西	北北西	北西	北北西	北北西	北北西	北北
風速(m/s)	8.2	8.0	8.7	8.1	8.9	7.5	8.3	8.3	8.5	8.3	9.0	9.1	8.8	9.2	8.1	8.1	6.5	9.9	8.6	9.0	9.3	9.9	10.3	10

3月26日																							
ニタリングポスト	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:
MP1(μSv/h)	11.170	11.113	11.153	11.127	11.050	11.037	11.043	11.053	11.000	11.003	11.027	11.030	11.030	10.953	10.993	10.983	10.977	10.963	10.973					
MP2(μSv/h)	6.330	6.303	6.290	6.283	6.263	6.243	6.277	6.250	6.213	6.263	6.283	6.247	6.247	6.243	6.237	6.227	6.237	6.267	6.227					
MP3(μSv/h)	10.613	10.580	10.610	10.530	10.487	10.527	10.493	10.503	10.480	10.473	10.470	10.470	10.433	10.440	10.460	10.427	10.410	10.430	10.443					
MP4(μSv/h)	8.060	8.067	8.037	8.037	8.020	8.003	7.983	7.993	8.000	8.000	7.983	7.943	7.963	7.970	8.017	7.957	7.970	7.970	7.977					
MP5(μSv/h)	7.347	7.380	7.353	7.353	7.353	7.353	7.347	7.353	7.353	7.353	7.353	7.353	7.353	7.333	7.353	7.327	7.307	7.353	7.353					
MP6(μSv/h)	8.547	8.547	8.520	8.497	8.477	8.483	8.447	8.460	8.443	8.453	8.463	8.477	8.433	8.443	8.447	8.437	8.437	8.497	8.467					
MP7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測					
風向	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西	北北西					
風速(m/s)	10.8	9.7	9.7	10.2	9.5	10.1	9.2	9.1	9.4	8.8	8.8	10.0	8.6	8.6	9.2	9.4	9.7	8.5	8.3					

3月26日																							
ニタリングポスト	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:
MP1(μSv/h)																								
MP2(μSv/h)																								
MP3(μSv/h)																								
MP4(μSv/h)																								
MP5(μSv/h)																								
MP6(μSv/h)																								
MP7(μSv/h)																								
風向																								
風速(m/s)																								

第二(2F) (事業者のモニタリングポスト)

月25日																							
タリングポスト	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15
P1(μSv/h)	13.683	13.553	13.430	13.390	13.297	13.167	13.107	12.997	12.943	12.907	12.777	12.793	12.677	12.590	12.560	12.457	12.483	12.457	12.397	12.360	12.287	12.283	12.260	12.2
P2(μSv/h)	7.600	7.517	7.510	7.437	7.390	7.383	7.357	7.313	7.303	7.267	7.237	7.220	7.193	7.187	7.147	7.133	7.107	7.080	7.057	7.060	7.013	7.020	7.010	6.9
P3(μSv/h)	12.233	12.147	12.103	12.033	11.983	11.967	11.920	11.853	11.827	11.803	11.737	11.737	11.673	11.640	11.627	11.597	11.610	11.540	11.527	11.540	11.497	11.450	11.453	11.4
P4(μSv/h)	9.390	9.310	9.243	9.243	9.223	9.183	9.157	9.117	9.107	9.083	9.040	9.017	9.013	8.973	8.960	8.960	8.930	8.873	8.860	8.847	8.833	8.833	8.820	8.8
P5(μSv/h)	8.820	8.767	8.727	8.673	8.640	8.627	8.627	8.580	8.533	8.527	8.527	8.447	8.427	8.427	8.373	8.387	8.333	8.333	8.280	8.293	8.287	8.233	8.233	8.2
P6(μSv/h)	10.013	9.923	9.910	9.870	9.827	9.783	9.770	9.777	9.723	9.693	9.697	9.677	9.677	9.630	9.593	9.577	9.600	9.543	9.510	9.483	9.483	9.450	9.463	9.4
P7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	5.300	欠測	欠測	欠測	欠測	欠
風向	東南東	南東	南東	東南東	南東	南東	南南東	南東	東南東	南東	南東	南東	南南東	南東	南東	南東	南東	南東	南南東	東南東	東	東	東	南
風速(m/s)	4.2	3.1	3.2	2.5	4.8	5.3	3.4	3.3	2.7	2.5	3.7	3.4	2.1	3.7	2.2	2.7	3.2	3.0	2.1	2.2	2.0	1.1	2.5	2

月25日																							
タリングポスト	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10	18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19
P1(μSv/h)	12.200	12.147	12.080	12.033	12.017	12.000	11.980	11.933	11.937	11.907	11.863	11.873	11.840	11.800	11.800	11.763	11.757	11.743	11.693	11.673	11.680	11.653	11.577	11.5
P2(μSv/h)	7.000	6.970	6.940	6.943	6.920	6.917	6.907	6.870	6.890	6.830	6.837	6.853	6.830	6.820	6.813	6.820	6.776	6.790	6.757	6.787	6.733	6.747	6.693	6.6
P3(μSv/h)	11.383	11.407	11.370	11.343	11.300	11.293	11.253	11.267	11.240	11.247	11.197	11.217	11.233	11.173	11.170	11.177	11.183	11.163	11.160	11.100	11.077	11.113	11.033	10.9
P4(μSv/h)	8.753	8.763	8.757	8.727	8.687	8.727	8.693	8.687	8.647	8.673	8.630	8.627	8.680	8.653	8.613	8.590	8.627	8.590	8.600	8.623	8.577	8.573	8.467	8.4
P5(μSv/h)	8.193	8.233	8.187	8.153	8.140	8.140	8.133	8.133	8.033	8.133	8.127	8.053	8.040	8.040	8.040	8.040	8.040	8.040	8.033	7.993	8.040	7.987	7.940	7.8
P6(μSv/h)	9.413	9.407	9.413	9.393	9.400	9.340	9.333	9.303	9.313	9.300	9.307	9.307	9.270	9.293	9.273	9.250	9.260	9.220	9.233	9.227	9.210	9.193	9.100	9.0
P7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠
風向	南東	南東	南南東	南南東	東南東	東	東	東	東南東	東南東	東	南東	東	南南東	東南東	東	東	西	北東	東北東	東	東北東	東北東	東北
風速(m/s)	2.8	2.6	1.8	3.3	2.5	3.5	4.3	1.7	1.8	2.0	2.9	1.7	0.8	1.1	1.9	1.9	3.2	2.1	0.4	0.8	2.4	2.5	3.3	4

月25日																							
タリングポスト	20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:
P1(μSv/h)	11.530	11.530	11.420	11.363	11.380	11.377	11.337	11.327	11.317	11.300	11.307	11.313	11.277	12.673	13.247	12.557	12.433	12.280	12.597	12.240	12.303	12.123	12.033	11.9
P2(μSv/h)	6.607	6.557	6.523	6.490	6.517	6.473	6.483	6.470	6.433	6.493	6.467	6.463	6.473	8.323	8.137	7.173	7.180	7.063	7.093	7.023	7.093	7.013	6.897	6.87
P3(μSv/h)	10.937	10.853	11.840	10.823	10.777	10.773	10.757	10.737	10.810	10.737	10.740	10.750	10.733	12.833	12.213	11.607	11.780	11.680	11.557	11.457	11.480	11.453	11.323	11.3
P4(μSv/h)	8.427	8.363	8.343	8.280	8.263	8.263	8.223	8.253	8.270	8.283	8.257	8.257	8.267	9.620	9.103	8.657	8.853	8.760	8.737	8.593	8.637	8.623	8.567	8.53
P5(μSv/h)	7.840	7.740	7.647	7.647	7.647	7.647	7.647	7.647	7.647	7.647	7.647	7.647	7.647	9.100	8.433	8.033	8.193	8.120	8.093	7.987	8.033	8.033	7.940	7.94
P6(μSv/h)	9.043	8.967	8.877	8.870	8.840	8.803	8.793	8.810	8.823	8.820	8.803	8.820	8.830	9.623	9.757	9.253	9.297	9.187	9.140	9.170	9.190	9.193	9.120	9.10
P7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠
風向	東	東北東	北東	北北東	北東	北東	北北東	北北東	北	北	北	北	北北西	北	北	北西	北西	北北西	北北西	北北西	北北西	北北西	北北西	北北
風速(m/s)	3.6	5.0	2.9	5.3	3.7	4.2	5.4	6.2	5.3	4.8	5.2	5.2	6.2	6.7	6.1	6.6	7.7	7.2	6.0	6.8	7.5	7.2	6.9	7

第二(2F)(事業者のモニタリングポスト)

月25日																							
ニタリングポスト	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3
P1(μSv/h)	12.297	12.297	12.280	12.287	12.277	12.227	12.247	12.217	12.220	12.200	12.237	12.210	12.190	12.177	12.170	12.203	12.173	12.120	12.133	12.143	12.097	12.133	12.100	12.0
P2(μSv/h)	7.220	7.217	7.213	7.187	7.193	7.183	7.173	7.170	7.183	7.167	7.150	7.177	7.173	7.180	7.140	7.150	7.143	7.113	7.133	7.137	7.113	7.100	7.097	7.1
P3(μSv/h)	11.890	11.933	11.887	11.887	11.890	11.887	11.847	11.853	11.843	11.847	11.867	11.827	11.840	11.803	11.857	11.810	11.760	11.770	11.753	11.810	11.783	11.750	11.760	11.6
P4(μSv/h)	9.293	9.307	9.307	9.297	9.277	9.230	9.240	9.267	9.213	9.247	9.200	9.200	9.207	9.203	9.200	9.180	9.173	9.197	9.133	9.183	9.180	9.143	9.130	9.1
P5(μSv/h)	8.627	8.627	8.627	8.627	8.627	8.627	8.627	8.627	8.627	8.627	8.627	8.627	8.613	8.627	8.567	8.533	8.533	8.533	8.533	8.527	8.533	8.533	8.493	8.5
P6(μSv/h)	9.877	9.827	9.870	9.823	9.803	9.800	9.823	9.820	9.803	9.827	9.793	9.803	9.783	9.743	9.777	9.757	9.767	9.717	9.727	9.733	9.713	9.727	9.700	9.6
P7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠
風向	西北西	西北西	西北西	西北西	南西	南南西	南南西	南南東	南南西	南南東	東	北北西	北西	北北西	北	北	北	北	北	北北西	北北西	北北西	北北西	北北
風速(m/s)	4.7	4.4	3.4	1.9	2.5	2.8	1.9	0.9	0.9	0.8	0.4	0.9	3.9	4.1	2.4	2.2	3.0	2.6	2.6	3.3	3.7	4.7	5.2	3

月25日																							
ニタリングポスト	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:
P1(μSv/h)	12.087	12.093	12.070	12.087	12.043	12.033	12.067	12.020	12.033	13.777	12.993	18.173	12.717	13.137	13.803	12.203	12.093	12.067	12.040	12.010	12.047	12.010	12.013	12.0
P2(μSv/h)	7.090	7.093	7.077	7.080	7.060	7.063	7.067	7.030	7.053	7.290	7.293	10.597	7.447	7.297	7.153	7.070	7.057	7.040	7.007	6.997	7.027	7.003	6.983	7.0
P3(μSv/h)	11.677	11.680	11.677	11.667	11.680	11.690	11.687	11.647	11.710	11.660	11.670	11.663	12.203	11.687	11.657	11.613	11.640	11.610	11.550	11.573	11.543	11.567	11.543	11.5
P4(μSv/h)	9.113	9.133	9.090	9.090	9.087	9.107	9.073	9.067	9.060	9.057	9.063	9.077	10.970	9.577	9.183	9.173	9.147	9.110	9.143	9.120	9.117	9.093	9.057	9.0
P5(μSv/h)	8.533	8.480	8.447	8.473	8.473	8.473	8.433	8.433	8.433	8.427	8.433	8.433	10.520	9.407	8.720	8.667	8.627	8.627	8.567	8.560	8.527	8.533	8.533	8.5
P6(μSv/h)	9.717	9.670	9.683	9.663	9.633	9.660	9.667	9.667	9.623	9.620	9.613	9.640	11.540	10.490	9.743	9.667	9.643	9.607	9.617	9.567	9.593	9.607	9.570	9.5
P7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠
風向	北西	北北西	北北西	北西	北西	北西	北西	北西	北	北北西	西北西	北西	北西	北西	北西	北西	北西	北西	北西	北北西	北西	北西	北北西	北北
風速(m/s)	4.3	5.0	5.1	5.7	6.1	6.3	5.5	1.1	1.1	2.1	4.0	2.5	2.2	2.0	2.6	2.5	2.2	2.5	2.2	3.3	3.5	3.6	3.5	3

月25日																							
ニタリングポスト	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:
P1(μSv/h)	12.040	18.670	21.737	24.850	18.083	17.560	17.270	16.780	16.937	16.317	16.040	15.727	15.543	15.277	15.040	14.877	14.737	14.507	14.423	14.283	14.107	14.030	13.870	13.7
P2(μSv/h)	7.020	9.087	14.597	21.447	9.993	9.200	9.117	8.793	9.190	8.757	8.573	8.447	8.290	8.187	8.093	8.043	7.977	7.880	7.837	7.797	7.763	7.707	7.667	7.6
P3(μSv/h)	11.567	11.663	15.243	17.277	17.533	14.967	13.917	13.703	13.870	13.583	13.360	13.300	13.110	12.990	12.880	12.817	12.680	12.613	12.553	12.503	12.397	12.423	12.327	12.2
P4(μSv/h)	9.047	9.083	12.067	13.833	13.113	11.620	10.737	10.587	10.540	10.407	10.170	10.150	10.077	9.973	9.853	9.763	9.707	9.687	9.590	9.550	9.550	9.507	9.473	9.4
P5(μSv/h)	8.527	8.533	10.887	14.713	13.507	11.373	10.573	10.287	10.153	10.073	9.787	9.607	9.700	9.607	9.407	9.287	9.220	9.167	9.120	9.087	9.020	8.973	8.920	8.8
P6(μSv/h)	9.547	9.570	11.673	13.677	14.300	11.567	11.173	11.023	10.933	10.897	10.667	10.660	10.647	10.573	10.463	10.380	10.323	10.310	10.213	10.180	10.167	10.140	10.117	10.0
P7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠
風向	北	北	北	北北西	北北東	北北東	北北東	北東	北東	東北東	北東	東北東	北東	東北東	北東	東	東	東南東	東	東南東	東南東	東南東	南東	南
風速(m/s)	3.5	2.3	2.2	3.6	5.1	5.1	5.0	4.3	3.3	4.1	5.3	4.1	4.5	2.1	2.6	3.1	3.6	3.1	3.5	3.1	3.2	3.3	1.4	3.

福島第二原子力発電所

2011/3/26
09:00現在

MP1：10.973μSv/h
(参考値:0.035～0.054μSv/h)

MP2：6.227μSv/h
(参考値:0.042～0.062μSv/h)

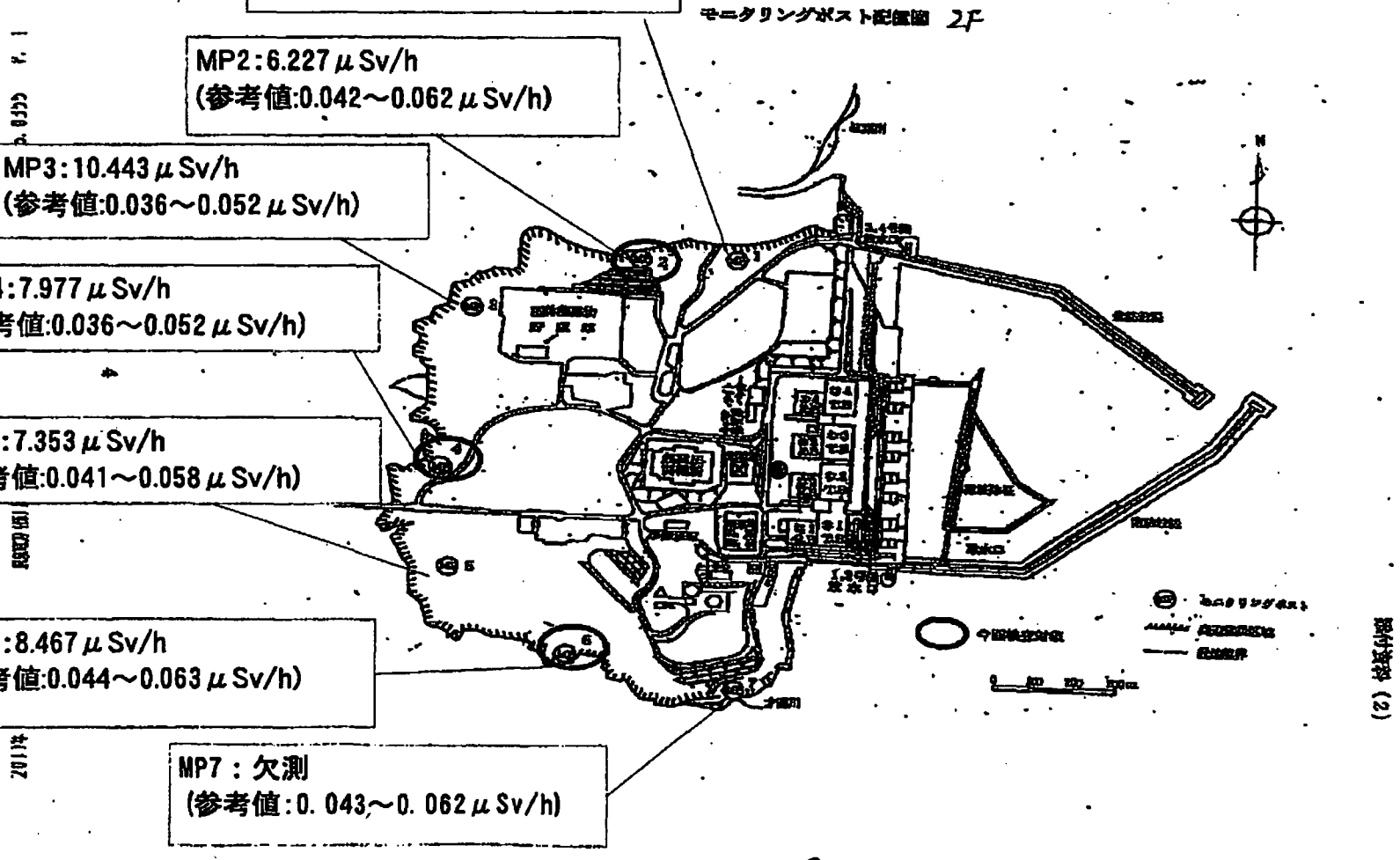
MP3：10.443μSv/h
(参考値:0.036～0.052μSv/h)

MP4：7.977μSv/h
(参考値:0.036～0.052μSv/h)

MP5：7.353μSv/h
(参考値:0.041～0.058μSv/h)

MP6：8.467μSv/h
(参考値:0.044～0.063μSv/h)

MP7：欠測
(参考値:0.043～0.062μSv/h)



各発電所等の環境モニタリング結果

単位：μSv/h

通常の平常値の範囲	会社名	発電所名	3月25日											
			0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00
0.023～0.027	北海道電力㈱	泊発電所	0.026	0.027	0.026	0.026	0.026	0.029	0.031	0.038	0.029	0.031	0.028	0.026
0.024～0.060	東北電力㈱	女川原子力発電所	1.100	1.100	1.100	1.100	1.100	1.000	1.000	1.000	1.000	1.000	1.00	1.00
0.012～0.060		東通原子力発電所	0.017	0.017	0.017	0.017	0.018	0.017	0.021	0.019	0.018	0.017	0.017	0.017
0.033～0.050	東京電力㈱	福島第一原子力発電所※	199.5	198.6	196.5	195.7	196.1	194.4	193.8	192.6	193.8	192.6	216.2	259
0.036～0.052		福島第二原子力発電所	11.890	11.847	11.840	11.753	11.677	11.687	12.203	11.550	11.567	13.917	13.11	12.553
0.011～0.159		柏崎刈羽原子力発電所	0.067	0.065	0.065	0.065	0.070	0.066	0.065	0.066	0.065	0.067	0.065	0.065
0.036～0.053	日本原子力発電㈱	東海第二発電所	0.920	0.921	0.918	0.907	0.911	0.910	0.907	0.903	0.905	0.899	0.904	0.903
0.039～0.110		敦賀発電所	0.073	0.073	0.073	0.073	0.074	0.073	0.073	0.073	0.073	0.074	0.074	0.072
0.064～0.108	中部電力㈱	浜岡原子力発電所	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.081	0.081	0.081	0.081	0.080
0.0207～0.132	北陸電力㈱	志賀原子力発電所	0.036	0.038	0.034	0.033	0.032	0.033	0.032	0.032	0.035	0.033	0.033	0.033
0.028～0.130	中国電力㈱	島根原子力発電所	0.027	0.030	0.030	0.030	0.031	0.031	0.037	0.034	0.040	0.041	0.034	0.031
0.070～0.077	関西電力㈱	美浜発電所	0.074	0.071	0.072	0.072	0.072	0.073	0.070	0.073	0.071	0.072	0.073	0.071
0.045～0.047		高浜発電所	0.042	0.042	0.043	0.043	0.042	0.043	0.042	0.043	0.043	0.044	0.043	0.043
0.036～0.040		大飯発電所	0.035	0.035	0.036	0.037	0.037	0.038	0.037	0.036	0.036	0.035	0.035	0.036
0.011～0.080	四国電力㈱	伊方発電所	0.014	0.013	0.014	0.014	0.014	0.014	0.014	0.014	0.015	0.015	0.014	0.015
0.023～0.087	九州電力㈱	玄海原子力発電所	0.026	0.025	0.027	0.031	0.028	0.029	0.028	0.027	0.025	0.026	0.027	0.027
0.034～0.120		川内原子力発電所	0.037	0.037	0.038	0.036	0.034	0.036	0.037	0.038	0.040	0.038	0.039	0.037
0.009～0.069	日本原燃㈱	六ヶ所 再処理事業所	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
0.009～0.071		六ヶ所 埋設事業所	0.021	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020

※福島第一原子力発電所については、作業状況により若干測定時間のずれ及び測定位置の変更が生じることもございます。

通常の平常値の範囲	会社名	発電所名	3月25日											
			12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
0.023～0.027	北海道電力㈱	泊発電所	0.025	0.025	0.026	0.028	0.026	0.026	0.024	0.025	0.033	0.034		
0.024～0.060	東北電力㈱	女川原子力発電所	1.00	0.99	0.99	0.99	0.98	0.98	0.97	0.97	0.97	0.97		
0.012～0.060		東通原子力発電所	0.017	0.018	0.018	0.017	0.017	0.017	0.017	0.017	0.017	0.017		
0.033～0.050	東京電力㈱	福島第一原子力発電所※	235.8	222.3	212.6	205.8	197.4	195	194.7	199.5	213.9	204.9		
0.036～0.052		福島第二原子力発電所	12.233	11.920	11.673	11.527	11.383	11.253	11.233	11.160	10.937	10.757		
0.011～0.159		柏崎刈羽原子力発電所	0.066	0.067	0.065	0.066	0.065	0.066	0.067	0.074	0.078	0.073		
0.036～0.053	日本原子力発電㈱	東海第二発電所	0.903	0.899	0.899	0.887	0.882	0.881	0.878	0.874	0.865	0.866		
0.039～0.110		敦賀発電所	0.073	0.073	0.074	0.075	0.073	0.080	0.091	0.090	0.078	0.074		
0.064～0.108	中部電力㈱	浜岡原子力発電所	0.080	0.080	0.080	0.081	0.086	0.083	0.081	0.081	0.083	0.081		
0.0207～0.132	北陸電力㈱	志賀原子力発電所	0.032	0.034	0.034	0.034	0.042	0.047	0.040	0.035	0.033	0.033		
0.028～0.130	中国電力㈱	島根原子力発電所	0.028	0.030	0.031	0.029	0.029	0.029	0.029	0.033	0.039	0.037		
0.070～0.077	関西電力㈱	美浜発電所	0.073	0.072	0.072	0.071	0.074	0.079	0.087	0.079	0.074	0.073		
0.045～0.047		高浜発電所	0.043	0.044	0.044	0.043	0.044	0.050	0.045	0.044	0.043	0.050		
0.036～0.040		大飯発電所	0.035	0.034	0.035	0.035	0.035	0.045	0.042	0.038	0.036	0.042		
0.011～0.080	四国電力㈱	伊方発電所	0.014	0.014	0.013	0.013	0.014	0.014	0.014	0.013	0.014	0.013		
0.023～0.087	九州電力㈱	玄海原子力発電所	0.026	0.026	0.026	0.027	0.027	0.027	0.027	0.025	0.026	0.027		
0.034～0.120		川内原子力発電所	0.035	0.037	0.037	0.038	0.036	0.039	0.037	0.036	0.038	0.036		
0.009～0.069	日本原燃㈱	六ヶ所 再処理事業所	0.017	0.016	0.016	0.016	0.016	0.016	0.017	0.017	0.016	0.016		
0.009～0.071		六ヶ所 埋設事業所	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.019		

※福島第一原子力発電所については、作業状況により若干測定時間のずれ及び測定位置の変更が生じることもございます。

東京電力福島第一原子力発電所敷地内の核種分析結果

採取方法:モニタリングカーにてダスト採取
測定方法:試料を2Fに持ち込みGe半導体型核種分析装置にて分析(1日1回測定)
測定時間:500秒

核種		3月19日 事務本館北側 採取時間(11:53～12:13)＊放水前 測定時間(14:12～)			3月20日 事務本館北側 採取時間(1:41～2:01) 測定時間(13:28～)			3月21日 事務本館北側 採取時間(10:19～10:39) 測定時間(13:28～)			③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm³)※
		①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	空気中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	空気中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	空気中濃度限度に対する割合 (①/③)	
揮発性	I-131	5.940E-03	3.374E-05	5.94	2.303E-03	1.256E-05	2.30	1.516E-03	1.134E-05	1.52	1.0E-03
	I-132	2.203E-03	8.816E-05	0.03	N.D			2.539E-04	2.702E-05	0.00	7.0E-02
	I-133	3.773E-05	2.861E-05	0.01	N.D			N.D			5.0E-03
粒子状	Cs-134	2.165E-05	1.692E-05	0.01	2.840E-05	4.755E-06	0.01	3.383E-05	5.364E-06	0.02	2.0E-03
	Cs-136	N.D			5.629E-06	5.447E-06	0.001	4.529E-06	3.321E-06	0.0005	1.0E-02
	Cs-137	2.437E-05	1.771E-05	0.01	2.892E-05	5.003E-06	0.01	3.801E-05	4.671E-06	0.01	3.0E-03

核種		3月22日 正門 採取時間(1:10～1:30) 測定時間(14:50～)			3月23日 正門 採取時間(2:01～2:21) 測定時間(14:54～)						③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm³)※
		①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	空気中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	空気中濃度限度に対する割合 (①/③)				
揮発性	I-131	2.2E-03	1.569E-05	2.24	6.7E-04	9.6E-06	0.67				1.0E-03
	I-132	N.D			3.0E-04	8.8E-06	0.00				7.0E-02
	I-133	N.D			N.D						5.0E-03
粒子状	Co-58	N.D			5.1E-06	5.1E-06	0.00				1.0E-02
	Cs-134	1.591E-05	5.853E-06	0.01	1.7E-05	4.2E-06	0.01				2.0E-03
	Cs-136	N.D			3.0E-06	2.7E-06	0.00				1.0E-02
	Cs-137	1.889E-05	5.295E-06	0.01	1.3E-05	4.2E-06	0.00				3.0E-03
その他	Te-129	N.D			2.3E-01	1.2E-01	0.58				4.0E-01
	Te-132	6.680E-05	1.116E-05	0.01	4.3E-04	4.5E-06	0.06				7.0E-03
	Ce-144	6.680E-05	1.116E-05	0.10	1.3E-03	3.7E-04	1.86				7.0E-04

※人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度

核種		3月24日 免震棟前 採取時間(14:16～14:36) 測定時間(17:41～)			③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm³)※
		①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	空気中濃度限度に対する割合 (①/③)	
揮発性	Co-58	6.5E-06	3.4E-05	0.007	1.0E-02
	I-131	2.2E-03	3.5E-05	2.2	1.0E-03
	I-132	8.4E-03	9.8E-05	0.1	7.0E-02
	I-133	N.D			5.0E-03
	Cs-134	N.D			2.0E-03
	Cs-137	3.4E-05	3.2E-05		3.0E-03
粒子状	Co-58	1.6E-04	3.5E-05	0.02	1.0E-02
	I-131	2.3E-03	2.7E-05	2.3	1.0E-03
	I-132	1.6E-02	6.8E-05	0.2	7.0E-02
	Cs-134	N.D			2.0E-03
	Cs-136	N.D			1.0E-02
	Cs-137	3.0E-06	2.8E-06	0.01	3.0E-03
その他	Ru-105	1.1E-04	7.1E-05	0.001	8.0E-02
	Ru-106	1.8E-03	2.3E-04	3.0	6.0E-04
	Te-132	8.1E-05	2.0E-05	0.01	7.0E-03
	Ba-142	3.7E+00	9.6E-01	6.2	6.0E-01

採取方法：海水を汲みあげ採取
測定方法：試料500mlを福島第二に運搬し、Ge半導体検出器で測定
測定時間：1，000秒

核種	3月21日 14:30 1F南放水口付近（1～4u放水口から南側約330m地点）			3月22日 6:30 1F南放水口付近（1～4u放水口から南側約330m地点）			3月23日 8:50 1F南放水口付近（1～4u放水口から南側約330m地点）			③周辺監視区域外の水中の濃度限度 (Bq/cm³)
	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	
Co-58	5.955E-02	3.349E-02	0.1	1.668E-02	2.138E-02	0.0	5.0E-02	2.6E-02	-	1E+00
I-131	5.066E+00	4.245E-02	126.7	1.190E+00	2.293E-02	29.8	5.9E+00	3.6E-02	146.9	4E-02
I-132	2.136E+00	1.925E-01	0.7	1.362E+00	7.721E-02	0.5	5.4E+00	1.4E-01	1.8	3E+00
Cs-134	1.486E+00	4.030E-02	24.8	1.504E-01	1.769E-02	2.5	2.5E-01	2.7E-02	4.2	6E-02
Cs-136	2.132E-01	2.368E-02	0.7	2.350E-02	1.056E-02	0.1	2.5E-02	2.4E-02	0.1	3E-01
Cs-137	1.484E+00	4.204E-02	16.5	1.535E-01	1.626E-02	1.7	2.5E-01	2.7E-02	2.8	9E-02
Zr-95							2.3E-01	7.8E-02	0.3	9E-01
Ru-105							8.7E-01	6.2E-01	0.3	3E+00
Ru-106							3.7E-01	2.0E-01	3.7	1E-01
Te-129							4.0E+00	3.9E+00	0.4	1E+01
Te-132							4.0E-02	3.6E-02	2.0	2E-01
La-140							1.3E-02	1.0E-02	0.0	4E-01

核種	3月23日 9:10 1F 5～6放水口北側（5～6u放水口から北側約30m地点）			3月24日 10:25 1F南放水口付近（1～4u放水口から南側約330m地点）			3月24日 10:40 1F 5～6放水口北側（5～6u放水口から北側約30m地点）			③周辺監視区域外の水中の濃度限度 (Bq/cm³)
	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	
Co-58	5.000E-02	3.100E-02	0.1							1E+00
I-131	2.700E+00	2.500E-02	66.6	4.200E+00	2.300E-02	103.9	9.500E-01	1.300E-02	23.7	4E-02
I-132	2.900E+00	7.700E-02	1.0	1.700E+00	4.300E-01	0.6	4.500E-01	2.100E-01	0.2	3E+00
Cs-134	1.800E+00	2.400E-02	29.9	4.500E-01	1.700E-02	7.4	1.100E-01	9.200E-03	1.8	6E-02
Cs-136	2.300E-01	2.500E-02	0.8	6.100E-02	1.700E-02	0.2	1.100E-02	6.500E-03	0.0	3E-01
Cs-137	1.900E+00	2.400E-02	21.4	4.400E-01	1.500E-02	4.9	1.100E-01	8.700E-03	1.2	9E-02
Tc-99m	8.300E-02	2.500E-02	0.0							4E+01
Te-129	7.300E+00	3.800E+00	0.7							1E+01
Te-129m	1.300E+00	6.100E-01	4.2							3E-01
Te-132	1.600E+00	2.100E-02	7.8	8.000E-02	2.100E-02	0.4	1.400E-01	1.000E-02	0.7	2E-01
Ba-140	1.300E-01	9.400E-02	0.4							3E-01
La-140	5.500E-02	1.200E-02	0.1	2.100E-02	1.200E-02	0.1				4E-01

採取方法:海水をくみ上げ採取
測定方法:試料500mlをGe半導体検出器で測定
測定時間:1,000秒

核種	3月21日 23:15 2F北放水口付近(3、4号放水口付近)			3月22日 15:06 2F岩沢海岸付近(1,2号放水口から南側に約7,000m地点)			3月22日 0:38 2F富岡川河口付近(3,4u放水口から北側約2,000m地点)			③周辺監視区域外の水中の濃度限度 (Bq/cm³)
	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	
Co-58	5.704E-03	7.570E-03	0.0	N.D	1.301E-02		1.028E-02	1.253E-02	0.0	1.0E+00
I-131	1.085E+00	1.284E-02	27.1	6.664E-01	1.862E-02	16.7	3.211E+00	1.694E-02	80.3	4.0E-02
I-132	1.597E-01	4.392E-02	0.1	N.D	7.915E-02		8.761E-01	4.236E-02	0.3	3.0E+00
Cs-134	4.816E-02	9.213E-03	0.8	3.925E-02	1.135E-02	0.7	7.535E-02	1.102E-02	1.3	6.0E-02
Cs-136	6.682E-03	4.722E-03	0.0	N.D	6.784E-03		1.159E-02	7.718E-02	0.0	3.0E-01
Cs-137	5.283E-02	8.822E-03	0.6	4.361E-02	1.129E-02	0.5	7.760E-02	1.186E-02	0.9	9.0E-02

核種	3月22日 14:28 2F北放水口付近(3、4号放水口付近)			3月23日 13:51 2F北放水口付近(3,4号放水口付近)			3月23日 14:25 2F岩沢海岸付近(1,2号放水口から南側に約7,000m地点)			③周辺監視区域外の水中の濃度限度 (Bq/cm³)
	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	
Co-58	N.D	1.526E-02								
Ru-105				3.4E-02	2.5E-02	0.01	3.3E-02	2.8E-02	0.01	3E+00
Ru-106							1.2E-01	1.2E-01	1.25	1E-01
I-131	1.138E+00	1.993E-02	28.5	7.4E-01	2.7E-02	18.6	7.6E-01	2.7E-02	19.1	4E-02
I-132	N.D	8.791E-02		2.0E-01	5.8E-02	0.1	3.3E-01	5.3E-02	0.1	3E+00
Cs-134	4.631E-02	1.350E-02	0.8	5.1E-02	2.0E-02	0.8	3.3E-02	2.1E-02	0.5	6E-02
Cs-136	N.D	7.849E-03								
Cs-137	3.962E-02	1.406E-02	0.4	5.5E-02	2.0E-02	0.6	4.3E-02	2.1E-02	0.5	9E-02

採取方法:海水をくみ上げ採取
測定方法:試料500mlをGe半導体検出器で測定
測定時間:1，000秒

核種	3月24日 9:30 2F北放水口付近(3、4号放水口付近)			3月24日 8:45 2F岩沢海岸付近(1,2号放水口から南側に約7，000m地点)						③周辺監視区域外の水中の濃度限度 (Bq/cm³)
	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)				
Ru-105	5.6E-02	4.4E-02	0.02							3.0E+00
I-131	1.1E+00	5.2E-02	28.4	5.0E-01	1.0E-02	12.50				4.0E-02
I-132	1.2E-01	8.8E-02	0.04	N.D	1.9E-02					3.0E+00
Cs-134	9.9E-02	3.8E-02	1.6	3.5E-02	7.0E-03	0.6				6.0E-02
Cs-136	6.8E-02	4.9E-02	0.2	5.3E-03	5.1E-03	0.0				3.0E-01
Cs-137	9.4E-02	4.1E-02	1.0	3.8E-02	7.0E-03	0.4				9.0E-02

東京電力福島第二原子力発電所敷地内の核種分析結果

採取方法：モニタリングカーにてダスト採取
測定方法：試料を2Fに持ち込みGe半導体型核種分析装置にて分析（1日2回測定）

核種		3月16日 情報棟東側 採取時間(7:66～8:06) 測定時間(8:47～) 500秒			3月16日 免震建屋1階入口 採取時間(10:00～10:10) 測定時間(11:59～) 500秒			3月17日 MP-1 採取時間(13:50～14:00) 測定時間(22:01～) 1000秒			③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm^3)※
		①放射能濃度(Bq/cm^3)	②検出限界濃度(Bq/cm^3)	空気中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm^3)	②検出限界濃度(Bq/cm^3)	空気中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm^3)	②検出限界濃度(Bq/cm^3)	空気中濃度限度に対する割合(①/③)	
揮発性	I-131	3.432E-04	2.559E-05	0.34	6.889E-04	1.268E-05	0.69	9.432E-05	3.351E-06	0.09	1.0E-03
	I-132	1.149E-03	2.812E-05	0.02	7.528E-04	1.986E-05	0.01	N.D			7.0E-02
	I-133	3.448E-05	2.687E-05	0.01	4.395E-05	1.497E-05	0.01	3.304E-06	4.478E-06	0.00	5.0E-03
粒子状	Co-58	N.D			4.943E-05	2.685E-05	0.00	2.494E-05	2.061E-05	0.00	1.0E-02
	Cs-134	1.237E-04	1.449E-05	0.06	4.163E-04	2.459E-05	0.21	3.314E-04	1.680E-05	0.17	2.0E-03
	Cs-136	2.699E-05	9.412E-06	0.00	7.504E-05	1.495E-05	0.01	6.107E-05	1.296E-05	0.01	1.0E-02
	Cs-137	1.227E-04	1.311E-05	0.04	3.861E-04	2.057E-05	0.13	3.232E-04	1.702E-05	0.11	3.0E-03

核種		3月18日 MP-1 採取時間(8:22～8:32) 測定時間(9:40～) 1000秒			3月18日 MP-1 採取時間(15:09～15:19) 測定時間(17:12～) 1000秒			3月19日 MP-1 採取時間(9:15～9:25) 測定時間(10:39～) 1000秒			③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm^3)※
		①放射能濃度(Bq/cm^3)	②検出限界濃度(Bq/cm^3)	空気中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm^3)	②検出限界濃度(Bq/cm^3)	空気中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm^3)	②検出限界濃度(Bq/cm^3)	空気中濃度限度に対する割合(①/③)	
揮発性	I-131	8.630E-04	3.145E-05	0.86	4.298E-03	4.993E-05	4.30	2.695E-04	5.585E-05	0.27	1.0E-03
	I-132	1.720E-03	3.821E-05	0.02	2.625E-03	9.359E-05	0.04	N.D			7.0E-02
	I-133	N.D			5.246E-05	4.213E-05	0.01	N.D			5.0E-03
粒子状	Co-58	3.080E-05	2.048E-05	0.00	1.578E-04	1.435E-05	0.02	N.D			1.0E-02
	Cs-134	3.345E-04	1.666E-05	0.17	4.863E-04	1.538E-05	0.24	N.D			2.0E-03
	Cs-136	5.882E-05	1.012E-05	0.01	8.416E-05	1.436E-05	0.01	N.D			1.0E-02
	Cs-137	3.147E-04	1.683E-05	0.10	4.306E-04	1.715E-05	0.14	N.D			3.0E-03

※人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度

核種		3月19日 MP-1 採取時間(18:18～18:28) 測定時間(19:08～) 1000秒			3月20日 MP-1 採取時間(11:27～11:37) 測定時間(16:17～) 500秒			3月20日 MP－1 採取時間(17:10～17:20) 測定時間(21:11～) 500秒			③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm³)※
		①放射能濃度(Bq/cm³)	②検出限界濃度(Bq/cm³)	空気中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm³)	②検出限界濃度(Bq/cm³)	空気中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm³)	②検出限界濃度(Bq/cm³)	空気中濃度限度に対する割合(①/③)	
揮発性	I-131	2.513E-04	5.665E-05	0.25	5.254E-05	1.155E-05	0.05	2.230E-04	4.286E-05	0.22	1.0E-03
	I-132	1.229E-04	1.226E-04	0.00	N.D			N.D			7.0E-02
	I-133	N.D			N.D			N.D			5.0E-03
粒子状	Co-58	N.D			N.D			N.D			1.0E-02
	Cs-134	N.D			N.D			N.D			2.0E-03
	Cs-136	N.D			N.D			N.D			1.0E-02
	Cs-137	N.D			N.D			N.D			3.0E-03

核種		3月21日 MP-1 採取時間(10:40～10:50) 測定時間(12:16～) 500秒			3月21日 MP-1 採取時間(18:11～18:19) 測定時間(19:00～) 500秒			3月23日 MP-1 採取時間(16:06～16:14) 測定時間(17:38～) 500秒			③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm³)※
		①放射能濃度(Bq/cm³)	②検出限界濃度(Bq/cm³)	空気中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm³)	②検出限界濃度(Bq/cm³)	空気中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm³)	②検出限界濃度(Bq/cm³)	空気中濃度限度に対する割合(①/③)	
揮発性	I-131	2.250E-04	1.687E-05	0.23	1.580E-04	1.931E-05	0.16	2.1E-04	1.4E-05	0.21	1.0E-03
	I-132	2.420E-04	2.401E-05	0.00	8.097E-04	1.937E-05	0.01	2.8E-04	2.8E-05	0.00	7.0E-02
	I-133	N.D			N.D			N.D			5.0E-03
粒子状	Co-58	1.065E-05	1.138E-05	0.00	1.341E-05	9.886E-06	0.00	N.D			1.0E-02
	Cs-134	4.410E-05	9.294E-06	0.02	3.017E-05	1.005E-05	0.02	1.7E-05	8.5E-06	0.01	2.0E-03
	Cs-136	N.D			N.D			3.7E-06	5.2E-06	0.00	1.0E-02
	Cs-137	4.711E-05	7.959E-06	0.02	3.306E-05	9.703E-06	0.01	1.7E-05	6.9E-06	0.01	3.0E-03
その他の検出核種	Te-129							9.3E-04	2.6E-04	0.93	1.0E-03
	Te-132							7.1E-04	6.5E-06	0.10	7.0E-03
	Ru-106							8.2E-05	5.7E-05	0.14	6.0E-04

※人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度

核種		3月22日 MP-1 採取時間(10:02～10:10) 測定時間(11:53～) 500秒			3月22日 MP-1 採取時間(16:43～16:51) 測定時間(17:32～) 500秒			3月23日 MP-1 採取時間(16:06～16:14) 測定時間(17:38～) 500秒			③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm^3)※
		①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm^3)	②検出限界濃度 (Bq/cm^3)	空気中濃度限度に対する割合 (①/③)	
揮発性	I-131	1.416E-04	2.272E-05	0.14	1.349E-04	2.216E-05	0.13	2.1E-04	1.4E-05	0.21	1.0E-03
	I-132	N.D			N.D			2.8E-04	2.8E-05	0.00	7.0E-02
	I-133	N.D			N.D			N.D			5.0E-03
粒子状	Co-58	N.D			N.D			N.D			1.0E-02
	Cs-134	1.293E-05	9.476E-06	0.01	1.353E-05	9.812E-06	0.01	1.7E-05	8.5E-06	0.01	2.0E-03
	Cs-136	N.D			N.D			3.7E-06	5.2E-06	0.00	1.0E-02
	Cs-137	1.024E-05	8.838E-06	0.003	1.369E-05	8.361E-06	0.005	1.7E-05	6.9E-06	0.01	3.0E-03
その他	Te-129	2.316E-03	1.784E-03	0.01	N.D			9.3E-04	2.6E-04	0.00	4.0E-01
	Te-132	2.191E-05	1.649E-05	0.003	N.D			7.1E-04	6.5E-06	0.10	7.0E-03
	Ru-106	N.D			N.D			8.2E-05	5.7E-05	0.14	6.0E-04

※人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度

採取方法:海水をくみ上げ採取
測定方法:試料500mlをGe半導体検出器で測定
測定時間:1,000秒

核種	3月21日 23:15 2F北放水口付近(3、4号放水口付近)			3月22日 15:06 2F岩沢海岸付近(1.2号放水口から南側に約7,000m地点)			3月22日 0:38 2F富岡川河口付近(3.4u放水口から北側約2,000m地点)			③周辺監視区域外の水中の濃度限度 (Bq/cm³)
	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	
Co-58	5.704E-03	7.570E-03	0.0	N.D	1.301E-02		1.028E-02	1.253E-02	0.0	1.0E+00
I-131	1.085E+00	1.284E-02	27.1	6.664E-01	1.862E-02	16.7	3.211E+00	1.694E-02	80.3	4.0E-02
I-132	1.597E-01	4.392E-02	0.1	N.D	7.915E-02		8.761E-01	4.236E-02	0.3	3.0E+00
Cs-134	4.815E-02	9.213E-03	0.8	3.925E-02	1.135E-02	0.7	7.535E-02	1.102E-02	1.3	6.0E-02
Cs-136	6.682E-03	4.722E-03	0.0	N.D	6.784E-03		1.159E-02	7.718E-02	0.0	3.0E-01
Cs-137	5.283E-02	8.822E-03	0.6	4.361E-02	1.129E-02	0.5	7.760E-02	1.186E-02	0.9	9.0E-02

核種	3月22日 14:28 2F北放水口付近(3、4号放水口付近)			3月23日 13:51 2F岩沢海岸付近(1.2号放水口から南側に約7,000m地点)			3月23日 14:25 2F岩沢海岸付近(1.2号放水口から南側に約7,000m地点)			③周辺監視区域外の水中の濃度限度 (Bq/cm³)
	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/⑨)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	水中濃度限度に対する割合 (①/③)	
Co-58	N.D	1.526E-02								
Ru-105				3.4E-02	2.5E-02		3.3E-02	2.8E-02	0.01	3E+00
Ru-106							1.2E-01	1.2E-01	1.25	1E-01
I-131	1.138E+00	1.993E-02	28.5	7.4E-01	2.7E-02	16.7	7.6E-01	2.7E-02	19.1	4E-02
I-132	N.D	8.791E-02		2.0E-01	5.8E-02		3.3E-01	5.3E-02	0.1	3E+00
Cs-134	4.631E-02	1.350E-02	0.8	5.1E-02	2.0E-02	0.7	3.3E-02	2.1E-02	0.5	6E-02
Cs-136	N.D	7.849E-03								
Cs-137	3.962E-02	1.406E-02	0.4	5.5E-02	2.0E-02	0.5	4.3E-02	2.1E-02	0.5	9E-02

平成23年3月25日
東京電力株式会社

発電所敷地内における空気中放射性物質の核種分析結果について　(3/24修正版)

当社福島第一原子力発電所における空気中放射性物質の測定結果をお知らせいたします。

1. 採取・測定条件

試料採取	場所	福島第一　事務本館北側		
	日時	3月19日	3月20日	3月21日
		11:53～12:13(放水前)	1:41～2:01	10:19～10:39
	採取方法	モニタリングカーにてダスト採取		
	風向・風速	W 4.7m/s (11:50現在)	SW 2.1m/s (1:40現在)	NW 2.6m (10:10現在)
試料測定	日時	3/19 14:12～	3/21 13:28～	3/21 13:48～
	測定方法	試料を2Fに持ち込みGe半導体型核種分析装置にて分析		
	測定時間	500s		

2. 結果

	核種	3月19日採取分			3月20日採取分			3月21日採取分			③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm3)※
		①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	
揮発性	I-131	5.9E-03	3.4E-05	5.94	2.3E-03	1.3E-05	2.30	1.5E-03	1.1E-05	1.52	1.0E-03
	I-132	2.2E-03	8.8E-05	0.03	ND	－	－	2.5E-04	2.7E-05	0.004	7.0E-02
	I-133	3.8E-05	2.9E-05	0.01	ND	－	－	ND	－	－	5.0E-03
	Cs-134	ND	－	－	4.0E-05	8.3E-06	0.02	3.1E-05	8.6E-06	0.016	2.0E-03
	Cs-137	ND	－	－	3.9E-05	8.4E-06	0.01	3.6E-05	7.9E-06	0.01	3.0E-03
粒子状	Co-58	ND	－	－	ND	－	－	ND	－	－	1.0E-02
	I-131	1.1E-03	1.6E-05	1.07	1.3E-03	6.8E-06	1.29	9.2E-06	5.0E-06	0.01	1.0E-03
	I-132	3.8E-04	5.0E-05	0.01	ND	－	－	1.1E-04	1.2E-05	0.00	7.0E-02
	Cs-134	2.2E-05	1.7E-05	0.01	2.8E-05	4.8E-06	0.01	3.4E-05	5.4E-06	0.02	2.0E-03
	Cs-136	ND	－	－	5.6E-06	5.4E-06	0.001	4.5E-06	3.3E-06	0.0005	1.0E-02
	Cs-137	2.4E-05	1.8E-05	0.01	2.9E-05	5.0E-06	0.01	3.8E-05	4.7E-06	0.01	3.0E-03
その他の検出核種	Ru-106	2.1E-04	2.1E-04	0.36	3.8E-05	3.4E-05	0.06	ND	－	－	6.0E-04
	Te-129	ND	－	－	ND	－	－	1.3E-03	3.8E-04	0.00	4.0E-01
	Te-129m	ND	－	－	1.4E-04	1.2E-04	0.03	ND	－	－	4.0E-03
	Te-132	6.7E-05	1.8E-05	0.01	5.1E-04	6.0E-06	0.07	3.9E-04	4.3E-06	0.06	7.0E-03
	Ce-144	ND	－	－	5.0E-03	4.6E-04	7.08	ND	－	－	7.0E-04

※ 人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※ ○.○E－○とは、○.○×$10^{-○}$と同じ意味である。

1FGe(0319,20,21)

平成23年3月25日
東京電力株式会社

発電所敷地内における空気中放射性物質の核種分析結果について　（3/24修正版）

当社福島第一原子力発電所における空気中放射性物質の測定結果をお知らせいたします。

1．採取・測定条件

試料採取	場所	福島第一　正門		
	日時	3/22 1:10～1:30	3/23 2:1～2:21	
	採取方法	モニタリングカーにてダスト採取		
	風向・風速	W　0.5m/s（1:10現在）	N 3.2m/s(2:00現在)	
試料測定	日時	3/22　14:50～	3/23 14:54～	
	測定方法	試料を2Fに持ち込みGe半導体型核種分析装置にて分析		
	測定時間	500s		

2．結果

	核種	3/22採取分			3/23採取分			3/24採取分			③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm3)※
		①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)				
揮発性	I-131	2.2E-03	1.6E-05	2.24	6.7E-04	9.6E-06	0.67				1.0E-03
	I-132	ND	－	－	ND	－	－				7.0E-02
	I-133	ND	－	－	ND	－	－				5.0E-03
	Cs-134	1.1E-05	1.1E-05	0.01	2.2E-05	7.6E-06	0.01				2.0E-03
	Cs-137	1.3E-05	1.0E-05	0.00	2.3E-05	7.6E-06	0.01				3.0E-03
粒子状	Co-58	ND	－	－	5.1E-06	5.1E-06	0.00				1.0E-02
	I-131	4.7E-04	7.4E-06	0.47	4.3E-04	5.0E-06	0.43				1.0E-03
	Cs-134	1.6E-05	5.9E-06	0.01	1.7E-05	4.2E-06	0.01				2.0E-03
	Cs-136	ND	－	－	3.0E-06	2.7E-06	0.00				1.0E-02
	Cs-137	1.9E-05	5.3E-06	0.01	1.3E-05	4.2E-06	0.00				3.0E-03
その他の検出核種	Te-129	ND	－	－	2.3E-01	1.2E-01	0.58				4.0E-01
	Te-132	6.7E-05	1.1E-05	0.01	4.3E-04	4.5E-06	0.06				7.0E-03
	Ce-144	ND	－	－	1.3E-03	3.7E-04	1.89				7.0E-04

※　人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※　○.○E－○とは、○.○×$10^{-○}$と同じ意味である。

1FGe(0322・23)

平成23年3月25日
東京電力株式会社

発電所敷地内における空気中放射性物質の核種分析結果について

当社福島第一原子力発電所における空気中放射性物質の測定結果をお知らせいたします。

1. 採取・測定条件

試料採取	場所	福島第一 正門		
	日時	3/24 5:27～5:47		
	採取方法	モニタリングカーにてダスト採取		
	風向・風速	ESE 0.8m/s (5:30現在)		
試料測定	日時	3/24 22:03～		
	測定方法	試料を2Fに持ち込みGe半導体型核種分析装置にて分析		
	測定時間	500s		

2. 結果

	核種	3/24採取分									③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm3)※
		①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①/③)							
揮発性	Co-58	ND	－	－							1.0E-02
	I-131	1.5E-03	1.0E-05	1.49							1.0E-03
	I-132	ND	－	－							7.0E-02
	I-133	ND	－	－							5.0E-03
	Cs-134	3.2E-05	7.9E-06	0.02							2.0E-03
	Cs-137	3.1E-05	7.3E-06	0.01							3.0E-03
粒子状	Co-58	ND	－	－							1.0E-02
	I-131	5.0E-04	4.8E-06	0.50							1.0E-03
	I-132	ND	－	－							7.0E-02
	Cs-134	1.1E-05	4.6E-06	0.01							2.0E-03
	Cs-136	ND	－	－							1.0E-02
	Cs-137	1.2E-05	3.8E-06	0.00							3.0E-03
その他の検出核種	Zr-95	2.5E-05	6.0E-06	0.00							8.0E-02
	Te-129	4.6E+00	9.5E-01	11.4							4.0E-01
	Te-129m	3.4E-04	9.9E-05	0.08							4.0E-03
	Te-132	3.6E-04	4.4E-04	0.05							7.0E-03

※ 人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。
※ ○.○E－○とは、○.○×$10^{-○}$と同じ意味である。

平成23年3月24日
東京電力株式会社

発電所敷地内における空気中放射性物質の核種分析結果について　（3/24修正版）

当社福島第二原子力発電所における空気中放射性物質の測定結果をお知らせいたします。

1．採取・測定条件

試料採取	場所	福島第二 MP－1	福島第二 MP－1	福島第二 MP－1	福島第二 MP－1
	日時	3月19日	3月19日	3月20日	3月20日
		9:16～9:25	18:18～18:28	11:27～11:37	17:10～17:20
	採取方法	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取
	風向・風速	－	－	－	－
試料測定	日時	3/19 10:39～	3/19 19:08～	3/20 16:17～	3/20 21:11～
	測定方法	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析
	測定時間	1000s	1000s	500s	500s

2．結果

	核種	3月19日 採取分①			3月19日 採取分②			3月20日 採取分①			3月20日 採取分②			③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm3)※
		①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	
揮発性	I-131	2.7E-04	5.6E-05	0.27	2.5E-04	5.7E-05	0.25	5.3E-05	1.2E-05	0.05	2.2E-04	4.3E-05	0.22	1.0E-03
	I-132	2.4E-04	1.7E-04	0.00	1.2E-04	1.2E-04	0.00	ND	－	－	2.6E-04	2.5E-04	0.00	7.0E-02
	I-133	ND	－	－	ND	－	－	ND	－	－	ND	－	－	5.0E-03
	Cs-134	6.3E-05	5.9E-05	1.06	ND	－	－	ND	－	－	ND	－	－	2.0E-03
	Cs-136	ND	-	-	1.7E-04	1.6E-04	0.02	ND	－	－	ND	－	－	1.0E-02
粒子状	Co-58	ND	－	－	ND	－	－	ND	－	－	ND	－	－	1.0E-02
	I-131	1.4E-04	3.1E-05	0.14	1.3E-04	3.1E-05	0.13	2.6E-05	6.0E-06	0.03	ND	－	－	1.0E-03
	I-132	1.2E-04	9.0E-05	0.00	ND	－	－	ND	－	－	1.8E-03	8.9E-04	0.03	7.0E-02
	I-133	ND	－	－	2.4E-04	2.2E-04	0.05	ND	－	－	ND	－	－	5.0E-03
	Cs-134	ND	－	－	ND	－	－	ND	－	－	ND	－	－	2.0E-03
	Cs-136	ND	－	－	ND	－	－	ND	－	－	ND	－	－	1.0E-02
	Cs-137	ND	－	－	ND	－	－	ND	－	－	ND	－	－	3.0E-03
その他核種	Ru-105	ND	－	－	2.1E-04	2.0E-04	0.00	ND	－	－	ND	－	－	8.0E-02
	Te-132	ND	－	－	ND	－	－	4.2E-06	3.4E-06	0.00	ND	－	－	7.0E-03

※　人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。
※　○.○E－○とは、○.○×$10^{-○}$と同じ意味である。

平成23年3月24日
東京電力株式会社

発電所敷地内における空気中放射性物質の核種分析結果について　(3/24修正版)

当社福島第二原子力発電所における空気中放射性物質の測定結果をお知らせいたします。

1. 採取・測定条件

試料採取	場所	福島第二 MP－1	福島第二 MP－1		
	日時	3月21日	3月21日		
		10:40～10:50	18:11～18:19		
	採取方法	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取		
	風向・風速	－	－		
試料測定	日時	3/21 12:15～	3/21 19:00～		
	測定方法	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析		
	測定時間	500s	500s		

2. 結果

	核種	3月21日 採取分①			3月21日 採取分②									③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm3)※
		①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①/③)	
揮発性	Co-58	ND	－	－	2.9E-05	2.1E-05	0.00							4.0E-01
	I-131	2.3E-04	1.7E-05	0.23	1.6E-04	1.9E-05	0.16							1.0E-03
	I-132	2.4E-04	2.4E-05	0.003	8.1E-04	1.9E-05	0.01							7.0E-02
	I-133	ND	－	－	ND	－	－							5.0E-03
	Cs-134	ND	－	－	1.7E-05	1.7E-05	0.01							2.0E-03
	Cs-137	1.8E-05	1.3E-05	0.01	ND	－	－							3.0E-03
粒子状	Co-58	ND	－	－	1.3E-05	9.9E-06	0.00							1.0E-02
	I-131	1.5E-04	9.6E-06	0.151	1.2E-04	1.0E-05	0.12							1.0E-03
	I-132	2.5E-04	1.3E-05	0.004	3.9E-04	1.6E-05	0.01							7.0E-02
	Cs-134	4.4E-05	9.3E-06	0.02	3.0E-05	1.0E-05	0.02							2.0E-03
	Cs-136	ND	－	－	ND	－	－							1.0E-02
	Cs-137	4.7E-05	8.0E-06	0.02	3.3E-05	9.7E-06	0.01							3.0E-03
その他核種	Ru-105	ND	－	－	1.2E-04	8.6E-05	0.00							8.0E-02
	Ru-106	ND	－	－	1.4E-04	7.6E-05	0.24							6.0E-04
	Te-129	4.5E-04	2.9E-04	0.00	9.3E-04	2.2E-04	0.00							4.0E-01
	Te-129m	6.4E-04	2.0E-04	0.16	ND	－	－							4.0E-03
	Te-132	7.6E-04	6.6E-04	0.11	1.4E-03	6.8E-06	0.21							7.0E-03

※ 人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※ O.OE－Oとは、O.O×10^{-O}と同じ意味である。

平成23年3月24日
東京電力株式会社

発電所敷地内における空気中放射性物質の核種分析結果について　（3/24修正版）

当社福島第二原子力発電所における空気中放射性物質の測定結果をお知らせいたします。

1. 採取・測定条件

試料採取	場所	福島第二 MP－1	福島第二 MP－1	福島第二 MP－1	福島第二 MP－1
	日時	3/22 10:02～10:10	3/22 16:43～16:51	3/23 9:40～9:48	3/23 16:06～16:14
	採取方法	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取
	風向・風速	－	－	－	－
試料測定	日時	3/22 11:53～	3/22 17:32～	3/23 15:00～	3/23 17:38～
	測定方法	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析
	測定時間	500s	500s	500s	500s

2. 結果

（データ集約3/22）

	核種	3/22採取分①			3/22採取分②			3/23採取分①			3/23採取分②			③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm3)※
		①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①／③)	
揮発性	Co-58	ND	－	－	ND	－	－	ND	－	－	1.5E-05	1.4E-05	0.00	1.0E-02
	I-131	1.4E-04	2.3E-05	0.14	1.3E-04	2.2E-05	0.13	2.7E-04	3.9E-05	0.27	2.1E-04	1.4E-05	0.21	1.0E-03
	I-132	ND	－	－	ND	－	－	2.8E-04	2.2E-04	0.00	2.8E-04	2.8E-05	0.00	7.0E-02
	I-133	ND	－	－	ND	－	－	ND	－	－	ND	－	－	5.0E-03
	Cs-134	2.6E-05	1.6E-05	0.01	1.9E-05	1.7E-05	0.01	4.3E-05	3.0E-05	0.02	2.3E-05	1.2E-05	0.01	2.0E-03
	Cs-137	2.3E-05	1.7E-05	0.01	2.1E-05	1.7E-05	0.01	ND	－	－	2.0E-05	1.3E-05	0.01	3.0E-03
粒子状	Co-58	ND	－	－	ND	－	－	ND	－	－	ND	－	－	1.0E-02
	I-131	6.9E-05	1.2E-05	0.07	7.9E-05	1.2E-05	0.08	1.5E-04	2.1E-05	0.15	8.2E-05	7.9E-06	0.08	1.0E-03
	I-132	ND	－	－	4.2E-05	3.4E-05	0.00	ND	－	－	2.6E-04	1.5E-05	0.00	7.0E-02
	Cs-134	1.3E-05	9.5E-06	0.01	1.4E-05	9.8E-06	0.01	ND	－	－	1.7E-05	8.5E-06	0.01	2.0E-03
	Cs-136	ND	－	－	ND	－	－	ND	－	－	ND	－	－	1.0E-02
	Cs-137	1.0E-05	8.8E-06	0.00	1.4E-05	8.4E-06	0.00	ND	－	－	1.7E-05	6.9E-06	0.01	3.0E-03
その他の検出核種	Ru-106	ND	－	－	ND	－	－	ND	－	－	8.2E-05	5.7E-05	0.14	6.0E-04
	Te-129	2.3E-03	1.8E-03	0.01	ND	－	－	ND	－	－	9.3E-04	2.6E-04	0.00	4.0E-01
	Te-132	2.2E-05	1.6E-05	0.00	ND	－	－	1.6E-04	2.2E-05	0.02	7.1E-04	6.5E-06	0.10	7.0E-03

※ 人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※ O.OE－Oとは、$O.O \times 10^{-O}$と同じ意味である。

東京電力株式会社

発電所敷地内における空気中放射性物質の核種分析結果について

当社福島第二原子力発電所における空気中放射性物質の測定結果をお知らせいたします。

1. 採取・測定条件

試料採取	場所	福島第二 MP－1	福島第二 MP－1		
	日時	3/24 9:47～9:55	3/24 17:46～17:54		
	採取方法	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取		
	風向・風速	－	－		
試料測定	日時	3/24 10:39～	3/25 0:40～		
	測定方法	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析		
	測定時間	500s	500s		

2. 結果

	核種	3/24採取分①			3/24採取分②									③放射線業務従事者の呼吸する空気中の濃度限度(Bq/cm3)※
		①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm3)	②検出限界濃度(Bq/cm3)	空気中濃度限度に対する割合(①/③)							
揮発性	Co-58	ND	－	－	ND	－	－							1.0E-02
	I-131	1.9E-04	1.5E-05	0.19	1.7E-04	1.4E-05	0.17							1.0E-03
	I-132	3.0E-04	2.5E-05	0.004	ND	－	－							7.0E-02
	I-133	ND	－	－	ND	－	－							5.0E-03
	Cs-134	2.8E-05	1.3E-05	0.01	1.6E-05	1.2E-05	0.01							2.0E-03
	Cs-137	3.0E-05	1.2E-05	0.01	2.9E-05	1.1E-05	0.01							3.0E-03
粒子状	Co-58	ND	－	－	ND	－	－							1.0E-02
	I-131	1.1E-04	7.3E-06	0.11	6.4E-05	2.1E-05	0.06							1.0E-03
	I-132	1.7E-04	1.0E-05	0.002	ND	－	－							7.0E-02
	Cs-134	2.1E-05	6.7E-06	0.01	ND	－	－							2.0E-03
	Cs-136	ND	－	－	ND	－	－							1.0E-02
	Cs-137	2.0E-05	6.6E-06	0.01	2.1E-05	1.7E-05	0.01							3.0E-03
その他の検出核種	Ru-106	ND	－	－	ND	－	－							6.0E-04
	Te-129	7.6E-04	1.3E-04	0.002	1.4E-02	9.5E-03	0.04							4.0E-01
	Te-129m	5.7E-04	1.7E-04	0.14	4.6E-04	2.8E-04	0.11							4.0E-03
	Te-132	5.6E-04	5.7E-06	0.08	3.5E-04	1.1E-05	0.05							7.0E-03

※ 人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※ O.OE－Oとは、O.O×10^{-O}と同じ意味である。

From: NITOPS <NITOPS@nnsa.doe.gov>
Sent: Sunday, March 27, 2011 10:29 AM
To: DL-Policy Working Group; CMHT; HOO Hoc; NARAC; PMT01 Hoc; PMT02 Hoc; Hoc, PMT12
Cc: NITOPS
Subject: FW: IAEA distributed documents
Attachments: No_53_Appendix_Results_of_nuclide_analysis_in_Seawater_Sample.pdf; No_54_Monitoring_Data_March26.pdf; No55_Info_1830_March26_english.pdf; Attachment_to_NISA_Press_release_No_25_in_Japanese[2.pdf; Meteo_Products_2011-03-26_-_RSMC_Beijing.pdf; Meteo_Products_2011-03-26_-_RSMC_Obninsk.pdf; Meteo_Products_2011-03-26_-_RSMC_Tokyo.pdf; Letter_-_Summary_of_reactor_unit_status_at_26-March_1800_UTC.pdf

From: turnerr@oem.doe.gov **On Behalf Of** DOE HQ EOC
Sent: Sunday, March 27, 2011 10:09 AM
To: Aoki, Steven; Bowman, David; NITOPS; Poneman, Daniel; Krol, Joseph; Pavetto, Carl; Mustin, Tracy; Miller, Neile; Wilber, Deborah; Heinrich, Ann
Cc: 'wtchofc@oem.doe.gov'
Subject: FW: IAEA distributed documents

FYI

-----Original Message-----
From: Kenagy, W David [mailto:KenagyWD@state.gov]
Sent: Sunday, March 27, 2011 9:59 AM
To: Kenagy, W David; vince.mcclelland@nnsa.doe.gov; veronica.rodriguez@nrc.gov; ann.heinrich@nnsa.doe.gov; hoo1@nrc.gov; hoo2@nrc.gov; wch@nrc.gov; decair.sara@epamail.epa.gov; timothy.greten@DHS.GOV; maria.marinissen@hhs.gov; [redacted]; doehqeoc@oem.doe.gov; hhs.soc@hhs.gov; james.kish@DHS.GOV; hoo.hoc@nrc.gov; brooke.smith@nrc.gov; Zubarev, Jill E; Shaffer, Mark R; nitops@nnsa.doe.gov; Skypek, Thomas M; [redacted] clark.ray@epamail.epa.gov; Stern, Warren
Subject: RE: IAEA distributed documents

BC/25

China Meteorological Administration

National Meteorological Center
Beijing, China

RSMC for Environmental Emergency Response

FAX: (86 10) 68407469, (86 10) 62172909 Tel: (86 10)68408594, (86 10)58993295
Email: RSMC@cma.gov.cn

TO: Operational Contacts of National Meteorological Services in RAII,
IAEA, WMO Secretariat,
RSMC Tokyo, and
RSMC Obninsk

From: RSMC Beijing
Date: Mar 26, 2011 Time: 22:00 UTC

Dear Colleagues,

Please find attached the Joint Statement of RAII for Environmental Emergency Response (EER) distributed by RSMC Tokyo, RSMC Obninsk, and RSMC Beijing.

Best regards,
RSMC Beijing

Total No. of pages including this sheet: 3

Draft of JOINT STATEMENT
by: RSMC Tokyo(JP), RSMC Obninsk(RU) and RSMC Beijing(CN)

Emergency notified by the IAEA (Emergency)

Issued: 22:00 UTC, Mar. 26, 2011

RADIOLOGICAL EVENT DETAILS
Source:
Fukushima Daiichi, Japan
Location:
37.4206 degrees North latitude, 141.0329 degrees East longitude
Release date-time:
From: 17:00 UTC 26 Mar 2011
To: 17:00 UTC 29 Mar 2011
Comments:
Emergency Accident

Weather Situation

It is mostly fine or cloudy around Fukushima. An upper transversal trough passes over Japan Island and it is weaken when moving eastward in the future 72 hours and it brings northwest wind blowing over Japan. A ridge of high pressure covers Japan Island and the south area of Japan at low level and will move eastward. A small low pressure system may affect the Island on the 29th and small precipitations will be expected around the central part of Japan.

Trajectories

RSMC Beijing and RSMC Tokyo predict that the tracers at 500m and 1500m are moving to the southeast during the first 24 hours and will rotate clockwise during the rest of the period. The trajectory at 500m of RSMC Obninsk is also similar with the other two RSMCs, while they forecast the tracer at 1500m is moving to east-northeast. At 3000m, RSMC Beijing predicts that the tracer is moving to the southeast during the first 48 hours and will rotate clockwise during the rest of the period; RSMC Tokyo's trajectory shows it is moving to the east-southeast in 72 hours; while RSMC Obninsk predicts that it is moving to the east-northeast during the period.

Exposure

The simulation results of three RSMCs show that the exposure areas will spread over

eastern part of Japan and toward southeast during the first 48 hours and then diffuse to the north western part of the Pacific Ocean.

Depositions

From three RSMCs' deposition charts, we could get that the deposition areas for the whole period will cover the northern, eastern and central parts of Japan and the north western part of Pacific Ocean.

Summary

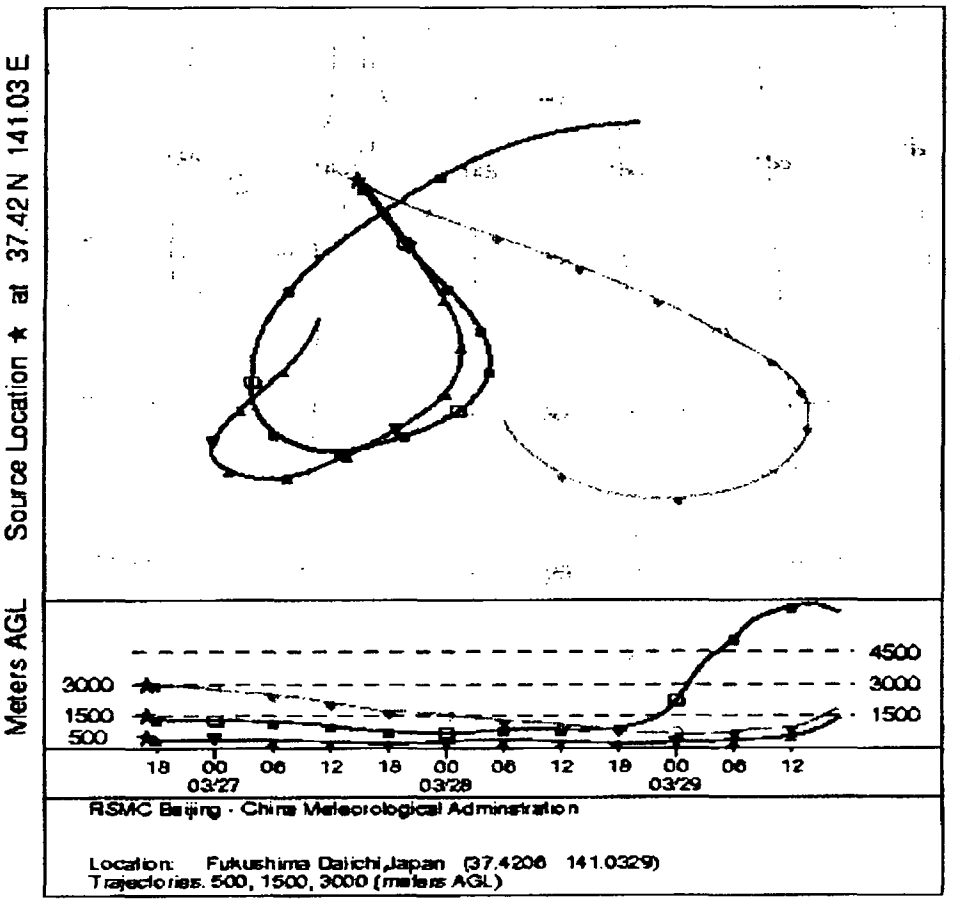
There would be a hazard around the northern, eastern and central parts of Japan and the north western part of the Pacific Ocean.

END

RSMC BEIJING - CHINA METEOROLOGICAL ADMINISTRATION

Forward trajectories starting at 17 UTC 26 Mar 11

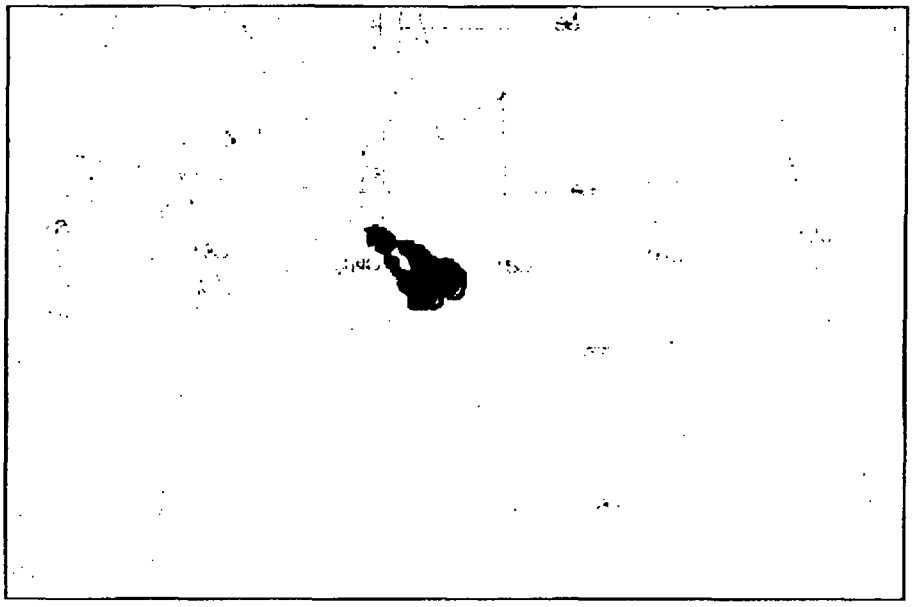
00 UTC 26 Mar CMAG Forecast Initialization



RSMC BEIJING - CHINA METEOROLOGICAL ADMINISTRATION

Deposition at Ground-Level (Bq/m2)
Integrated from 12z 26 Mar to 12z 27 Mar (UTC)
I131 Release Started at 17Z 26 Mar (UTC)

Source (*) 37.42 N 141.03 E from 20 to 500 m



00Z 26 Mar 11 CMAG FORECAST INITIALIZATION

1.0E-12 1.0E-13 1.0E-14 1.0E-15

4.7E-12 Maximum at square

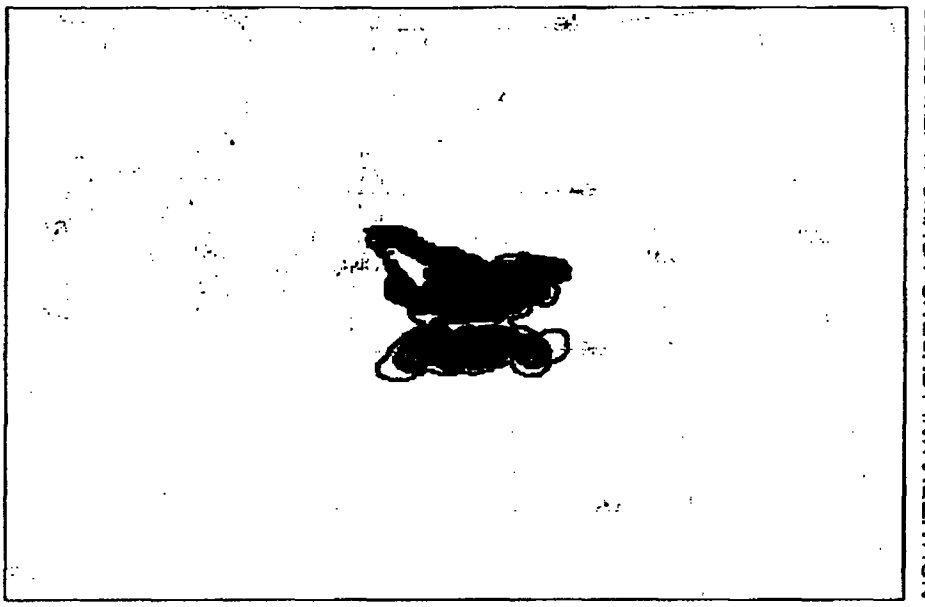
Location: Fukushima Daiichi,Japan (37.4208 141.0329)
Meteorology: GT213
Emission: 1.00 Unit I131 over 72 hr
Distribution: Uniform between 0 - 500 m agl
Deposition: Wet and Dry (0.1 cm/s)
Notes: Contours may change from map to map
Results based on default values

RSMC BEIJING - CHINA METEOROLOGICAL ADMINISTRATION

Deposition at Ground-Level (Bq/m2)

Integrated from 12z 26 Mar to 12z 26 Mar (UTC)

I131 Release Started at 17Z 26 Mar (UTC)



1.0E-12 1.0E-13 1.0E-14 1.0E-15

5.9E-12 Maximum at square

Location: Fukushima Daiichi,Japan (37.4206 141.0329)
Meteorology: GT213
Emission: 1.00 Unit I131 over 72 hr
Distribution: Uniform between 0 - 500 m agl
Deposition: Wet and Dry (0.1 cm/s)
Notes: Contours may change from map to map
Results based on default values

RSMC BEIJING - CHINA METEOROLOGICAL ADMINISTRATION

Deposition at Ground-Level (Bq/m2)
Integrated from 12z 26 Mar to 12z 29 Mar (UTC)
I131 Release Started at 17Z 26 Mar (UTC)

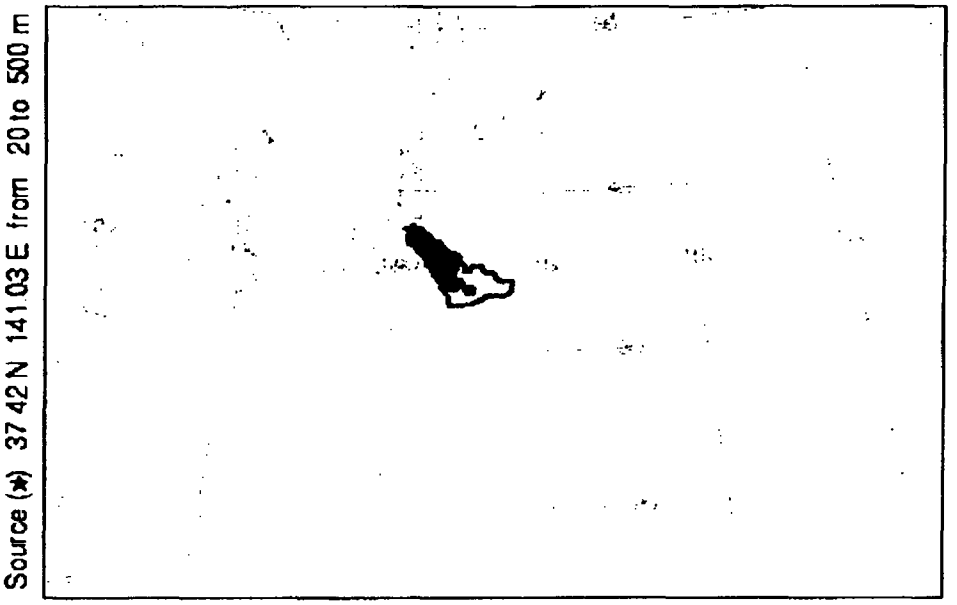
1.0E-12 1.0E-14 1.0E-16 1.0E-18

6.0E-12 Maximum at square

Location: Fukushima Daiichi,Japan (37.4206 141.0329)
Meteorology: GT213
Emission: 1.00 Unit I131 over 72 hr
Distribution: Uniform between 0 - 500 m agl
Deposition: Wet and Dry (0.1 cm/s)
Notes: Contours may change from map to map
Results based on default values

RSMC BEIJING - CHINA METEOROLOGICAL ADMINISTRATION

Exposure averaged between 0 m and 500 m (Bq-s/m3)
Integrated from 12z 26 Mar to 12z 27 Mar (UTC)
I131 Release Started at 17Z 26 Mar (UTC)



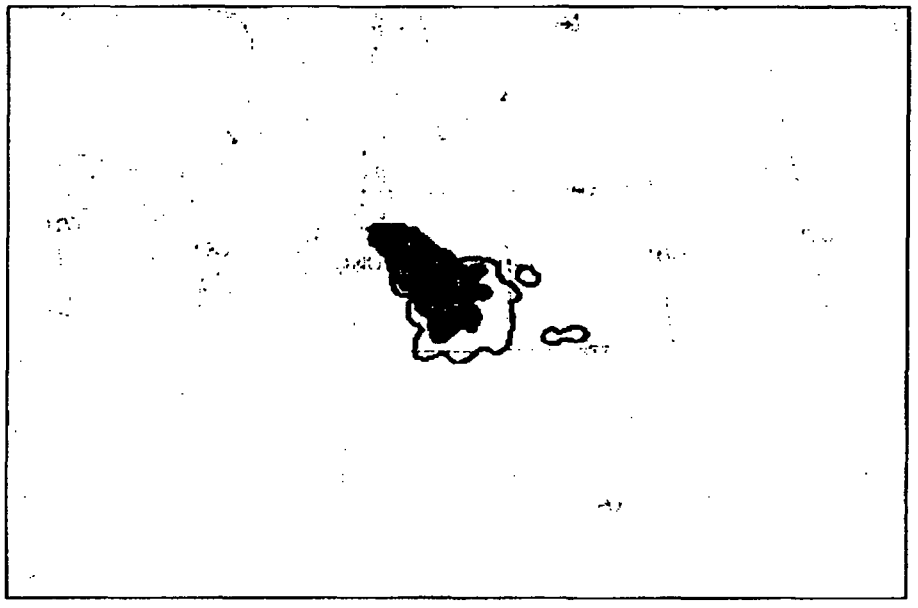
1.0E-09 1.0E-10 1.0E-11 1.0E-12

5.0E-09 Maximum at square

Location: Fukushima Daiichi,Japan (37.4208 141.0329)
Meteorology: GT213
Emission: 1.00 Unit I131 over 72 hr
Distribution: Uniform between 0 - 500 m agl
Deposition: Wet and Dry (0.1 cm/s)
Notes: Contours may change from map to map
Results based on default values

RSMC BEIJING - CHINA METEOROLOGICAL ADMINISTRATION

Exposure averaged between 0 m and 500 m (Bq-s/m3)
Integrated from 12z 27 Mar to 12z 28 Mar (UTC)
I131 Release Started at 17Z 26 Mar (UTC)



1.0E-09 1.0E-10 1.0E-11 1.0E-12

2.0E-09 Maximum at square

Location: Fukushima Daiichi,Japan (37.4208 141.0329)
Meteorology: GT213
Emission: 1.00 Unit I131 over 72 hr
Distribution: Uniform between 0 - 500 m agl
Deposition: Wet and Dry (0.1 cm/s)
Notes: Contours may change from map to map
Results based on default values

RSMC BEIJING - CHINA METEOROLOGICAL ADMINISTRATION

Exposure averaged between 0 m and 500 m (Bq-s/m3)
Integrated from 12z 26 Mar to 12z 29 Mar (UTC)
I131 Release Started at 17Z 26 Mar (UTC)

1.0E-10 1.0E-12 1.0E-14 1.0E-16

9.6E-10 Maximum at square

Location: Fukushima Daiichi,Japan (37.4206 141.0329)
Meteorology: GT213
Emission: 1.00 Unit I131 over 72 hr
Distribution: Uniform between 0 - 500 m agl
Deposition: Wet and Dry (0.1 cm/s)
Notes: Contours may change from map to map
Results based on default values

(Appendix)

Results of nuclide analysis in Seawater Sample

Sampling day & time	8:30 March 25th, 2011			
Sampling place	1F Near southern Water Discharge Gate (approx. 330m from water discharge gate of Unit 1~4 in south direction)			
Measureing method	Analysis of 500 ml Seawater Sample by Ge-Semiconductor Nuclide Analyzer in Fukushima Dai-ni NPS			
Mesuring time	1,000 seconds			
Nuclide (Half life)	①Conc. of Radioactivity (Bq/cm^3)	②Conc. of Detection Limit (Bq/cm^3)	③Consentration limits specified in the Notice based on the Rules for Establishment, Operation, etc. of Commercial Power Reactor Bq/cm^3 (Concentration Limits in Water Outside the Environmental Monitoring Area shown in the 6th Column of Attached Table 2)	Ratio of ① to ③ (①/③)
Co-60 (approx. 5 days)	5.9E-02	2.0E-02	2E-01	0.3
Mo-99 (approx. 66 hours)	2.1E-01	1.7E-01	1E+00	0.2
I-131 (approx. 8 days)	5.0E+01	6.2E-02	4E-02	1250.8
I-132 (approx. 2 hours)	3.3E+00	7.7E-02	3E+00	1.1
Te-132 (approx. 3 days)	2.2E-01	4.0E-02	2E-01	1.1
Cs-134 (approx. 2 years)	7.0E+00	3.9E-02	6E-02	117.3
Cs-136 (approx. 13 days)	8.0E-01	3.9E-02	3E-01	2.7
Cs-137 (approx. 30 years)	7.2E+00	3.5E-02	9E-02	79.6
Ba-140 (approx. 13 days)	1.2E+00	1.5E-01	3E-01	3.9
La-140 (approx. 2 days)	5.8E-01	1.3E-02	4E-01	1.4

※ O.OE−Odescripts O.O×10−O

Wagner, Katie

From: Wagner, Katie
Sent: Thursday, March 31, 2011 11:40 AM
To: Lee, Richard
Subject: RE: ACTION DUE by 3/31 COB: Questions on the use of MOX fuel

Is this "Complete" or "Pending"?

From: Lee, Richard
Sent: Thursday, March 31, 2011 8:22 AM
To: Wagner, Katie
Subject: FW: ACTION DUE by 3/31 COB: Questions on the use of MOX fuel
Importance: High

Pls. log in.

(b)(5)

Thx

From: Aissa, Mourad
Sent: Thursday, March 31, 2011 7:02 AM
To: Armstrong, Kenneth
Cc: Gibson, Kathy; Lee, Richard; Hoxie, Chris
Subject: FW: ACTION DUE by 3/31 COB: Questions on the use of MOX fuel
Importance: High

Ken,

(b)(5)

Thanks
Mourad

Mourad Aissa, PhD
Senior Criticality Analysis and Reactor Physics Engineer
Office of Nuclear Regulatory Research
Mail Stop CSB-3A07M
US Nuclear Regulatory Commission
Washington, DC 20555-0001
Phone: (301) 251-7511

From: Bowman, Gregory
Sent: Wednesday, March 30, 2011 2:20 PM
To: Gibson, Kathy; Lee, Richard; Aissa, Mourad
Cc: Armstrong, Kenneth
Subject: FW: ACTION DUE by 3/31 COB: Questions on the use of MOX fuel
Importance: High

BC/216

The questions below were sent to Ken Armstrong a minute ago, but I wanted to make sure you were aware of them (I tried calling Ken, but I missed him). Like the questions you worked on yesterday, these are related to MOX. (b)(5)

I think the answers you provided yesterday evening cover these questions, as well, but I wanted to give you a chance to add anything you think might be important that you didn't have time to address yesterday. The responses to these questions will end up being sent to all the Commission offices. If you're okay with what was sent yesterday, we can simply forward that on and consider the two RES questions addressed.

Thanks again for all the help with this. If you need any clarification or anything like that, please let me know.

From: Frazier, Alan
Sent: Wednesday, March 30, 2011 2:12 PM
To: Meighan, Sean; Nguyen, Quynh; Armstrong, Kenneth; Shropshire, Alan; Deegan, George
Cc: Wittick, Brian; Andersen, James; Merzke, Daniel; OST01 HOC; OST02 HOC; Rini, Brett; Bowman, Gregory; Brock, Kathryn; Muessle, Mary; Layton, Michael
Subject: ACTION DUE by 3/31 COB: Questions on the use of MOX fuel
Importance: High

All,

(b)(5)

Alan

ARTICLE: **Mixed Oxide Nuclear Fuel Raises Safety Questions.** The Scientific American (3/25, Matson) reported that reactor No. 3 at the troubled Fukushima Daiichi power station in Japan "has one characteristic that differentiates it from its neighboring reactors and from any operating reactor in the US" Among the

"hundreds of standard nuclear fuel assemblies in its core... are some that contain a mix of uranium and plutonium," or MOX. The use of MOX is controversial, and some "critics say that MOX is riskier than standard fuel and that there are better ways to dispose of excess plutonium." Notably, "the federally owned Tennessee Valley Authority (TVA), which operates the Browns Ferry Nuclear Plant and two other nuclear facilities, has expressed some interest in trying MOX and may step up to take fuel from" the Mixed Oxide Fuel Fabrication Facility (MFFF) in South Carolina.

From: LIA01 Hoc
Sent: Tuesday, April 05, 2011 3:32 PM
To: LIA08 Hoc; LIA06 Hoc
Subject: FW: FYI -- FW: Requests for USG Assistance: TRACKING MATRICES
Attachments: JAPANESE TRACKER (Master) (version 2).xlsb; Nuclear Team Asks and Offers Tracker 03-05-2011.xlsx

-----Original Message-----
From: RMTPACTSU_ELNRC [mailto:RMTPACTSU_ELNRC@ofda.gov]
Sent: Tuesday, April 05, 2011 3:29 PM
To: LIA11 Hoc; LIA01 Hoc; LIA07 Hoc; LIA02 Hoc; LIA08 Hoc; LIA12 Hoc; Harrington, Holly; McIntyre, David; Burnell, Scott; ET07 Hoc
Subject: FYI -- FW: Requests for USG Assistance: TRACKING MATRICES

-----Original Message-----
From: Clark, Ngoc CIV OSD POLICY [mailto:(b)(6)
Sent: Tuesday, April 05, 2011 3:23 PM
To: RMTPACTSU_RM; RMTPACTSU_DOE; RMTPACTSU_ELNRC; 'Green, Christopher L'
Subject: Requests for USG Assistance: TRACKING MATRICES

Colleagues,

Please see attached the Embassy Tokyo spreadsheet and Master tracker developed since last week to track requests for USG assistance.

Best,

Ngoc

Ms. Ngoc Clark
Foreign Affairs Specialist
OUSD(Policy) - SO/LIC & IC - PSO
703-692-0122

-----Original Message-----
From: Terrell, Patrick COL (USA) OSD POLICY
Sent: Tuesday, April 05, 2011 3:01 PM
To: POL HADR; POL Japan; POL CBRN JAPAN
Subject: TRACKING MATRICES

All,

Attached are two documents:

BC/217

1. The USEMBASSY TOKYO's Tracker (Nuclear Team Asks...)

2. The Tracking Matrix we started last week that the JS was refining over the weekend. (Japanese Tracker Master)

<<...>>

<<...>>

Pat

Attachment JAPANESE TRACKER (Master) (version 2).xlsb(168750 bytes) cannot be converted to PDF format.

US-Japan Nuclear-Related Assistance Tracker

Last update: April 5 - 1715 hrs.

Equipment/Supplies/Services Requested by GOJ

No.	NRC No.	Equipment/Service Being Requested	Quantity	Date of request	Requesting GOJ Office	GOJ POC	USG Action Office	USG POC	Target Date	Training Needed?	Reimbursement (Y/N)	Status of response	Open/ Closed	Comments
1	16	Aerial survey for AMS measurement, data sharing and analysis	N/A	3/25 GOJ list	MEXT, NSC, NISA, MAFF		DOE	Cherry, Duncan	N/A			DOE coordinates with MEXT, NSC, NISA, MOFF, MOFA. Daily sharing of AMS data and products. Per 4/4 meeting with GOJ, agreement on joint aerial surveys 4/6-4/12. Joint Staff is sharing U.S. aerial survey info USFJ-Ichigaya.	O	NRC's PMT provided this info to the white house (NITOPS). The feedback was that NITOPS won't task NARAC to run analysis until approval is received from the White House
2a	20 & 22	Ground radiation monitoring devices, mobile and stationary		3/25 GOJ list	MEXT, NSC, NISA, MOFA		DOE	Cherry				Mobile ground monitoring began 3/17. Discussions ongoing re fixed ground-based monitors. Need GOJ approval to proceed; MOFA is coordinating.	O	Mobile monitoring is closed. Stationary monitoring is the open item. This was a GoJ request and the idea is to possibly install a system such as the EPA Radnet system.
2b		(incl radiation friskers --hand /foot monitors)		3/28 C&b mtng	MEXT, NSC, NISA, MOFA		NRC/INPO	Blamey				Elaborates on request above - 20 hand/foot detectors (Bruce Howard), STP, San Onofre	O	This activity is awaiting authorization of commercial transport for Bruce monitors. (U.S. Embassy to advise). INPO to query utility-arranged transport of SONGS and STP equipment. Process of approving transportation needs to be solidified Shipping payments are being investigated as to who will pay for shipments. STP has 1 parcel that is internally contaminated that may be shipped to Bruce to be included in their shipment to Japan. Alan Blaney will attempt to have to moved forward quickly through the DART team.
3	18	Conduct simulation by radiation diffusion model (compare with SPEEDI data)	N/A		NSC, MEXT		DOE	Cherry, Duncan				DOE coordinates with NSC. NSC is the leading POC with the GOJ. GOJ has provided SPEEDI source term to NRC 3/25 and meteorological data with NARAC.	O	Models haven't been shared. Clarification needed between NARAC and Japanese POCs. DOE having discussions 4/04/11 to discuss technical preparations.
4	19	Germanium semiconductor detectors		3/25 GOJ list	MEXT, NISA, MAFF		DOE					INPO - US industry does not have spare detectors at this time (3/29). One detector has been loaned & training is underway. DOE to provide 1 detector each to MAFF and MHLW, due 4/6; 4 more for MAFF & MHLW, delivery TBD. NISA requested 1 HPE, under discussion.	O	DOE delivering 2 detectors on 4/05/11. 2-4 more detectors will ship the same week.
5	21	Robotic monitoring devices	2	3/25 list, quantity set 3/26	METI, NISA, TEPCO	METI: Hatada	DOE	Cherry, Duncan	Shipment o/a 4/6/11	yes-DOE proposed training through Qinetic Japan office		DOE coordinates with NRC, DOD/USFJ. U.S. confirmed 3/26 Cabinet meeting can provide Qinetic Talon, M2, Radiation-hardened cameras. Per 3-31 WG meeting, DOE will also provide additional radiation sensor kits.	O	DOE is handling Ground robotics and hardened cameras only. UAVs and handhelds are separate DOE is looking to send 1) Robotics expert and 2) camera's expert....plans are still in the making.
5a		Information on Radiation shielding materials for vehicles.		3/26 cabinet meeting; 3/29 list	METI, NISA		NRC, DOE					NRC provided information on tungsten materials; METI told DOE 3/28 in Remote/Robotics WG that it doesn't need shielding materials, just information.	O	

US-Japan Nuclear-Related Assistance Tracker

5b		Radiation-hardened cameras & Gamma Camera	5	3/26 cabinet meeting	METI, NISA		DOE		4/6/2011 shipment expected		US confirmed at 3/26 cabinet meeting that it can provide camera and system for mapping gamma rays. DOE to send five cameras and one gamma cam.	O	
5c		Westinghouse working on the UAV request and coordinating with Texas A&M expert									Westinghouse working with Texas A&M University expert.	O	
5d		GOJ request for shielding			INPO						This has been closed out. (Confirm how and by whom?)	C	
6	21a	Robotic debris clearing machines	2	3/25 list, quantity tet 3/26	METI, NISA		DOE	Cherry, Duncan	N/A	N/A	DOE coordinates with NRC, DOD/USFJ. Japan dropped request for equipment 3/28; still wants advice on shielding for heavy equipment.	O	Based on discussions with Embassy, the K-MAX helicopter is not needed, however Per NNSA (Jay Tilden) a whole range of remote heavy equipment will likely be needed. This is an open item being discussed by the Remote Control Project Team.
7	22	Provision of data obtained from UAVs	N/A	3/25 list	MOD, MOFA		DOD				GOJ is receiving Global Hawk images		Follow up action with Japan. Handled separately from Ground robotics and hardened cameras NISA will hold a meeting to discuss and determine needs for vauge items on the lists.
8	23	Unmanned helicopter - GOJ is looking for helicopter to spray nondispersant.	1	3/25 list	MOD, NISA, MOFA		DOD	DAO			MOD looking into DOD options (KS); repeated by Mr. Nagashima on 3/27 as unmanned helicoper with camera. NRC agreed 3/27 to follow using specs provided by Japan; NISA promised documents stating Japan's needs. MOD is not interested in KMAX.	C O	PACOM indicated no longer needed and taken off the table.
9	24	Transportation of fresh water by barges and delivery of pumps		3/25 list	MOD, NISA, MLIT, JCG			POL-MIL, DAO			Provided. Arrangement made for three vendor support representatives to stay and train.	C	There is one train that is installed. There is no need for further trains. DOD has the appropriate guidance. Alan Blamey will work with Japanese embassy officials to re-validate the need for this asset R Neilson says that second train is in Australia. A. Blamey to determine from Embassy if still needed and to share with R. Neilson so that Bechtel and can be advised
9a	24	Water barges			MOD			J4, PACOM			Per J4 the barges have been outfitted and tested and are 10 hrs from the NPP site and should arrive Weds. Need ETA	C	
9b	24	Fresh water supply pumps from Bechtel									First train in Japan	C	
10	3	High quality pumps and hoses.		3/26 meeting and previous discussion	MOD (TEPCO)		NRC	NRC			CLOSED: NRC rec'd info 3/26 on possible hose and said would investigate further; request withdrawn at 3/29 Cab meeting.	C	
11	3	High pressure hose (3 x 500 m) and couplers (for cooling reactor)		3/25 list and previous discussion	NISA		NRC/DOD	NRC, DOD			Hose delivered as part of Australia/Bechtel equipment; in J-Village.	O	

US-Japan Nuclear-Related Assistance Tracker

12		Protective body armor, radioactive survey meters and dosimeters, radioactive measuring instruments, iodine absorption masks, separation materials.		3/25 list	NISA, MOD	NISA, MOD					Japan repeated 3/27. (note: USAID has already provided 10,000 sets of protective clothing). Supply chain: Materials sourced; to be obtained commercially. Info sent to GOJ through Al Hochevar GOJ to establish need. Communicated to them that they are payers by Hochevar.	O	
13	34	2100+ radiation survey meters	2100+	3/28 meeting		NISA, MOD	DART				probably existing request repeated/elaborated. Dosimeters referred to DART.	O	List provided to Alan Blamey and Al Hochevar for cabinet meeting 4/2/11.
13a	34	Request for the following: 2100 units-Rad Survey Meters 2500 units-Personal Dosimetery 5100 units- iodine shielding masks					DART				Need status update	O	List provided to Alan Blamey and Al Hochevar for cabinet meeting 4/2/11.
14	34	5100+ masks for iodine absorption	5100+	3/28 meeting		NISA, MOD	DART				Nos. 14-16: probably existing request repeated/elaborated. Per INPO (A. Hochevar, 678-451-3017): these supplies can be obtained commercially by GOJ. Reffered to DART.	O	List provided to Alan Blamey and Al Hochevar for cabinet meeting 4/2/11.
15		33,000+ iodine absorption cans	33K	3/29 draft list		NISA, MOD	DART					O	
16		Separation materials for masks (as many as possible)		3/29 draft list		NISA, MOD	DART					O	
17	34	2,000 personal radiation dosimeters (PRD)	2000	3/28 meeting	MEXT, RIKEN					yes	Comment; State (Randy Thur) email 3/24 said "MEXT has declined to provide a statement of needs" and said it will not be needing the units ; need to check status"	O	List provided to Alan Blamey and Al Hochevar for cabinet meeting 4/2/11.
17a	34	2600+ personal dosimeters	2600+	3/28 meeting	NISA					yes	Probably existing request repeated/elaborated	O	List provided to Alan Blamey and Al Hochevar for cabinet meeting 4/2/11.
18	27	Potassium iodide (KI) preparation	1 million 17-dose bottles	3/25 list	NISA, MHLW, MOFA		HHS to provide; USAID to transport	Dr. Coleman and team (NIH via HHS), Robert Gabor Econ liaison with MOFA			MOFA said 3/30 it would accept the 1 million bottles (17 doses each) of liquid KI offered; requested via note vebale to DOS in D.C. (3/30); USG to share grant document text with GOJ before shipping.	O	Industry had tablets available, but HHS had liquid tablets that they were to provide. A. Blamey to verify with GOJ. May be caught up in logistics. Coming from USAID and CDC
19	29	Bottled water for infant formula		3/25 list	MHLW		USAID	USAID/OFDA	4/01 - 4/02		USAID and USFJ responsed with initial stocks; paperwork underway at USAID/State for possible delivery April 1-2	O	On the Embassy list for tracking

US-Japan Nuclear-Related Assistance Tracker

20		Heat exchanger to be used in spent fuel pool.		3/27 Nagashima; 3/29 list	NISA		NRC	INPO (Al Hochevar, 678-451-3017 (cell), expect source identified by 4/02/2011.			INPO is currently providing sources of comm'l heat exchangers that can be used to cool a spent fuel pool. (This will not result in purchase of heat exchanger.)	O	
21		Devices for condensing radiation contaminated water & information on evaporation technology		3/29 draft list	TBD		DOE, DOD	DOE Cherry, Duncan; DOD Adm. Gregory			Expanded request: On March 28 DCCS Fukuyama asked for information on measures to remove contaminated water.	O	
21a	30, 31 & 32	Assistance in dealing with accumulated radioactive water in turbine buildings		3/27 meeting			DOE/NRC	Cherry, Duncan			DOE paper provided to Amb. Roos and Amb Fujisaki on 3/29/11. Management of cont. water.	O	
21b	30 & 31	Water storage tanks and a trailer for contaminated water at 1F	6 tanks, 1 trailer	4/01, NISA-DOE mtg	NISA, TEPCO	NISA - Oshima;TEPCO - Umino	DOE	Cherry, Duncan		No	NISA asks info on specs, usage, installation. Asks if more are available. Request under consideration by USG. Need GOJ confirmation of request.	O	
21c	32	Information on "evaporation technologies"		3/28 - DCCS Fukuyama			DOE	Cherry, Duncan					
21d	108	Obtain contact info for industry personnel with experience in handling and disposal of open pools/trenches of high dose rate(>100 R/hr) water. Rcvd Mar 29 from Al Hochevar from Hososn							40632		Contacts developed and provided through INPO-Al Hochevar	C	
21e	13	Direct request from GOJ to Pacific Northwest Labs for technical assistance with water decontamination and storage issues.					DOE	Cherry, Duncan				O	
21f		Determine whether tempoary radwaste porcessing skids are available or would be a good idea (for removing contaminated water)						INPO				O	
21g	30	Temporary holding tanks (for removing contaminated water)					DOE; DOD; INPO					O	Develop recommendations for removal of water in basements of Units 1,2 and 3 per Task Tracker #3235. The Toshiba Team has investigated the use of large storage bladders to be used as temporary contaminated water storage. These bladders can hold up to 189,000 liters per bladder. Bladders can eventually be handled as a relatively small volume of solid waste. Need to develop a single water management team to handle all water issues once decision is made on how to proceed forward.

US-Japan Nuclear-Related Assistance Tracker

21h	31	Tanker trucks as a temporary holding area (for removing contaminated water)				DOE; DOD; INPO				O	Develop recommendations for removal of water in basements of Units 1,2 and 3 per Task Tracker #3235. The Toshiba team is concerned that the relative capacity of tanker trucks is small and that the trucks will have to remain onsite once contaminated. This option should be reserved for special situations.
21i	32	Investigate whether there is a technology that would absorb contaminated materials from water (for removing contaminated water)				DOE				O	Secretary Chu reportedly told this to the Japanese. The Toshiba Team has developed draft plans for water treatment with a focus on fission product removal and minimization of solids waste processing.
22		INFO: UGVs with radiation mapping capacity	3/29 draft list	METI		DOE/DOD			Initial request on March 25 list was for information on UGVs. Discussed in Remote/Robotics WG attended by DOE. (See nos. 5,6)	O	
23		INFO: Technical support on radiation technology, nuclear technology, and health effects	3/25 list	MHLW		DOE, USAID	Dr. Coleman (NIH via HHS)				
23a		Information on KI and drinking water								C	
23b		Health cooperation in three areas: environmental monitoring; KI policy; risk communication		CAO	Dr. Akashi	USAID, State, NIH, CDC, USDA, DOD	Dr. Coleman		Both sides agreed to continue discussions and include other personnel to arrive later.	C	
24		Medical triage re: exposure to radiation (decontamination capability)	3/25 list	MHLW		DOD, DOE, USAID	Dr. Coleman (NIH via HHS)		MOD initially identified as principal action ministry along with MHLW, subsequently changed 3/29. Chem Bio Initial Response Force (CBIRF) provided for this purpose.	O	
25	28	INFO: Extinguishant/coolant	3/25 list	NISA					Request further info from GOJ.	C	A. Blamey to Verify with GOJ what is exactly needed in this request
26		Incorporate PNL into crisis mgmt dialogue/Spent Fuel WG	3/26, 3/28 - DCCS Fukuyama	TBD		DOE/NRC	Cherry		PNNL team in Tokyo and providing support.	O	
27		U.S. cooperation in bringing private sector engineers into Shielding WG	3/26 meeting - Nagashima			NRC			Not included on draft 3/29 request list	O	
28		Assessment of possible fuel damage in units 1, 2, 3	3/27 - Hosono			NRC			NRC provided brief response at meeting.	C	
29		Assessment of structural stability of spent fuel pools	3/27 - Nagashima ; 3/28 - Fukuyama			NRC	NRC reactor Safety Team		In preparation for decisions on shielding. NRC completed assessment of current spent fuel pool weight. Further analysis needed.	O	
29a	107	Information on shielding for individual rooms and for the facility in general							Provided to GOJ through INPO-Al Hochevar.	C	

US-Japan Nuclear-Related Assistance Tracker

29b	33	Japan asked for NRC expertise on temporary shielding options, to determine whether the NPP Plant buildings are strong enough to hold up under additional pressure					NRC				From Cabinet Office Crisis Mgt. Team Meeting notes 3-28-2011	C	NRC has completed a gross analysis and does not have sufficient information to perform a detailed analysis for shielding. From Cabinet Office Crisis Management Team Meeting notes, 3/28/11. A. Blamey to discuss further with Japan
30	106	Information on tools/methods for moving damaged fuel, plus contacts of those with experience at TMI-2 and Chernobyl. From Mr. Hosono.			Hosono's Office			40632			Provided to GOJ through INPO-Al Hochevar on 3/30.	C	
31	110	SAMG Technical Document									Guidance has been sent to INPO contact in Japan and is being updated (Rev.1) and will be discussed 4/01; will include injection rate and best assessment to plant conditions; (need to confirm that INPO has received)	O	
32	111	GEH is following up on the Nitrogen purge issue analysis									GE is following	O	
33		Clarify for RST the indications that can be used to assess RPV integrity and location of core. (RST request)				NRC		40632			ongoing project, comments that shift focus are received during 1100 status call 3/29	O	
34		List alternative flowpaths that can be used for purging, given accessibility challenges. (RST request)				NRC		40632			GE to provide 3/29 list, INPO providing technical review	O	
35		Confirm RST recommendation that RPV injection can be maximized once containment has been purged and vented (RST)				NRC		40632			Technical: Ongoing project, comments that shift focus are received during 1100 status call 3/29	O	
36	118	Requests for military air transport					J4, PACOM				PACOM is involved in review and approval of all requests for military airlift to Japan. Requests should include weight and dimensions of the cargo. 1st choice should be commercial carrier for timely delivery; should limit requests to materiel that is difficult for commercial carriers to deliver.	C	

US-Japan Nuclear-Related Assistance Tracker

U.S. Offers				
	date offered	USG agency	Embassy office responsible	status
balloons for unmanned radiation measurement	3/26/2011	NOAA	ECON	Japan accepted in principle; Japan to identify approriate ministry
200-300 pieces of radiation measurement equipment		INPO through NRC		3/26 Japan said it would take all equipment offered
provide info on options for spent fuel transfer	3/26/2011	NRC		
U.S. expert on radiological tolerance of food to travel to Japan for consultations with FCS	3/26/2011	FDA	FAS	DCCS Fukuyama asked that FDA and FSC communicate directly
Canadian power plant to provide equipment for hand/foot monitoring	3/27/2011	INPO		
information on contamination control	3/28/2011			

US-Japan Nuclear-Related Assistance Tracker

Last update: April 4 - 1815 hrs.

Equipment/Supplies/Services Requested by GOJ

No.	Equipment/Service Being Requested	Date of request	Requesting GOJ Office	GOJ POC	USG Action Office	USG POC	Status of response	Open/ Closed
1	Aerial survey for AMS measurement, data sharing and analysis	3/25 GOJ list	MEXT, NSC, NISA, MAFF		DOE	Cherry, Duncan	DOE coordinates with MEXT, NSC, NISA, MOFF, MOFA. Daily sharing of AMS data and products. Per 4/4 meeting with GOJ, agreement on joint aerial surveys 4/6-4/12. Joint Staff is sharing U.S. aerial survey info USFJ-Ichigaya.	O
2a	Ground radiation monitoring devices, mobile and stationary	3/25 GOJ list	MEXT, NSC, NISA, MOFA		DOE	Cherry	Mobile ground monitoring began 3/17. Discussions ongoing re fixed ground-based monitors. Need GOJ approval to proceed; MOFA is coordinating.	O
2b	(incl radiation friskers --hand /foot monitors)	3/28 Cab mtng	MEXT, NSC, NISA, MOFA		NRC/INPO	Blamey	Elaborates on request above - 20 hand/foot detectors (Bruce Howard), STP, San Onofre	O
3	Conduct simulation by radiation diffusion model (compare with SPEEDI data)		NSC, MEXT		DOE	Cherry, Duncan	DOE coordinates with NSC. NSC is the leading POC with the GOJ. GOJ has provided SPEEDI source term to NRC 3/25 and meteorological data with NARAC.	O
4	Germanium semiconductor detectors	3/25 GOJ list	MEXT, NISA, MAFF		DOE		INPO - US industry does not have spare detectors at this time (3/29). One detector has been loaned & training is underway. DOE to provide 1 detector each to MAFF and MHLW, due 4/6; 4 more for MAFF & MHLW, delivery TBD. NISA requested 1 HPE, under discussion.	O

US-Japan Nuclear-Related Assistance Tracker

5	Robotic monitoring devices	3/25 list, quantity set 3/26	METI, NISA, TEPCO	METI: Hatada	DOE	Cherry, Duncan	DOE coordinates with NRC, DOD/USFJ. U.S. confirmed 3/26 Cabinet meeting can provide Qinetic Talon, M2, Radiation-hardened cameras. Per 3-31 WG meeting, DOE will also provide additional radiation sensor kits.	O
5a	Information on Radiation shielding materials for vehicles.	3/26 cabinet meeting; 3/29 list	METI, NISA		NRC, DOE		NRC provided information on tungsten materials; METI told DOE 3/28 in Remote/Robotics WG that it doesn't need shielding materials, just information.	O
5b	Radiation-hardened cameras & Gamma Camera	3/26 cabinet meeting	METI, NISA		DOE		US confirmed at 3/26 cabinet meeting that it can provide camera and system for mapping gamma rays. DOE to send five cameras and one gamma cam.	O
5c	Westinghouse working on the UAV request and coordinating with Texas A&M expert						Westinghouse working with Texas A&M University expert.	O
5d	GOJ request for shielding		INPO				This has been closed out. (Confirm how and by whom?)	C
6	Robotic debris clearing machines	3/25 list, quantity set 3/26	METI, NISA		DOE	Cherry, Duncan	DOE coordinates with NRC, DOD/USFJ. Japan dropped request for equipment 3/28; still wants advice on shielding for heavy equipment.	O
7	Provision of data obtained from UAVs	3/25 list	MOD, MOFA		DOD		GOJ is receiving Global Hawk images	C
8	Unmanned helicopter - GOJ is looking for helicopter to spray nondispersant.	3/25 list	MOD, NISA, MOFA		DOD	DAO	MOD looking into DOD options (KS); repeated by Mr. Nagashima on 3/27 as unmanned helicoper with camera. NRC agreed 3/27 to follow using specs provided by Japan; NISA promised documents stating Japan's needs. MOD is not interested in KMAX.	O C

9	Transportation of fresh water by barges and delivery of pumps	3/25 list	MOD, NISA, MLIT, JCG		POL-MIL, DAO	Provided. Arrangement made for three vendor support representatives to stay and train.	
9a	Water barges		MOD		J4, PACOM	Per J4 the barges have been outfitted and tested and are 10 hrs from the NPP site and should arrive Weds. Need ETA	C
9b	Fresh water supply pumps from Bechtel					First train in Japan	C
							C
10	High quality pumps and hoses.	3/26 meeting and previous discussion	MOD (TEPCO)	NRC	NRC	CLOSED: NRC rec'd info 3/26 on possible hose and said would investigate further; request withdrawn at 3/29 Cab meeting.	O
11	High pressure hose (3 x 500 m) and couplers (for cooling reactor)	3/25 list and previous discussion	NISA	NRC/DOD	NRC, DOD	Hose delivered as part of Australia/Bechtel equipment; in J-Village.	O
12	Protective body armor, radioactive survey meters and dosimeters, radioactive measuring instruments, iodine absorption masks, separation materials.	3/25 list	NISA, MOD	NISA, MOD		Japan repeated 3/27. (note: USAID has already provided 10,000 sets of protective clothing). Supply chain: Materials sourced; to be obtained commercially. Info sent to GOJ through AI Hochevar GOJ to establish need. Communicated to them that they are payers by Hochevar.	O
13	2100+ radiation survey meters	3/28 meeting		NISA, MOD	DART	probably existing request repeated/elaborated. Dosimeters referred to DART.	O
13a	Request for the following: 2100 units-Rad Survey Meters 2500 units-Personal Dosimetery 5100 units- iodine shielding masks				DART	Need status update	O

14	5100+ masks for iodine absorption	3/28 meeting		NISA, MOD	DART		Nos. 14-16: probably existing request repeated/elaborated. Per INPO (A. Hochevar, 678-451-3017): these supplies can be obtained commercially by GOJ. Reffered to DART.	O
15	33,000+ iodine absorption cans	3/29 draft list		NISA, MOD	DART			O
16	Separation materials for masks (as many as possible)	3/29 draft list		NISA, MOD	DART			O
17	2,000 personal radiation dosimeters (PRD)	3/28 meeting	MEXT, RIKEN				Comment; State (Randy Thur) email 3/24 said "MEXT has declined to provide a statement of needs" and said it will not be needing the units ; need to check status"	O
17a	2600+ personal dosimeters	3/28 meeting	NISA				Probably existing request repeated/elaborated	O
18	Potassium iodide (KI) preparation	3/25 list	NISA, MHLW, MOFA		HHS to provide; USAID to transport	Dr. Coleman and team (NIH via HHS), Robert Gabor Econ liaison with MOFA	MOFA said 3/30 it would accept the 1 million bottles (17 doses each) of liquid KI offered; requested via note vebale to DOS in D.C. (3/30); USG to share grant document text with GOJ before shipping.	O
19	Bottled water for infant formula	3/25 list	MHLW		USAID	USAID/OFDA	USAID and USFJ responsed with initial stocks; paperwork underway at USAID/State for possible delivery April 1-2	O

20	Heat exchanger to be used in spent fuel pool.	3/27 Nagashima; 3/29 list	NISA		NRC	INPO (Al Hochevar, 678-451-3017 (cell), expect source identified by 4/02/2011.	INPO is currently providing sources of comm'l heat exchangers that can be used to cool a spent fuel pool. (This will not result in purchase of heat exchanger.)	O
21	Devices for condensing radiation contaminated water & Information on evaporation technology	3/29 draft list	TBD		DOE, DOD	DOE Cherry, Duncan; DOD Adm. Gregory	Expanded request: On March 28 DCCS Fukuyama asked for information on measures to remove contaminated water.	O
21a	Assistance in dealing with accumulated radioactive water in turbine buildings	3/27 meeting			DOE/NRC	Cherry, Duncan	DOE paper provided to Amb. Roos and Amb Fujisaki on 3/29/11. Management of cont. water.	O
21b	Water storage tanks and a trailer for contaminated water at 1F	4/01, NISA-DOE mtg	NISA, TEPCO	NISA - Oshima;TEPCO - Umino	DOE	Cherry, Duncan	NISA asks info on specs, usage, installation. Asks if more are available. Request under consideration by USG. Need GOJ confirmation of request.	O
21c	Information on "evaporation technologies"	3/28 - DCCS Fukuyama			DOE	Cherry, Duncan		
21d	Obtain contact info for industry personnel with experience in handling and disposal of open pools/trenches of high dose rate(>100 R/hr) water. Rcvd Mar 29 from Al Hochevar from Hososn						Contacts developed and provided through INPO-Al Hochevar	C
21e	Direct request from GOJ to Pacific Northwest Labs for technical assistance with water decontamination and storage issues.				DOE	Cherry, Duncan		O

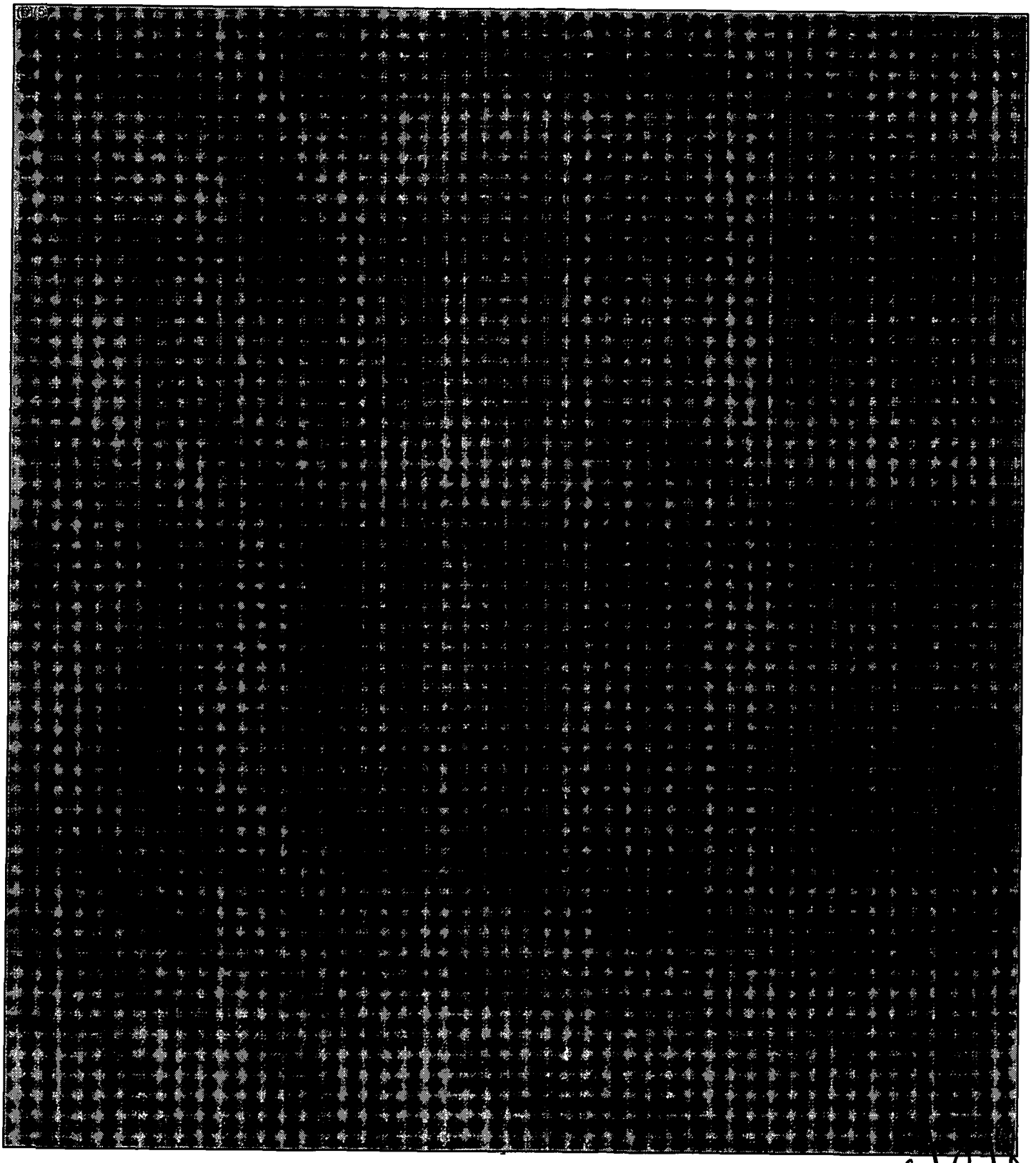
21f	Determine whether tempoary radwaste porcessing skids are available or would be a good idea (for removing contaminated water)					INPO		O
21g	Temporary holding tanks (for removing contaminated water)				DOE; DOD; INPO			O
21h	Tanker trucks as a temporary holding area (for removing contaminated water)				DOE; DOD; INPO			O
21i	Investigate whether there is a technology that would absorb contaminated materials from water (for removing contaminated water)				DOE			O
22	INFO: UGVs with radiation mapping capacity	3/29 draft list	METI		DOE/DOD		Initial request on March 25 list was for information on UGVs. Discussed in Remote/Robotics WG attended by DOE. (See nos. 5,6)	O
23	INFO: Technical support on radiation technology, nuclear technology, and health effects	3/25 list	MHLW		DOE, USAID	Dr. Coleman (NIH via HHS)		
23a	Information on KI and drinking water							C
23b	Health cooperation in three areas: environmental monitoring; KI policy; risk communication		CAO	Dr. Akashi	USAID, State, NIH, CDC, USDA, DOD	Dr. Coleman	Both sides agreed to continue discussions and include other personnel to arrive later.	C
24	Medical triage re: exposure to radiation (decontamination capability)	3/25 list	MHLW		DOD, DOE, USAID	Dr. Coleman (NIH via HHS)	MOD initially identified as principal action ministry along with MHLW, subsequently changed 3/29. Chem Bio Initial Response Force (CBIRF) provided for this purpose.	O

25	INFO: Extinguishant/coolant	3/25 list	NISA			Request further info from GOJ.	C
26	Incorporate PNL into crisis mgmt dialogue/Spent Fuel WG	3/26, 3/28 - DCCS Fukuyama	TBD	DOE/NRC	Cherry	PNNL team in Tokyo and providing support.	O
27	U.S. cooperation in bringing private sector engineers into Shielding WG	3/26 meeting - Nagashima		NRC		Not included on draft 3/29 request list	O
28	Assessment of possible fuel damage in units 1, 2, 3	3/27 - Hosono		NRC		NRC provided brief response at meeting.	C
29	Assessment of structural stability of spent fuel pools	3/27 - Naga-shima ; 3/28 - Fukuyama		NRC	NRC reactor Safety Team	In preparation for decisions on shielding. NRC completed assessment of current spent fuel pool weight. Further analysis needed.	O
29a	Information on shielding for individual rooms and for the facility in general					Provided to GOJ through INPO-Al Hochevar.	C
29b	Japan asked for NRC expertise on temporary shielding options, to determine whether the NPP Plant buildings are strong enough to hold up under additional pressure				NRC	From Cabinet Office Crisis Mgt. Team Meeting notes 3-28-2011	C
30	Information on tools/methods for moving damaged fuel, plus contacts of those with experience at TMI-2 and Chernobyl. From Mr. Hosono.			Hosono's Office		Provided to GOJ through INPO-Al Hochevar on 3/30.	C

31	SAMG Technical Document					Guidance has been sent to INPO contact in Japan and is being updated (Rev.1) and will be discussed 4/01; will include injection rate and best assessment to plant conditions; (need to confirm that INPO has received)	O
32	GEH is following up on the Nitrogen purge issue analysis					GE is following	O
33	Clarify for RST the indications that can be used to assess RPV integrity and location of core. (RST request)			NRC		ongoing project, comments that shift focus are received during 1100 status call 3/29	O
34	List alternative flowpaths that can be used for purging, given accessibility challenges. (RST request)			NRC		GE to provide 3/29 list, INPO providing technical review	O
35	Confirm RST recommendation that RPV injection can be maximized once containment has been purged and vented (RST)			NRC		Technical: Ongoing project, comments that shift focus are received during 1100 status call 3/29	O
36	Requests for military air transport				J4, PACOM	PACOM is involved in review and approval of all requests for miltary airlift to Japan. Requests should include weight and dimensions of the cargo. 1st choice should be commercial carrier for timely delivery; should limit requests to materiel that is difficult for commercial carriers to deliver.	C

Gibson, Lauren

From: Gibson, Lauren
Sent: Wednesday, April 06, 2011 2:43 PM
To: Regan, Christopher
Subject: Japan Notes



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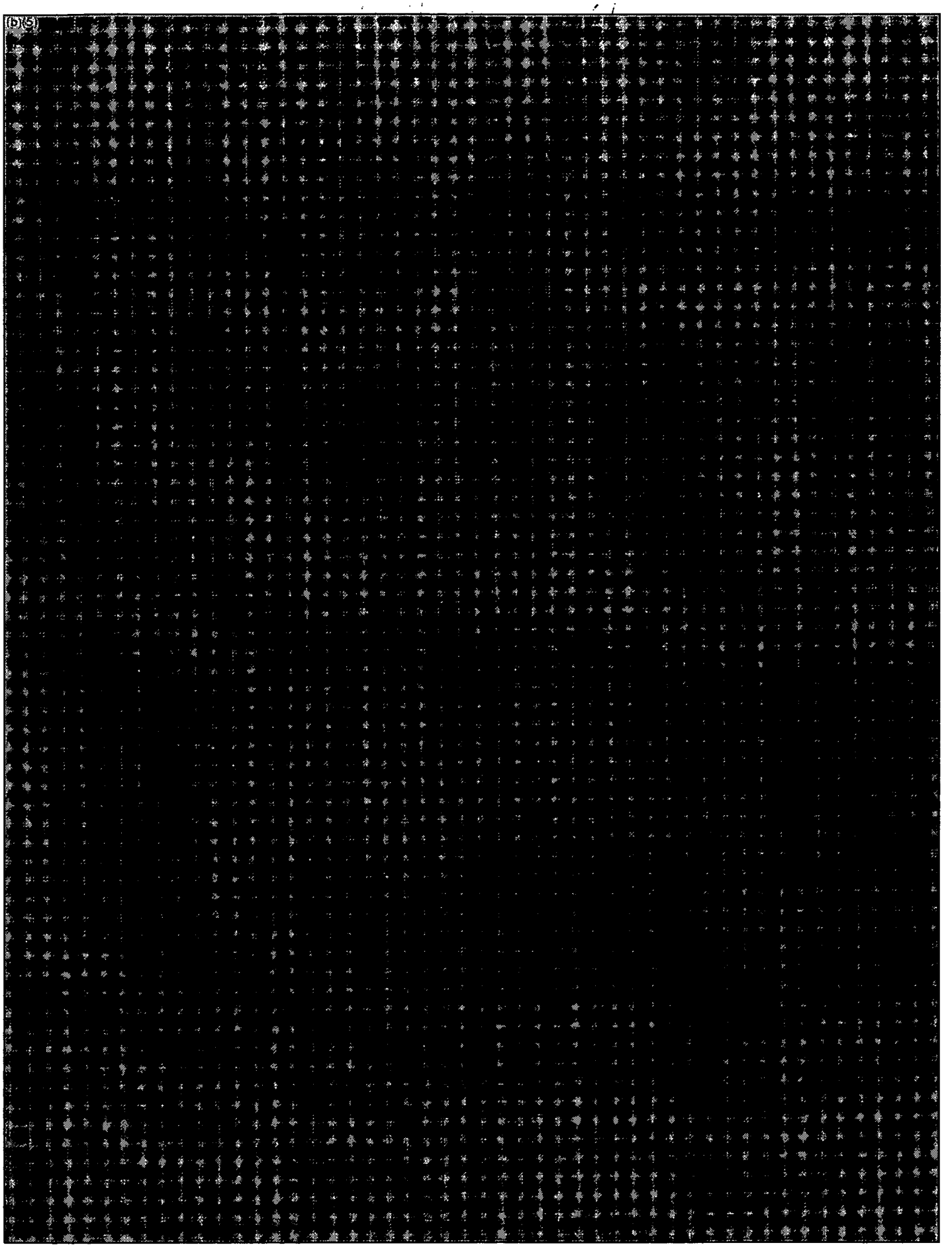
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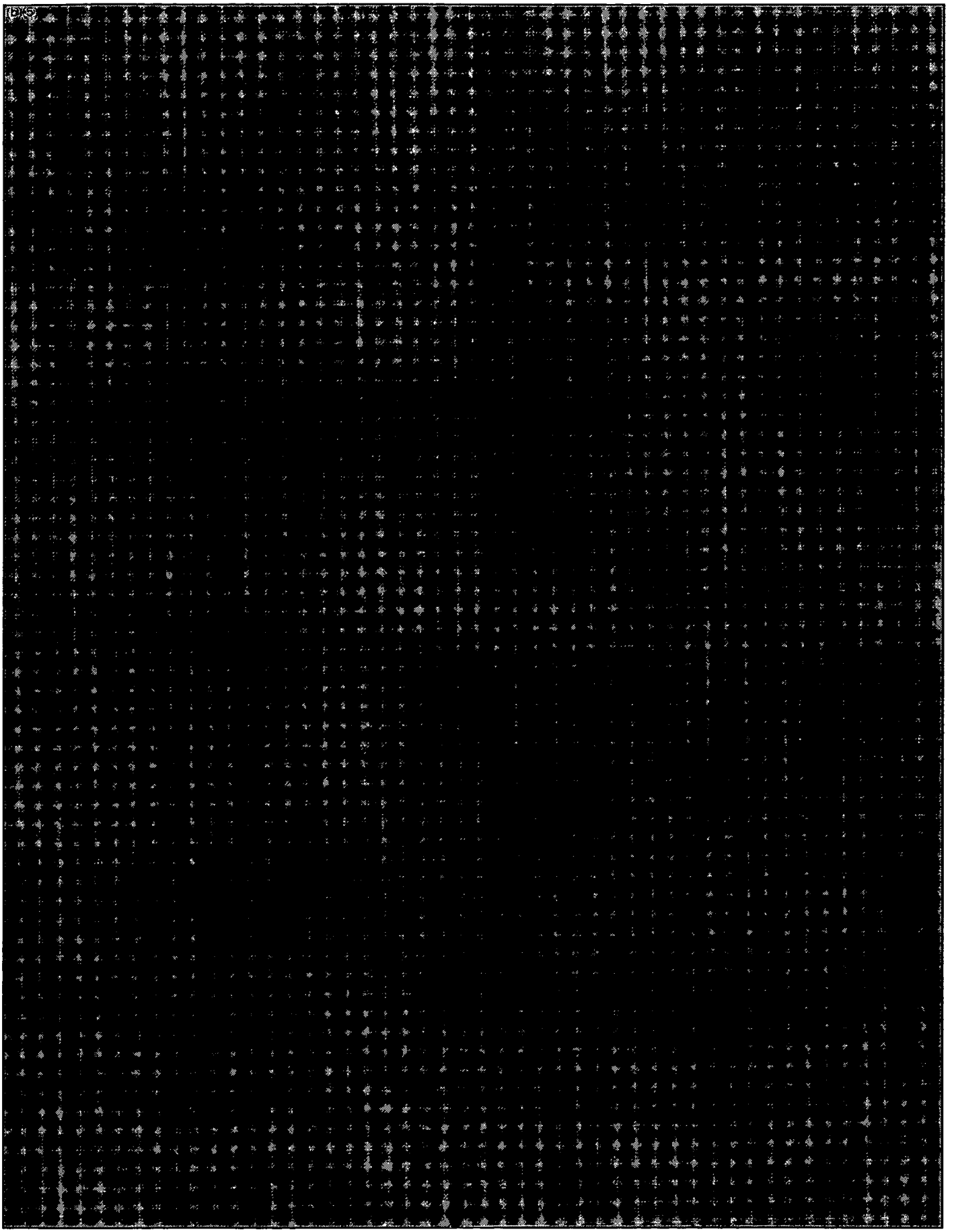

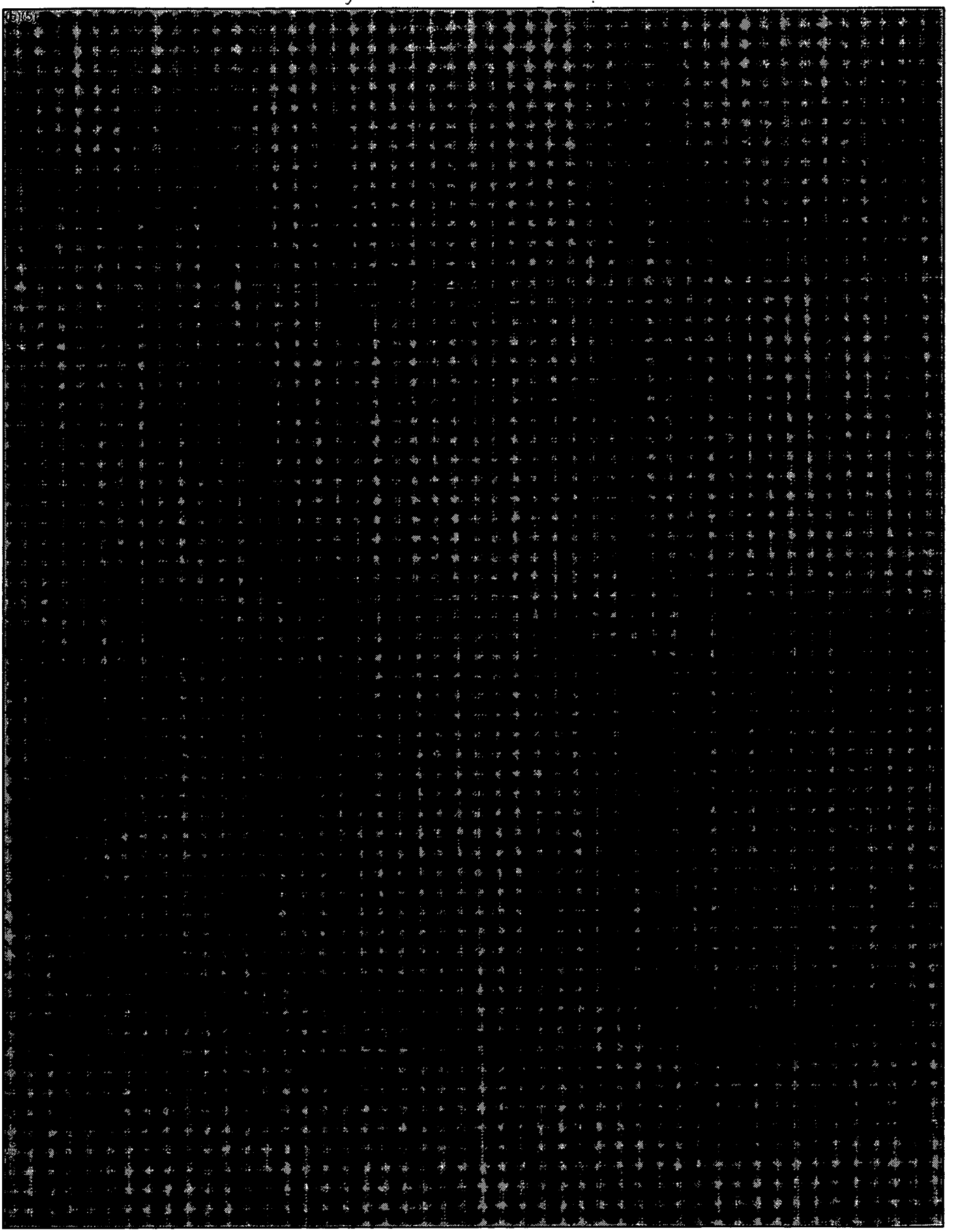

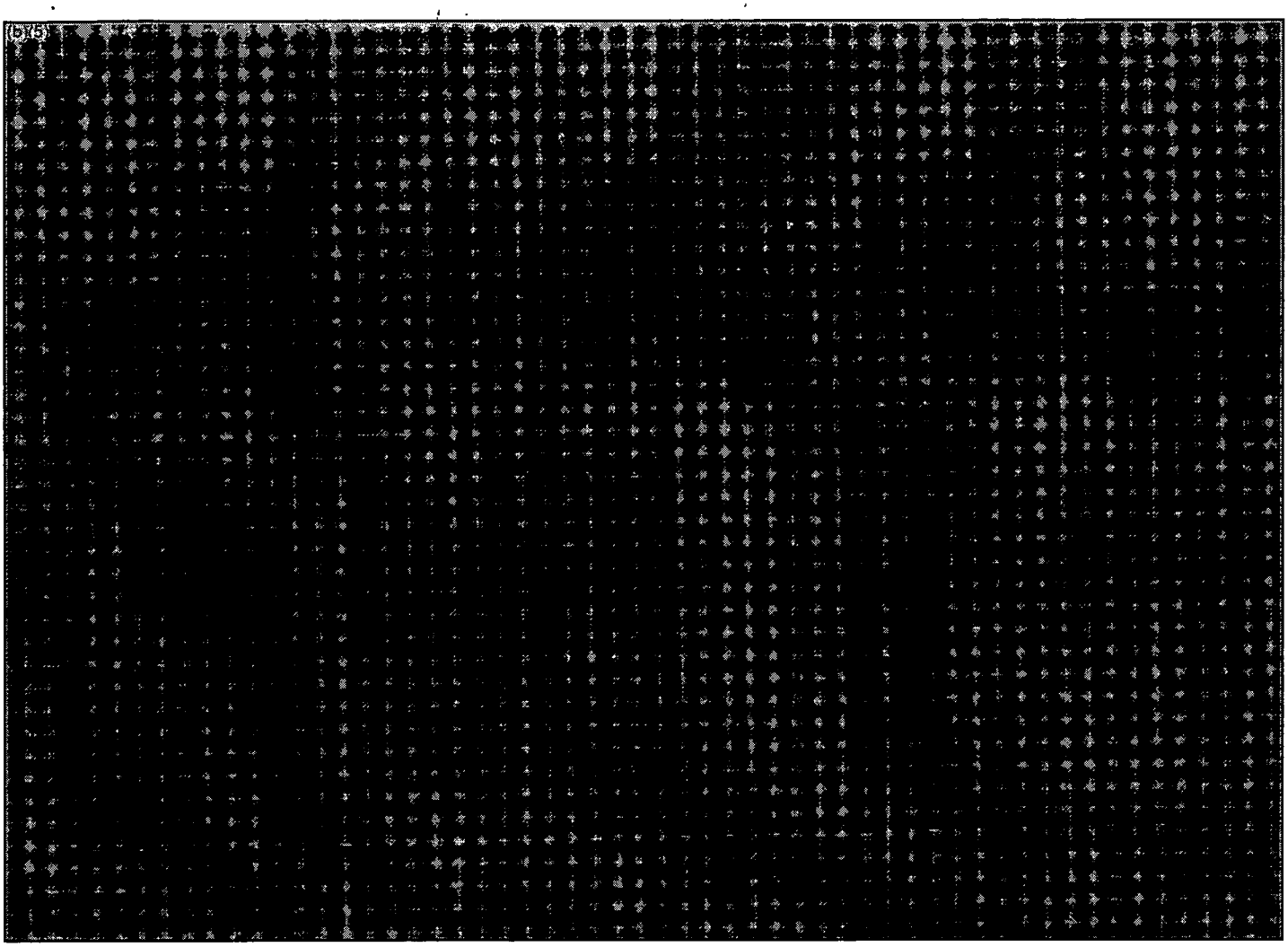

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East Japan Great Earthquake Damage Report

7 APR 0830 (Thu)

Japan Defense Intelligence Headquarters

East Japan Great Earthquake

JDIH
7 APR 2011 (Thu) 0830

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Earthquake Overview

- 11 MAR 1446, M9.0 Earthquake occurred off the coast of Sanriku Region, Intensity 7 (Japanese scale, Northern Miyagi)
- Aftershocks: 6 APR Japan Meteorological Agency predicts a 10% chance of a intensity 5+(M7.0) quake by 12 APR 1500
  There will be a predicted 20 aftershocks that are above M5.0 before 12 APR
  6 APR 2156 M4.7 quake in northern Ibaraki. Max intensity 4 (Hitachi city)
  6 APR 1155 M5.3 quake off the coast of Fukushima. Max intensity 4 (South Miyagi)

Damage overview (6 APR 2000)
(±compared to 6 APR 1345)

- Deaths: 12,554 (+66)
- Missing: 15,077 (-69)
- Injured: 2,866 (-19)
- Displaced : App. 160,600 (-1,500)
  Miyagi (App. 61,000)
  Fukushima (App. 26,100)
  Iwate (App. 50,200)

Damage to Lifeline (5 APR 1600)

- Electricity: Outage at 163,000 homes (-2,000)
  (Iwate: 30,000, Miyagi: 97,000, Fukushima: 36,000)
  Power Outages:
  Tokyo Electric: No outages until the 11th
  Tohoku Electric: Not today
- Water: Outage: 132,000 (-7,000)
- Gas: Outage: 169,000 (-21,000)

- Fukushima Daiichi Nuclear Power Plant (5 APR 0800)
  11 MAR Nuclear Emergency Declared
  12 MAR Ordered the evacuation 20km radius
  15 MAR 20-30km residents asked to stay indoors
  27 MAR Water found in trenches outside of reactor 1-3
  The water near reactor 2 was 1,000mSv/h.
  31 MAR iodine detected at 4,385 times the standard in seawater near the south water discharge port
  2 APR Water in the pit near water intake port registered over 1000mSv/h. Crack found in concrete on wall.
  4 APR Released low-contamination water from the central contaminated waste treatment facility and reactor 5, 6.
  6 APR 0530 stopped the leak of contaminated water from the pit of reactor 2
  6 APR 1800 Reactor 1 Containment Structure Temp 211.2 ℃ (compared to 5 APR 0000: -26.2℃)
  6 APR 2230 Injected Nitrogen into Reactor 1

Damage to Infrastructure (6 APR 1800)

- Roads: 2,126 damaged areas (56 damaged bridges); 1 Expressway and 17 national highways blocked; other than a few restricted areas, all roads are open for private and commercial vehicles.
- Rail: Most JR and private railways are operational in the Tohoku area. Akita Yamagata Shinkansen restored
- Air: All airports operational
- Ports: All ports are partially operational. More Berths available at Kuji and Sendai Shiogama Port

Human Loss

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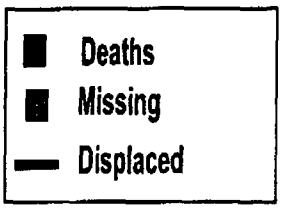
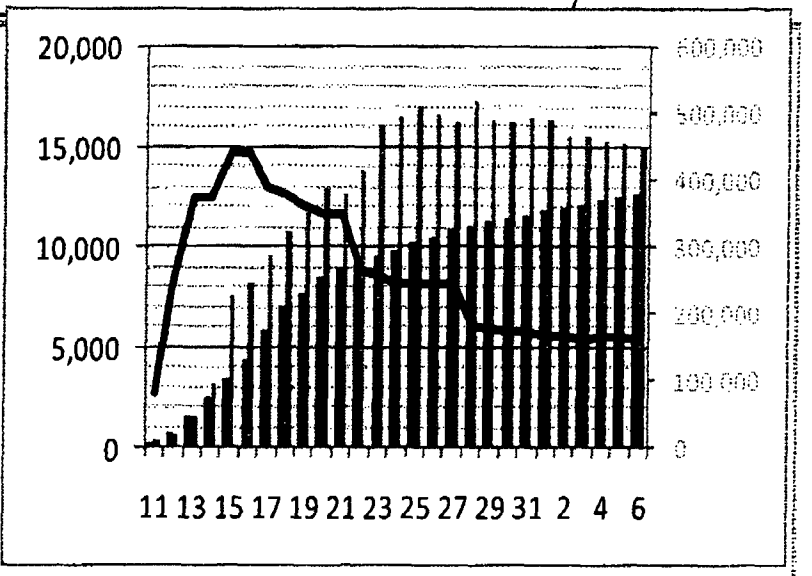
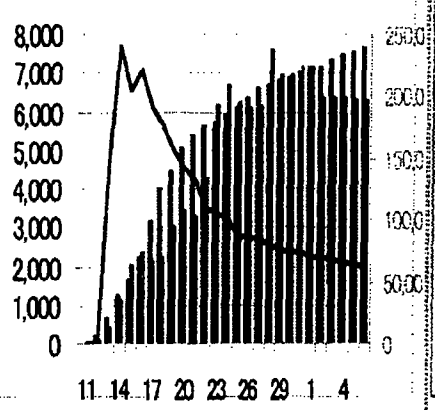
Totals (Includes Kanto)	
Deaths	12,554 (+66)
Missing	15,077 (-69)
Displaced	App. 160,600 (-1,500)



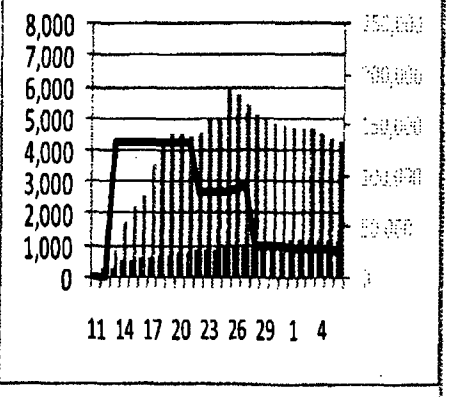


(Numbers in () show difference from 6 APR 1345)

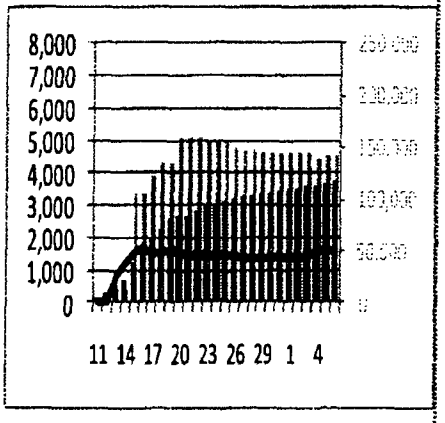
Miyagi	
Deaths	7,648 (+41)
Missing	6,321(+ 6)
Displaced	App. 61,000 (-2,000)



Fukushima	
Deaths	1,158 (±0)
Missing	4,280(±0)
Displaced	App. 26,100(-400)



Iwate	
Deaths	3,687(+44)
Missing	4,472(- 30)
Displaced	App. 50,200 (+1,200)



Source: NPA/Prefectural Govs

Nuclear Power Plants

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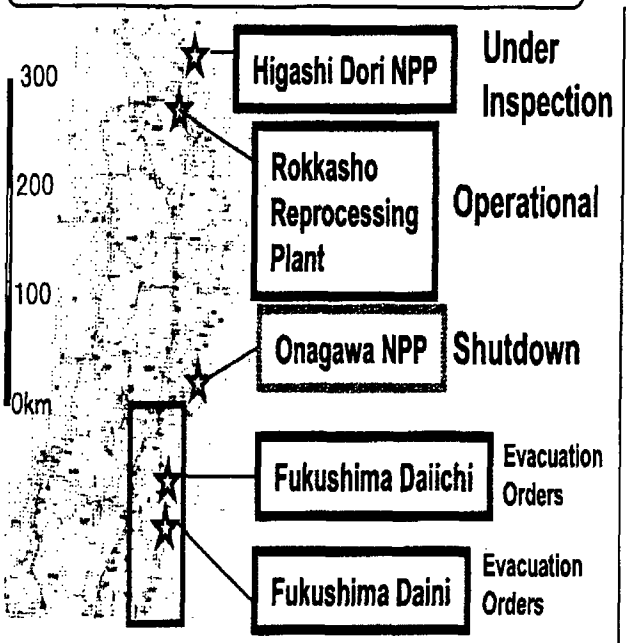

Fukushima Daiichi Nuclear Power Plant

- ♦ 11 MAR 1903 Nuclear Emergency Declared
- ♦ 12 MAR 1825 20km radius evacuation order (180,000 affected)
- ♦ 15 MAR 1100 20km-30km residents asked to stay indoors
- ♦ 15 MAR 1410 30km radius no-fly zone declared (MLIT)
- ♦ 18 MAR INES provisional assessment of situation released
  - ◊ Reactor No. 1, 2, 3: Evaluation Level 5 (Accident with Widespread Consequences)
  - ◊ Reactor No. 4: Evaluation Level 3 (Serious Incident)
- ♦ 20 MAR Cooling systems restored to Reactors 5 and 6. Cold Shutdown
- ♦ 22 MAR Reactor 1-4: Connected to external power. Inspecting equipment.
- ♦ 24 MAR 1537 Power/Cooling to Spent Fuel Pool
- ♦ 25 MAR Freshwater to Reactor 1, 3 Cores, 26 MAR Reactor 2
- ♦ 27 MAR Radiation levels of turbine bldg basement water pool are 1000mSv/h for Reactor 2, and 750mSv/h for Reactor 3
- ♦ 27 MAR Found water in trenches outside of reactors 1-3. Radiation levels of water outside of Reactor 2 turbine bldg is 1000mSv/h
- ♦ 28 MAR TEPCO finds traces of Plutonium within facility
- ♦ 2 APR Water in the pit near water intake port registered over 1000mSv/h. Water leaking into pit from crack in concrete wall.
- ♦ 3 APR Complex Molecular Polymer poured into reactor 2 pit to stop water flow.
- ♦ 4 APR Low-contamination water released from central contaminated water treatment facility and reactor 5 & 6
- ♦ 6 APR Stopped the contaminated water leak from the pit of reactor 2
- ♦ 6 APR 2230 Injected Nitrogen into Reactor 1

Fukushima Daini Nuclear Power Plant: Cold Shutdown

- ◊ 12 MAR 0745 Evacuation Order 10km radius
- ◊ Radioactive Materials Released?: No
- ◊ Displaced Persons: 32,426 (10km radius)
- ◊ 30 MAR 1756 Smoke at Reactor 1, at 1915 FD determined that there was an equipment malfunction and that it wasn't a fire

Source: Emergency Disaster Relief Headquarters

Fukushima Nuclear Powerplant

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	Reactor 1	Reactor 2	Reactor 3	Reactor 4	Reactor 5 & 6
	INES Level 5			Level 3	
Major Incidents	11 MAR 1636 Cooling System Failure 12 MAR 1536 Hydrogen Explosion 22 MAR 1120 Reactor Vessel temp rises (383 ℃) 23 MAR~ Temperature in reactor vessel declining (146.3℃ as of 26 MAR 0930) 27 MAR Turbine Bldg Pool Water Radiation Levels: 60mSv/h	11 MAR 1636 Cooling System Failure 14 MAR 1325 Loss of Cooling Capability 15 MAR 0610 Explosive Sound heard. Suppression Pool Damaged? 27 MAR Turbine Bldg Pooled Water Radiation Levels: 1,000mSv/h 28 MAR Water outside Turbine bldg is 1,000mSv/h **2 APR Water in the pit near water intake port registered over 1000mSv/h. Water leaking into pit from crack in concrete wall.**	13 MAR 0856 Cooling Failure 14 MAR 1101 Hydrogen Explosion 21 MAR 1555-1802 Grey smoke 23 MAR 1620 Black smoke (stopped 2330) 24 MAR radiation injury to 3 people at turbine bldg, 2 hospitalized 27 MAR Turbine Bldg Pooled Water Radiation Levels: 750mSv/h	14 MAR 0408 Temp rise in Spent Fuel Pool (Normally 40℃) 15 MAR 0938 Fire (extinguished 1225) 16 MAR 0545 Fire (extinguished 0726) 27 MAR Turbine Bldg Pooled Water Radiation Levels: 0.5mSv/h	15 MAR 1600 Temp rise in Spent Fuel Pool of Reactor 5 and 6 20 MAR Reactor 5 & 6 Cold Shutdown (Core under 100 ℃) 23 MAR 1724 Cooling Pump Failure (Repaired 3/24)
Damage	Roof of the outer structure damaged	East side of outer structure has a hole.	·Only the reinforced steel remain for the roof	·Only the reinforced steel remain for the roof	No visible damage
Electrical	Power from Reactor 2. Inspecting equipment 24 MAR Light in Cent Cont Rm	External Power Connected. Inspecting equipment 26 MAR Light in Cent Cont Rm	Power from Reactor 4. Inspecting equipment 22 MAR Light in Cent Cont Rm	External Power Connected. Inspecting equipment. 29 MAR 1150, Lights turned on in the central operating room	External Power Connected. Switched power sources.
Current Status	·Water level: A: -1,650mm (+50) B: -1,650mm (+0) (as of 6 APR 1800: Compared to 5 APR 0600) ·Reactor Core Damage 70% (15 MAR 1530) 211.2 ℃ (6 APR 1800)	·Water Level: -1,500mm (+0mm) (as of 6 APR 1800: Compared to 5 APR 0600) ·Reactor Core Damage 30% (15 MAR 1530) 143.6 ℃ (6 APR 1800)	·Water Level: A: -1,800mm (+50mm) B: -2,200mm (+50mm) (as of 6 APR 1800: Compared to 5 APR 1020) ·Reactor Core Damage 25% (14 MAR 0635) 83.0 ℃ (6 APR 1800)	No fuel rods	Cold Shutdown
Spent Fuel Pool	Water temp: not measurable *Water temp: 24 ℃ (6 APR 0730: MOD measurement)	Water temp: 51℃ (-20℃) (as of 6 APR 1800: Compared to 5 APR 0600)	Water temp gauge: broken MOD measured temp: 60 ℃ (+3.0) (as of 6 APR 0730)	Water temp: not measurable MOD measured temp: 57 ℃ (+27) (as of 6 APR 0730)	Water Temp: Reactor 5: 31.3℃(-3.9℃) Reactor 6: 28.0℃(+2.0℃) (as of 6 APR 2000: Compared to 5 APR 1300)

Red: Updated Information Blue: Unreleased New Information **Source: Nuclear Powerplant Disaster Response Headquarters**

Detailed Report of the Fukushima Nuclear Powerplant

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	Reactor 1	Reactor 2	Reactor 3	Reactor 4	Reactor 5 & 6
Countermeasures	12 MAR 1430 Vent Reactor 12 MAR 2020 Seawater Pumped 19 MAR Power estimated to be restored •Completed laying the cable from external power line to the power plant backup transformer. Currently connecting power to motor and other equipment. 23 MAR 0233 Pumped water into reactor using the built in pipes. 25 MAR 1537- Started injecting freshwater into reactor vessel 27 MAR Pooled water is being transported to the condenser 31 MAR 0920 Moved the water from the trench 31 MAR -2 APR Move water from condenser tank to surge tank 6 APR 2230 Injected Nitrogen to prevent hydrogen explosion Spent Fuel Pool Hose Ops: 31 MAR 1303-1604	14 MAR 1634 Seawater Pumped 15 MAR 0000 Vented Reactor 17 MAR, Power Cable Restoration starts 25 MAR 1930- Injected Seawater into reactor vessel 26 MAR 1010 Injection of fresh water into reactor vessel 27 MAR Preparations being made to transfer pooled water to the condenser 29 MAR 1630 Started adding freshwater to Spent Fuel Pool 29 MAR- 1 APR Started moving contaminated water from condenser tank to surge tank 2 APR 1625Poured concrete into pit to stop contaminated water leak **2 APR 1710 Moved water from condenser to condenser tank** **3 APR Poured complex molecular polymer into reactor 2 pit** **5 APR 1507 Poured liquid glass chemicals in ground to stop leak around the pit** **6 APR 0538 Confirmed that the leak has stopped** Spent Fuel Pool Hose Ops: 20 MAR 1505-1720 22 MAR 1619-1701 25 MAR 1030-1219 30 MAR 1905-2350 1 APR 1456-1705 4 APR 1105-1337	13 MAR 0841 Vent Reactor 13 MAR 1312 Seawater/Boric Acid Pumped 21 MAR 1601 Workers evacuate from smoke 23 MAR 1620 black smoke. Workers temporarily evacuated, 25 MAR 1802- Inject Freshwater into reactor vessel 28 MAR 1740 Start Move of Basement Water to Surge Tank Hose Ops of spent fuel pool: SDF: 17 MAR water disposal 18 MAR 1400-1438 FD: 19 MAR 1446-20th 0340 20 MAR 2130-21st 0356 22 MAR 1510-1600 25 MAR 1328-1600 TEPCO: 27 MAR 1234-1436 29 MAR 1417-1818 2 APR 0952-1254 4 APR 1703-1919 Spent Fuel Pool: 23 MAR 1103-1320 24 MAR 0530-1605 31 MAR 1630-1933	17 MAR Power restoration effort) 22 MAR 0600-1000 Setup of the water truck "Kirin" 25 MAR 0605 Seawater added to Spent Fuel Pool 27 MAR Transfer of pooled water to the condenser is under consideration Hose of spent fuel pool: SDF: 20 MAR 0820-0943 20 MAR 1822-1943 21 MAR 0637-0841 TEPCO: 20 MAR 0820-0943 20 MAR 0820-0943 20 MAR 1822-1943 21 MAR 0637-0841 22 MAR 1717-2032 23 MAR 1000-1302 24 MAR 1436-1730 25 MAR: 1905-2207 27 MAR: 1655-1925 30 MAR: 1404-1833 1 APR 0828-1414 5 APR 1735-1822 Spent Fuel Pool: 25 MAR 0605-1020 3 APR 1714-2216	18-19 MAR Release Hydrogen from ceiling 19 MAR 0500 Reactor 5 pump activated 19 MAR 0742 Generator activated for reactor 5/6 19 MAR Restarting cooling pump of the reactor 5/6 spent fuel pool. →Temperature Decline 22 MAR 1941 Reactors 5, 6 on External Power

Red: Updated Information Blue: Unreleased New Information **Source: Nuclear Powerplant Disaster Response Headquarters**

Nuclear Reactor Overview (6 APR)

Reactor 1, 2, 3 parameters are stable.

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			Reactor 1	Reactor 2	Reactor 3	Reactor 4
Reactor	Freshwater Injection		○(Intake Pipes)	○(Fire Pipes)	○(Fire Pipes)	Under Maintenance during earthquake/ tsunami
	Reactor Temp Reactor Pressure Containment Structure Press.		211.2℃ 0.350MPaG 0.150MPaabs (6日1800)	143.6℃ -0.014MPaG 0.100MPaabs (6日1800)	83.0℃ 0.004MPaG 0.1066MPaabs (6日1800)	
Spent Fuel Pool	Freshwater by External Pump		○	○	○	–
	Temp	NPP Gauges	x	51.0℃ (4/61800)	x	x
		MOD Thermograph	24℃ (4/6 0730)	–	60℃ (4/6 0730)	57℃ (4/6 0730)
	Hose Ops	Most Recent	3/31 1303~1604	–	4/4 1703~1919	4/5 1735~1822
		Plans	No Plans	–	4/6 1700~1930	No Plans
Water Drainage	Most Recent		4/3 1355~ H/W→CST in progress	4/2 1710~ H/W→CST in progress	4/6 H/W→CST planning	Under Consideration
	Plans		4/7 Same as above	4/7 Same as above (until 4/9)		–

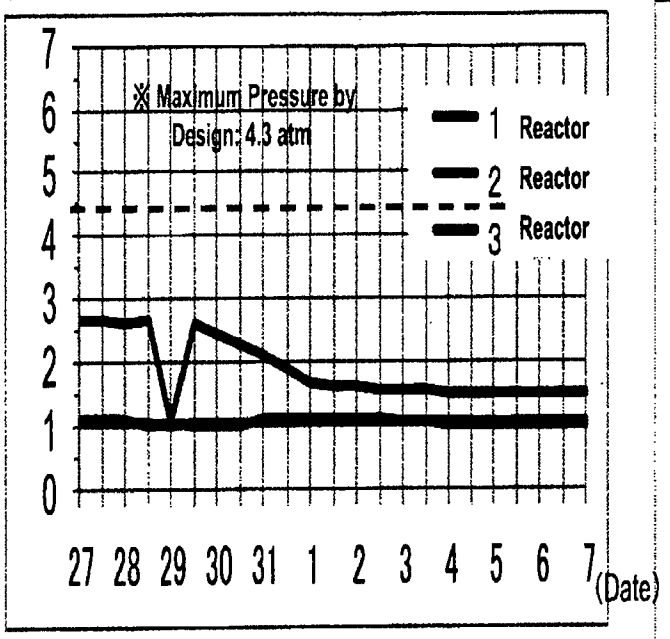
T/B:Turbine Building
CST:Condensed Water Storage Tank
R/W:Radioactive Waste Processing Facility
H/T:Condenser
SPT:Pressure Suppression Tank

Source: Nuclear Disaster Response HQ 7

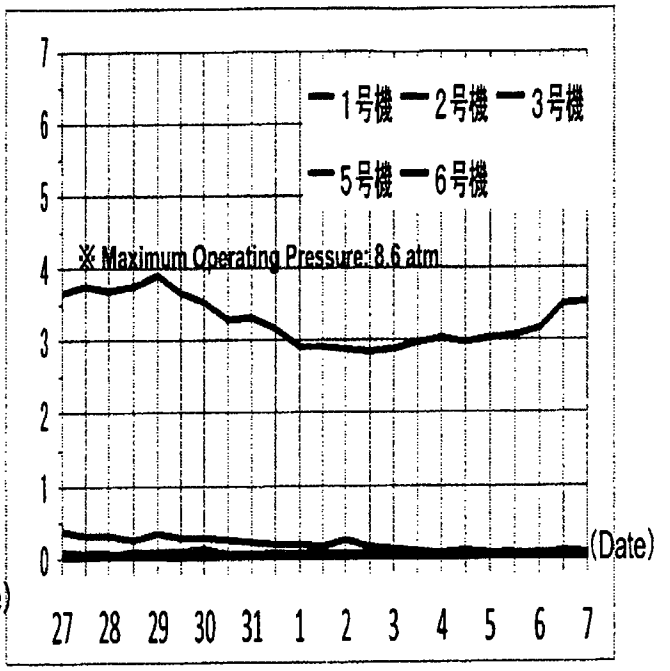
Fukushima Daiichi NPP Status (Radiation Levels) 7 APR

UNCLASSIFIED
~~FOUO~~

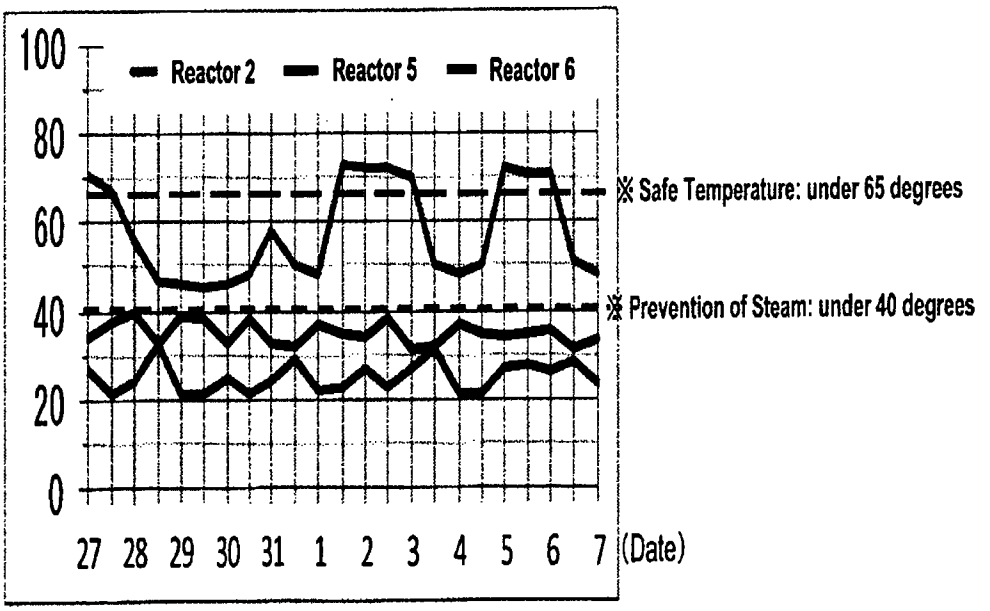
Containment Structure Pressure (4/7 0000)



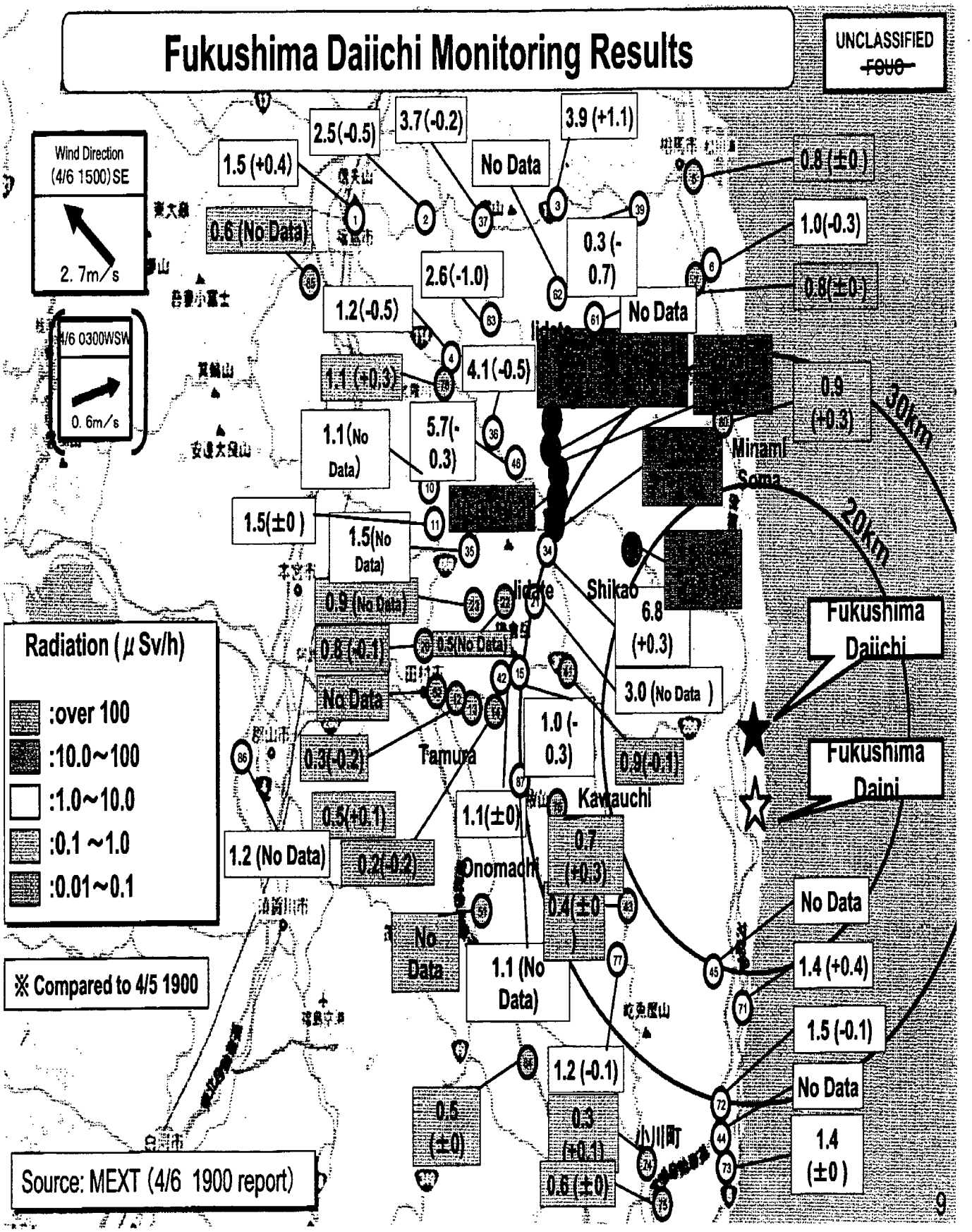
Reactor Vessel Pressure (4/7 0000)



Spent Fuel Pool Temp (4/7 0200)



Source: MOD DR HQ


Fukushima Daiichi Monitoring Results
UNCLASSIFIED
~~FOUO~~
Wind Direction (4/6 1500) SE
2. 7m/s
4/6 0300WSW
0. 6m/s
2.5(-0.5)
3.7(-0.2)
3.9 (+1.1)
1.5 (+0.4)
No Data
0.8 (±0)
0.6 (No Data)
1.0(-0.3)
0.3 (-0.7)
2.6(-1.0)
0.8(±0)
1.2(-0.5)
No Data
4.1(-0.5)
1.1 (+0.3)
0.9 (+0.3)
30km
1.1(No Data)
5.7(-0.3)
Minami Soma
20km
1.5(±0)
1.5(No Data)
Iidate
Shikao
0.9 (No Data)
6.8 (+0.3)
Fukushima Daiichi
0.8 (-0.1)
0.5(No Data)
3.0 (No Data)
No Data
1.0 (-0.3)
0.9(-0.1)
Fukushima Daini
0.3(-0.2)
Tamura
Kawauchi
0.5(+0.1)
1.1(±0)
0.7 (+0.3)
1.2 (No Data)
0.2(-0.2)
Onomachi
0.4(±0)
No Data
No Data
1.1 (No Data)
1.4 (+0.4)
1.5 (-0.1)
1.2 (-0.1)
No Data
0.5 (±0)
0.3 (+0.1)
小川町
1.4 (±0)
0.6 (±0)
Radiation (μSv/h)
:over 100
:10.0~100
:1.0~10.0
:0.1 ~1.0
:0.01~0.1
※ Compared to 4/5 1900
Source: MEXT (4/6 1900 report)

Fukushima Daiichi NPP Accumulated Radiation

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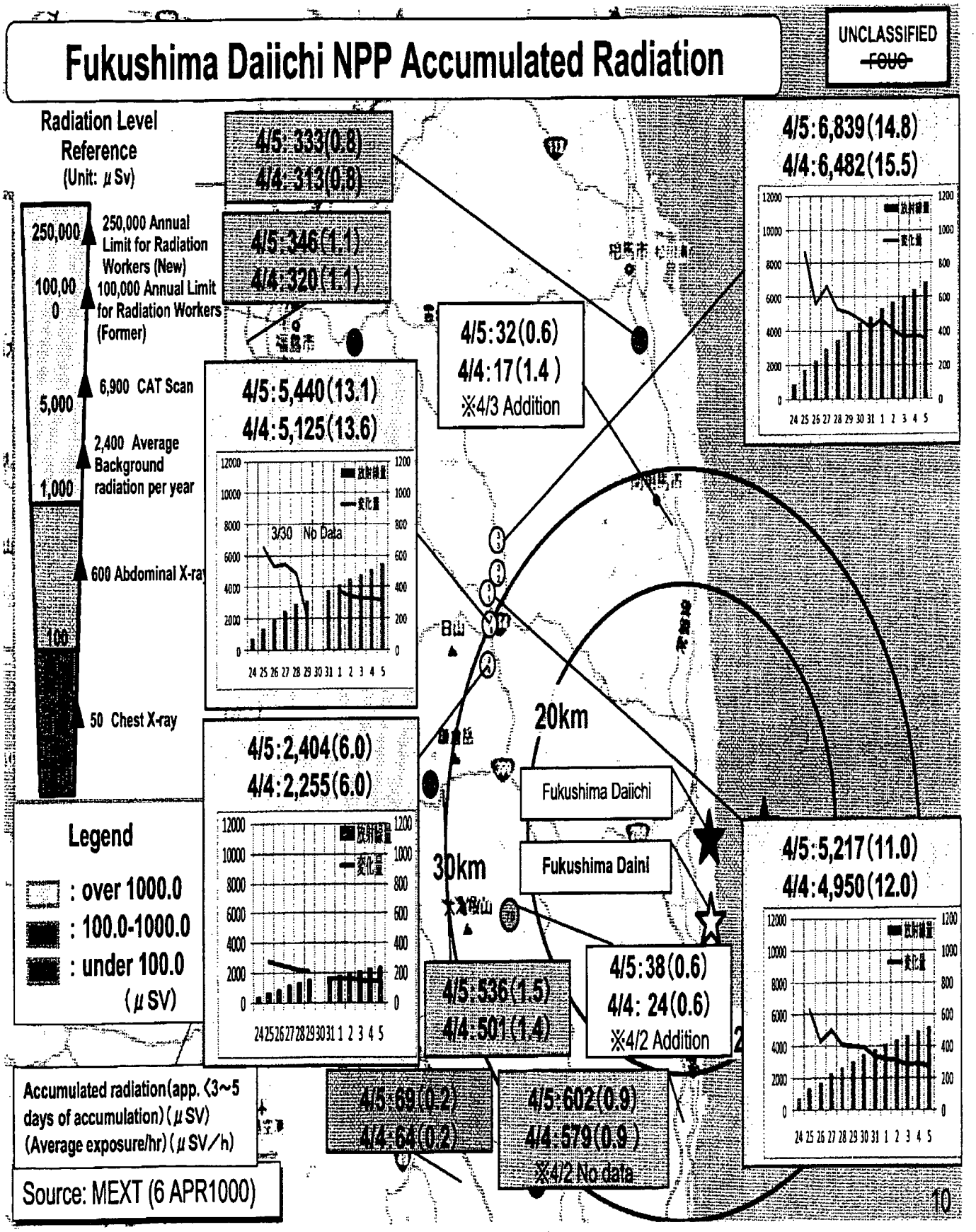

Fukushima Daiichi NPP Monitoring 4/7 0500

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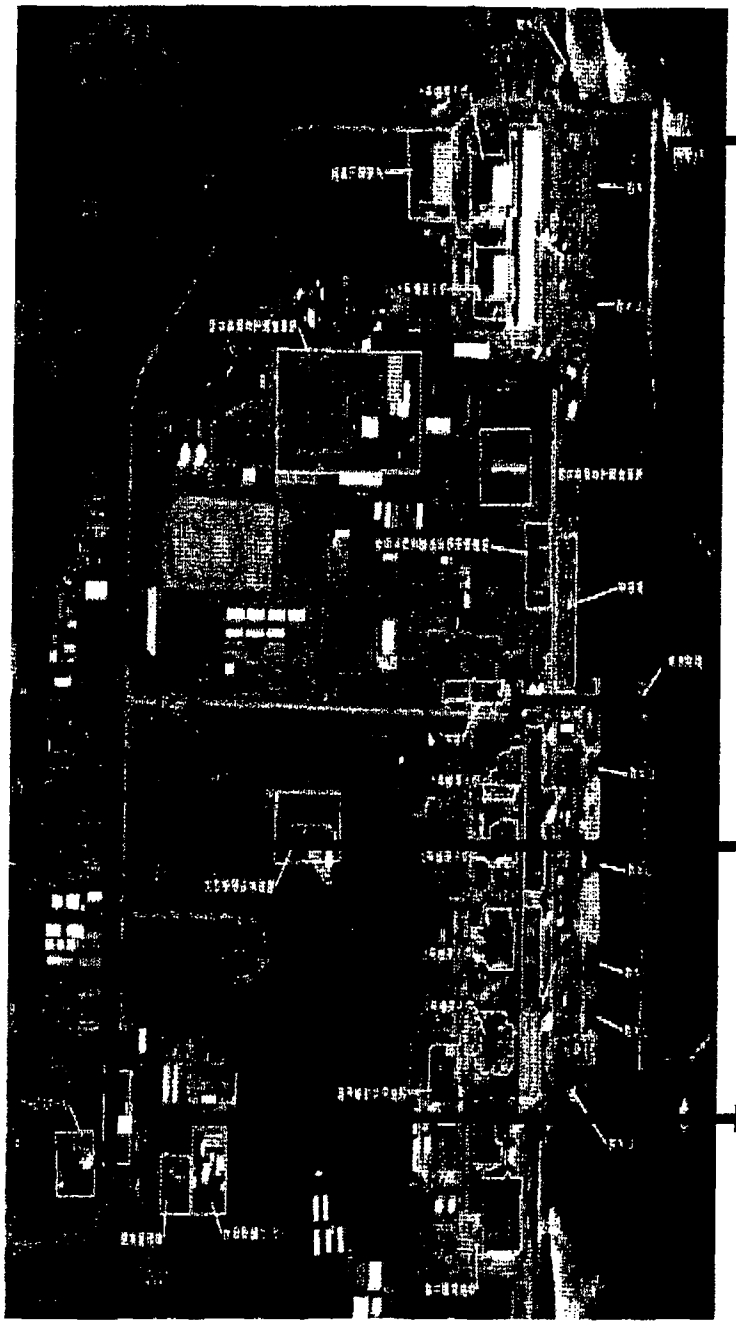
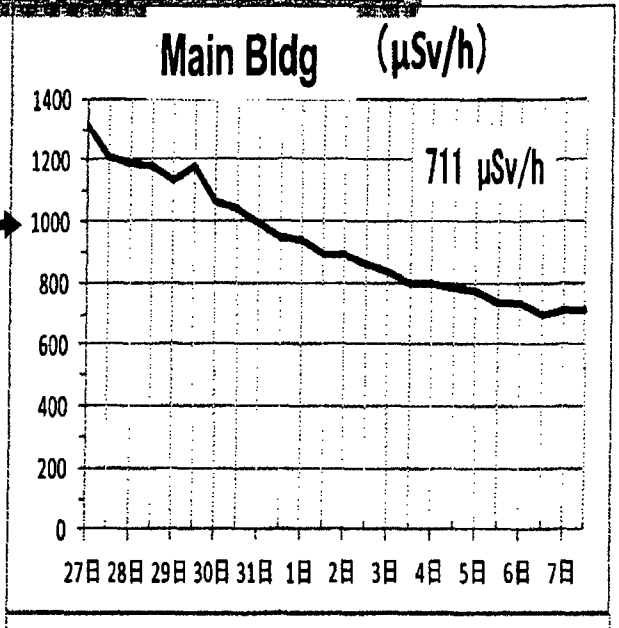
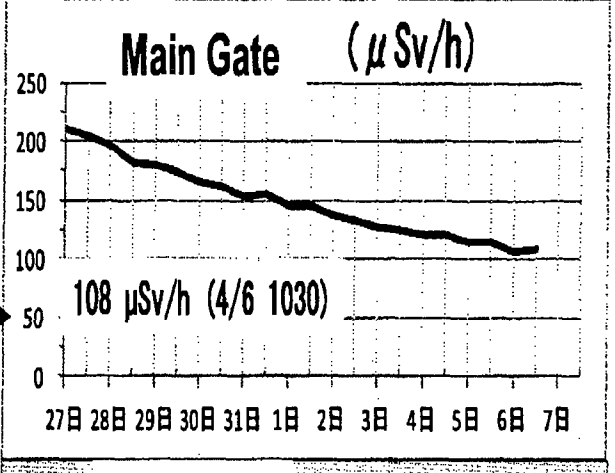
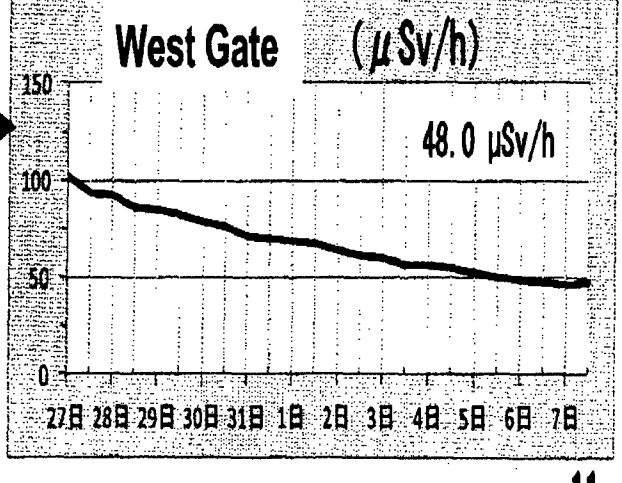




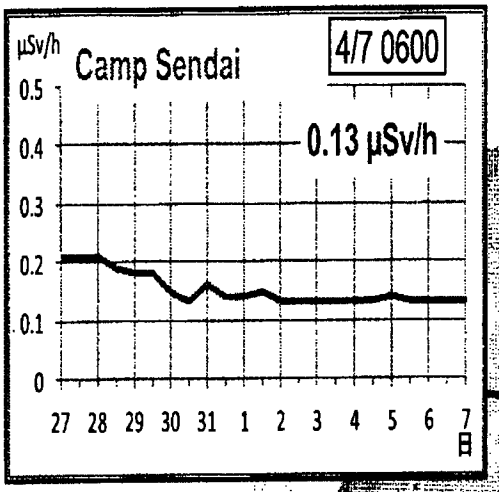


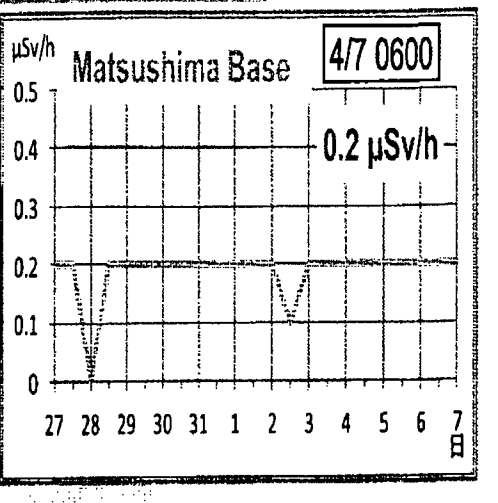


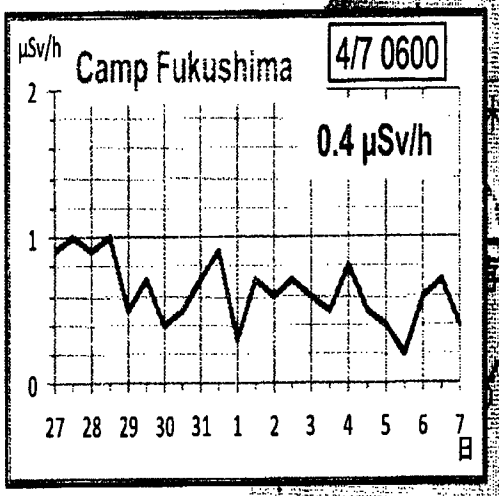
Source: MOD DR HQ

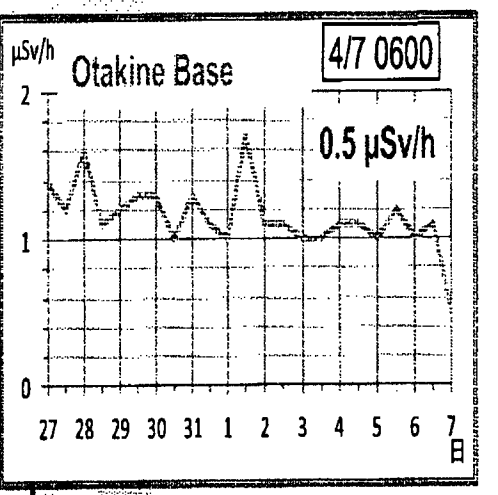
Fukushima Daiichi NPP Radiation of Nearby SDF Facilities 4/6 0600

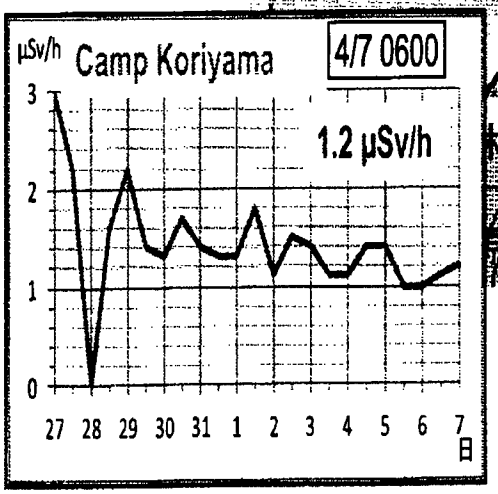
UNCLASSIFIED
~~FOUO~~

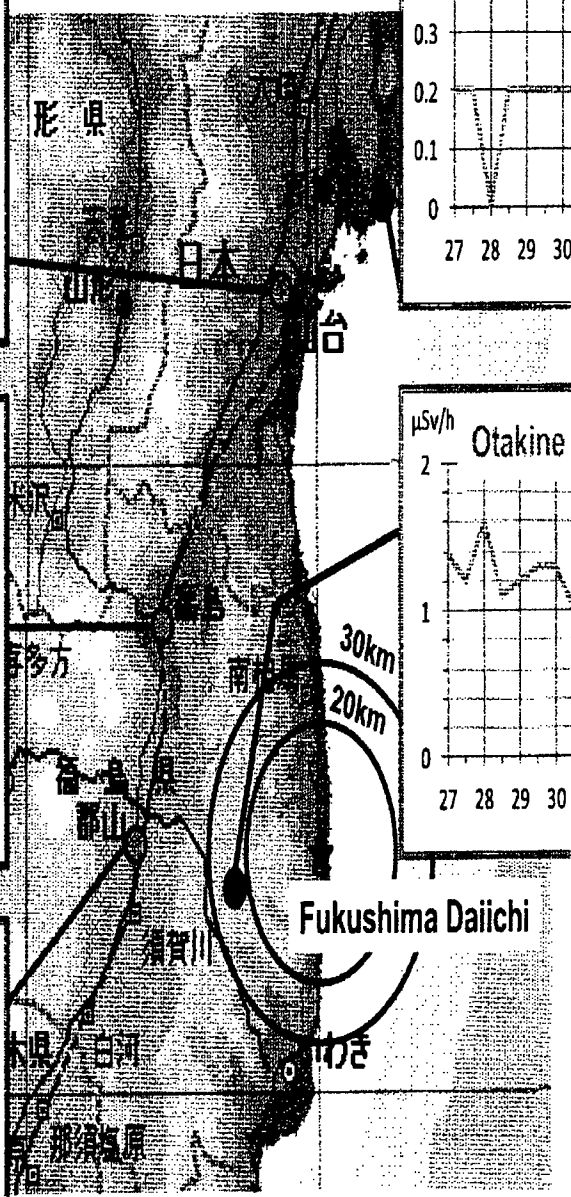












Legend
— :JGSDF
— :JASDF

0 50 100k
m

Source: JTF-TH, ADC

Radiological Measurements of DECON Centers (4/5 1700)

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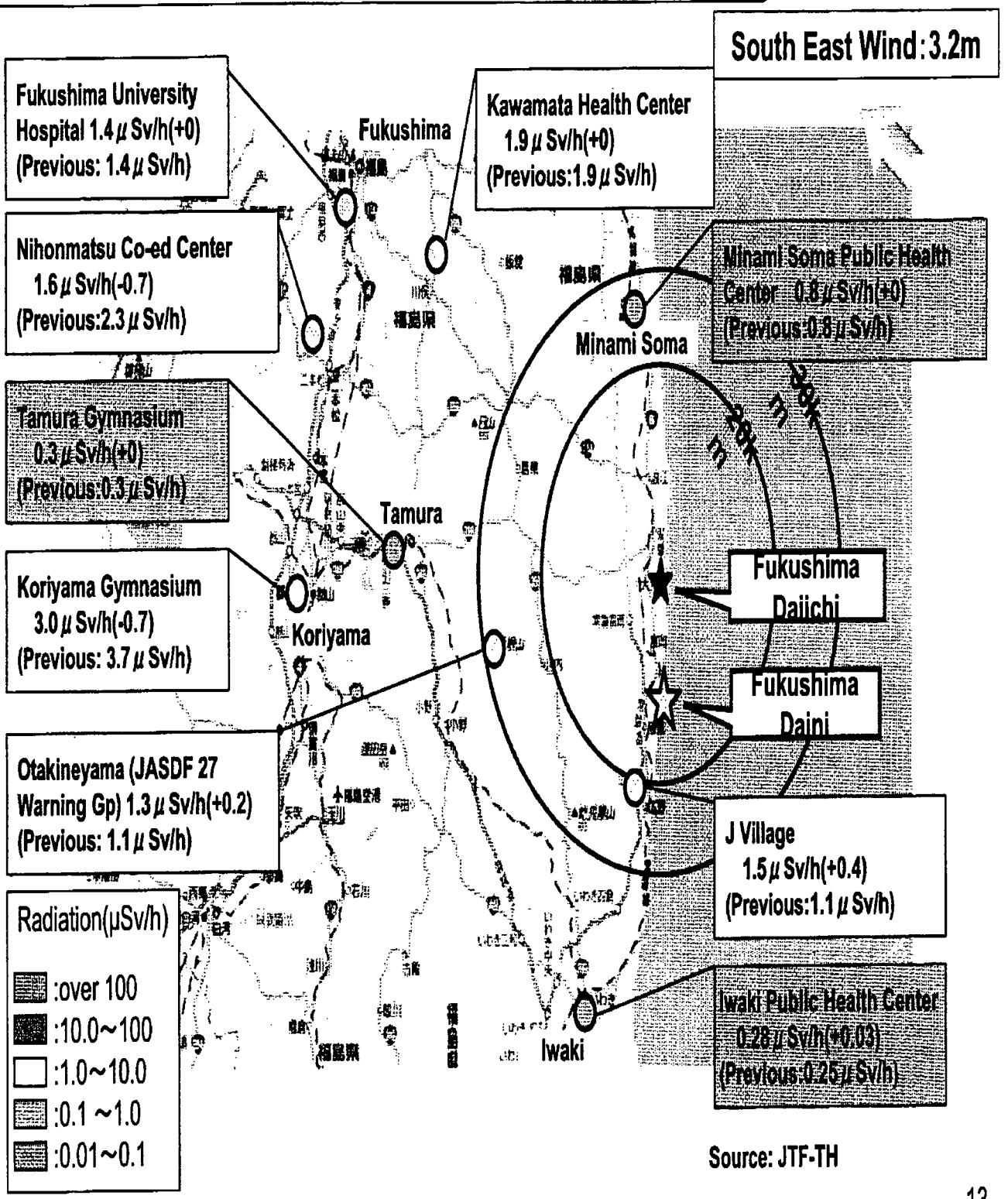
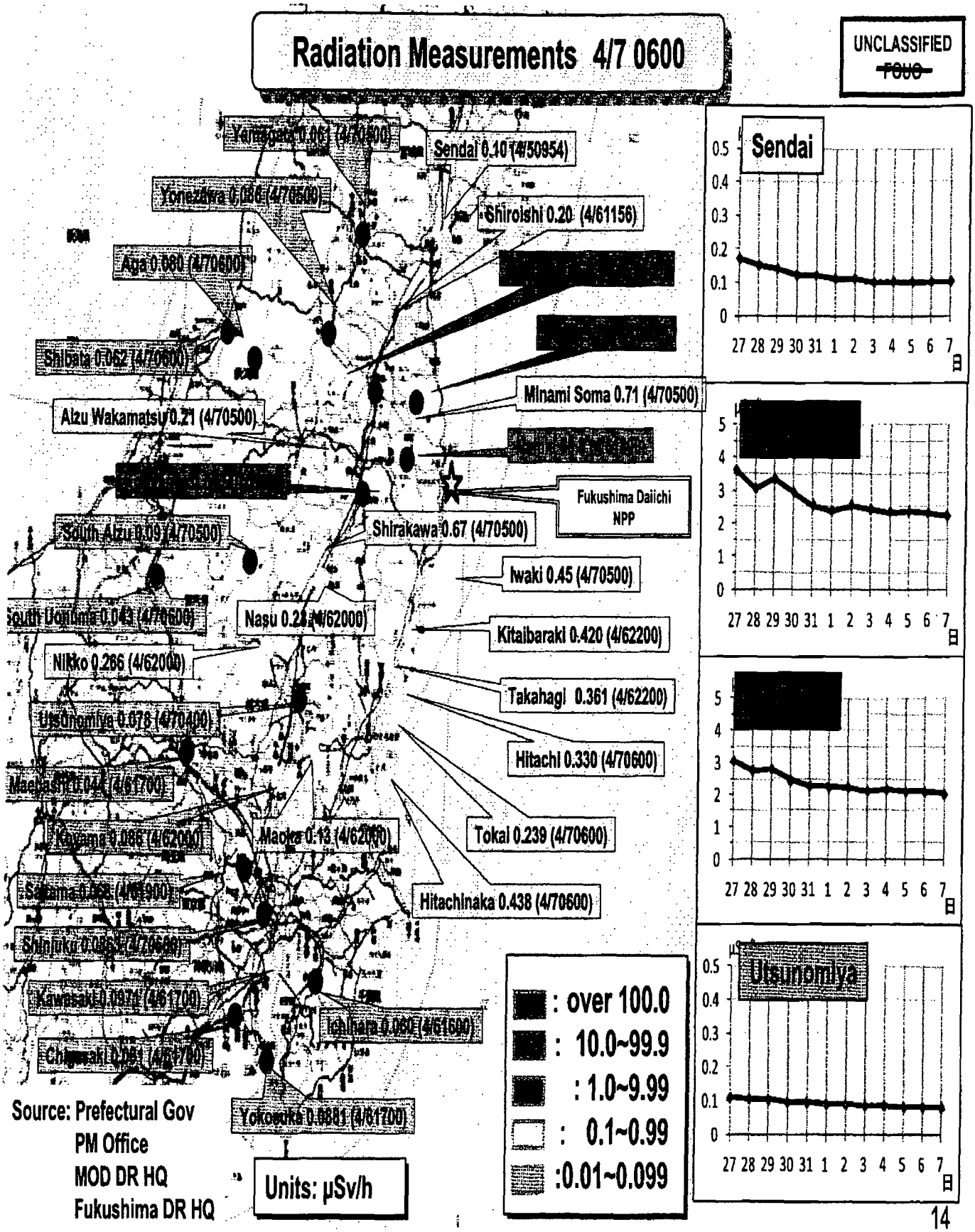
~~FOUO~~

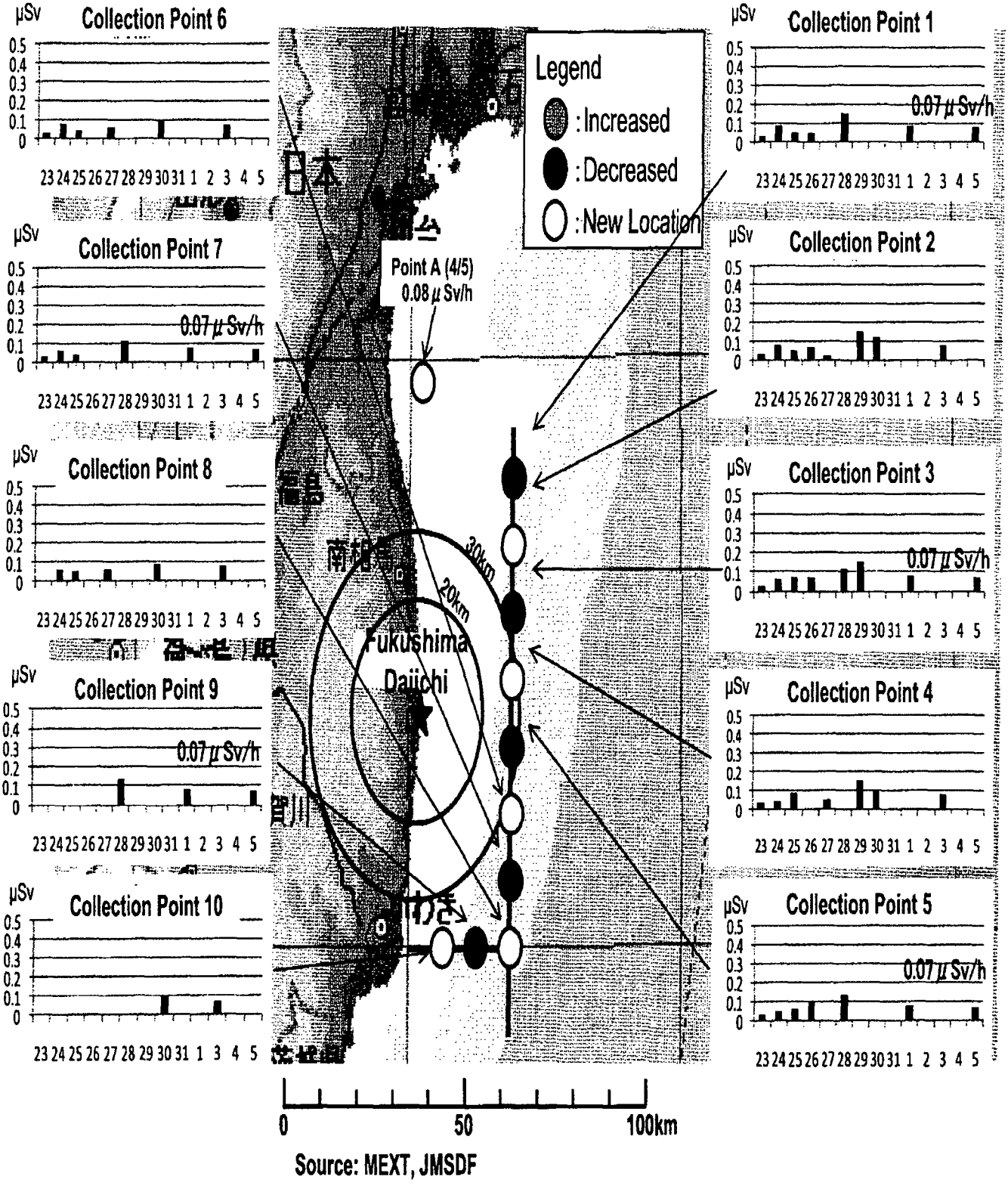


Source: JTF-TH


Radiation Measurements 4/7 0600
UNCLASSIFIED
~~FOUO~~
Yamagata 0.06 (4/70600)
Sendai 0.10 (4/50954)
Yonezawa 0.080 (4/70500)
Shiroishi 0.20 (4/61156)
Aga 0.080 (4/70600)
Shibata 0.062 (4/70600)
Minami Soma 0.71 (4/70500)
Aizu Wakamatsu 0.21 (4/70500)
Fukushima Daiichi NPP
Shirakawa 0.67 (4/70500)
South Aizu 0.09 (4/70500)
Iwaki 0.45 (4/70500)
Nasu 0.28 (4/62000)
Kitaibaraki 0.420 (4/62200)
Nikko 0.266 (4/62000)
Takahagi 0.361 (4/62200)
Utsunomiya 0.078 (4/70400)
Hitachi 0.330 (4/70600)
Maebashi 0.044 (4/61700)
Tokai 0.239 (4/70600)
Kiryama 0.086 (4/62000)
Maeda 0.13 (4/62000)
Hitachinaka 0.438 (4/70600)
Shinjuku 0.053 (4/70600)
Kawasaki 0.037 (4/61700)
Ichihara 0.060 (4/61600)
Chigasaki 0.061 (4/61700)
Yokosuka 0.0881 (4/61700)
Sendai
Utsunomiya
27 28 29 30 31 1 2 3 4 5 6 7 日
: over 100.0
: 10.0~99.9
: 1.0~9.99
: 0.1~0.99
:0.01~0.099
Source: Prefectural Gov
PM Office
MOD DR HQ
Fukushima DR HQ
Units: μSv/h

Fukushima Daiichi Sea Water Radiation Monitoring (30km out)

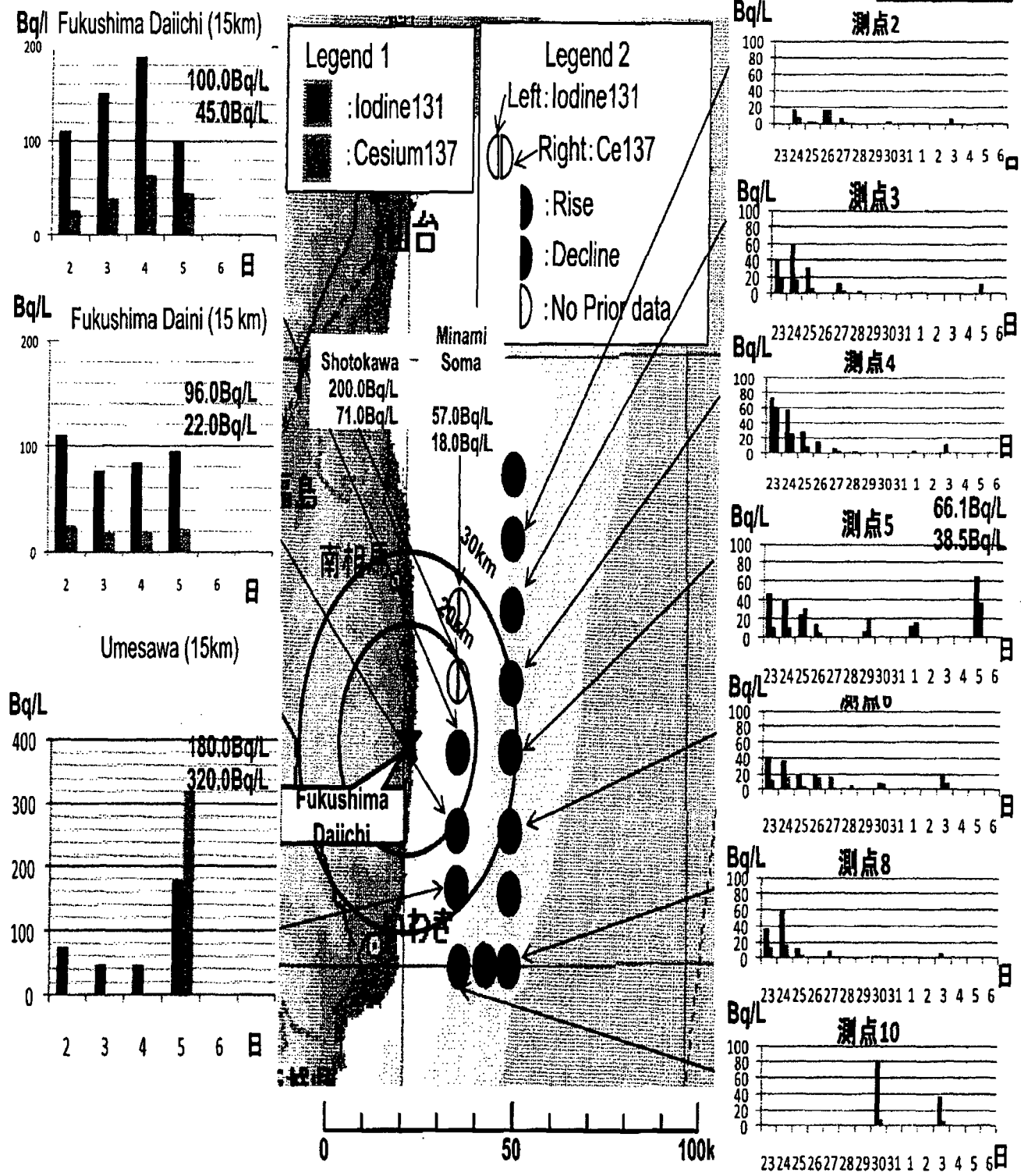
UNCLASSIFIED
~~FOUO~~



Source: MEXT, JMSDF

Fukushima Daiichi Sea Monitoring (Radiation Levels)

UNCLASSIFIED
~~FOUO~~



Source: TEPCO (4/6)

Reference: Drinking Water Limit (Adult) 300Bq/L

Source: MEXT (4/6)

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~~FOUO~~

Lifeline Status

#s in ( ) show difference from 4 APR 1130

Estimate of Restoration

◊ Respective local government and business entities are surveying the area and preparing estimates

Reference:

Hanshin-Awaji Great Earthquake Lifeline Restoration

Electricity: 7 days

Phone Services: app. 2 weeks

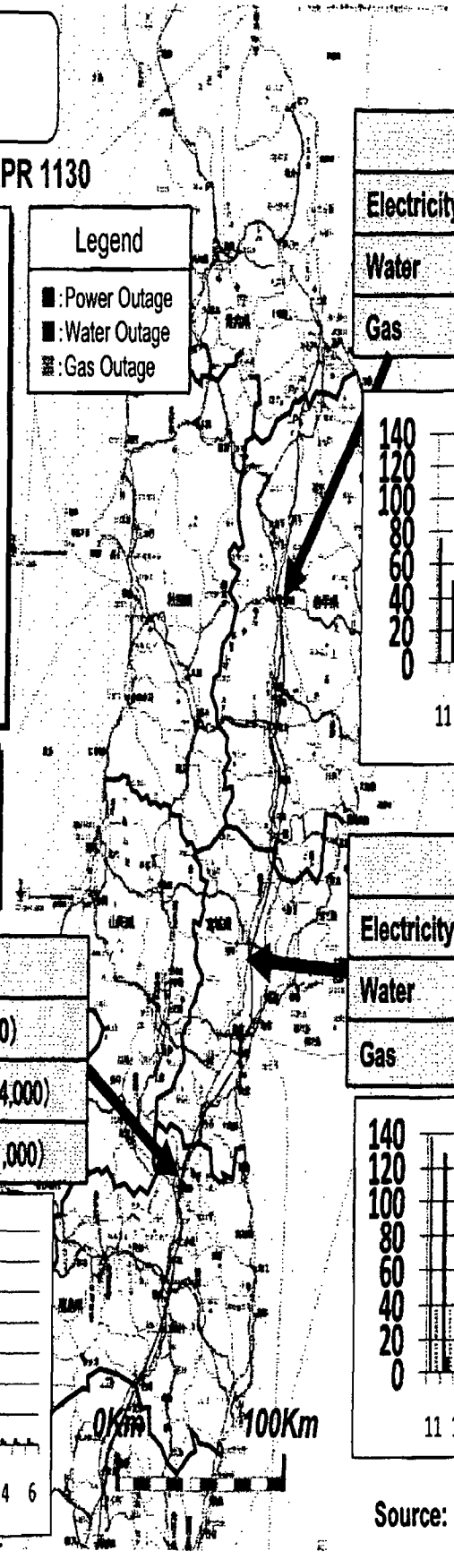
Gas, Sewage: app. 3 months

(Source: Hyogo Prefecture Archives)

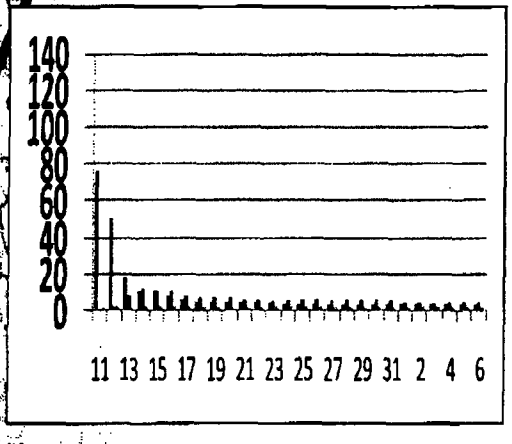
Communications

◊ Phone line: Mostly Restored

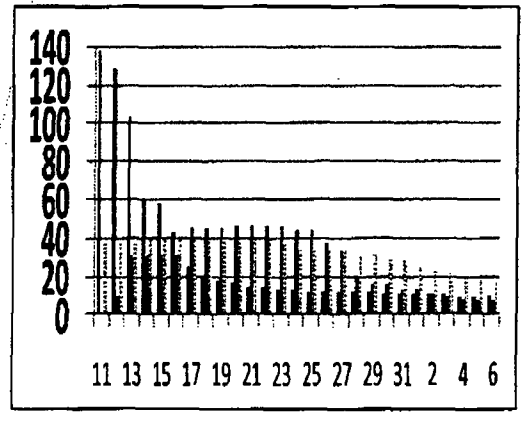
◊ Cell Phone: Mostly Restored



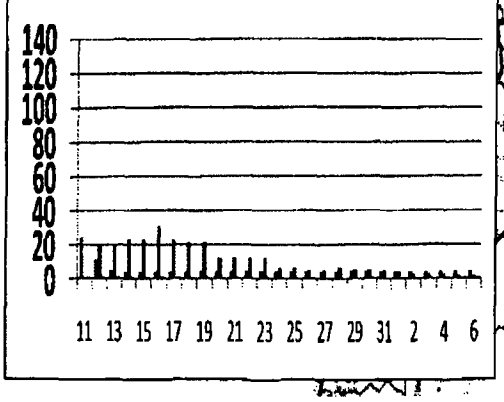
Iwate	
Electricity	Outage: 30,000 homes (+0)
Water	Outage: 40,000 homes (+0)
Gas	Outage: 3,000 homes (-1,000)



Miyagi	
Electricity	Outage: 97,000 homes (-2,000)
Water	Outage: 72,000 homes (-3,000)
Gas	Outage: 162,000 homes (-19,000)



Fukushima	
Electricity	Outage: 36,000 homes (+0)
Water	Outage: 20,000 homes (-4,000)
Gas	Outage: 4,000 homes (-1,000)



Source: METI, MLHW, TEPCO, Gas Assoc. 7

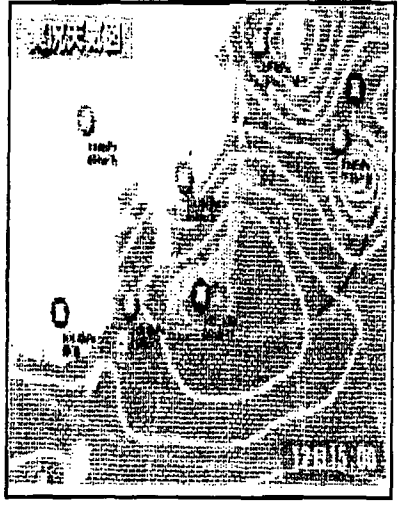
UNCLASSIFIED
~~FOUO~~

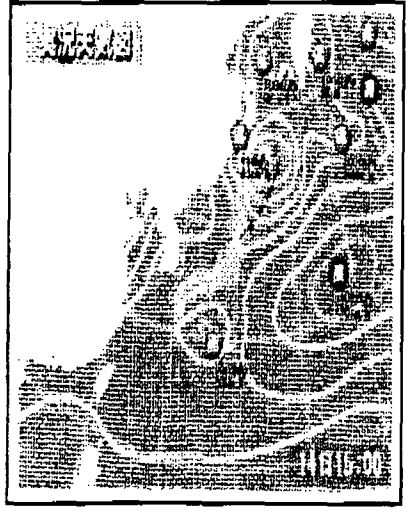
Reference Slide
4/6 0745

Wind Data for Explosions of Reactor 1 & 3

UNCLASSIFIED
~~FOUO~~

Explosion Date	Reactor 1: 12 MAR 1536				Reactor 3: 14 MAR 1101			
Category	Date/Time		Wind Direction	Wind Speed (m/s)	Date/Time		Wind Direction	Wind Speed (m/s)
JMA (AMEDAS) Onahama (S55Km)	4/12	15:00	S	5.5	4/14	11:00	S	3.9
		16:00	S	4.8		12:00	S	3.0
		17:00	S	4.4		13:00	S	3.9
		18:00	S	2.5		14:00	S	2.5
JMA (AMEDAS) Hirono (S20Km)	4/12	15:00	SSE	3.6	4/14	No Data		
		16:00	SSE	2.9				
		17:00	S	2.3				
		18:00	SSW	1.3				
JMA (SPEEDI) Fukushima Daiichi NPP	4/12	No Data			4/14	11:00	WSW	4.8
						12:00	W	5.2
						13:00	W	5.7
						14:00	W	5.9





Source: JMA

UNCLASSIFIED
~~FOUO~~

Backup Slide
4/6 0745

Power Plant Radiological Readings (4/3 0700)

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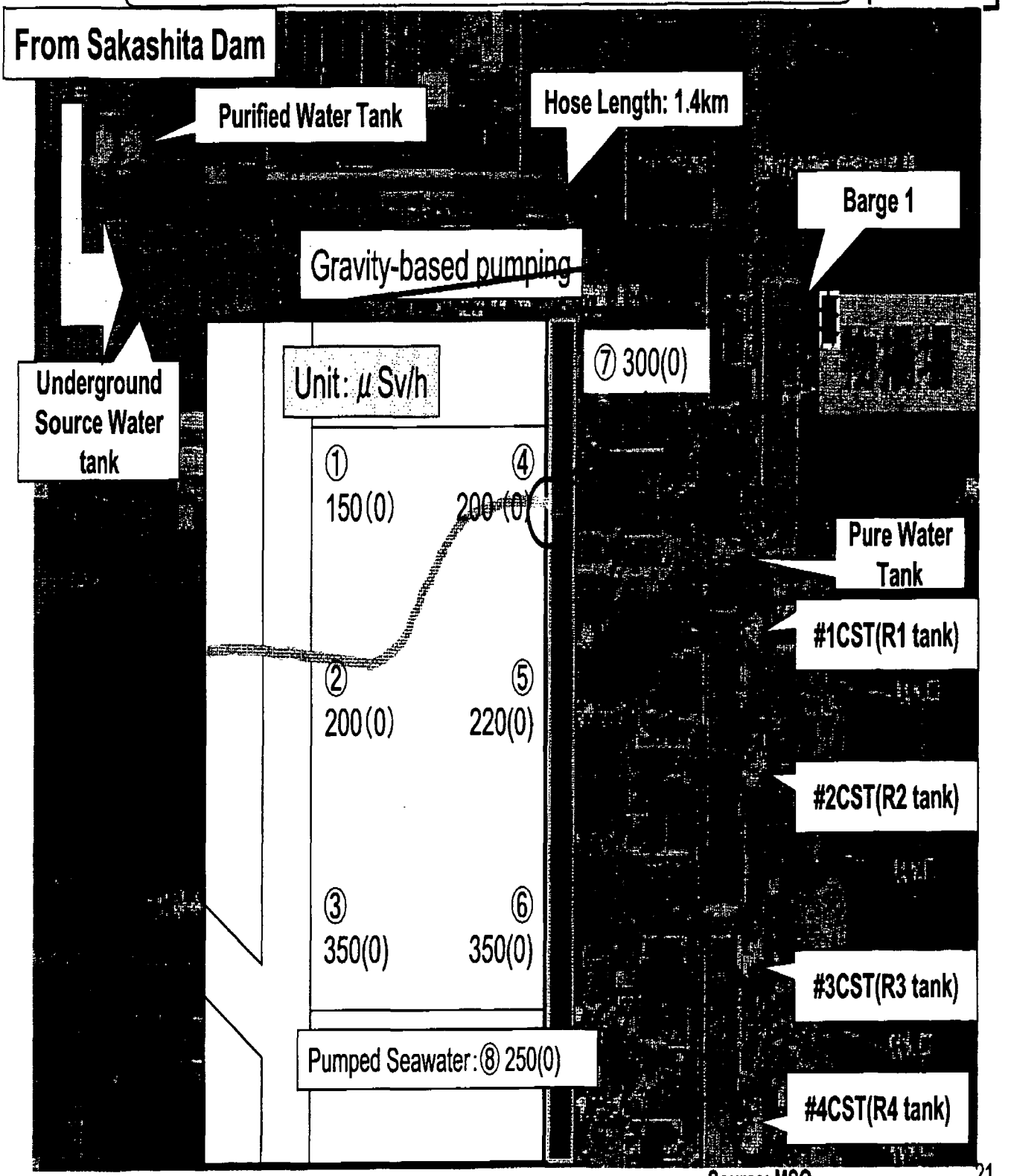

Source: MSO

UNCLASSIFIED
~~FOUO~~

Collection Priorities

	JSO Focus	Details	JDIH Collection Priorities
Nuclear Power Plant	Support to Local Residents (Evacuation/Decontamination)	◊ Are there any residents near the NPP that needs JSDF support? What type of support is needed? ◊ What type of protection is needed for the SDF members during this task?	◊ Status of the Power Plant - Detailed Status - Accumulative Radiation of Area - Monitoring Results - Radiation of Nearby Bases - Radiation Measurements
		◊ Is the infrastructure in place to complete this task?	◊ Status of the Lifeline, MSRs, Airports, Seaports
	Nuclear Reactor Cooling Operations	◊ Does the SDF need to do freshwater hosing ops? How much assets will be needed to complete it? ◊ What type of protection is needed for the SDF members during this task?	◊ Status of the Power Plant - Detailed Status - Accumulutive Radiation of Area - Monitoring Results
		◊ Is the infrastructure in place to complete this task?	◊ Status of the Lifeline, MSRs, Airports, Seaports
HA/DR	Life Support Supplies Transport Reconstruction	◊ What is the estimated requirement?	◊Human Damage Levels
		◊ Is the infrastructure in place to complete this task?	◊Status of the Lifeline, MSRs, Airports, Seaports
	Search and Rescue/Recovery efforts	◊ What is the estimated requirement?	◊Human Damage Levels
		◊ Is the infrastructure in place to complete this task?	◊Status of MSRs, Airports, Seaports

Fukushima Daiichi NPP

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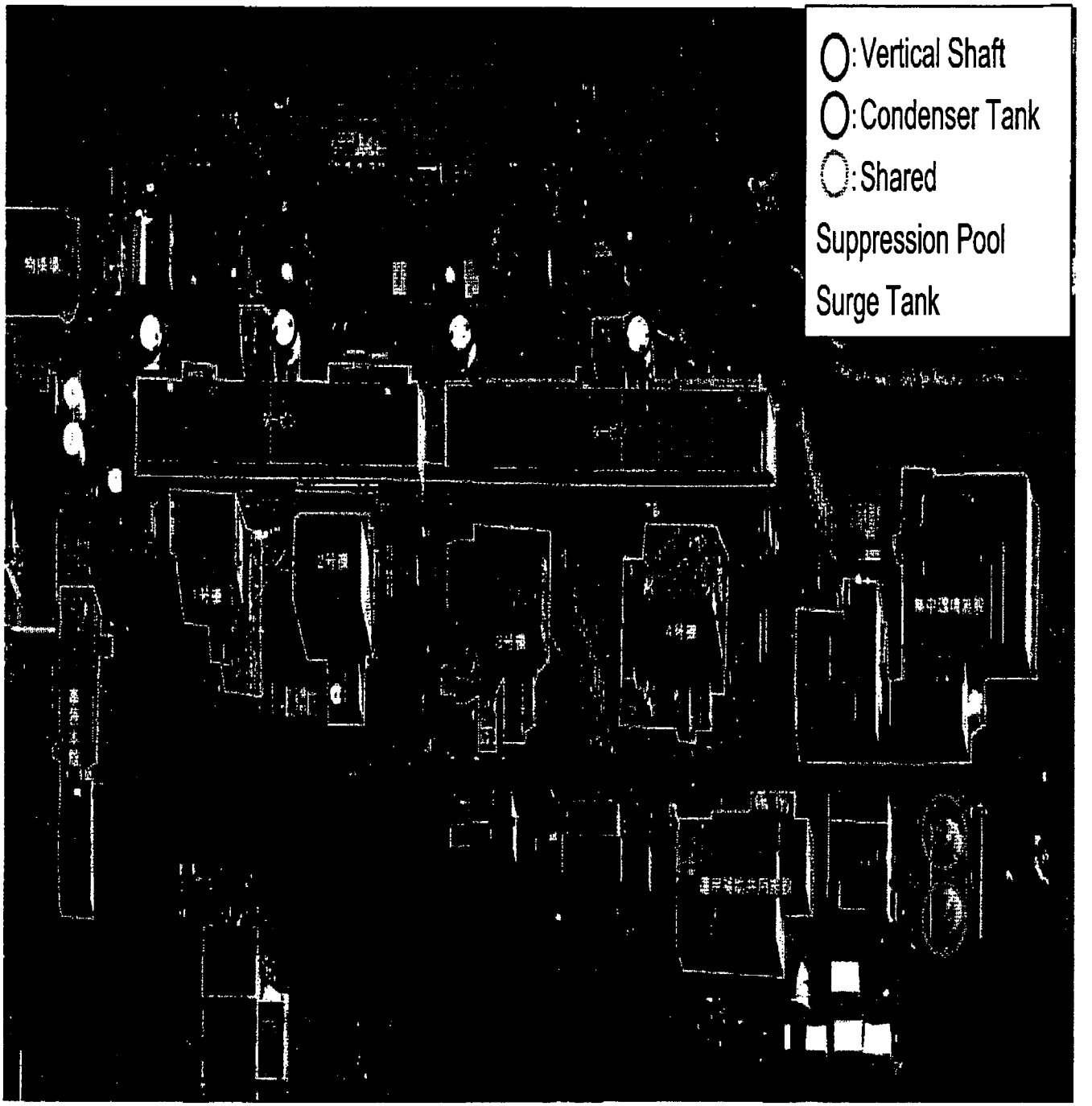


From: HOO Hoc
Sent: Saturday, April 09, 2011 2:44 AM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Cc: HOO Hoc
Subject: FW: Government of Japan Request for Assistance List - Update
Attachments: Nuclear Team Asks and Offers Tracker 04-09-2011 - 1400.xlsx; image001.jpg

Headquarters Operations Officer
U.S. Nuclear Regulatory Commission
Phone: 301-816-5100
Fax: 301-816-5151
email: hoo.hoc@nrc.gov
secure e-mail: hoo1@nrc.sgov.gov

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

From: Stahl, Eric
Sent: Saturday, April 09, 2011 2:41 AM
To: LIA08 Hoc; Al Hochevar; Alice Caponiti; Blount, Tom; Boger, Bruce; Christensen, Harold; Craig Gaddis; DORLCAL Resource; Dorman, Dan; DprNrrCal Resource; Emche, Danielle; ET05 Hoc; ET07 Hoc; FOIA Response.hoc Resource; Giitter, Joseph; Glenn Southern; HOO Hoc; INPO; INPO; INPO; INPO; INPO; INPO; INPO; INPO; Jay Tilden; Jeffrey Miller; LIA01 Hoc; LIA06 Hoc; LIA08 Hoc; McDermott, Brian; McGinty, Tim; Miller, Chris; Morris, Scott; NRC Liaison at USAID; OST02 HOC; PACOM Watch Officer; Pentagon Japan Crisis Team J-4 Desk; Peter Lyons; Hoc, PMT12; Riaz Awan; Rick Nielsen; Robert Gambone; Robert Mercer; Ross-Lee, MaryJane; RST01 Hoc; RST01B Hoc; Sal Golub; Sal Golub; Samuel Young; Steve Aoki; Tom Vavoso; Virgilio, Martin; Weber, Michael; Wiggins, Jim; William Webster; Zimmerman, Roy; Wittick, Brian; 'CipulloTL@state.gov'; [redacted] Wall, Marc M; Blamey, Alan; Berger, William (RDMA/OFDA); Spurlock, Kenneth R (TDY/MDAO); Howard, E. Bruce; [redacted] Donovan, Joseph R; [redacted] Chuck.Casto@nrc.gov; alan.blamey@nrc.gov; John.Monninger@nrc.gov; [redacted] Emche, Danielle; White, James R (TDY/DAO); Berger, Claire; Zumwalt, James P; Dresser, Heather L (EAP/J); White, James R (TDY/DAO); Gabri, Steven (TDY/DAO); Greene, Raymond F; [redacted] Piccuta, Daniel; Basalla, Suzanne I; Luke, Robert S; Young, Joseph M; Mears, Jeremy M; Cherry, Ronald C; [redacted] Cooper, Justin D; Morales, Russell A; Wiggin, Geoffrey W; john.peters@trade.gov; [redacted] Cherry, Ronald C; Duncan, Aleshia D; [redacted] Schuchat, Simon J; Deming, Rust M; Green, Christopher L
Subject: Government of Japan Request for Assistance List - Update

Please find the current "Equipment/Supplies/Services Requested by GOJ" spreadsheet attached, which includes supplemental information and revisions from the Friday, April 8 call held at 2000 EDT [Saturday, April 9 - 0900 JST], identified in green font. As discussed during the call, the next call will be held on **Sunday, April 10 at 2000 EDT** [Monday, April 11 - 0900 JST).

Thanks,
Eric

Eric Stahl
U.S. Nuclear Regulatory Commission
Japan Team International Liaison

BC/219

Tel: 81-33-22-45-066
Mob: +(b)(6) [redacted]

US-Japan Nuclear-Related Assistance Tracker

Equipment/Supplies/Services Requested by GOJ

Emb No.	NRC No.	Equipment/Service Being Requested	Priority (Hi Med Lo)	Date of request	Requesting GOJ Office	GOJ Action Office & POC	USG Action Office & POC	Target Date	Training Needed?	Cost / Reimbursement	Status of Response	Open/ Closed	Comments
		High Priority Requests											
21		Devices for condensing radiation contaminated water & information on evaporation technology	Hi	3/29 draft list	NISA		DOE Cherry, Duncan; DOD Adm. Gregory				Expanded request: On March 28 DCCS Fukuyama asked for information on measures to remove contaminated water.	O	[illegible]
21a	30, 31 & 32	Assistance in dealing with accumulated radioactive water in turbine buildings	Hi	3/27 meeting	NISA		DOE Cherry, Duncan; NRC				DOE paper provided to Amb. Roos and Amb Fujisaki on 3/29/11. Management of cont. water.	O	
21b	30 & 31	Water storage tanks (6) and a trailer (1) for contaminated water at 1F	Hi	4/01, NISA-DOE mtg	NISA, TEPCO	NISA - Oshima;TEPCO - Umino	DOE Cherry, Duncan		No		~~NISA asks info on specs, usage, installation. Asks if more are available. Request under consideration by USG. Need GOJ confirmation of request.~~ TEPCO will pay shipping costs, requests estimate for sea & air shipment. DOE to provide these. NEXT STEPS: DOE/State Embassy Team and NISA/TEPCO had a telecon this morning to discuss options DOE and SRS evaluating both "by sea" and "by air" freighting options. Also, if urgent, but GOJ cannot pay, we will consider DoD Airlift.	O	GOJ sourcing other donors, cost to ship by air is $1.3M. [illegible]
21c	32	Information on "evaporation technologies"	HI	3/28 - DCCS Fukuyama	NISA		DOE Cherry, Duncan						
21e	13	Direct request from GOJ to Pacific Northwest Labs for technical assistance with water decontamination and storage issues.	Hi		NISA		DOE Cherry, Duncan				DOE considering Basic Ordering Agreement. GOJ wants to know if there will be a consultation fee. DOE needs to understand scope of work to estimate cost.	O	NEXT STEPS: DOE- Cherry to follow up with NISA to learn potential scope of work.
21f		Determine whether tempoary radwaste porcessing skids are available or would be a good idea (for removing contaminated water)	Hi		NISA		INPO					O	

US-Japan Nuclear-Related Assistance Tracker

21g	30	Temporary holding tanks (for removing contaminated water)	Hi		NISA		DOE; DOD; INPO					O	Develop recommendations for removal of water in basements of Units 1,2 and 3 per Task Tracker #3235. The Toshiba Team has investigated the use of large storage bladders to be used as temporary contaminated water storage. These bladders can hold up to 189,000 liters per bladder. Bladders can eventually be handled as a relatively small volume of solid waste. Need to develop a single water management team to handle all water issues once decision is made on how to proceed forward.
21h	31	Tanker trucks as a temporary holding area (for removing contaminated water)	HI		NISA		DOE; DOD; INPO					O	Develop recommendations for removal of water in basements of Units 1,2 and 3 per Task Tracker #3235. The Toshiba team is concerned that the relative capacity of tanker trucks is small and that the trucks will have to remain onsite once contaminated. This option should be reserved for special situations.
21i	32	Investigate whether there is a technology that would absorb contaminated materials from water (for removing contaminated water)	Hi		NISA		DOE					O	Secretary Chu reportedly told this to the Japanese. The Toshiba Team has developed draft plans for water treatment with a focus on fission product removal and minimization of solids waste processing.
4	19	Germanium semiconductor detectors	Hi	3/25 GOJ list	MEXT, NISA, MAFF, TEPCO	MAFF: Y.Yamada MHLW: T.Tokiwa TEPCO: H.Kaneha ma	DOE Cherry				INPO - US industry does not have spare detectors at this time (3/29). ~~One detector has been loaned & training is underway. DOE to provide 1 detector each to MAFF and MHLW, due 4/6; 4 more for MAFF & MHLW, delivery TBD. NISA requested 1 HPE, under discussion.~~ Detectors will be used to test contamination of water and food.MHLW to receive 1 loaned detector. Wants to know the weight (already emailed this question to DOE?). NISA requests at least 1; wants to know how many available. Cabinet Secretariat (CAS) to discuss with MAFF and local governments and provide to USG total number requested MEXT withdrew request for 3 detectors because they lack shielding. Training expense is free of charge (4/1). DOE delivered 2 detectors on 4/05/11. 4 more detectors from Naval Research Labs scheduled to arrive at Yokota on 4/11. O	DOE - may offer TEPCO 2 units and discuss about not to return the instruments. NEXT STEPS: DOE - Cherry will add POCs for USG. Send to DanDOELiaison1@ofda.gov and request update. DOE has loaned 2 detectors on 4/05/11. 4 additional detectors were shipped from Naval Research Labs Atsugi (NRL) and will be received in Yokota AB on April 11. Fedex tracking # [illegible] and # [illegible]. [illegible]

13a	34	Request for the following: 2,100 units-Rad Survey Meters, 2,600 units-Personal Dosimetery, 5,100 units- Iodine absorbent masks, 33,000 units-iodine absorption cans	HI		NISA, MOD		DART				DART shipped 2,000 dosimeters; will see what it can do further. GOJ is considering allowing residents in the 20km evacuation zone return to their homes to collect belongings. Will need a large number of dosimeters. NISA requests USG inform GOJ how many we can provide. MOFA to provide info on number procured from other donor nations. ~~Need status update~~	O	List provided to Alan Blamey and Al Hochevar for cabinet meeting 4/2/11. **NEXT STEP: DART - raise in 4/7 meeting with Cabinet.** Japan still requesting as many radiometers as possible. Cabinet's meeting set for 4/11 or 4/12 and give more information on total # needed and coordination of efforts.
		Other Open Requests											
2a	20 & 22	Loaning ground radiation monitoring devices, mobile and stationary (incl radiation friskers -20 hand /foot/cloth monitors)		3/25 GOJ list	MEXT, NSC, NISA, MOFA, TEPCO	JAEA: M.Kanamori	DOE Cherry				Mobile ground monitoring began 3/17. Discussions ongoing re fixed ground-based monitors. Need GOJ approval to proceed; MOFA is coordinating. Need to determine locations for fixed monitoring stations.	O	Mobile monitoring is closed. Stationary monitoring is the open item. This was a GoJ request and the idea is to possibly install a system such as the EPA Radnet system. DOE currently has operating air samplers on the roof of the US Embassy, at the consequence Management Team HQ in Yokota AB, and occasional field deployments. DOE is working to install 8 "infield" radiation detection backpacks in "unattended mode" ringing Fukushima NPP from 10 to 30 miles within small police stations (Koban). MEXT has approved the DOE request, and awaiting Japanese National Police approval. GOJ approval of additional [illegible]
2b		(incl radiation friskers --hand /foot monitors)		3/28 Cab mtng	MEXT, NSC, NISA, MOFA	JAEA: M.Kanamori TEPCO: H.Kaneha ra	NRC Blamey; INPO				Elaborates on request above - 20 hand/foot detectors from Bruce Co., STP, San Onofre Determined to send. Discussing of shipping expense (4/5)	O	(Commercial to TEPCO) This activity is awaiting authorization of commercial transport for Bruce monitors. (U.S. Embassy to advise). INPO to query utility-arranged transport of SONGS and STP equipment. Process of approving transportation needs to be solidified Shipping payments are being investigated as to who will pay for shipments. STP has 1 parcel that is internally contaminated that may be shipped to Bruce Co. to be included in their shipment to Japan. Alan Blaney will attempt to have to moved forward quickly through the DART team. Equipment has no low-level contamination. SONGS and STP items have shipped. Bruce not shipped yet. Wait for information from GoJ as they may want sooner and may pay for it. [illegible] shipment

US-Japan Nuclear-Related Assistance Tracker

5	21	Robotic monitoring devices - 1 robot, 3 radiation sensors, 5 cameras		3/25 list, quantity set 3/26	METI, NISA, TEPCO	METI: Hatada	DOE Cherry, Duncan	Shipment o/a 4/6/11	yes-DOE proposed training through Qinetic Japan office	DOE to pay for equipment and experts	Scheduled to arrive in Japan 4/8/11. NISA to inform USG whether it wants DOE experts (at no cost). DOE coordinates with NRC, DOD/USFJ. U.S. confirmed 3/26 Cabinet meeting can provide Qinetic Talon, M2, Radiation-hardened cameras. Per 3-31 WG meeting, DOE will also provide additional radiation sensor kits.	O	DOE is handling Ground robotics and hardened cameras only. UAVs and handhelds are separate. DOE is looking to send 1) Robotics expert and 2) cameras expert. NEXT STEP: DOE - check if GOJ needs technical experts. FEDEX Tracking Number (PRO) is 54501824. DOE is awaiting a decision from GOJ this evening. [illegible] expected to arrive tomorrow.
5a		Information on Radiation shielding materials for vehicles.		3/26 cabinet meeting; 3/29 list	METI, NISA						NRC provided information on tungsten materials; METI still wants advice on shielding for heavy equipment.	O	Japan provided additional information on 4 April to DOE HQ.
5b		Radiation-hardened cameras & Gamma Camera		3/26 cabinet meeting	METI, NISA		DOE	4/6/2011 shipment expected			US confirmed at 3/26 cabinet meeting that it can provide camera and system for mapping gamma rays. DOE to send five cameras and one gamma cam.	O	Tied to item 5a - this equipment is with the robots
~~16~~		~~Separation materials for masks (as many as possible)~~		~~3/29 draft list~~	~~NISA~~		~~DART~~					~~O~~	~~Same as 13a.~~
18	27	Potassium Iodide (KI) preparation 1 million 17-dose bottles		3/25 list	NISA, MHLW, MOFA		HHS Dr. Colemanto provide; USAID to transport; Embassy Gabor				MOFA said 3/30 it would accept the 1 million bottles (17 doses each) of liquid KI offered; requested via note vebale to DOS in D.C. (3/30); USG to share grant document text with GOJ before shipping.	O	Industry had tablets available, but HHS had liquid tablets that they were to provide. A. Blamey to verify with GOJ. May be caught up in logistics. Coming from USAID and CDC. Currently tied up within Japan legal.
20		Heat exchanger to be used in spent fuel pool.	HI	3/27 Nagashima; 3/29 list	NISA		NRC; INPO (Al Hochevar, 678-451-3017 (cell)				~~INPO is currently providing sources of comm'l heat exchangers that can be used to cool a spent fuel pool. (This will not result in purchase of heat exchanger.)~~ TEPCO is trying to get a system design. Placed a design order with Toshiba. INPO can provide info for free. TEPCO may pursue commercial procurement of heat exchanger.		NEXT STEPS: Check if Shaw has a commercial contract to do work on this. Status: TEPCO has contract and is pursuing purchase
24		Medical triage re: exposure to radiation (decontamination capability)		3/25 list	MHLW,NSC, NISA,MEXT, MOD		DOD; DOE; USAID; NIH Coleman				MOD initially identified as principal action ministry along with MHLW, subsequently changed 3/29. Chem Bio Initial Response Force (CBIRF) provided for this purpose.	O	[illegible]
25	28	INFO: Extinguishant/coolant		3/25 list	NISA						Request further info from GOJ.	O	A. Blamey to Verify with GOJ what is exactly needed in this request
26		Incorporate PNL into crisis mgmt dialogue/Spent Fuel WG		3/26, 3/28 - DCCS Fukuyama	NISA		DOE Cherry; NRC				PNNL team in Tokyo and providing support.	O	PNNL team in Tokyo and providing support.

US-Japan Nuclear-Related Assistance Tracker

27		U.S. cooperation in bringing private sector engineers into Shielding WG		3/26 meeting - Nagashima	NISA		NRC			Not included on draft 3/29 request list	O	Items 27, 29 and 29b are interrelated. 3/26 Action for Ann Harvey to coordinate with INPO and determine what is meant by shielding.
29		Assessment of structural stability of spent fuel pools		3/27 - Nagashima ; 3/28 - Fukuyama	NISA		NRC reactor Safety Team			In preparation for decisions on shielding. NRC completed assessment of current spent fuel pool weight. Further analysis needed.	O	Need GOJ input
29b	33	Japan asked for NRC expertise on temporary shielding options, to determine whether the NPP Plant buildings are strong enough to hold up under additional pressure			NISA		NRC			From Cabinet Office Crisis Mgt. Team Meeting notes 3-28-2011	O	NRC has completed a gross analysis and does not have sufficient information to perform a detailed analysis for shielding. From Cabinet Office Crisis Management Team Meeting notes, 3/28/11. A. Blamey to discuss further with Japan
32	111	GEH is following up on the Nitrogen purge issue analysis			NISA, TEPCO					GE is following	O	NRC Japan to confirm with GE. 4/6: NRC has analysis for review.
33		Clarify for RST the indications that can be used to assess RPV integrity and location of core. (RST request)			NISA		NRC	40632		*ongoing project, comments that shift focus are* received during 1100 status call 3/29	O	4/6: Ongoing
34		List alternative flowpaths that can be used for purging, given accessibility challenges. (RST request)			NISA		NRC	40632		GE to provide 3/29 list, INPO providing technical review	O	INPO to confirm this was provided 4/6: NRC RST Feedback
35		Confirm RST recommendation that RPV injection can be maximized once containment has been purged and vented (RST)			NISA		NRC	40632		Technical: Ongoing project, comments that shift focus are received during 1100 status call 3/29	O	4/6: Ongoing
		Closed Requests										
1	16	Aerial survey for AMS measurement, data sharing and analysis		3/25 GOJ list	MEXT, NSC, NISA, MAFF	MEXT: N.Akasaka	DOE Cherry, Duncan	N/A		DOE coordinates with MEXT, NSC, NISA, MOFF, MOFA. Daily sharing of AMS data and products. Per 4/4 meeting with GOJ, agreement on joint aerial surveys 4/6-4/12. Joint Staff is sharing U.S. aerial survey info USFJ-Yokota.	C	NRC's PMT provided this info to the white house (NITOPS). The feedback was that NITOPS won't task NARAC to run analysis until approval is received from the White House
3	18	Conduct simulation by radiation diffusion model (compare with SPEEDI data)			NSC, MEXT		DOE Cherry, Duncan			DOE coordinates with NSC. NSC is the leading POC with the GOJ. GOJ has provided SPEEDI source term to NRC 3/25 and meteorological data with NARAC.	C	DOE coordinates with NSC. NSC is the leading POC with the GOJ. GOJ discussed with NARAC on an idea to estimate the source term from monitoring data. GOJ provided information on meteorological data which is open to public.

US-Japan Nuclear-Related Assistance Tracker

5c		Westinghouse working on the UAV request and coordinating with Texas A&M expert			TEPCO					Westinghouse working with Texas A&M University expert.	C	
5d		GOJ request for shielding			INPO					This has been closed out. (Confirm how and by whom?)	C	
6	21a	Robotic debris clearing machines		3/25 list, quantity set 3/26	METI, NISA		DOE Cherry, Duncan	N/A	N/A	DOE coordinates with NRC, DOD/USFJ. Japan dropped request for equipment 3/28	C	Based on discussions with Embassy, the K-MAX helicopter is not needed, however Per NNSA (Jay Tilden) a whole range of remote heavy equipment will likely be needed. This is an open item being discussed by the Remote Control Project Team.
7	22	Provision of data obtained from UAVs		3/25 list	MOD, MOFA		DOD			GOJ is receiving Global Hawk images	C	Follow up action with Japan. Handled separately from Ground robotics and hardened cameras NISA will hold a meeting to discuss and determine needs for vauge items on the lists.
8	23	Unmanned helicopter - GOJ is looking for helicopter to spray nondispersant.		3/25 list	MOD, NISA, MOFA		DOD DAO			4 T-Hawks on-site. MOD looking into DOD options (KS); repeated by Mr. Nagashima on 3/27 as unmanned helicoper with camera. NRC agreed 3/27 to follow using specs provided by Japan; NISA promised documents stating Japan's needs. MOD is not interested in KMAX.	C	PACOM indicated no longer needed and taken off the table.
9	24	Transportation of fresh water by barges and delivery of pumps		3/25 list	MOD, NISA		POL-MIL, DAO			Provided. Arrangement made for three vendor support representatives to stay and train.	C	There is one train that is installed. There is no need for further trains. DOD has the appropriate guidance. Alan Blamey will work with Japanese embassy officials to re-validate the need for this asset R Neilson says that second train is in Australia. A. Blamey to determine from Embassy if still needed and to share with R. Neilson so that Bechtel and can be advised
9a	24	Water barges			MOD, NISA		J4, PACOM			Per J4 the barges have been outfitted and tested and are 10 hrs from the NPP site and should arrive Weds. Need ETA	C	
9b	24	Fresh water supply pumps from Bechtel			NISA					First train in Japan	C	
10	3	High quality pumps and hoses.		3/26 meeting and previous discussion	TEPCO		NRC			CLOSED: NRC rec'd info 3/26 on possible hose and said would investigate further; request withdrawn at 3/29 Cab meeting.	C	
11	3	High pressure hose (3 x 500 m) and couplers (for cooling reactor)		3/25 list and previous discussion	NISA		NRC; DOD			Hose delivered as part of Australia/Bechtel equipment; in J-Village.	C	

US-Japan Nuclear-Related Assistance Tracker

12		Protective body armor, ~~radioactive survey meters and dosimeters, radioactive measuring instruments, iodine absorption masks, separation materials.~~	HI	3/25 list	NISA - Sakuna, MOD	NISA, MOD	NRC - Blamey				INPO provided info on commercial sources. Body Armor Closed ~~Japan repeated 3/27. (note: USAID has already provided 10,000 sets of protective clothing) - Supply chain: Materials sourced; to be obtained commercially. Info sent to GOJ through Al Hochevar GOJ to establish need. Communicated to them that they are payers by Hochevar.~~	C	
~~17~~	~~14~~	~~2,000 personal radiation dosimeters (PRD)~~		~~3/28 meeting~~	~~NISA, MEXT, RIKEN~~				~~yes~~		~~Comment, State (Randy Thur) email 3/24 said "MEXT has declined to provide a statement of needs" and said it will not be needing the units; need to check status"~~	~~C~~	~~List provided to Alan Blamey and Al Hochevar for cabinet meeting 4/2/11.~~
19	29	Bottled water for infant formula		3/25 list	MHLW		USAID/OFDA	4/01 - 4/02			USAID and USFJ responsed with initial stocks; paperwork underway at USAID/State for possible delivery April 1-2. Confirmed delivery to Tokyo Met. Gov. warehouse.	C	On the Embassy list for tracking
21d	108	Obtain contact info for industry personnel with experience in handling and disposal of open pools/trenches of high dose rate(>100 R/hr) water. Rcvd Mar 29 from Al Hochevar from Hososn	HI		NISA						Contacts developed and provided through INPO-Al Hochevar	C	
23		INFO: Technical support on radiation technology, nuclear technology, and health effects		3/25 list	MHLW CAS NSC NISA MEXT MOD		Dr. Coleman (NIH via HHS); USAID						
23a		Information on KI and drinking water										C	
23b		Health cooperation in three areas: environmental monitoring; KI policy; risk communication			CAS	Dr. Akashi	USAID, State, NIH Coleman, CDC, USDA, DOD				Both sides agreed to the recommendations in these three areas.	C	
28		Assessment of possible fuel damage in units 1, 2, 3		3/27 - Hosono	NISA		NRC				NRC provided brief response at meeting.	C	
29a	107	Information on shielding for individual rooms and for the facility in general			NISA						Provided to GOJ through INPO-Al Hochevar.	C	

US-Japan Nuclear-Related Assistance Tracker

30	106	Information on tools/methods for moving damaged fuel, plus contacts of those with experience at TMI-2 and Chernobyl. From Mr. Hosono.			NISA	Hosono's Office		40632			Provided to GOJ through INPO-Al Hochevar on 3/30.	C	
31	110	SAMG Technical Document			TEPCO						Guidance has been sent to INPO contact in Japan and is being updated. Includes injection rate and best assessment to plant conditions; TEPCO confirmed receiving info at 4/7 meeting with INPO.	C	TEPCO received.
36	118	Requests for military air transport			MOD		J4, PACOM				PACOM is involved in review and approval of all requests for military airlift to Japan. Requests should include weight and dimensions of the cargo. 1st choice should be commercial carrier for timely delivery; should limit requests to materiel that is difficult for commercial carriers to deliver.	C	

U.S. Offers (including Commercial to Commercial)						
	date offered	USG agency	Embassy office responsible	status		
balloons for unmanned radiation measurement	3/26/2011	NOAA	ECON	Japan accepted in principle; Japan to identify approriate ministry		
200-300 pieces of radiation measurement equipment		INPO through NRC		3/26 Japan said it would take all equipment offered		
provide info on options for spent fuel transfer	3/26/2011	NRC				
U.S. expert on radiological tolerance of food to travel to Japan for consultations with FCS	3/26/2011	FDA	FAS	DCCS Fukuyama asked that FDA and FSC communicate directly		
Canadian power plant to provide equipment for hand/foot monitoring	3/27/2011	INPO				
information on contamination control	3/28/2011					
Chem Bio Initial Response Force (CBIRF)		DOD	USFJ?	Currently, CBIRF team is at Yokota Air Base, conducting training with S		

DF.

From: Emche, Danielle
Sent: Monday, April 11, 2011 12:55 PM
To: LIA08 Hoc; LIA06 Hoc; ET02 Hoc; LIA01 Hoc
Subject: Re: daily updates to the US-Japan Nuclear-Related Assistance Tracker

Right, ok good.
Danielle
Sent from an NRC BlackBerry.

From: LIA08 Hoc
To: Emche, Danielle; LIA06 Hoc; ET02 Hoc; LIA01 Hoc
Sent: Mon Apr 11 12:43:24 2011
Subject: RE: daily updates to the US-Japan Nuclear-Related Assistance Tracker

Talk to Alan Blamey. He is working on the update today/tonight
IF he can't help you let me know-
Thanks
LisaG

Lisa Gibney Wright
Liaison Team Coordinator
US Nuclear Regulatory Commission
Email: lia08.hoc@nrc.gov
Desk Ph: 301-816-5185

From: Emche, Danielle
Sent: Monday, April 11, 2011 12:33 PM
To: LIA06 Hoc; LIA08 Hoc; ET02 Hoc; LIA01 Hoc
Subject: Fw: daily updates to the US-Japan Nuclear-Related Assistance Tracker
Importance: High

For the 2000 consortium call, Tim's version (Embassy) is the only update we've seen since the last call. (Please let me know if this is not correct.) NRC Japan may or may not have a few updates. We'll wait to make changes until we hear from HQ.

Danielle
Sent from an NRC BlackBerry.

From: Cipullo, Timothy L <CipulloTL@state.gov>
To: Blamey, Alan; Berger, William (RDMA/OFDA) <wberger@usaid.gov>; Stahl, Eric; Emche, Danielle; Wittick, Brian
Cc: Wall, Marc M <WallMM@state.gov>; Howard, E. Bruce <HowardEB@state.gov>; Cherry, Ronald C <CherryRC@state.gov>; Spurlock, Kenneth R (TDY/MDAO) <TDYSpurlockKR@state.gov>; Spurlock, Kenneth CAPT USN MDAO <[redacted]>; LIA06 Hoc; LIA08 Hoc
Sent: Mon Apr 11 07:39:26 2011
Subject: RE: daily updates to the US-Japan Nuclear-Related Assistance Tracker

Alan, Eric, Danielle, Brian,

BC/220

Here is the latest version of the US-Japan Nuclear-Related Assistance Tracker. I started with the document we used in this morning's conference call. Then I merged my notes from the conference call, Ron Cherry's updates from DOE, weekend emails from Washington, and input from USFJ.

Somewhere along the way, the column for GOJ Action Office & POC got lost. We need to copy this back in from the short version we received from Saito-san in the GOJ.

Please add in any other updates you have from NRC and forward it to the list to use for tomorrow's conference call.

Best,

Tim

This email is UNCLASSIFIED.

From: LIA03 Hoc
Sent: Monday, April 11, 2011 8:04 PM
To: LIA08 Hoc; LIA02 Hoc; LIA10 Hoc
Subject: FW: Official notice (11/04/2011) Announcement of Mr. EDANO
Attachments: Announcement of Mr. EDANO.docx

From: LIA02 Hoc
Sent: Monday, April 11, 2011 8:04 PM
To: LIA08 Hoc; LIA03 Hoc; LIA10 Hoc
Subject: FW: Official notice (11/04/2011) Announcement of Mr. EDANO

From: Hinds, Lynda J [mailto:HindsLJ@state.gov] **On Behalf Of** Tokyo Staff Assistant
Sent: Monday, April 11, 2011 8:04 PM
To: [redacted]; Alan Remick - DOE; [redacted] Ulses, Anthony; ASINK@OFDA.GOV; [redacted] Smith, Brooke; [redacted] Call, Michel; Carden, Terry; [redacted] CherryRC@state.gov; [redacted] Casto, Chuck; cmht@nnsa.doe.gov; [redacted] damian.peko@nuclear.energy.gov; Dorman, Dan; Daniel.Blumenthal@nnsa.doe.gov; [redacted] Debevec, Jacob; DuncanAD@state.gov; [redacted] Fiser, Erich; [redacted] Halladay, Timothy; Harrell, Benjamin L; Hinds, Lynda; HOO Hoc; [redacted] Jay Frogness; [redacted] Jensen, Justina; jhughart@ofda.gov; Monninger, John; [redacted] Johnstone, Gregg M; [redacted] joseph.hughart@foh.hhs.gov; [redacted] Foggie, Kirk; [redacted] Lewis, Brian M; LIA01 Hoc; LIA02 Hoc; Long, Kristopher; Mears, Jeremy M; [redacted] Morales, Russell A; [redacted] narac@llnl.gov; [redacted] NITOPS@nnsa.doe.gov; OSS; [redacted] PMT01 Hoc; Hoc, PMT12; [redacted] Devercelly, Richard; [redacted] Robinson, Alex; Stowe, Jamie; [redacted] Thur, Randy R; Nakanishi, Tony; [redacted] Uchida, Koichi; [redacted] Vietas, Jay; Cook, William; Wong, Christopher
Subject: FW: Official notice (11/04/2011) Announcement of Mr. EDANO

Lynda Hinds
Staff Assistant
(03) 3224- 5370

From: PROTOCOLOFFICE-EM [mailto:protocoloffice-em@mofa.go.jp]
Sent: Monday, April 11, 2011 11:11 PM
To: PROTOCOLOFFICE-EM
Subject: Official notice (11/04/2011) Announcement of Mr. EDANO

BC/221

To All Missions (Embassies, Consular posts and International Organizations in Japan)

The Ministry of Foreign Affairs has the honour to send to the missions a tentative English translation of the announcement made by Chief Cabinet Secretary Mr. EDANO on the introduction of new kinds of evacuation area at the regular press briefing held at 4PM 11 April.

Besides, the Ministry would like to provide all Missions with updates on the effect of the latest strong earth quake that took place today.

At Fukushima Dai-ichi Nuclear Power Plant, external power sources were temporarily cut off due to the quake, and injection of coolant water into the reactors No. 1 to 3 halted about 50 minutes. The injection of coolant water was resumed after the external power was restored, and no major safety problem has been found.

No major problem was found in the external power sources of other nuclear power plants, such as Fukushima Dai-ni and Onagawa.

In the regular press briefing held at 4PM, Chief Cabinet Secretary Mr. EDANO made his announcement on the introduction of new kinds of evacuation area. Following is the main point of his announcement.

The area which is outside the 20km radius zone, and where accumulation of the radioactive material is found to be high and accumulative dose may reach 20 mSv within one year from the beginning of the accident because of weather and geographic conditions, is designated as Planned Evacuation Area. The following local communities belong to this Area: Katsurao Village, Namie Town, Iitate Village, part of Kawamata Town, and part of Minami-Soma City. It is desirable for residents in this area to leave the Area within one month.

The area which is in the zone between 20km and 30km radius and which does not belong to the Planned Evacuation Area is designated as Area for Evacuation Preparation in case of Emergency. Residents in this Area will be requested to stay in shelter or to evacuate in case of an emergency situation. The following local communities belong to this Area: Hirono Town, Naraha Town, Kawauchi Village, part of Tamura City, and part of Minami-Soma City. In particular, infants, children, pregnant women, and those who need special care or hospitalized people are requested not to enter this zone. Nurseries, kindergartens, primary schools, junior-high and high schools will not open in this area. Those who have to enter this area for work or business are requested to be prepared to leave this area on their own if it becomes necessary.

As for these two Areas, monitoring will be strengthened and on the basis of the monitoring data and their assessment, these Areas will be reviewed.

*This is preliminary explanation based on the oral explanation by Chief Cabinet Secretary.

Wittick, Brian

From: Wittick, Brian
Sent: Wednesday, April 13, 2011 7:27 AM
To: Doane, Margaret; Abrams, Charlotte; Foggie, Kirk; Young, Francis; Bloom, Steven
Subject: Read out from 4/13 meetings
Attachments: Doc1.docx

BC/222

Summary – 4/13

NISA/TEPCO Meeting

Discussed development of topic-specific engineering meeting planning (ie. subgroups), including plans for an engineer-engineer level meeting at 1600 concerning MELCOR analysis.

Noted that SFP samples were taken on #4 reactor (this is important because it is really the first piece of hard data that will tell whether there is ongoing criticality, fuel damage, etc in the pool), and provided that pictures showed the pool was down 4', which indicates the fuel is covered by water.

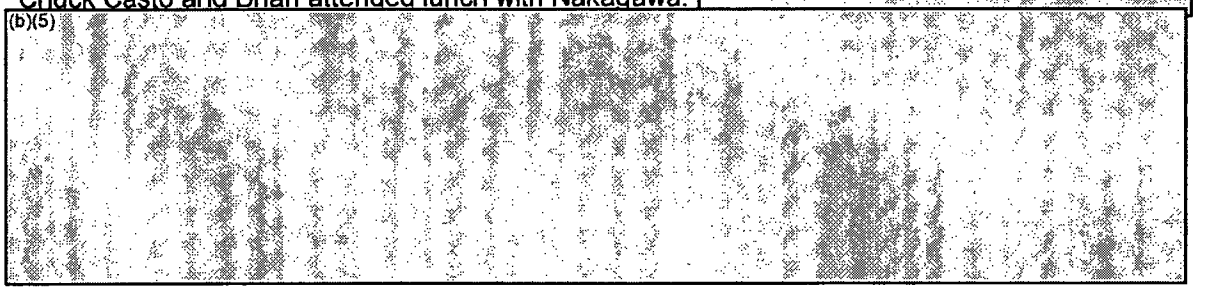
INPO interactions with TEPCO were noted to be further developing and expanding.

NRC and NISA are discussing making the regular meeting a "steering group" type meeting, with several working groups to address specific topics.

AREVA was at the meeting to discuss contaminated water cleanup (they are still seeking a contract for such). They mentioned a proprietary process AREVA has for contamination cleanup (i.e it was a sales pitch).

Nakagawa lunch

Chuck Casto and Brian attended lunch with Nakagawa. (b)(5)



The confinement working group meeting has been permanently canceled. They will address any questions that may arise at other meetings as necessary.

Cabinet Meeting

The Cabinet discussed their implementation of multiple layers of defense for the Fukushima cooling water electrical supplies. These reflected issues previously pressed by the NRC team. The Cabinet also presented a number of items they desired ongoing assistance with and some successes with equipment and supplies to support their mitigation efforts. The Cabinet also noted the usefulness of the newly developed subgroup meetings, as mentioned above, and concluded that the Cabinet meetings would be held less frequently because of this.

Comment: there appeared an interest in several meetings over the last two days to reduce the frequency of engagement.

Johnson, Michael

From: Boger, Bruce
Sent: Friday, April 15, 2011 10:03 PM
To: Hoc, PMT12; RST01 Hoc; LIA08 Hoc
Cc: Zimmerman, Roy; Johnson, Michael
Subject: FW: Statement on Tokyo

FYI—this is a few days old, but it represents the technical basis used to support the Ambassador's policy change to end the voluntary evacuation in Japan. The site team requested it in preparation for questions.

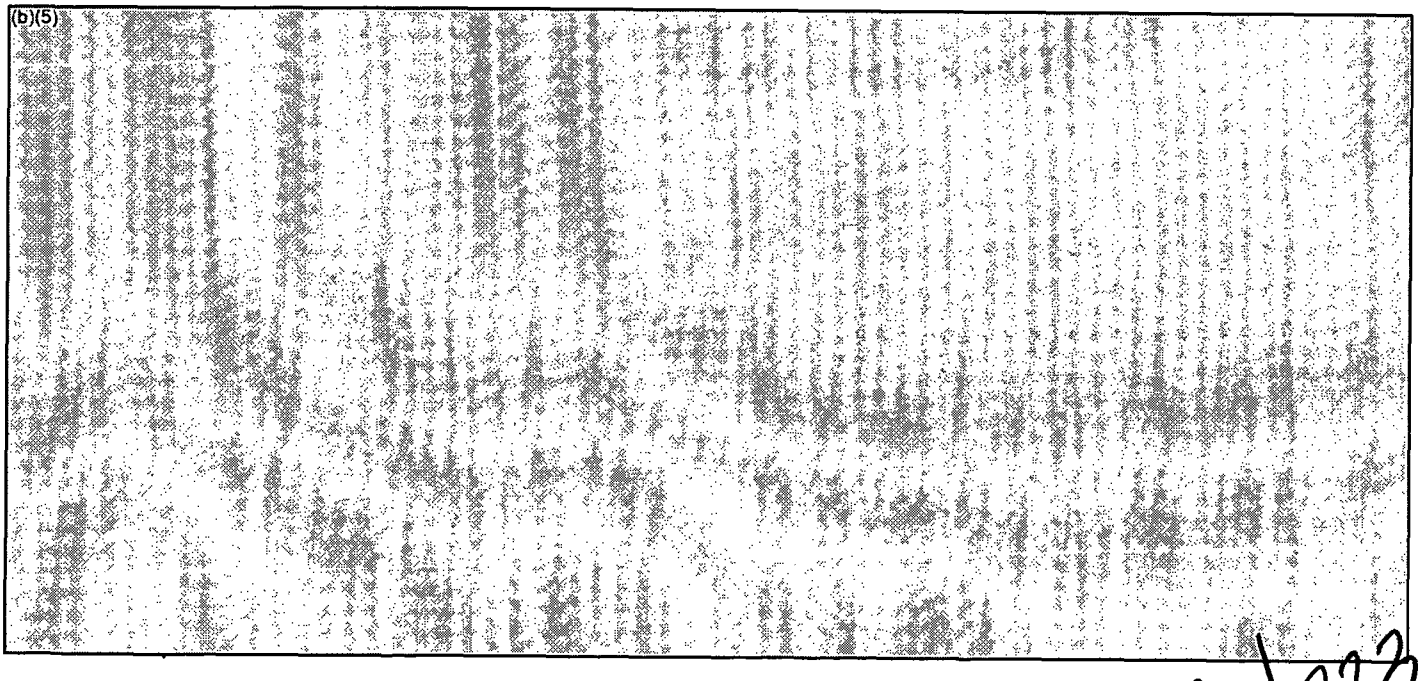
From: Dyer, Jim
Sent: Wednesday, April 13, 2011 3:05 PM
To: Fetter, Steve; Trautman, Stephen J SES CIV NAVSEA 08 NR; Aoki, Steven; Lyons, Peter; Kelly, John E (NE); Binkley, Steve; DAgostino, Thomas
Cc: Holdren, John P.
Subject: RE: Statement on Tokyo

NRC Concurs. Jim Dyer, ET Director 4/13/2011

From: (b)(6) [mailto: (b)(6)
Sent: Wednesday, April 13, 2011 2:23 PM
To: Dyer, Jim; Trautman, Stephen J SES CIV NAVSEA 08 NR; Aoki, Steven; Lyons, Peter; Kelly, John E (NE); Binkley, Steve; DAgostino, Thomas
Cc: Holdren, John P.
Subject: Statement on Tokyo

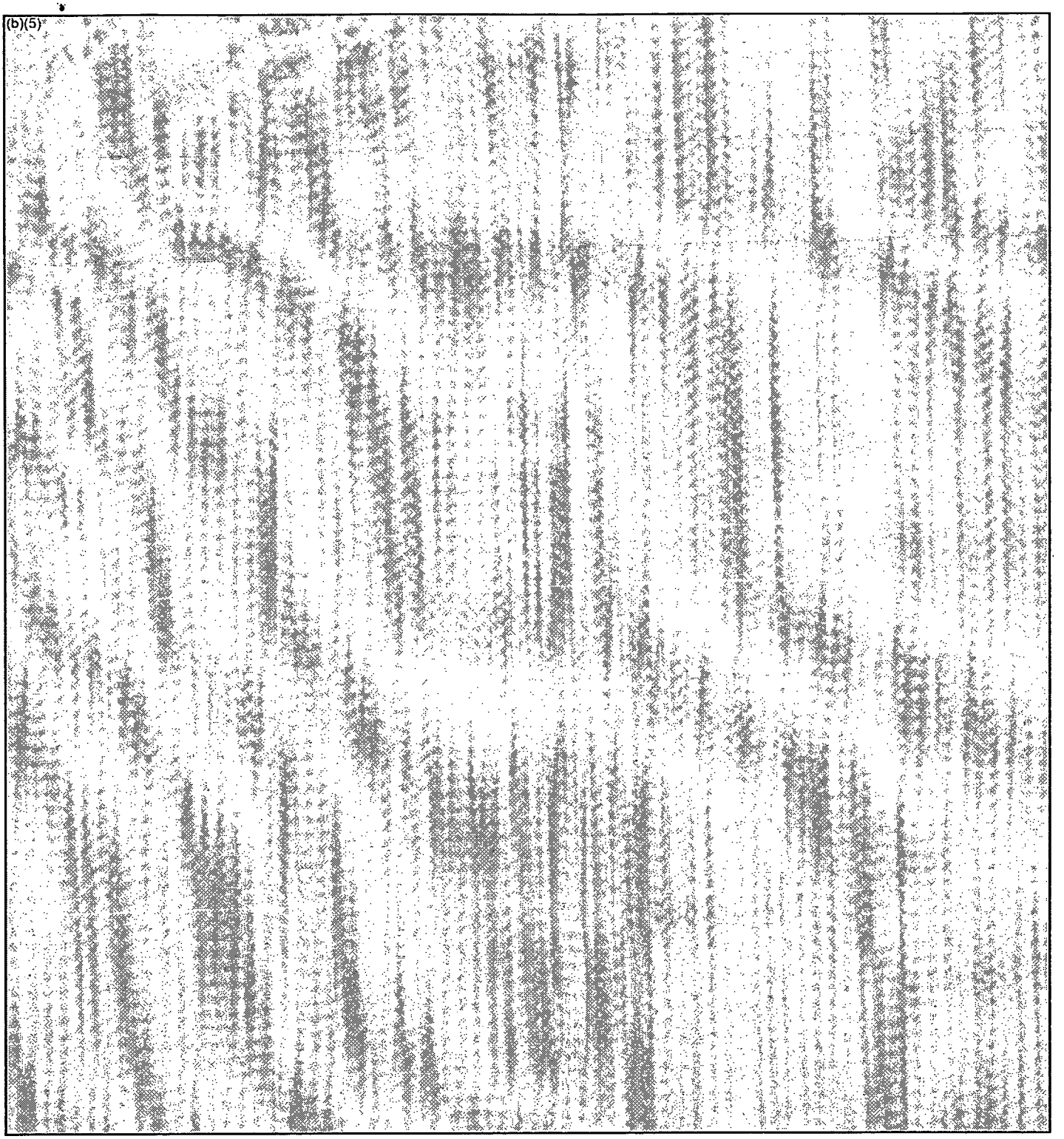
Below is the revised statement with combines NR/NRC and DOE comments (and a few additional edits not intended to change the substance). Please let me know ASAP if you have any further comments or concerns.

(b)(5)



BC/223

(b)(5)



Weaver, Tonna

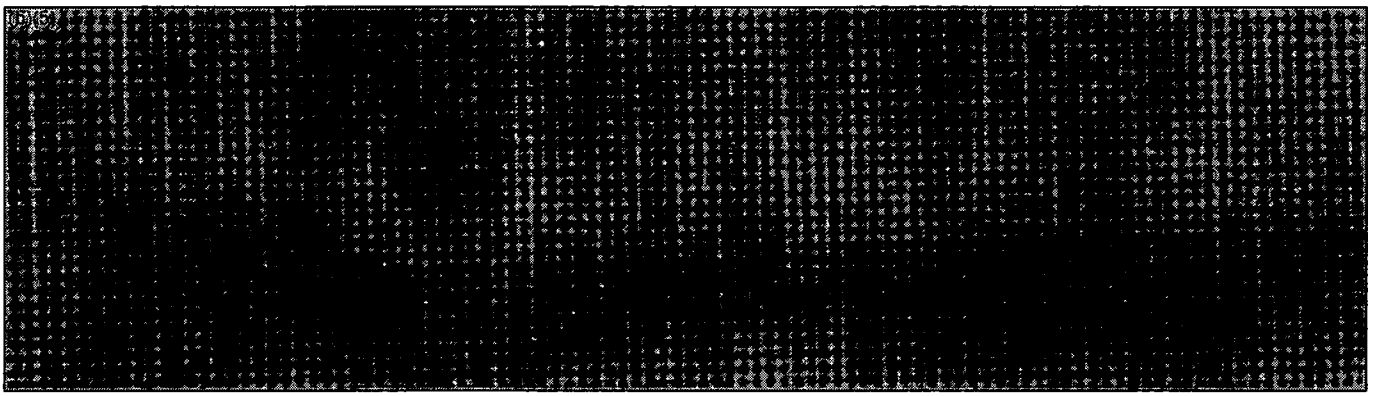
From: Magee, Erin K. (DCHA/OFDA) [redacted]
Sent: Sunday, March 13, 2011 9:50 AM
To: DART_PACTSU; RMT_PACTSU; SMT [USAID]
Subject: 03.13.11 - USAID/DART Japan Earthquake and Tsunami Field Notes #1
Attachments: 03.13.11 - USAID-DART Japan Field Notes #1.doc

~~- For Internal USG Use Only -~~

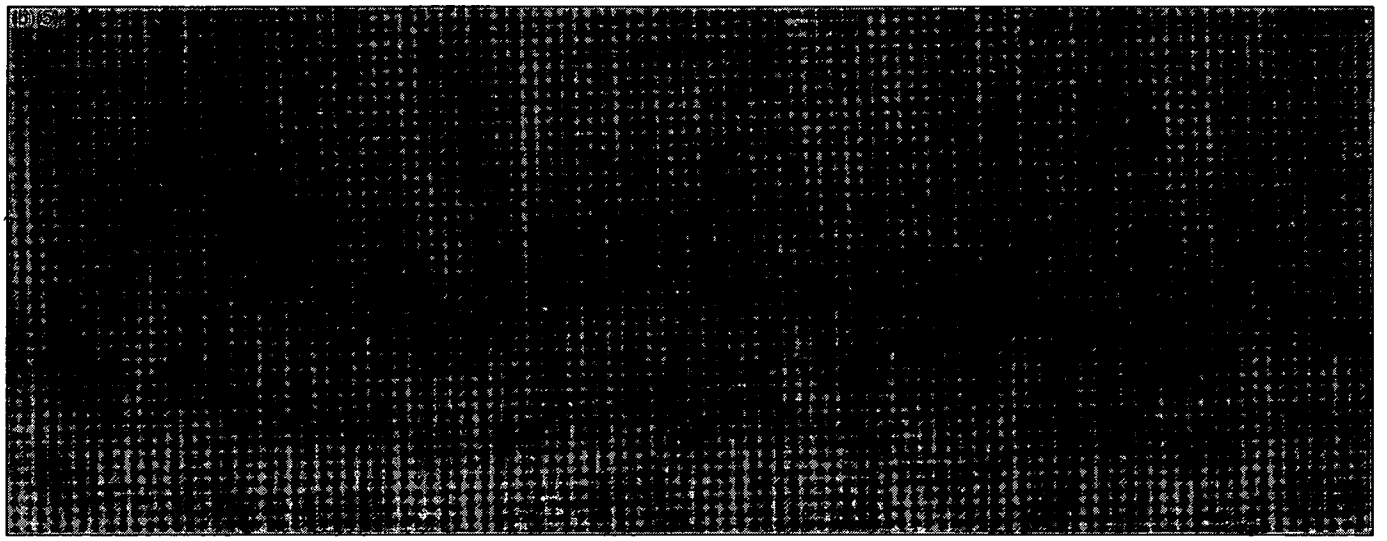
USAID/DART Japan Earthquake and Tsunami Field Notes #1

03.13.11

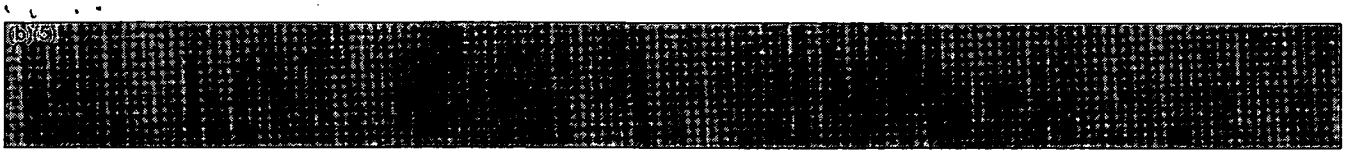
USAID Disaster Assistance Response Team (USAID/DART)



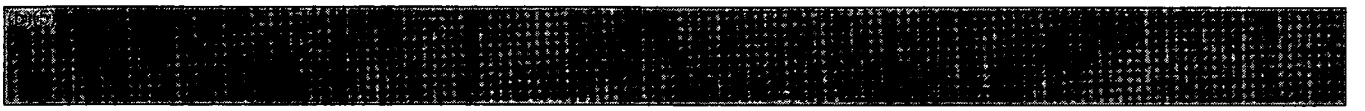
Urban Search and Rescue

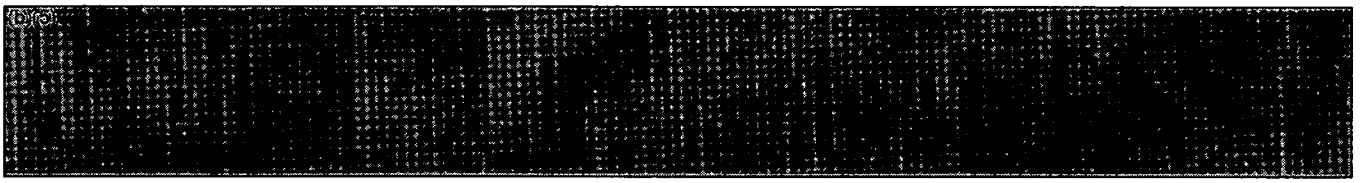


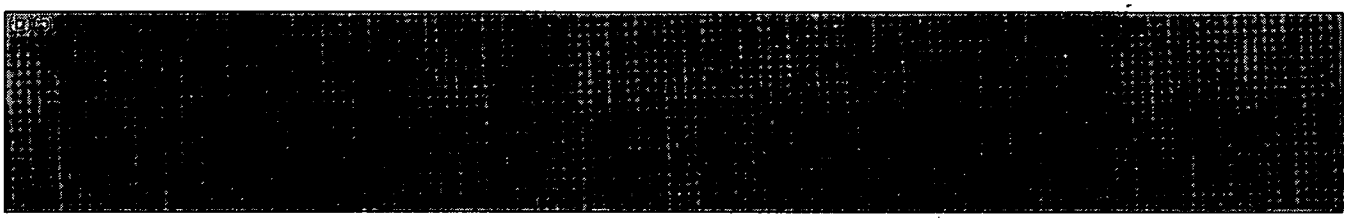
BC/224

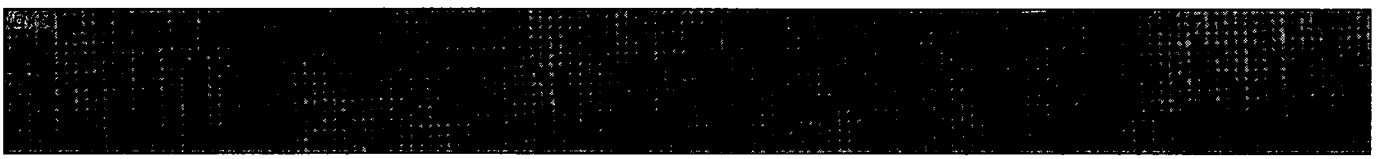


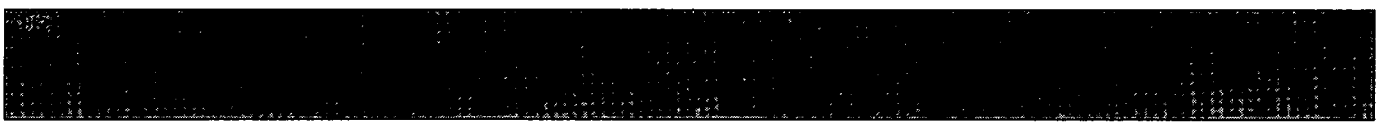
Nuclear Power Plant



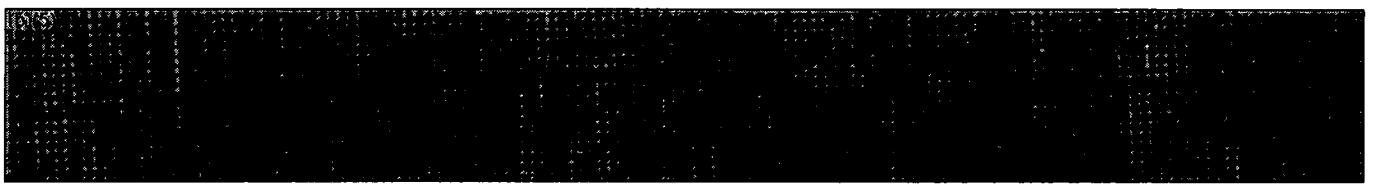


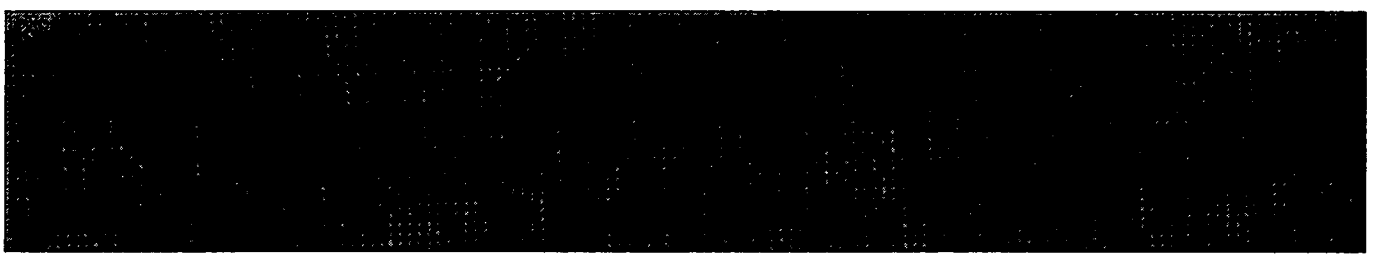


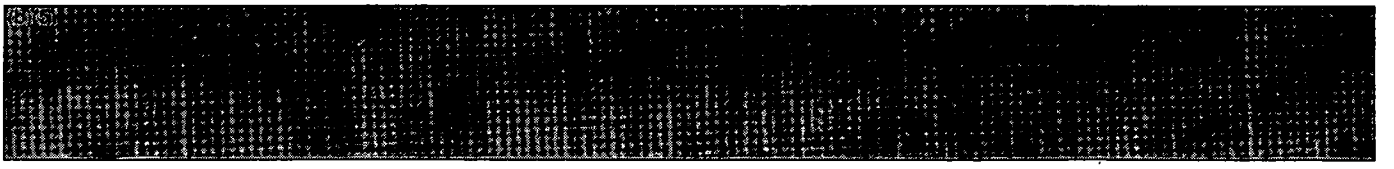




Humanitarian Situation







Humanitarian Response

[redacted]

[redacted]

Erin Magee
Information Officer
USAID Disaster Assistance Response Team (USAID/DART)
Email: [redacted] emagee@usaid.gov

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~~*U.S. Government Only*~~

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USAID/DART Japan Earthquake and Tsunami Field Notes #6
03.18.11

Nuclear Issues

- ~~(SBU)~~ [redacted]
- ~~(SBU)~~ [redacted]
- ~~(SBU)~~ [redacted]
- [redacted]

Urban Search and Rescue

- [redacted]
- [redacted]
- [redacted]

Humanitarian Situation

- [redacted]

- [redacted]

USAID/DART Assessment

- [redacted]

- [redacted]

U.S. Government Response

- [redacted]
- [redacted]
- [redacted]

Weaver, Tonna

From: Magee, Erin K. (DCHA/OFDA) [redacted]
Sent: Monday, March 14, 2011 11:05 AM
To: DART_PACTSU
Subject: Cable: EMBASSY TOKYO REVISED POCS FOR JAPAN EMERGENCY COMMAND

FYI. Please see Japan Emergency Command information below.

Erin

Erin Magee
Information Officer
USAID Disaster Assistance Response Team (USAID/DART) Japan Earthquake and Tsunami Cell Phone: [redacted]
Email: [redacted] emagee@usaid.gov

O R 140743Z MAR 11
FM AMEMBASSY TOKYO
TO SECSTATE WASHDC IMMEDIATE 7281
INFO AMEMBASSY TOKYO

E.O. 13526: N/A
TAGS: AEMR, ASEC, CASC, KFLO, MARR, PREL, PINR
SUBJECT: EMBASSY TOKYO REVISED POCS FOR JAPAN EMERGENCY COMMAND CENTER

REF: A) 11 STATE 768; B) 11 STATE 22688;

PLEASE REPLACE JAPAN EARTHQUAKE EMBASSY TASK FORCE POINTS OF CONTACT (REFTEL A) WITH THE BELOW UPDATED INFORMATION FOR THE JAPAN EMERGENCY COMMAND CENTER, CONSULAR CRISIS RESPONSE CENTER AND OTHER EMBASSY POINTS OF CONTACT:

JAPAN EMERGENCY COMMAND CENTER (JECC) CONTACT INFORMATION (OPERATING 24/7):

DIRECT NUMBER - +81-3-3224 5530

SENIOR TEAM LEADER - +81-3-3224-5531

EMERGENCY ACTION OFFICER - +81-3-3224-5533

EDITOR -+81-3-3224 5542

POL/MIL COORDINATOR - +81-3-3224 5541

PUBLIC AFFAIRS COORDINATOR - +81-3-3224 5543

JAPANESE PRESS MONITOR - +81-3-3224 5532

ADDITIONAL LINE - +81-3-3224 5534

BC/225

CONSULAR CRISIS RESPONSE CENTER (OPERATING IN TANDEM WITH JECC 24/7)

DIRECT NUMBERS - +81-3-3224-5398, -5429,-5468, -5395, -5356

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UTSCHIG, ANDREW S - OFFICE: +81-3-3224-5159; CELL

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WASHBURN, LISA - OFFICE: +81-3-3224-5917; CELL:

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4202-6823

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BROWN, BENJAMIN A - OFFICE: +81-6-6315-5911; CELL: [redacted]

KENNEDY, SYLBETH A. - OFFICE: +81-6-6315-5931; CELL:

SNIDER, MARC A. - OFFICE: +81-6-6315-5912;CELL: [redacted]

VALDES, ANDRES - OFFICE: +81-6-6315-5931;CELL: [redacted]

WUEBBELS, MARK C. J. - OFFICE: +81-6-6315-5936; CELL:+[redacted]

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NAGOYA RESIDENCE	+81-52-773-8130
NAHA FAX	+81-98-876-7448
OSAKA-KOBE CAT ROOM	+81-6-6315-5945
OSAKA-KOBE IPC	+81-6-6315-5992
OSAKA-KOBE CG OFFICE	+81-6-6315-5902
SAPPORO OFFICE	+81-11-641-1884

SECURE COMMUNICATIONS:

EMBASSY:

SVTC ROOM	+81-3-3224-5903
AMBASSADOR'S OFFICE	+81-3-3224-5969
DCM'S OFFICE	+81-3-3224-5968
DCM'S RESIDENCE	+81-3-3224-5577
DEA OFFICE	+81-3-3224-4112
DEA OFFICE FAX	+81-3-5570-9850
ECON OFFICE FAX	+81-3-3224-5638
LEGAL ATTACHE OFFICE	+81-3-3224-5961
LEGAL ATTACHE OFFICE FAX	+81-3-3224-5018
MDAO	+81-3-3224-5964
POL OFFICE FAX	+81-3-3224-5681
A/RSO	+81-3-3224-5935
S/RSO	+81-3-3224-5958
USDAO	+81-3-3224-5384

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USDAO	+81-3-3224-5922
USDAO	+81-3-3224-5984
USDAO ROOS	+81-3-3224-5227

NNNN

Weaver, Tonna

From: Bock, Yoni (b)(6)
Sent: Wednesday, March 16, 2011 11:11 AM
To: (b)(6)
Cc:

Subject: JAP EQ/TSU MITAM - March 16, 2011 (2300)
Attachments: PacTSU MITAM - March 16 2011.xls

CAT Chiefs - MITAM for action.

Everyone else - Info

This MITAM updates the one distributed at 1300 today. New missions include 4 additional requests to procure/source commodities and transport for JJF and one request to support the Australian USAR team.

Please provide updates on previously tasked missions and feedback on the new ones attached.

v/r
Yoni

~~~~~~~~~~~~~~~~~~~~~~~~

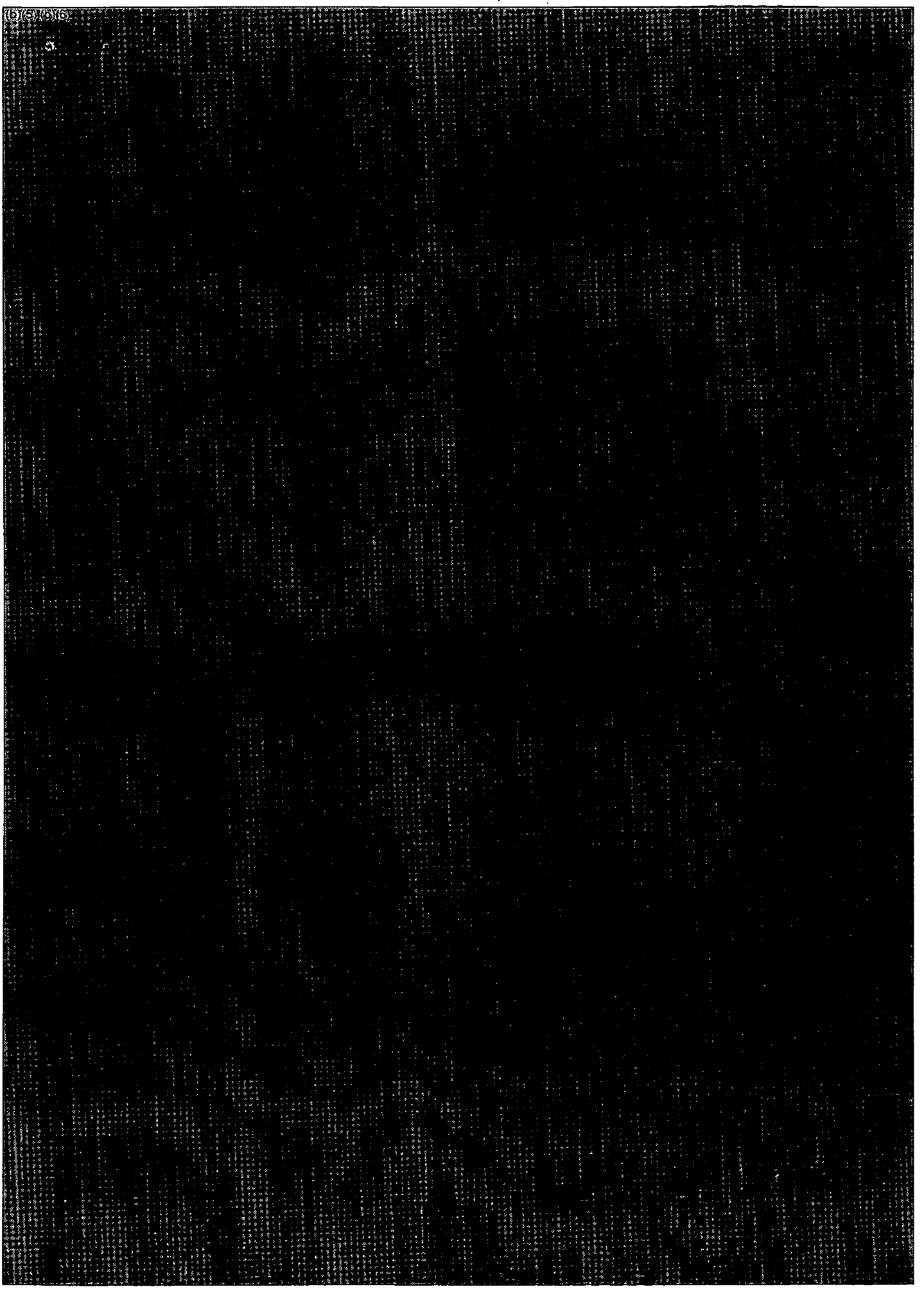
Mr. Yonahton Bock
Military Liaison Officer / Civ-Mil Coordinator Japan Earthquake/Tsunami DART
Email: ybock@usaid.gov
Blackberry: (b)(6)

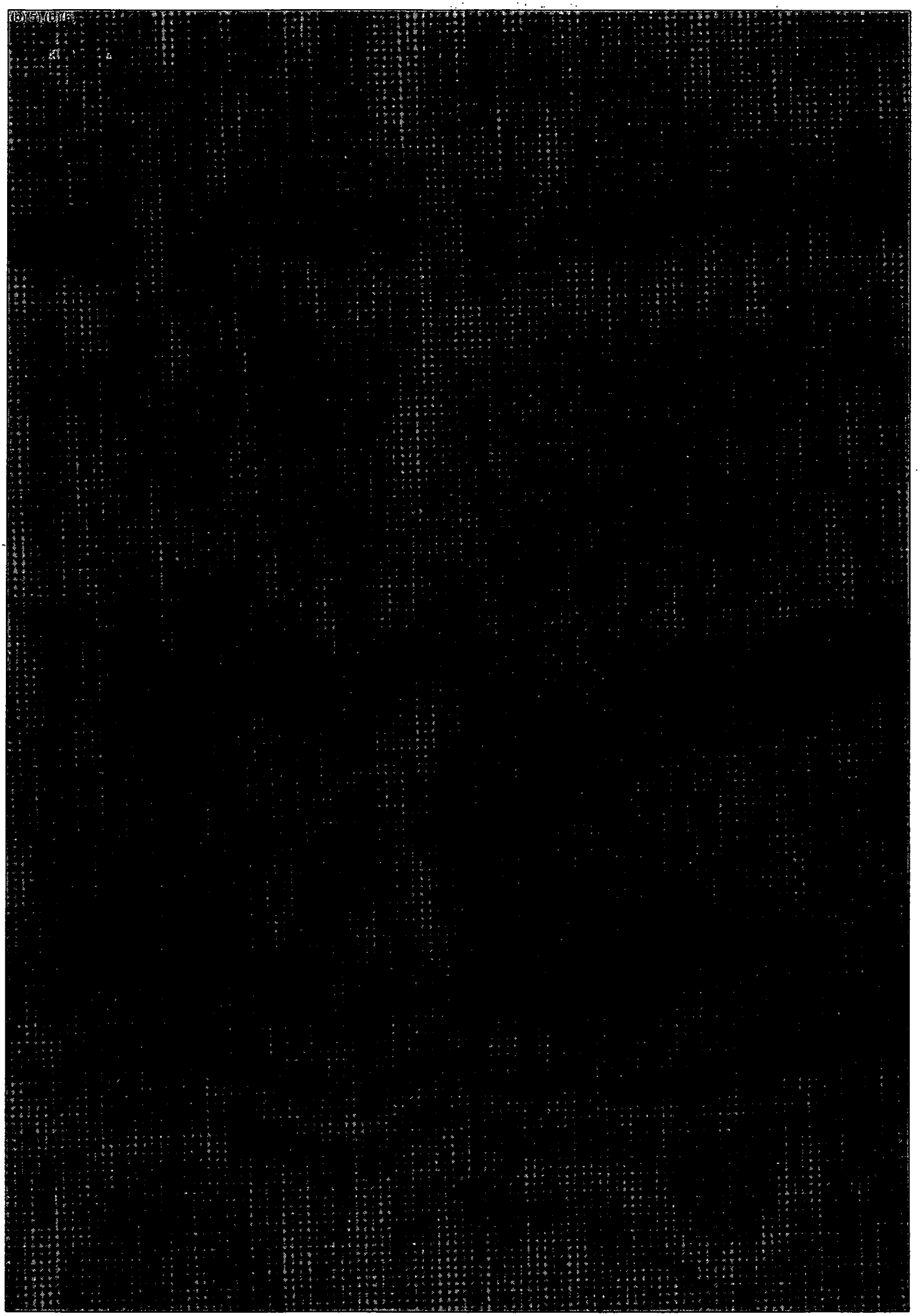
DNS at USFJ: 225-4329, 3137, 2469

From US (or non DSN) (011 81) 425 522-511 From Japan (non DSN) 0425 522-511 after dial tone, ext (b)(6)

Current Location: Yokota AB, Tokyo, Japan ~~~~~~~~~~~~~~~~~~~~~~~~

BC|226
~~~~~~~~~~~~~~~~~~~~~~~~





Weaver, Tonna

From: Magee, Erin K. (DCHA/OFDA) [redacted]
Sent: Monday, March 14, 2011 11:27 AM
To: DART_PACTSU; RMTPACTSU_INC; RMTPACTSU_RM; RMTPACTSU_DMP; RMTPACTSU_DMO; RMTPACTSU_PRO
Subject: ~~(SBU)~~ 03.14.11 - USAID/DART Japan Earthquake and Tsunami Field Notes #2
Attachments: ~~(SBU)~~ 03.14.11 - USAID-DART Field Notes 2.doc

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~~(SBU)~~ USAID/DART Japan Earthquake and Tsunami Field Notes #2

03.14.11

USAID/DART Activities

[redacted]

Nuclear Issues

- ~~(SBU)~~ [redacted]

[redacted]

- ~~(SBU)~~ [redacted]

- ~~(SBU)~~ [redacted]

BC1227

[redacted]

- (SBU) [redacted]

- (SBU) [redacted]

- (SBU) [redacted]

Urban Search and Rescue

- [redacted]

[redacted]

Aftershocks and Humanitarian Situation

[redacted]

[redacted]

Health

[redacted]

U.S. Government Outreach and Coordination

[redacted]

Erin Magee
Information Officer
USAID Disaster Assistance Response Team (USAID/DART) Japan Earthquake and Tsunami Cell Phone: [redacted]
Email: [redacted]emagee@usaid.gov

~~*Please Note: This is for information purposes only. Please do not distribute outside of the RMT or DART.*~~

~~(SBU)~~ USAID/DART Japan Earthquake and Tsunami Field Notes #2
03.14.11

USAID/DART Activities

- [redacted]
- [redacted]

Nuclear Power Plants

- ~~(SBU)~~ [redacted]
- [redacted]
- ~~(SBU)~~ [redacted]
- ~~(SBU)~~ [redacted]
- ~~(SBU)~~ [redacted]

- [redacted]
- (SBU) [redacted]
- (SBU) [redacted]

Urban Search and Rescue

- [redacted]
- [redacted]

Aftershocks and Humanitarian Situation

- [redacted]
- [redacted]
- [redacted]

- [redacted]

Health

- [redacted]

U.S. Government Outreach and Coordination

- [redacted]

Weaver, Tonna

From: Ulses, Anthony
Sent: Monday, March 14, 2011 12:24 PM
To: youngjm@state.gov
Subject: 14 March Meeting Summary ~~(OUO)~~
Attachments: Summary of 14 March meeting with Japanese.docx

Here is the meeting summary.

Tony

BC/228

Summary of 14 March meeting with Japanese

Unit Summary

Unit 1

- [redacted]

Unit 2

- [redacted]

Uni t 3

- [redacted]

General Obervations

[redacted]

(b)(4)

(b)(4)

(b)(4)

(b)(4)

Weaver, Tonna

From: Cherry, Ronald C [CherryRC@state.gov]
Sent: Monday, March 14, 2011 6:50 PM
To: JapanEmbassy, TaskForce
Cc: Zumwalt, James P; Wall, Marc M; Duncan, Aleshia D; Trapp, James; Ulses, Anthony
Subject: FW: call from Sec. Chu's office

[redacted]

Thanks.

This email is UNCLASSIFIED.

From: Adams, Ian [mailto:Ian.Adams@Hq.Doe.Gov]
Sent: Tuesday, March 15, 2011 6:45 AM
To: Cherry, Ronald C
Subject: RE: call from Sec. Chu's office

[redacted]

Thanks
Ian

From: Cherry, Ron
Sent: Monday, March 14, 2011 3:20 PM
To: Pommersheim, John M; Basalla, Suzanne I
Cc: Zumwalt, James P; Wall, Marc M; Adams, Ian; [redacted] Duncan, Aleshia; Duncan, Aleshia (State Dept)
Subject: RE: call from Sec. Chu's office

John Mark,

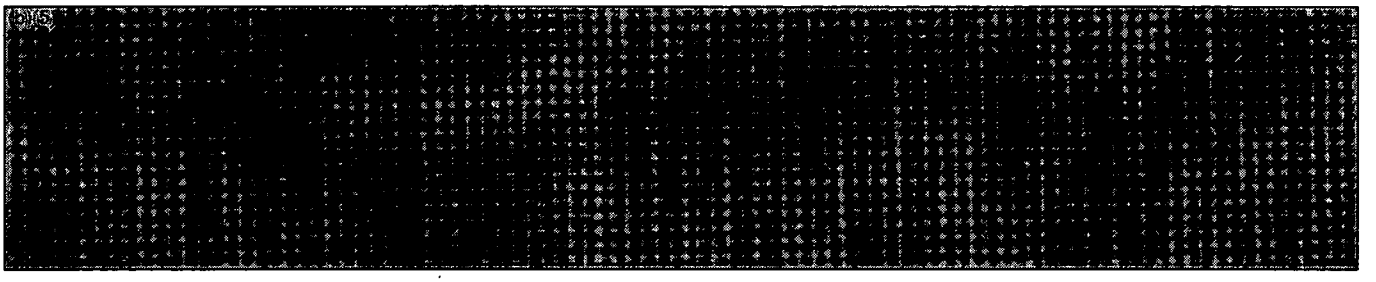
[redacted]

Ron

This email is UNCLASSIFIED.

BC/229

From: Pommersheim, John M
Sent: Tuesday, March 15, 2011 3:07 AM
To: Basalla, Suzanne I; Cherry, Ronald C
Cc: Zumwalt, James P; Wall, Marc M; 'ian.adams@hq.doe.gov'
Subject: call from Sec. Chu's office



John Mark Pommersheim
Bilateral/Foreign Policy Unit Chief/ Deputy Director
Political Section
U.S. Embassy Tokyo
1-10-5, Akasaka 1-Chome, Minato-Ku, Tokyo 107
tel:(81)(03)3224-5334
fax:(81)(03)3224-5322
http://japan.usembassy.gov/

This email is UNCLASSIFIED.

Weaver, Tonna

From: Bock, Yoni [redacted]
Sent: Tuesday, March 15, 2011 6:41 PM
To: ofdaPACOM; DART_PACTSU
Subject: FW: Road Conditions to Sendai

FYI only

From: Huntington, Miki T LTC USA USFJ J54 [mailto:[redacted]
Sent: Tue 3/15/2011 6:35 PM
To: USFJ-CAT-CHIEF; USFJ-CAT-J5; USFJ-CAT-GROUND; USFJ-CAT-IIIMEF-FWD-LNO
Cc: Bock, Yoni
Subject: FW: Road Conditions to Sendai

[redacted]

Thanks.
V/R,

MIKI T. HUNTINGTON, LTC, U.S. Army
Chief, Government Relations (J54)
United States Forces Japan
DSN 315-225-2072 / FAX 315-225-4718
Comm: 011-81-3-1175-52072

-----Original Message-----
From: Kimura, Ayako [mailto:KimuraAX@state.gov]
Sent: Tuesday, March 15, 2011 10:21 PM
To: Luke, Robert MCPolAf AMEMB JP; Young, Joseph ChiefPolMil AMEMB JP; Tokyo PolMil Unit; Oikawa, Yufuko; Huntington, Miki T LTC USA USFJ J54
Cc: Greene, Robert F. DOS; Basalla, Suzanne SAA AMEMB JP; Fuller, Matthew G
Subject: Re: Sendai

[redacted]

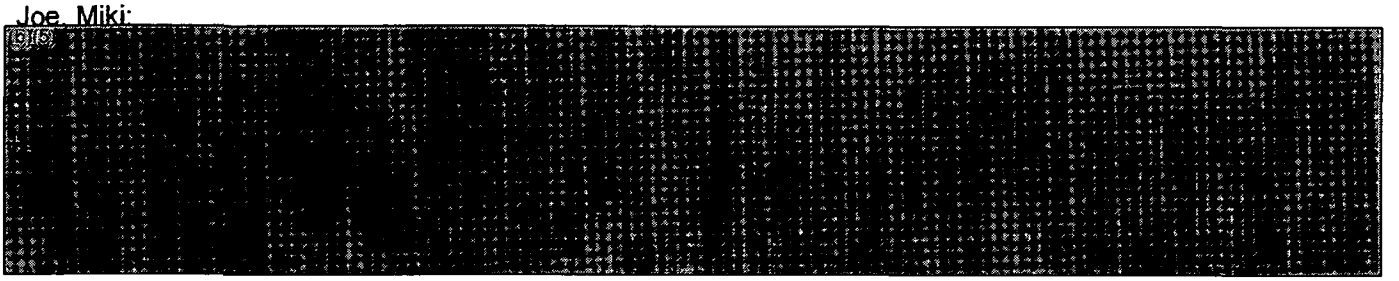
- Aya

----- Original Message -----
From: Kimura, Ayako
To: Luke, Robert S; Young, Joseph M; Tokyo PolMil Unit; Oikawa, Yufuko; [redacted]
Cc: Greene, Raymond F; Basalla, Suzanne I; Fuller, Matthew G

BC/230

Sent: Tue Mar 15 08:11:05 2011
Subject: Sendai

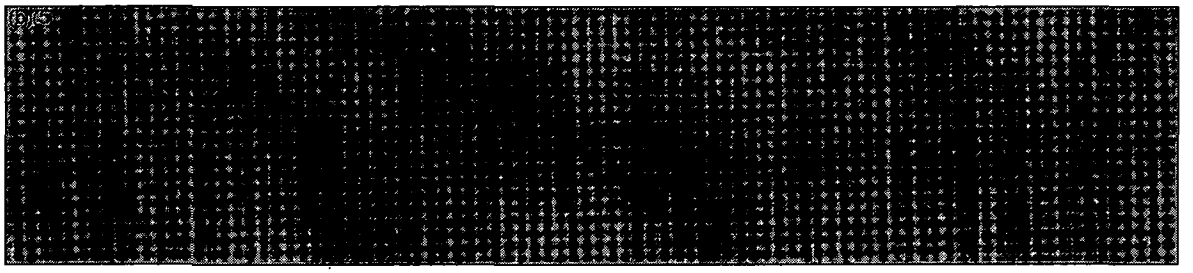
Joe, Miki:



- Aya

Weaver, Tonna

From: Cherry, Ronald C; CherryRC@state.gov
Sent: Tuesday, March 15, 2011 7:00 PM
To: JapanEmbassy, TaskForce; Angelov, Bonnie A; Alexander, Kathleen J
Cc: Alan Remick; Aleshia Duncan; Duncan, Aleshia D; Trapp, James; James Trapp (BB); Mears, Jeremy M; Morales, Russell A; Nesheiwat, Julia; Tamada, Yoshimi; Ulses, Anthony; Uchida, Koichi
Subject: RE: Nuclear Team Schedule, March 16

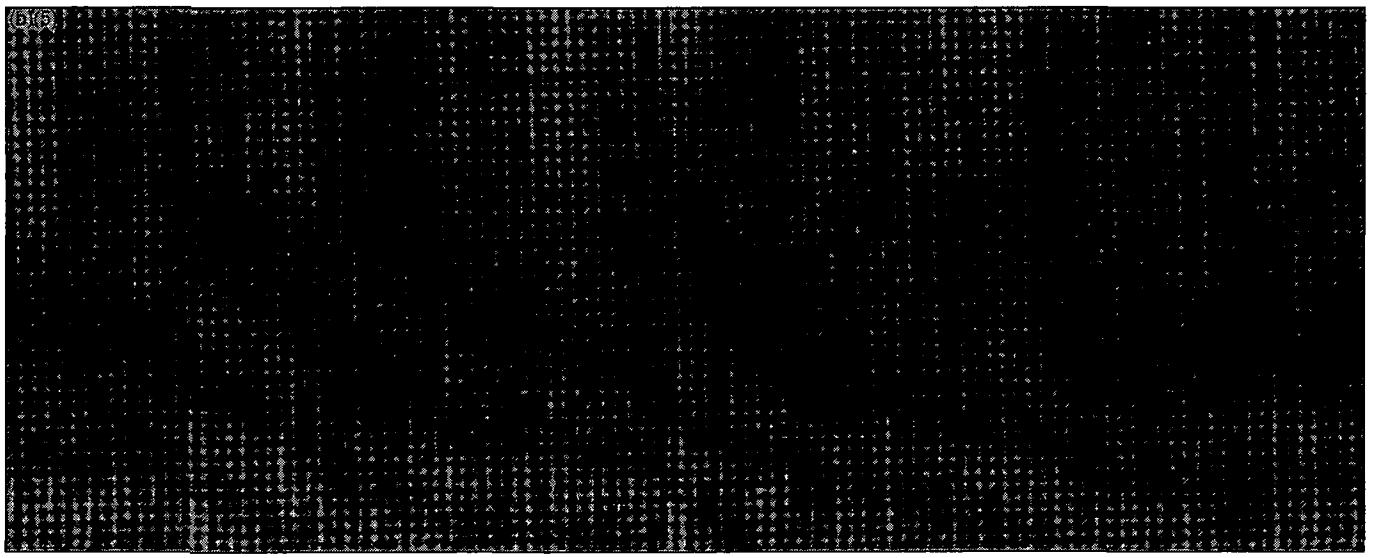


Ron

This email is UNCLASSIFIED.

From: Cherry, Ronald C
Sent: Tuesday, March 15, 2011 10:25 PM
To: JapanEmbassy, TaskForce; Angelov, Bonnie A; Alexander, Kathleen J
Cc: Alan Remick; Aleshia Duncan; Duncan, Aleshia D; James Trapp; James Trapp (BB); Mears, Jeremy M; Morales, Russell A; Nesheiwat, Julia; Tamada, Yoshimi; Tony Ulses; Uchida, Koichi
Subject: Nuclear Team schedule

All:



Good night.

BC 231

Ron

This email is UNCLASSIFIED.

Weaver, Tonna

From: Cherry, Ronald C/CherryRC@state.gov
Sent: Tuesday, March 15, 2011 7:01 PM
To: JapanEmbassy, TaskForce; Basalla, Suzanne I; Beed, John A; Berger, William (RDMA/OFDA); Forbes, James A
Cc: Alan Remick; Aleshia Duncan; Duncan, Aleshia D; Trapp, James; James Trapp (BB); Mears, Jeremy M; Morales, Russell A; Nesheiwat, Julia; Tamada, Yoshimi; Ulses, Anthony; Uchida, Koichi
Subject: FW: Secretary Chu receives positive response from METI Minister on monitoring

(b)(5) (b)(5)

(b)(5)

Thank you.

Ron

This email is UNCLASSIFIED. -----Original Message-----
From: Aoki, Steven [mailto (b)(5)
Sent: Wednesday, March 16, 2011 12:04 AM
To: 'jroos@state.gov'; Zumwalt, James P; Basalla, Suzanne I; Cherry, Ronald C; Duncan, Aleshia; Remick, Alan
Cc: NITOPS; Connery, Joyce; Mustin, Tracy; Poneman, Daniel; DAgostino, Thomas; Hurlbut, Brandon
Subject: Secretary Chu receives positive response from METI Minister on monitoring

Mr. Ambassador:

(b)(5)

(b)(5)

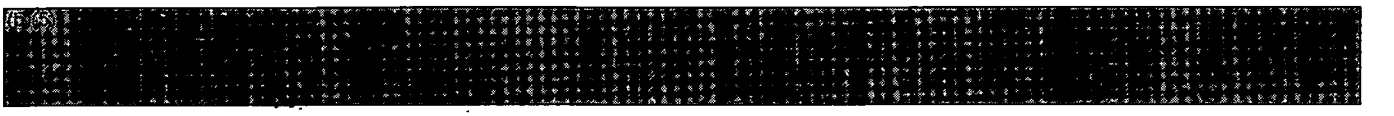
(b)(5)

(b)(5)

(b)(5)

BC 232

(b)(5)



v/r
Steve Aoki

Weaver, Tonna

From: Ulses, Anthony
Sent: Tuesday, March 15, 2011 7:30 PM
To: Trapp, James
Subject: Fw: Updates: 4 reactor

Sent from NRC BlackBerry
Anthony Ulses
(b)(6)

----- Original Message -----
From: Cherry, Ronald C <CherryRC@state.gov>
To: Sano, Mikako <SanoMX@state.gov>; Russ Morales <russ@earthtabi.com>; Ulses, Anthony; Duncan, Aleshia D <DuncanAD@state.gov>
Sent: Tue Mar 15 19:14:47 2011
Subject: RE: Updates: 4 reactor

Thanks, Sano-san.

This email is UNCLASSIFIED

-----Original Message-----
From: Sano, Mikako
Sent: Wednesday, March 16, 2011 8:14 AM
To: 'Russ Morales'; anthony.ulses@nrc.gov; Duncan, Aleshia D; Cherry, Ronald C
Subject: Updates: 4 reactor

Wednesday, March 16, 2011

(b)(6)

(b)(6)

(b)(6)

(b)(6)

(b)(6)

Mikako Sano, Scientific Affairs Analyst
Environment, Science,Technology & Health Unit Economic Affairs Sec. The US Embassy Tokyo
(T) +81-3-3224-5494 (F) +81-3-3224-5229
E-mail: sanomx@state.gov

-----Original Message-----

BC/233

From: Russ Morales [mailto:russ@earthtabi.com]
Sent: Tuesday, March 15, 2011 11:45 PM
To: anthony.ulses@nrc.gov; Duncan, Aleshia D; Cherry, Ronald C
Cc: Sano, Mikako
Subject: 4 reactor

Folks,,

[redacted]

Russ

Weaver, Tonna

From: Ulses, Anthony
Sent: Monday, March 14, 2011 7:48 PM
To: LIA03 Hoc
Subject: Fw: Activity and Dose Estimate information for Plume over Yokosuka

Please pass to PMT

Sent from NRC BlackBerry
Anthony Ulses
(b)(6)

----- Original Message -----
From: (b)(6)
To: Ulses, Anthony
Sent: Mon Mar 14 19:32:02 2011
Subject: Activity and Dose Estimate information for Plume over Yokosuka

Mr. Ulses,

(b)(6)

(b)(6)

(b)(5) (b)(6)

(b)(6)

(b)(6)

(b)(6)

Sincerely,
Richard O'Malley
NACCC Program Manager
COMSUBGRU SEVEN

(O) 243-2398
From US (VOIP): 808-473-8000 (X7114)
DSN: 315-243-2398
Cell: (b)(6) (local)
(b)(6) (from US)

BL 234

Weaver, Tonna

From: Bock, Yoni (b)(6)
Sent: Tuesday, March 15, 2011 4:51 AM
To: ofdaPACOM; DART_PACTSU; RMTPACTSU_RM
Subject: FW: complete use of Yamagata Airport (UNCLASSIFIED)

All,
(b)(6)

Thanks!
yoni

~~~~~~~~~~~~~~~~~~~~~~
Mr. Yonahton Bock
Military Liaison Officer / Civ-Mil Coordinator
Japan Earthquake/Tsunami DART
Email: ybock@usaid.gov
Blackberry: (b)(6)

DNS at USFJ: 225-4329, 3137, 2469

Calling Yokota from non DSN: (0) 425 522-511,
ext (b)(6)

Current Location: Yokota AB, Tokyo, Japan
~~~~~~~~~~~~~~~~~~~~~~

From: USFJ-CAT-J5
Sent: Tue 3/15/2011 4:48 AM
To: loyjr@state.gov; Hefner, Timothy B; Tanaka, Rodney S; tokyopolmilunit@state.gov
Cc: (b)(6) USFJ-CAT-CHIEF; USFJ-CAT-AIR; USFJ-CAT-GROUND; Bock, Yonahton(DCHA/OFDA)
(b)(6)
Subject: FW: complete use of Yamagata Airport (UNCLASSIFIED)

(b)(6)

CAT J5
(b)(6)

-----Original Message-----
From: Huntington, Miki T LTC USA USFJ J54
Sent: Tuesday, March 15, 2011 5:35 PM
To: 'Lowell, Stephen R Mr CIV US USA USARPAC'; USFJ-CAT-J5; USFJ-CAT-CHIEF
Cc: (b)(6)
(b)(6)
Subject: RE: complete use of Yamagata Airport (UNCLASSIFIED)

All ~
(b)(6)

BC/235

(b)(6)

(b)(6)

V/R,

MIKI T. HUNTINGTON, LTC, U.S. Army
Chief, Government Relations (J54)
United States Forces Japan
DSN 315-225-2072 / FAX 315-225-4718
Comm: 011-81-3-1175-52072

-----Original Message-----
From: Huntington, Miki T LTC USA USFJ J54
Sent: Tuesday, March 15, 2011 2:44 PM
To: 'Lowell, Stephen R Mr CIV US USA USARPAC'; USFJ-CAT-J5; USFJ-CAT-CHIEF
Cc: Galvin, Richard J COL MIL US USA USARPAC; Dulniawka, Peter Mr CIV US USA
USARPAC; Deyeso, Robert L Jr COL MIL US USA USARPAC; Agena, Craig J COL MIL
US USA USARPAC; Neyland, Alan W COL MIL US USA USARPAC
Subject: RE: complete use of Yamagata Airport (UNCLASSIFIED)

Stephen,

(b)(6)

V/R,

MIKI T. HUNTINGTON, LTC, U.S. Army
Chief, Government Relations (J54)
United States Forces Japan
DSN 315-225-2072 / FAX 315-225-4718
Comm: 011-81-3-1175-52072

-----Original Message-----
From: Lowell, Stephen R Mr CIV US USA USARPAC
[mailto:
Sent: Tuesday, March 15, 2011 2:35 PM
To: Huntington, Miki T LTC USA USFJ J54
Cc: Galvin, Richard J COL MIL US USA USARPAC; Dulniawka, Peter Mr CIV US USA
USARPAC; Deyeso, Robert L Jr COL MIL US USA USARPAC; Agena, Craig J COL MIL
US USA USARPAC; Neyland, Alan W COL MIL US USA USARPAC
Subject: complete use of Yamagata Airport (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Miki,

(b)(6)

(b)(5)

(b)(5)

(b)(5)

(b)(5)

(b)(5)

(b)(5) (b)(6)

(b)(5)

(b)(6)

(b)(6)

(b)(6)

concepts at this time.

(b)(5)

Stephen

Stephen Lowell
Political-Military Officer
(b)(6)

Classification: UNCLASSIFIED
Caveats: FOUO

Weaver, Tonna

From: Ulses, Anthony
Sent: Tuesday, March 15, 2011 7:51 AM
To: Basalla, Suzanne I; LIA02 Hoc; Mitchell, Derek J SES OSD POLICY; Schiffer, Michael SES OSD POLICY; [redacted] Crowe, William B BGen USMC USFJ J01; [redacted] Duncan, Aleshia D; Cherry, Ronald C; JapanEmbassy, TaskForce; Beed, John A; Berger, William (RDMA/OFDA); Jaczko, Gregory; HOO Hoc; LIA06 Hoc
Cc: Roos, John; Zumwalt, James P; Fuller, Matthew G; [redacted] LIA03 Hoc; LIA02 Hoc
Subject: RE: GOJ urgent request for water pumping capacity - follow up 1

COL McDaniel/Team USFJ,

Please see the enclosed information. Please advise how best to proceed.

Thank you,

Tony Ulses

Jim and Tony,

[redacted] 315-225-4223

Thank you.

From: Basalla, Suzanne I [BasallaSI@state.gov]
Sent: Tuesday, March 15, 2011 6:59 AM
To: Basalla, Suzanne I; LIA02 Hoc; Mitchell, Derek J SES OSD POLICY; Schiffer, Michael SES OSD POLICY; [redacted] Crowe, William B BGen [redacted] Duncan, Aleshia D; Cherry, Ronald C; JapanEmbassy, TaskForce; Beed, John A; Berger, William (RDMA/OFDA); Jaczko, Gregory; HOO Hoc; LIA06 Hoc; Ulses, Anthony
Cc: Roos, John; Zumwalt, James P; Fuller, Matthew G
Subject: RE: GOJ urgent request for water pumping capacity - follow up 1

[redacted]

Suzanne

SBU

This email is UNCLASSIFIED.

From: Basalla, Suzanne I
Sent: Tuesday, March 15, 2011 12:24 AM
To: 'LIA02 Hoc'; Mitchell, Derek J SES OSD POLICY; Schiffer, Michael SES OSD POLICY; [redacted] Crowe, William B BGen USMC USFJ J01;

BC 1236

(b)(6) Duncan, Aleshia D; Cherry, Ronald C; JapanEmbassy, TaskForce; Beed, John A; Berger, William (RDMA/OFDA); Jaczko, Gregory; HOO Hoc; LIA06 Hoc
Cc: Roos, John; Zumwalt, James P; Fuller, Matthew G
Subject: RE: GOJ urgent request for water pumping capacity - follow up 1

Thank you. (b)(5)

~~SBU~~
This email is UNCLASSIFIED.

From: LIA02 Hoc [mailto:LIA02.Hoc@nrc.gov]
Sent: Tuesday, March 15, 2011 12:16 AM
To: Basalla, Suzanne I; Mitchell, Derek J SES OSD POLICY; Schiffer, Michael SES OSD POLICY; (b)(6) Crowe, William B BGen USMC USFJ J01; (b)(6) Duncan, Aleshia D; Cherry, Ronald C; JapanEmbassy, TaskForce; Beed, John A; Berger, William (RDMA/OFDA); Jaczko, Gregory; HOO Hoc; LIA06 Hoc
Cc: Roos, John; Zumwalt, James P; Fuller, Matthew G
Subject: RE: GOJ urgent request for water pumping capacity - follow up 1

Hi Suzanne,

(b)(5)

Hope this helps,
Rani Franovich
Liaison Team Coordinator
U.S. Nuclear Regulatory Commission

From: Basalla, Suzanne I [mailto:BasallaSI@state.gov]
Sent: Monday, March 14, 2011 10:39 AM
To: Mitchell, Derek J SES OSD POLICY; Schiffer, Michael SES OSD POLICY; (b)(6) HOO Hoc; LIA02 Hoc
Cc: (b)(6)
Subject: GOJ urgent request for water pumping capacity - follow up 1

All,

(b)(5)

(b)(5)

(b)(5)

(b)(5)

(b)(5)

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(b)(6)

(b)(5)

(b)(6)

(b)(6)

(b)(5)

Suzanne

Suzanne I. Basalla
Senior Advisor to Ambassador John V. Roos
American Embassy - Tokyo

Please follow Ambassador Roos on Twitter.com/AmbassadorRoos

Tel: 081-3-3224-5023
Fax: 081-3-3224-5312
BasallaSI@state.gov

~~SBU~~
This email is UNCLASSIFIED.

Weaver, Tonna

From: Magee, Erin K. (DCHA/OFDA) [redacted]
Sent: Tuesday, March 15, 2011 7:59 AM
To: DART_PACTSU; RMTPACTSU_DMO; RMTPACTSU_DMP; RMTPACTSU_RM; RMTPACTSU_INC; RMTPACTSU_PRO
Subject: ~~(SBU)~~ 03.15.11 - USAID/DART Japan Earthquake and Tsunami Field Notes #3
Attachments: ~~(SBU)~~ 03.15.11 - USAID-DART Japan Field Notes #3.doc

~~-- U.S. Government Use Only --~~

[redacted]

~~(SBU)~~ USAID/DART Japan Earthquake and Tsunami Field Notes #3

03.15.11

Nuclear Issues

~~(SBU)~~ [redacted]

[redacted]

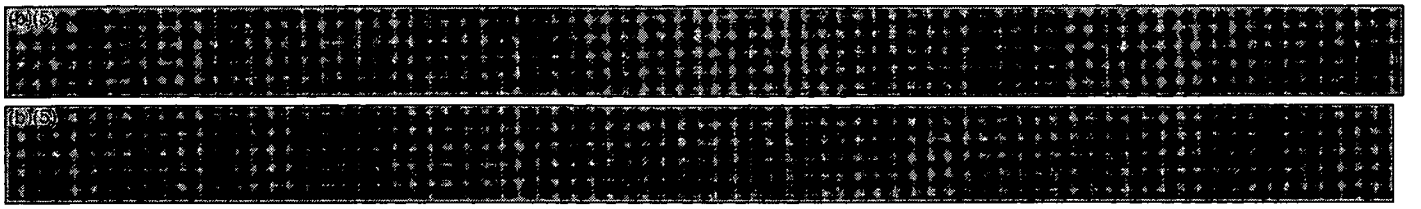
~~(SBU)~~ [redacted]

[redacted]

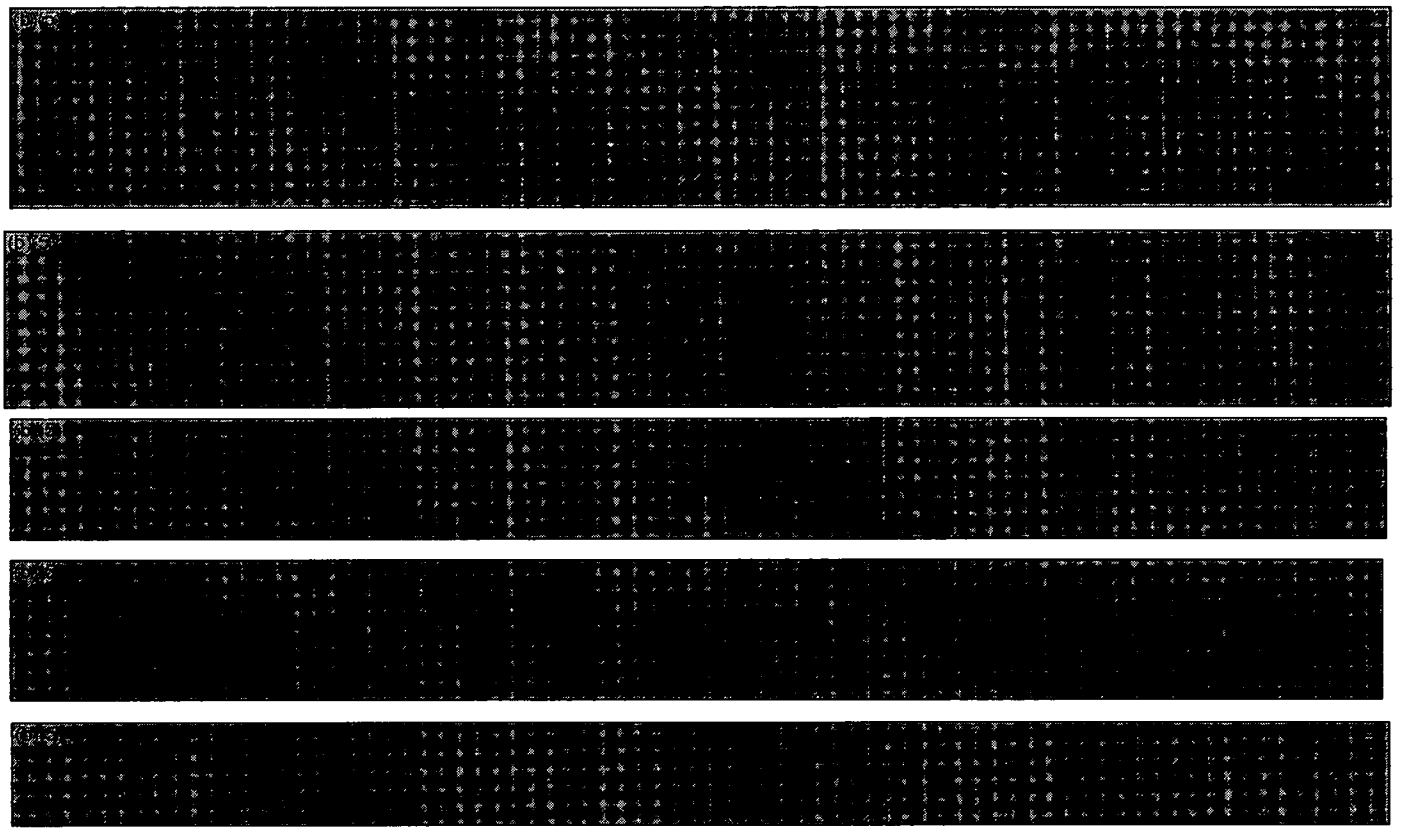
Safety and Security

[redacted]

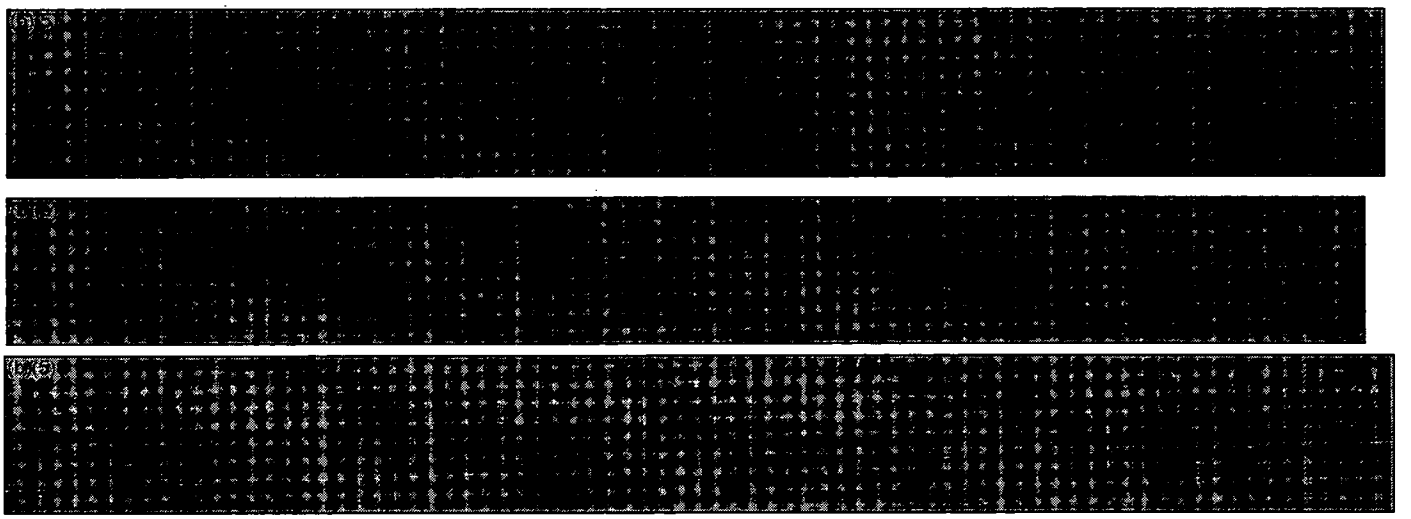
BC|237



Urban Search and Rescue



USAID/DART



[redacted]

Humanitarian Situation

[redacted]

Health

[redacted]

Erin Magee
Information Officer
USAID Disaster Assistance Response Team (USAID/DART) Japan Earthquake and Tsunami Cell Phone: +1-[redacted]
Email: [redacted] emagee@usaid.gov

Weaver, Tonna

From: Bock, Yoni [redacted]
Sent: Tuesday, March 15, 2011 8:19 AM
To: [redacted]
Cc: [redacted] Reeves, James (OSD); ofdaPACOM; Trigilio, John (OSD); Hanlon, Melissa (OSD); [redacted] USFJ-CAT-J5 [redacted] Clark, Ngoc (OSD); [redacted] DART_PACTSU; [redacted] RMTPACTSU_RM; [redacted]; RMT_PACTSU; Atteberry, Christopher (OSD)
Subject: Japan EQ/Pacific Tsunami MITAM #1 (March 15, 2100 Local)
Attachments: PacTSU MITAM - March 15 2011.xls

Importance: High

CAT Chief: For action

Everyone else: Information.

[redacted]

v/r
Yoni

~~~~~~~~~~~~~~~~~~~~~~~~

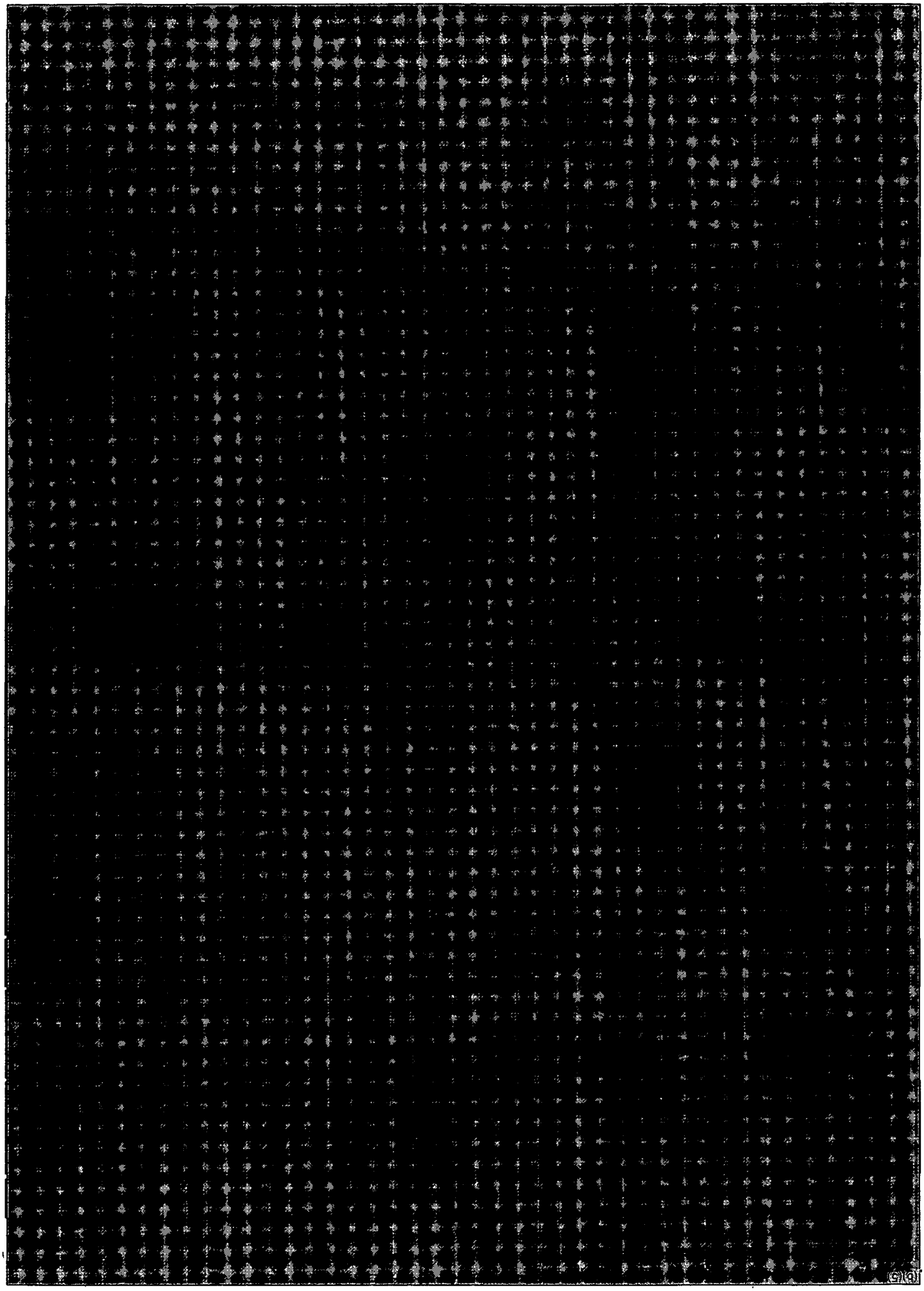
Mr. Yonahton Bock
Military Liaison Officer / Civ-Mil Coordinator Japan Earthquake/Tsunami DART
Email: ybock@usaid.gov
Blackberry: [redacted]

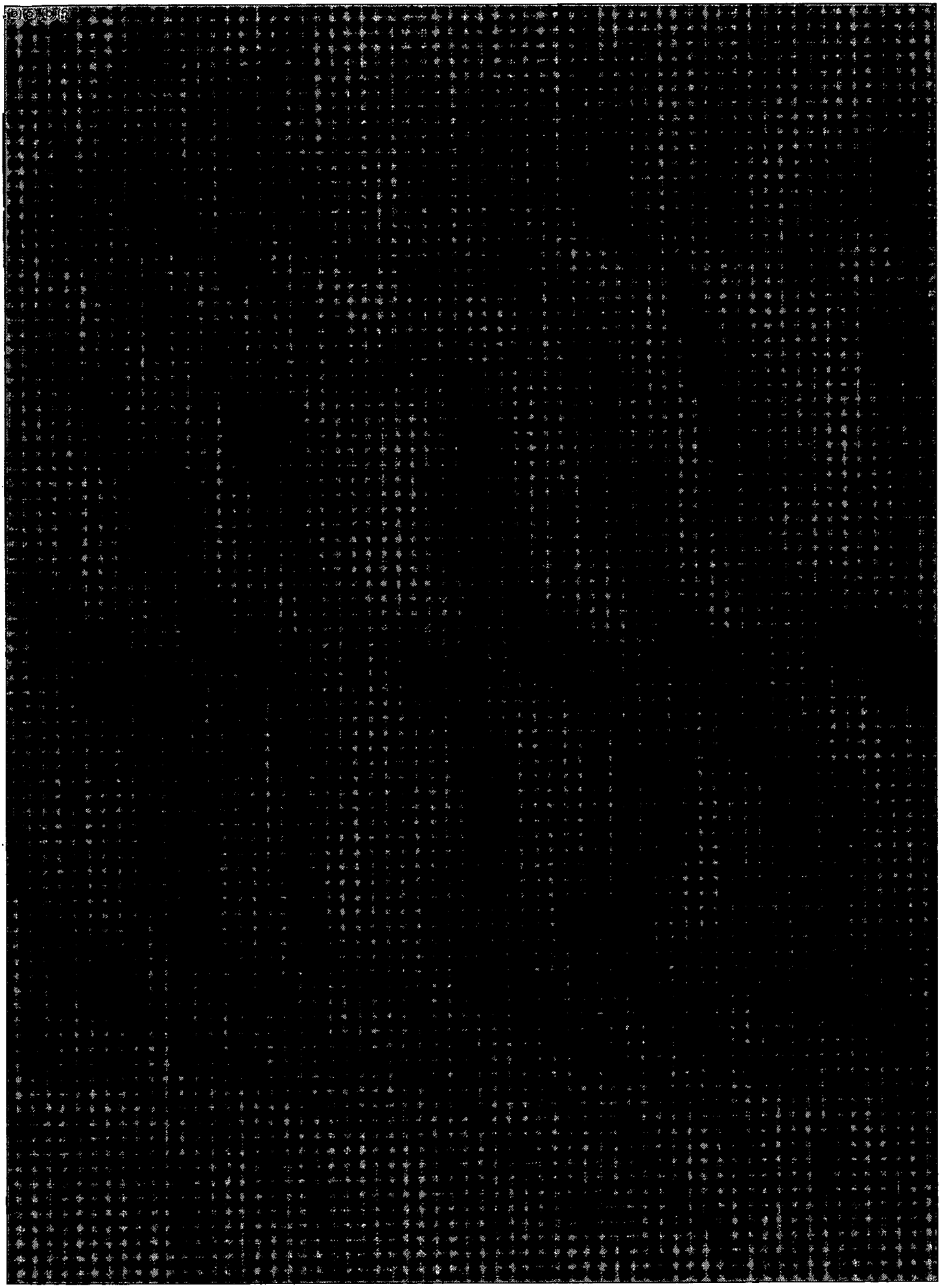
DNS at USFJ: 225-4329, 3137, 2469

Calling Yokota from non DSN: (0) 425 522-511
ext [redacted]

Current Location: Yokota AB, Tokyo, Japan ~~~~~~~~~~~~~~~~~~~~~~~~

BC/238
~~~~~~~~~~~~~~~~~~~~~~~~





Weaver, Tonna

From: Cherry, Ronald C [CherryRC@state.gov]
Sent: Tuesday, March 15, 2011 9:00 AM
To: Alan Remick; Aleshia Duncan; Duncan, Aleshia D; Trapp, James; James Trapp (BB); Mears, Jeremy M; Morales, Russell A; Nesheiwat, Julia; Tamada, Yoshimi; Ulses, Anthony; Uchida, Koichi
Subject: Nuclear Team Contacts List
Attachments: Embassy Nuclear Team Contacts_3 15.doc

All:

Please let me know of any changes that need to be made to this list.

Thanks very much.

Ron

Ronald C. Cherry
Energy Attaché
Director, DOE Japan Office
U.S. Embassy Tokyo
Tel. (0)3-3224-5444
Fax (0)3-3224-5769
Cell [redacted]
email CherryRC@state.gov

This email is UNCLASSIFIED.

BC|239

EMBASSY NUCLEAR TEAM

ECON Unclassified Conference Room (Rm 4037), Extension X5046

Name	Cell Phone	Office Phone	Email
Ron Cherry	[redacted]	03-3224-5444	CherryRC@state.gov
Aleshia Duncan		03-3224-5475	DuncanAD@state.gov Aleshia.Duncan@nuclear.energy.gov
James Trapp, NRC	[redacted]		[redacted] James.Trapp@nrc.gov
Tony Ulses, NRC	[redacted]		Anthony.Ulses@nrc.gov
Alan Remick, DOE			DartDOELiaison@OFDA.gov
Joe Hughart, HHS			
Koichi Uchida	[redacted]	03-3224-5476	UchidaKX@state.gov
Yoshimi Tamada		03-3224-5478	TamadaYX@state.gov
Julia Nesheiwat			NesheiwatJ@state.gov
Russ Morales		3224-5459	MoralesRA@state.gov Russ@earthtabi.com
Jeremy Mears	[redacted]	3224-5853	MearsJM@state.gov

Japan Embassy Command Center

JECC email: JapanEmbassyTaskForce@state.gov
Tel: Main 03 3224 5530 Fax 03 3224 5131

Senior Team Leader	03 3224 5531
Emergency Action Officer	03 3224 5533
Editor	03 3224 5542
Pol/Mil Coordinator	03 3224 5541
Public Affairs Coordinator	03 3224 5543
Operations Assistant	03 3224 5530
Japanese Press Monitor	03 3224 5532
Additional Line	03 3224 5534

DOE Nuclear Incident Team [redacted] Tel. for DOE EOC: 202-586-8100
State Department Task Force: TaskForce-1@state.gov. Tel. for State crisis management: 202-647-6611.

Weaver, Tonna

From: Bock, Yoni [redacted]
Sent: Tuesday, March 15, 2011 10:56 PM
To: [redacted]
Cc: [redacted] Reeves, James (OSD); ofdaPACOM; Trigilio, John (OSD); Hanlon, Melissa (OSD); [redacted] Clark, Ngoc (OSD); [redacted] DART_PACTSU; [redacted] RMT_PACTSU; Atteberry, Christopher (OSD); [redacted]
Subject: Japan EQ/Tsunami MITAM - March 16 (1200 local)
Attachments: PacTSU MITAM - March 16 2011.xls

All,

CAT Chief - For Action

Everyone else: For Info

[redacted]

cheers,
yoni

~~~~~~~~~~~~~~~~~~~~~~~~

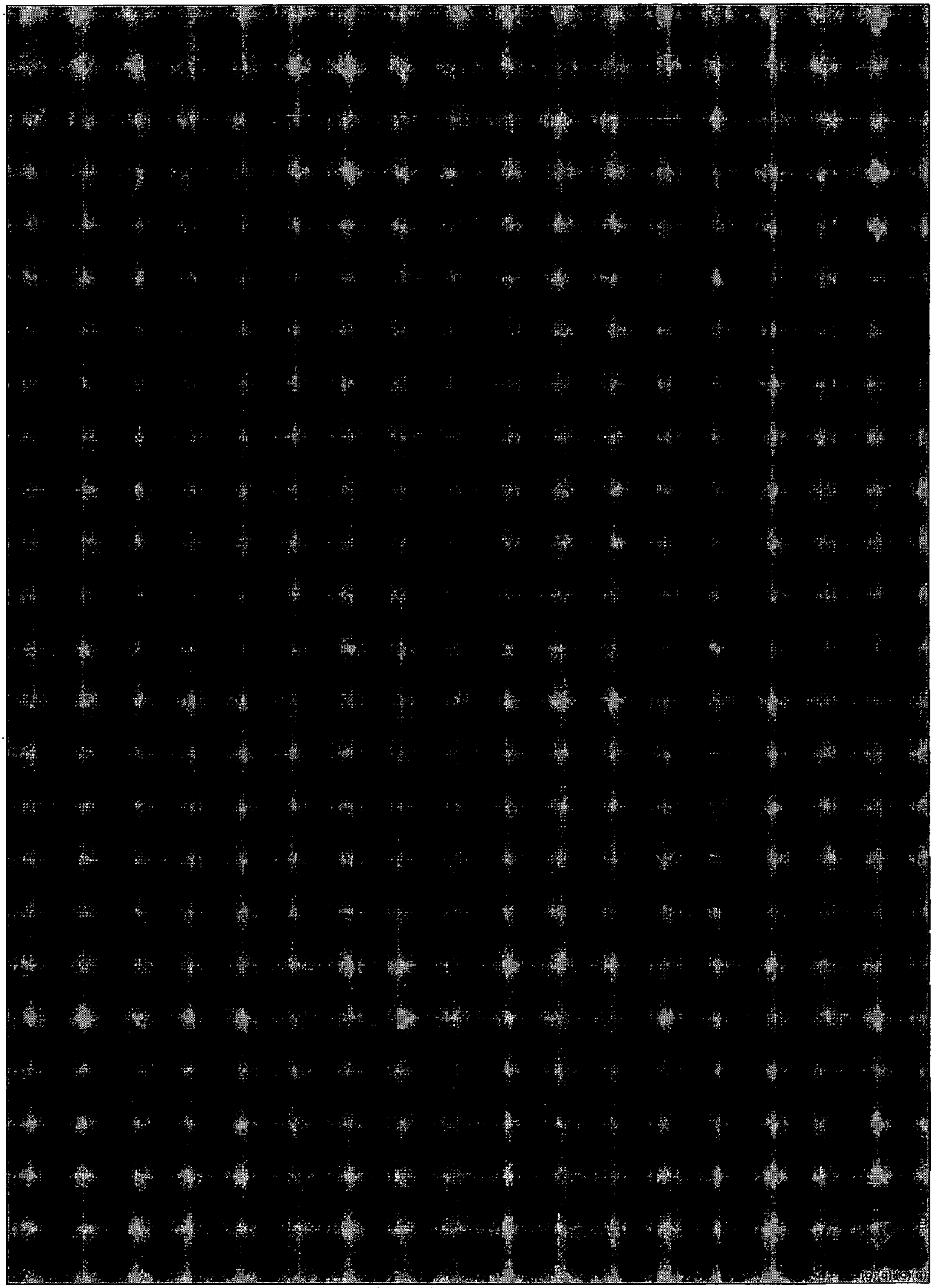
Mr. Yonahton Bock
Military Liaison Officer / Civ-Mil Coordinator Japan Earthquake/Tsunami DART
Email: ybock@usaid.gov
Blackberry: [redacted]

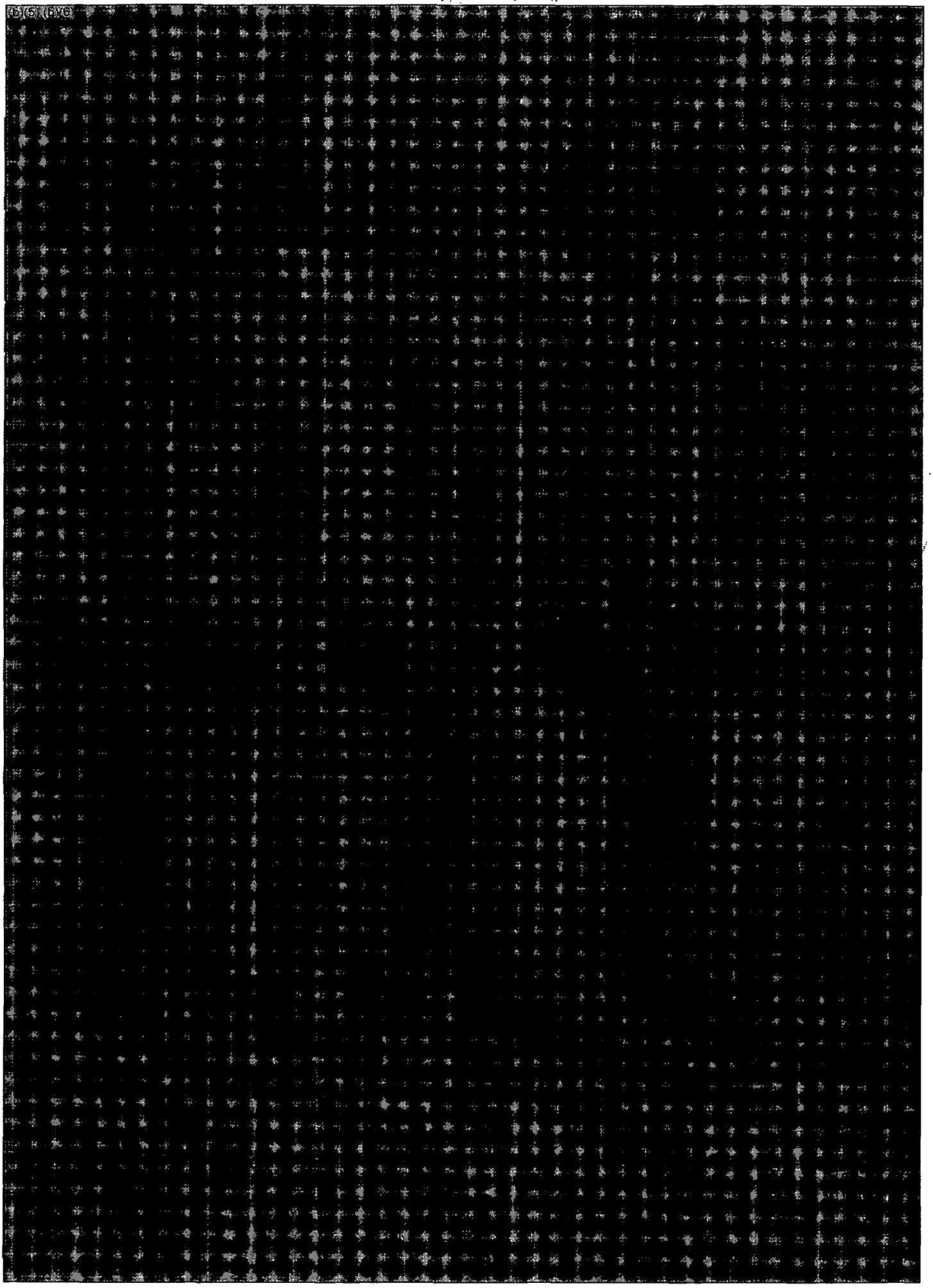
DNS at USFJ: 225-4329, 3137, 2469

From US (or non DSN) (011 81) 425 522-511 From Japan (non DSN) 0425 522-511 after dial tone, ext [redacted] 52469, 53137

Current Location: Yokota AB, Tokyo, Japan ~~~~~~~~~~~~~~~~~~~~~~~~

BC/240
~~~~~~~~~~~~~~~~~~~~~~~~





Weaver, Tonna

From: Perks, Dewey [redacted]
Sent: Wednesday, March 16, 2011 5:28 AM
To: DART_PACTSU
Subject: FW: Demob plan
Attachments: Demob Plan-Japan - DRAFT, MAR162011.doc

From: [redacted]
Sent: Wed 16-Mar-11 5:12
To: Perks, Dewey(DCHA/OFDA) [USAID]
Subject: Demob plan

Attached

BC/241

Task Force
Demobilization plan

Incident: **Japan Earthquake**

Location: **Ofunato, Japan**

Date and Time Prepared: Wednesday, March 16, 2011 10:30 hrs

Prepared by: Richard Roatch	Title: USA Planning Team
Approved by:	Title: DART Team Leader
Approved by:	Title: Deputy DART Team Leader
Approved by:	Title: DART Logistics Officer
Approved by:	Title: DART Administrative Officer
Approved by:	Title: DART Safety and Security Officer
Approved by:	Title: DART Operations Coordinator

DEMOBILIZATION PLAN

This Demobilization Plan contains seven (7) sections:

1. [redacted]
2.
3.
4.
5.
6.
7.

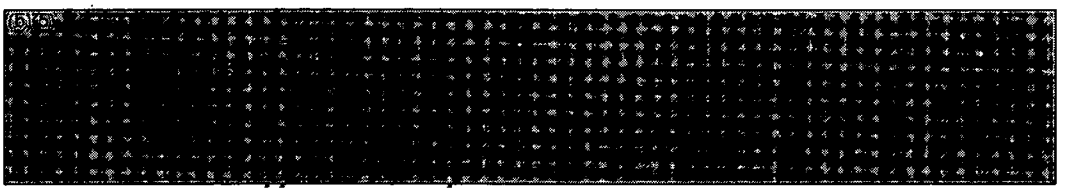
1. General Information

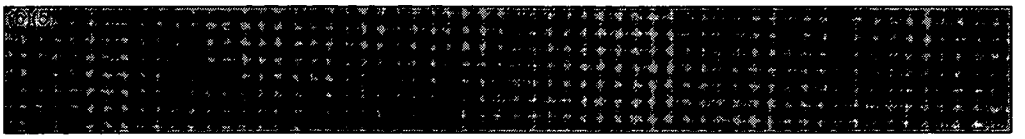
[redacted]

The following are general guidelines to be followed for resources that are leaving the incident:

[redacted]

2. Responsibilities

A. 

B. 

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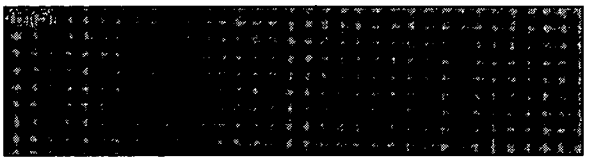
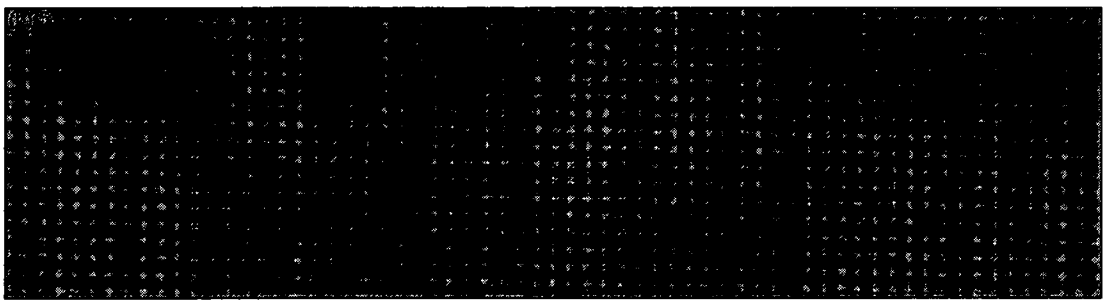
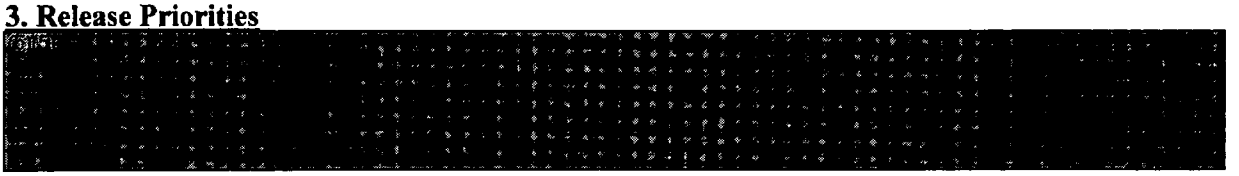
D. 

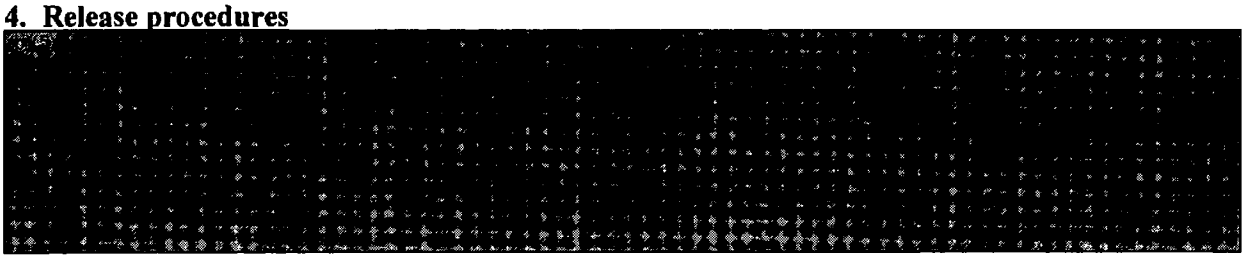
E.

F. 

3. Release Priorities



4. Release procedures



5. Incident Directory

POSITION	TEAM	NAME	CELL	SAT
TFL	CATF-2	ROHALEY, PAT	[redacted]	8816-3251-2204
PLANS	CATF-2	TRONE, DEVIN		8816-3251-2203
LOGS	CATF-2	GORDON, DAN		
COMM	CATF-2	ATWOOD, RICH		8816-3251-2223
POSITION	TEAM	NAME		SAT
TFL	VATF-1	Robert Zoldos		8816-5145-2197
PLANS	VATF-1	Richard Roatch		
LOGS	VATF-1	Clyde Buchanan		
COMM	VATF-1	Bobby Ritchie		

6. Demobilization Timeline

Date	Time	Event	Hours to Complete
XXXXX	XXXX	[redacted]	0
XXXXX	XXXX		4.0
XXXXX	XXXX		6.0
XXXXX	XXXX		
XXXXX	XXXX		6.0
XXXXX	XXXX		4.0
XXXXX	XXXX		TBD
XXXXX	XXXX		TBD
XXXXX	XXXX		TBD
XXXXX	XXXX		
XXXXX	XXXX		2.0
XXXXX	XXXX		3.0

Weaver, Tonna

From: Magee, Erin K. (DCHA/OFDA) [redacted]
Sent: Wednesday, March 16, 2011 8:25 AM
To: DART_PACTSU; RMTPACTSU_RM; RMTPACTSU_PRO; RMTPACTSU_DMP; RMTPACTSU_DMO; RMTPACTSU_INC
Subject: 03.16.11 - USAID/DART Japan Earthquake and Tsunami Field Notes #4
Attachments: 03.16.11 - USAID-DART Japan Field Notes #4.doc

~~-- U.S. Government Only --~~

[redacted]

[redacted]

03.16.11

Nuclear Issues

[redacted]

Safety and Security

[redacted]

Urban Search and Rescue

BC1242

(b)(5)

(b)(5)

(b)(5)

(b)(5)

USAID/DART

(b)(5)

(b)(5)

(b)(5)

Humanitarian Situation

(b)(5)

(b)(5)

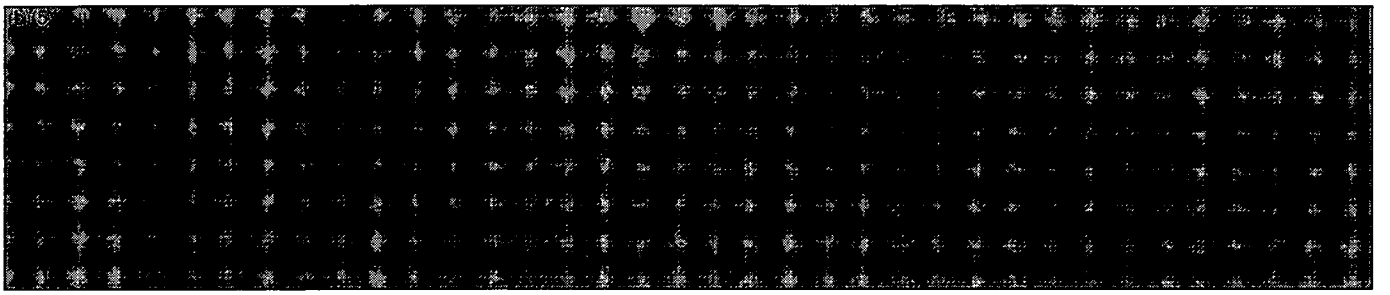
(b)(5)

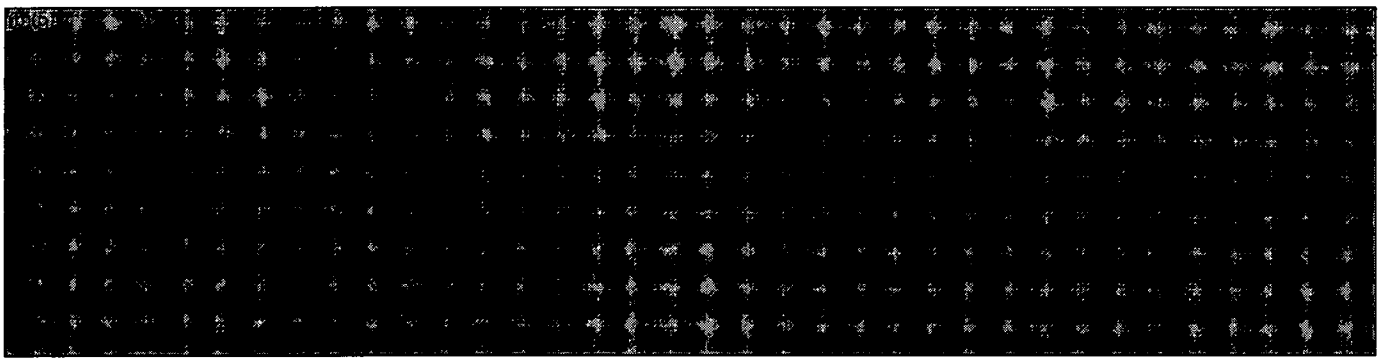
Erin Magee
Information Officer
USAID Disaster Assistance Response Team (USAID/DART) Japan Earthquake and Tsunami Cell Phone: [redacted]
Email: [redacted] emagee@usaid.gov

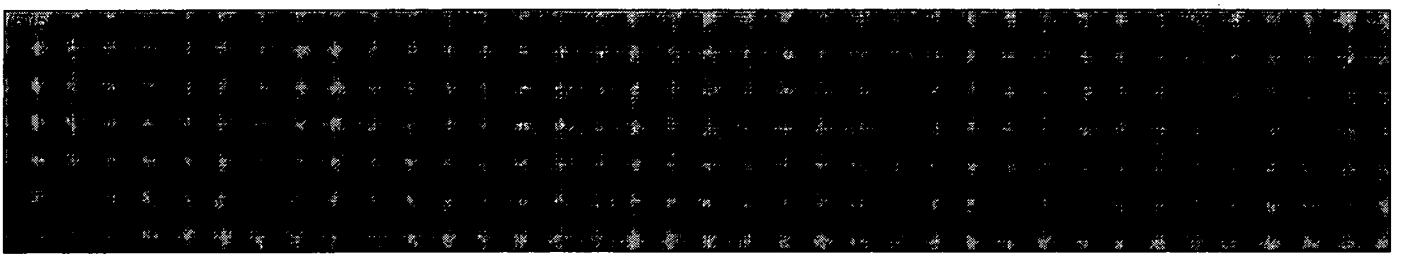
Weaver, Tonna

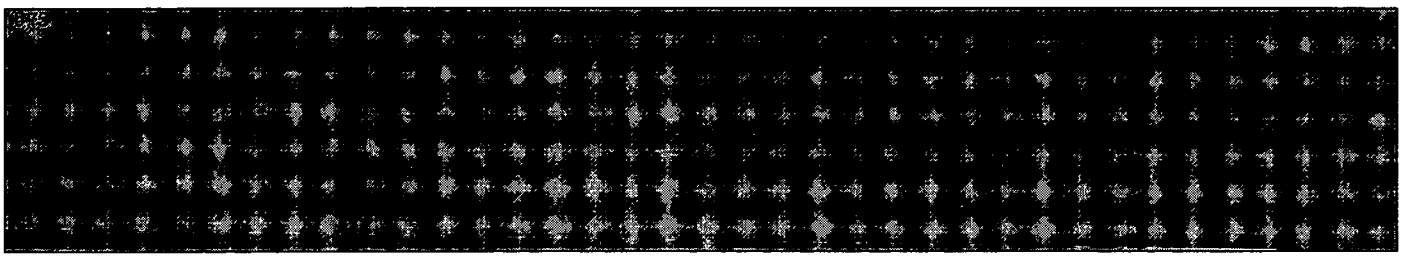
From: Magee, Erin K. (DCHA/OFDA) (b)(6)
Sent: Wednesday, March 16, 2011 7:33 PM
To: DART_PACTSU
Cc: RMTPACTSU_INC
Subject: 0800 Mar 17 - Running Update on Japan Emergency (running file attached)
Attachments: 2011-03-17 running updates on Japan emergency with times 0800 - Mar 17.docx

FYI. From the Task Force.

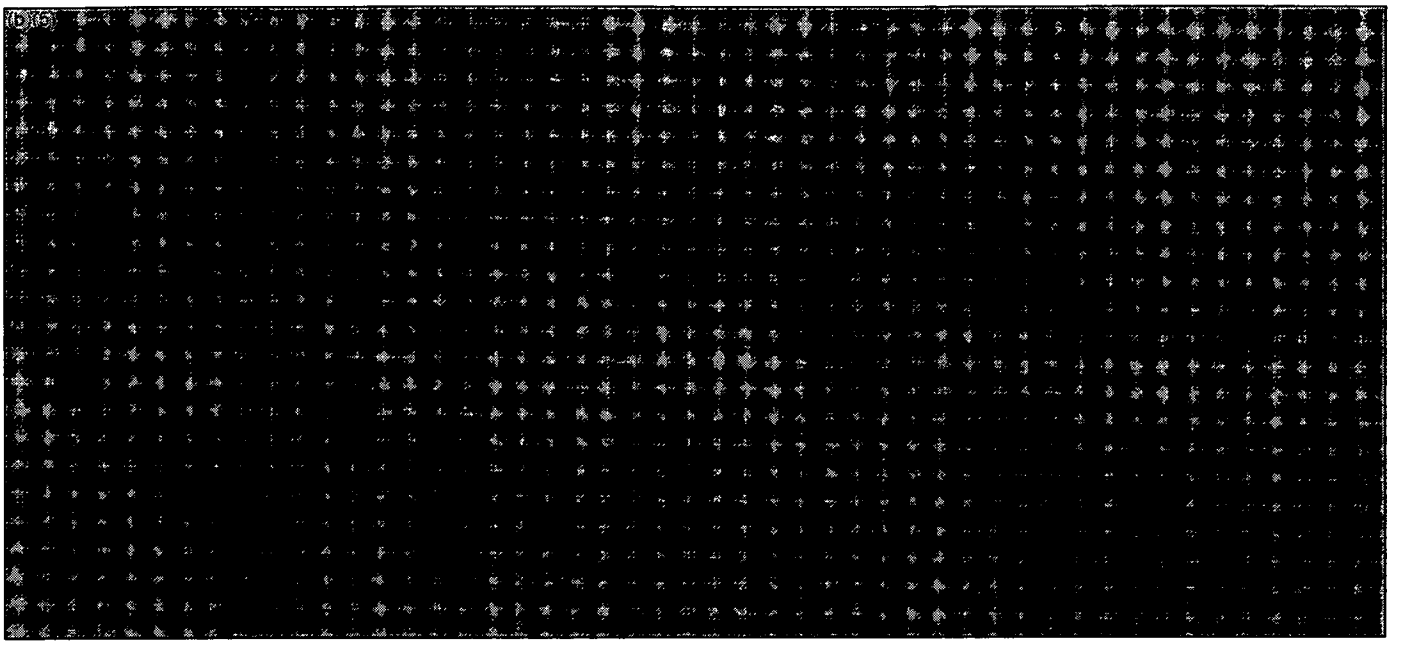








BC|243

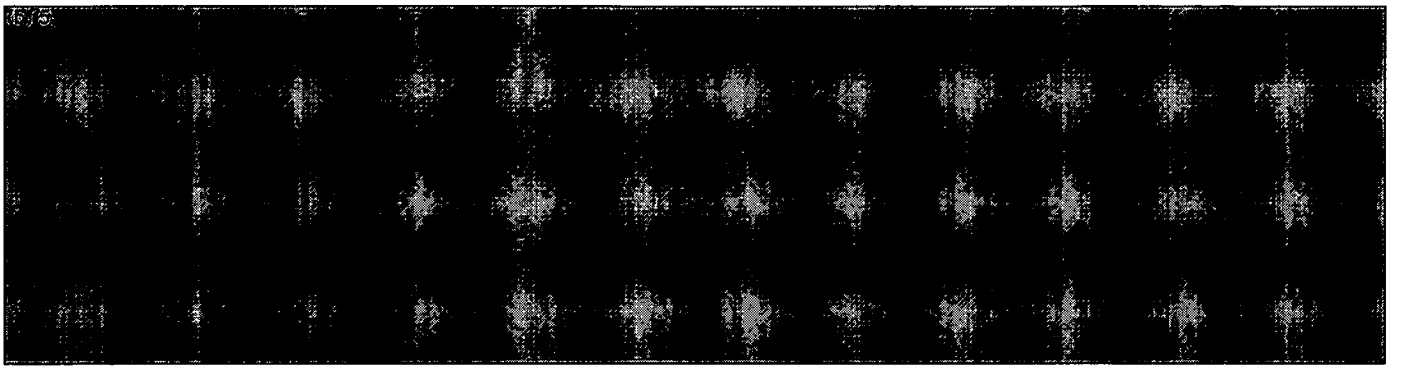


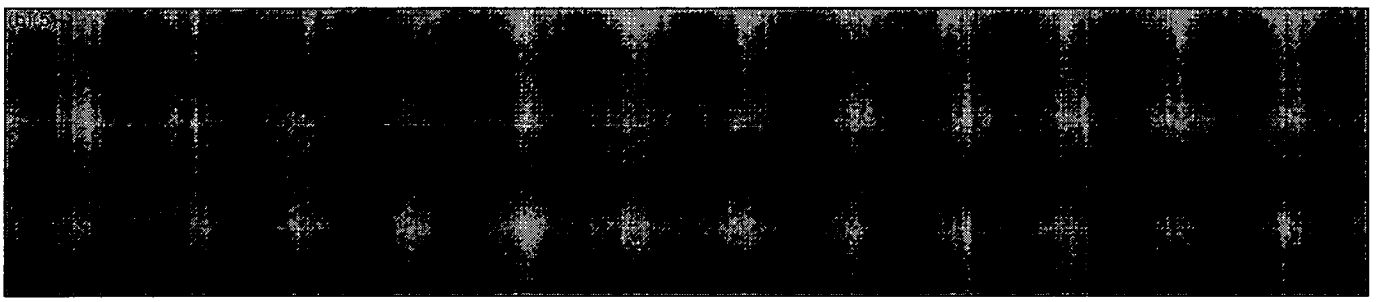
Erin Magee
Information Officer
USAID Disaster Assistance Response Team (USAID/DART) Japan Earthquake and Tsunami Cell Phone: [redacted]
Email: [redacted] emagee@usaid.gov

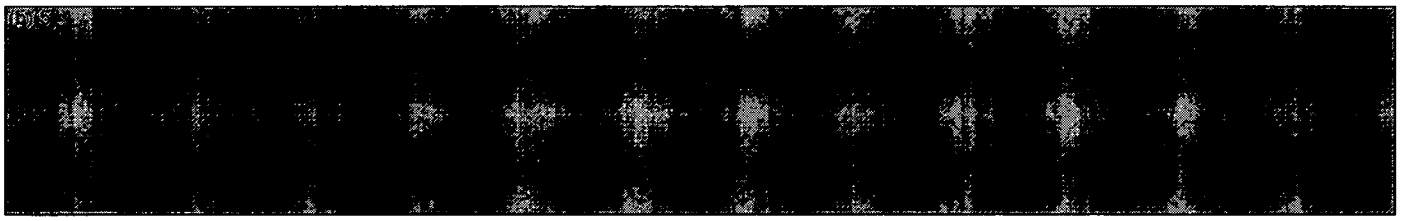
From: Ou, Andrew H [mailto:OuAH@state.gov]
Sent: Wed 3/16/2011 7:17 PM
To: Whitney, Thomas C; Cipullo, Timothy L; JapanEmbassy, TaskForce; Masuda, Tracy L; Dudley, Katherine F; Sim, Hyon B; Mears, Jeremy M; Lee, Ti-Ying; Ryan, Emmett Jerome; Hotz, Raymond E; Chen, Perry Y; Burleson, Edward C; Wakahiro, Gary S; Utschig, Andrew S; Bernier-Toth, Michelle; Fitzgerald, Paul M; Zareski, Karen B; Shelbourn, Brian L; Cubas, Jason R; Christopher, William W; Kaneshiro, Claire K; Greene, Raymond F; Stewart, Jonas D; Ries, John N; Dong, Edward K; Jenks, Darrell A; Washburn, Lisa L; Tokyo-Visa-Officers-DL; Roos, John; Luke, Robert S; Ries, John N; Dong, Edward K; Stewart, Jonas D; Greene, Raymond F; Cubas, Jason R; Fuller, Matthew G; Basalla, Suzanne I; Hinds, Lynda J; sroos@cookroos.com; Cherry, Ronald C; Dresser, Heather L (EAP/J); TOKYO POL All; Wood, Robert A; Nawn, Jeff; Angelov, Bonnie A; Kelley, Karen D (IO/Tokyo); Magee, Erin K. (DCHA/OFDA)
Cc: Zumwalt, James P; Chipman, Alan R; Engstrom, Aaron; Forbes, James A; Martin, Timothy W; Rathweg-Weitz, Abbey H; Whitten, Richard V; Young, Joseph M; Operations Center; Young, Joseph M; Lyons, Thomas H; CA-Taskforce; Snider, Marc A; Kaneshiro, Claire K; SES-O; State Task Force; Lyons, Thomas H; Snider, Marc A; Yoo, Donny H; Tomlinson, Christina; Roberts, Richard M; Kaneshiro, Claire K; Avecilla, Juan T; Chadwick, Michael J; Dieker, Mark S; CA-Taskforce; Ponce, Timothy F; Korff, Meena F; Task Force 1; CA-Taskforce; Brown, Benjamin A; Wuebbels, Mark C; Osaka-Kobe All State Americans; Sapporo ALL; Naha All; Fukuoka Americans; Nagoya-Americans-DL; Yokohama-FSI-DL; TOKYO ECON Americans; Tilman, Justin E; justin.tilman@nasa.gov; Sakurai, Joy M; Stewart, Bruce J; Sauer, [redacted] Morales, Russell A; russ@earthtabi.com; lia.hoc@nrc.gov; [redacted] Weinhold, Laura M (Jamie); Maw, Aye Aye; Clever, Thomas S (Scott); Japan-Embassy-Task-Force-DL; Huff, Michael P; Kaproth, Robert K; Robert.Kaproth@treasury.gov; Mace, Casey K; Duncan, Aleshia D; Cherry, Ronald C; Damian.Peko@Nuclear.Energy.gov; [redacted] aleshia.duncan@nuclear.energy.gov;

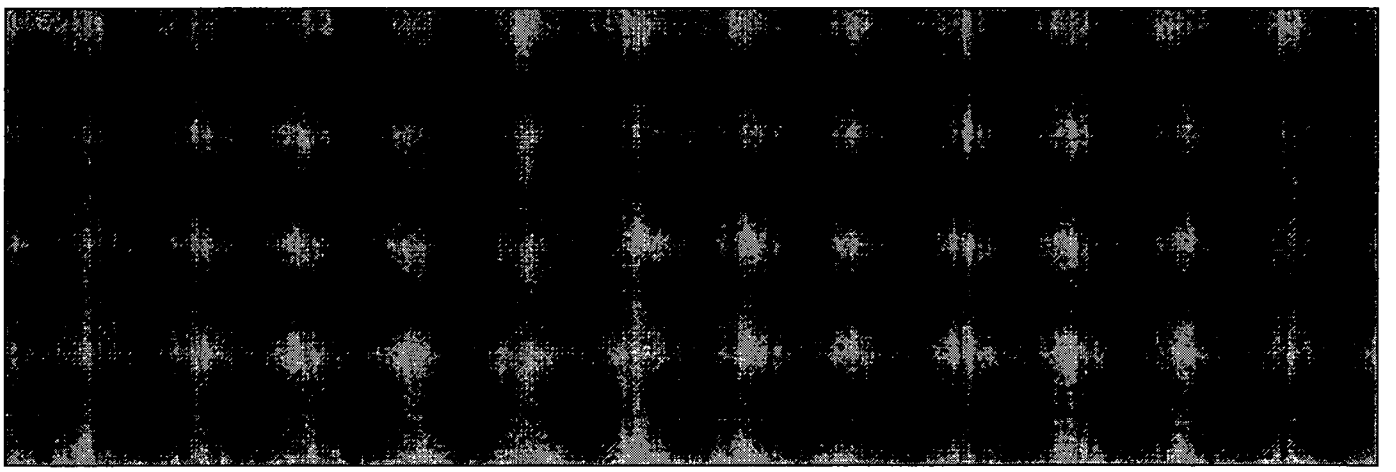
edward.meginnis@nuclear.energy.gov; King, Terri L; Hefner, Timothy B; Tanaka, Rodney S; Napier, Bradford; Till, Laura A; Walsh, Cody C; Brunette-Chen, Rachel; Toko, Kenichiro (Ken); Huntington, Miki T LTC USA USFJ J54; Kimura, Ayako; Toledo, Ana Y; Oikawa, Yufuko; Basalla, Suzanne I; Luke, Robert S; Zumwalt, James P; (b)(6) Wiltse, Jeffrey S COL USA USFJ J5; Epstein, Daren A GS-14 USFJ J5; Caballero, Leo F LTC USA USFJ J52; Tran, John D Maj USAF USFJ J5; Nylin, John D (TDY/POL); Nylin, John D

Subject: 0800 Mar 17 - Running Update on Japan Emergency (running file attached)

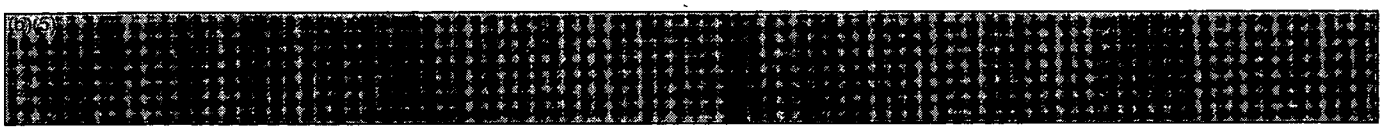


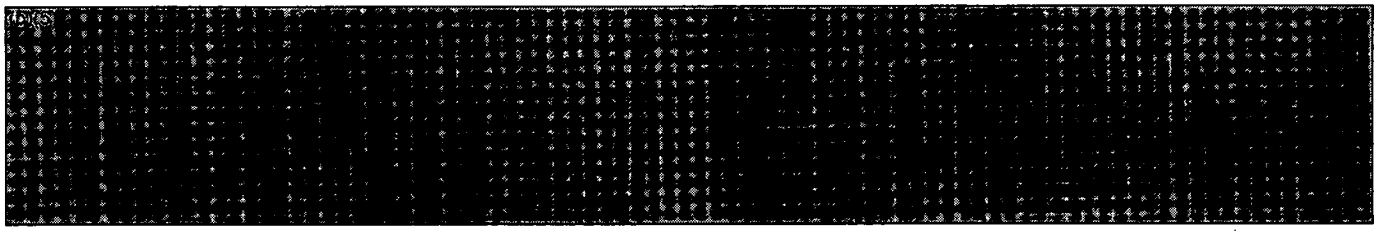


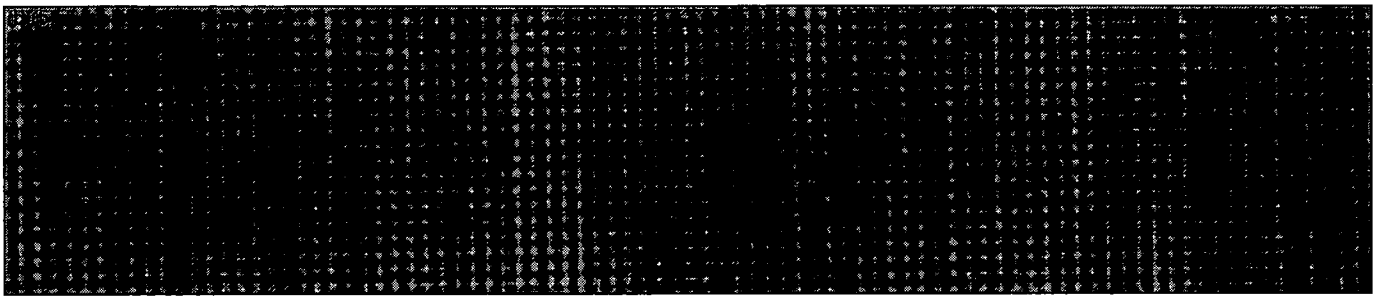


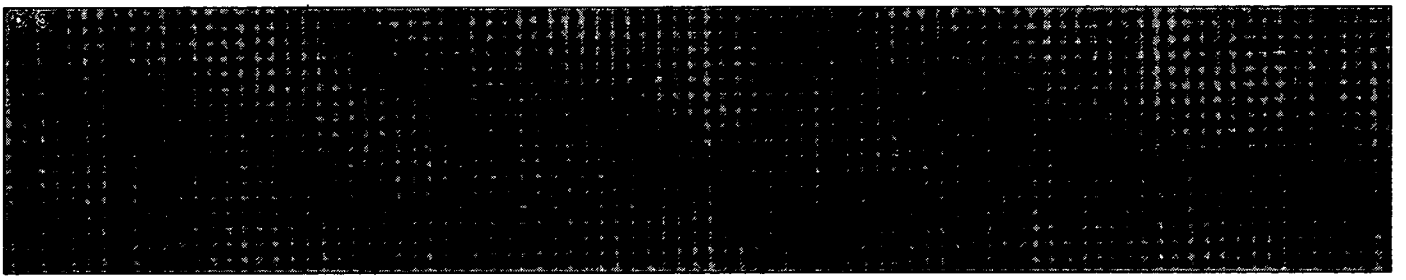


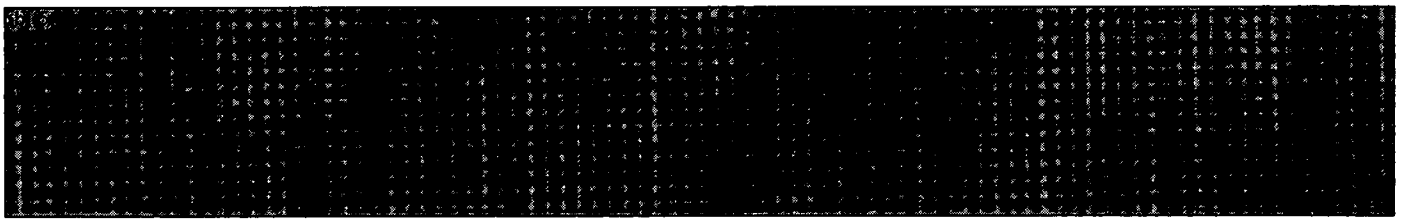
From: Whitney, Thomas C
Sent: Thursday, March 17, 2011 6:15 AM
To: Whitney, Thomas C; Cipullo, Timothy L; JapanEmbassy, TaskForce; Masuda, Tracy L; Dudley, Katherine F; Ou, Andrew H; Sim, Hyon B; Mears, Jeremy M; Lee, Ti-Ying; Ryan, Emmett Jerome; Hotz, Raymond E; Chen, Perry Y; Burleson, Edward C; Wakahiro, Gary S; Utschig, Andrew S; Bernier-Toth, Michelle; Fitzgerald, Paul M; Zareski, Karen B; Shelbourn, Brian L; Cubas, Jason R; Christopher, William W; Kaneshiro, Claire K; Greene, Raymond F; Stewart, Jonas D; Ries, John N; Dong, Edward K; Jenks, Darrell A; Washburn, Lisa L; Tokyo-Visa-Officers-DL; Roos, John; Luke, Robert S; Ries, John N; Dong, Edward K; Stewart, Jonas D; Greene, Raymond F; Cubas, Jason R; Fuller, Matthew G; Basalla, Suzanne I; Hinds, Lynda J; 'sroos@cookroos.com'; Cherry, Ronald C; Dresser, Heather L (EAP/J); TOKYO POL All; Wood, Robert A; Nawn, Jeff; Angelov, Bonnie A; Kelley, Karen D (IO/Tokyo); [redacted]
Cc: Zumwalt, James P; Chipman, Alan R; Engstrom, Aaron; Forbes, James A; Martin, Timothy W; Rathweg-Weitz, Abbey H; Whitten, Richard V; Young, Joseph M; Operations Center; Young, Joseph M; Lyons, Thomas H; CA-Taskforce; Snider, Marc A; Kaneshiro, Claire K; SES-O; SES-O_CMS; Lyons, Thomas H; Snider, Marc A; Yoo, Donny H; Tomlinson, Christina; Roberts, Richard M; Kaneshiro, Claire K; Avecilla, Juan T; Chadwick, Michael J; Dieker, Mark S; CA-Taskforce; Ponce, Timothy F; Korff, Meena F; TaskForce-1; CA-Taskforce; Brown, Benjamin A; Wuebbels, Mark C; Osaka-Kobe All State Americans; Sapporo ALL; Naha All; Fukuoka Americans; Nagoya-Americans-DL; Yokohama-FSI-DL; TOKYO ECON Americans; Tilman, Justin E; 'justin.tilman@nasa.gov'; Sakurai, Joy M; Stewart, Bruce J; Sauer, David M; [redacted] Morales, Russell A; 'russ@earthtabi.com'; 'lia.hoc@nrc.gov'; [redacted]
Aye Aye; Clever, Thomas S (Scott); Japan-Embassy-Task-Force-DL; Huff, Michael P; Kaproth, Robert K; 'Robert.Kaproth@treasury.gov'; Mace, Casey K; Duncan, Aleshia D; Cherry, Ronald C; 'Damian.Peko@Nuclear.Energy.gov'; [redacted] 'aleshia.duncan@nuclear.energy.gov'; 'edward.meginnis@nuclear.energy.gov'; King, Terri L; Hefner, Timothy B; Tanaka, Rodney S; Napier, Bradford; Till, Laura A; Walsh, Cody C; Brunette-Chen, Rachel; Toko, Kenichiro (Ken); 'Huntington, Miki T LTC USA USFJ J54'; Kimura, Ayako; Toledo, Ana Y; Oikawa, Yufuko; Basalla, Suzanne I; Luke, Robert S; Zumwalt, James P; [redacted] 'Wiltse, Jeffrey S COL USA USFJ J5'; 'Epstein, Daren A GS-14 USFJ J5'; 'Caballero, Leo F LTC USA USFJ J52'; 'Tran, John D Maj USAF USFJ J5'; Nylin, John D (TDY/POL); Nylin, John D
Subject: 0600 Mar 17 - Running Update on Japan Emergency (running file attached)

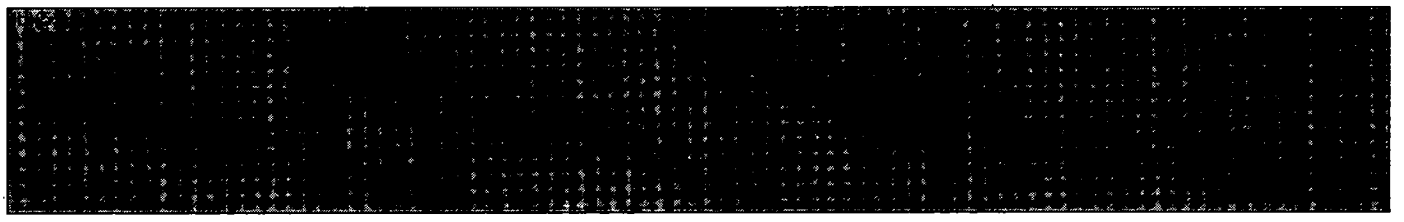


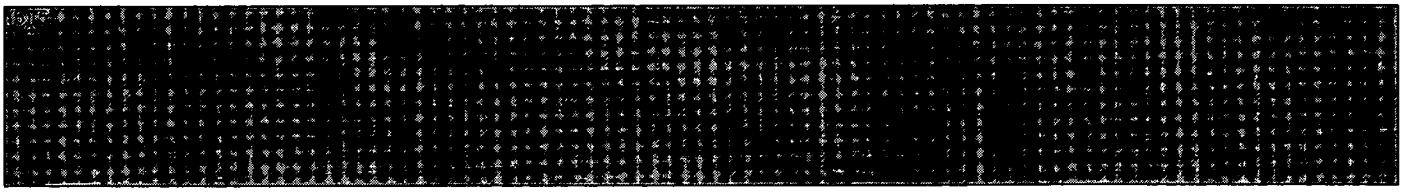


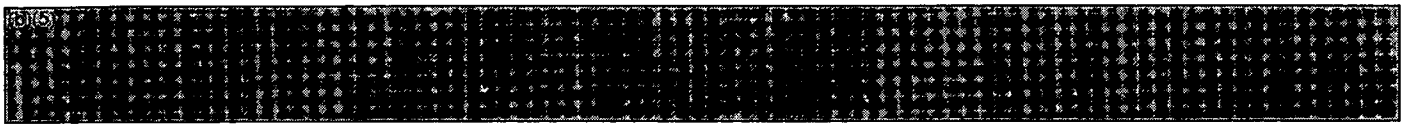


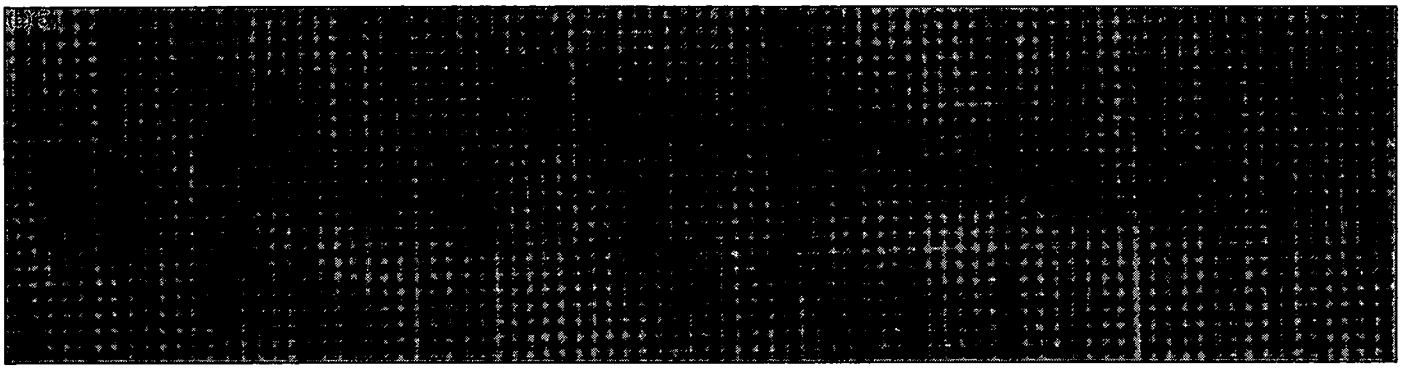


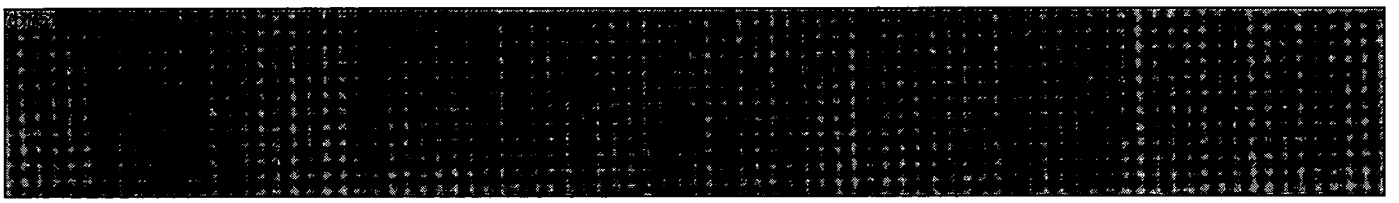


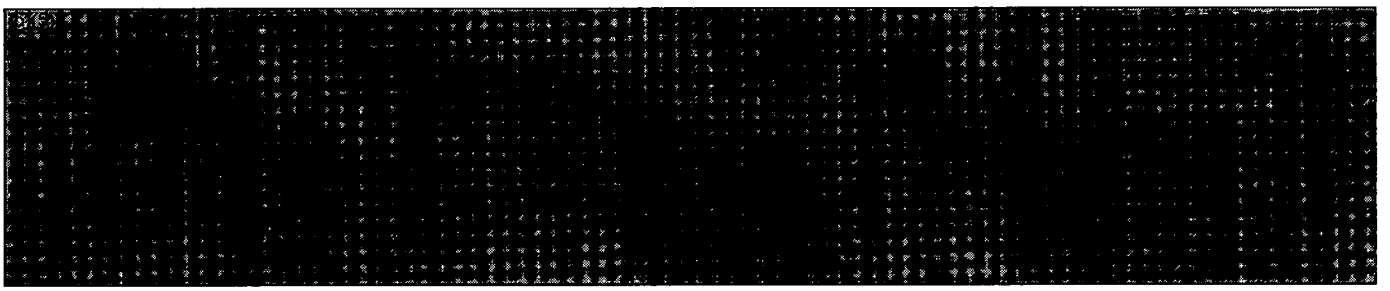


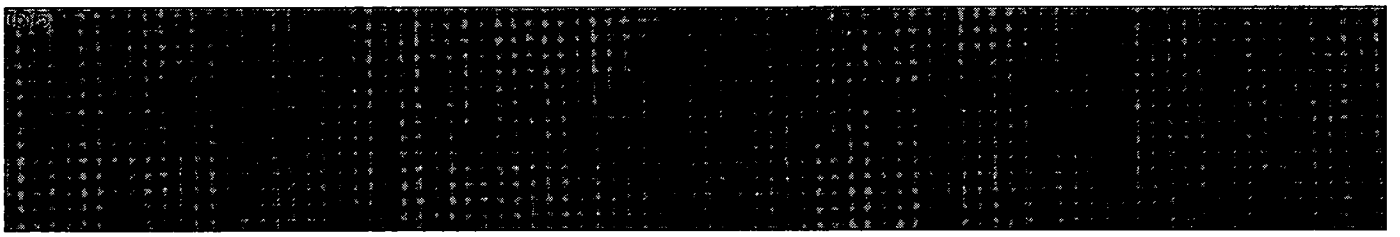




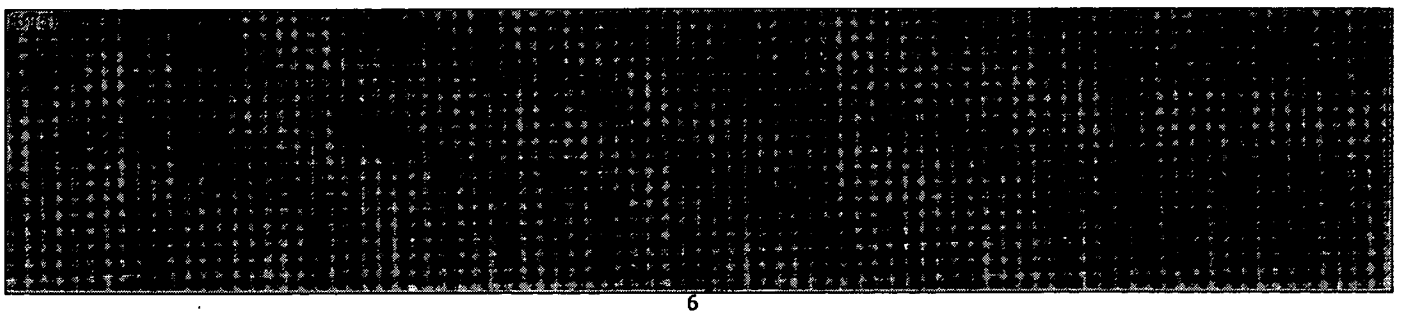


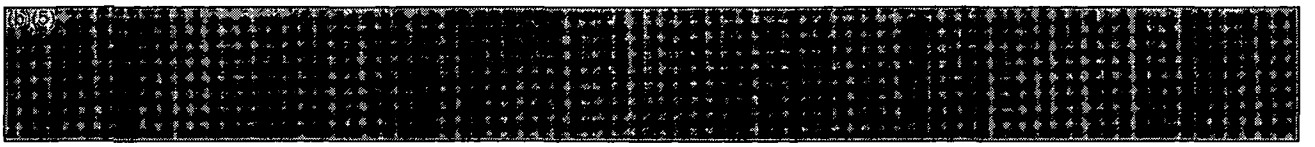


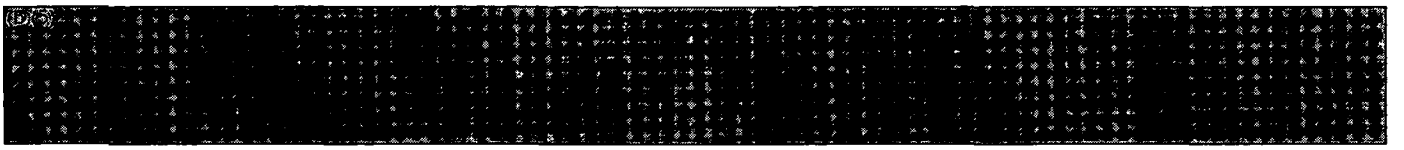


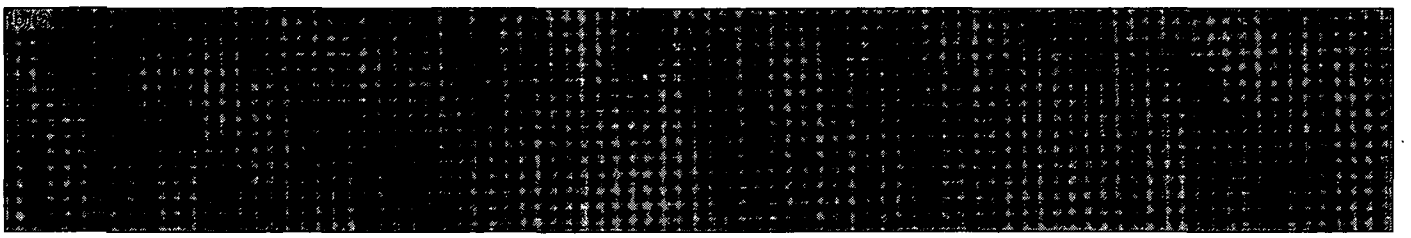


(Various Times) March 16-17, 2011 (Foreign Embassy Advisories):

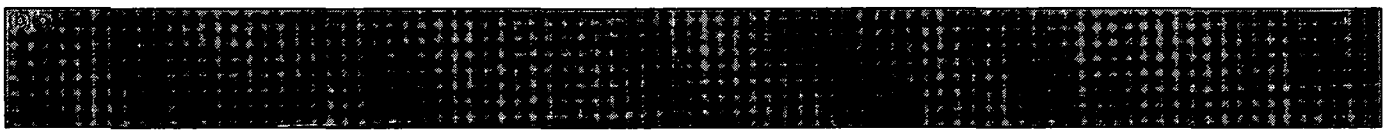


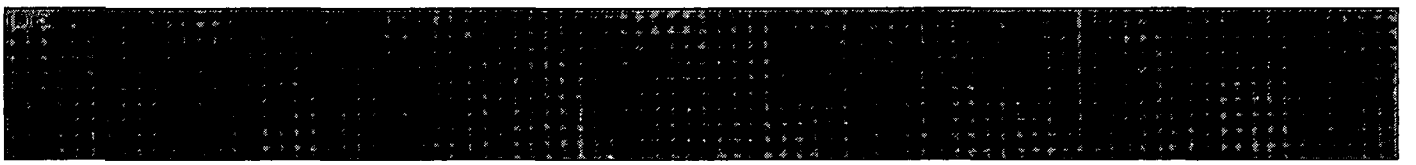


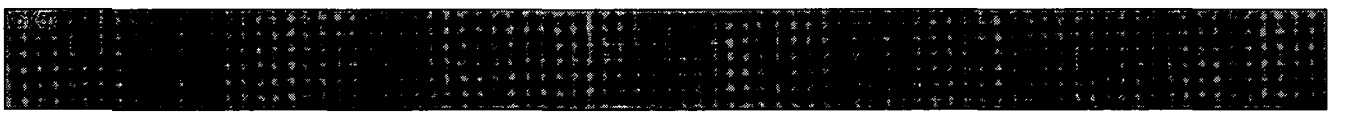


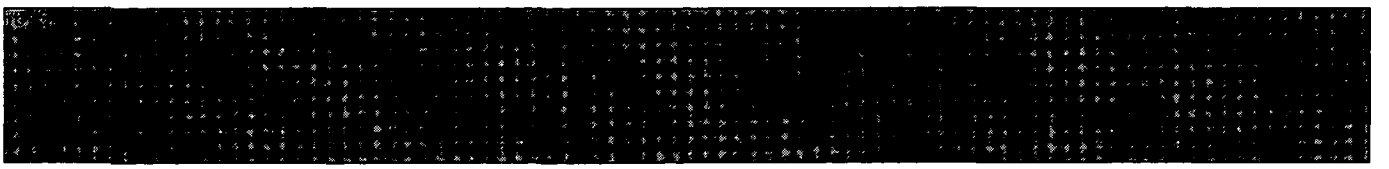


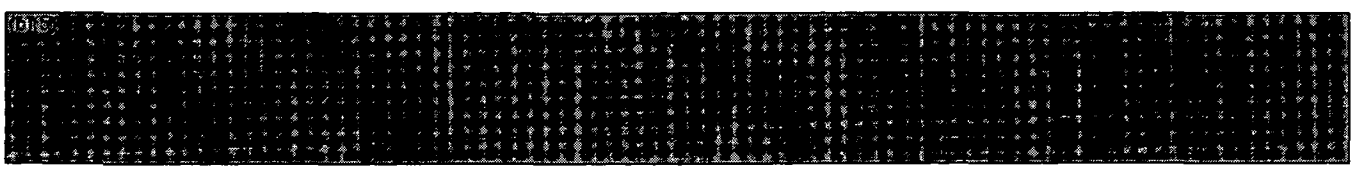
04:00 March 17, 2011 (NRC provides protective action recommendations based on U.S. Guidelines)











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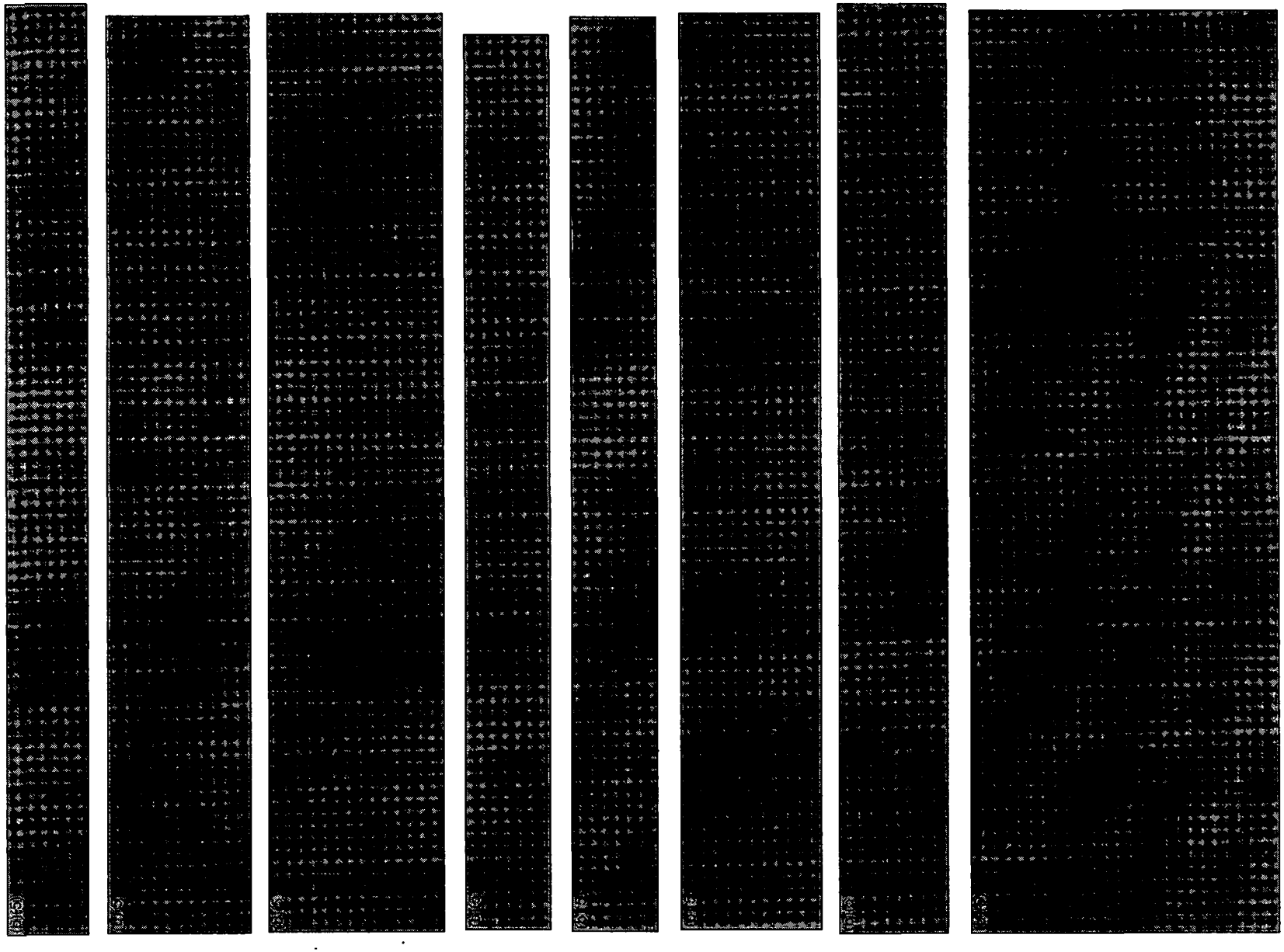
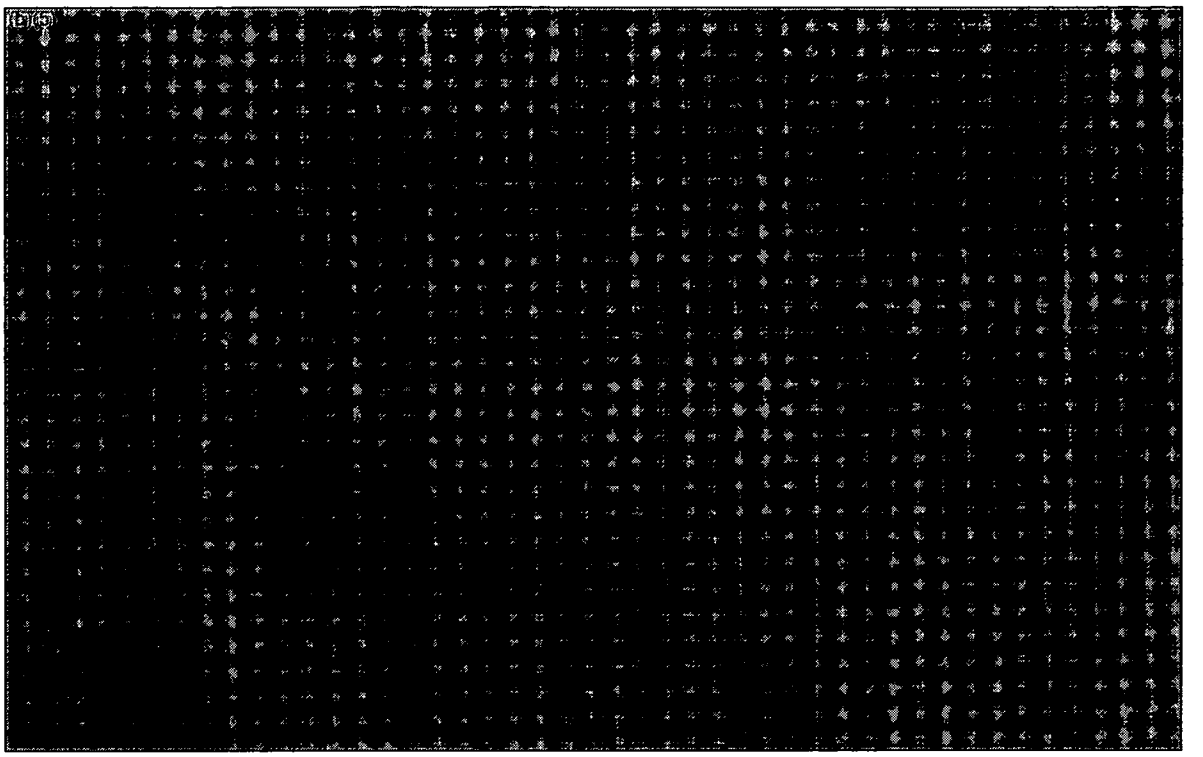
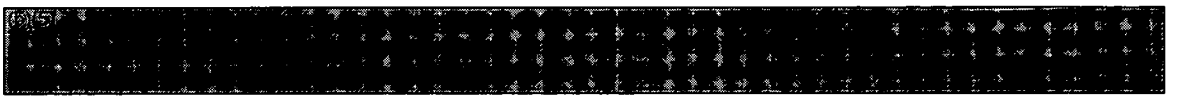
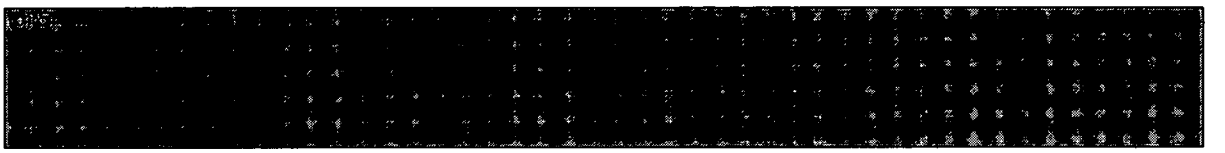
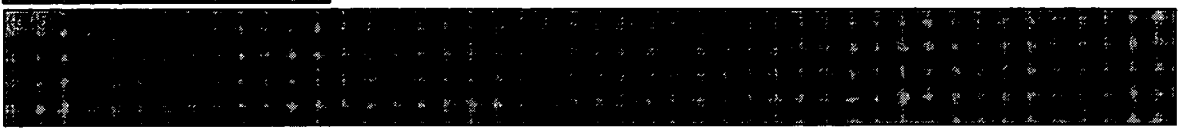
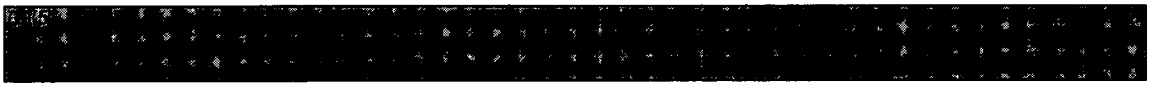


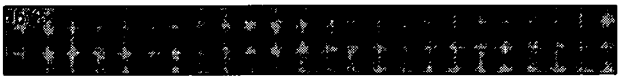




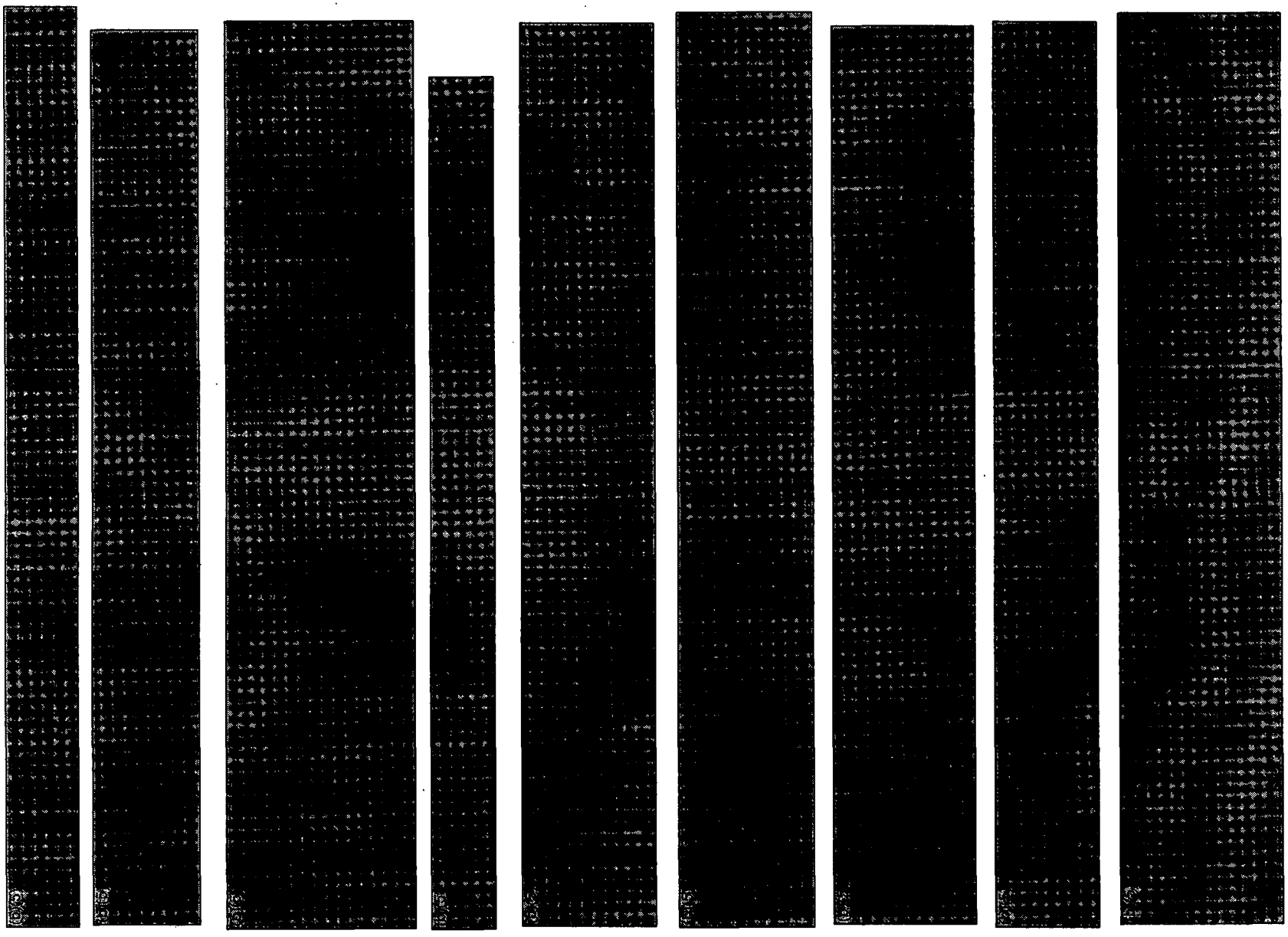








1615 March 15, 2011 Tuesday (Consulate Fukuoka Update):



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11:30

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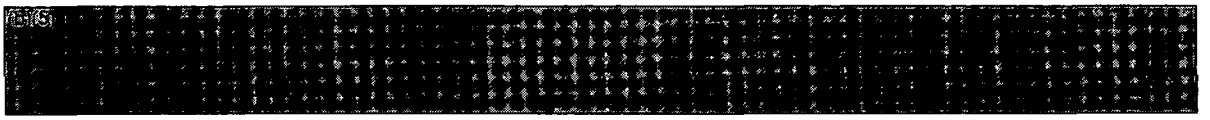

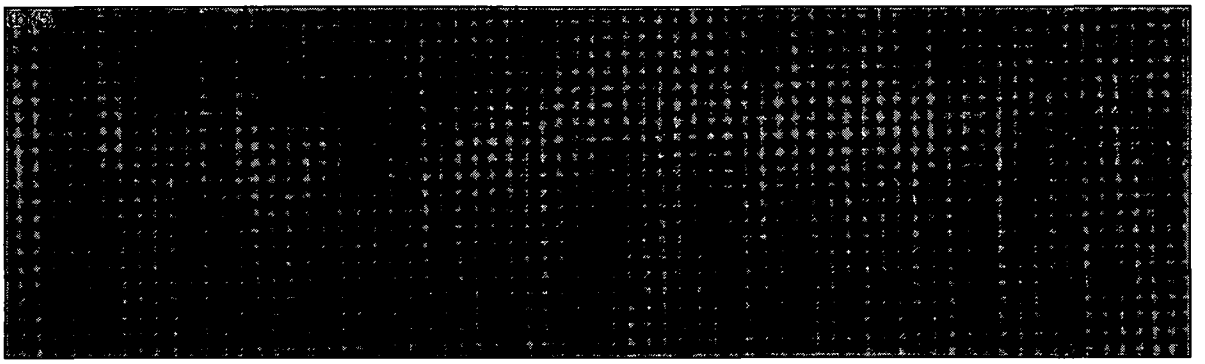

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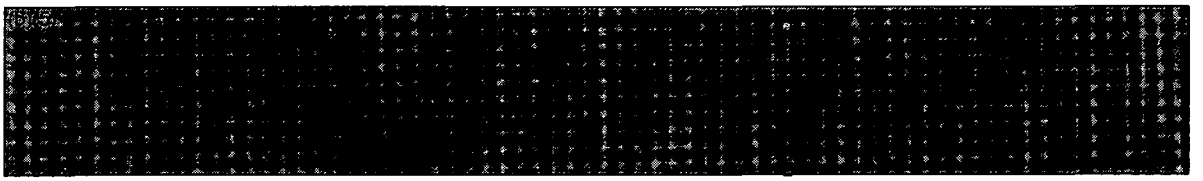

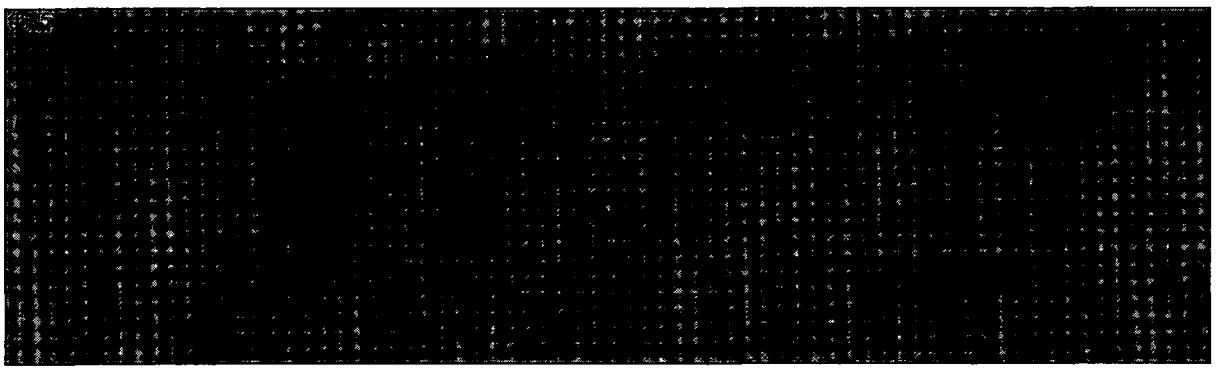

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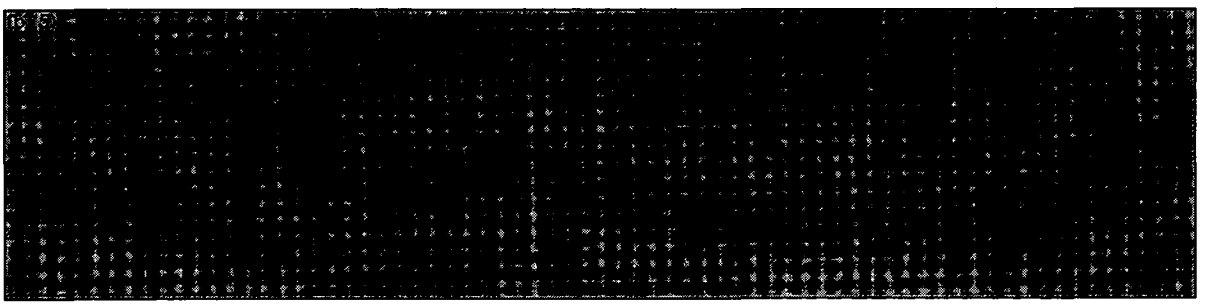

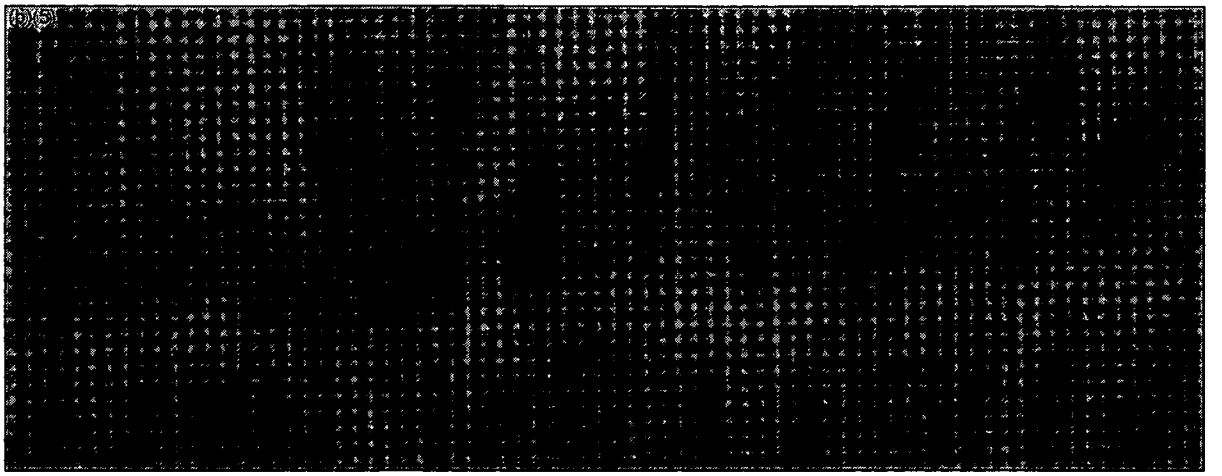

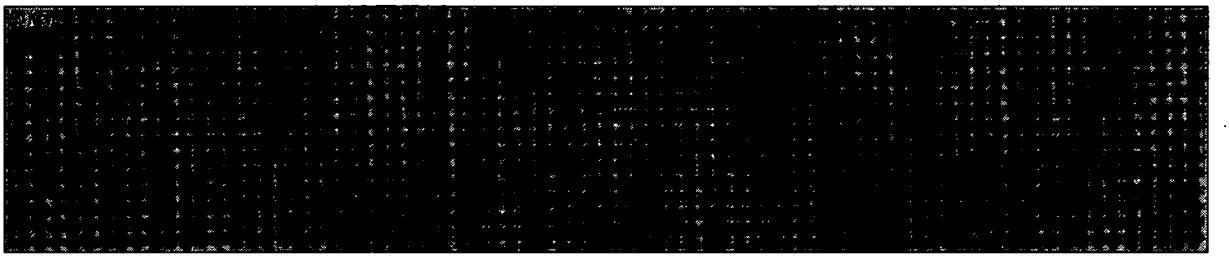

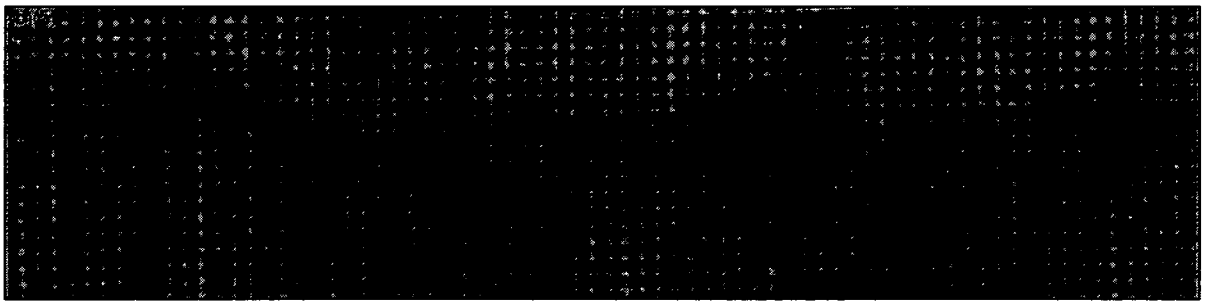

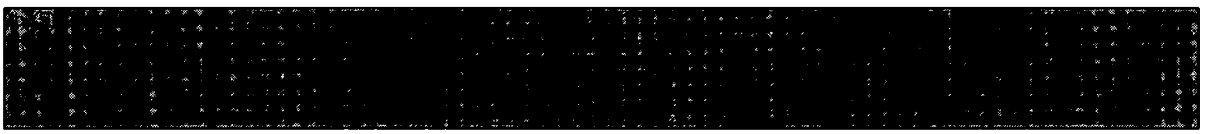

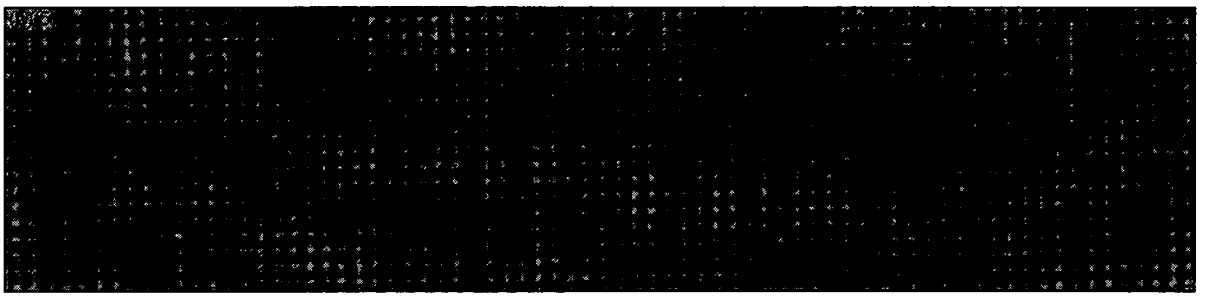

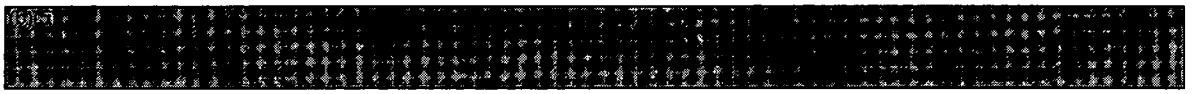

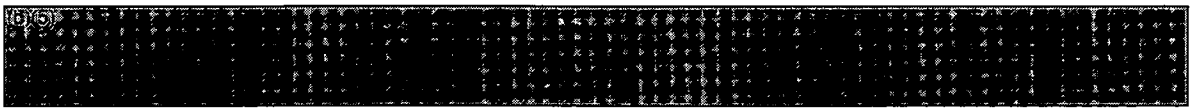

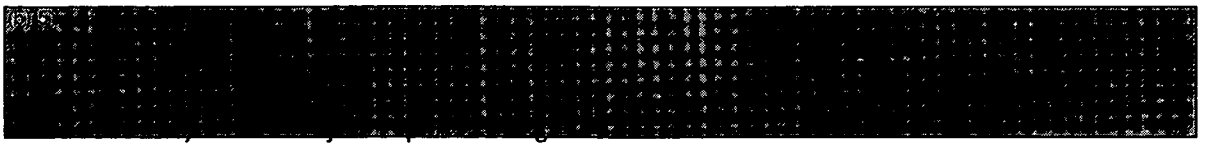

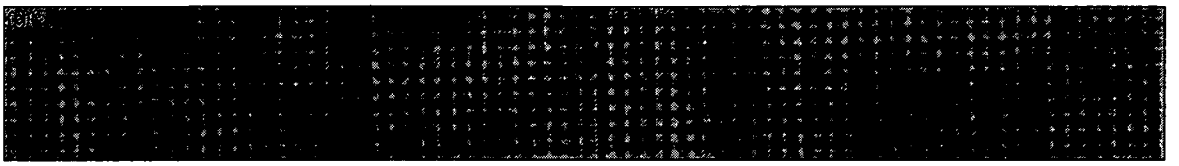

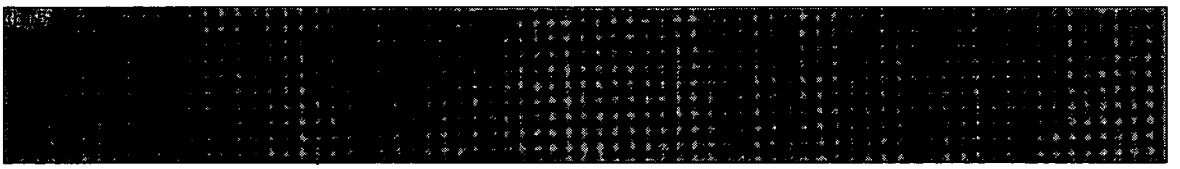

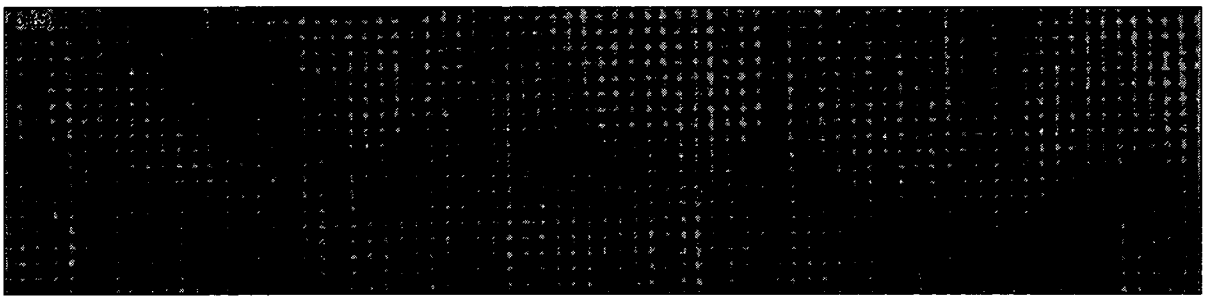

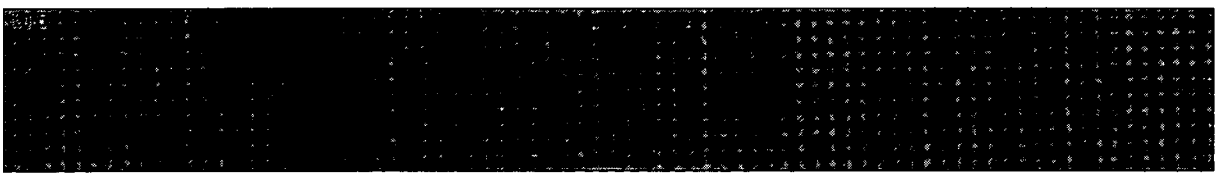

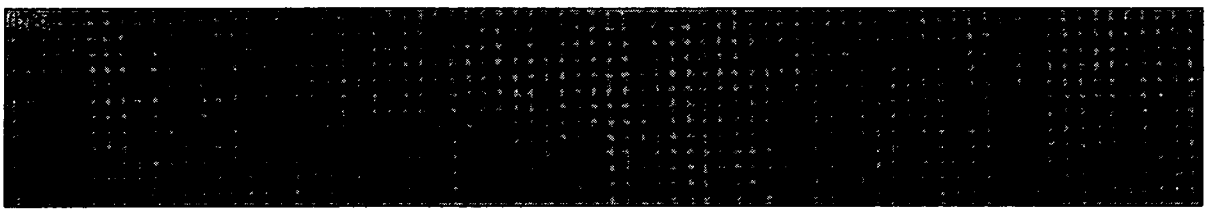

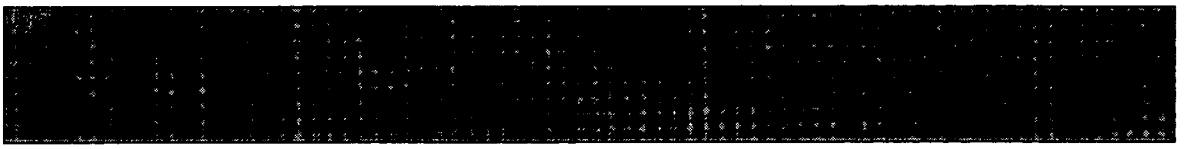

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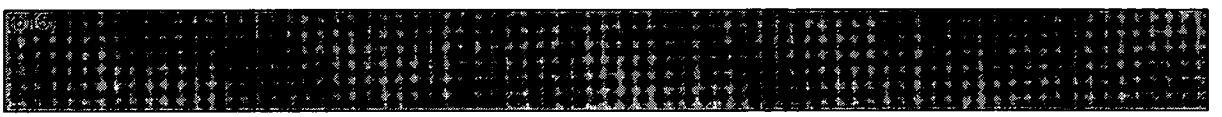

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A few specific Q&As of note:

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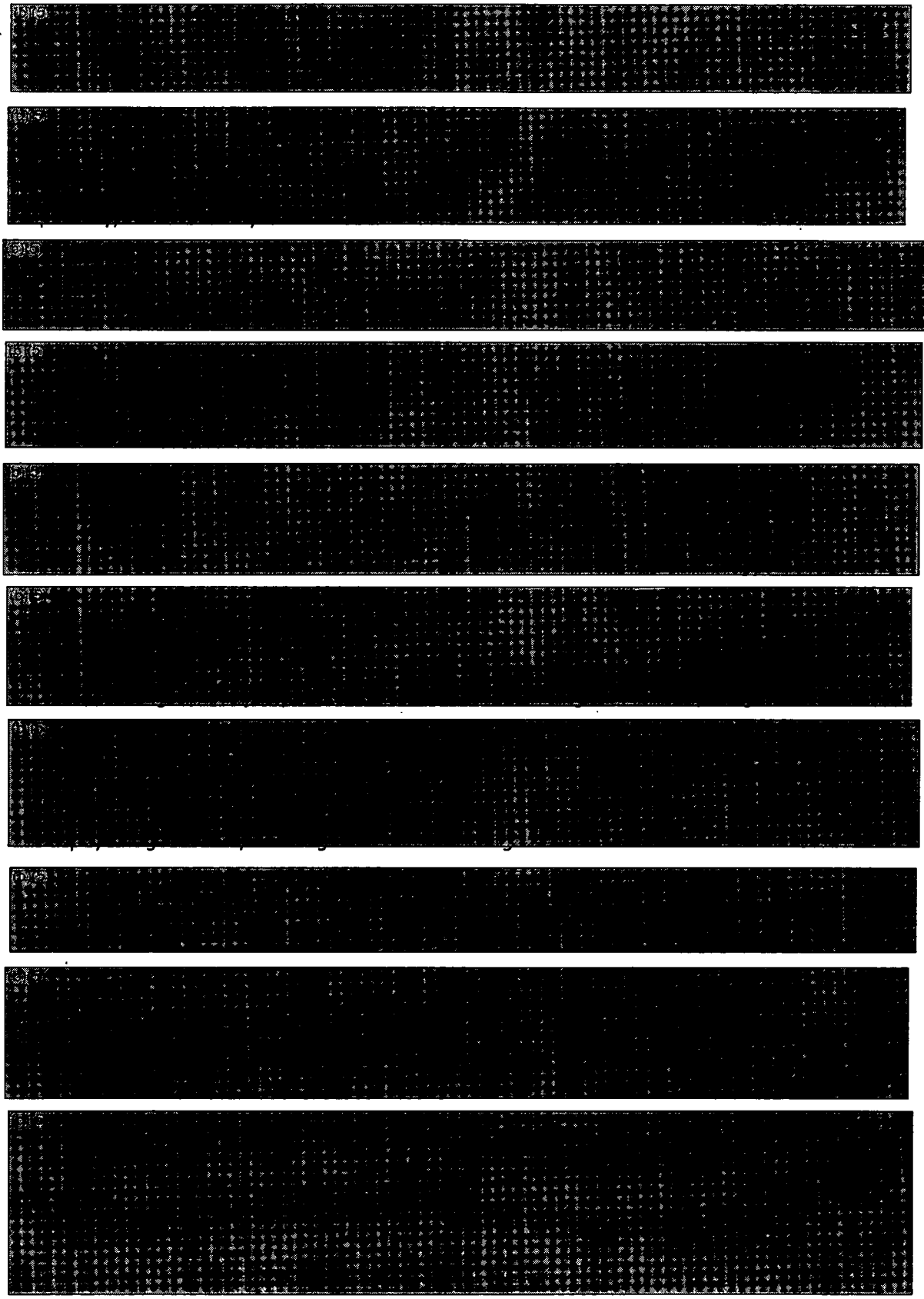

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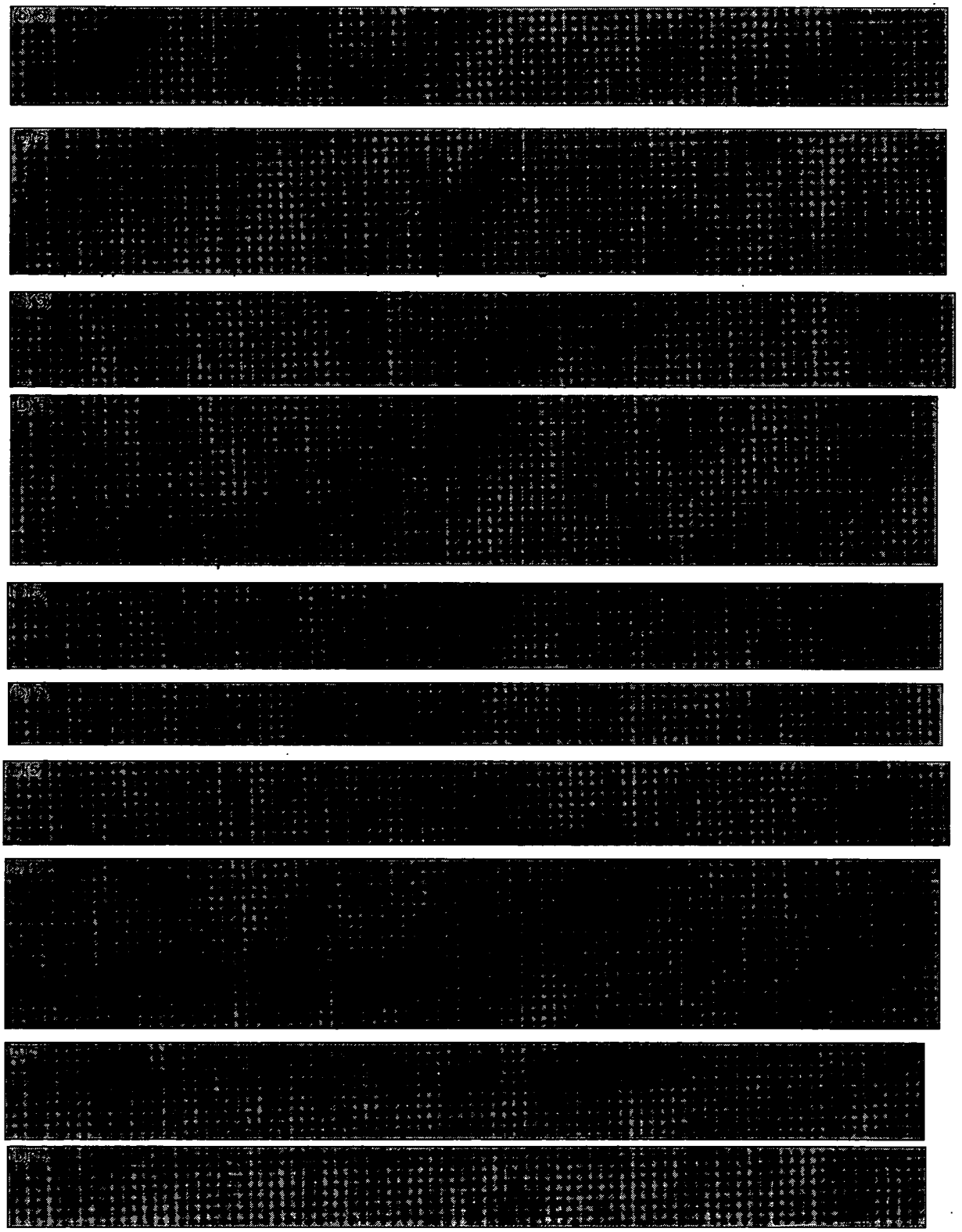

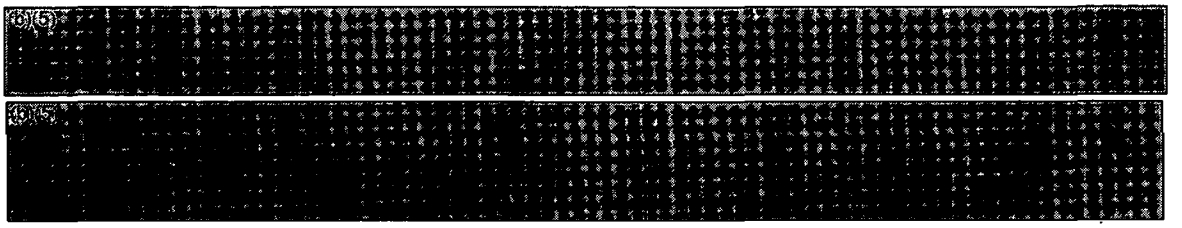

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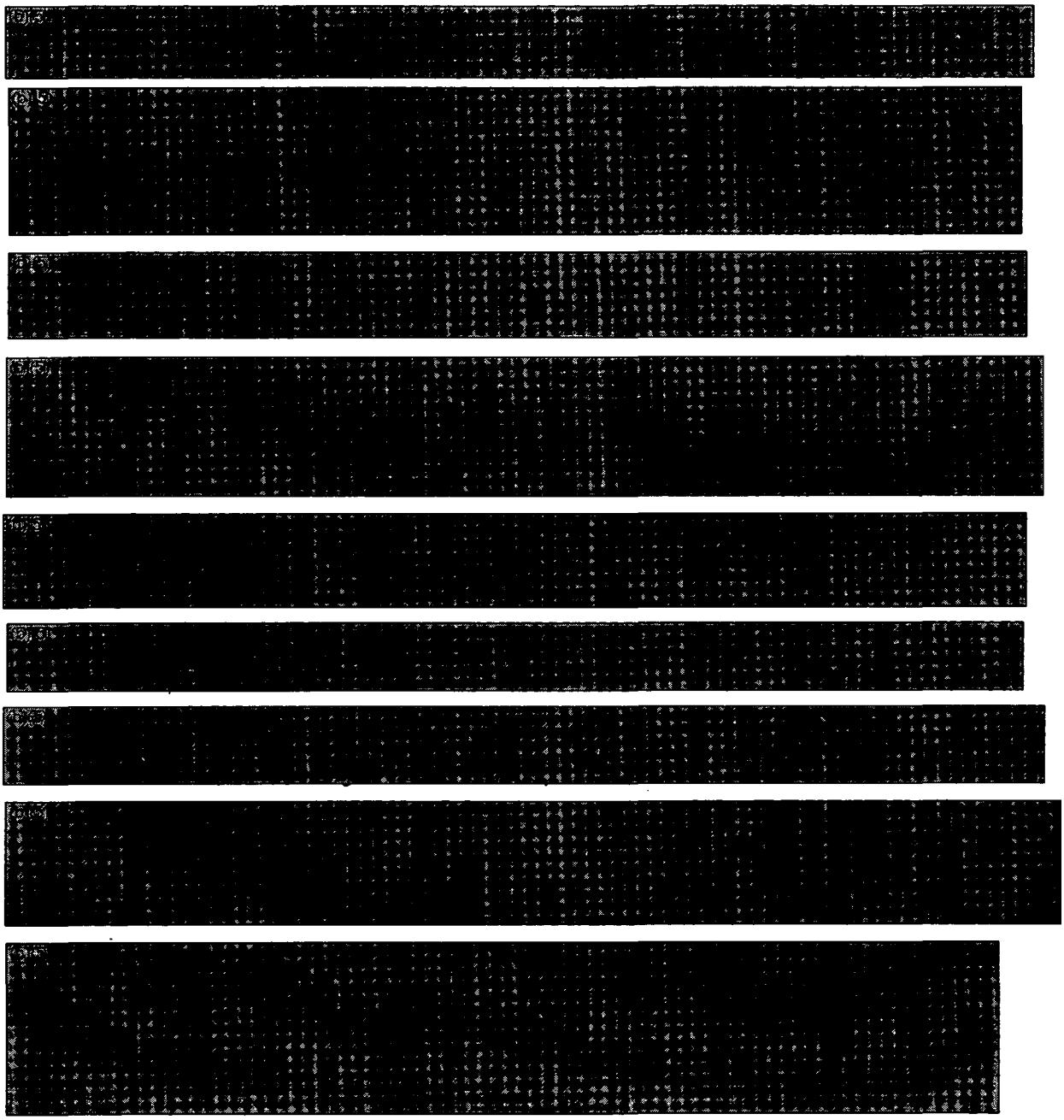

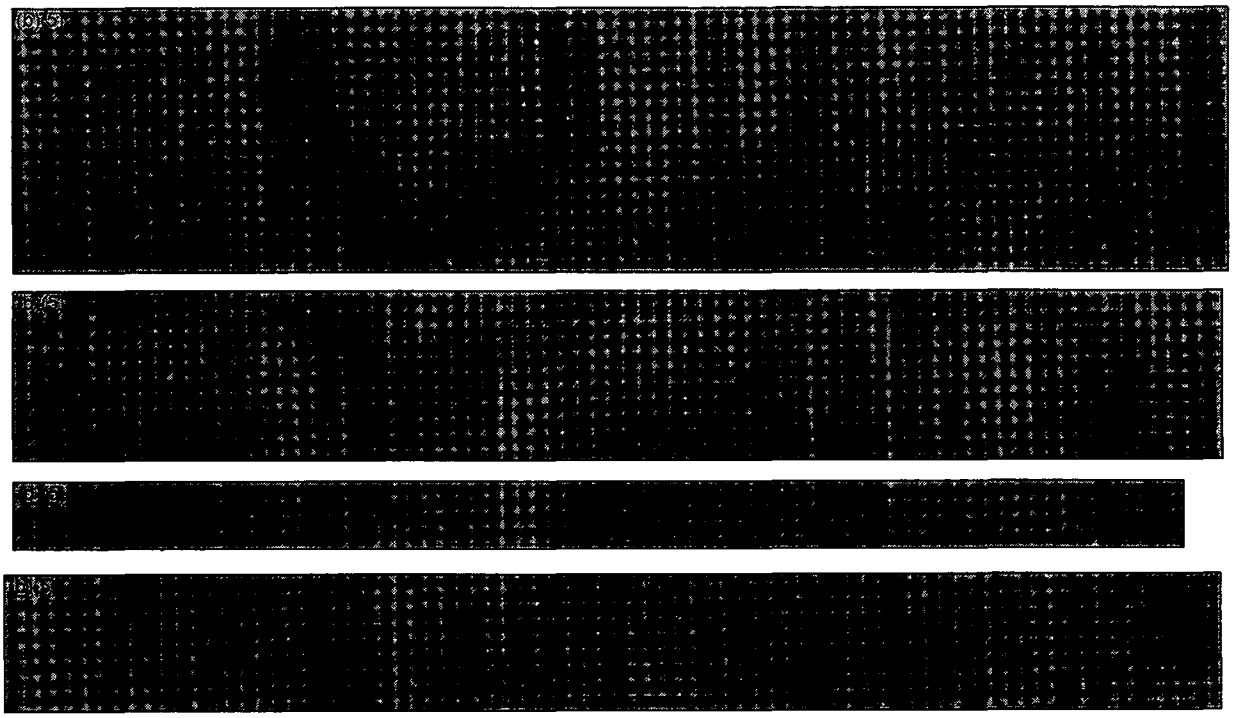

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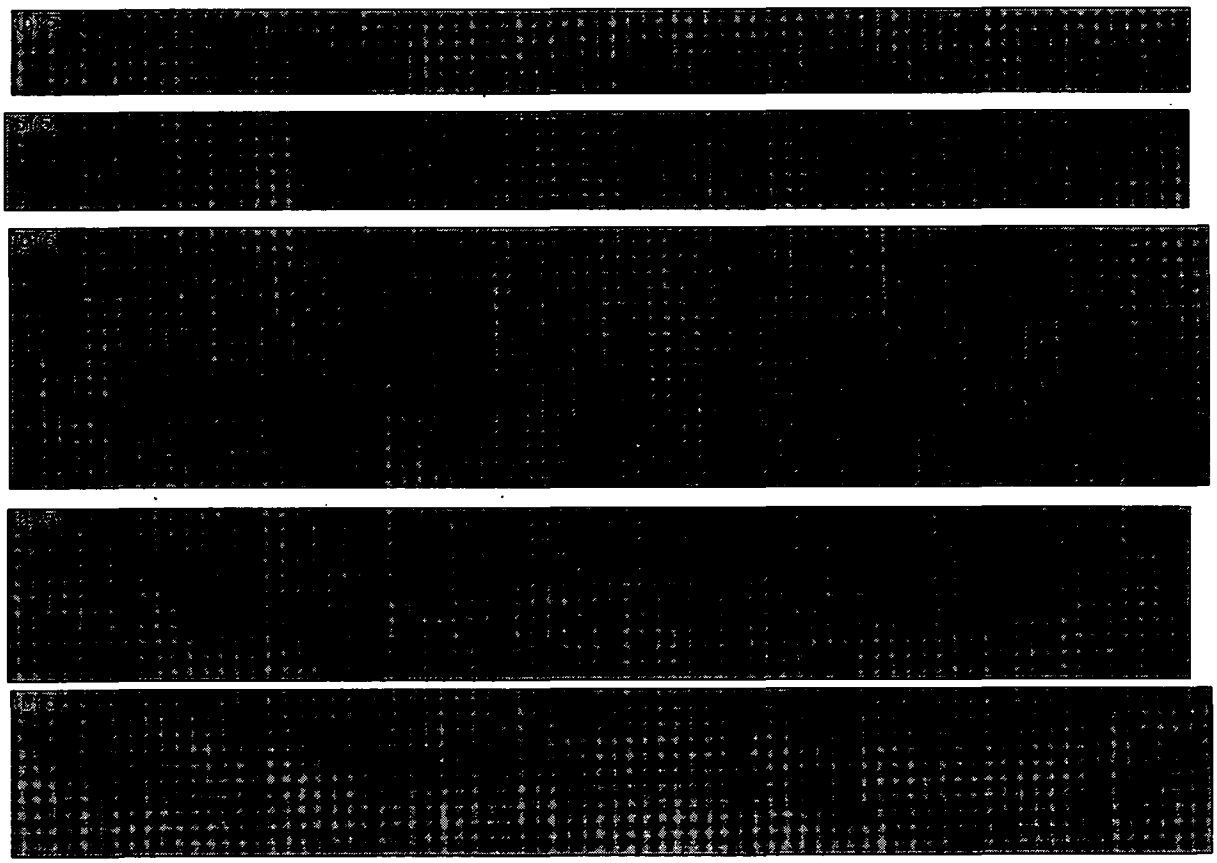

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1835 March 14, 2011 Monday (Updates from Consulate Nagoya):

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Transportation:

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Infrastructure:

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Manufacturing Operations:

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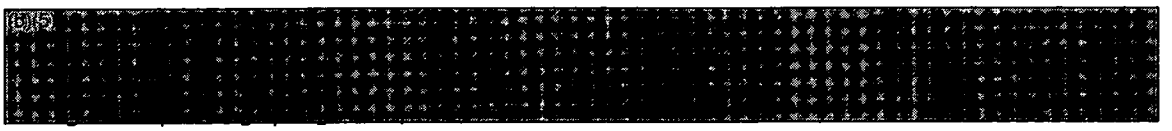

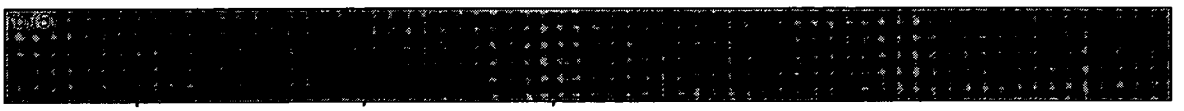

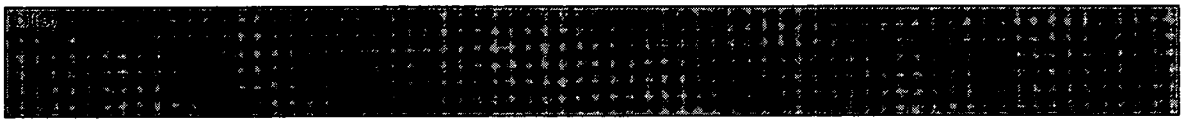

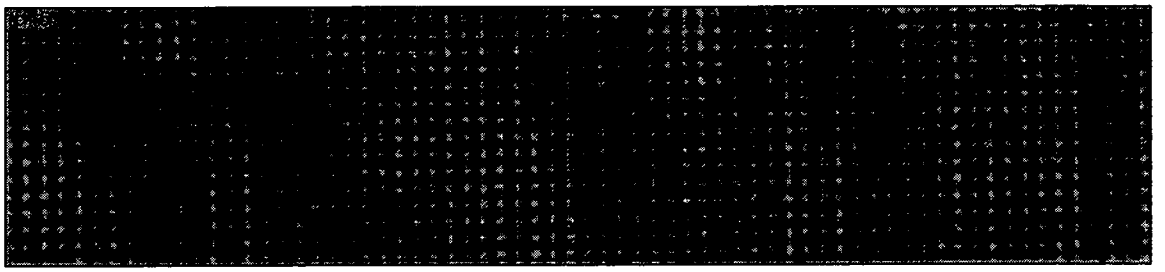

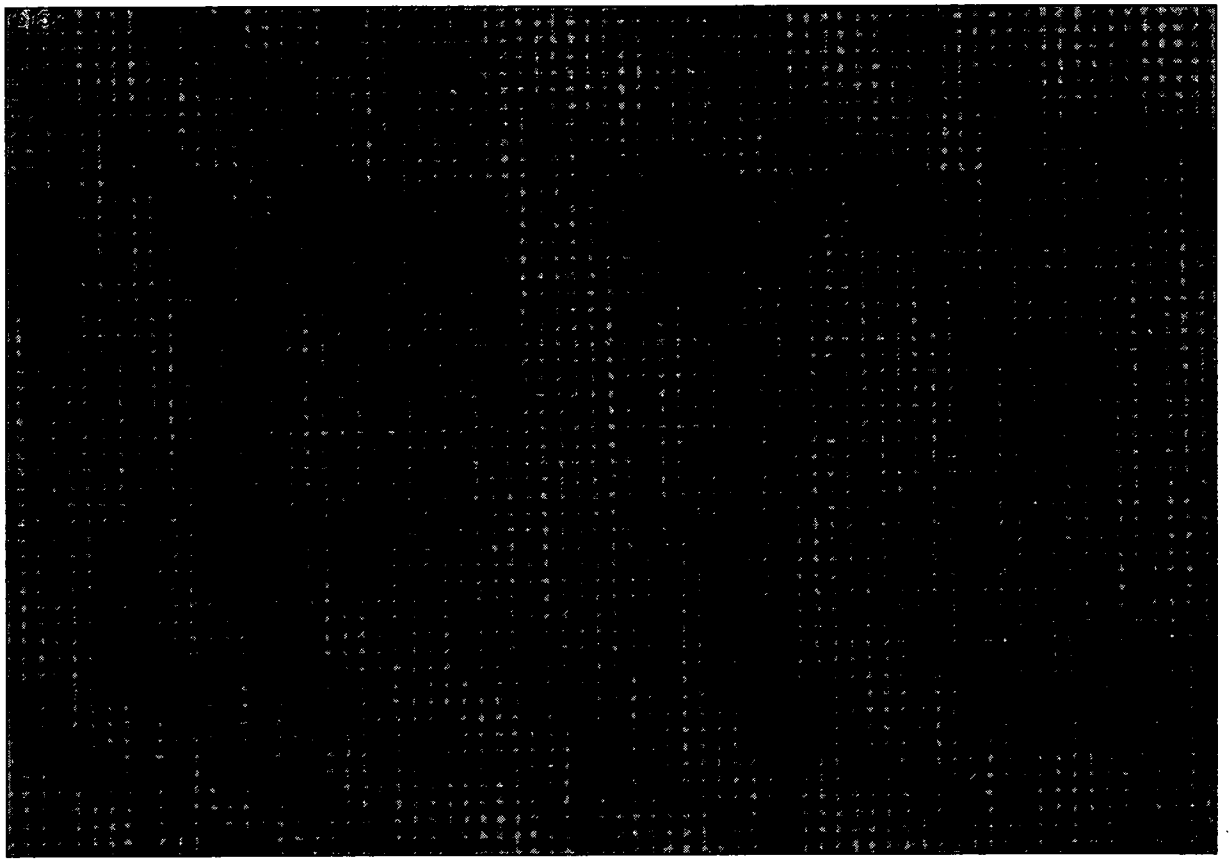

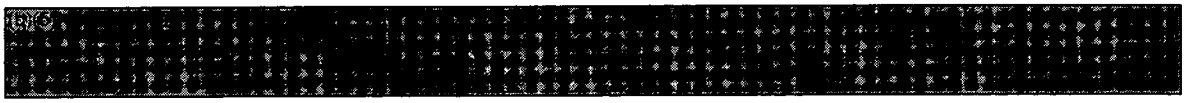

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17:00 March 14, 2011 Monday (NHK Fatality Update): NHK 1800 dead confirmed—no further details.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Weaver, Tonna

From: RMTPACTSU_DMP [redacted]
Sent: Wednesday, March 16, 2011 8:53 PM
To: RMTPACTSU_ELNRC; DART_PACTSU; Berger, William (RDMA/OFDA) [USAID]; Berger, William
Cc: Stickman, Elizabeth; RMTPACTSU_RM; RMTPACTSU_DMO
Subject: FW: FCM Request
Attachments: Request for support on FMCT of the Department of State.docx

Importance: High

[redacted]

[redacted]

Gavi

Gavrielle Rosenthal
Deputy Manager for Planning
Pacific Tsunami and Japan Earthquake Response Management Team
USAID/DHCA/OFDA
[redacted]

From: CMS TaskForce1F - USAID [mailto:1TFF@state.gov]
Sent: Wednesday, March 16, 2011 6:28 PM
To: RMTPACTSU_DMP
Cc: zTask Force 1 Mailbox
Subject: FW: FCM Request

FYI

From: CMS TaskForce1Q
Sent: Wednesday, March 16, 2011 1:57 PM
To: Noble, David A.
Cc: zTask Force 1 Mailbox
Subject: FW: FCM Request

From: Green, Christopher L
Sent: Wednesday, March 16, 2011 11:27 AM
To: TaskForce-1; JapanEmbassy, TaskForce; Young, Joseph M; Hefner, Timothy B
Cc: Lewis, Brian M; Thur, Randy R; Schiller, Bryan S; Pigg, David N; 'lewisbm@fcmp.org'; 'thurrr@fcmp.org'; Lee, Siyoung; Skypek, Thomas M
Subject: FW: FCM Request

Task force:

[redacted]

BC/244

Please assist with visa waiver.

Regards,
Christopher

Christopher Green
First Secretary
Office of Japan Affairs
U.S. Department of State
Tel: (202) 647 2914
Fax: (202) 647 4402

From: Skypek, Thomas M
Sent: Wednesday, March 16, 2011 11:01 AM
To: Green, Christopher L
Cc: Lewis, Brian M; Thur, Randy R; Schiller, Bryan S; Pigg, David N; 'lewisbm@fcmp.org'; 'thurrr@fcmp.org'; Lee, Siyoung
Subject: Country Clearance Info for Lewis and Thur

Christopher,

[redacted]

Brian M. Lewis
Passport #: [redacted]
Expiration: [redacted]
DOB: [redacted]

Randolph R. Thur
Passport #: [redacted]
Expiration: [redacted]
DOB: [redacted]

Please let me know if you need any additional information. Thank you for your help with this.

Tom

Tom Skypek
U.S. Department of State
ISN/WMDT FCM Program
Office: (703) 875-4915
skypektm@state.gov

This email is UNCLASSIFIED.

From: Hefner, Timothy B
Sent: Wednesday, March 16, 2011 06:49 AM
To: JapanEmbassy, TaskForce; [redacted]
Cc: Tokyo PolMil Unit; [redacted]
Subject: FCM Request

[redacted]

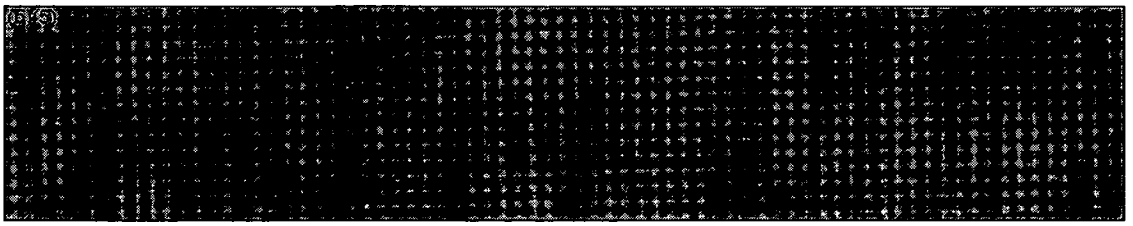
Tim Hefner
Political-Military Unit
U.S. Embassy Tokyo
Tel: + 81 3 3224-5344
Fax: + 81 3 3224-5322
Cell: [redacted]

HefnerTB@state.gov

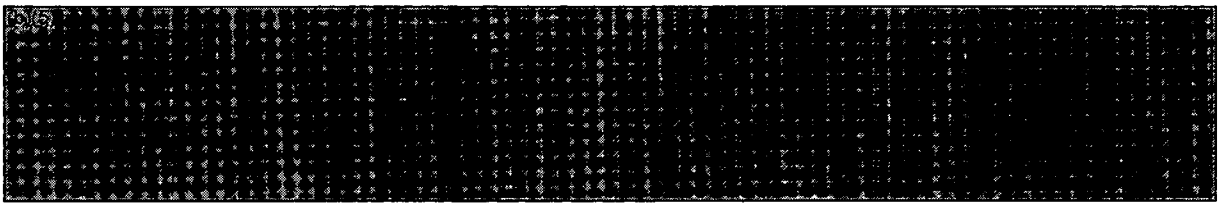
~~SBU~~
This email is UNCLASSIFIED.

Request for support on FMCT of the Department of State

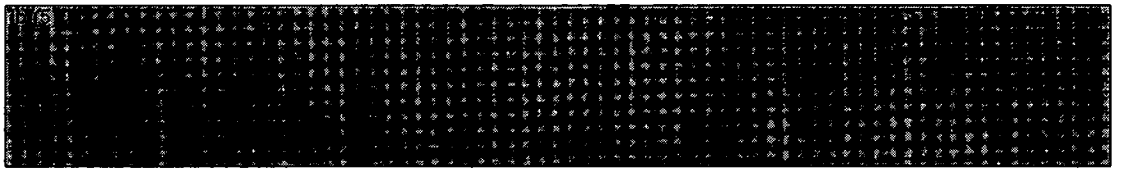
Urgent Issue



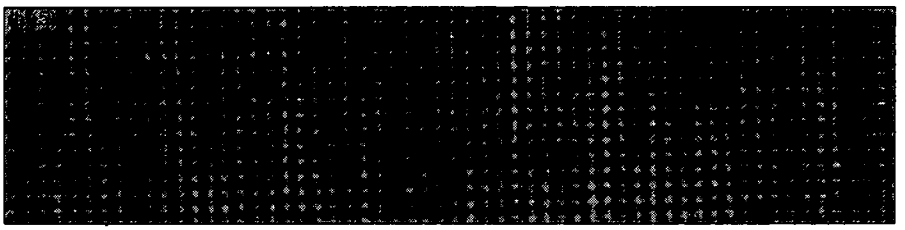
Preparation work



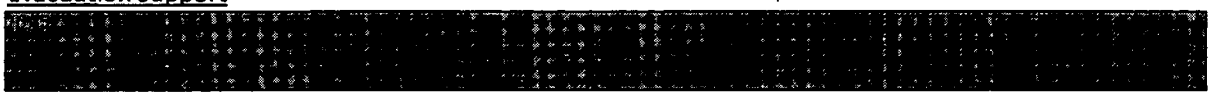
Recovery Work



Material & Equipment

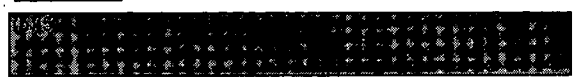


Evacuation Support

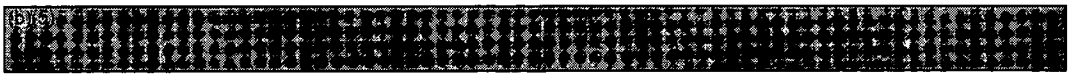


Medical Issue

Radiation



Common



Weaver, Tonna

From: Bock, Yoni [redacted]
Sent: Thursday, March 17, 2011 6:56 AM
To: DART_PACTSU; RMT_PACTSU
Subject: FW: GOJ request for supplies - Sendai
Attachments: Stock levels.pdf; jjs.ppt

All,

[redacted]

cheers,
yoni

~~~~~~~~~~~~~~~~~~~~~~~~

Mr. Yonahton Bock
Military Liaison Officer / Civ-Mil Coordinator Japan Earthquake/Tsunami DART
Email: ybock@usaid.gov
Blackberry: [redacted]

DNS at USFJ: 225-4329, 3137, 2469

From US (or non DSN) (011 81) 425 522-511 From Japan (non DSN) 0425 522-511 after dial tone, ext [redacted] 52469, 53137

Current Location: Yokota AB, Tokyo, Japan ~~~~~~~~~~~~~~~~~~~~~~~~

From: [redacted] USA USFJ J4 [mailto: [redacted]
Sent: Thu 3/17/2011 3:40 AM
To: USFJ-CAT-J5; Berger, William; TokoKE@state.gov; beedja@state.gov; Beed, John [USAID]; Berger, William (RDMA/OFDA) [USAID]; RMT_PACTSU; Sink, Amy (BFS) [USAID]; Potts, Sarah(DCHA/OFDA) [USAID]; Long, Patrick(DCHA/OFDA) [USAID]; Perks, Dewey(DCHA/OFDA) [USAID]; Stitt, Tony; Bock, Yoni; USFJ-CAT-J4; USFJ-JLOC-J43
Cc: TokyoPolMilUnit@state.gov; TOKYOPOLAll@state.gov; Greene, Robert F. DOS; USFJ-CAT-J3; KimuraAX@state.gov; TDYSpurlockKR@state.gov; TanakaRS@state.gov
Subject: RE: GOJ request for supplies - Sendai

Miki,

[redacted]

V/R

[redacted]
J43 Branch Chief

BC | 245
~~~~~~~~~~~~~~~~~~~~~~~~

U.S. Forces Japan, J4
DSN: (315) 225-6716/4710
Comm: 011-81-3117-55-4710
FAX: (315) 225-4709
NIPR: (b)(6)
AKO:
SIPR:

-----Original Message-----
From: Huntington, Miki T LTC USA USFJ J54 On Behalf Of USFJ-CAT-J5
Sent: Thursday, March 17, 2011 4:34 PM
To: 'Berger, William'; TokoKE@state.gov; beedja@state.gov; Beed, John [USAID]; Berger, William (RDMA/OFDA) [USAID]; RMT_PACTSU; Sink, Amy (BFS) [USAID]; Potts, Sarah(DCHA/OFDA) [USAID]; Long, Patrick(DCHA/OFDA) [USAID]; Perks, Dewey(DCHA/OFDA) [USAID]; Stitt, Tony; 'Bock, Yoni'; USFJ-CAT-J4; USFJ-JLOC-J43; Williams, Joseph V LTC USA USFJ J4
Cc: USFJ-CAT-J5; TokyoPolMilUnit@state.gov; TOKYOPOLAll@state.gov; Greene, Robert F. DOS; USFJ-CAT-J3; KimuraAX@state.gov; TDYSpurlockKR@state.gov; TanakaRS@state.gov
Subject: RE: GOJ request for supplies - Sendai
Importance: High

All ~

(b)(5)

V/R,

MIKI T. HUNTINGTON, LTC, U.S. Army
Chief, Government Relations (J54)
United States Forces Japan
DSN 315-225-2072 / FAX 315-225-4718
Comm: 011-81-3-1175-52072

-----Original Message-----
From: (b)(6)
Sent: Thursday, March 17, 2011 3:56 PM
To: TokoKE@state.gov; beedja@state.gov; Beed, John [USAID]; Berger, William (RDMA/OFDA) [USAID]; RMT_PACTSU; Sink, Amy (BFS) [USAID]; Potts, Sarah(DCHA/OFDA) [USAID]; Long, Patrick(DCHA/OFDA) [USAID]; Perks, Dewey(DCHA/OFDA) [USAID]; Stitt, Tony
Cc: USFJ-CAT-J5; TokyoPolMilUnit@state.gov; TOKYOPOLAll@state.gov; Greene, Robert F. DOS; USFJ-CAT-J3; Huntington, Miki T LTC USA USFJ J54; KimuraAX@state.gov; TDYSpurlockKR@state.gov; TanakaRS@state.gov
Subject: Re: GOJ request for supplies - Sendai

Please contact Tom Frey the DART Liaison to the JTF in Yokota Bill Berger DART Leader

---

From: Toko, Kenichiro (Ken) <TokoKE@state.gov>

To: Beed, John A <beedja@state.gov>; Beed, John [USAID]; Berger, William (RDMA/OFDA) [USAID]; RMT_PACTSU; Sink, Amy (BFS) [USAID]; Potts, Sarah(DCHA/OFDA) [USAID]; Long, Patrick(DCHA/OFDA) [USAID]; Perks, Dewey(DCHA/OFDA) [USAID]; Stitt, Tony
Cc: [redacted]; Tokyo PolMil Unit <TokyoPolMilUnit@state.gov>; TOKYO POL All <TOKYOPOLAll@state.gov>; Greene, Raymond F <GreeneRF2@state.gov>; [redacted]; Toko, Kenichiro (Ken) <TokoKE@state.gov>; Kimura, Ayako <KimuraAX@state.gov>; Spurlock, Kenneth R (TDY/MDAO) <TDYSpurlockKR@state.gov>; Tanaka, Rodney S <TanakaRS@state.gov>
Sent: Thu Mar 17 02:01:58 2011
Subject: FW: GOJ request for supplies - Sendai

Miki,

I haven't been able to contact the DART folks by phone. We'll keep trying.

Ken

~~SBU~~

This email is UNCLASSIFIED.

From: [redacted] USA USFJ J54 [mailto:[redacted]
Sent: Thursday, March 17, 2011 2:51 PM
To: [redacted] USA USFJ J54; Toko, Kenichiro (Ken); Kimura, Ayako
Cc: USFJ-CAT-J5; Tokyo PolMil Unit; TOKYO POL All; Greene, Raymond F; USFJ-CAT-J3
Subject: RE: GOJ request for supplies - Sendai
Importance: High

All ~

[redacted]

Thank you!

V/R,

[redacted]

Chief, Government Relations (J54)

United States Forces Japan

DSN 315-225-2072 / FAX 315-225-4718

Comm: 011-81-3-1175-52072

Operation Tomodachi (Japan Earthquake Relief):

E-mail: [redacted]

DSN 315-225-4329 or 2903

From: Huntington, Miki T LTC USA USFJ J54
Sent: Thursday, March 17, 2011 1:41 PM
To: 'Toko, Kenichiro (Ken)'; Kimura, Ayako
Cc: USFJ-CAT-J5; Tokyo PolMil Unit; TOKYO POL All; Greene, Robert F. DOS; USFJ-CAT-J3
Subject: RE: GOJ request for supplies
Importance: High

Aya/Ken ~

[redacted]

[redacted]

[redacted]

V/R,

[redacted] U.S. Army

Chief, Government Relations (J54)

United States Forces Japan

DSN 315-225-2072 / FAX 315-225-4718

Comm: 011-81-3-1175-52072

Operation Tomodachi (Japan Earthquake Relief):

E-mail: [redacted]

DSN 315-225-4329 or 2903

From: Toko, Kenichiro (Ken) [mailto:TokoKE@state.gov]
Sent: Thursday, March 17, 2011 1:36 PM
To: Kimura, Ayako
Cc: USFJ-CAT-J5; Tokyo PolMil Unit; [redacted] USA USFJ J54; TOKYO POL All; Greene, Robert F. DOS; USFJ-CAT-J3
Subject: RE: GOJ request for supplies

Aya,

[redacted]

Thanks,

Ken

~~SBU~~

This email is UNCLASSIFIED.

From: Kimura, Ayako
Sent: Thursday, March 17, 2011 1:23 PM
To: Toko, Kenichiro (Ken)
Cc: [redacted]
Subject: Re: GOJ request for supplies

[redacted]

[redacted] Thanks! Aya

From: Toko, Kenichiro (Ken)
To: Kimura, Ayako
Cc: [redacted]
Sent: Wed Mar 16 23:53:36 2011
Subject: RE: GOJ request for supplies

Aya,

[redacted]

Thanks,

Ken

~~SBU~~

This email is UNCLASSIFIED.

From: Kimura, Ayako
Sent: Thursday, March 17, 2011 9:03 AM
To: Walsh, Cody C
Cc: [redacted]
Subject: Re: GOJ request for supplies

[redacted]

From: Walsh, Cody C
To: Kimura, Ayako
Cc: (b)(6)
Sent: Wed Mar 16 13:16:37 2011
Subject: RE: GOJ request for supplies

(b)(5)

Best,

Cody

This email is UNCLASSIFIED.

From: Kimura, Ayako
Sent: Thursday, March 17, 2011 2:16 AM
To: Walsh, Cody C
Cc: (b)(6)
Subject: Re: GOJ request for supplies

Cody

(b)(5)

- Aya

From: Walsh, Cody C
To: Kimura, Ayako
Cc: (b)(6)
Sent: Wed Mar 16 12:14:12 2011
Subject: GOJ request for supplies

Aya,

(b)(5)

(b)(5)

(b)(5)

(b)(5)

Cody

Cody C. Walsh

U.S. Embassy Tokyo

1-10-5, Akasaka 1-Chome

Minato-ku, Tokyo 107 Japan

Tel: +81-3-3224-5337

Fax: +81-3-3224-5322

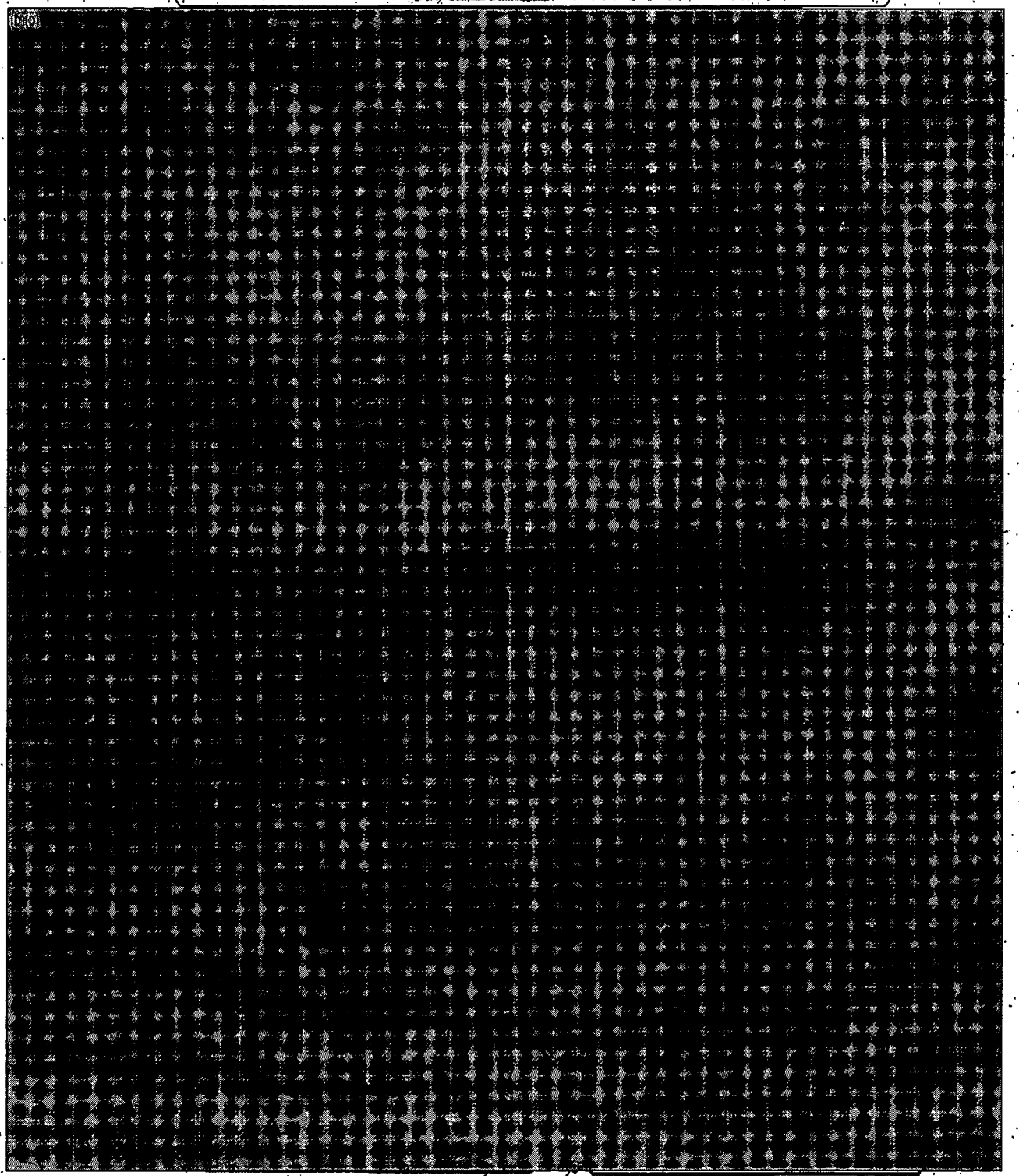
Email: WalshCC1@state.gov <mailto:WalshCC1@state.gov>

http://japan.usembassy.gov/ <http://japan.usembassy.gov/>

~~SBU~~

This email is UNCLASSIFIED.

STOCK LEVELS OF FOODSTUFF ETC

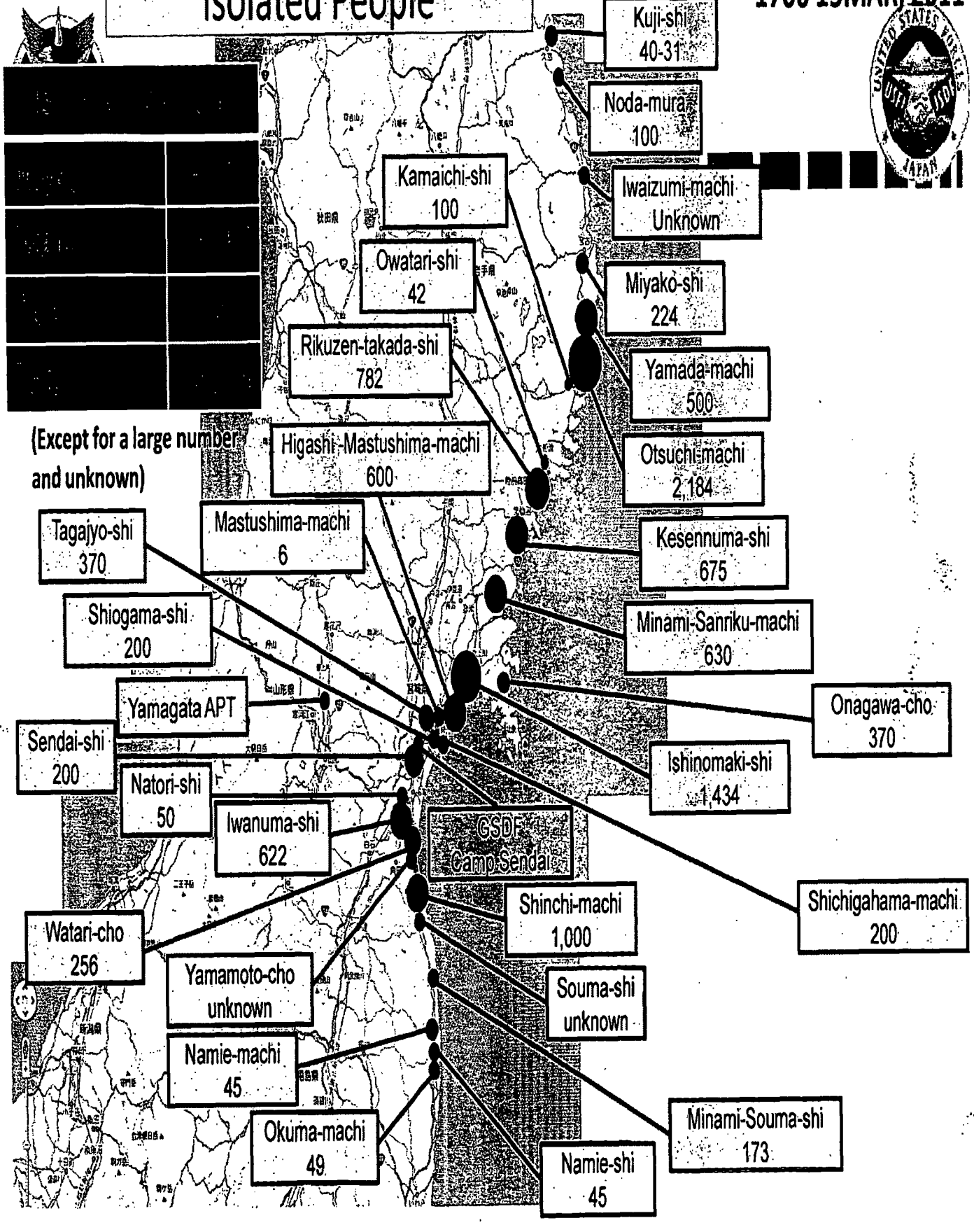


Isolated People

1700 15MAR, 2011

[redacted]

(Except for a large number and unknown)



Weaver, Tonna

From: Magee, Erin K. (DCHA/OFDA) [redacted]
Sent: Thursday, March 17, 2011 7:50 AM
To: DART_PACTSU
Subject: 2030 Mar 17 - Running Update on Japan Emergency (running file attached)
Attachments: 2011-03-17 running updates on Japan emergency with times 2030 - Mar 17.docx

20:30

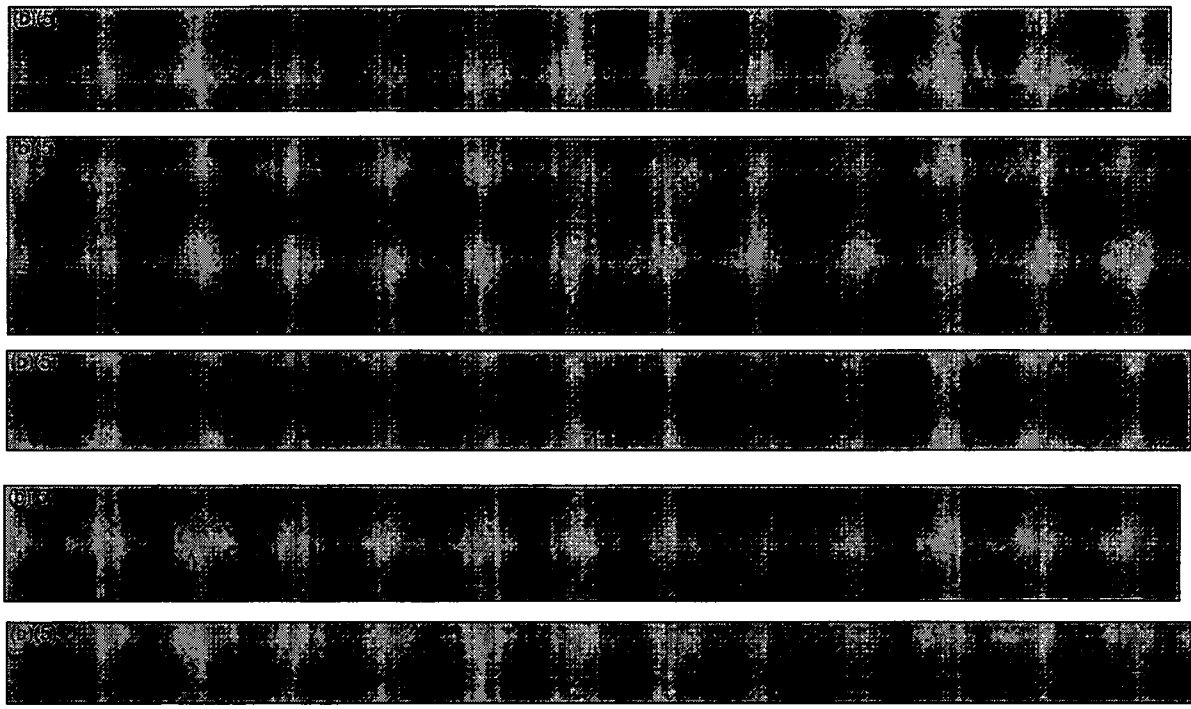
[redacted]

~~SBU~~

This email is UNCLASSIFIED.

BC|246

20:30



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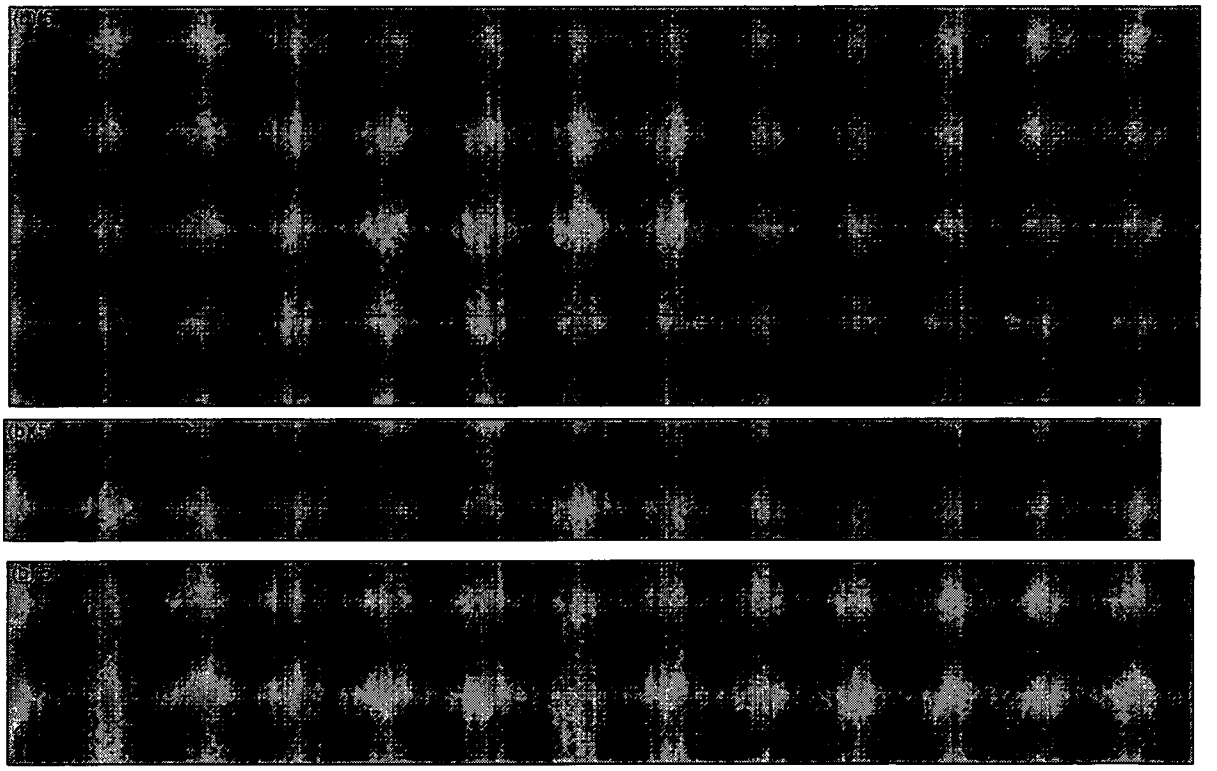

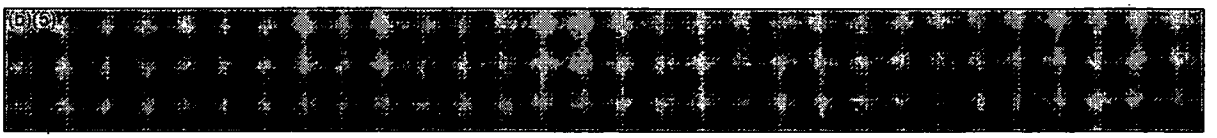

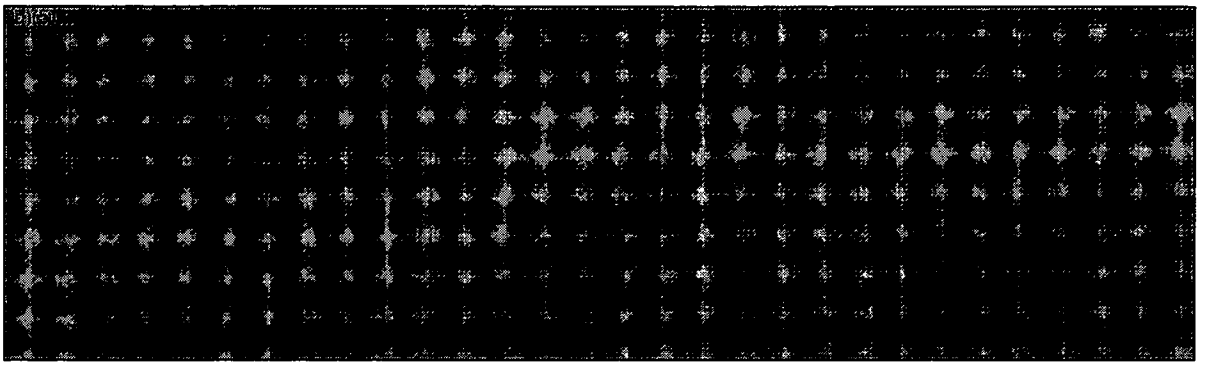

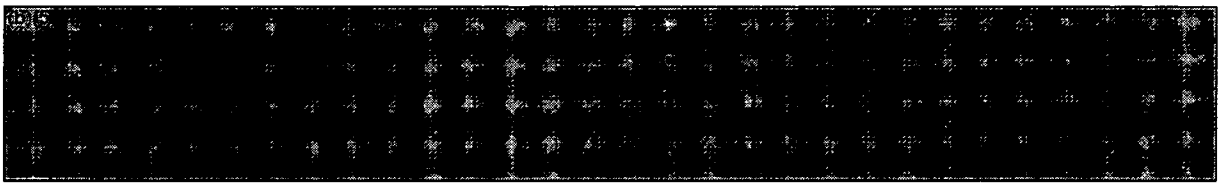

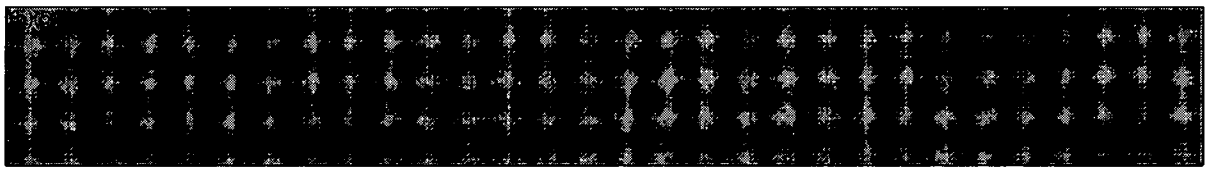

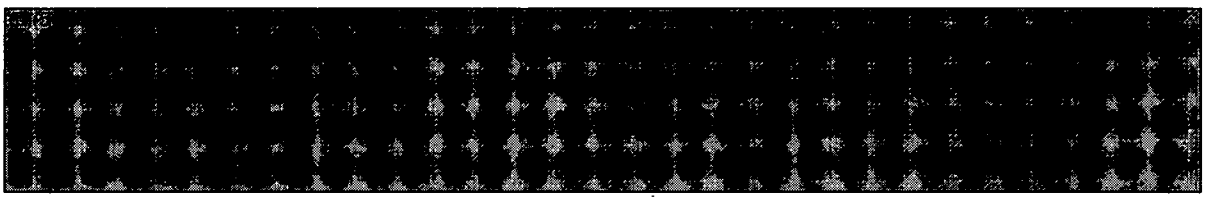

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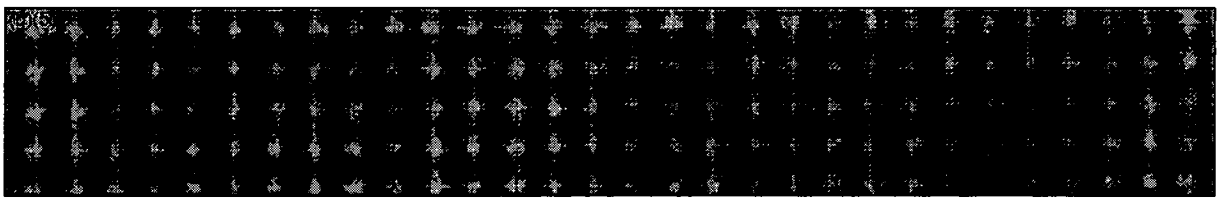

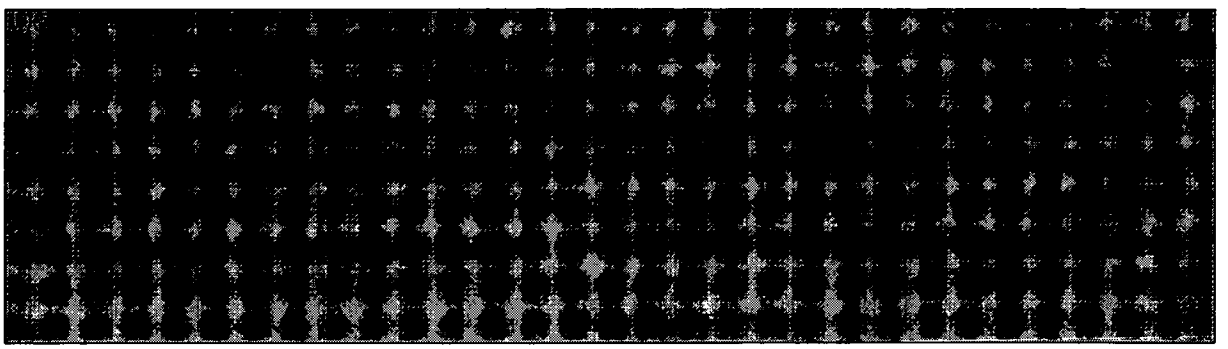

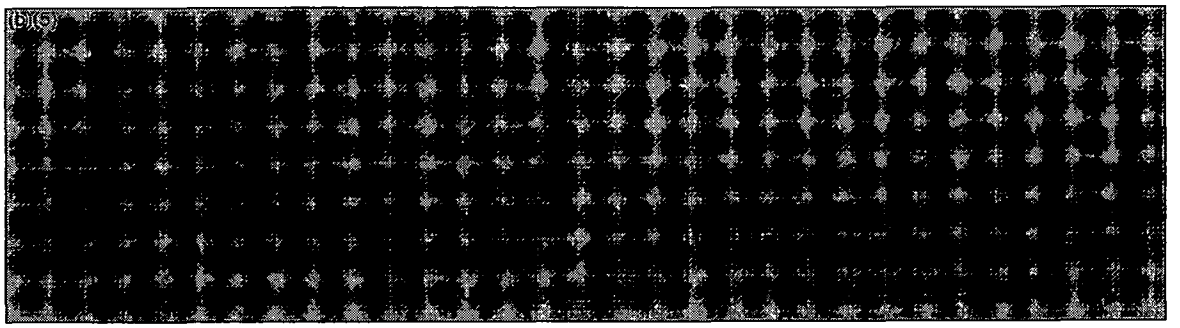
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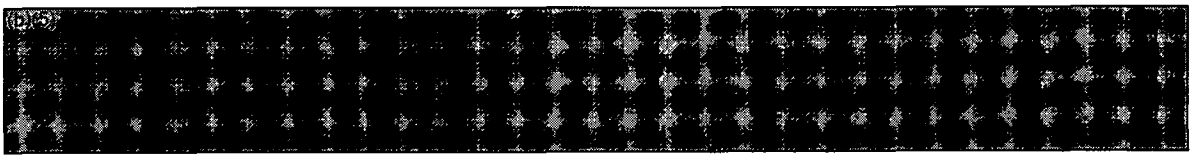
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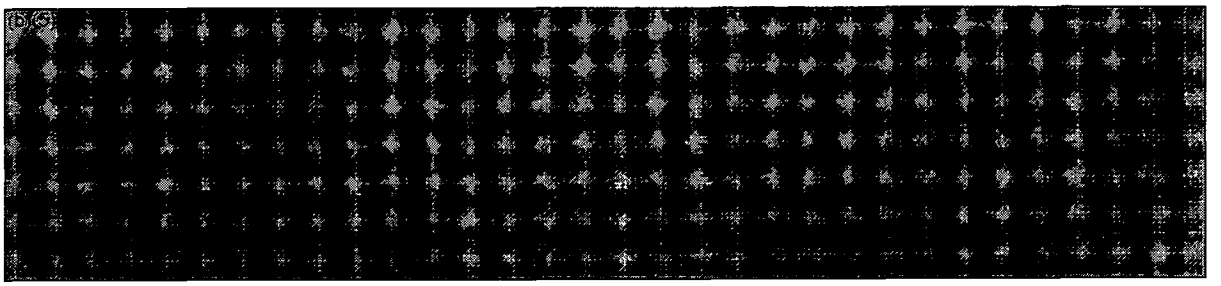
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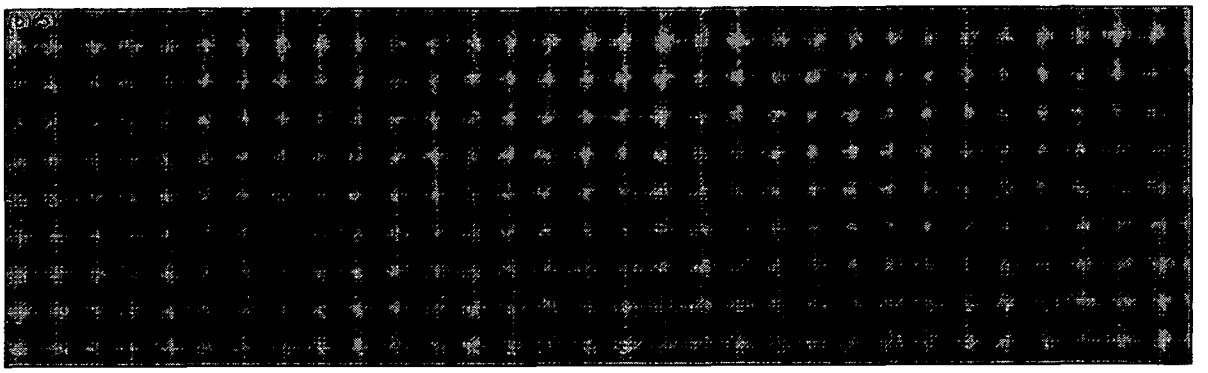
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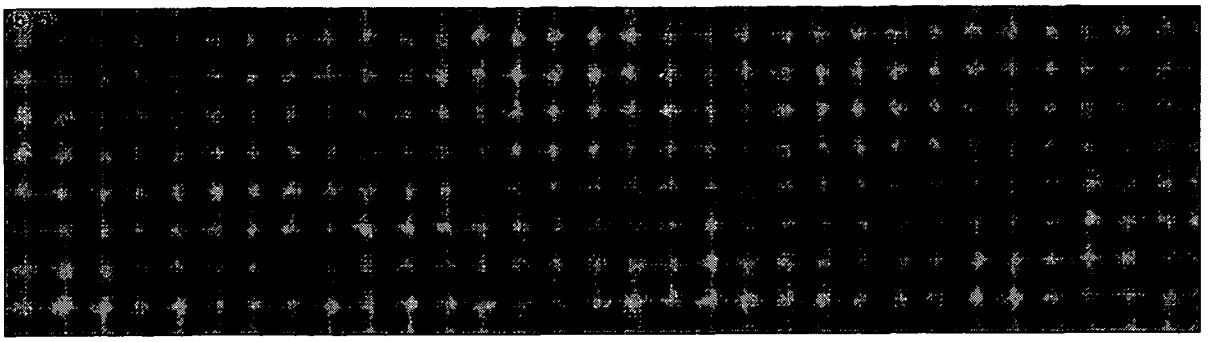
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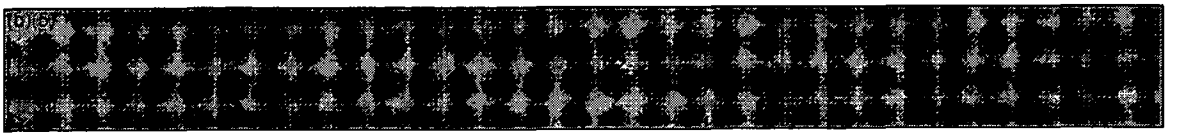
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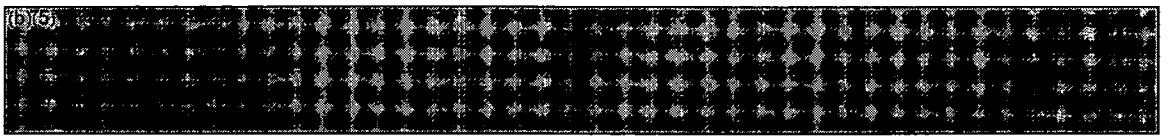

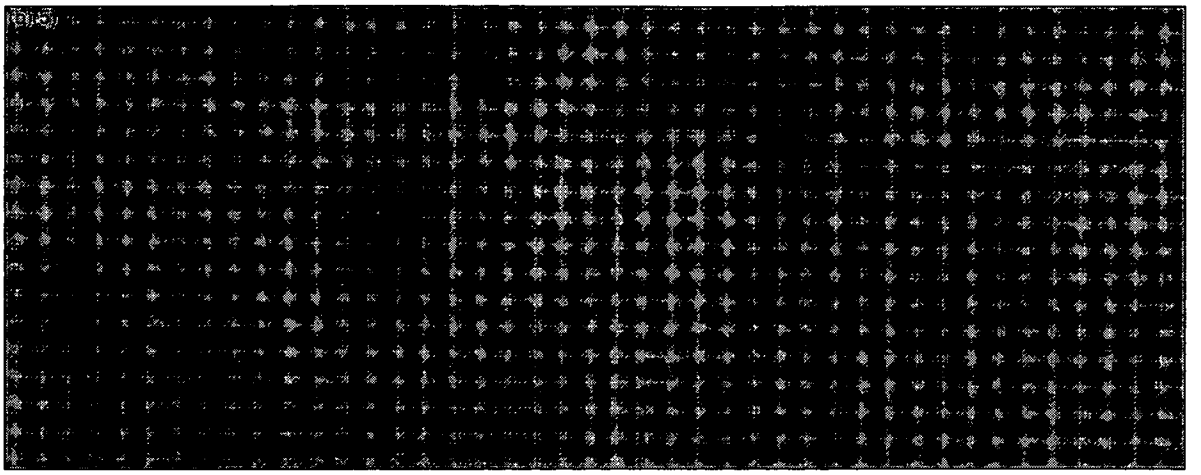

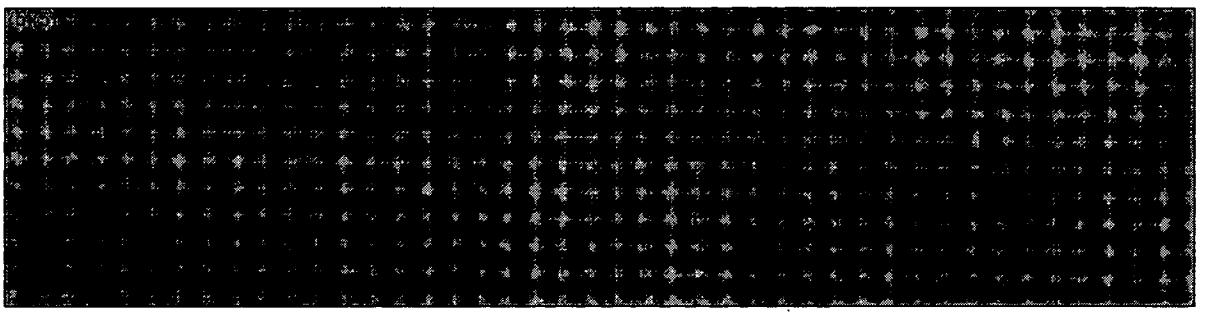

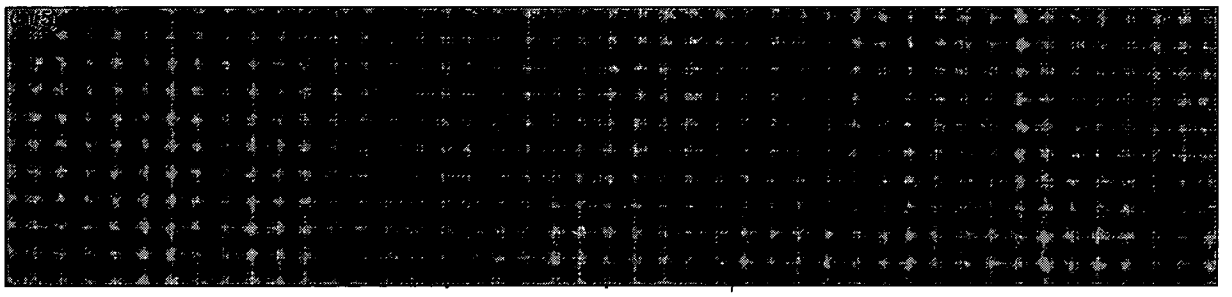

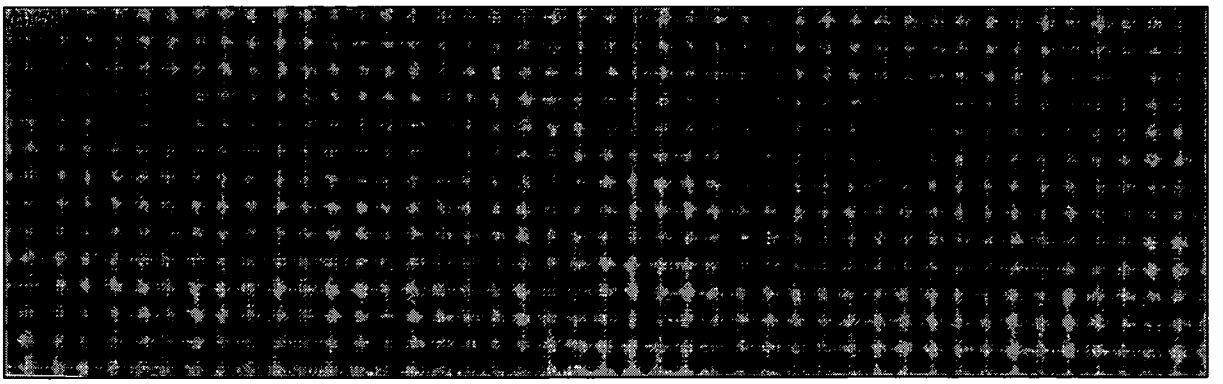

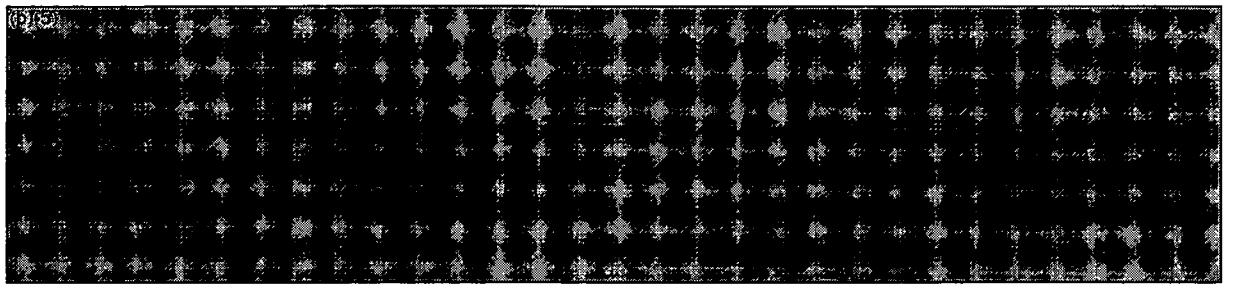

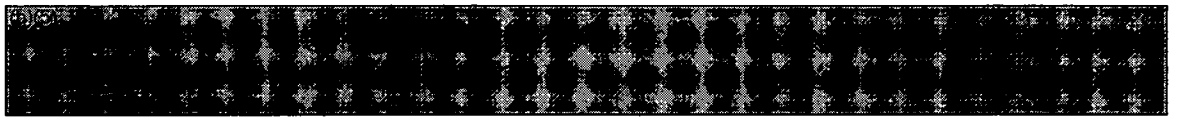

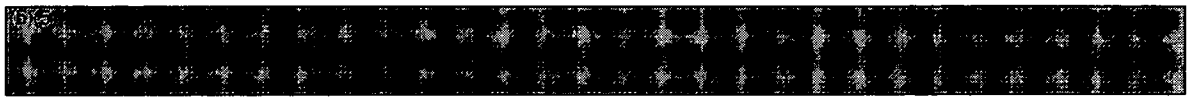

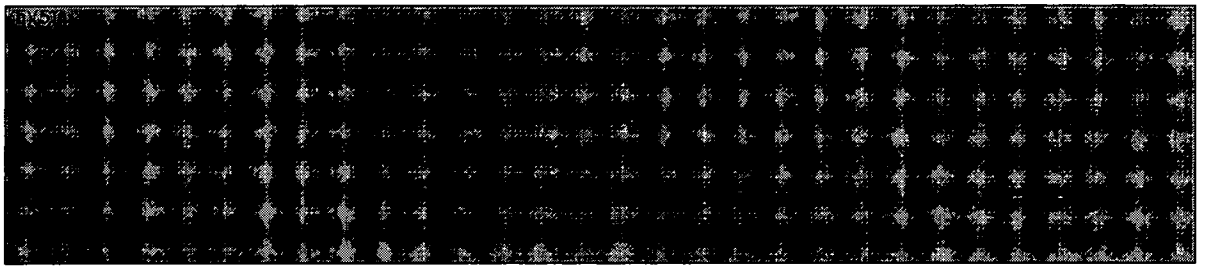

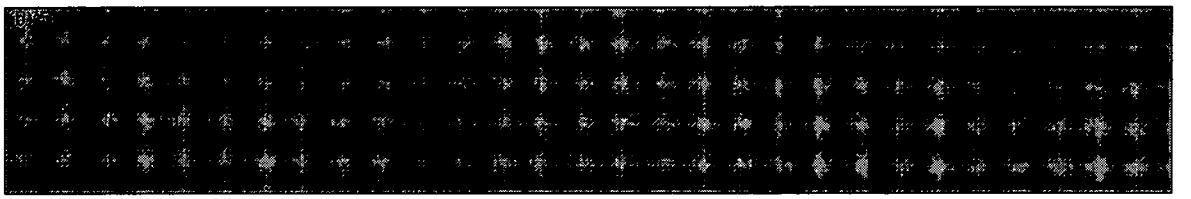

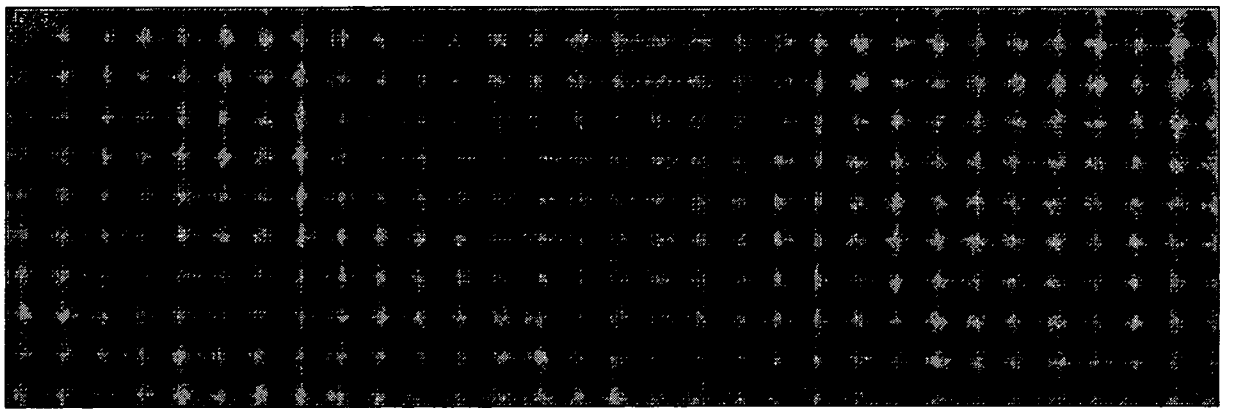

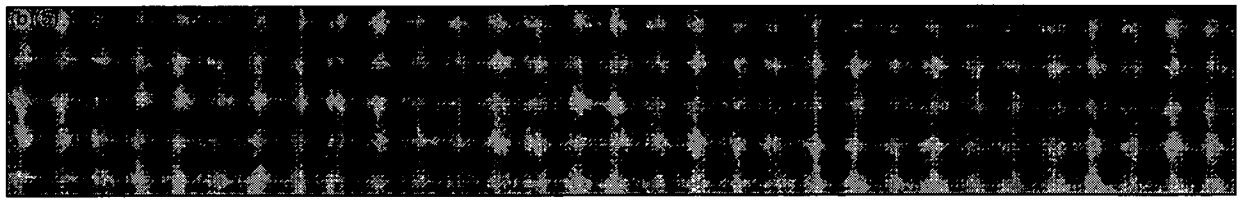

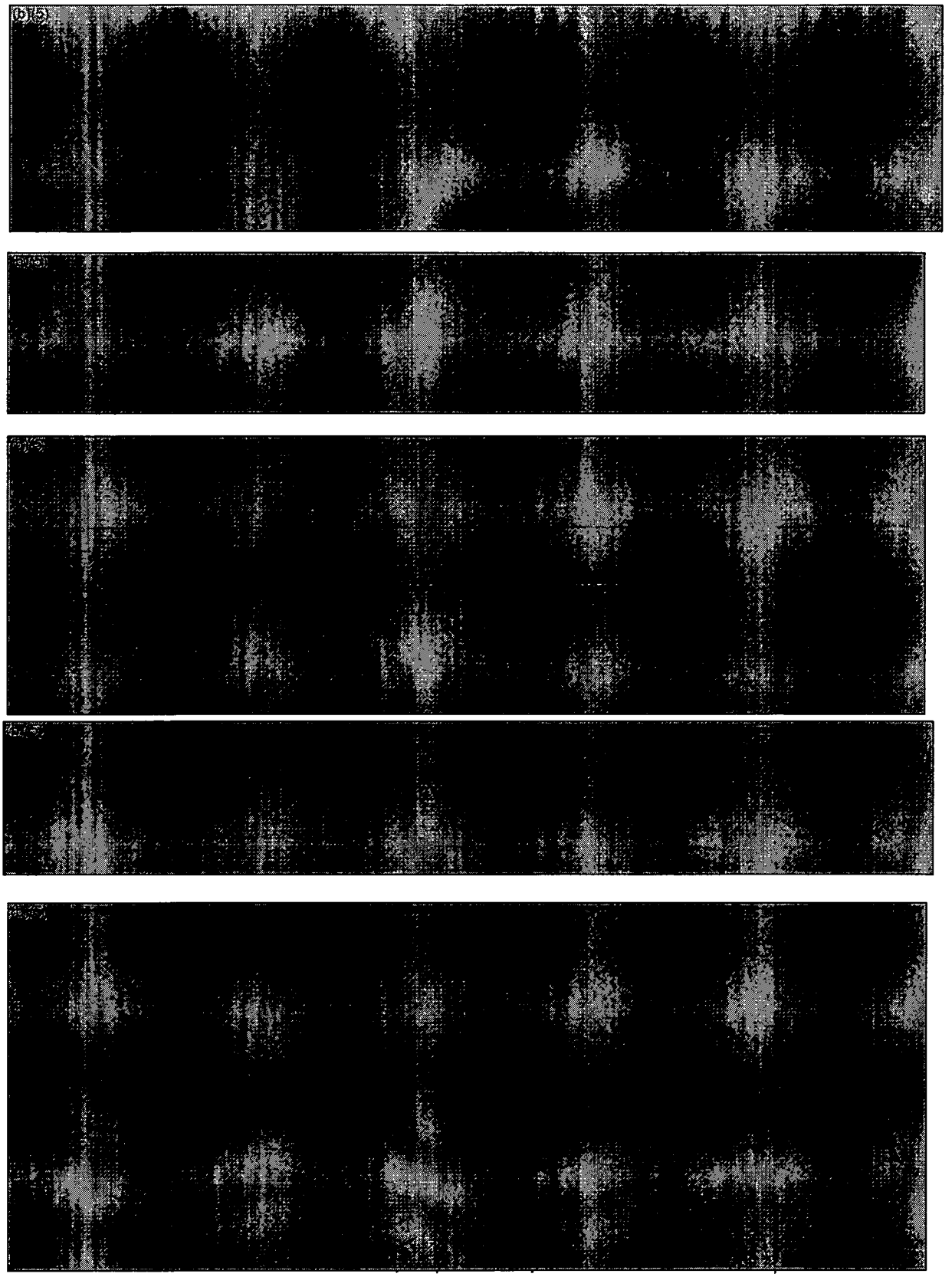

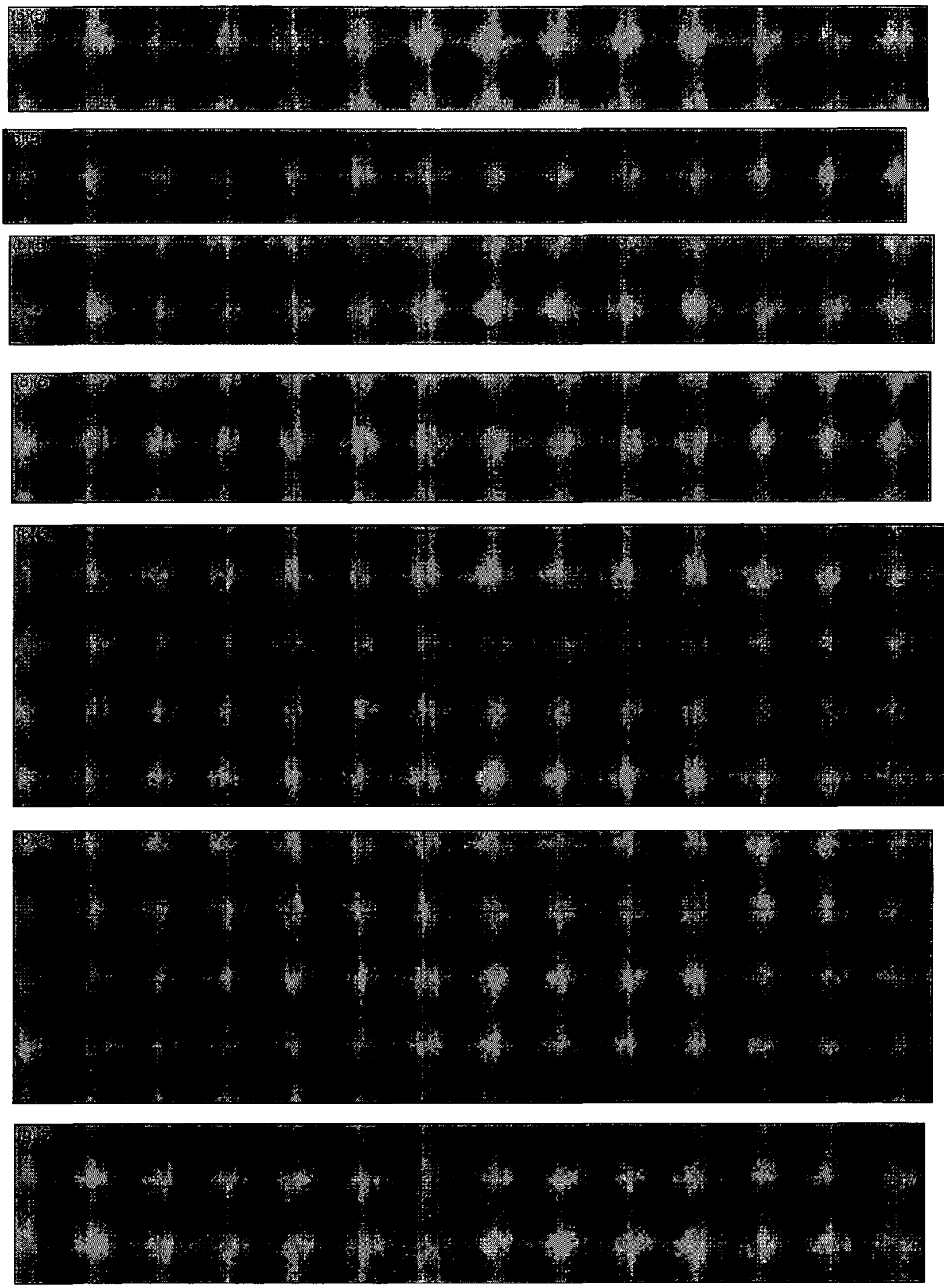

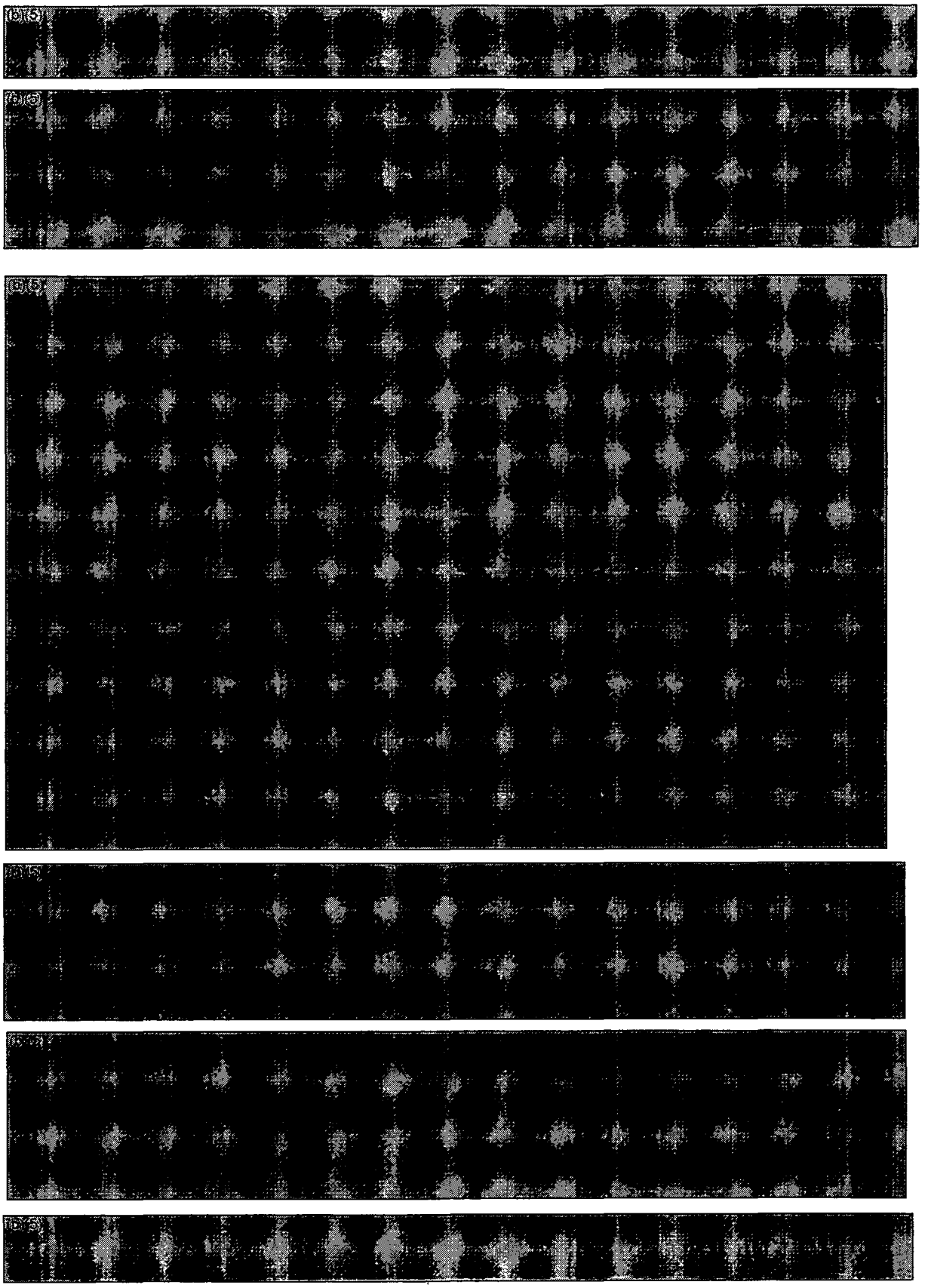

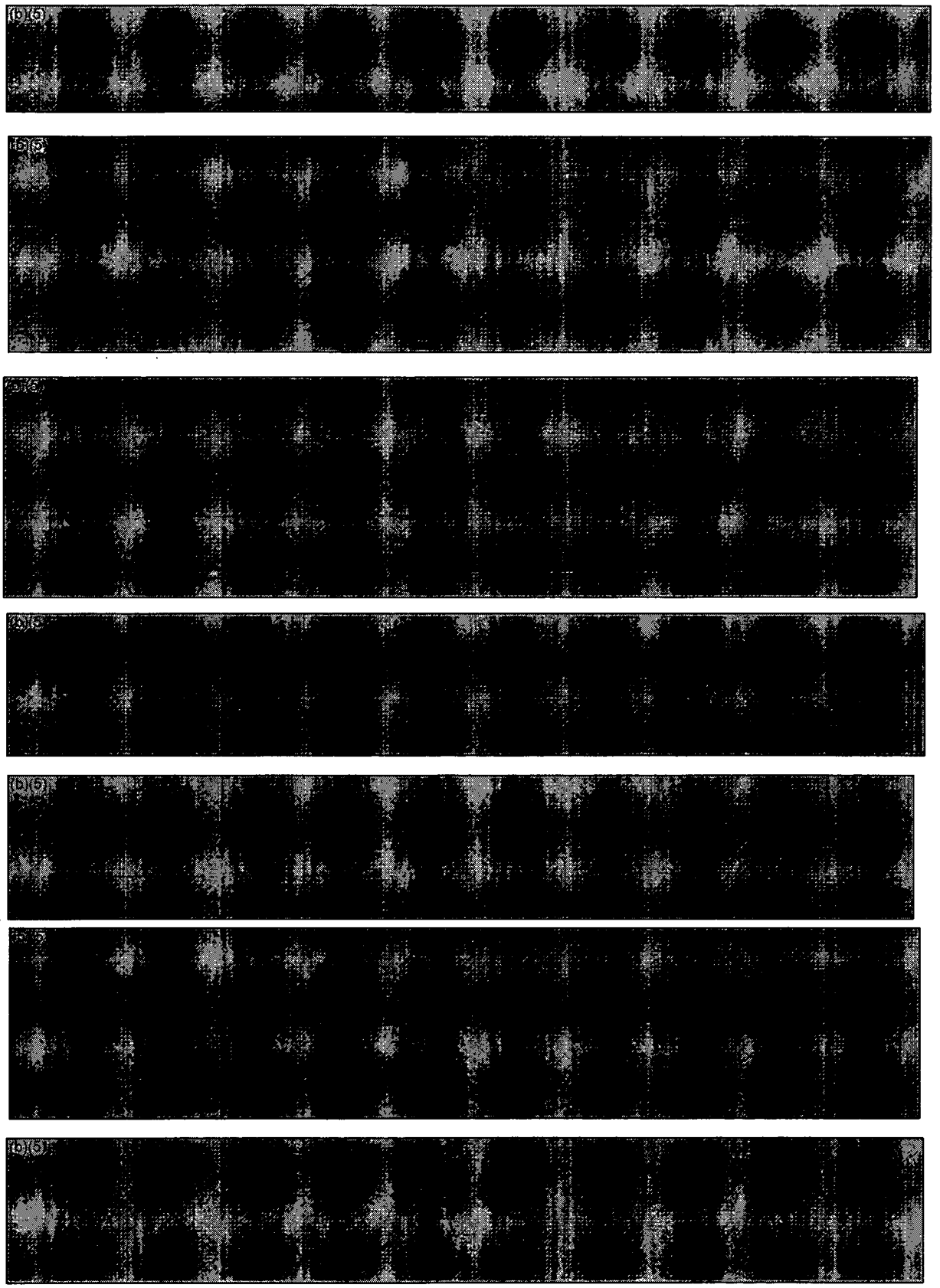

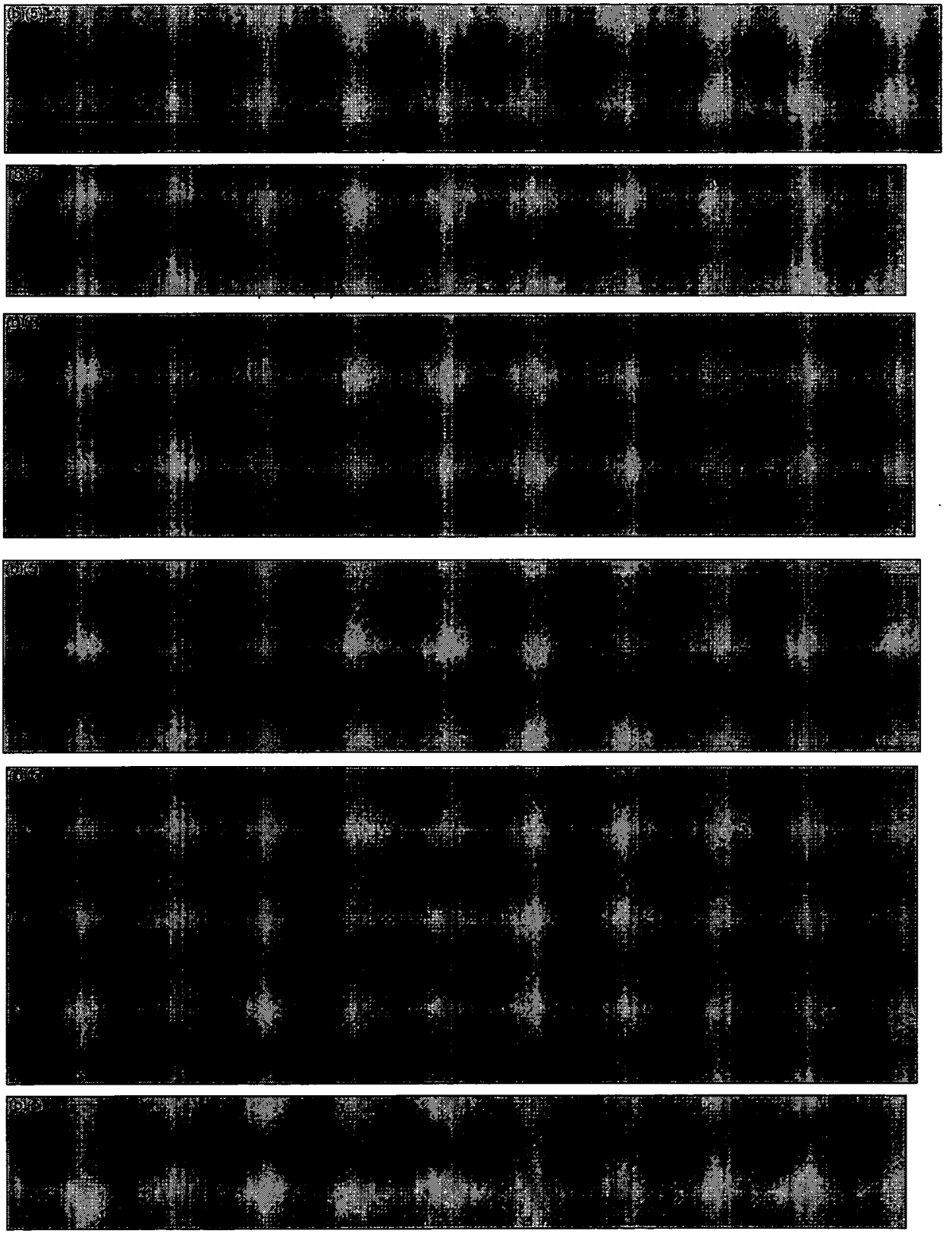

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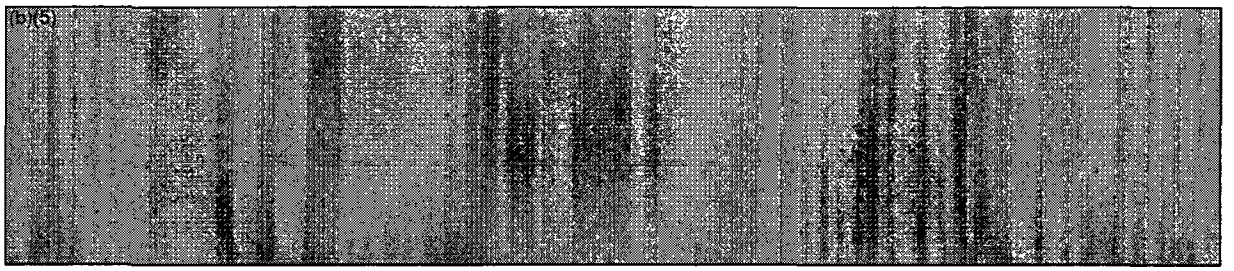
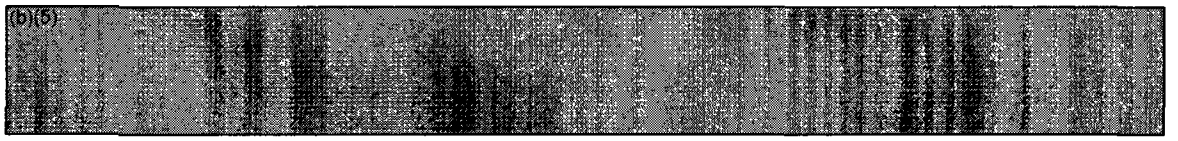


04:00 March 17, 2011 (NRC provides protective action recommendations based on U.S. Guidelines)

(b)(5)



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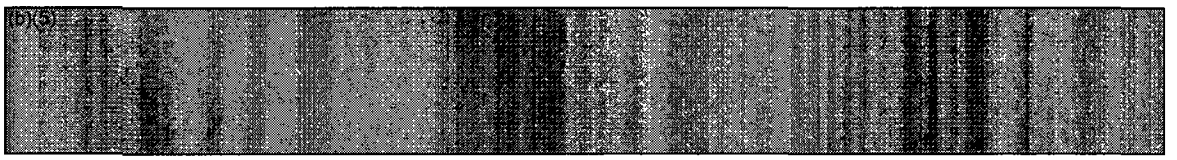

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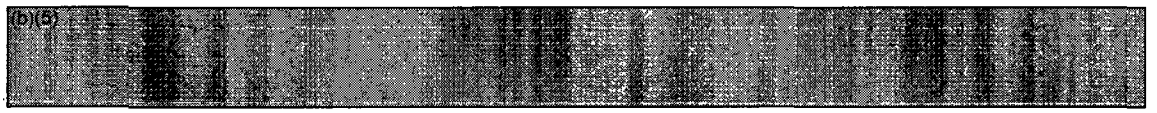

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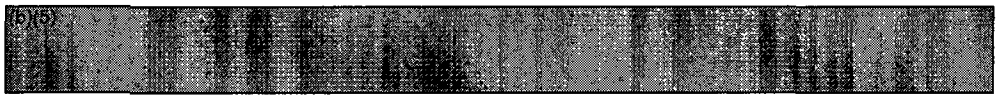

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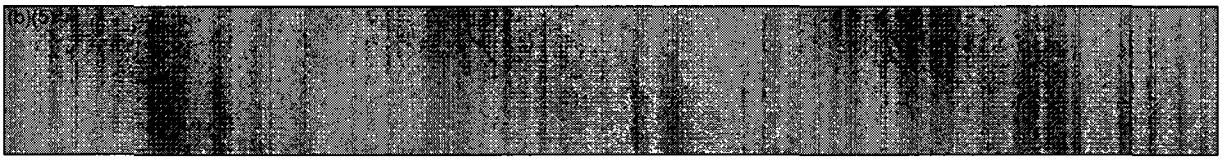

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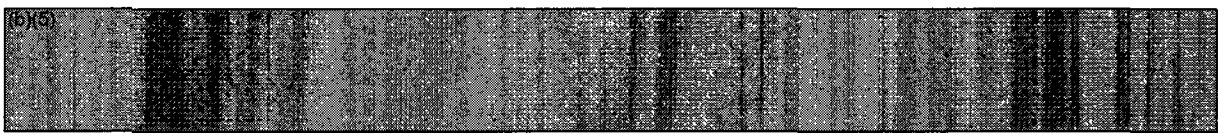

04:00 March 17, 2011 Thursday

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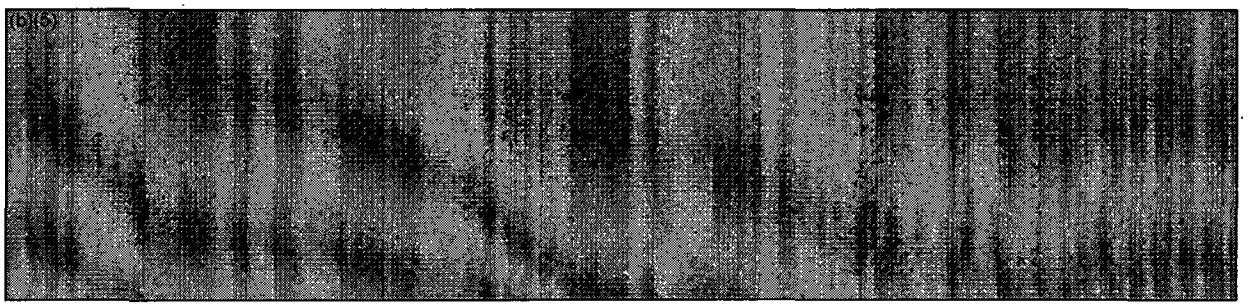

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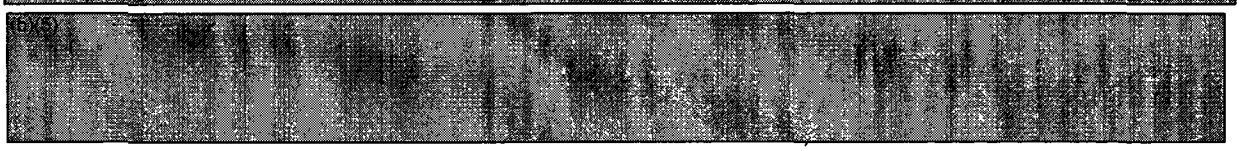
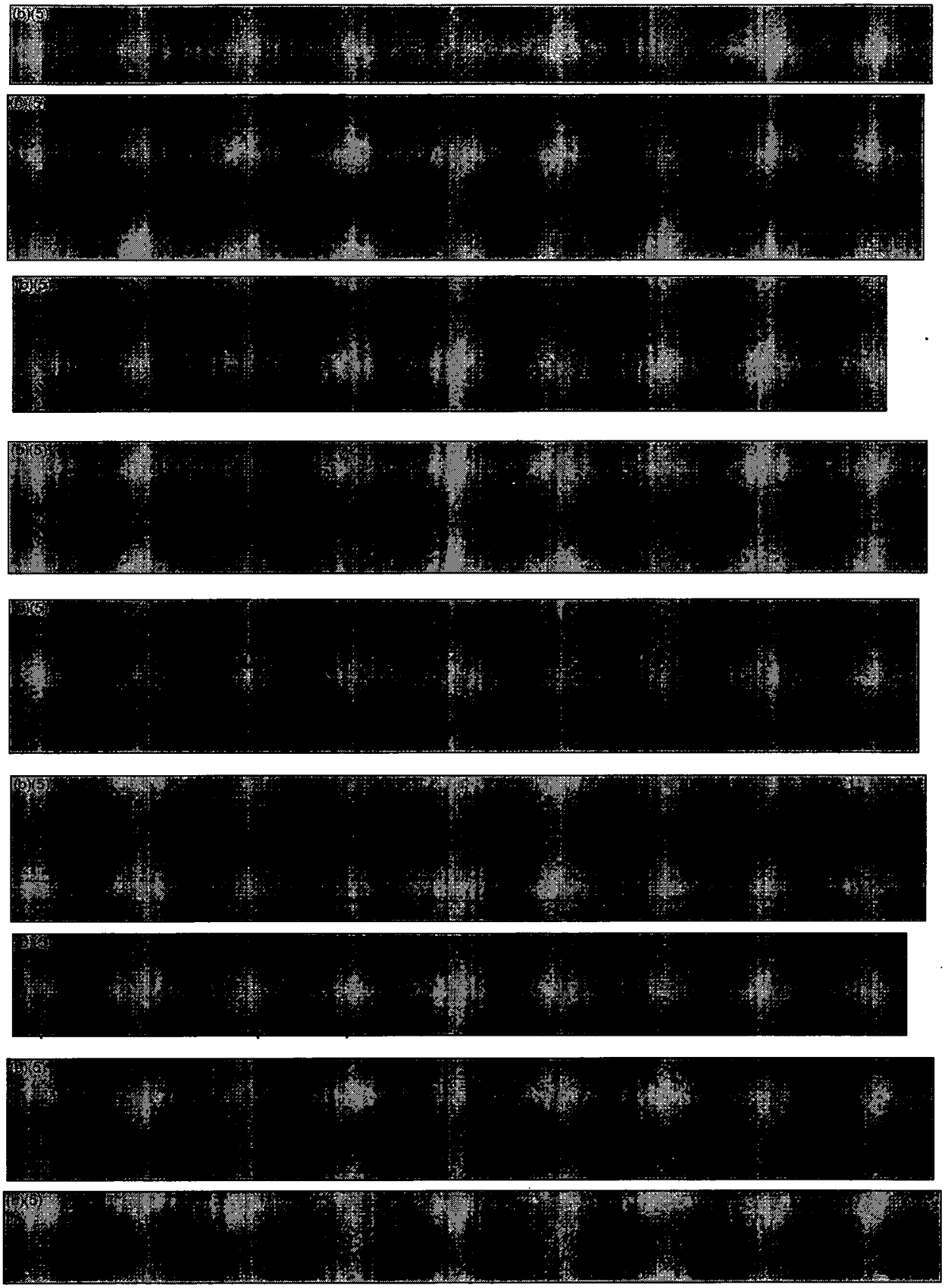
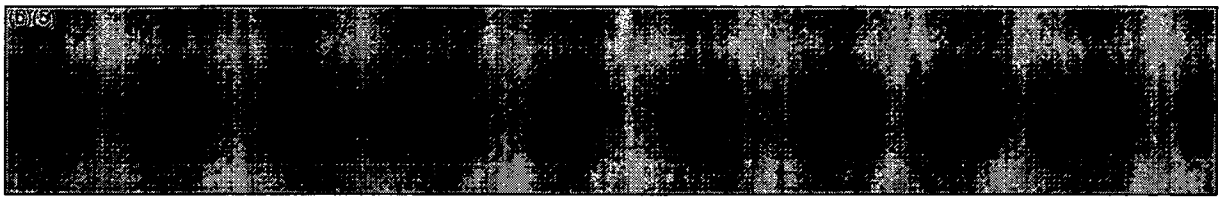
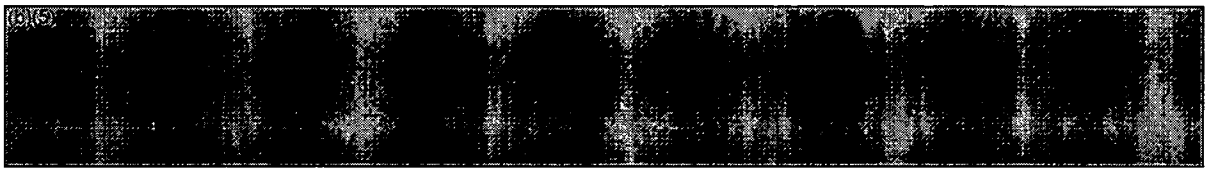
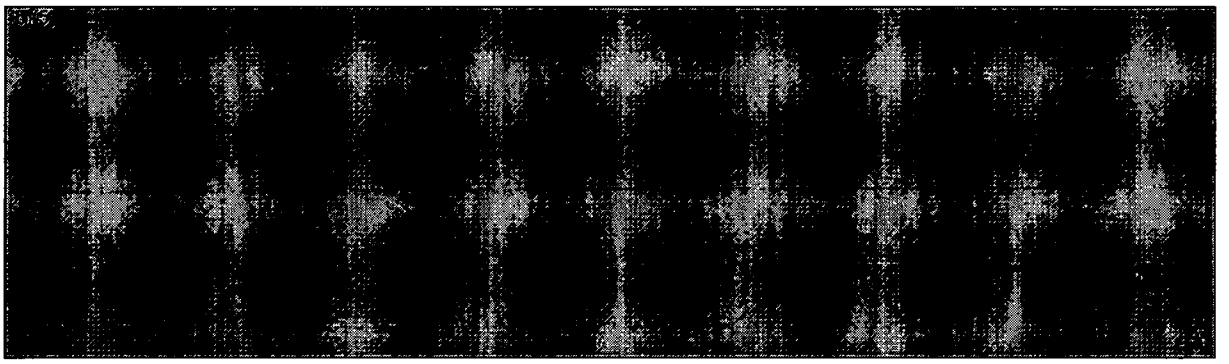


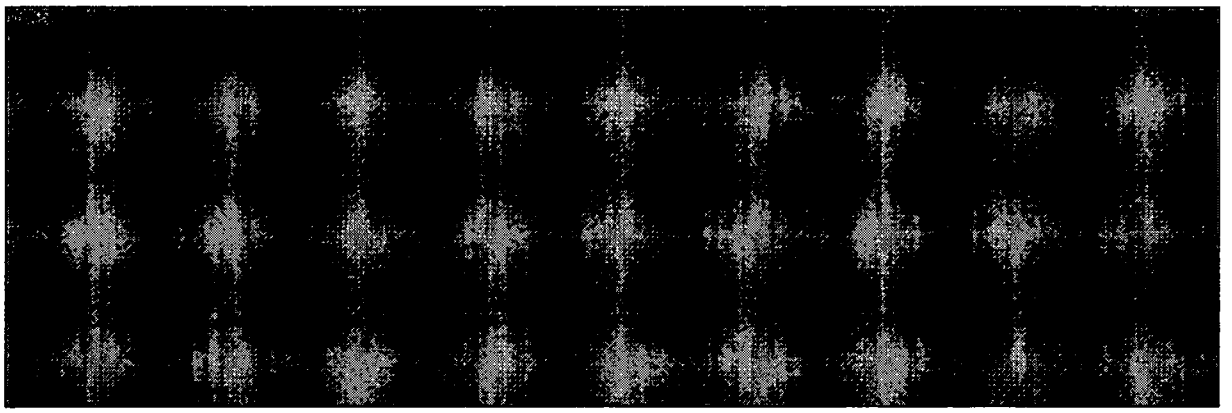




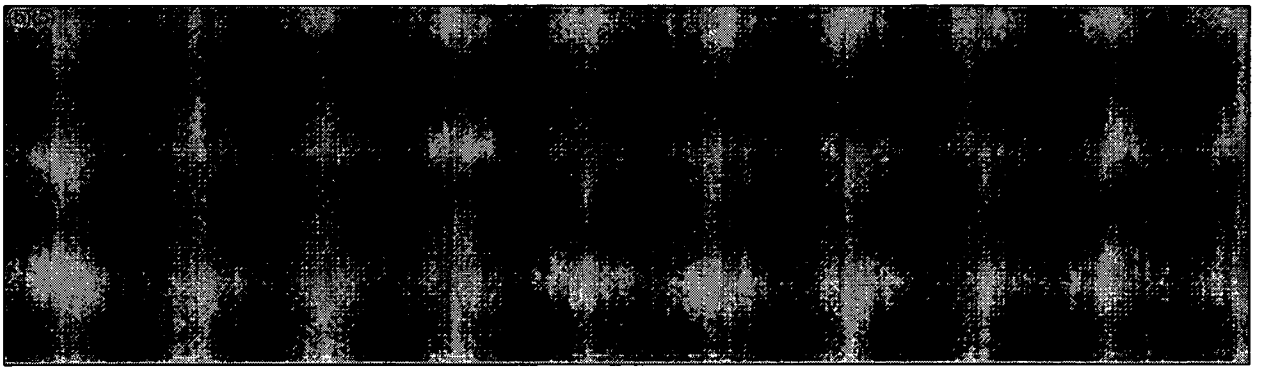
01:00 March 17, 2011 Thursday







22:45 March 16, 2011 Wednesday (Summary of CCS Edano's Press Conference):



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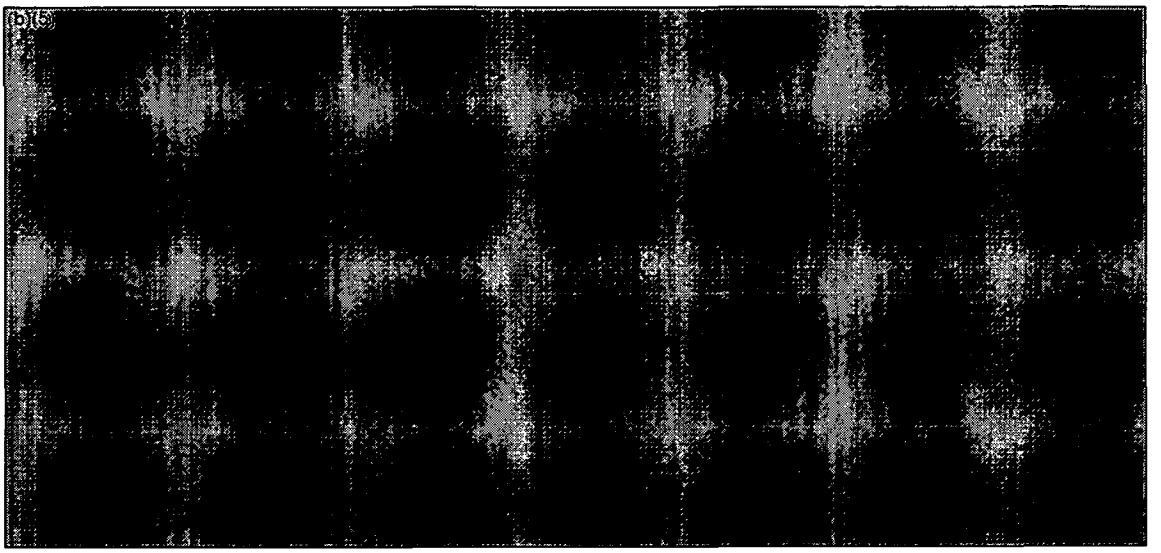

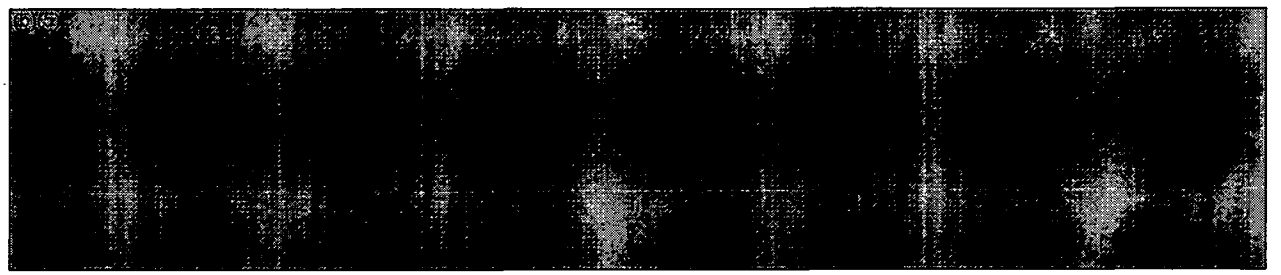

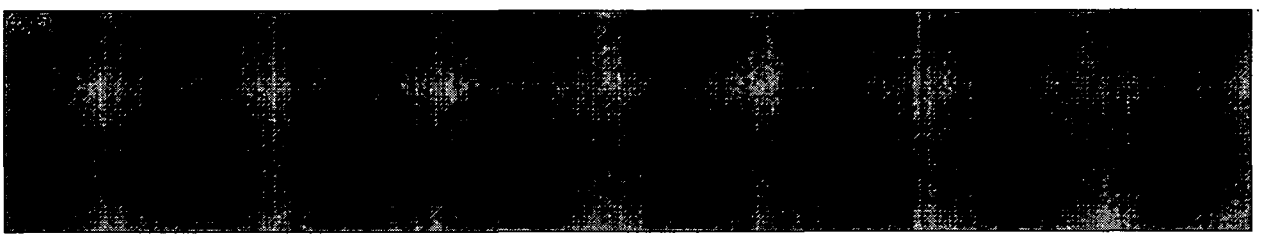

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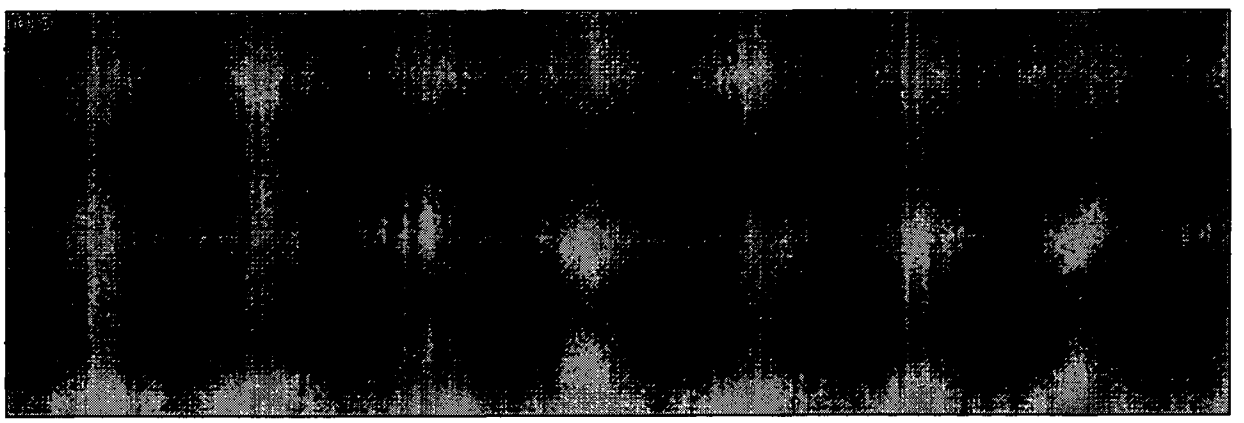
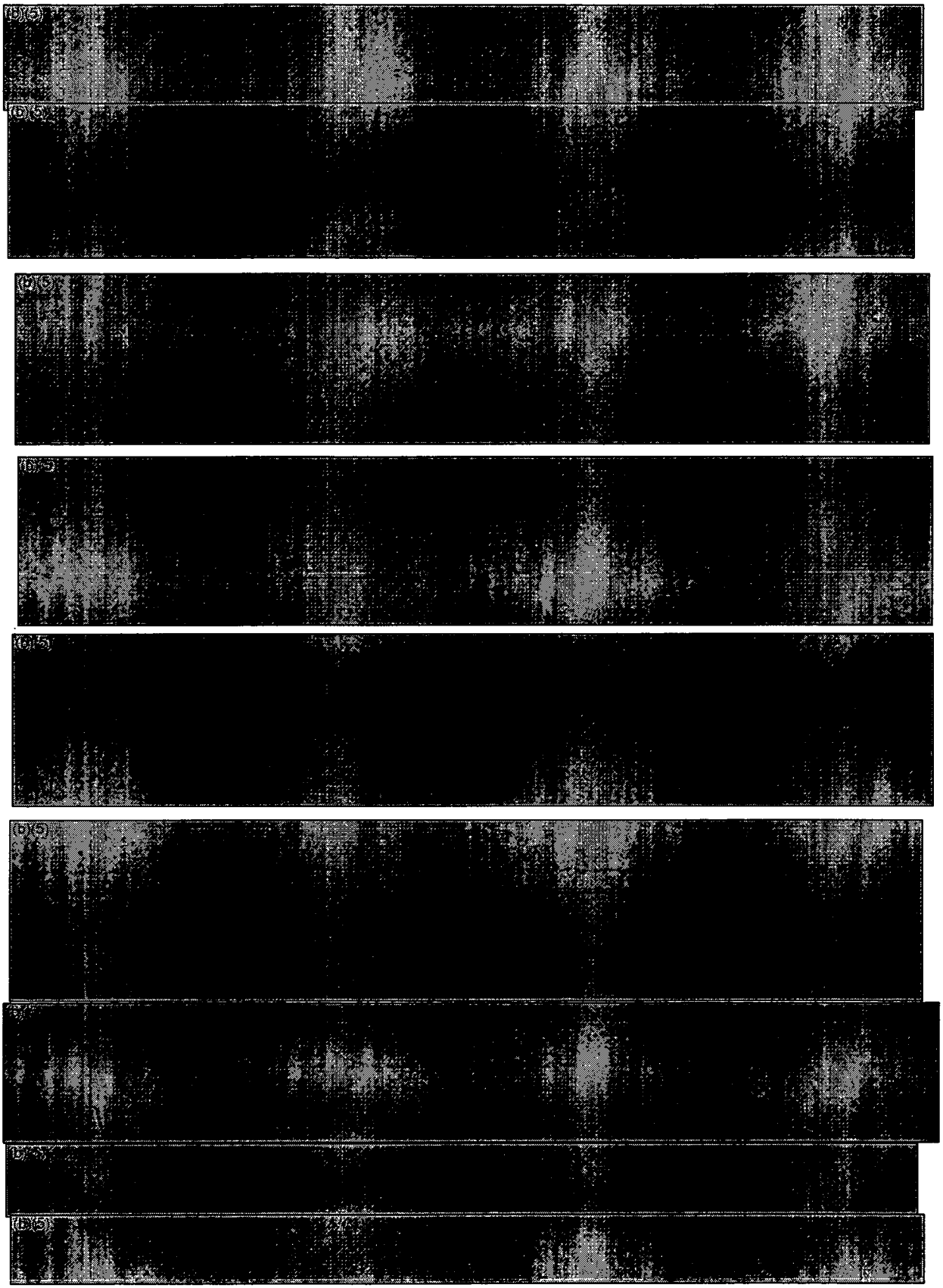
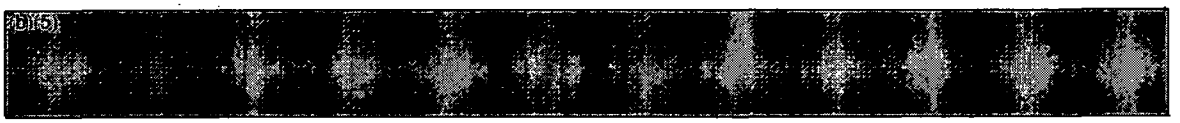
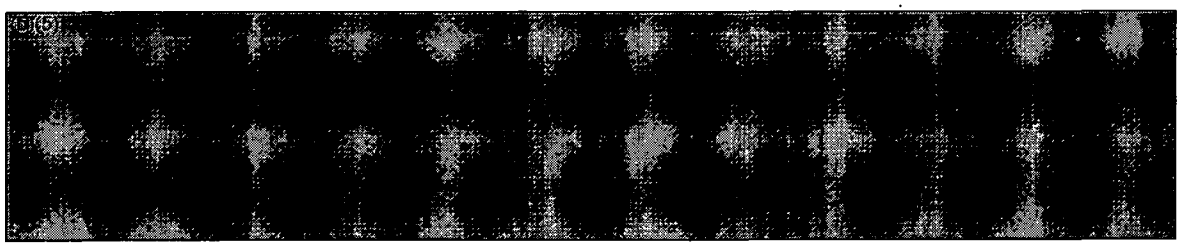
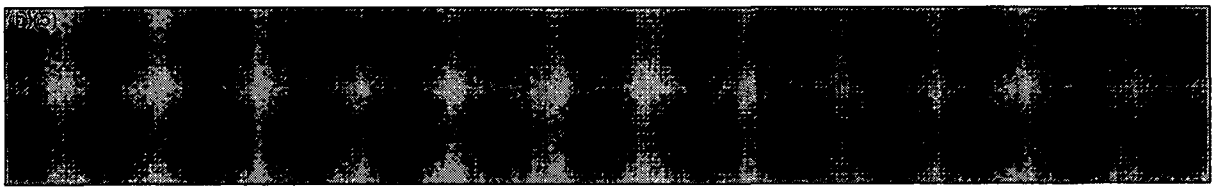
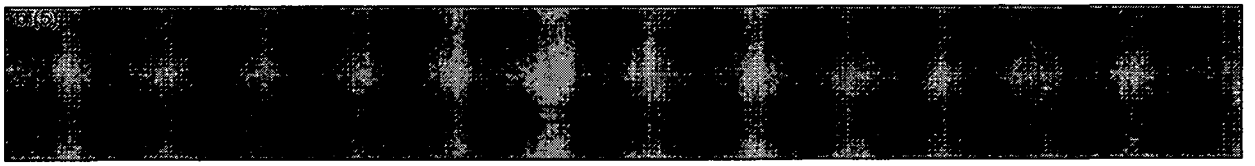


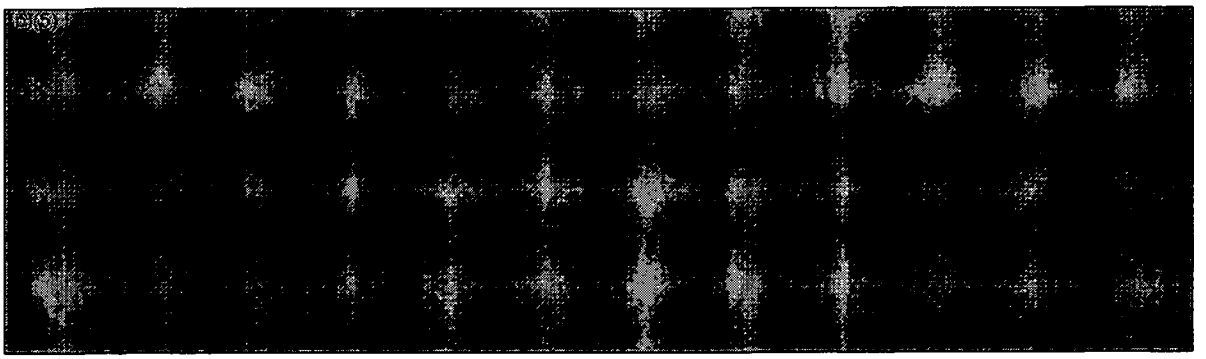


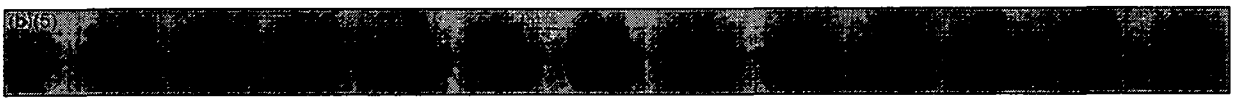


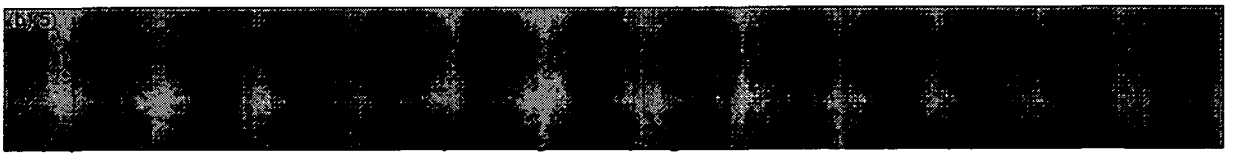


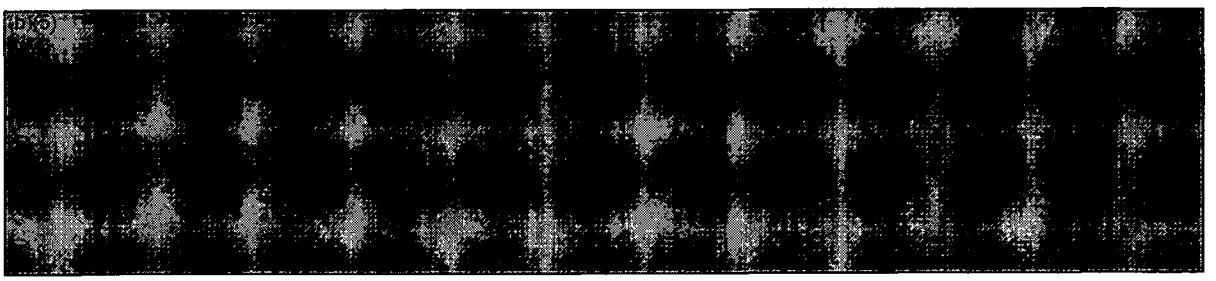




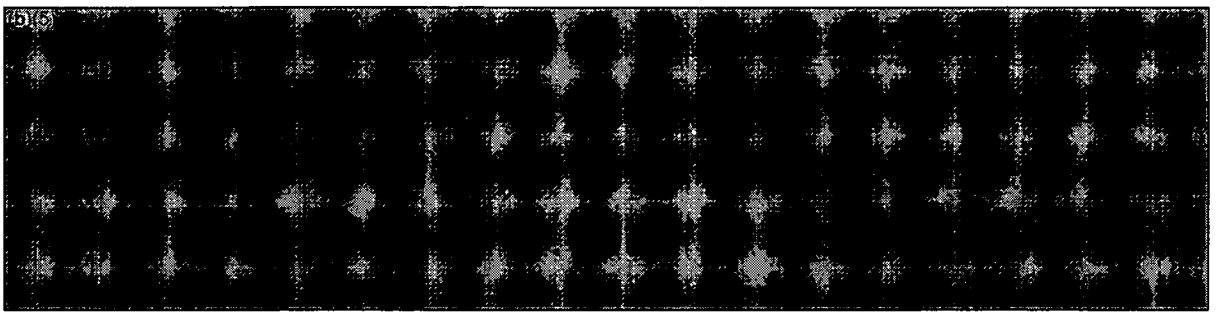
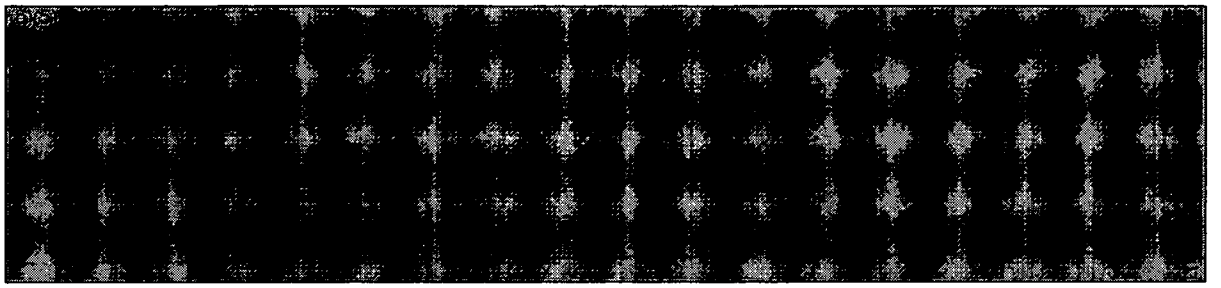
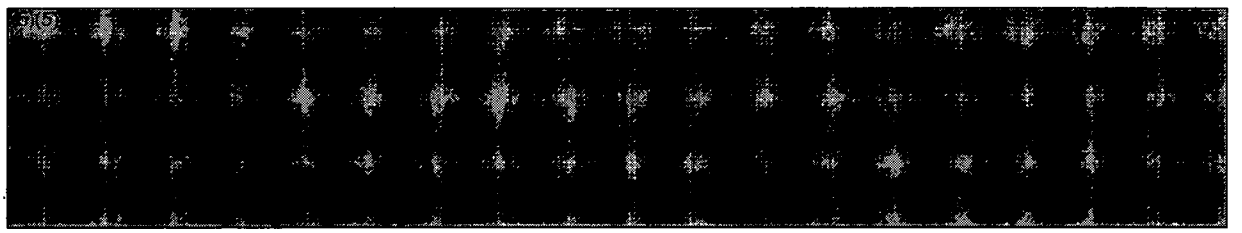
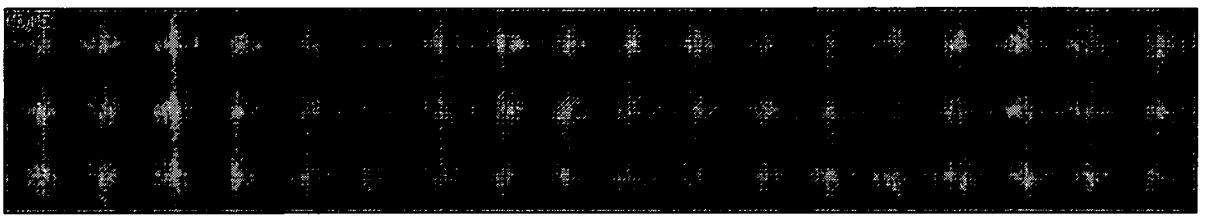
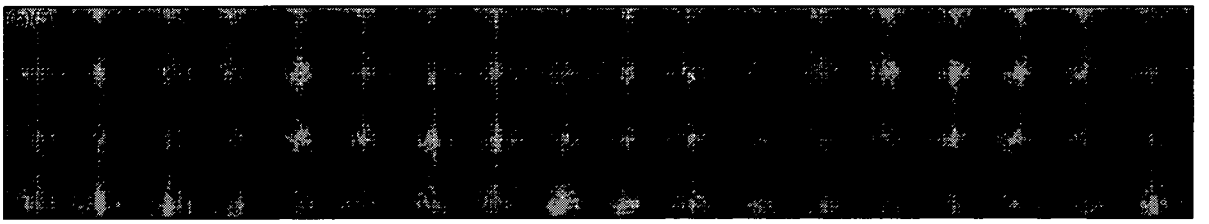


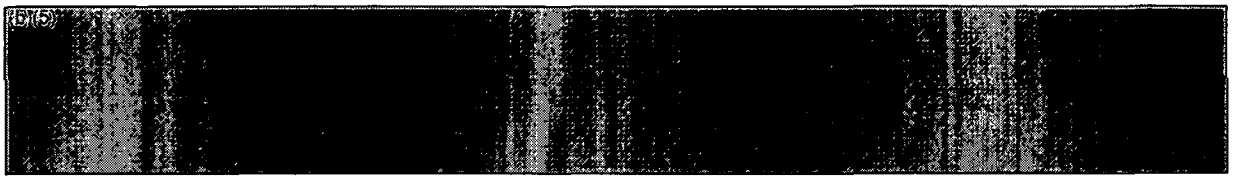






Departure dates have not fixed given the uncertain length/period of the emergency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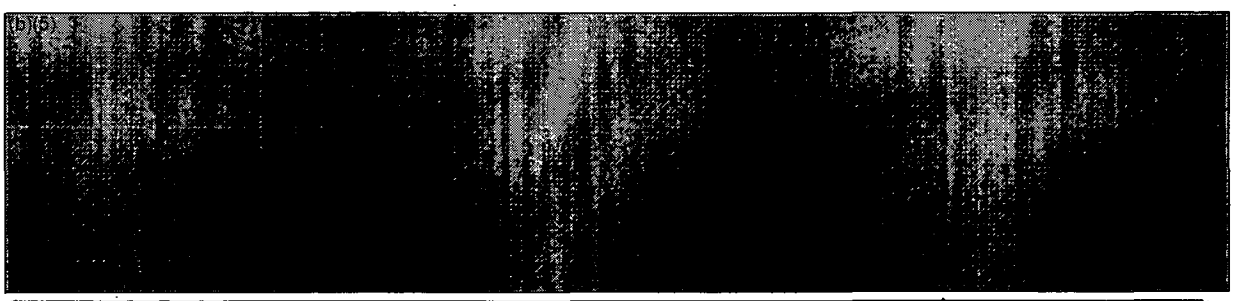
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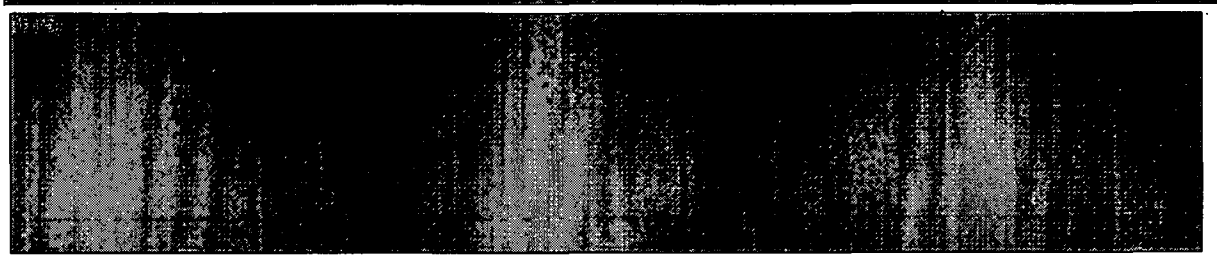

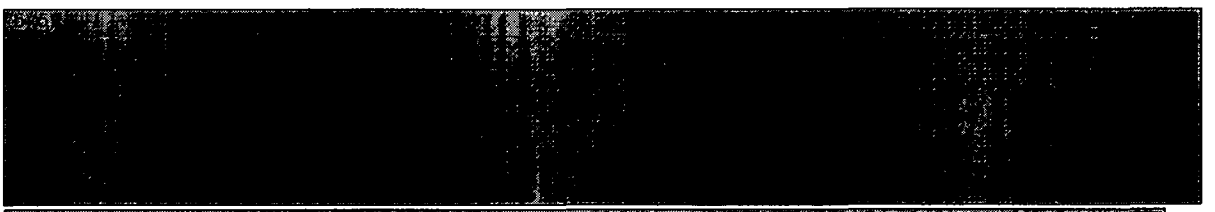

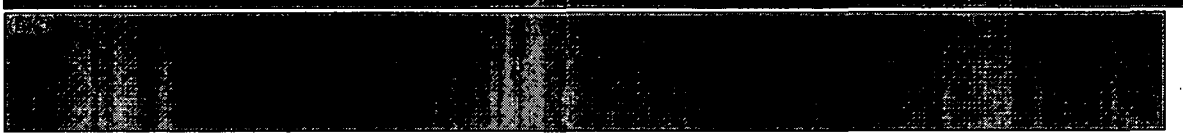

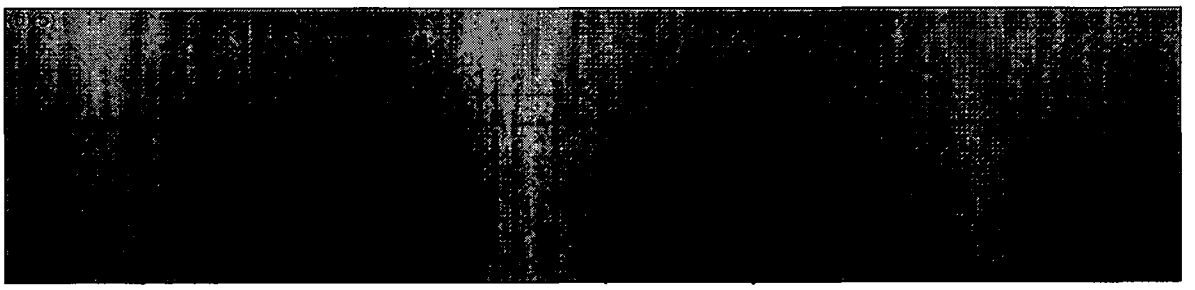

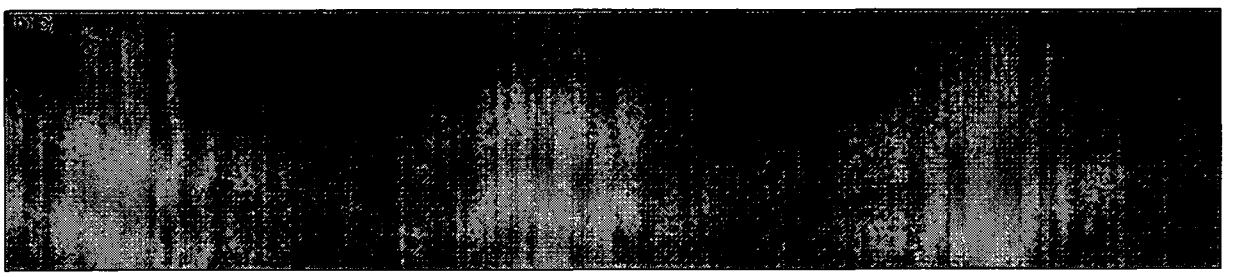

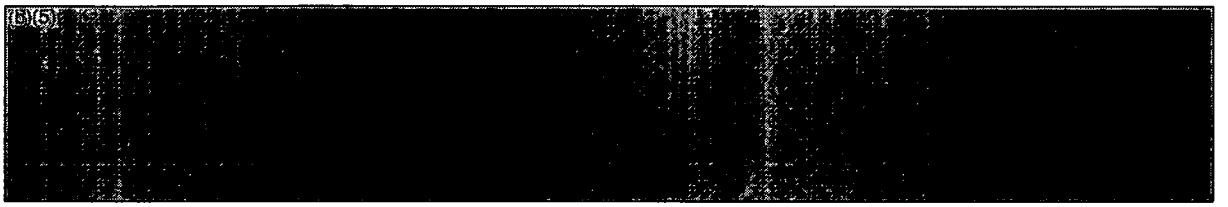

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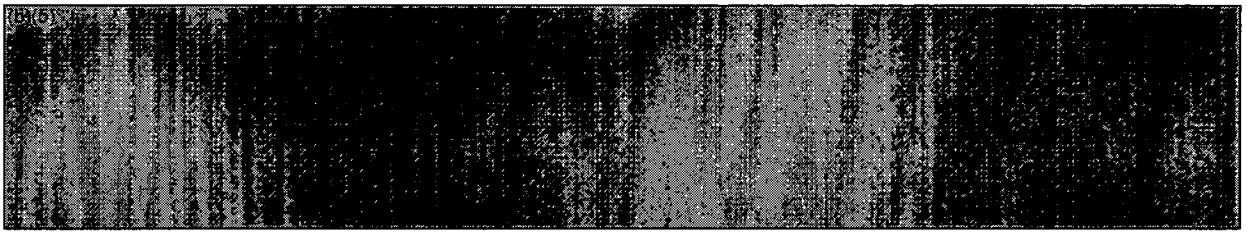

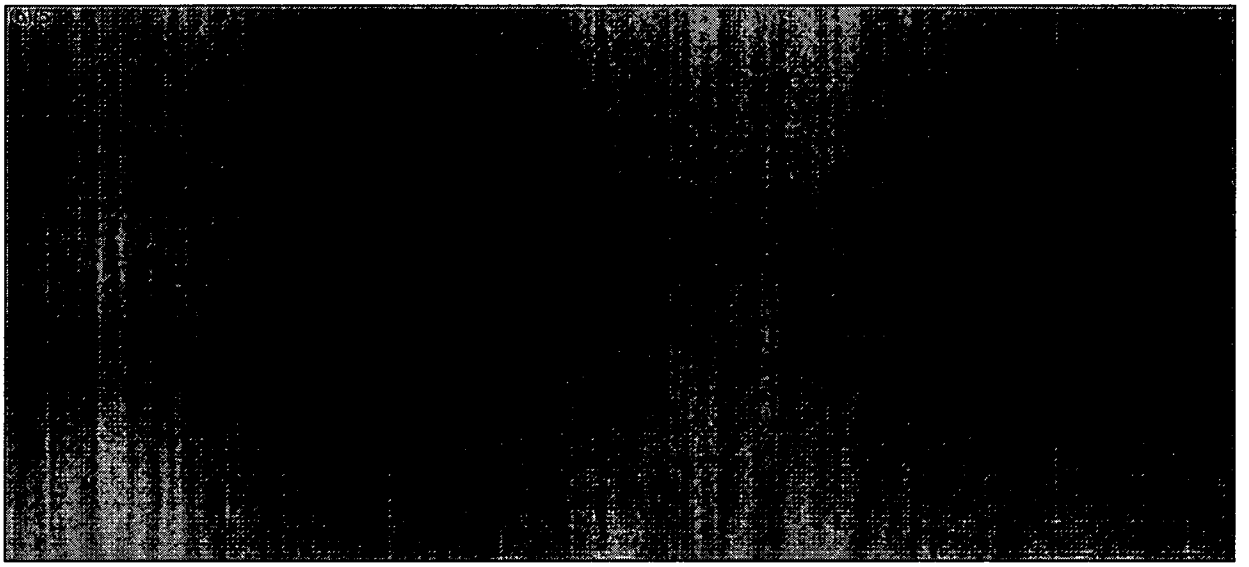

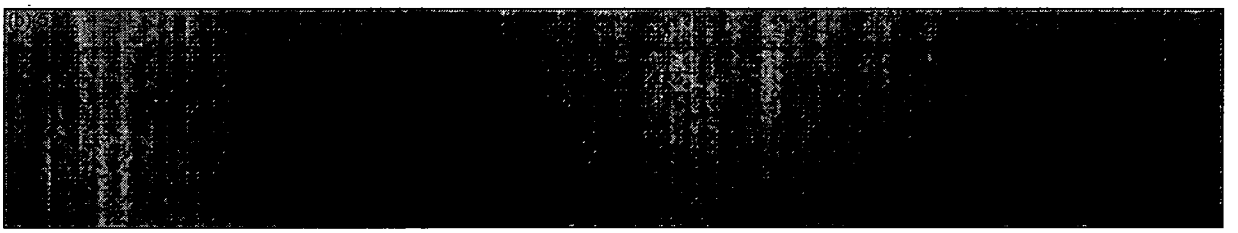

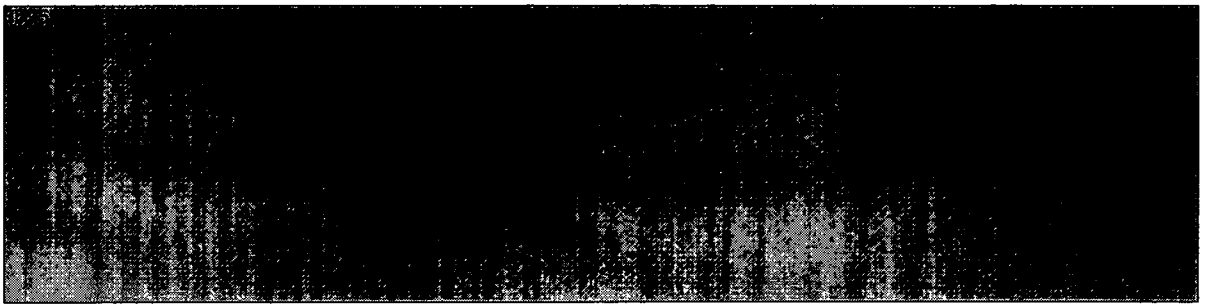

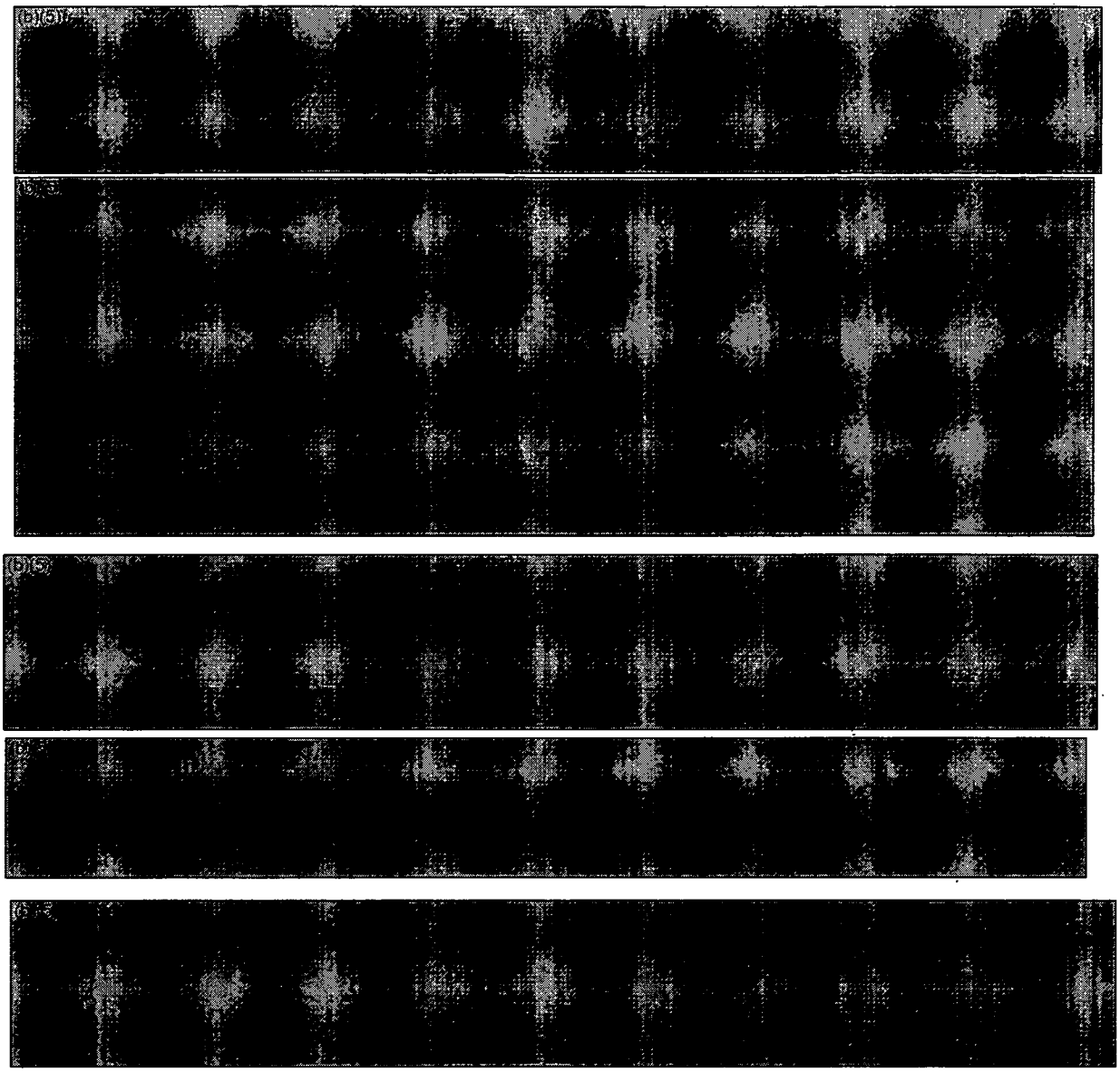

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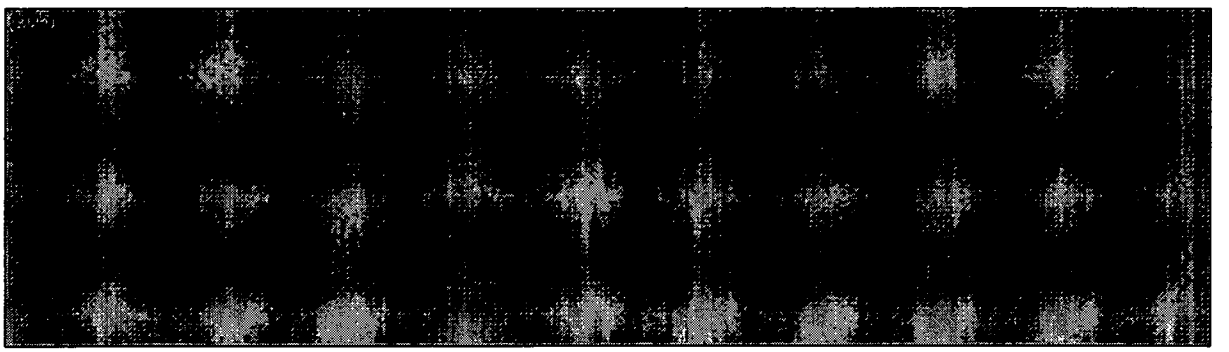

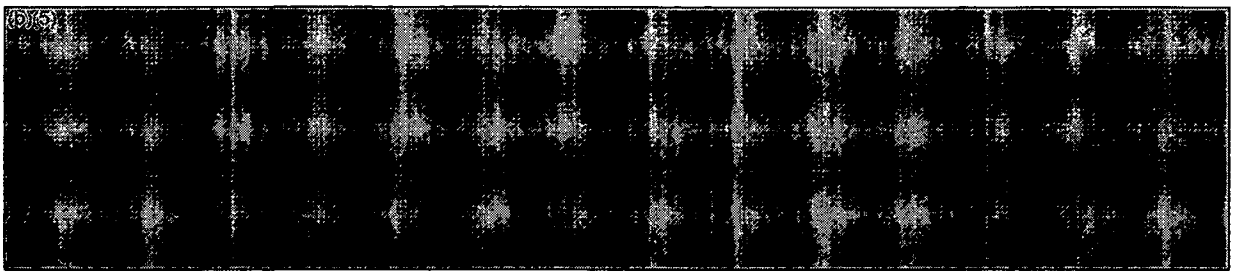

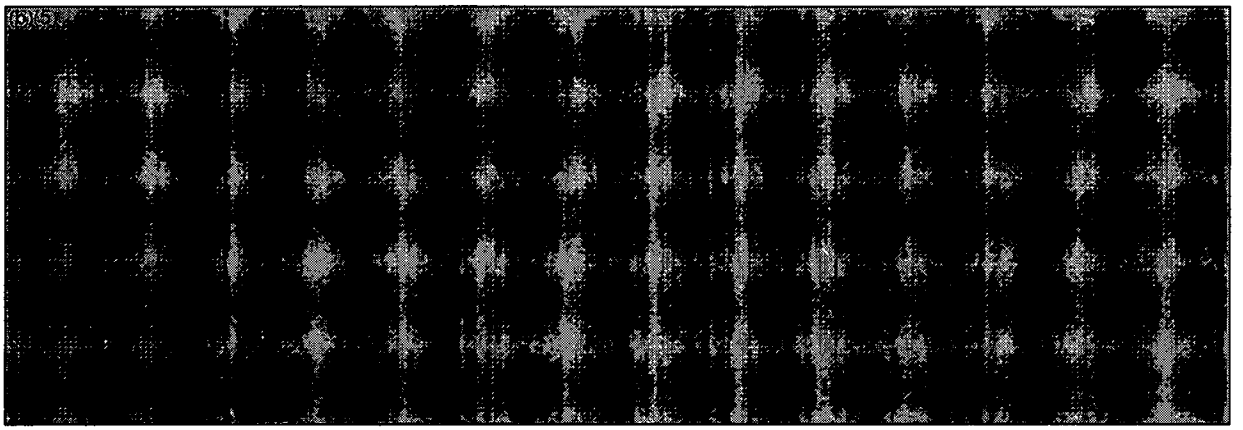

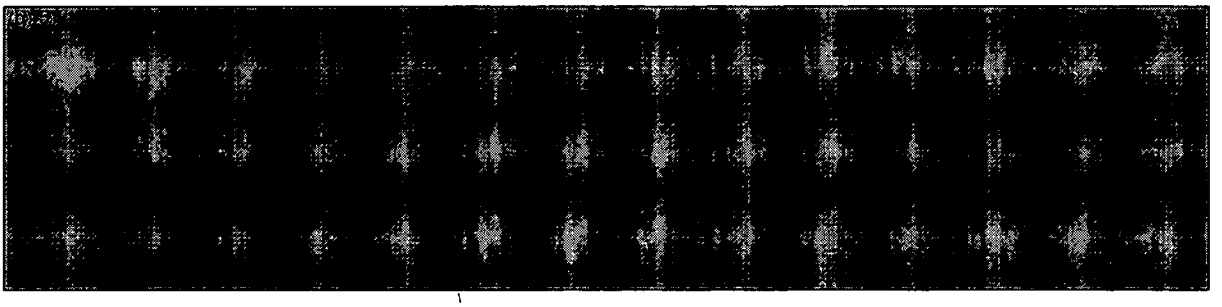

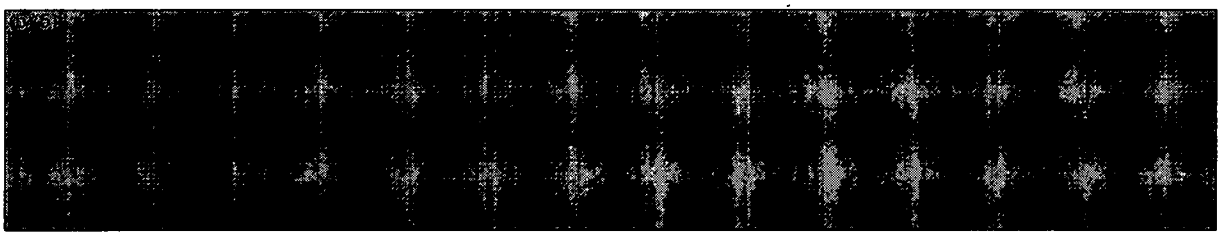

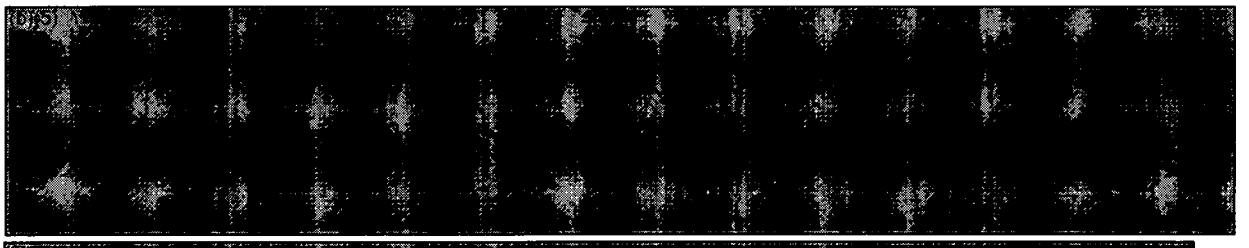

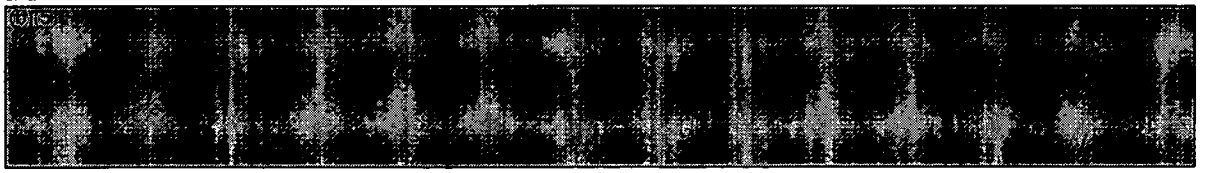

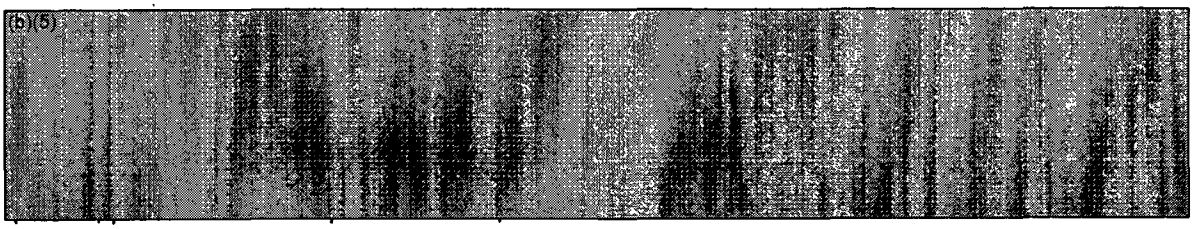

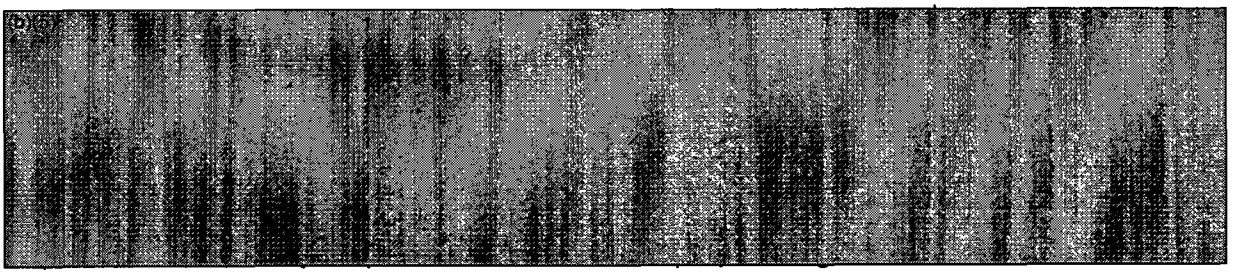

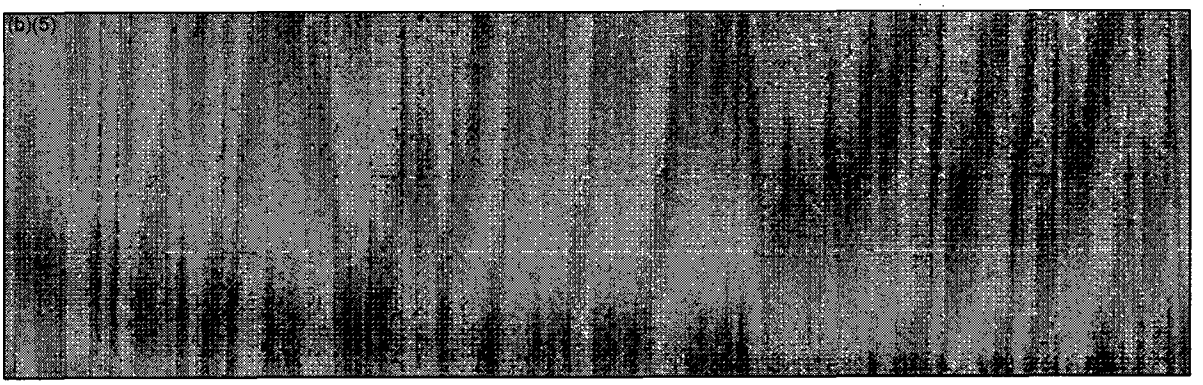

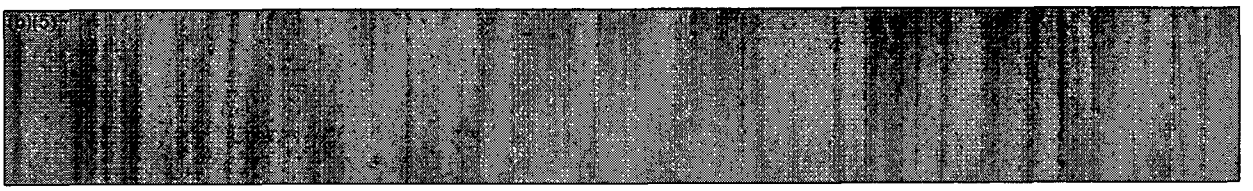

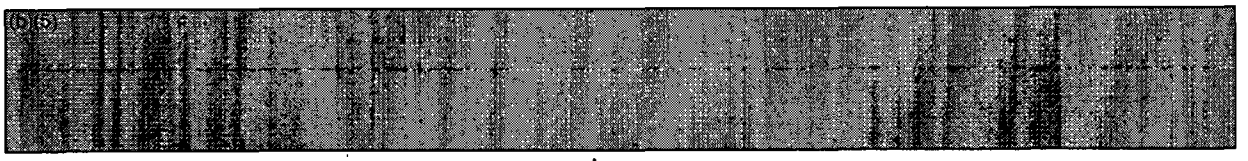

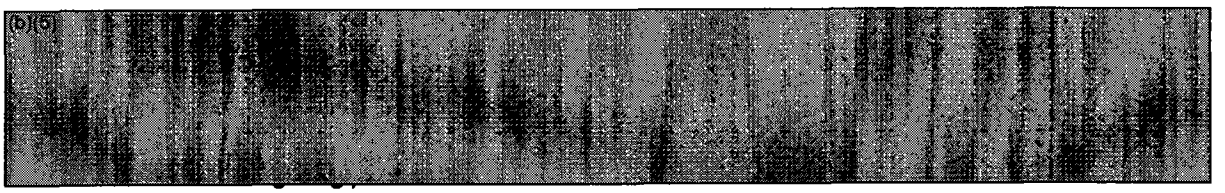

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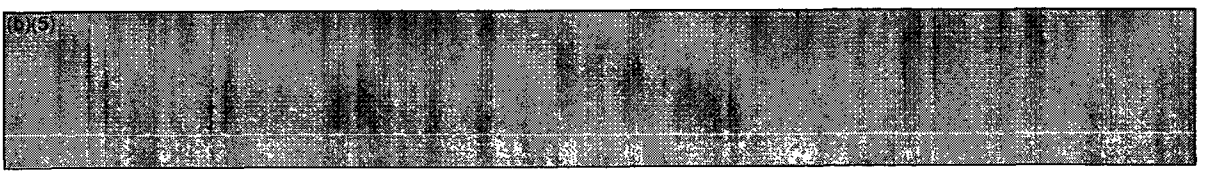

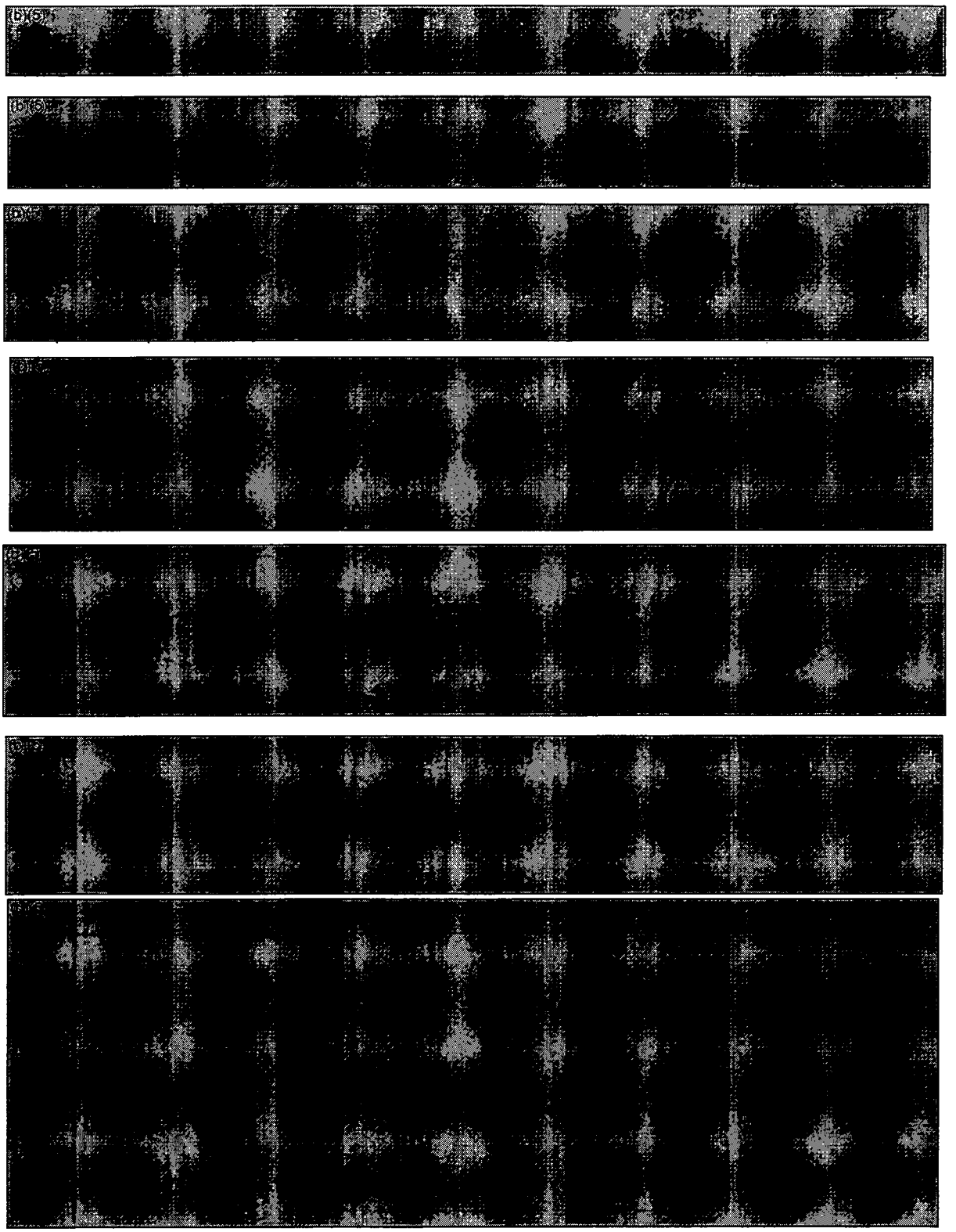

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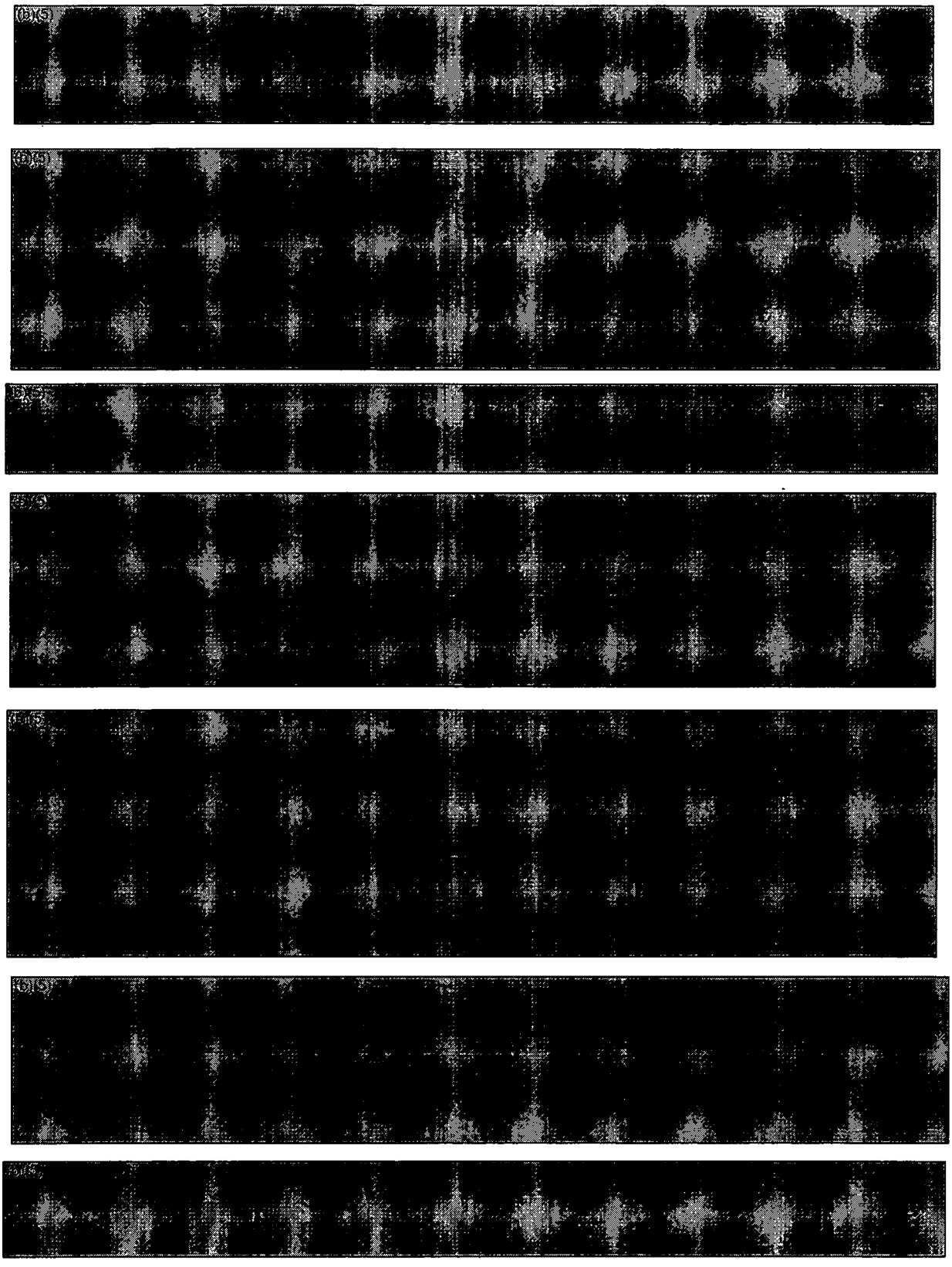

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A few key exchanges:

[redacted]

Weaver, Tonna

From: Magee, Erin K. (DCHA/OFDA) [redacted]
Sent: Thursday, March 17, 2011 8:35 AM
To: DART_PACTSU; RMTPACTSU_RM; RMTPACTSU_PRO; RMTPACTSU_DMO; RMTPACTSU_DMP; RMTPACTSU_INC
Subject: ~~(SBU)~~ 03.17.11 - USAID/DART Japan Earthquake and Tsunami Field Notes #5
Attachments: ~~(SBU)~~ 03.17.11 - USAID-DART Japan Field Notes #5.doc

~~-- U.S. Government Only --~~

Please Note: This is for information purposes only. Please do not distribute outside of the RMT or DART.

USAID/DART Japan Earthquake and Tsunami Field Notes #5

03.17.11

Nuclear Issues

- ~~(SBU)~~ [redacted]
- ~~(SBU)~~ [redacted]
- [redacted]
- ~~(SBU)~~ [redacted]

Safety and Security

[redacted]

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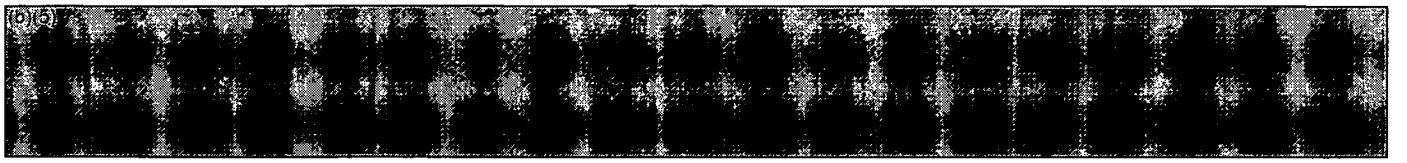
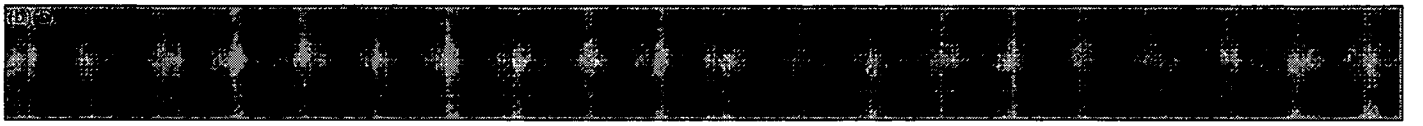
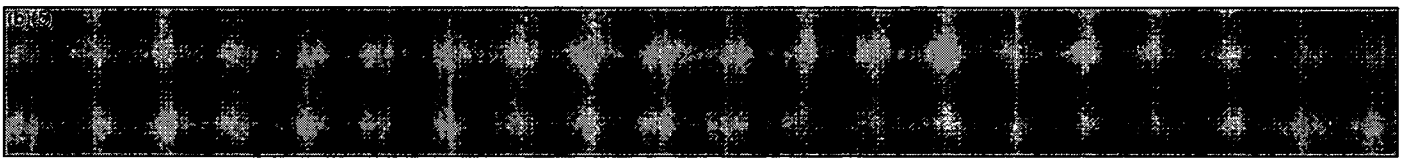


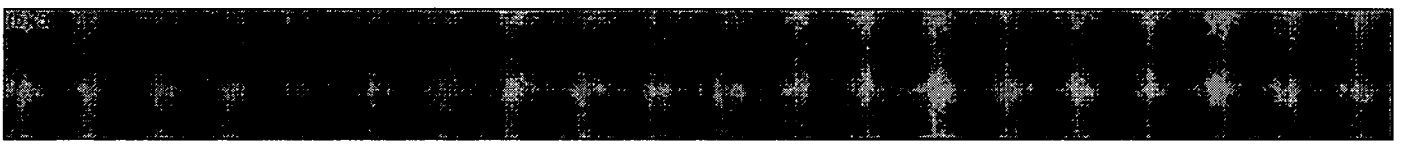


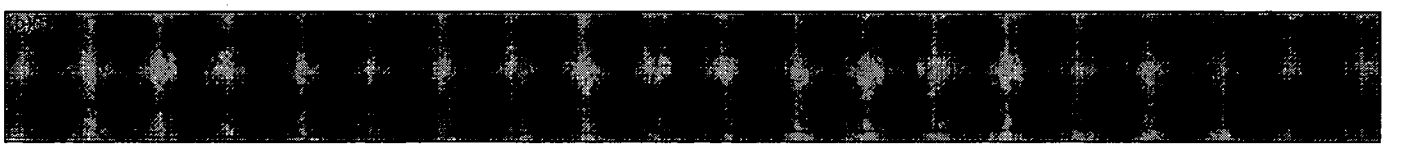
Urban Search and Rescue

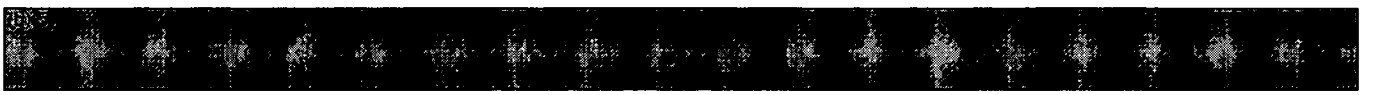


Humanitarian Situation

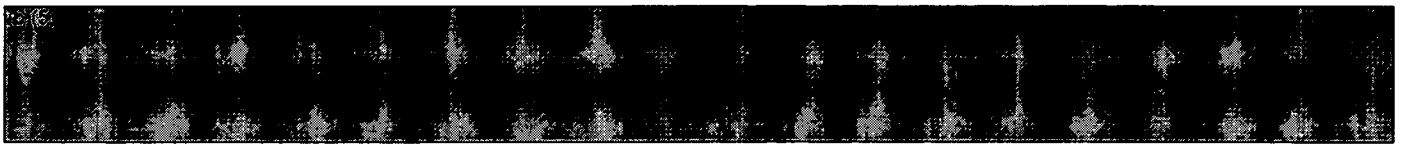
USAID/DART Assessment

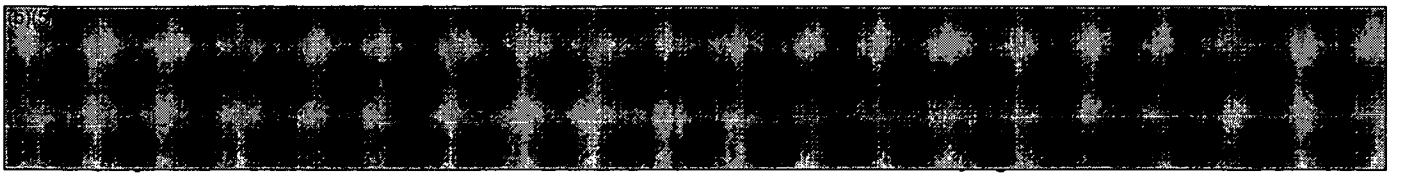






Affected Population





(b)(5)

Humanitarian Needs and Response

(SBU) (b)(5)

(b)(5)

(b)(5)

(b)(5)

(b)(5)

Health

(b)(5)

(b)(5)

Logistics

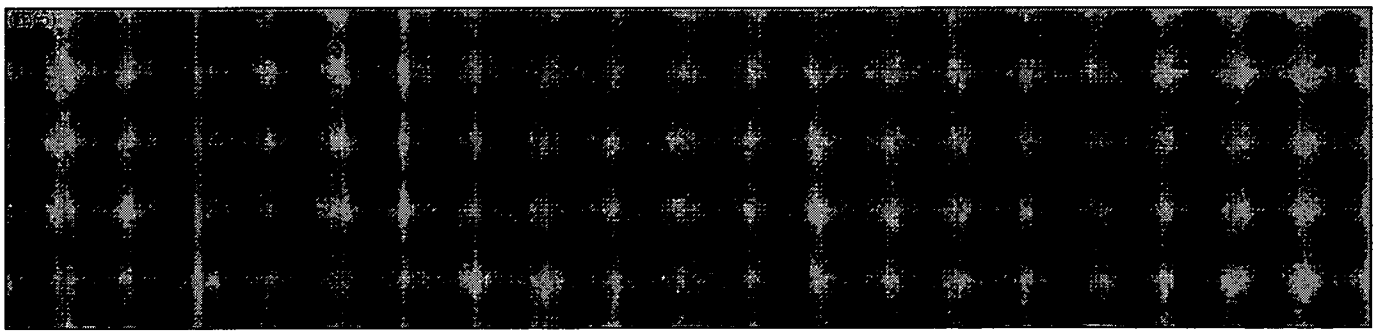
(b)(5)

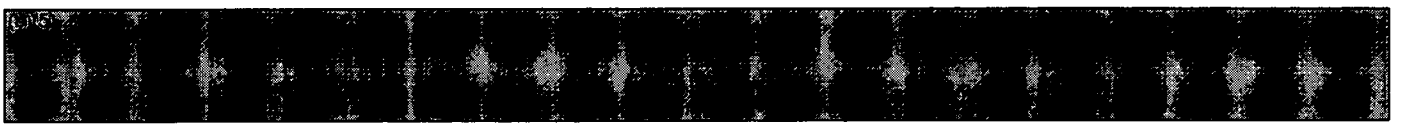
Erin Magee
Information Officer

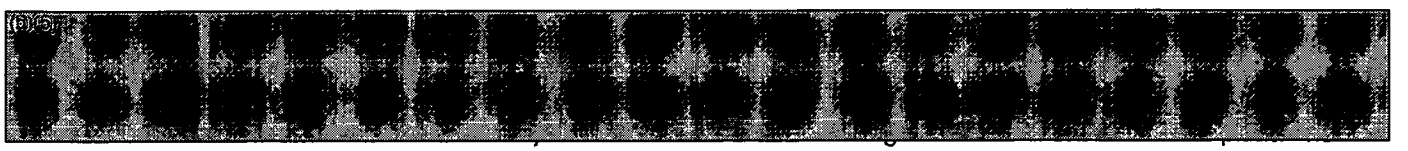
USAID Disaster Assistance Response Team (USAID/DART) Japan Earthquake and Tsunami Cell Phone: [redacted]
Email: [redacted] emagee@usaid.gov

Weaver, Tonna

From: Ou, Andrew H [OuAH@state.gov]
Sent: Thursday, March 17, 2011 8:56 PM
To: Ou, Andrew H; JapanEmbassy, TaskForce; Whitney, Thomas C; Masuda, Tracy L; Dudley, Katherine F; Sim, Hyon B; Mears, Jeremy M; Lee, Ti-Ying; Ryan, Emmett Jerome; Hotz, Raymond E; Chen, Perry Y; Burleson, Edward C; Wakahiro, Gary S; Utschig, Andrew S; Bernier-Toth, Michelle; Fitzgerald, Paul M; Zareski, Karen B; Shelbourn, Brian L; Cubas, Jason R; Christopher, William W; Kaneshiro, Claire K; Greene, Raymond F; Stewart, Jonas D; Ries, John N; Dong, Edward K; Jenks, Darrell A; Washburn, Lisa L; Tokyo-Visa-Officers-DL; Roos, John; Luke, Robert S; Ries, John N; Dong, Edward K; Stewart, Jonas D; Greene, Raymond F; Cubas, Jason R; Fuller, Matthew G; Basalla, Suzanne I; Hinds, Lynda J; sroos@cookroos.com; Cherry, Ronald C; Dresser, Heather L (EAP/J); TOKYO POL All; Wood, Robert A; Nawn, Jeff; Angelov, Bonnie A; Kelley, Karen D (IO/Tokyo); (b)(6)
Cc: Zumwalt, James P; Chipman, Alan R; Engstrom, Aaron; Forbes, James A; Martin, Timothy W; Rathweg-Weitz, Abbey H; Whitten, Richard V; Young, Joseph M; Operations Center; Young, Joseph M; Lyons, Thomas H; CA-Taskforce; Snider, Marc A; Kaneshiro, Claire K; SES-O; SES-O_CMS; Lyons, Thomas H; Snider, Marc A; Yoo, Donny H; Tomlinson, Christina; Roberts, Richard M; Kaneshiro, Claire K; Avecilla, Juan T; Chadwick, Michael J; Dieker, Mark S; CA-Taskforce; Ponce, Timothy F; Korff, Meena F; TaskForce-1; CA-Taskforce; Brown, Benjamin A; Wuebbels, Mark C; Osaka-Kobe All State Americans; Sapporo ALL; Naha All; Fukuoka Americans; Nagoya-Americans-DL; Yokohama-FSI-DL; TOKYO ECON Americans; Tilman, Justin E; justin.tilman@nasa.gov; Sakurai, Joy M; Stewart, Bruce J; Sauer, (b)(6) Morales, Russell A; russ@earthtabi.com; lia.hoc@nrc.gov; (b)(6) Weinhold, Laura M (Jamie); Maw, Aye Aye; Clever, Thomas S (Scott); Japan-Embassy-Task-Force-DL; Huff, Michael P; Kaproth, Robert K; Robert.Kaproth@treasury.gov; Mace, Casey K; Duncan, Aleshia D; Cherry, Ronald C; Damian.Peko@Nuclear.Energy.gov; (b)(6) aleshia.duncan@nuclear.energy.gov; edward.meginnis@nuclear.energy.gov; King, Terri L; Hefner, Timothy B; Tanaka, Rodney S; Napier, Bradford; Till, Laura A; Walsh, Cody C; Brunette-Chen, Rachel; Toko, Kenichiro (Ken); Huntington, Miki T LTC USA USFJ J54; Kimura, Ayako; Toledo, Ana Y; Oikawa, Yufuko; Basalla, Suzanne I; Luke, Robert S; Zumwalt, (b)(6) Wiltse, Jeffrey S COL USA USFJ J5; Epstein, Daren A GS-14 USFJ J5; Caballero, Leo F LTC USA USFJ J52; Tran, John D Maj USAF USFJ J5; Nylin, John D (TDY/POL); Nylin, John D; TaskForce-3
Subject: 1000 Mar 18 - Running Update on Japan Emergency (running file attached)
Attachments: 2011-03-18 running updates on Japan emergency with times 1000 - Mar 18.docx







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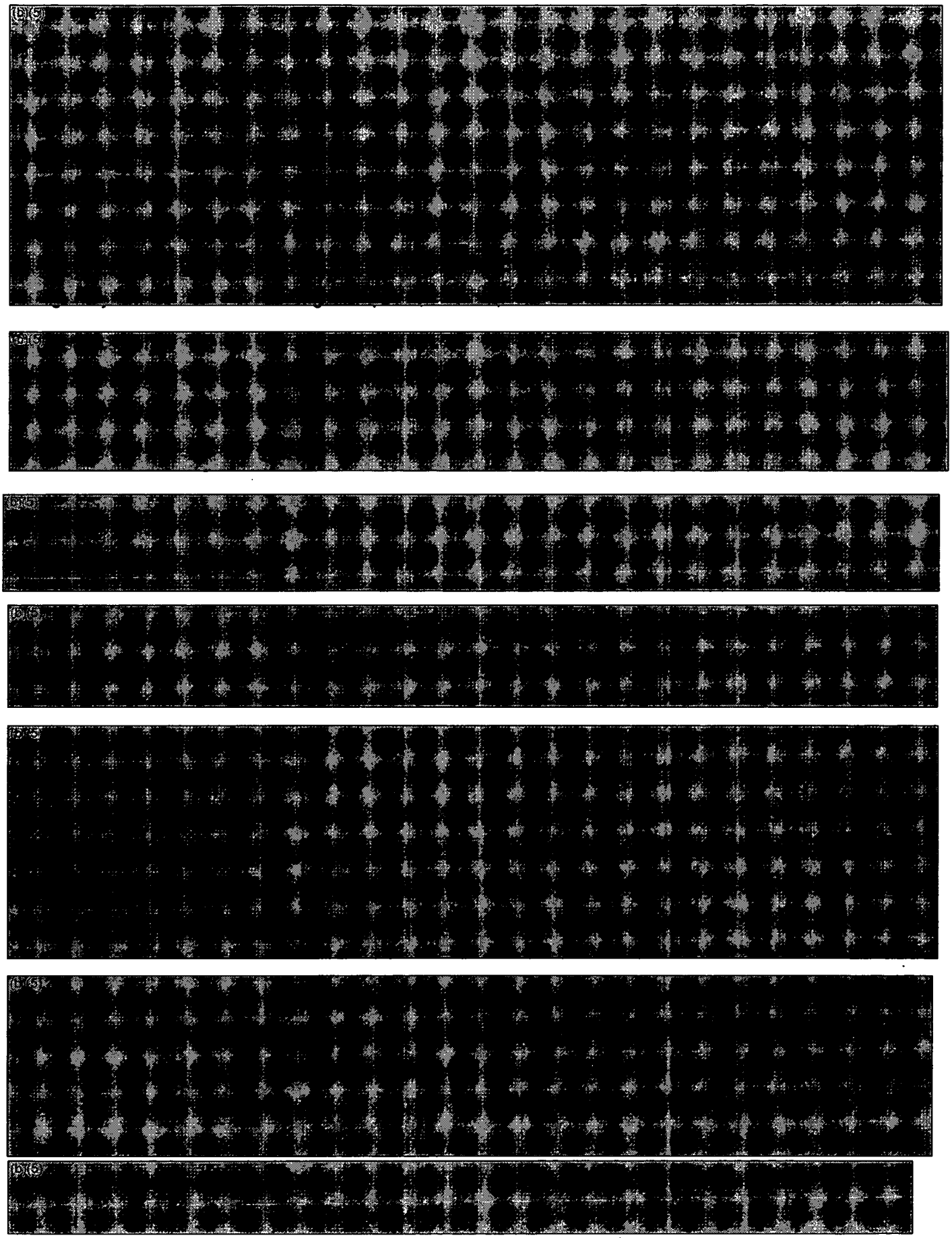
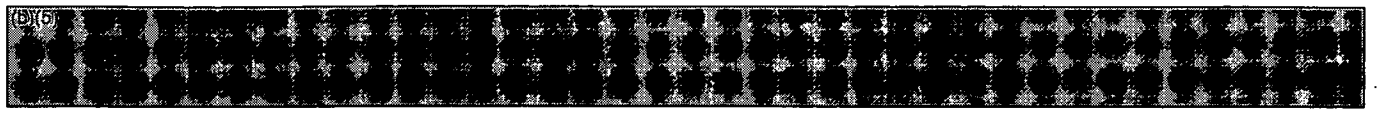
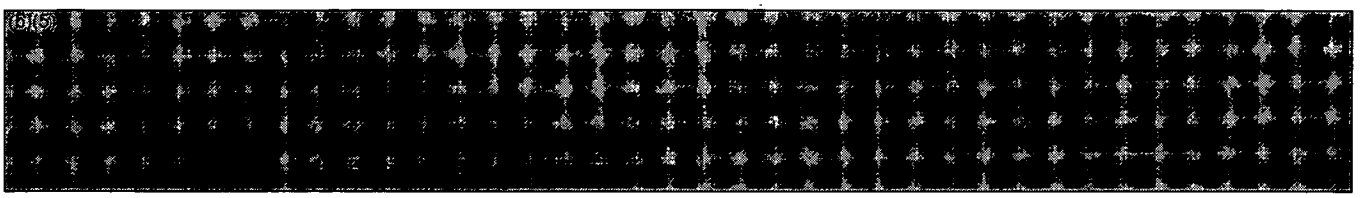
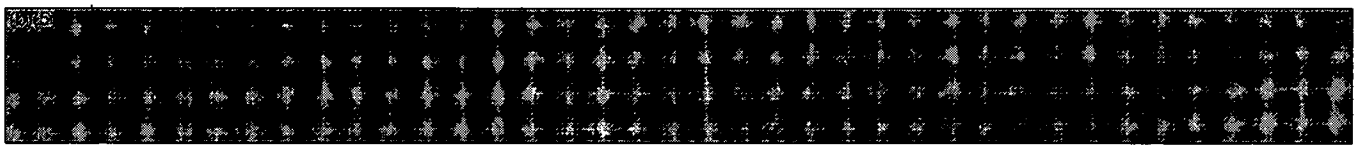
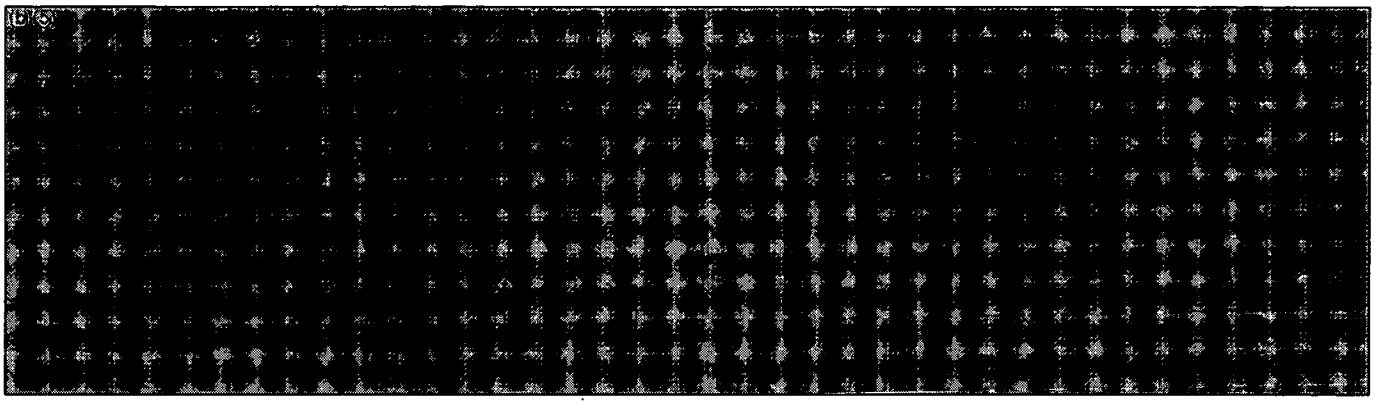
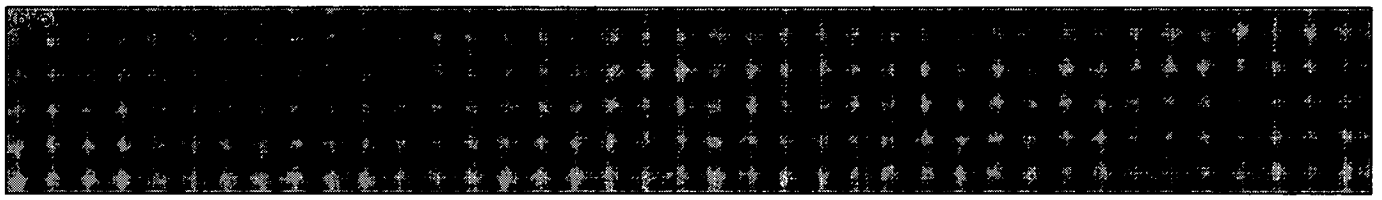
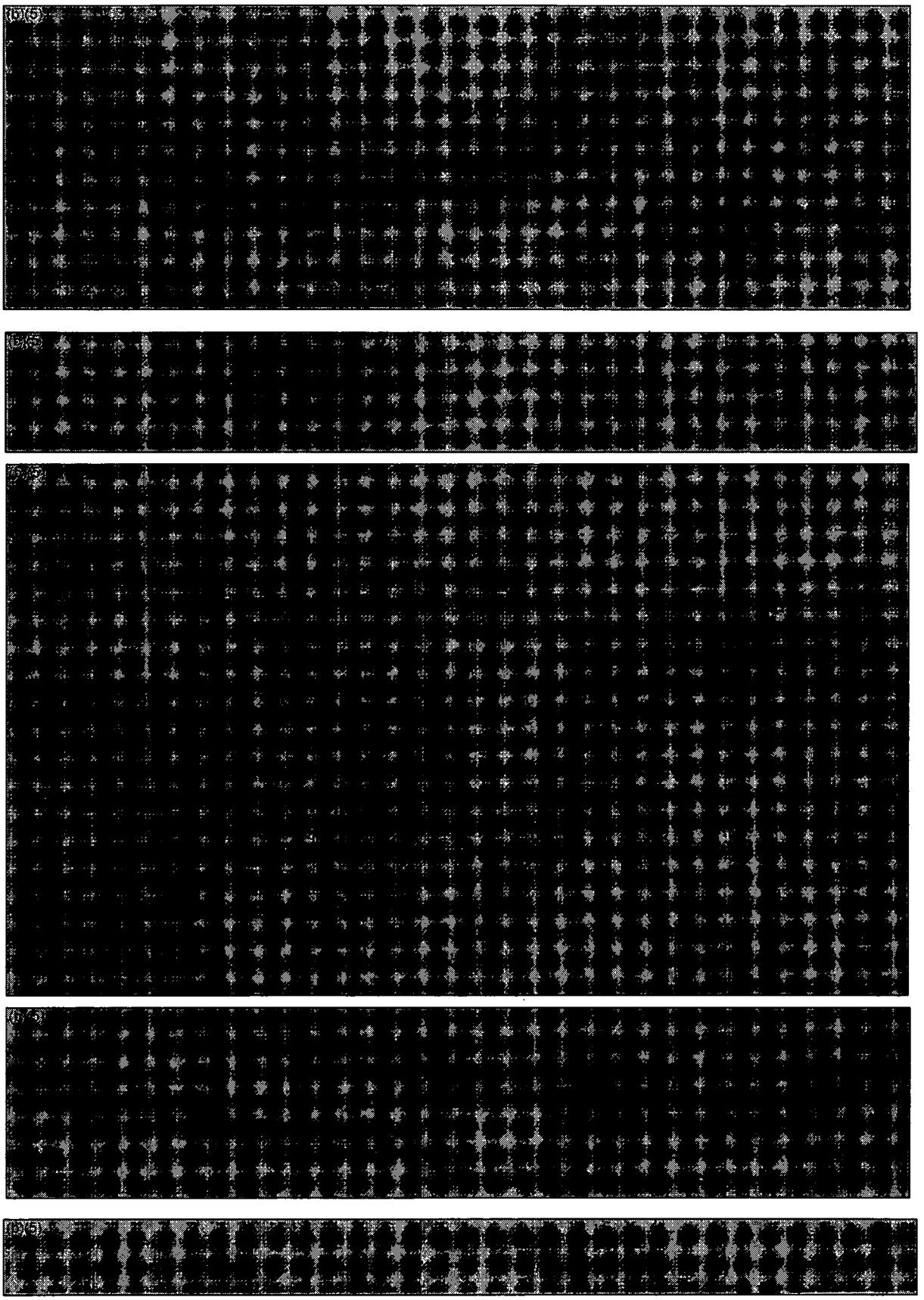
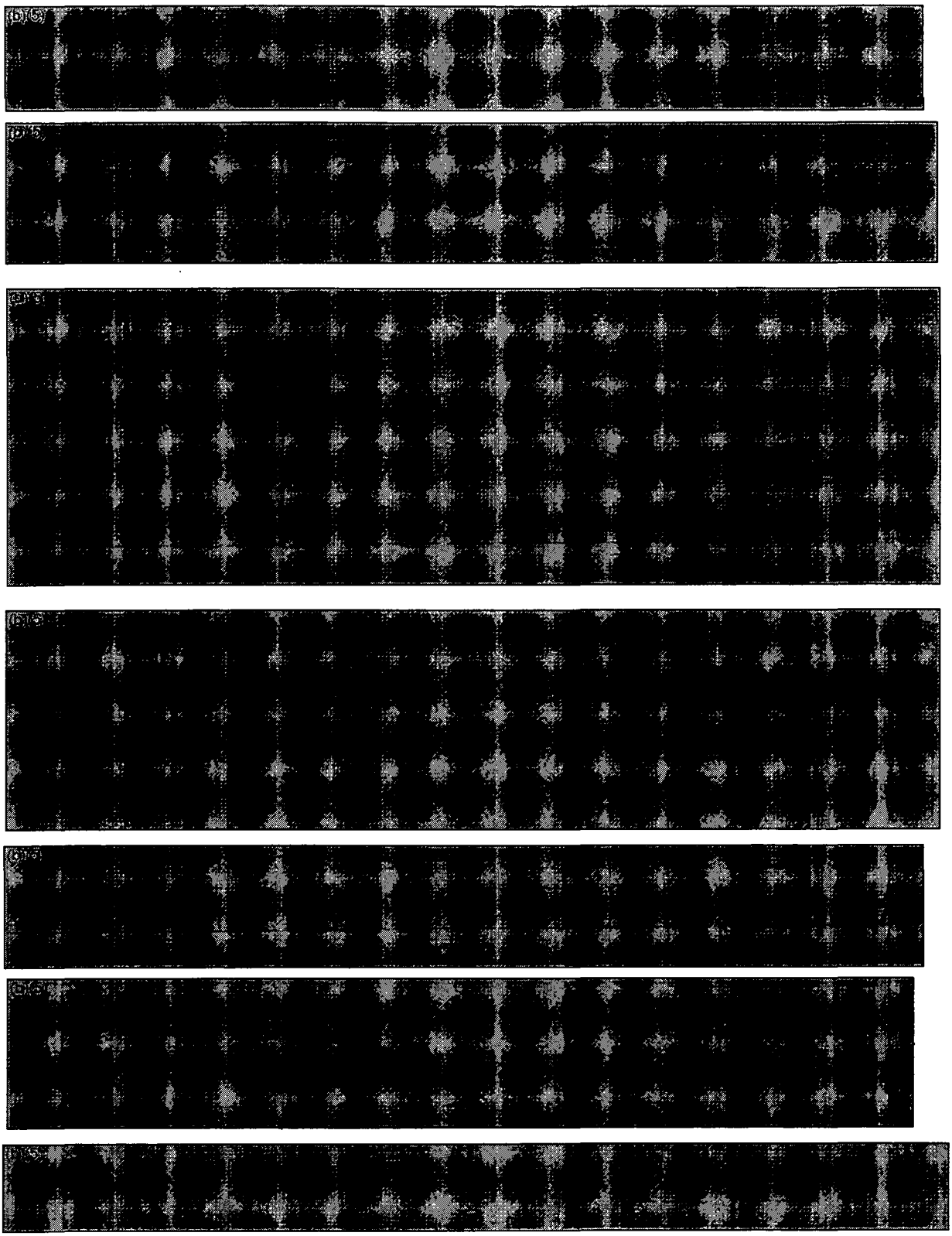
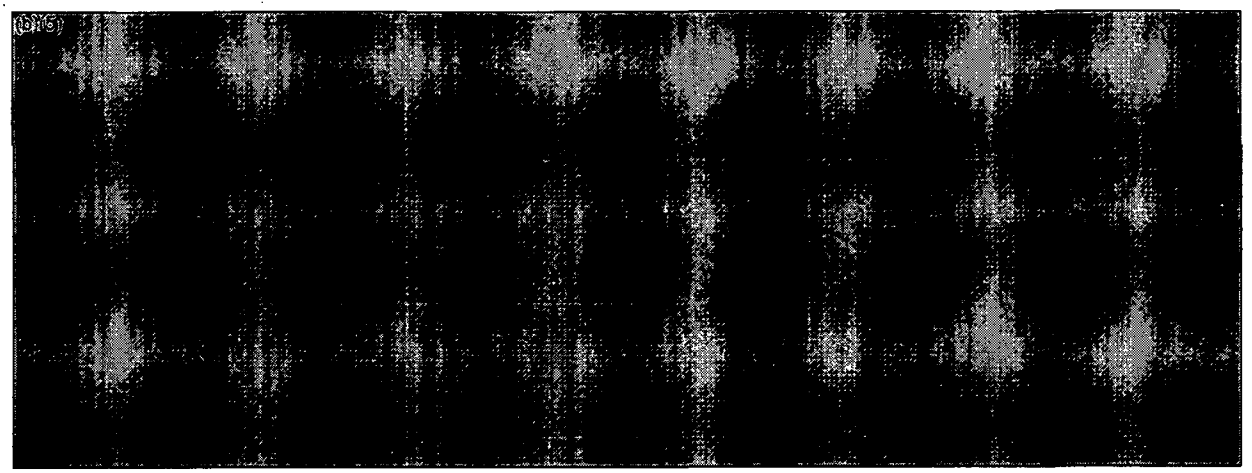


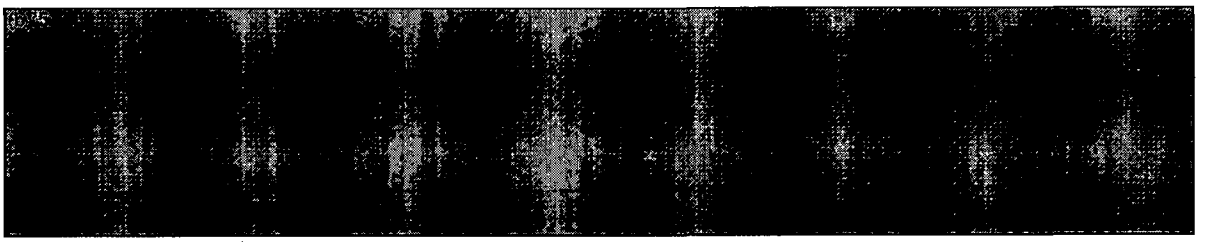






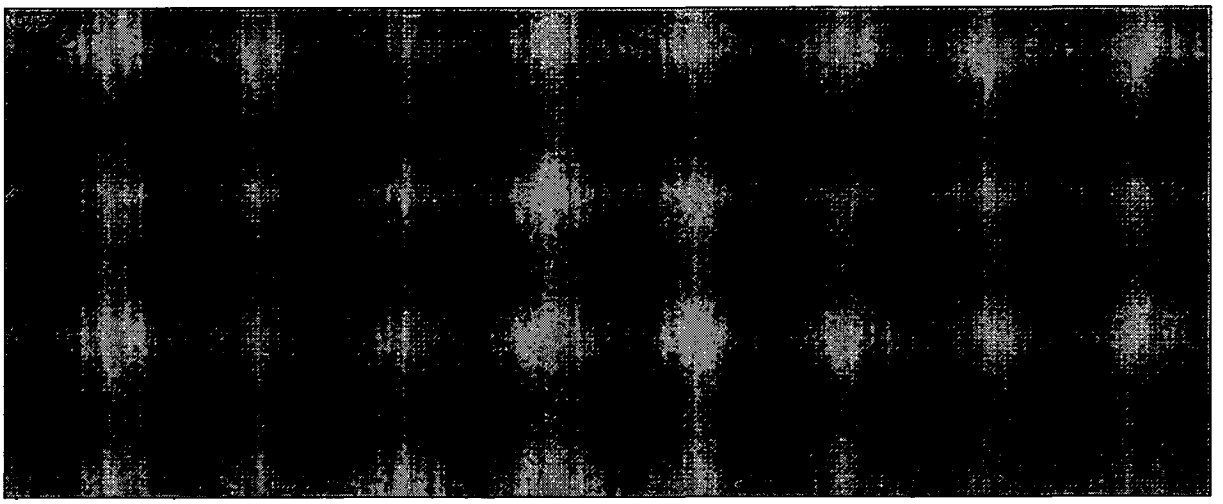
~~SBU~~
This email is UNCLASSIFIED.

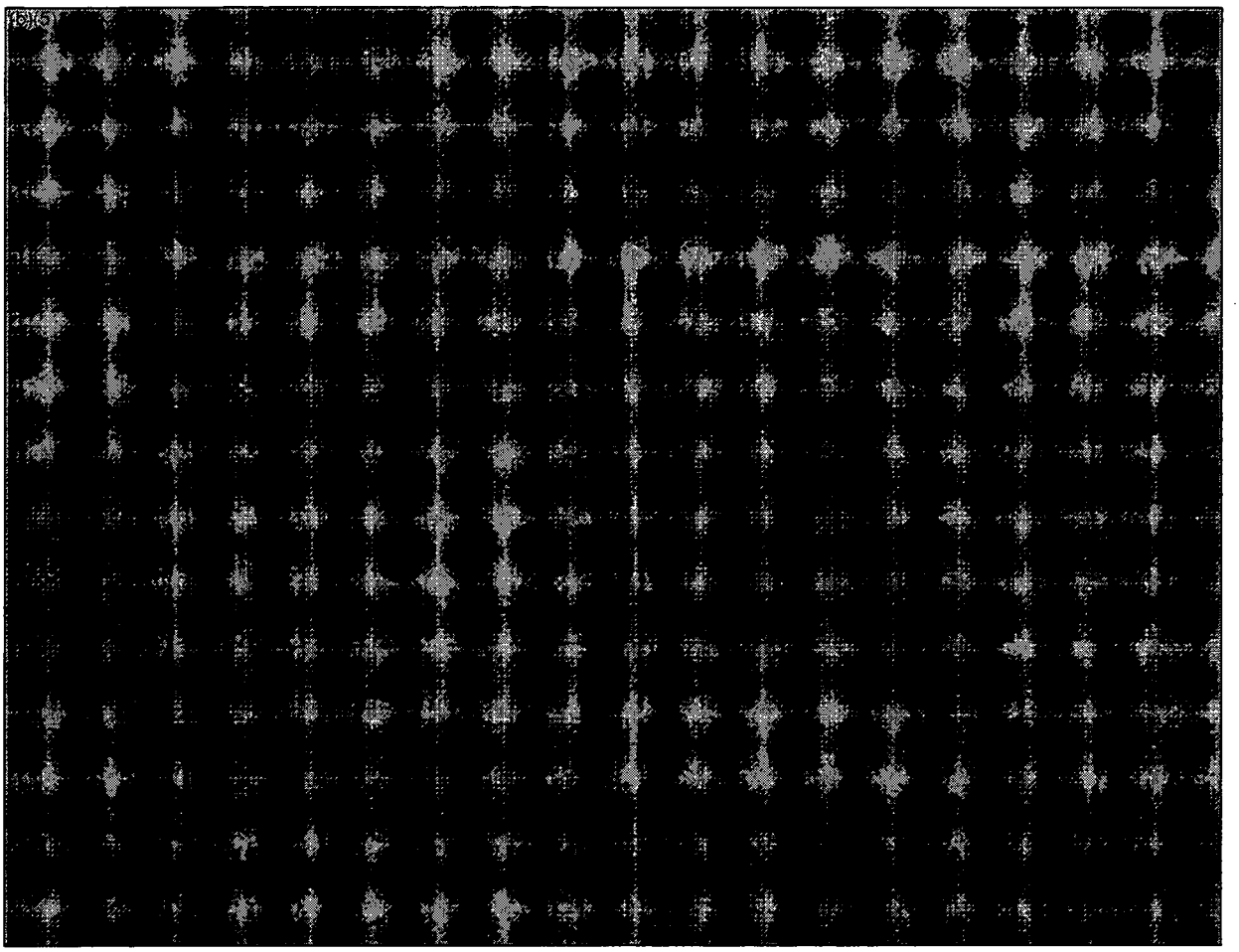


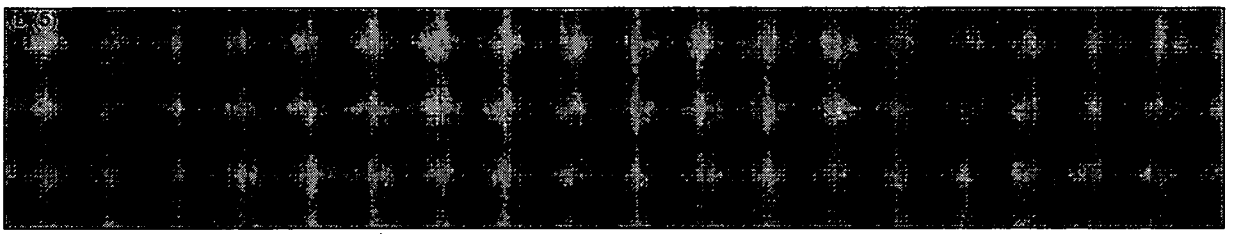












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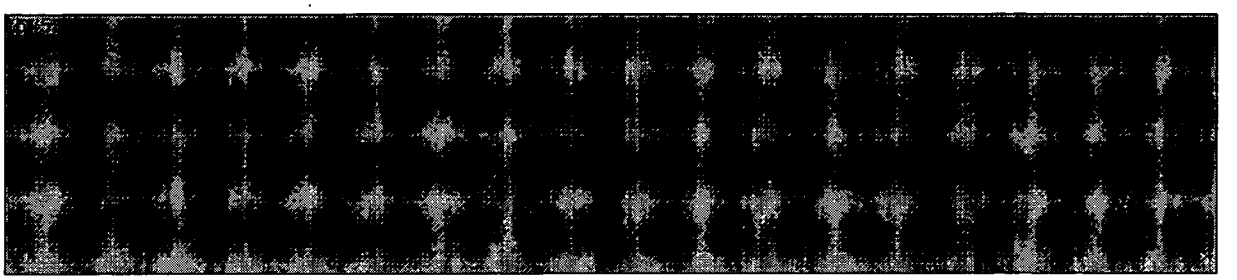

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See attachment for readout of March 16 NRC-TEPCO-NISA meeting (may be OBE)

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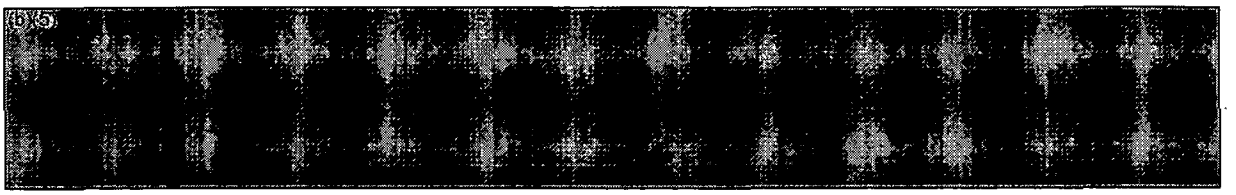

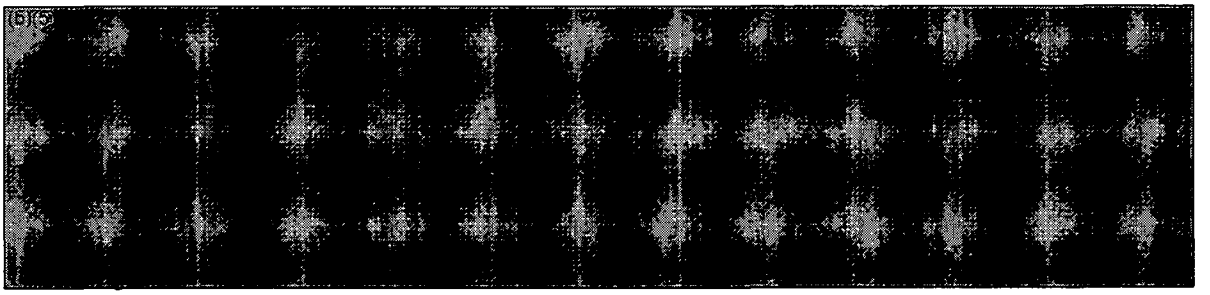

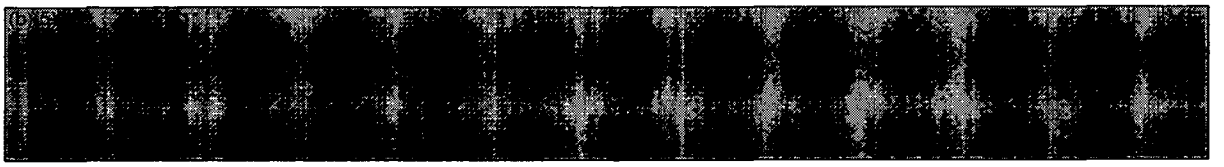

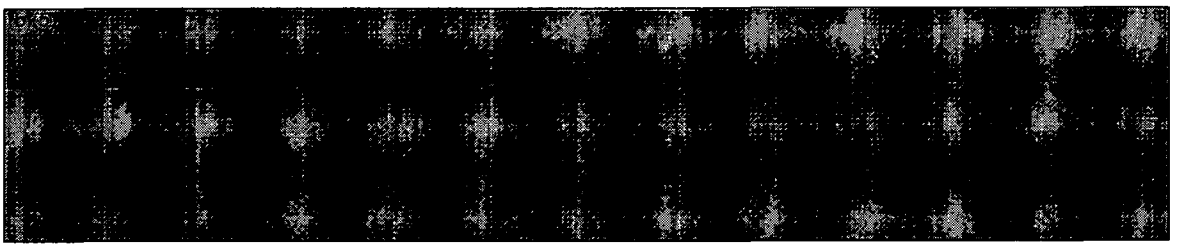

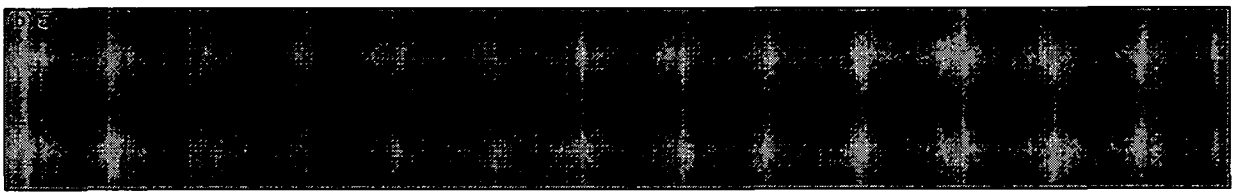

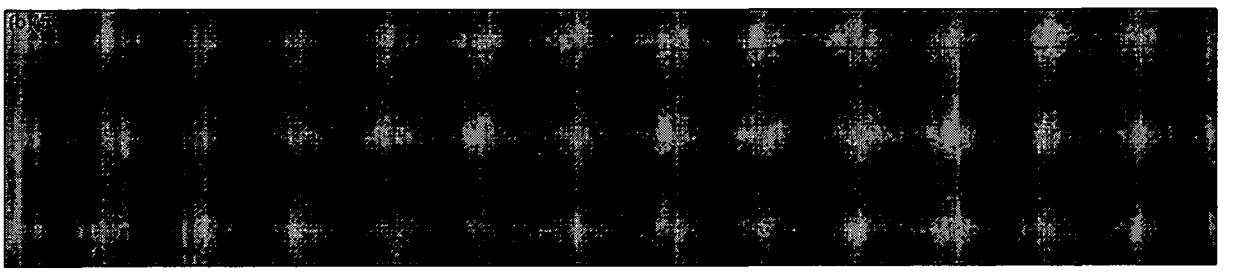

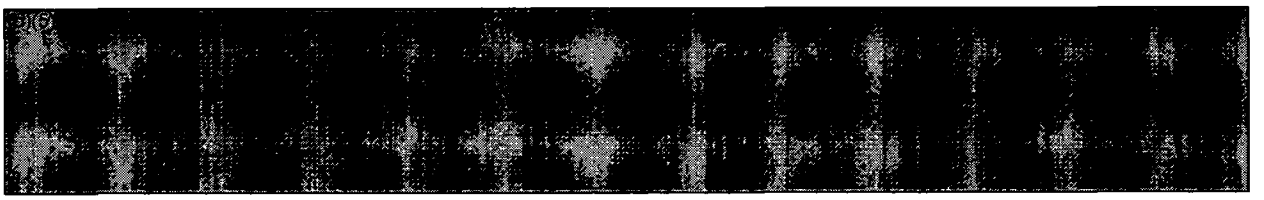

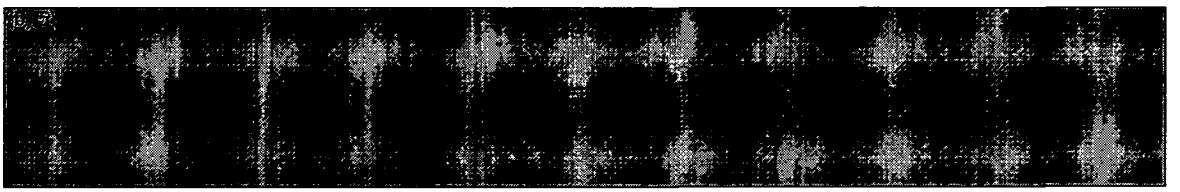

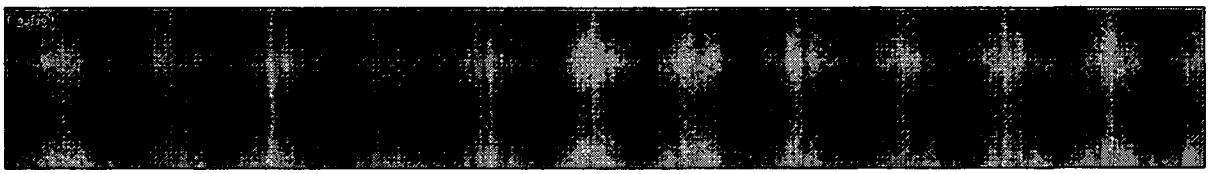

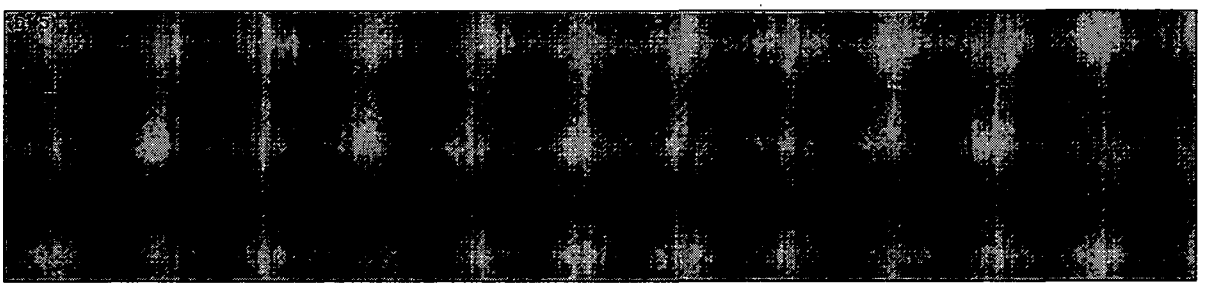

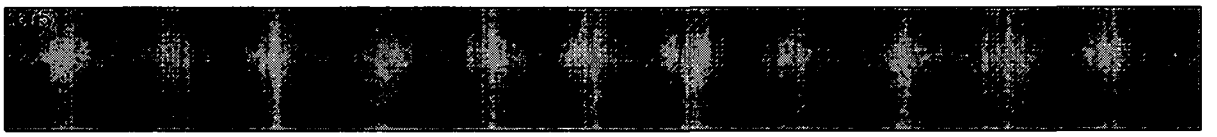

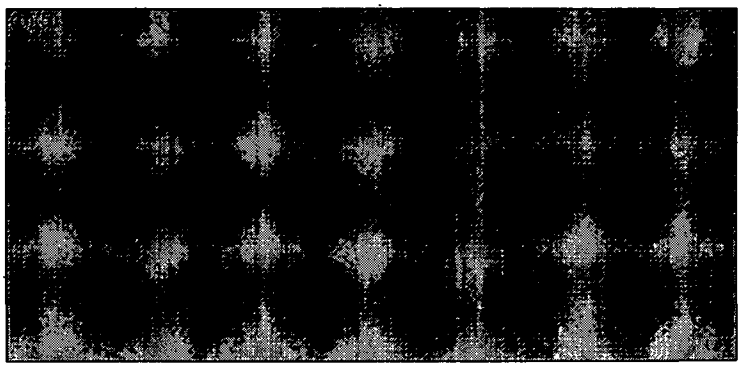

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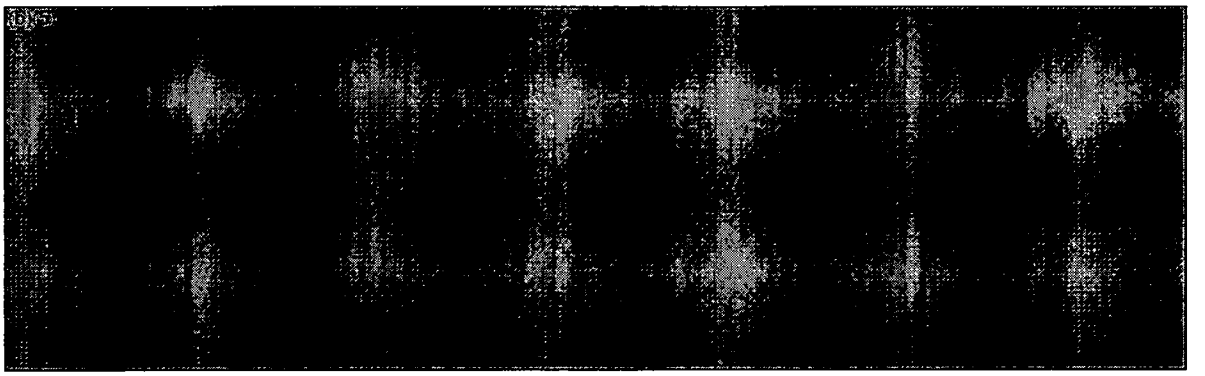
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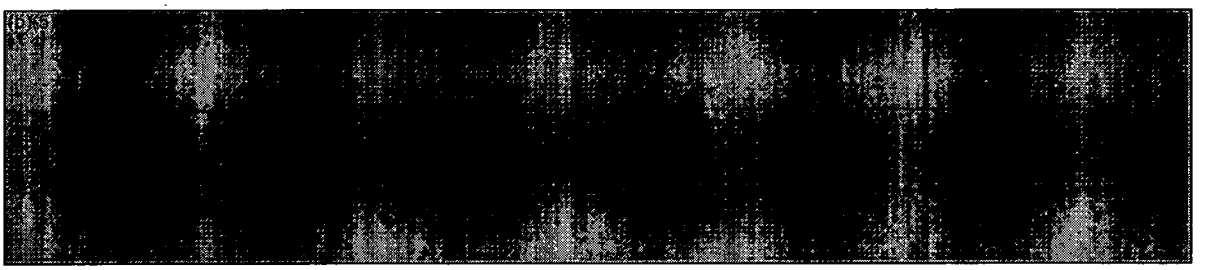
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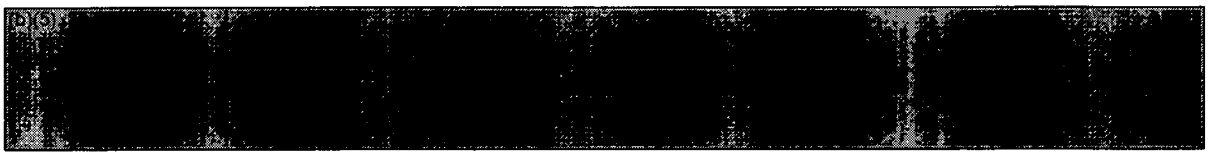
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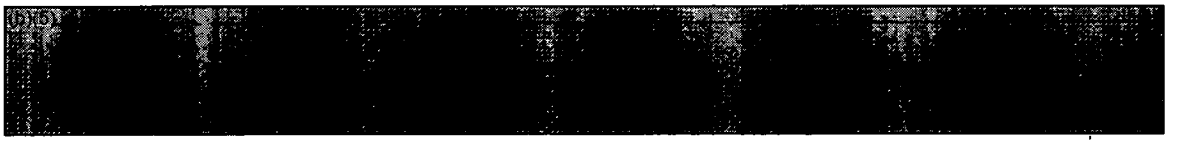
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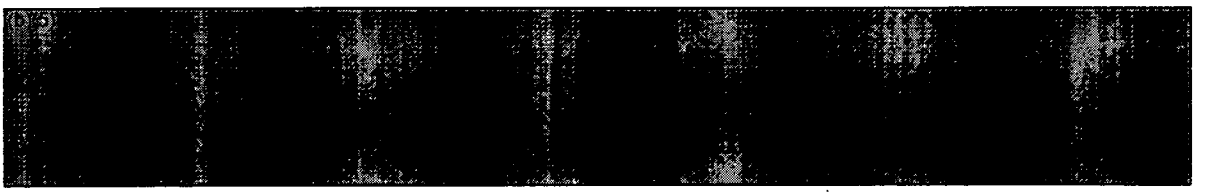
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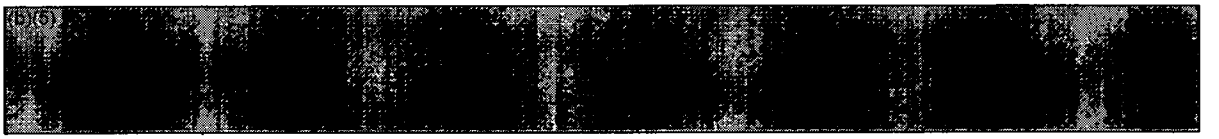
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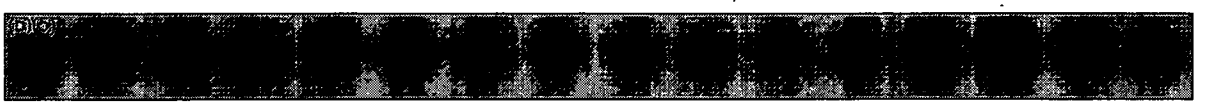

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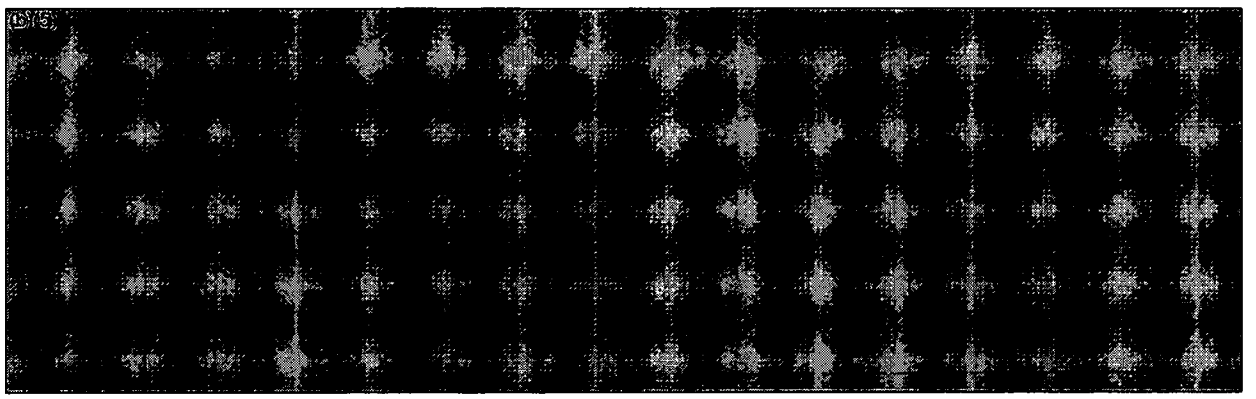

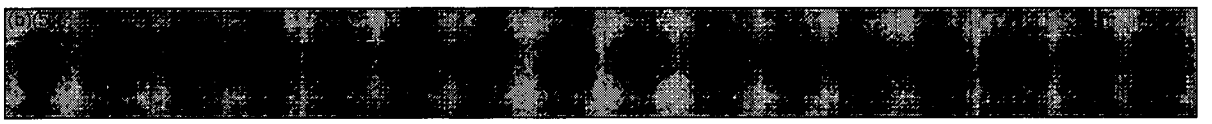

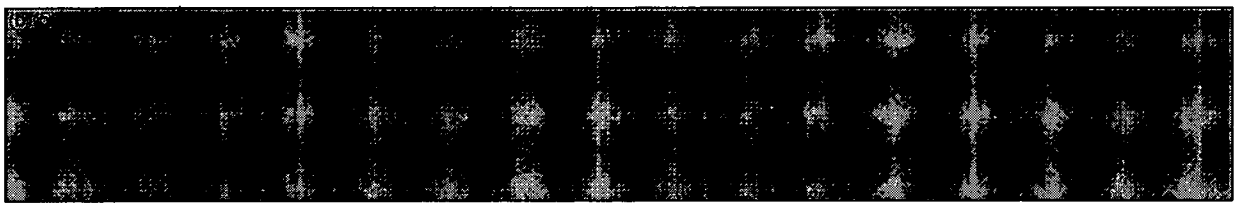

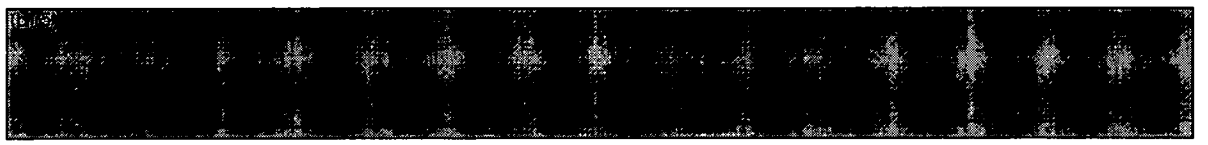

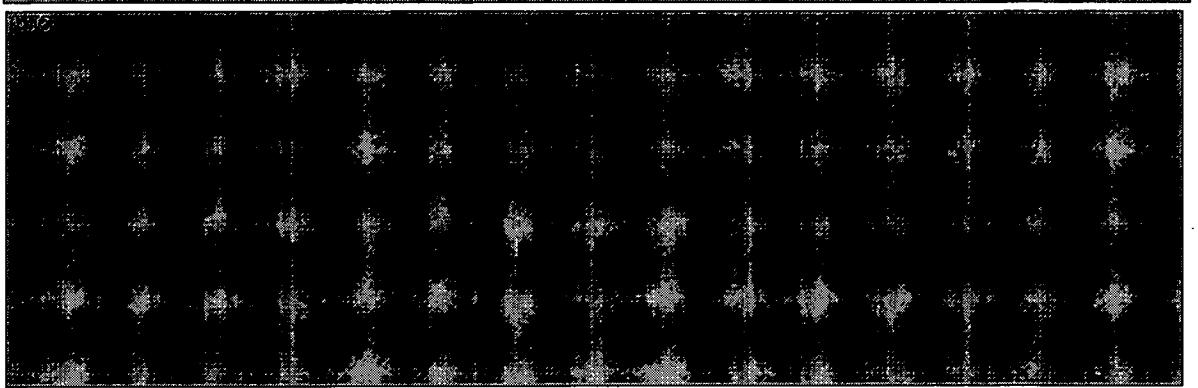

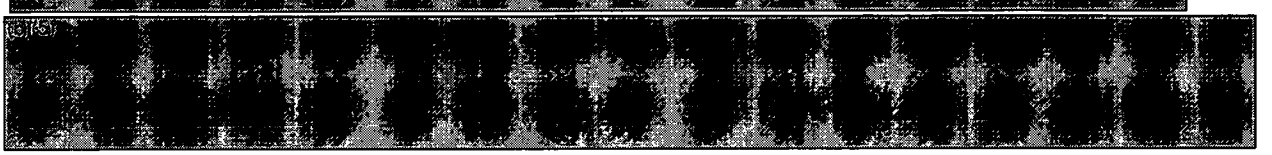

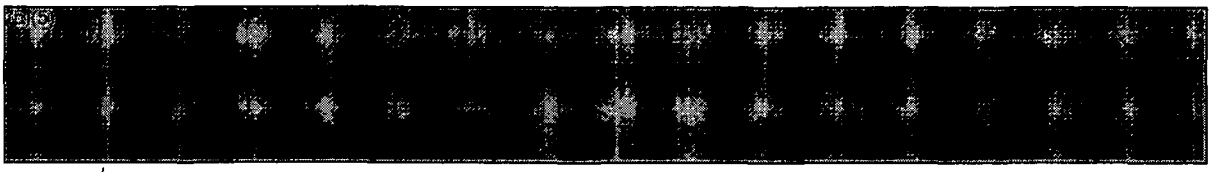

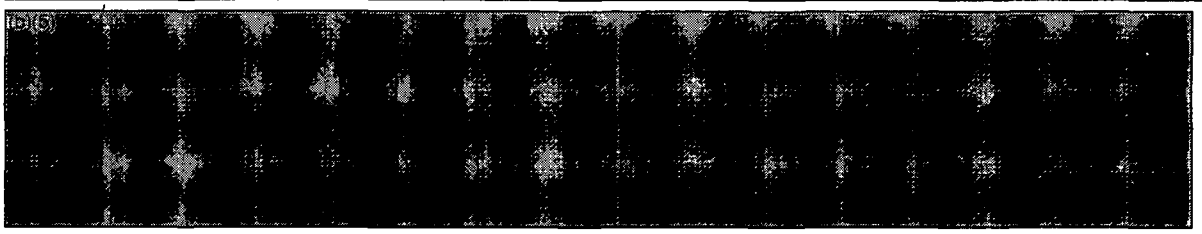

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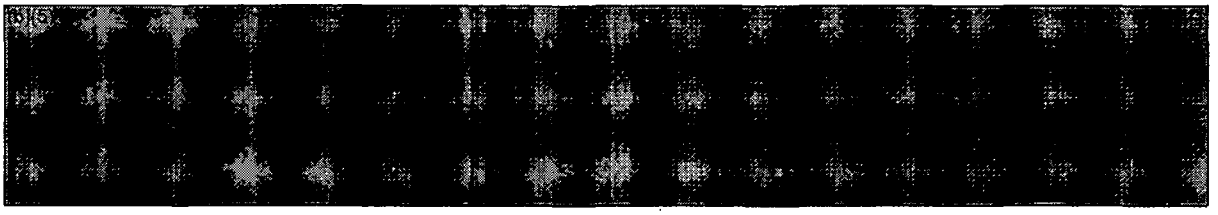

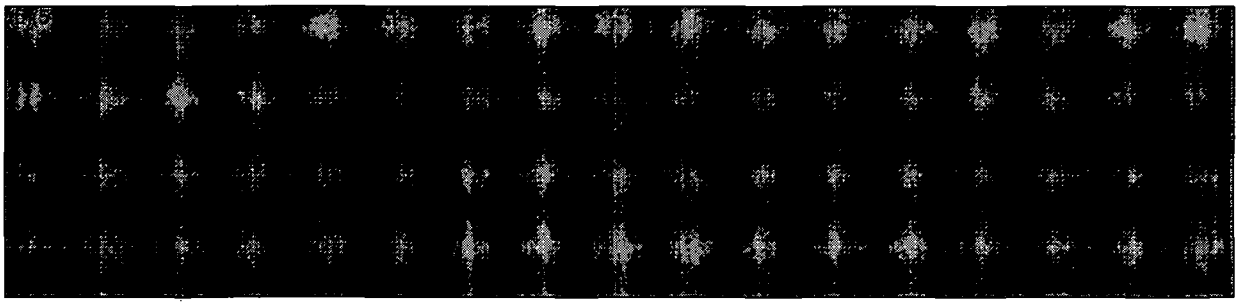

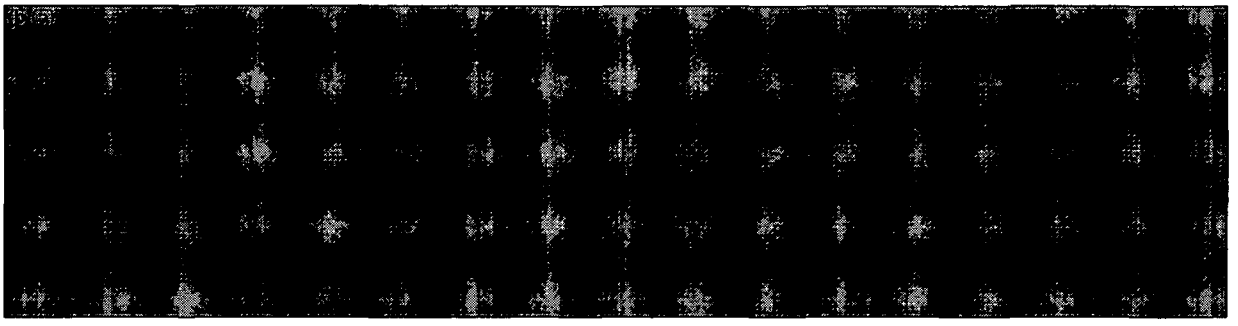

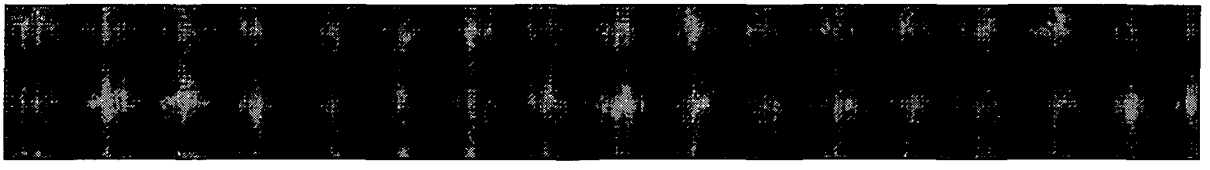

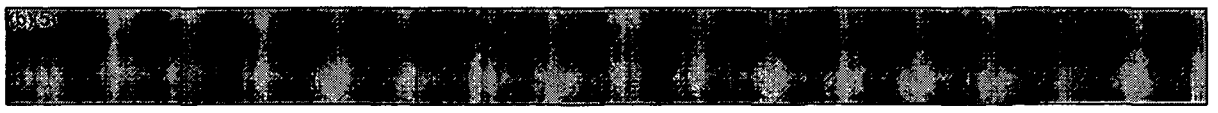

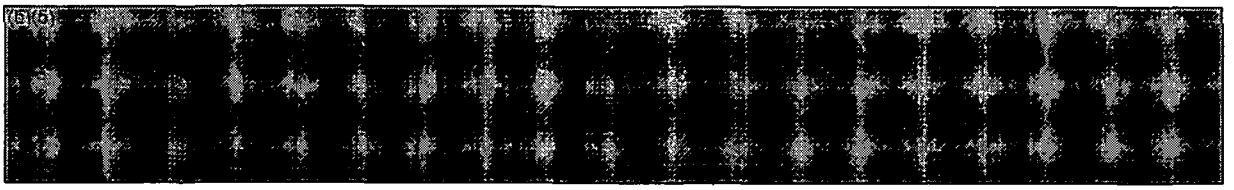

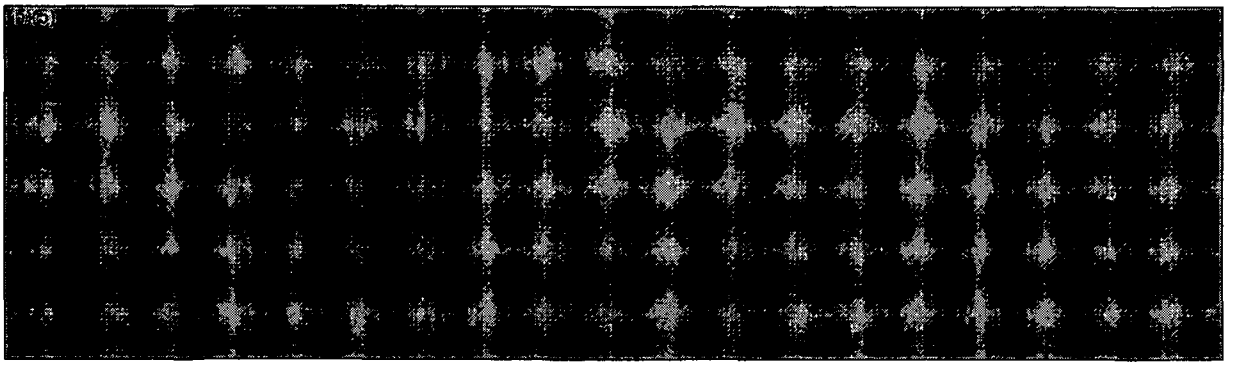

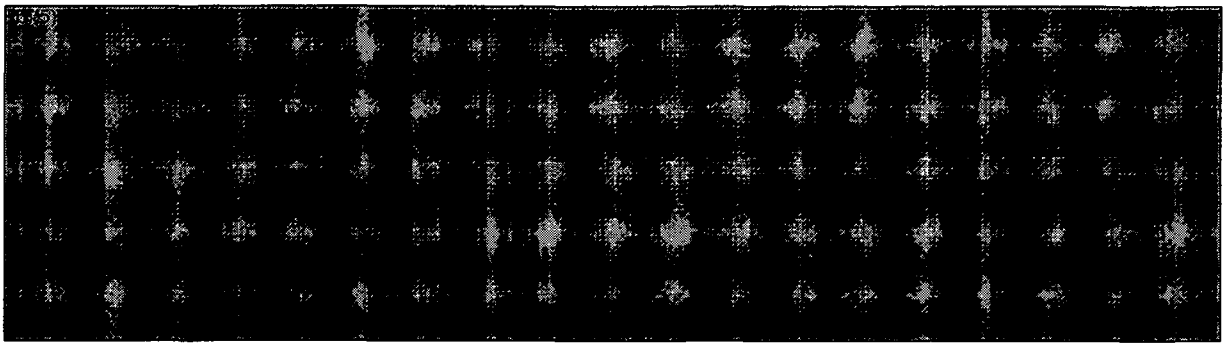

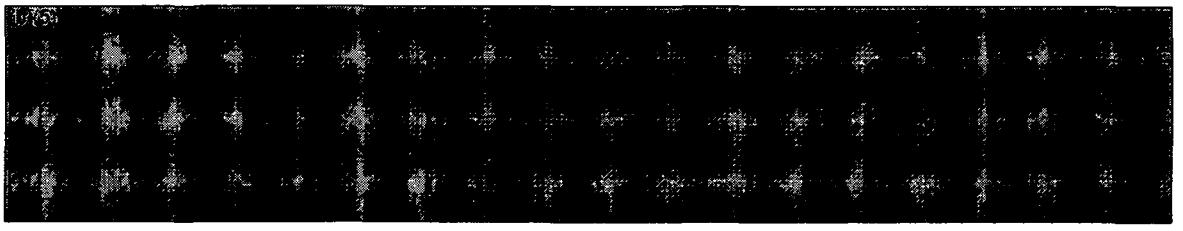

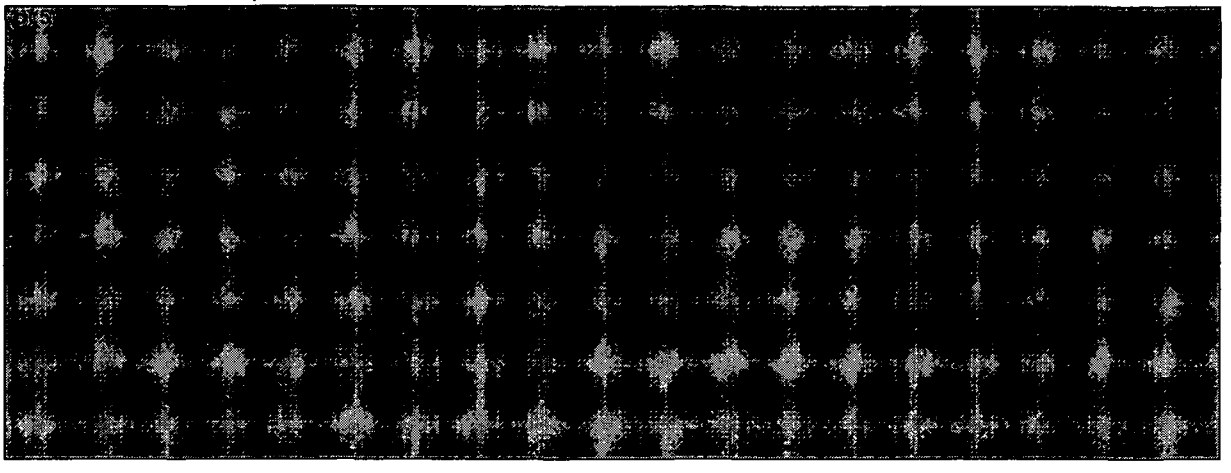

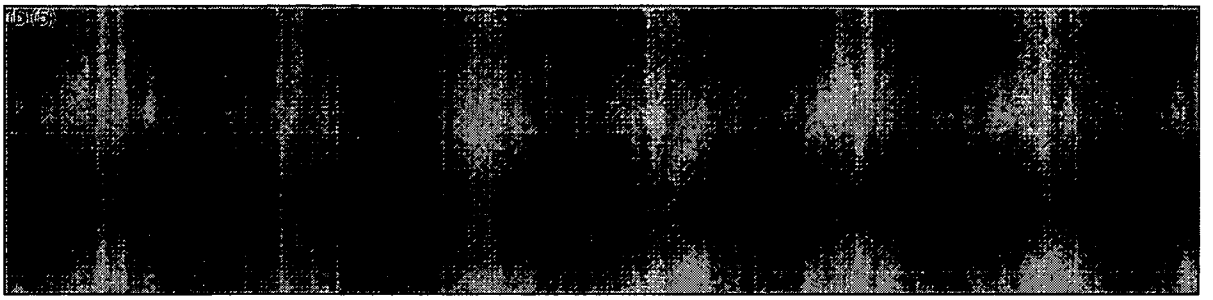

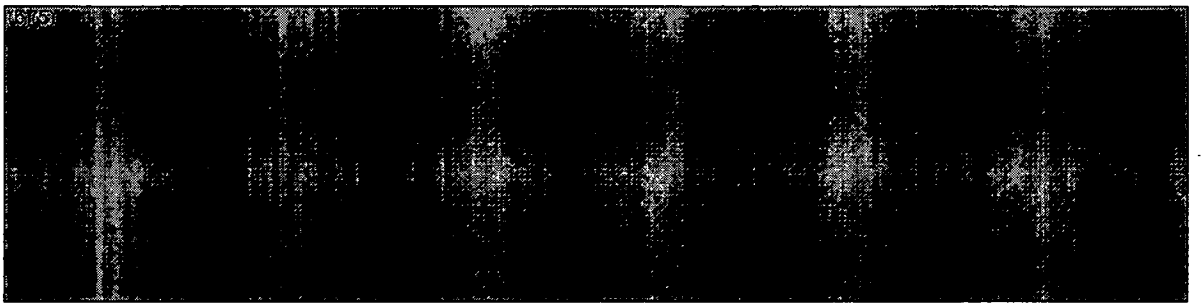

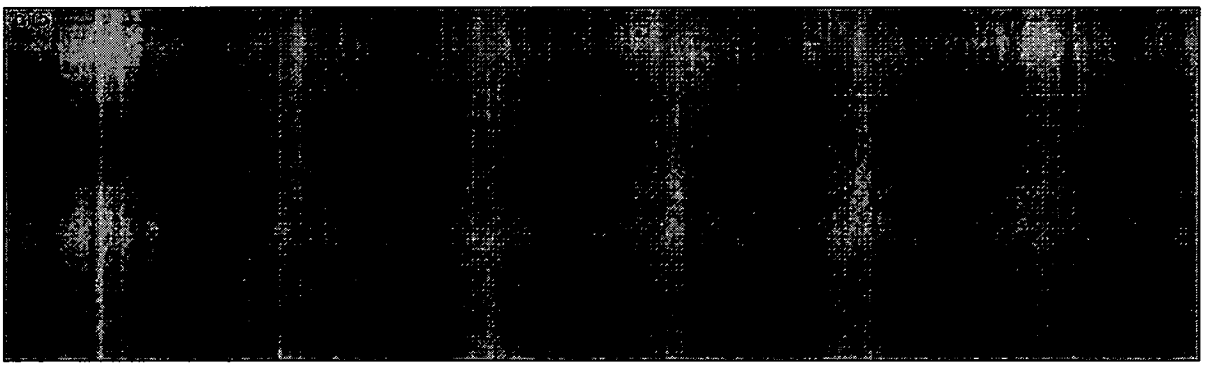

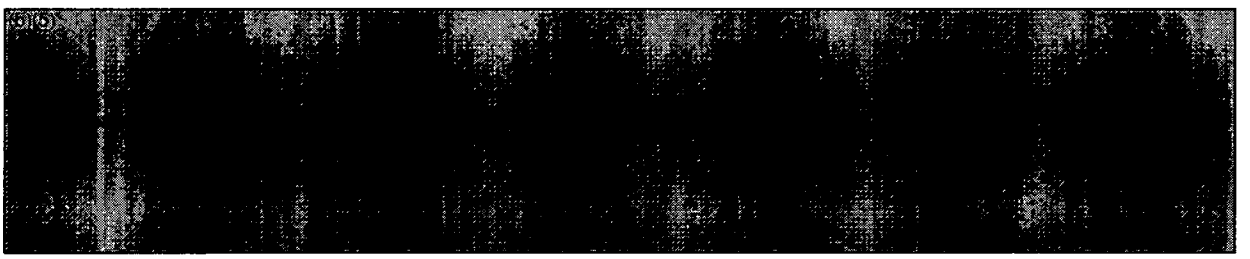

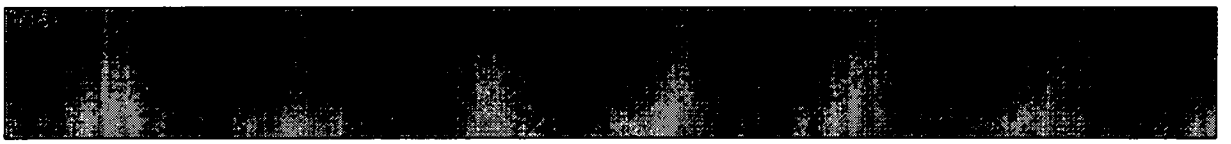

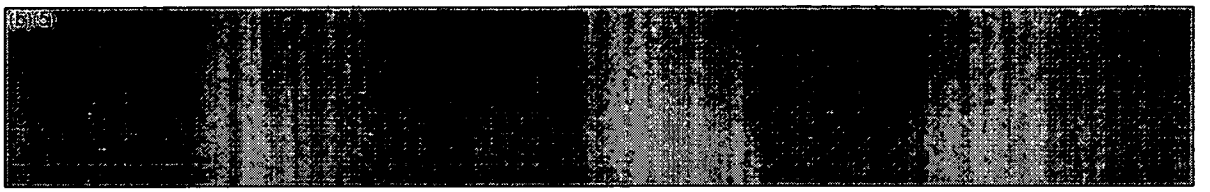

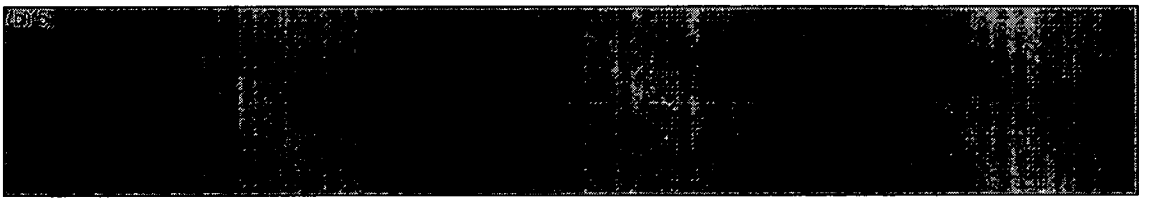

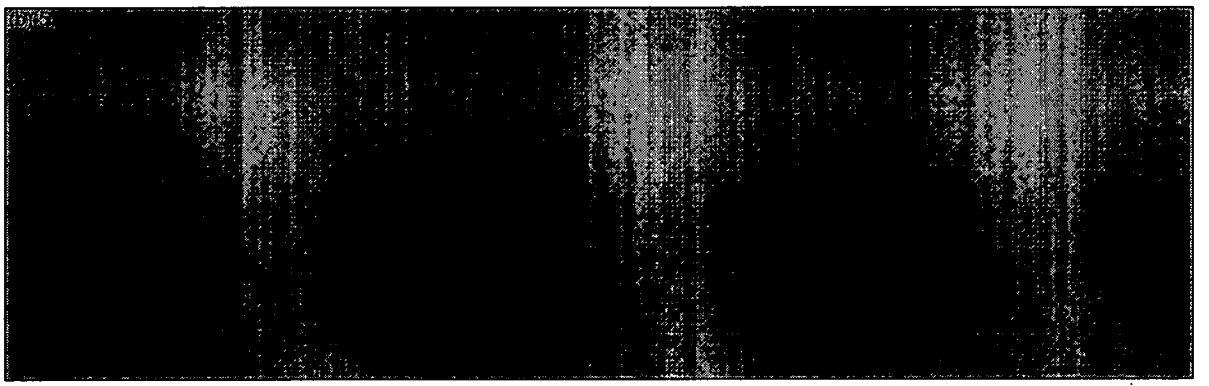

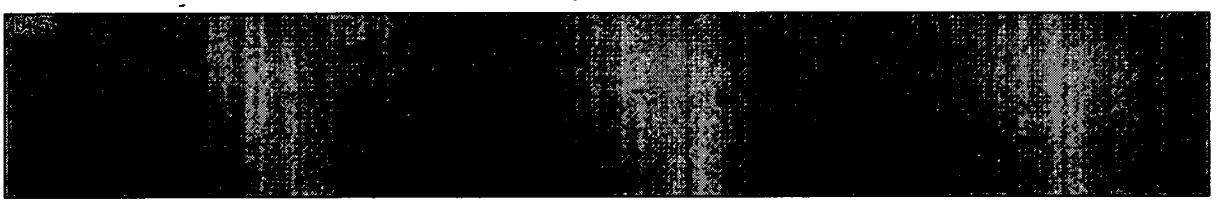

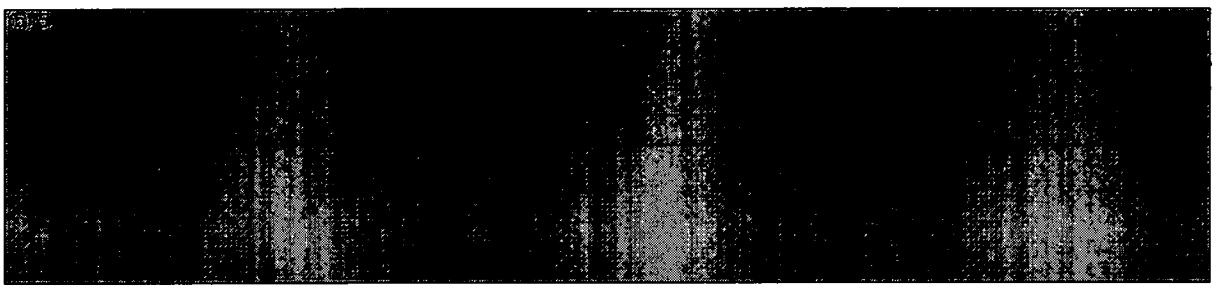

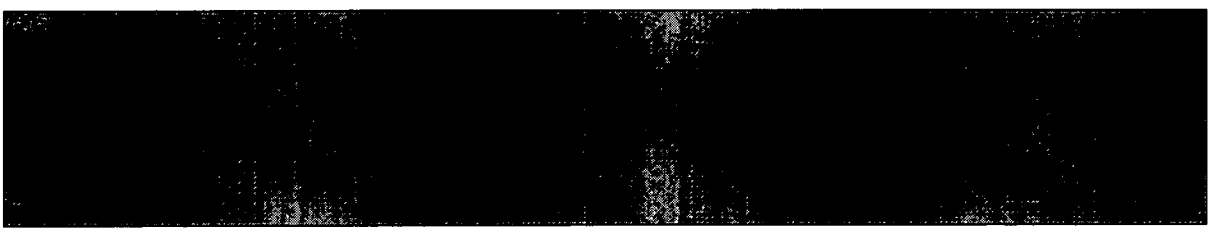

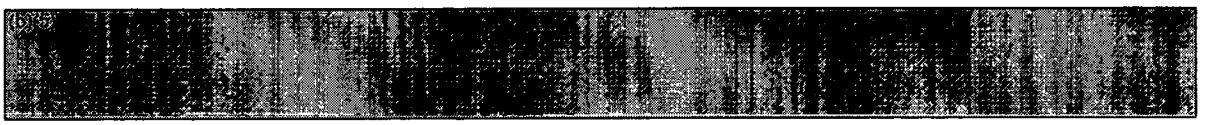

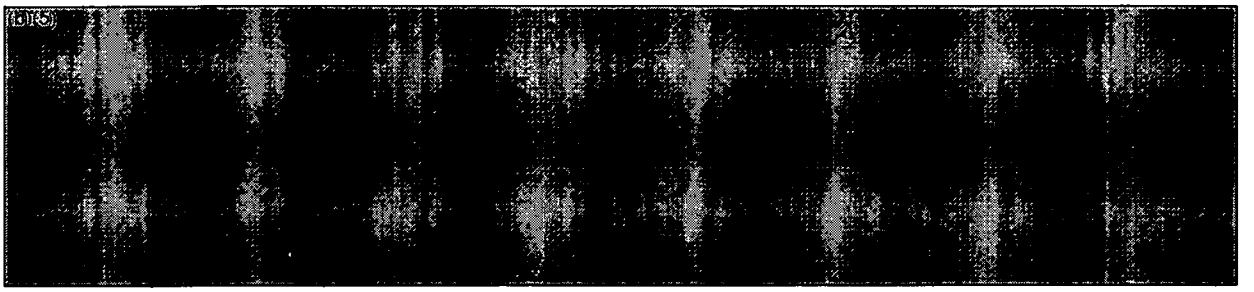

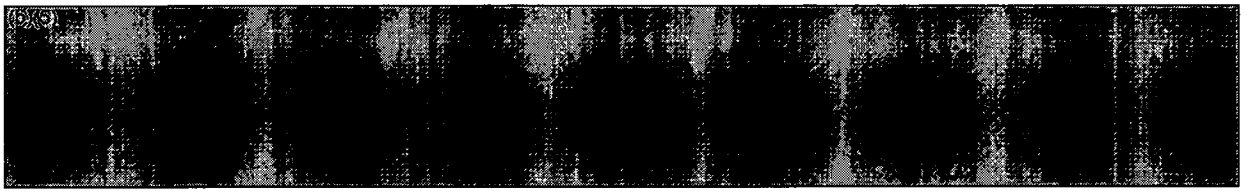

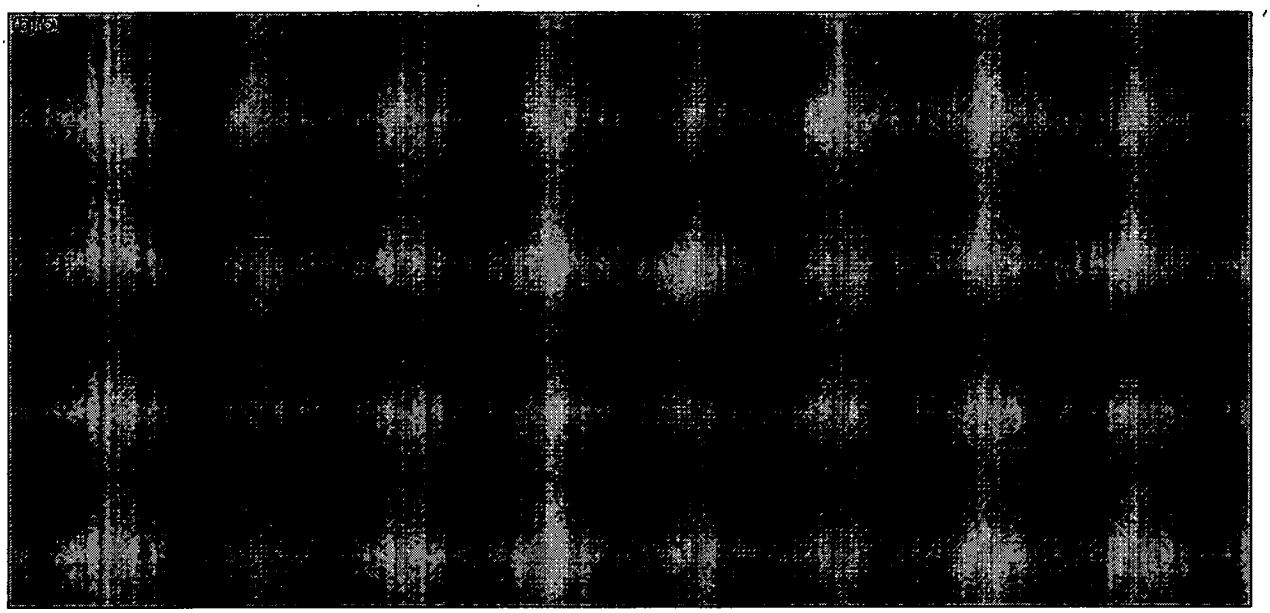

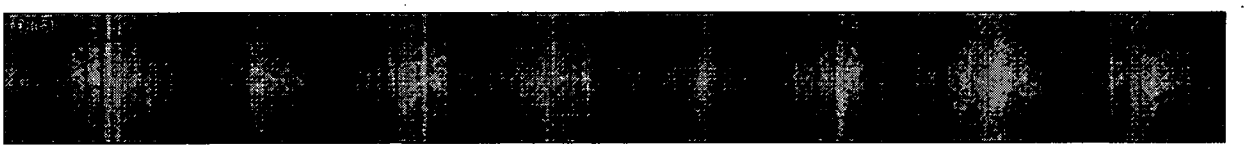

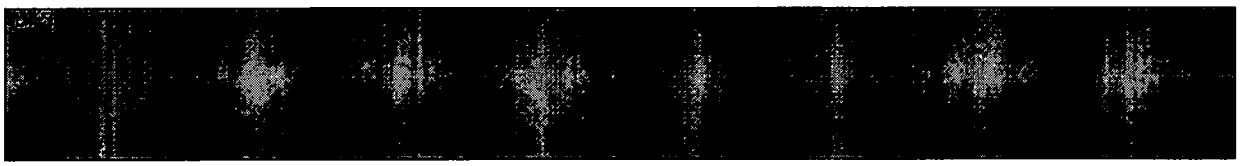

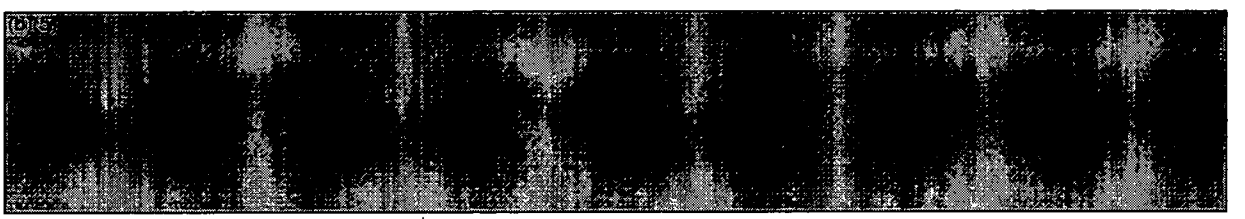

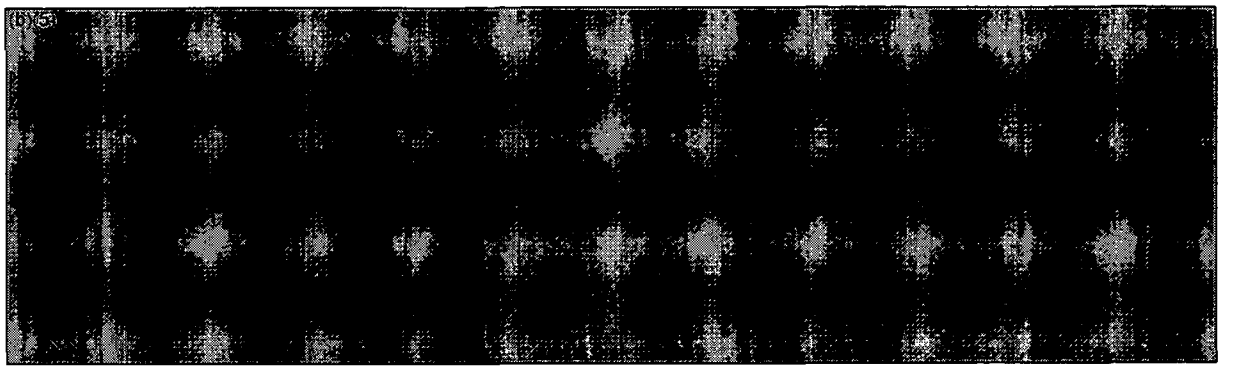

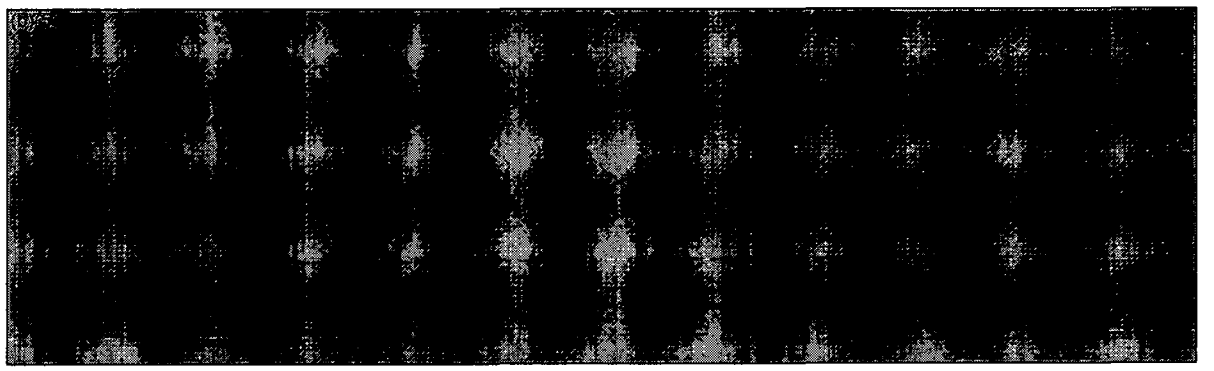

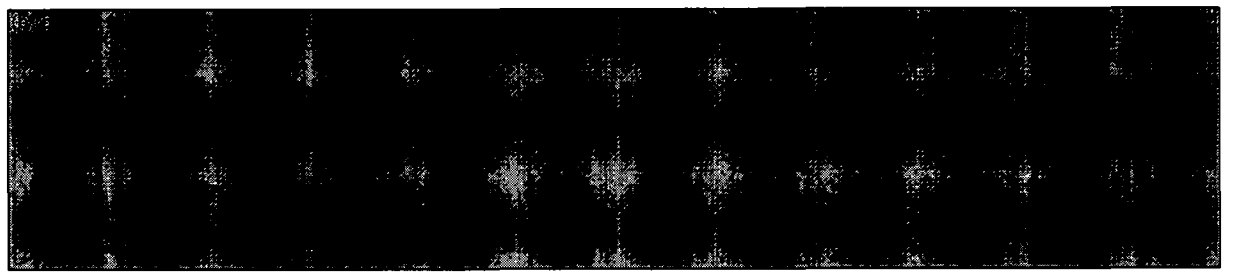

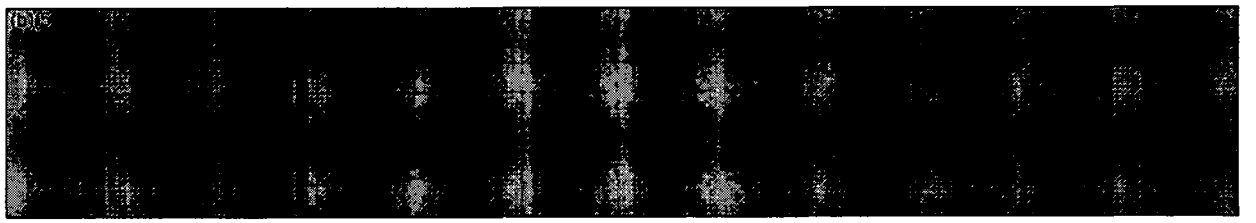

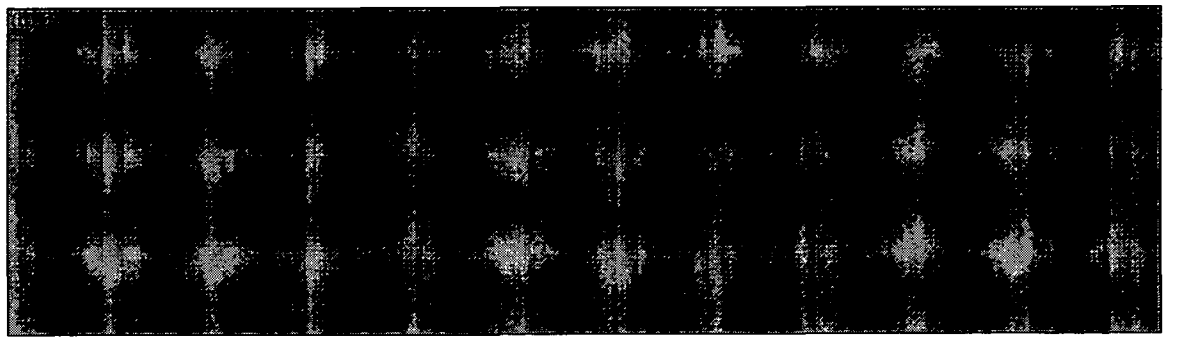

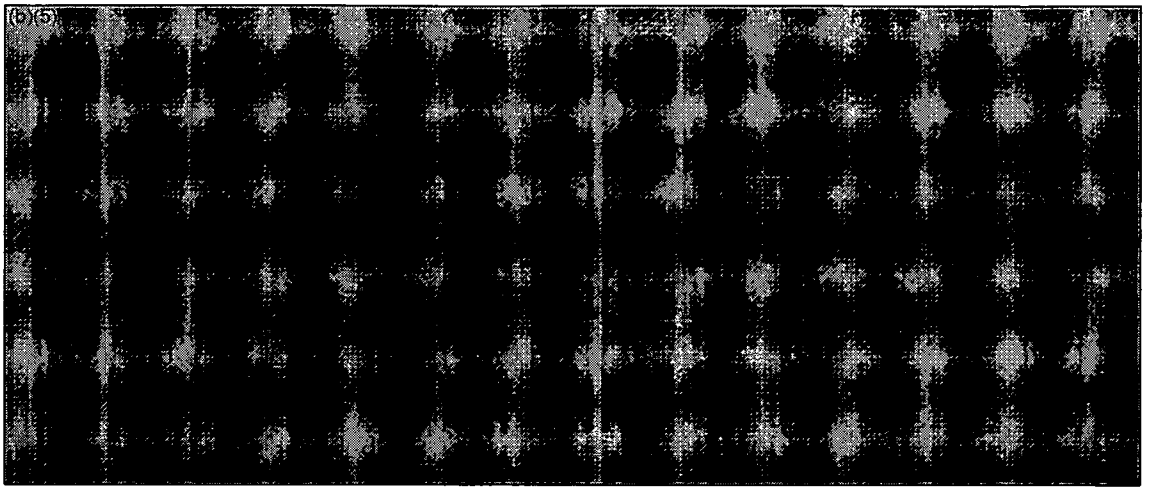
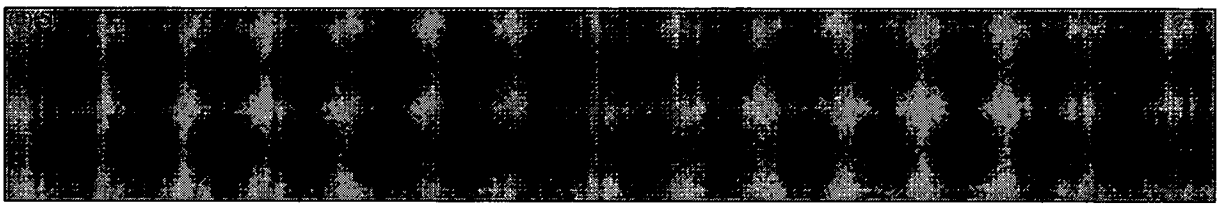
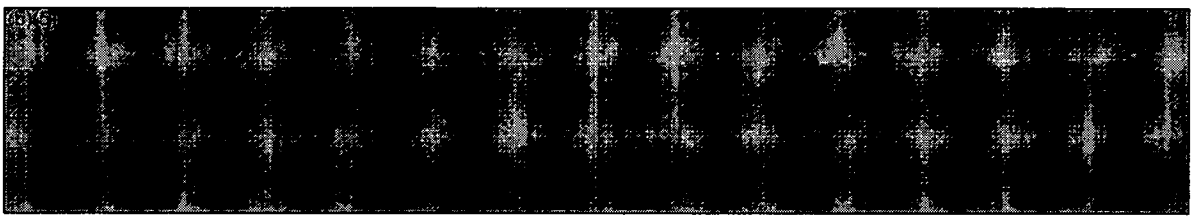
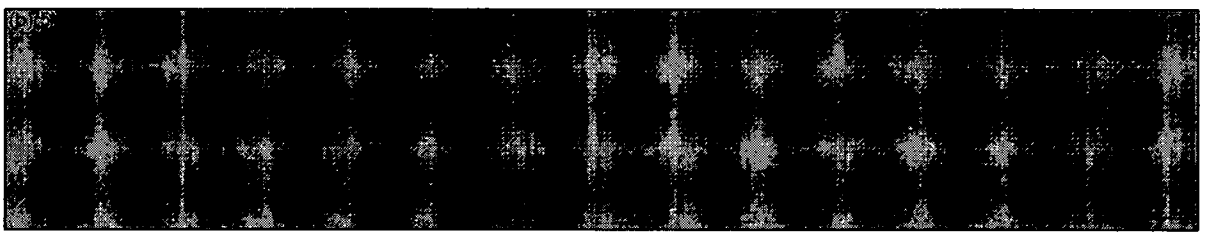
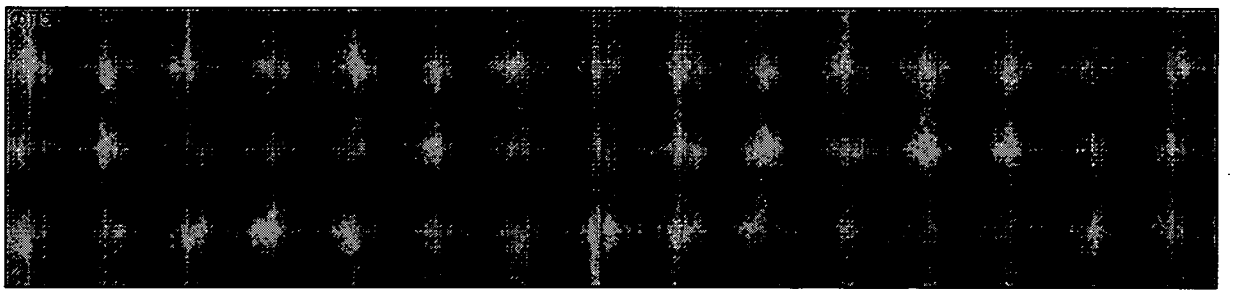
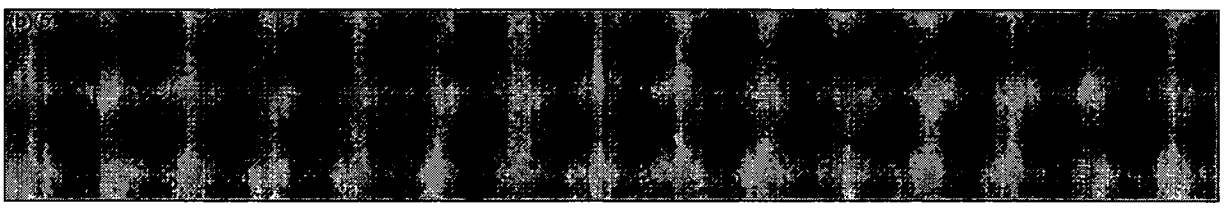

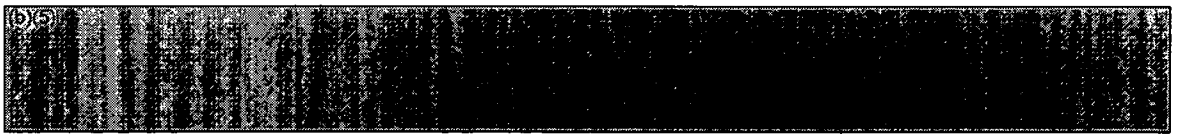
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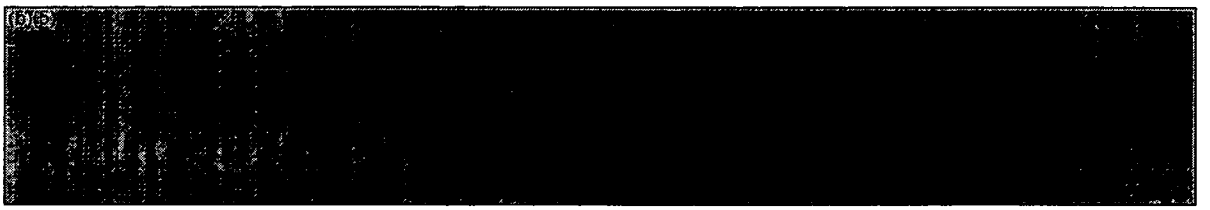
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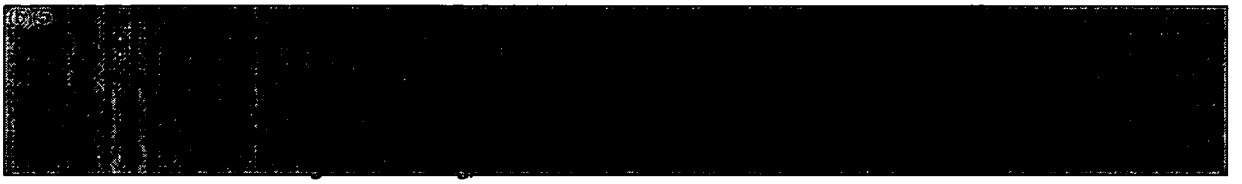
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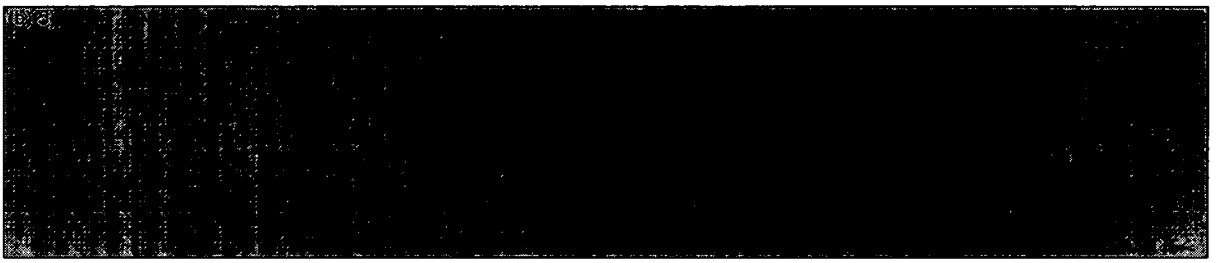
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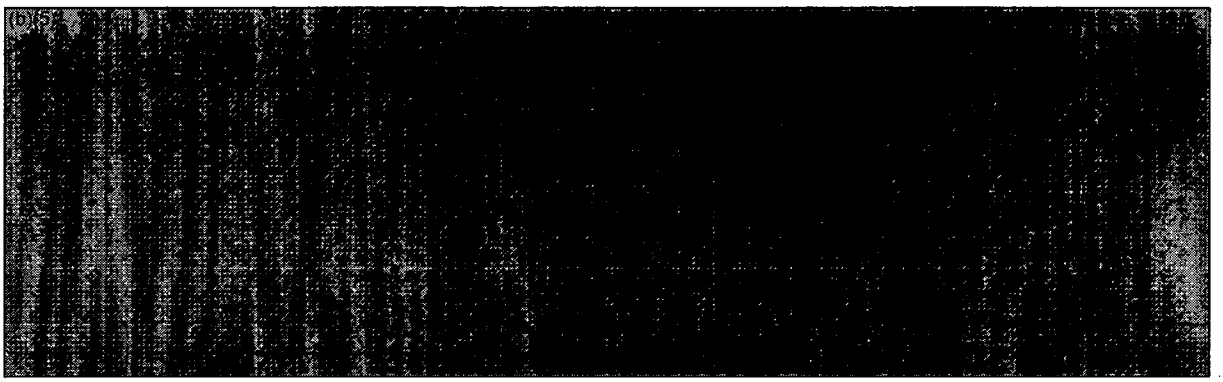
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04:00 March 17, 2011 (NRC provides protective action recommendations based on U.S. Guidelines)

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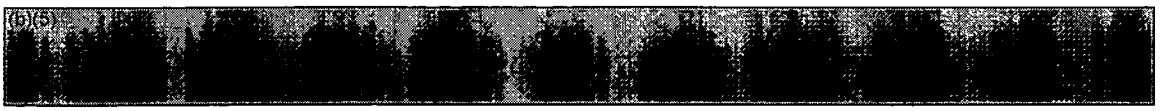

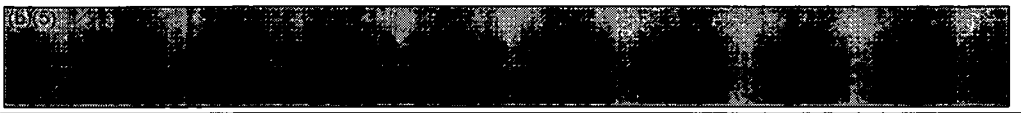

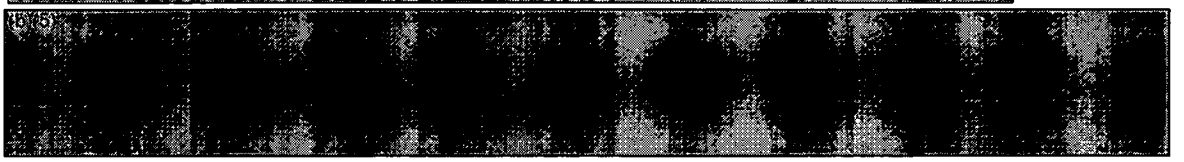

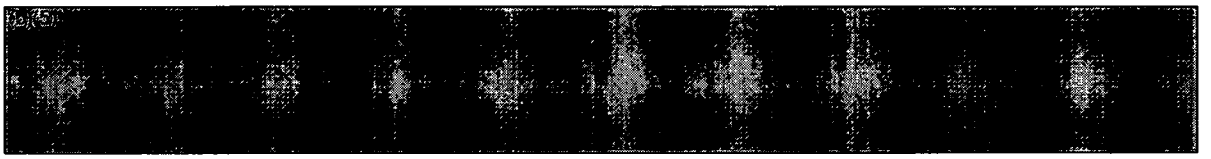
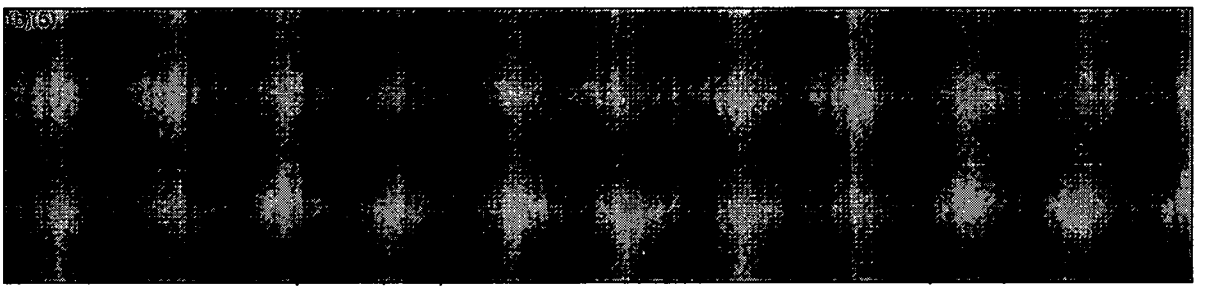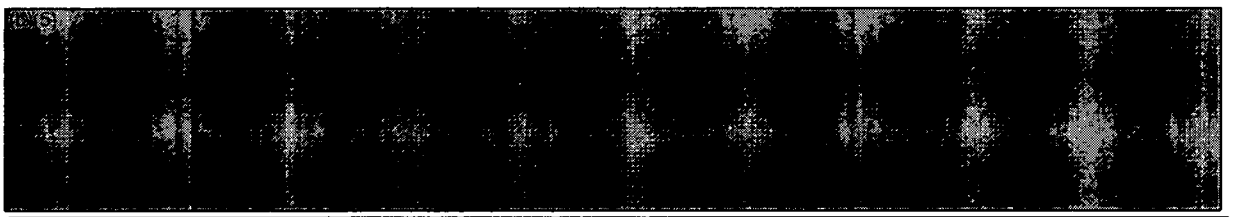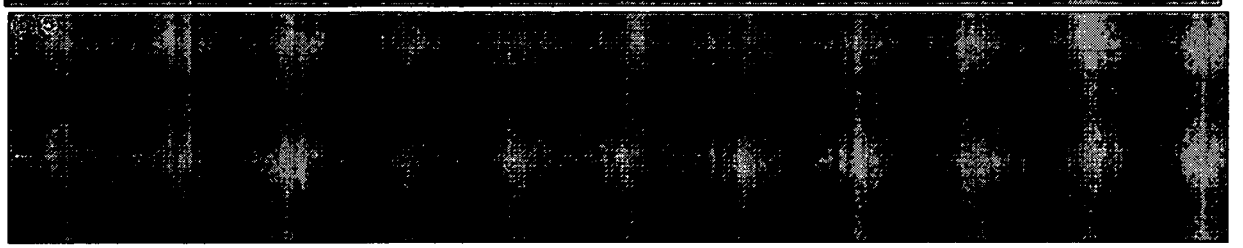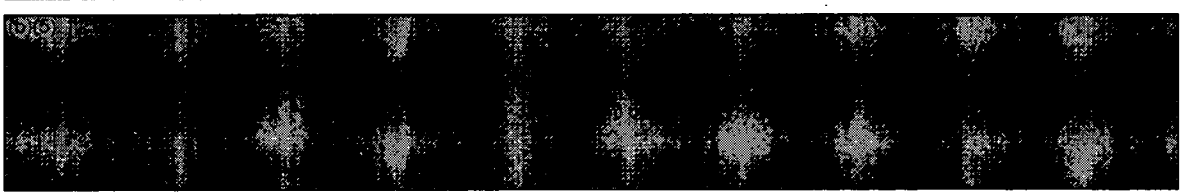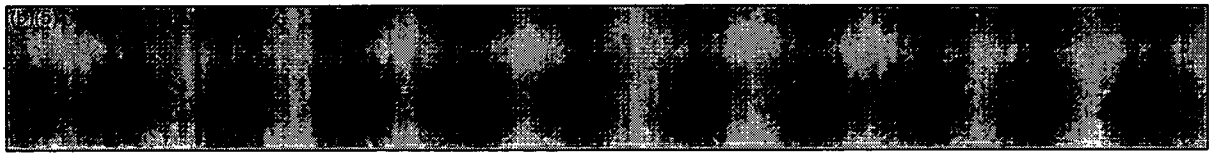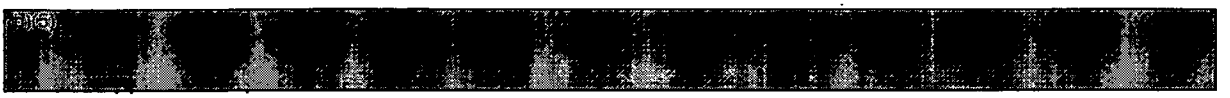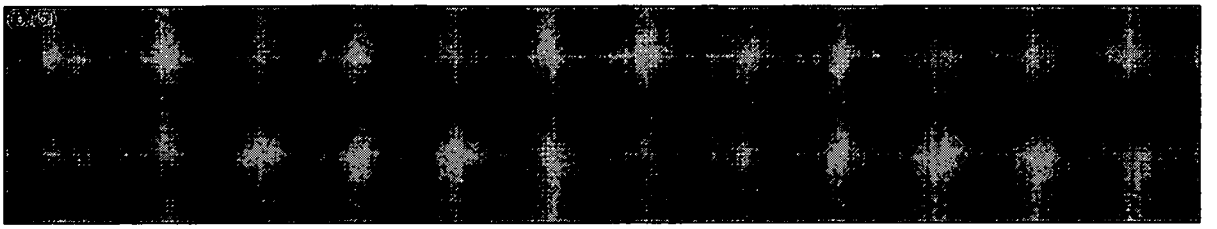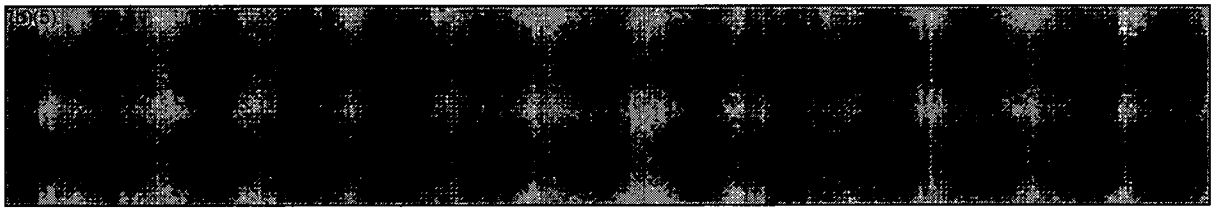
04:00 March 17, 2011 Thursday