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Hydrometeorological Design Studies Center

Precipitation Frequency Data Server (PFDS)


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NOAA ATLAS 14 POINT PRECIPITATION FREQUENCY ESTIMATES: NJ

DATA DESCRIPTION

Data type: precipitation depth

Units: english

Time series type: partial duration

SELECT LOCATION

1. Manually:

a) Enter location (decimal degrees, use "-" for S and W): latitude: longitude:

b) Select station ([click here for a list of stations used in frequency analysis for NJ](#)): select station

2. Use map:

a) Select location
(move crosshair or double click)

b) Click on station icon
(show stations on map)

LOCATION INFORMATION:

Name: Mansfield, New Jersey, US*

Latitude: 40.1000°

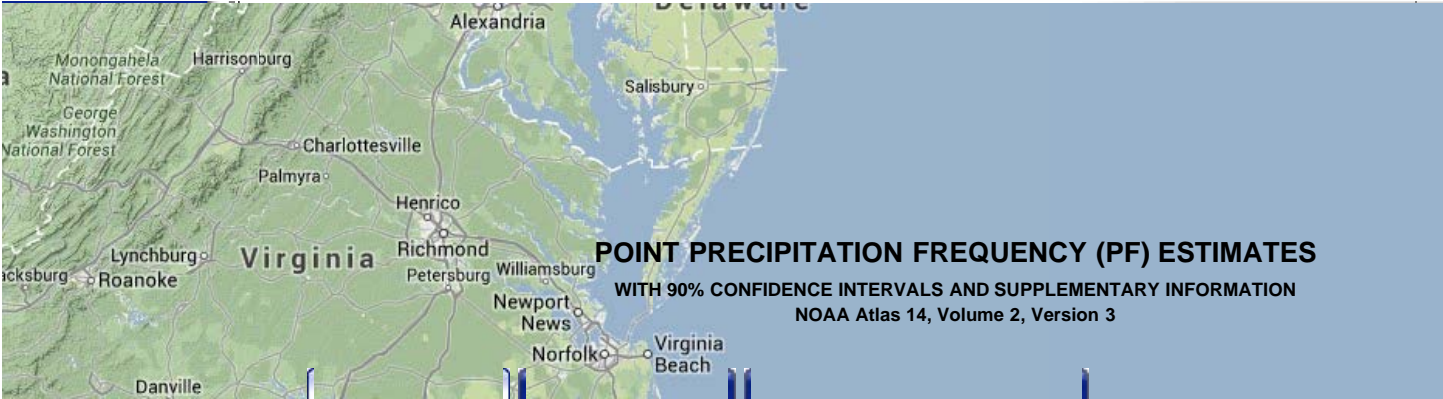
Longitude: -74.7000°

Elevation: 95 ft*

* source: Google Maps

Google

Map data ©2014 Google 50 km Terms of Use



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PDS-based precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.347 (0.316 0.381)	0.414 (0.377 0.455)	0.492 (0.447 0.540)	0.549 (0.497 0.603)	0.619 (0.558 0.679)	0.671 (0.601 0.737)	0.722 (0.645 0.795)	0.770 (0.683 0.851)	0.831 (0.729 0.924)	0.877 (0.763 0.982)
10-min	0.555 (0.505 0.609)	0.663 (0.604 0.728)	0.788 (0.716 0.865)	0.878 (0.795 0.964)	0.987 (0.890 1.08)	1.07 (0.958 1.17)	1.15 (1.02 1.26)	1.22 (1.08 1.35)	1.31 (1.15 1.46)	1.38 (1.20 1.55)
15-min	0.693 (0.631 0.761)	0.833 (0.759 0.916)	0.997 (0.906 1.10)	1.11 (1.01 1.22)	1.25 (1.13 1.37)	1.35 (1.21 1.49)	1.45 (1.29 1.60)	1.54 (1.37 1.70)	1.65 (1.45 1.84)	1.73 (1.51 1.94)
30-min	0.950 (0.865 1.04)	1.15 (1.05 1.27)	1.42 (1.29 1.56)	1.61 (1.46 1.77)	1.85 (1.67 2.03)	2.04 (1.83 2.24)	2.22 (1.98 2.45)	2.40 (2.13 2.65)	2.63 (2.31 2.93)	2.81 (2.44 3.14)
60-min	1.19 (1.08 1.30)	1.44 (1.32 1.59)	1.82 (1.65 1.99)	2.10 (1.90 2.30)	2.47 (2.22 2.71)	2.76 (2.48 3.03)	3.06 (2.73 3.37)	3.36 (2.98 3.72)	3.78 (3.31 4.20)	4.10 (3.57 4.59)
2-hr	1.44 (1.30 1.58)	1.75 (1.59 1.93)	2.21 (2.01 2.43)	2.57 (2.33 2.82)	3.06 (2.75 3.36)	3.45 (3.09 3.79)	3.86 (3.43 4.25)	4.27 (3.77 4.72)	4.86 (4.23 5.41)	5.32 (4.59 5.96)
3-hr	1.57 (1.43 1.74)	1.92 (1.74 2.12)	2.43 (2.20 2.69)	2.83 (2.55 3.13)	3.39 (3.04 3.74)	3.84 (3.42 4.25)	4.32 (3.81 4.79)	4.82 (4.21 5.35)	5.51 (4.75 6.16)	6.08 (5.17 6.83)
6-hr	1.98 (1.79 2.20)	2.40 (2.17 2.67)	3.03 (2.73 3.37)	3.55 (3.18 3.93)	4.29 (3.82 4.75)	4.91 (4.34 5.44)	5.58 (4.88 6.19)	6.30 (5.45 7.00)	7.34 (6.23 8.21)	8.20 (6.87 9.25)
12-hr	2.39 (2.17 2.69)	2.90 (2.62 3.25)	3.69 (3.32 4.13)	4.36 (3.91 4.87)	5.36 (4.75 5.97)	6.23 (5.48 6.95)	7.18 (6.23 8.01)	8.24 (7.03 9.24)	9.82 (8.21 11.1)	11.2 (9.18 12.7)
24-hr	2.76 (2.54 3.01)	3.33 (3.07 3.64)	4.26 (3.93 4.64)	5.05 (4.64 5.50)	6.24 (5.68 6.76)	7.26 (6.56 7.87)	8.40 (7.51 9.09)	9.66 (8.55 10.5)	11.6 (10.1 12.6)	13.2 (11.3 14.4)
2-day	3.18 (2.92 3.48)	3.85 (3.55 4.22)	4.94 (4.53 5.39)	5.84 (5.34 6.38)	7.18 (6.52 7.81)	8.32 (7.50 9.05)	9.57 (8.56 10.4)	11.0 (9.69 11.9)	13.0 (11.3 14.2)	14.7 (12.7 16.2)
3-day	3.37 (3.12 3.66)	4.08 (3.78 4.44)	5.19 (4.80 5.64)	6.12 (5.64 6.64)	7.48 (6.85 8.10)	8.63 (7.85 9.34)	9.88 (8.92 10.7)	11.3 (10.1 12.2)	13.3 (11.7 14.4)	15.0 (13.1 16.3)
4-day	3.56 (3.31 3.85)	4.30 (4.01 4.65)	5.45 (5.07 5.89)	6.40 (5.93 6.91)	7.78 (7.17 8.38)	8.94 (8.19 9.62)	10.2 (9.28 11.0)	11.5 (10.4 12.4)	13.5 (12.1 14.6)	15.2 (13.5 16.4)
7-day	4.16 (3.88 4.49)	5.01 (4.66 5.39)	6.25 (5.81 6.73)	7.28 (6.75 7.84)	8.78 (8.11 9.44)	10.0 (9.23 10.8)	11.4 (10.4 12.2)	12.9 (11.7 13.8)	15.0 (13.4 16.1)	16.7 (14.9 18.0)
10-day	4.74 (4.44 5.07)	5.67 (5.31 6.07)	6.97 (6.52 7.46)	8.03 (7.50 8.59)	9.54 (8.87 10.2)	10.8 (9.98 11.5)	12.1 (11.1 12.9)	13.4 (12.3 14.4)	15.4 (14.0 16.5)	17.0 (15.3 18.3)
20-day	6.40 (6.05 6.78)	7.60 (7.18 8.05)	9.11 (8.61 9.65)	10.3 (9.74 10.9)	12.0 (11.3 12.7)	13.3 (12.5 14.0)	14.6 (13.7 15.4)	16.0 (14.9 16.9)	17.8 (16.5 18.9)	19.3 (17.7 20.5)
30-day	7.95 (7.55 8.36)	9.38 (8.92 9.87)	11.0 (10.5 11.6)	12.3 (11.7 13.0)	14.1 (13.3 14.8)	15.4 (14.5 16.2)	16.7 (15.7 17.5)	18.0 (16.9 19.0)	19.8 (18.4 20.8)	21.1 (19.6 22.3)

45-day	10.1 (9.67 10.6)	11.9 (11.4 12.5)	13.8 (13.2 14.5)	15.3 (14.5 16.0)	17.1 (16.2 17.9)	18.5 (17.5 19.4)	19.8 (18.7 20.7)	21.1 (19.9 22.1)	22.7 (21.3 23.8)	23.9 (22.4 25.1)
60-day	12.1 (11.6 12.7)	14.3 (13.6 14.9)	16.3 (15.6 17.1)	17.9 (17.1 18.7)	19.9 (19.0 20.8)	21.3 (20.3 22.3)	22.6 (21.5 23.7)	23.9 (22.7 25.1)	25.5 (24.1 26.7)	26.6 (25.1 28.0)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).
Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.
Please refer to NOAA Atlas 14 document for more information.

Estimates from the table in csv format: precipitation frequency estimates

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Page last modified: February 24, 2014

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