

94-7994

ET_{Idaho} 2012 -- Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho

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Saint Maries (NWS -- 108062)

Statistics based on thirty year normal spans 1973 to 2010 years

For a different land cover or crop click on the above link.

You can highlight this table and copy via the clipboard to a Microsoft Excel or OpenOffice spreadsheet to plot or otherwise work with this data.

Open water - shallow systems (ponds, streams)															
Precipitation Deficit (Click here for a graph)															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Growing Season ^a	Non Growing Season ^b	Annual
Mean ^j	mm/day												mm		
Monthly ^c	-3.06	-1.82	-0.82	0.62	1.23	2.07	3.51	3.26	1.90	0.00	-3.22	-3.34	12	0	12
15-Day Moving Average ^d	-3.08	-2.08	-0.78	0.64	1.23	1.92	3.44	3.20	1.86	0.21	-3.15	-3.34			
7-Day Moving Average ^e	-3.05	-1.88	-0.79	0.64	1.23	2.01	3.49	3.20	1.89	0.10	-3.25	-3.38			
3-Day Moving Average ^f	-3.05	-1.80	-0.82	0.62	1.23	2.05	3.51	3.25	1.91	0.03	-3.26	-3.35			
Standard Deviation ^k	mm/day												mm		
Monthly ^c	2.27	1.49	1.42	1.08	1.46	1.05	1.75	1.68	1.17	1.92	1.70	2.44	176	0	176
15-Day Moving Average ^d	2.31	2.07	1.52	1.48	1.79	1.63	1.66	1.71	1.44	1.64	2.19	2.14			
7-Day Moving Average ^e	3.03	3.04	2.09	2.20	2.50	2.40	1.93	2.39	2.05	2.34	3.11	3.12			
3-Day Moving Average ^f	4.19	4.19	3.02	3.05	3.52	3.36	2.49	3.06	2.90	3.16	4.39	4.34			
20% Exceedance ^l	mm/day												mm		
Monthly ^c	-1.96	-0.84	0.08	1.51	2.13	2.91	4.23	4.25	2.93	1.17	-1.79	-2.02	124	0	124
15-Day Moving Average ^d	0.02	0.16	1.17	2.64	3.96	4.24	4.96	4.84	3.78	2.13	0.00	0.00			
7-Day Moving Average ^e	0.36	1.12	2.19	3.68	4.82	5.16	5.42	5.45	4.28	2.50	0.70	0.18			
3-Day Moving Average ^f	0.66	1.51	2.92	4.27	5.49	5.73	5.94	5.90	4.73	2.97	1.00	0.35			
80% Exceedance ^m	mm/day												mm		

Monthly ^c	-3.71	-2.79	-2.01	-0.10	0.21	1.33	2.85	2.26	0.88	-1.39	-5.25	-4.90	-124	0	-124
15-Day Moving Average ^d	-6.31	-5.05	-3.44	-1.55	-1.77	-1.08	1.43	0.61	-0.86	-2.65	-7.19	-7.53			
7-Day Moving Average ^e	-10.93	-10.00	-5.24	-3.81	-4.76	-3.56	-0.19	-2.05	-4.34	-5.23	-12.06	-11.10			
3-Day Moving Average ^f	-16.00	-17.61	-11.31	-8.38	-8.75	-8.19	-4.64	-8.68	-8.71	-10.96	-19.10	-16.49			
Ave Highest P_{def}	mm/day												--		
15-Day Moving Average ^g	0.05	0.15	0.75	1.99	2.86	3.32	4.40	4.41	3.00	1.41	0.04	0.02			
7-Day Moving Average ^h	0.20	0.76	1.70	3.06	4.10	4.60	5.02	5.01	3.80	2.13	0.31	0.09			
3-Day Moving Average ⁱ	0.41	1.25	2.32	3.90	4.89	5.32	5.50	5.48	4.31	2.55	0.72	0.24			
Ave Lowest P_{def}	mm/day												--		
15-Day Moving Average ^j	-4.95	-3.21	-2.16	-0.65	-0.32	0.68	2.56	2.03	0.74	-1.25	-4.90	-5.18			
7-Day Moving Average ^h	-7.70	-5.85	-3.90	-2.52	-2.63	-1.53	1.16	0.29	-1.11	-3.36	-7.66	-8.11			
3-Day Moving Average ⁱ	-12.06	-10.78	-7.68	-6.01	-6.96	-5.66	-1.31	-3.08	-4.73	-6.63	-12.91	-12.68			
Special normal distribution parameters for monthly, seasonal, and annual intervals															
Skew ^m	-0.20	-0.69	-0.15	-0.33	-0.08	-1.28	-0.78	-0.39	-0.45	-0.10	-0.14	-0.33	-0.04	0.00	-0.04
Kurtosis ^o	0.90	3.59	0.56	4.04	0.62	6.34	2.41	1.10	2.73	0.60	2.53	0.94	5.24	0.00	5.24

^a Growing Season: This is usually the time from green up or planting in the spring to a killing frost or harvest in the fall. It is not applicable for entries without a growing season and will be blank.

^b Nongrowing Season: This is usually the time from a killing frost or harvest in the fall to the of green up in the spring. It is not applicable for entries without a growing season.

^c Mean of the average daily value for month

^d Mean of the fourteen 15-day period averages contained in the month

^e Mean of the twenty three 7-day period averages contained in the month

^f Mean of the twenty seven 3-day period averages contained in the month

^g Mean of the highest/lowest 15-day period average in month

^h Mean of the highest/lowest 7-day period average in month

ⁱ Mean of the highest/lowest 3-day period average in month

^j This value represents the *mean value* for the parameter for the month over the 'normal' period of record. Generally, the 'normal' period is the last thirty years with data.

^k This value represents the *standard deviation* for the parameter for the month over the 'normal' period.

^l This value represents the *value* for the parameter that has a 20% chance of being exceeded that month during any particular year. Conversely, there is an 80% chance that the parameter value will be less than the *value* shown.

^m This value represents the *value* for the parameter that has a 80% chance of being exceeded that month during any particular year. Conversely, there is an 20% chance that the parameter value will be less than the *value* shown.

ⁿ This value represents the *skewness (asymmetry) of the distribution of the parameter values* for the month (year) over the 'normal' period. A value near zero indicates that the distribution approximates a normal (Gaussian) and symmetrical distribution. A negative skew indicates that the parameter distribution has relatively few low values compared to high values. A positive skew indicates that the distribution has relatively few high values compared to the number of low values. A skew value near 1 indicates that the underlying distribution approximates a lognormal distribution.

^o This value represents the *kurtosis* of the parameter value distribution for the month (year) over the 'normal' period. Kurtosis is a measurement of the height to width ratio of the probability distribution, or the *peakedness (slenderness)*. A normal (Gaussian) distribution has a kurtosis of 3. A high kurtosis distribution has a sharper peak and longer tails, while a low kurtosis distribution has a more rounded peak and shorter tails.

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The citation for the evapotranspiration data used from this site should be: *Allen, Richard G. and Clarence W. Robison, 2012. Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho: Supplement updating the Time Series through December 2008, Research Technical Completion Report, Kimberly Research and Extension Center, University of Idaho, Moscow, ID.*

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