

RAINFALL DATA
NOAA ATLAS 14



POINT PRECIPITATION FREQUENCY ESTIMATES FROM NOAA ATLAS 14



Arizona 31.9302 N 111.2637 W 3894 feet

from "Precipitation-Frequency Atlas of the United States" NOAA Atlas 14, Volume 1, Version 4

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M. Yekta, and D. Riley

NOAA, National Weather Service, Silver Spring, Maryland, 2006

Extracted: Fri Feb 23 2007

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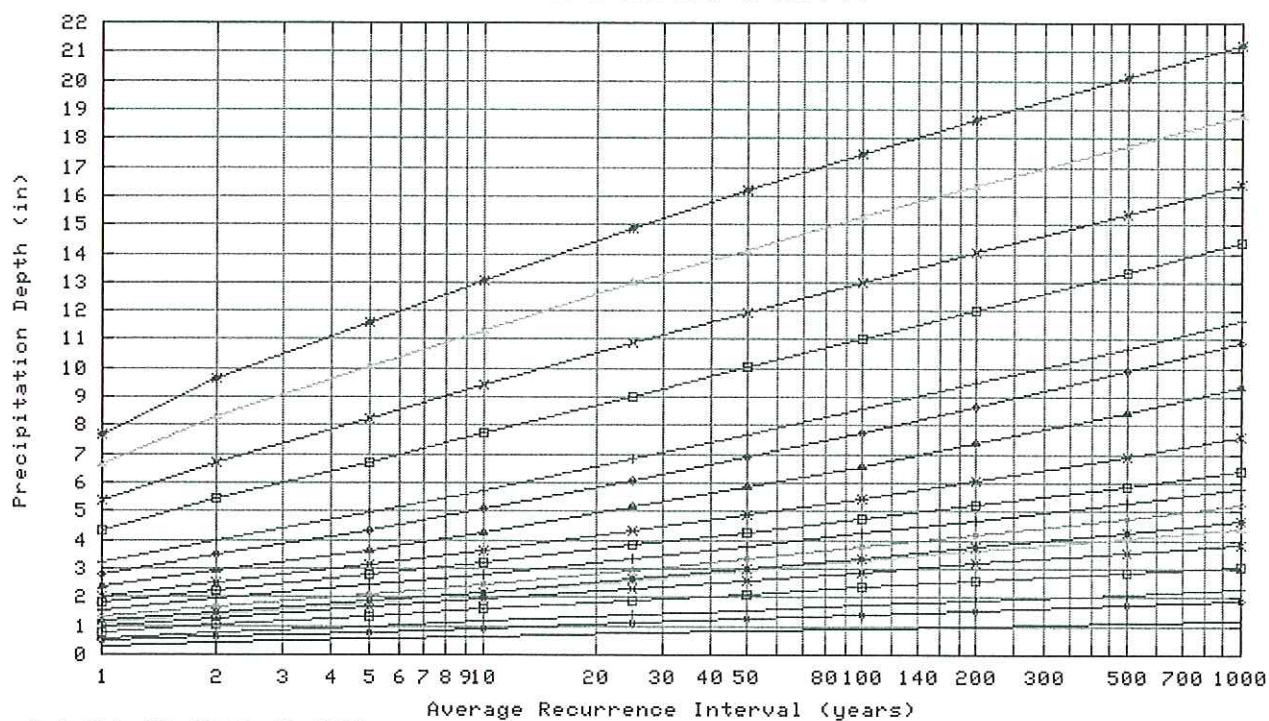
Precipitation Frequency Estimates (inches)

ARI* (years)	5 min	10 min	15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr	48 hr	4 day	7 day	10 day	20 day	30 day	45 day	60 day
1	0.31	0.47	0.59	0.79	0.98	1.10	1.16	1.34	1.56	1.79	2.01	2.34	2.77	3.19	4.36	5.39	6.65	7.71
2	0.40	0.61	0.76	1.02	1.26	1.41	1.46	1.68	1.95	2.23	2.51	2.92	3.47	3.98	5.45	6.74	8.29	9.62
5	0.53	0.80	0.99	1.34	1.66	1.83	1.87	2.11	2.43	2.78	3.12	3.65	4.35	4.97	6.74	8.26	10.05	11.63
10	0.62	0.94	1.17	1.57	1.95	2.15	2.20	2.46	2.83	3.22	3.62	4.27	5.08	5.76	7.73	9.40	11.34	13.08
25	0.74	1.13	1.40	1.88	2.33	2.58	2.65	2.96	3.37	3.81	4.33	5.14	6.10	6.84	9.04	10.86	12.97	14.89
50	0.83	1.26	1.57	2.11	2.61	2.92	3.00	3.35	3.80	4.28	4.89	5.84	6.91	7.69	10.03	11.94	14.13	16.19
100	0.92	1.40	1.74	2.34	2.90	3.26	3.38	3.77	4.25	4.75	5.48	6.58	7.76	8.57	11.03	13.01	15.27	17.43
200	1.01	1.54	1.91	2.57	3.18	3.60	3.75	4.19	4.71	5.24	6.09	7.37	8.66	9.48	12.03	14.05	16.36	18.62
500	1.13	1.72	2.13	2.87	3.55	4.07	4.28	4.78	5.33	5.89	6.93	8.47	9.90	10.71	13.36	15.40	17.75	20.12
1000	1.22	1.85	2.30	3.10	3.83	4.43	4.70	5.24	5.82	6.40	7.61	9.36	10.90	11.69	14.37	16.40	18.79	21.22

[Text version of table](#)

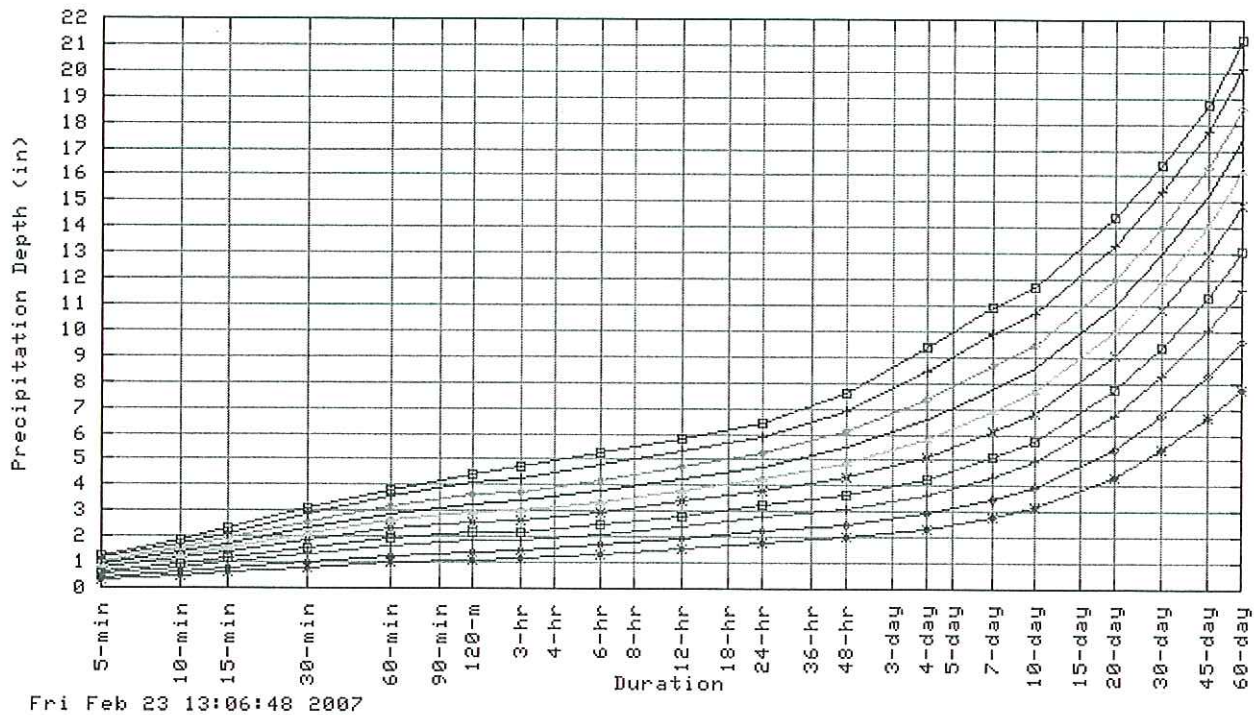
* These precipitation frequency estimates are based on a partial duration series. ARI is the Average Recurrence Interval. Please refer to the documentation for more information. NOTE: Formatting forces estimates near zero to appear as zero.

Partial duration based Point Precipitation Frequency Estimates Version: 4
31.9302 N 111.2637 W 3894 ft



Duration			
5-min	—	120-min	—◇—
10-min	—○—	3-hr	—*—
15-min	—+—	6-hr	—◇—
30-min	—□—	12-hr	—+—
60-min	—x—	24-hr	—□—
		48-hr	—x—
		4-day	—*—
		7-day	—◇—
		10-day	—+—
		20-day	—□—
		30-day	—x—
		45-day	—◇—
		60-day	—*—

Partial duration based Point Precipitation Frequency Estimates Version: 4
31.9302 N 111.2637 W 3894 ft



Average Recurrence Interval (years)	
1	*
2	+
5	+
10	+
25	+
50	+
100	+
200	+
500	+
1000	+

Confidence Limits -

* Upper bound of the 90% confidence interval Precipitation Frequency Estimates (inches)																		
ARI** (years)	5 min	10 min	15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr	48 hr	4 day	7 day	10 day	20 day	30 day	45 day	60 day
1	0.35	0.54	0.67	0.90	1.11	1.25	1.30	1.52	1.74	1.97	2.22	2.62	3.10	3.54	4.79	5.88	7.26	8.42
2	0.46	0.69	0.86	1.16	1.43	1.59	1.65	1.90	2.18	2.46	2.77	3.26	3.87	4.43	6.00	7.36	9.06	10.51
5	0.59	0.91	1.12	1.51	1.87	2.06	2.11	2.38	2.72	3.07	3.45	4.08	4.86	5.53	7.41	9.03	10.98	12.71
10	0.70	1.06	1.32	1.77	2.19	2.41	2.47	2.77	3.15	3.55	4.01	4.76	5.67	6.41	8.51	10.28	12.40	14.31
25	0.83	1.27	1.57	2.12	2.62	2.89	2.97	3.33	3.76	4.20	4.79	5.73	6.82	7.62	9.96	11.91	14.21	16.32
50	0.94	1.43	1.77	2.38	2.94	3.27	3.37	3.77	4.24	4.71	5.41	6.52	7.75	8.59	11.08	13.12	15.51	17.77
100	1.04	1.59	1.97	2.65	3.28	3.66	3.79	4.25	4.76	5.25	6.08	7.37	8.73	9.60	12.22	14.33	16.79	19.18
200	1.15	1.75	2.17	2.92	3.61	4.07	4.24	4.75	5.31	5.80	6.78	8.28	9.77	10.65	13.37	15.52	18.03	20.54
500	1.29	1.97	2.44	3.29	4.07	4.62	4.88	5.45	6.07	6.56	7.77	9.56	11.26	12.12	14.94	17.12	19.67	22.32
1000	1.41	2.15	2.66	3.58	4.44	5.08	5.41	6.04	6.69	7.16	8.58	10.62	12.45	13.31	16.18	18.33	20.92	23.65

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Please refer to the documentation for more information. NOTE: Formatting prevents estimates near zero to appear as zero.

* Lower bound of the 90% confidence interval

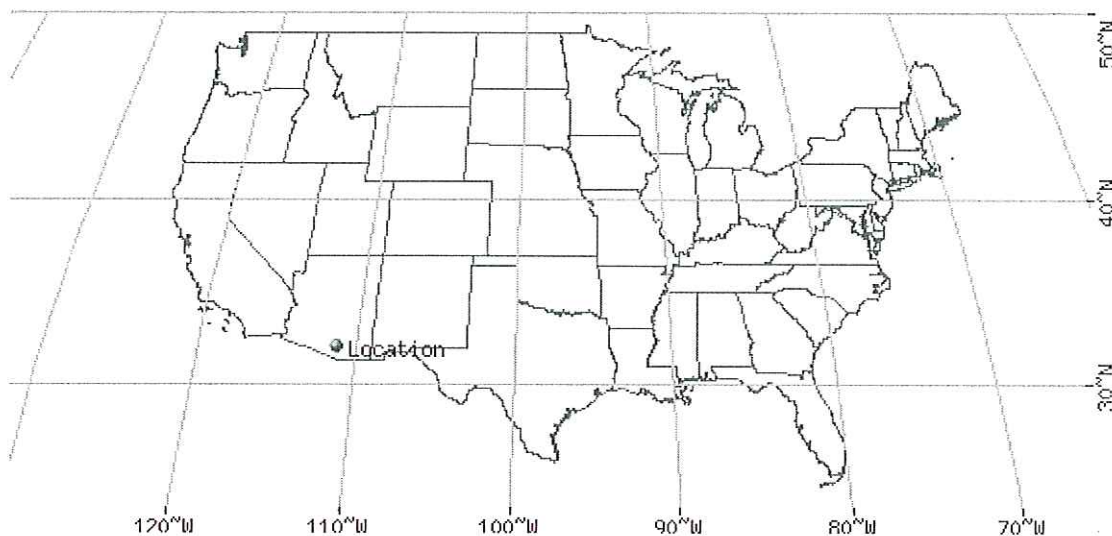
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1	0.28	0.42	0.52	0.70	0.87	0.99	1.04	1.20	1.40	1.62	1.82	2.11	2.50	2.87	3.96	4.93	6.10	7.05
2	0.36	0.54	0.67	0.91	1.12	1.26	1.31	1.50	1.76	2.03	2.28	2.63	3.12	3.59	4.96	6.16	7.61	8.80
5	0.47	0.71	0.88	1.18	1.46	1.62	1.67	1.88	2.18	2.52	2.82	3.28	3.91	4.46	6.11	7.53	9.21	10.63
10	0.54	0.83	1.02	1.38	1.71	1.89	1.95	2.18	2.52	2.91	3.27	3.82	4.55	5.15	6.99	8.55	10.37	11.95
25	0.64	0.98	1.22	1.64	2.03	2.26	2.33	2.59	2.97	3.43	3.89	4.57	5.42	6.09	8.14	9.85	11.81	13.57
50	0.71	1.09	1.35	1.82	2.25	2.53	2.61	2.90	3.31	3.82	4.36	5.16	6.11	6.81	9.00	10.79	12.84	14.70
100	0.78	1.19	1.48	1.99	2.47	2.79	2.88	3.20	3.65	4.22	4.85	5.77	6.81	7.53	9.84	11.70	13.82	15.78
200	0.85	1.29	1.60	2.16	2.67	3.04	3.16	3.50	3.98	4.62	5.35	6.39	7.53	8.26	10.65	12.57	14.73	16.77
500	0.93	1.41	1.75	2.36	2.92	3.35	3.50	3.89	4.41	5.15	6.01	7.24	8.49	9.21	11.70	13.65	15.86	17.98
1000	0.98	1.50	1.86	2.50	3.10	3.58	3.76	4.18	4.72	5.55	6.52	7.90	9.24	9.94	12.47	14.44	16.67	18.84

* The lower bound of the confidence interval at 90% confidence level is the value which 5% of the simulated quantile values for a given frequency are less than.

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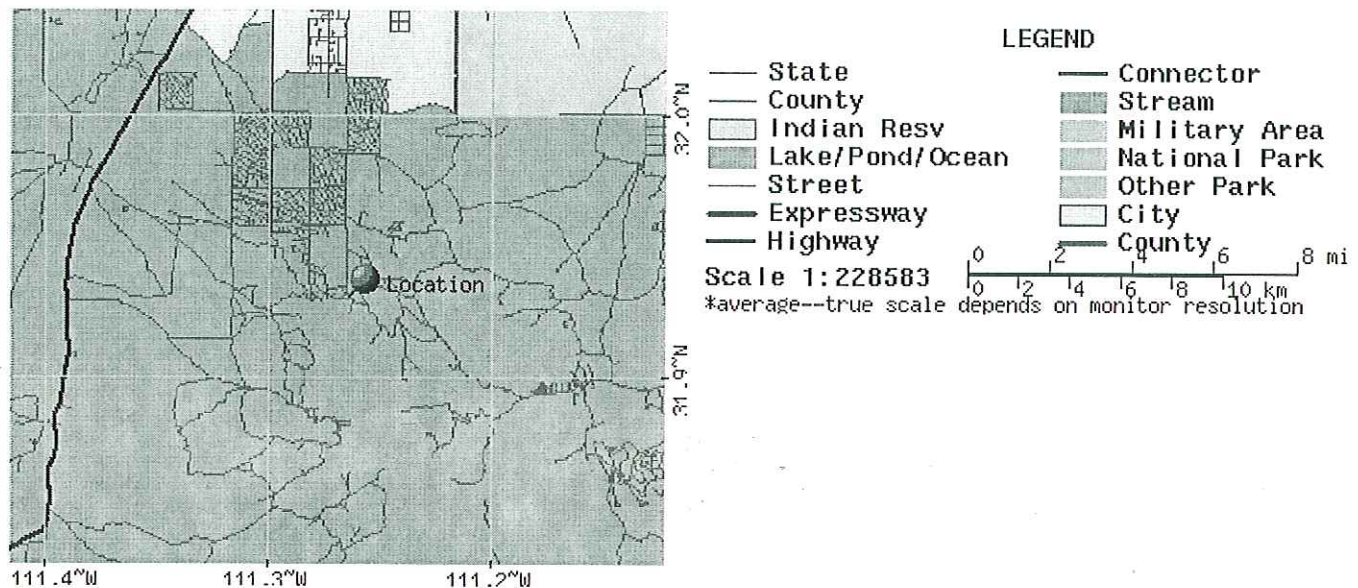
Please refer to the [documentation](#) for more information. NOTE: Formatting prevents estimates near zero to appear as zero.

Maps -



These maps were produced using a direct map request from the U.S. Census Bureau Mapping and Cartographic Resources Tiger Map Server.

Please read disclaimer for more information.



Other Maps/Photographs -

View [USGS digital orthophoto quadrangle \(DOQ\)](#) covering this location from TerraServer; [USGS Aerial Photograph](#) may also be available from this site. A DOQ is a computer-generated image of an aerial photograph in which image displacement caused by terrain relief and camera tilts has been removed. It combines the image characteristics of a photograph with the geometric qualities of a map. Visit the [USGS](#) for more information.

Watershed/Stream Flow Information -

Find the [Watershed](#) for this location using the U.S. Environmental Protection Agency's site.

Climate Data Sources -

Precipitation frequency results are based on data from a variety of sources, but largely NCDC. The following links provide general information about observing sites in the area, regardless of if their data was used in this study. For detailed information about the stations used in this study, please refer to our documentation.

Using the [National Climatic Data Center's \(NCDC\)](#) station search engine, locate other climate stations within:

...OR... of this location (31.9302/-111.2637). Digital ASCII data can be obtained directly from [NCDC](#).

Find Natural Resources Conservation Service (NRCS) SNOTEL (SNOWpack TELelemetry) stations by visiting the [Western Regional Climate Center's state-specific SNOTEL station maps](#).

Hydrometeorological Design Studies Center
 DOC/NOAA/National Weather Service
 1325 East-West Highway
 Silver Spring, MD 20910

(301) 713-1669
 Questions?: HDSC.Questions@noaa.gov

[Disclaimer](#)



POINT PRECIPITATION FREQUENCY ESTIMATES FROM NOAA ATLAS 14



Arizona 32.0218 N 111.2652 W 3064 feet

from "Precipitation-Frequency Atlas of the United States" NOAA Atlas 14, Volume 1, Version 4

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M. Yekta, and D. Riley

NOAA, National Weather Service, Silver Spring, Maryland, 2006

Extracted: Mon Feb 26 2007

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[Location Maps](#)
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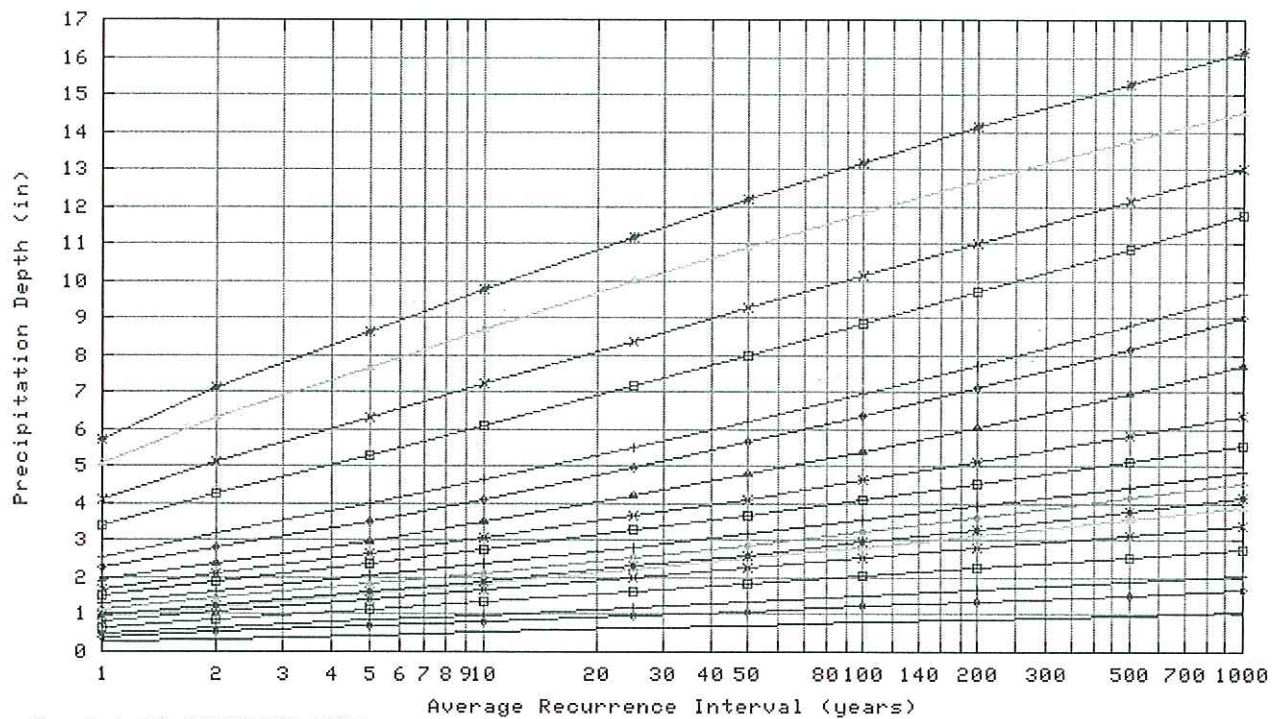
Precipitation Frequency Estimates (inches)

ARI* (years)	5 min	10 min	15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr	48 hr	4 day	7 day	10 day	20 day	30 day	45 day	60 day
1	0.26	0.40	0.49	0.66	0.82	0.94	0.99	1.15	1.30	1.53	1.70	1.92	2.25	2.54	3.39	4.11	5.05	5.71
2	0.34	0.51	0.64	0.86	1.06	1.21	1.26	1.44	1.63	1.92	2.12	2.40	2.81	3.18	4.24	5.13	6.30	7.12
5	0.45	0.68	0.84	1.13	1.40	1.57	1.61	1.81	2.04	2.39	2.64	3.00	3.53	3.97	5.27	6.31	7.68	8.65
10	0.53	0.80	0.99	1.34	1.66	1.84	1.90	2.12	2.37	2.77	3.07	3.50	4.13	4.62	6.08	7.21	8.70	9.78
25	0.64	0.97	1.20	1.61	2.00	2.23	2.30	2.55	2.82	3.29	3.66	4.22	4.97	5.51	7.16	8.39	9.98	11.20
50	0.72	1.09	1.35	1.82	2.26	2.53	2.62	2.89	3.18	3.70	4.13	4.80	5.64	6.22	7.99	9.27	10.91	12.21
100	0.80	1.22	1.51	2.04	2.52	2.83	2.94	3.25	3.55	4.12	4.62	5.41	6.36	6.96	8.84	10.15	11.81	13.20
200	0.89	1.35	1.67	2.25	2.79	3.14	3.29	3.62	3.93	4.54	5.12	6.06	7.10	7.73	9.70	11.02	12.67	14.13
500	1.00	1.52	1.88	2.54	3.14	3.56	3.77	4.14	4.45	5.12	5.82	6.97	8.16	8.80	10.85	12.15	13.74	15.29
1000	1.08	1.65	2.04	2.75	3.41	3.89	4.14	4.55	4.86	5.57	6.37	7.70	9.00	9.64	11.74	13.00	14.52	16.13

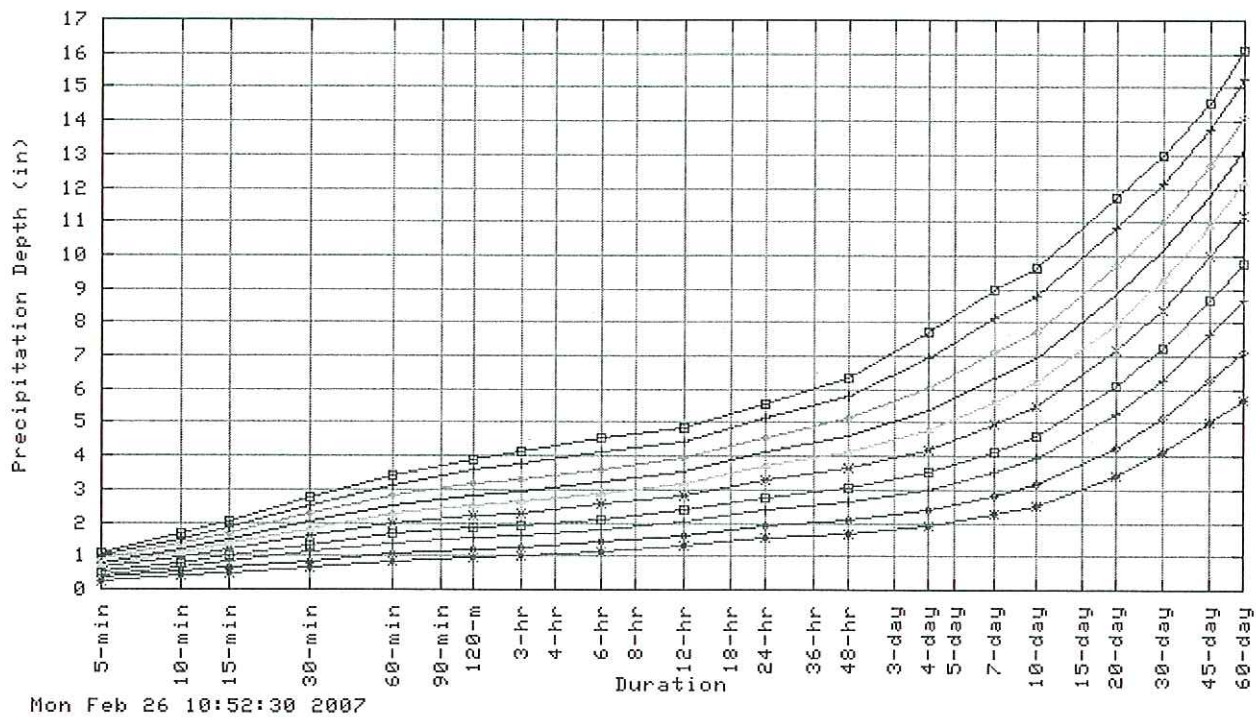
[Text version of table](#)

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Partial duration based Point Precipitation Frequency Estimates Version: 4
 32.0218 N 111.2652 W 3064 ft



Partial duration based Point Precipitation Frequency Estimates Version: 4
32.0218 N 111.2652 W 3064 ft



Average Recurrence Interval (years)	
1	*
2	o
5	+
10	□
25	✕
50	—
100	—
200	—
500	—
1000	—

Confidence Limits -

* Upper bound of the 90% confidence interval Precipitation Frequency Estimates (inches)																		
ARI** (years)	5 min	10 min	15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr	48 hr	4 day	7 day	10 day	20 day	30 day	45 day	60 day
1	0.30	0.45	0.56	0.76	0.94	1.07	1.13	1.30	1.45	1.69	1.87	2.14	2.50	2.83	3.72	4.48	5.51	6.22
2	0.39	0.59	0.73	0.98	1.21	1.37	1.43	1.62	1.82	2.11	2.34	2.67	3.13	3.53	4.67	5.61	6.87	7.76
5	0.51	0.77	0.95	1.29	1.59	1.78	1.83	2.05	2.27	2.64	2.91	3.33	3.92	4.41	5.80	6.90	8.38	9.43
10	0.60	0.91	1.13	1.52	1.88	2.09	2.15	2.39	2.64	3.06	3.38	3.89	4.59	5.13	6.69	7.89	9.48	10.66
25	0.72	1.09	1.36	1.83	2.26	2.51	2.60	2.87	3.14	3.63	4.04	4.69	5.53	6.12	7.89	9.19	10.90	12.22
50	0.81	1.24	1.54	2.07	2.56	2.85	2.95	3.25	3.54	4.08	4.56	5.34	6.30	6.93	8.82	10.17	11.92	13.36
100	0.91	1.39	1.72	2.32	2.87	3.20	3.34	3.67	3.96	4.56	5.12	6.04	7.12	7.79	9.80	11.17	12.93	14.46
200	1.01	1.54	1.91	2.57	3.18	3.57	3.74	4.11	4.41	5.05	5.71	6.79	8.00	8.69	10.80	12.17	13.90	15.54
500	1.15	1.75	2.17	2.92	3.61	4.08	4.33	4.73	5.05	5.73	6.53	7.87	9.27	9.97	12.18	13.53	15.18	16.93
1000	1.26	1.91	2.37	3.20	3.96	4.49	4.80	5.25	5.57	6.26	7.20	8.75	10.30	11.01	13.28	14.57	16.12	17.96

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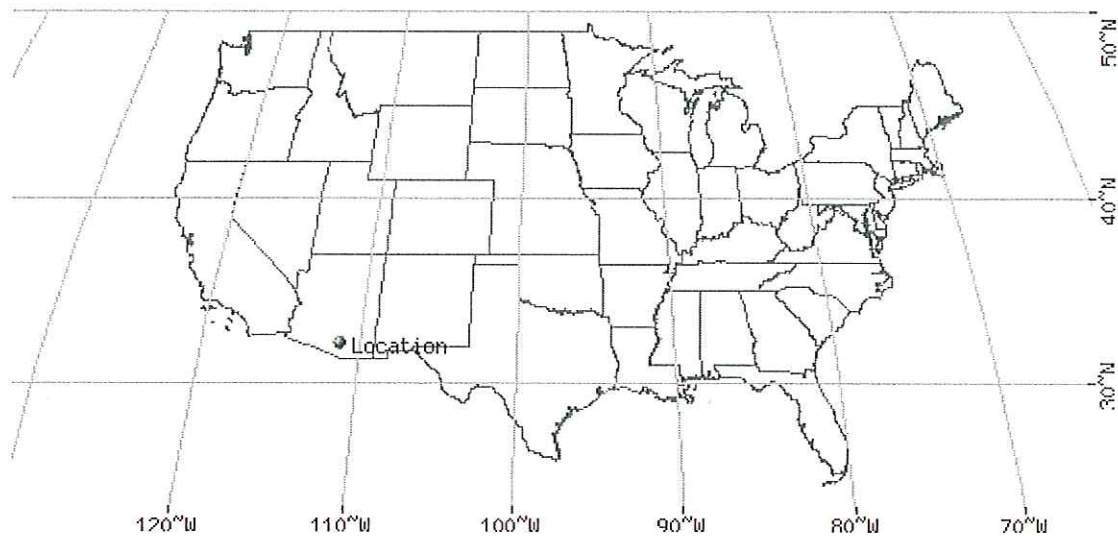
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1	0.23	0.35	0.44	0.59	0.73	0.84	0.89	1.02	1.17	1.39	1.54	1.74	2.03	2.30	3.08	3.76	4.64	5.23
2	0.30	0.46	0.56	0.76	0.94	1.07	1.12	1.28	1.47	1.74	1.92	2.17	2.54	2.87	3.86	4.69	5.79	6.52
5	0.39	0.60	0.74	0.99	1.23	1.38	1.43	1.61	1.82	2.16	2.39	2.71	3.18	3.57	4.78	5.76	7.04	7.93
10	0.46	0.70	0.87	1.17	1.45	1.62	1.68	1.87	2.10	2.50	2.77	3.15	3.71	4.14	5.50	6.57	7.96	8.95
25	0.55	0.84	1.04	1.40	1.73	1.94	2.00	2.22	2.48	2.96	3.29	3.77	4.43	4.91	6.45	7.61	9.10	10.22
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100	0.68	1.03	1.27	1.72	2.12	2.40	2.49	2.75	3.04	3.65	4.09	4.75	5.59	6.11	7.86	9.12	10.69	11.97
200	0.74	1.12	1.39	1.87	2.31	2.62	2.73	3.01	3.31	3.99	4.50	5.26	6.19	6.72	8.56	9.84	11.41	12.76
500	0.81	1.23	1.53	2.06	2.54	2.90	3.03	3.34	3.67	4.45	5.04	5.95	6.99	7.53	9.45	10.73	12.28	13.70
1000	0.86	1.31	1.62	2.19	2.71	3.10	3.27	3.60	3.93	4.80	5.45	6.49	7.62	8.15	10.12	11.38	12.90	14.36

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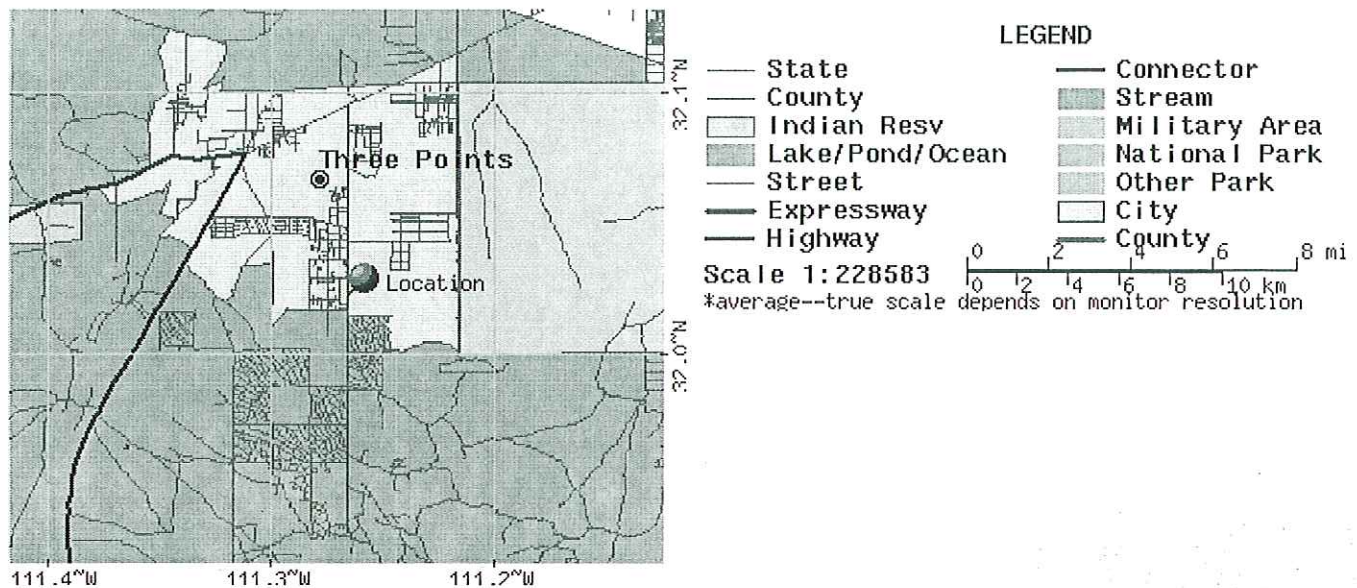
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Hydrometeorological Design Studies Center
DOC/NOAA/National Weather Service
1325 East-West Highway
Silver Spring, MD 20910
(301) 713-1669
Questions?: HDSC.Questions@noaa.gov

Disclaimer



POINT PRECIPITATION FREQUENCY ESTIMATES FROM NOAA ATLAS 14



Arizona 32.1074 N 111.2365 W 2473 feet

from "Precipitation-Frequency Atlas of the United States" NOAA Atlas 14, Volume 1, Version 4

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NOAA, National Weather Service, Silver Spring, Maryland, 2006

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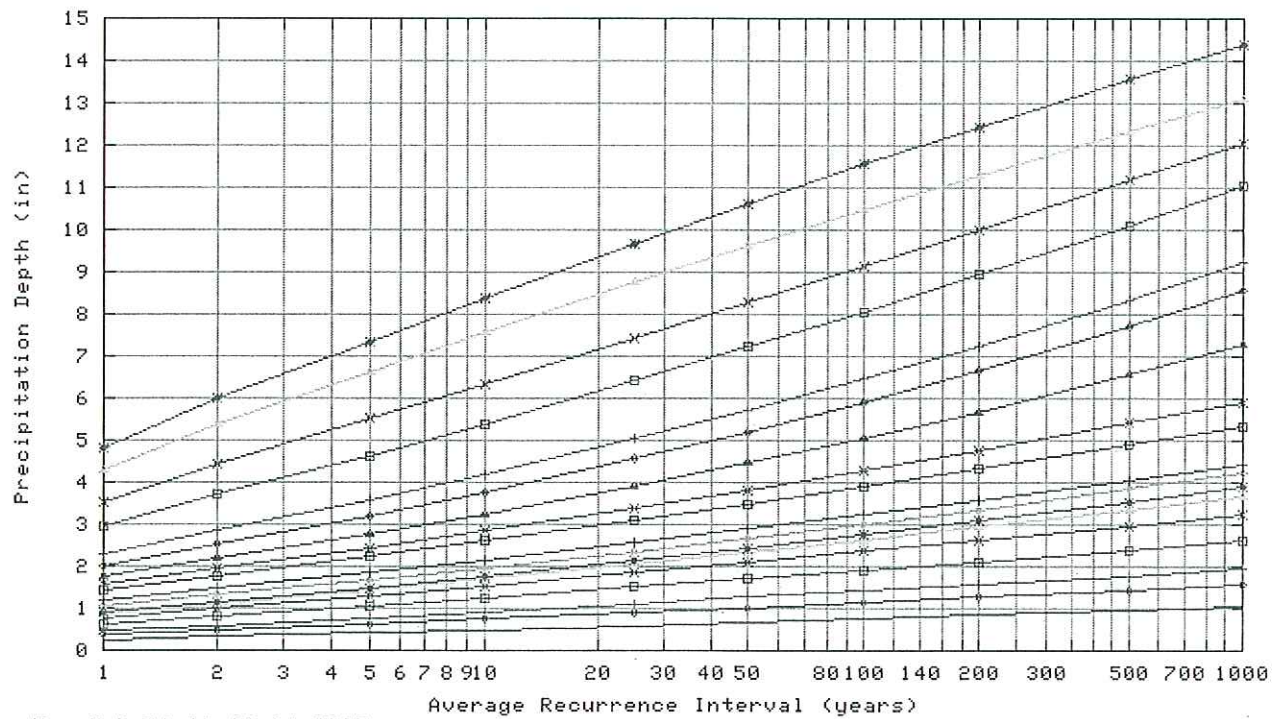
Precipitation Frequency Estimates (inches)

ARI* (years)	5 min	10 min	15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr	48 hr	4 day	7 day	10 day	20 day	30 day	45 day	60 day
1	0.24	0.37	0.45	0.61	0.76	0.87	0.92	1.05	1.19	1.42	1.55	1.75	2.02	2.27	2.94	3.54	4.31	4.79
2	0.31	0.47	0.59	0.79	0.98	1.11	1.16	1.32	1.48	1.78	1.94	2.19	2.54	2.84	3.69	4.43	5.38	5.98
5	0.41	0.63	0.78	1.05	1.29	1.45	1.50	1.67	1.85	2.23	2.43	2.76	3.20	3.57	4.64	5.50	6.63	7.35
10	0.49	0.74	0.92	1.24	1.53	1.71	1.76	1.96	2.15	2.60	2.83	3.24	3.76	4.18	5.39	6.34	7.55	8.37
25	0.59	0.90	1.12	1.50	1.86	2.07	2.14	2.35	2.57	3.10	3.39	3.92	4.57	5.04	6.42	7.45	8.75	9.68
50	0.67	1.02	1.26	1.70	2.11	2.35	2.43	2.67	2.89	3.49	3.83	4.47	5.21	5.73	7.23	8.30	9.62	10.63
100	0.75	1.15	1.42	1.91	2.37	2.64	2.75	3.01	3.23	3.90	4.29	5.06	5.91	6.47	8.07	9.15	10.47	11.56
200	0.83	1.27	1.57	2.12	2.62	2.94	3.07	3.36	3.58	4.32	4.76	5.68	6.66	7.24	8.93	10.02	11.29	12.45
500	0.94	1.44	1.78	2.40	2.97	3.34	3.53	3.85	4.05	4.89	5.41	6.57	7.72	8.34	10.11	11.17	12.33	13.58
1000	1.03	1.56	1.94	2.61	3.23	3.65	3.89	4.24	4.43	5.34	5.92	7.29	8.59	9.22	11.03	12.05	13.09	14.40

[Text version of table](#)

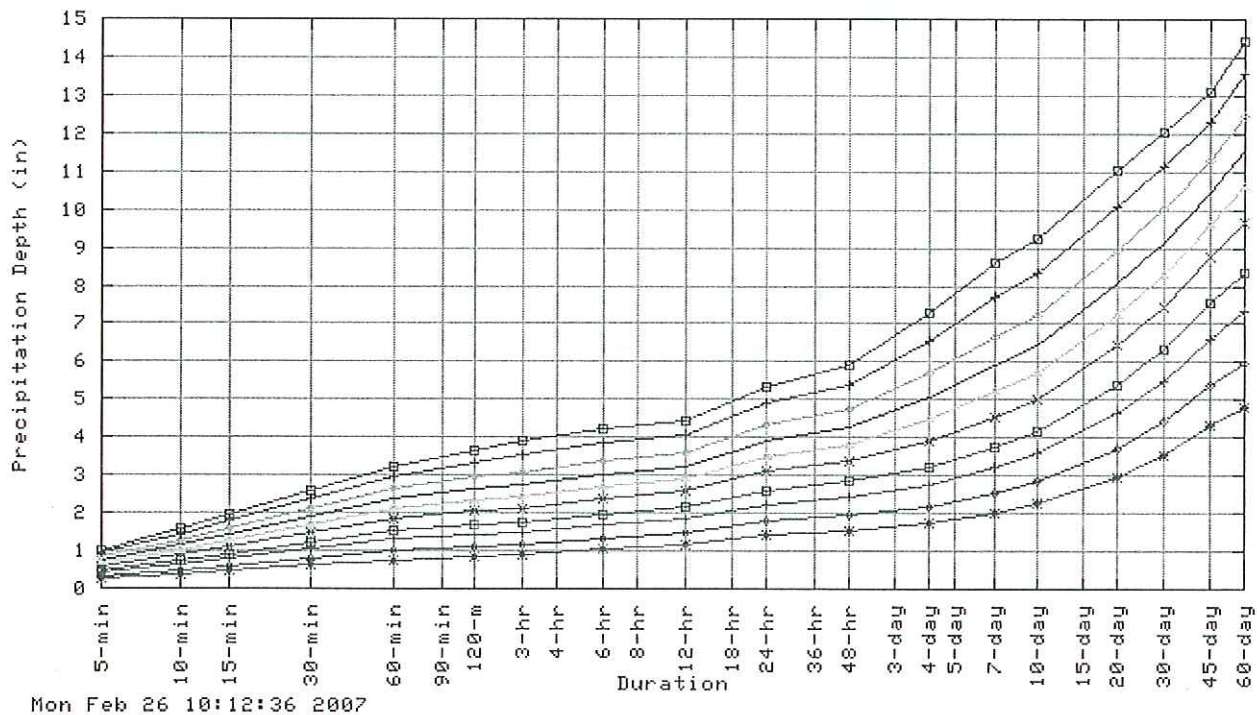
* These precipitation frequency estimates are based on a partial duration series. ARI is the Average Recurrence Interval. Please refer to the [documentation](#) for more information. NOTE: Formatting forces estimates near zero to appear as zero.

Partial duration based Point Precipitation Frequency Estimates Version: 4
 32.1074 N 111.2365 W 2473 ft



Duration			
5-min	—	120-min	—
10-min	—o—	3-hr	—*—
15-min	—+—	6-hr	—o—
30-min	—□—	12-hr	—+—
60-min	—x—	24-hr	—□—
		48-hr	—x—
		4-day	—▲—
		7-day	—o—
		10-day	—+—
		20-day	—□—
		30-day	—x—
		45-day	—+—
		60-day	—*—

Partial duration based Point Precipitation Frequency Estimates Version: 4
32.1074 N 111.2365 W 2473 ft



Average Recurrence Interval (years)	
1	*
2	•
5	+
10	■
25	✕
50	—
100	—
200	—
500	—
1000	—

Confidence Limits -

* Upper bound of the 90% confidence interval Precipitation Frequency Estimates (inches)																		
ARI** (years)	5 min	10 min	15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr	48 hr	4 day	7 day	10 day	20 day	30 day	45 day	60 day
1	0.28	0.42	0.52	0.70	0.87	0.99	1.04	1.20	1.32	1.57	1.70	1.95	2.24	2.51	3.23	3.86	4.68	5.21
2	0.36	0.54	0.67	0.90	1.12	1.26	1.32	1.50	1.66	1.97	2.14	2.43	2.81	3.14	4.05	4.83	5.86	6.51
5	0.47	0.71	0.88	1.19	1.47	1.64	1.70	1.89	2.07	2.47	2.68	3.06	3.54	3.95	5.09	6.00	7.21	7.99
10	0.55	0.84	1.05	1.41	1.74	1.93	2.00	2.21	2.40	2.87	3.12	3.59	4.16	4.62	5.92	6.91	8.21	9.10
25	0.67	1.02	1.26	1.70	2.11	2.33	2.42	2.65	2.86	3.42	3.73	4.34	5.05	5.57	7.06	8.13	9.52	10.53
50	0.76	1.16	1.44	1.94	2.40	2.65	2.75	3.01	3.22	3.86	4.22	4.96	5.80	6.36	7.96	9.07	10.47	11.60
100	0.86	1.30	1.62	2.18	2.69	2.98	3.12	3.39	3.61	4.33	4.75	5.64	6.61	7.21	8.92	10.05	11.44	12.64
200	0.95	1.45	1.80	2.42	3.00	3.33	3.50	3.81	4.02	4.81	5.30	6.38	7.49	8.12	9.93	11.05	12.38	13.68
500	1.09	1.66	2.05	2.76	3.42	3.82	4.06	4.39	4.60	5.50	6.07	7.44	8.78	9.44	11.35	12.44	13.62	15.04
1000	1.19	1.81	2.25	3.03	3.75	4.21	4.51	4.89	5.08	6.04	6.71	8.32	9.86	10.55	12.52	13.53	14.55	16.05

* The upper bound of the confidence interval at 90% confidence level is the value which 5% of the simulated quantile values for a given frequency are greater than.

** These precipitation frequency estimates are based on a partial duration series. ARI is the Average Recurrence Interval.

Please refer to the documentation for more information. NOTE: Formatting prevents estimates near zero to appear as zero.

* Lower bound of the 90% confidence interval

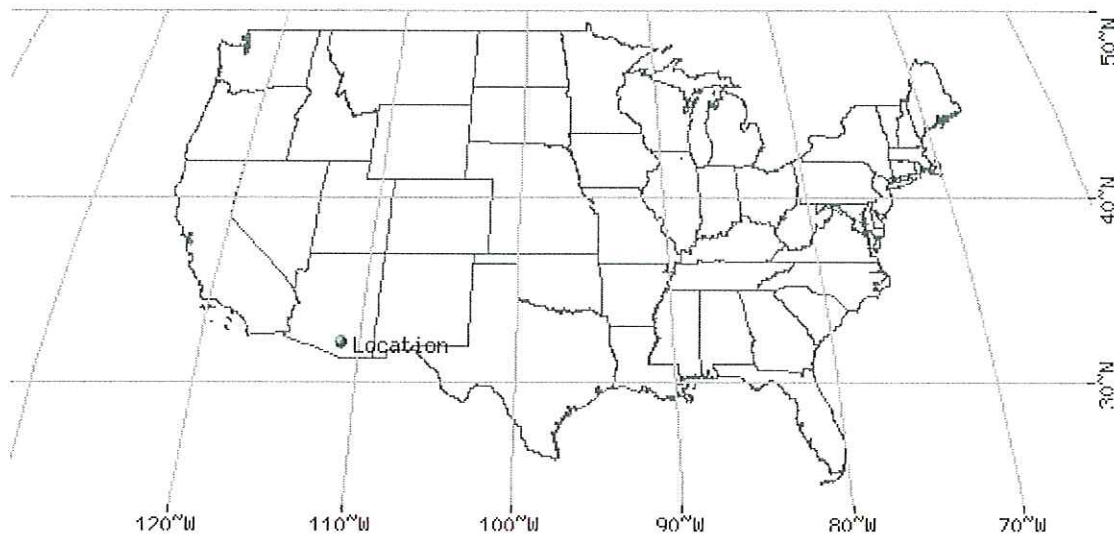
Precipitation Frequency Estimates (inches)																		
ARI** (years)	5 min	10 min	15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr	48 hr	4 day	7 day	10 day	20 day	30 day	45 day	60 day
1	0.21	0.32	0.40	0.54	0.67	0.77	0.82	0.94	1.07	1.30	1.41	1.59	1.83	2.06	2.68	3.25	3.97	4.41
2	0.28	0.42	0.52	0.70	0.87	0.99	1.03	1.18	1.34	1.62	1.77	1.99	2.29	2.57	3.36	4.06	4.96	5.51
5	0.36	0.55	0.68	0.92	1.14	1.28	1.33	1.48	1.66	2.03	2.22	2.50	2.89	3.23	4.21	5.03	6.09	6.77
10	0.43	0.65	0.81	1.08	1.34	1.50	1.55	1.73	1.92	2.35	2.57	2.92	3.39	3.77	4.88	5.78	6.93	7.69
25	0.51	0.78	0.96	1.30	1.61	1.80	1.86	2.06	2.27	2.79	3.06	3.51	4.08	4.50	5.78	6.77	8.00	8.87
50	0.57	0.87	1.08	1.45	1.80	2.02	2.09	2.30	2.53	3.12	3.42	3.97	4.62	5.08	6.46	7.50	8.76	9.71
100	0.63	0.96	1.19	1.60	1.99	2.23	2.31	2.54	2.77	3.46	3.80	4.44	5.19	5.67	7.14	8.21	9.49	10.51
200	0.69	1.05	1.30	1.75	2.17	2.44	2.54	2.79	3.02	3.79	4.18	4.93	5.77	6.28	7.83	8.93	10.18	11.26
500	0.76	1.16	1.44	1.93	2.39	2.70	2.83	3.11	3.34	4.24	4.68	5.58	6.57	7.09	8.72	9.81	11.02	12.17
1000	0.81	1.24	1.53	2.06	2.55	2.90	3.05	3.35	3.59	4.58	5.05	6.10	7.19	7.71	9.39	10.47	11.62	12.80

* The lower bound of the confidence interval at 90% confidence level is the value which 5% of the simulated quantile values for a given frequency are less than.

** These precipitation frequency estimates are based on a partial duration maxima series. ARI is the Average Recurrence Interval.

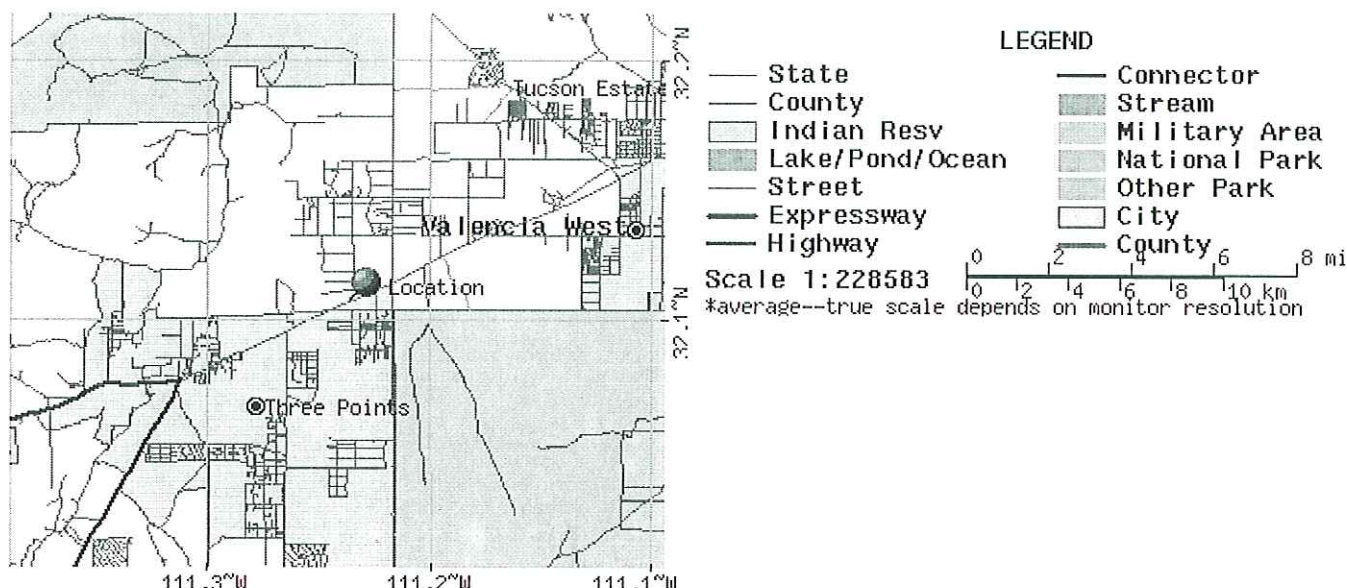
Please refer to the [documentation](#) for more information. NOTE: Formatting prevents estimates near zero to appear as zero.

Maps -



These maps were produced using a direct map request from the
U.S. Census Bureau Mapping and Cartographic Resources
Tiger Map Server.

Please read disclaimer for more information.



Other Maps/Photographs -

View USGS digital orthophoto quadrangle (DOQ) covering this location from TerraServer; USGS Aerial Photograph may also be available from this site. A DOQ is a computer-generated image of an aerial photograph in which image displacement caused by terrain relief and camera tilts has been removed. It combines the image characteristics of a photograph with the geometric qualities of a map. Visit the USGS for more information.

Watershed/Stream Flow Information -

Find the Watershed for this location using the U.S. Environmental Protection Agency's site.

Climate Data Sources -

Precipitation frequency results are based on data from a variety of sources, but largely NCDC. The following links provide general information about observing sites in the area, regardless of if their data was used in this study. For detailed information about the stations used in this study, please refer to our documentation.

Using the [National Climatic Data Center's \(NCDC\)](#) station search engine, locate other climate stations within:

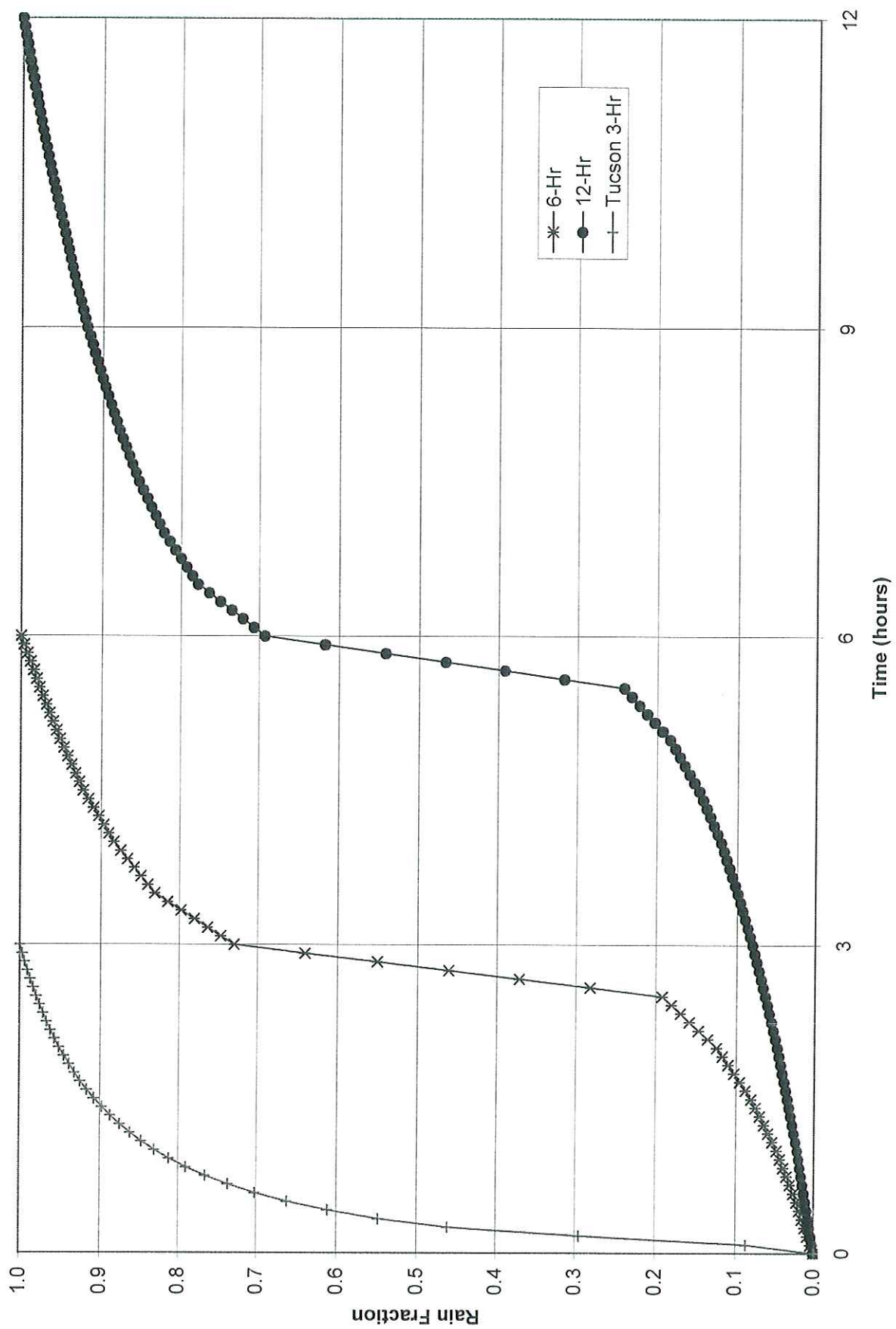
...OR... of this location (32.1074/-111.2365). Digital ASCII data can be obtained directly from [NCDC](#).

Find Natural Resources Conservation Service (NRCS) SNOTEL (SNOWpack TELelemetry) stations by visiting the [Western Regional Climate Center's](#) state-specific SNOTEL station maps.

Hydrometeorological Design Studies Center
DOC/NOAA/National Weather Service
1325 East-West Highway
Silver Spring, MD 20910
(301) 713-1669
Questions?: HDSC.Questions@noaa.gov

Disclaimer

**PIMA COUNTY DESIGN STORM
DISTRIBUTION**



Time		6-Hr	Lower	Middle	Upper
(min)	(hr)		3.39	3.67	4.25
0	0.00	0.000	0.000	0.000	0.000
5	0.08	0.004	0.013	0.014	0.016
10	0.17	0.008	0.026	0.028	0.032
15	0.25	0.011	0.038	0.042	0.048
20	0.33	0.015	0.051	0.055	0.064
25	0.42	0.019	0.064	0.069	0.080
30	0.50	0.023	0.077	0.083	0.096
35	0.58	0.027	0.091	0.099	0.114
40	0.67	0.031	0.105	0.114	0.132
45	0.75	0.035	0.120	0.130	0.150
50	0.83	0.040	0.134	0.145	0.168
55	0.92	0.044	0.149	0.161	0.186
60	1.00	0.048	0.163	0.176	0.204
65	1.08	0.054	0.181	0.196	0.227
70	1.17	0.059	0.200	0.216	0.250
75	1.25	0.064	0.218	0.236	0.274
80	1.33	0.070	0.237	0.256	0.297
85	1.42	0.075	0.255	0.276	0.320
90	1.50	0.081	0.273	0.296	0.343
95	1.58	0.088	0.298	0.323	0.374
100	1.67	0.095	0.323	0.350	0.405
105	1.75	0.103	0.348	0.376	0.436
110	1.83	0.110	0.372	0.403	0.467
115	1.92	0.117	0.397	0.430	0.498
120	2.00	0.124	0.422	0.457	0.529
125	2.08	0.136	0.460	0.498	0.577
130	2.17	0.147	0.499	0.540	0.625
135	2.25	0.158	0.537	0.581	0.673
140	2.33	0.170	0.575	0.623	0.721
145	2.42	0.181	0.614	0.664	0.769
150	2.50	0.192	0.652	0.706	0.818
155	2.58	0.282	0.956	1.035	1.198
160	2.67	0.372	1.259	1.363	1.579
165	2.75	0.461	1.563	1.692	1.960
170	2.83	0.551	1.867	2.021	2.340
175	2.92	0.640	2.170	2.350	2.721
180	3.00	0.730	2.474	2.679	3.102
185	3.08	0.747	2.532	2.741	3.174
190	3.17	0.764	2.589	2.803	3.246
195	3.25	0.781	2.647	2.865	3.318
200	3.33	0.798	2.704	2.928	3.390
205	3.42	0.815	2.762	2.990	3.463
210	3.50	0.832	2.819	3.052	3.535
215	3.58	0.840	2.849	3.084	3.572
220	3.67	0.849	2.879	3.116	3.609
225	3.75	0.858	2.908	3.148	3.646
230	3.83	0.867	2.938	3.180	3.683
235	3.92	0.875	2.967	3.212	3.720
240	4.00	0.884	2.997	3.244	3.757
245	4.08	0.890	3.018	3.268	3.784
250	4.17	0.897	3.040	3.291	3.811
255	4.25	0.903	3.062	3.314	3.838
260	4.33	0.909	3.083	3.338	3.865

Time			6-Hr	Lower	Middle	Upper
(min)	(hr)					
				3.39	3.67	4.25
265	4.42		0.916	3.105	3.361	3.892
270	4.50		0.922	3.126	3.384	3.919
275	4.58		0.927	3.143	3.403	3.940
280	4.67		0.932	3.160	3.421	3.961
285	4.75		0.937	3.177	3.439	3.982
290	4.83		0.942	3.193	3.457	4.004
295	4.92		0.947	3.210	3.475	4.025
300	5.00		0.952	3.227	3.494	4.046
305	5.08		0.956	3.241	3.509	4.064
310	5.17		0.960	3.256	3.525	4.082
315	5.25		0.965	3.270	3.540	4.100
320	5.33		0.969	3.285	3.556	4.118
325	5.42		0.973	3.299	3.571	4.136
330	5.50		0.977	3.313	3.587	4.154
335	5.58		0.981	3.326	3.601	4.170
340	5.67		0.985	3.339	3.615	4.186
345	5.75		0.989	3.352	3.628	4.202
350	5.83		0.992	3.364	3.642	4.218
355	5.92		0.996	3.377	3.656	4.234
360	6.00		1.000	3.390	3.670	4.250

Time			12-Hr	Lower	Middle	Upper
(min)	(hr)			3.61	3.96	4.76
0	0.00		0.000	0.000	0.000	0.000
5	0.08		0.002	0.006	0.007	0.008
10	0.17		0.004	0.013	0.014	0.017
15	0.25		0.005	0.019	0.021	0.025
20	0.33		0.007	0.026	0.028	0.034
25	0.42		0.009	0.032	0.035	0.042
30	0.50		0.011	0.039	0.042	0.051
35	0.58		0.012	0.045	0.049	0.059
40	0.67		0.014	0.051	0.056	0.068
45	0.75		0.016	0.058	0.063	0.076
50	0.83		0.018	0.064	0.071	0.085
55	0.92		0.020	0.071	0.078	0.093
60	1.00		0.021	0.077	0.085	0.102
65	1.08		0.024	0.085	0.093	0.112
70	1.17		0.026	0.093	0.102	0.122
75	1.25		0.028	0.101	0.111	0.133
80	1.33		0.030	0.109	0.119	0.143
85	1.42		0.032	0.116	0.128	0.154
90	1.50		0.034	0.124	0.136	0.164
95	1.58		0.037	0.132	0.145	0.174
100	1.67		0.039	0.140	0.154	0.185
105	1.75		0.041	0.148	0.162	0.195
110	1.83		0.043	0.156	0.171	0.205
115	1.92		0.045	0.164	0.180	0.216
120	2.00		0.048	0.171	0.188	0.226
125	2.08		0.050	0.181	0.198	0.238
130	2.17		0.053	0.190	0.209	0.251
135	2.25		0.055	0.199	0.219	0.263
140	2.33		0.058	0.209	0.229	0.275
145	2.42		0.060	0.218	0.239	0.287
150	2.50		0.063	0.227	0.249	0.300
155	2.58		0.066	0.237	0.260	0.313
160	2.67		0.068	0.247	0.271	0.326
165	2.75		0.071	0.257	0.282	0.339
170	2.83		0.074	0.267	0.293	0.352
175	2.92		0.077	0.277	0.304	0.366
180	3.00		0.080	0.287	0.315	0.379
185	3.08		0.083	0.299	0.328	0.394
190	3.17		0.086	0.310	0.340	0.409
195	3.25		0.089	0.322	0.353	0.424
200	3.33		0.092	0.333	0.365	0.439
205	3.42		0.095	0.344	0.378	0.454
210	3.50		0.099	0.356	0.390	0.469
215	3.58		0.102	0.369	0.404	0.486
220	3.67		0.106	0.382	0.419	0.503
225	3.75		0.109	0.394	0.433	0.520
230	3.83		0.113	0.407	0.447	0.537
235	3.92		0.116	0.420	0.461	0.554
240	4.00		0.120	0.433	0.475	0.571
245	4.08		0.125	0.449	0.493	0.593
250	4.17		0.129	0.466	0.511	0.614
255	4.25		0.134	0.482	0.529	0.636
260	4.33		0.138	0.499	0.547	0.658

Time		12-Hr	Lower	Middle	Upper
(min)	(hr)		3.61	3.96	4.76
265	4.42	0.143	0.515	0.565	0.679
270	4.50	0.147	0.532	0.583	0.701
275	4.58	0.153	0.554	0.607	0.730
280	4.67	0.160	0.576	0.632	0.759
285	4.75	0.166	0.598	0.656	0.789
290	4.83	0.172	0.620	0.680	0.818
295	4.92	0.178	0.642	0.705	0.847
300	5.00	0.184	0.665	0.729	0.876
305	5.08	0.194	0.699	0.767	0.921
310	5.17	0.203	0.733	0.804	0.967
315	5.25	0.213	0.767	0.842	1.012
320	5.33	0.222	0.802	0.879	1.057
325	5.42	0.232	0.836	0.917	1.102
330	5.50	0.241	0.870	0.955	1.148
335	5.58	0.316	1.142	1.253	1.506
340	5.67	0.392	1.413	1.550	1.864
345	5.75	0.467	1.685	1.848	2.222
350	5.83	0.542	1.956	2.146	2.580
355	5.92	0.617	2.228	2.444	2.938
360	6.00	0.692	2.500	2.742	3.296
365	6.08	0.707	2.551	2.798	3.364
370	6.17	0.721	2.602	2.855	3.431
375	6.25	0.735	2.654	2.911	3.499
380	6.33	0.749	2.705	2.968	3.567
385	6.42	0.764	2.757	3.024	3.635
390	6.50	0.778	2.808	3.081	3.703
395	6.58	0.785	2.835	3.110	3.738
400	6.67	0.793	2.861	3.139	3.773
405	6.75	0.800	2.888	3.168	3.807
410	6.83	0.807	2.914	3.197	3.842
415	6.92	0.815	2.940	3.226	3.877
420	7.00	0.822	2.967	3.255	3.912
425	7.08	0.827	2.986	3.276	3.937
430	7.17	0.833	3.005	3.297	3.963
435	7.25	0.838	3.025	3.318	3.988
440	7.33	0.843	3.044	3.339	4.014
445	7.42	0.849	3.063	3.360	4.039
450	7.50	0.854	3.083	3.382	4.065
455	7.58	0.858	3.098	3.398	4.084
460	7.67	0.862	3.113	3.414	4.104
465	7.75	0.866	3.128	3.431	4.124
470	7.83	0.871	3.143	3.447	4.144
475	7.92	0.875	3.158	3.464	4.164
480	8.00	0.879	3.173	3.480	4.183
485	8.08	0.882	3.186	3.494	4.200
490	8.17	0.886	3.198	3.509	4.217
495	8.25	0.890	3.211	3.523	4.234
500	8.33	0.893	3.224	3.537	4.251
505	8.42	0.897	3.237	3.551	4.268
510	8.50	0.900	3.250	3.565	4.285
515	8.58	0.903	3.261	3.577	4.300
520	8.67	0.907	3.273	3.590	4.315
525	8.75	0.910	3.284	3.603	4.330

Time			12-Hr	Lower	Middle	Upper
(min)	(hr)			3.61	3.96	4.76
530	8.83		0.913	3.296	3.615	4.345
535	8.92		0.916	3.307	3.628	4.361
540	9.00		0.919	3.318	3.640	4.376
545	9.08		0.922	3.328	3.651	4.389
550	9.17		0.925	3.338	3.662	4.402
555	9.25		0.928	3.348	3.673	4.415
560	9.33		0.930	3.358	3.684	4.428
565	9.42		0.933	3.368	3.695	4.442
570	9.50		0.936	3.378	3.706	4.455
575	9.58		0.938	3.387	3.715	4.466
580	9.67		0.941	3.396	3.725	4.477
585	9.75		0.943	3.404	3.734	4.489
590	9.83		0.945	3.413	3.744	4.500
595	9.92		0.948	3.421	3.753	4.511
600	10.00		0.950	3.430	3.762	4.523
605	10.08		0.952	3.439	3.772	4.534
610	10.17		0.955	3.447	3.781	4.545
615	10.25		0.957	3.456	3.791	4.556
620	10.33		0.960	3.464	3.800	4.568
625	10.42		0.962	3.473	3.810	4.579
630	10.50		0.964	3.481	3.819	4.590
635	10.58		0.967	3.489	3.828	4.601
640	10.67		0.969	3.497	3.836	4.611
645	10.75		0.971	3.505	3.845	4.621
650	10.83		0.973	3.513	3.853	4.632
655	10.92		0.975	3.521	3.862	4.642
660	11.00		0.977	3.529	3.871	4.653
665	11.08		0.979	3.536	3.878	4.662
670	11.17		0.981	3.543	3.886	4.671
675	11.25		0.983	3.550	3.894	4.681
680	11.33		0.985	3.557	3.902	4.690
685	11.42		0.987	3.564	3.910	4.700
690	11.50		0.989	3.571	3.918	4.709
695	11.58		0.991	3.578	3.925	4.718
700	11.67		0.993	3.584	3.932	4.726
705	11.75		0.995	3.591	3.939	4.735
710	11.83		0.996	3.597	3.946	4.743
715	11.92		0.998	3.604	3.953	4.752
720	12.00		1.000	3.610	3.960	4.760

Time		3-Hr COT	Lower	Middle	Upper
(min)	(hr)				
0	0.00	0.000	0.000	0.000	0.000
5	0.08	0.087	0.271	0.290	0.329
10	0.17	0.295	0.920	0.985	1.118
15	0.25	0.461	1.439	1.541	1.749
20	0.33	0.548	1.711	1.832	2.078
25	0.42	0.611	1.907	2.041	2.316
30	0.50	0.661	2.063	2.209	2.506
35	0.58	0.702	2.191	2.346	2.662
40	0.67	0.737	2.298	2.460	2.792
45	0.75	0.765	2.388	2.557	2.901
50	0.83	0.790	2.466	2.640	2.995
55	0.92	0.812	2.533	2.711	3.077
60	1.00	0.831	2.592	2.774	3.148
65	1.08	0.847	2.643	2.830	3.211
70	1.17	0.862	2.689	2.879	3.267
75	1.25	0.875	2.731	2.923	3.317
80	1.33	0.887	2.768	2.963	3.362
85	1.42	0.898	2.801	2.999	3.403
90	1.50	0.908	2.832	3.031	3.440
95	1.58	0.917	2.860	3.061	3.474
100	1.67	0.925	2.885	3.089	3.505
105	1.75	0.932	2.909	3.114	3.533
110	1.83	0.939	2.930	3.137	3.560
115	1.92	0.946	2.950	3.158	3.584
120	2.00	0.952	2.969	3.178	3.607
125	2.08	0.957	2.986	3.197	3.628
130	2.17	0.962	3.002	3.214	3.647
135	2.25	0.967	3.018	3.230	3.666
140	2.33	0.972	3.032	3.246	3.683
145	2.42	0.976	3.045	3.260	3.699
150	2.50	0.980	3.058	3.273	3.714
155	2.58	0.984	3.070	3.286	3.729
160	2.67	0.987	3.081	3.298	3.743
165	2.75	0.991	3.091	3.309	3.755
170	2.83	0.994	3.101	3.320	3.768
175	2.92	0.997	3.111	3.330	3.779
180	3.00	1.000	3.120	3.340	3.790