

Trap Release Enclosures

00/7/8

Case	Inventories	NG I/cs/Ru	Te	Sr	Ba	Ce	La
61a	1 yr	1	.03	.03	.03	.03	3 X 10 ⁻⁵
61b	"	.03	.03	.03	.03	.03	3 X 10 ⁻⁵
61c	"	.03	.01	.01	.01	.01	3 X 10 ⁻⁵
61d	"	.03	2 X 10 ⁻⁴	2 X 10 ⁻⁴	2 X 10 ⁻⁴	2 X 10 ⁻⁴	3 X 10 ⁻⁵
62a	5 yr						
62b	"						
62c	"						
62d	"						

all fractions

(Same pattern)

Start with case 61a \Rightarrow

atmos 46 h \rightarrow atmos 61a

atmos 61a
early 695
chrncl-n
SURSET
METSUR

} 61a

61b

61c

61d

Now, use EXCEL to calculate inventories at 5 years.

Start with COREINV1.XLS

Copy it to COREINV3.XLS.

Check my spreadsheet for $t=5$ years (C_{o-60} is $7.92 \times 10^{15} Bq$) ✓

$$\begin{aligned} C_{o-60}(5 \text{ years}) &= C_{o-60}(1 \text{ year}) \cdot e^{-\lambda t} \\ &= 1.34 \times 10^{16} Bq \cdot e^{-\frac{0.693}{5.3 \text{ yr}} (5 \text{ yr} - 1 \text{ yr})} \\ &= 7.94 \times 10^{15} Bq \quad \checkmark \end{aligned}$$