

HIGHEST DECEMBER SOI SINCE 1975

The daily Southern Oscillation Index values climbed to the roof. The 30 day average for the SOI just 15 days ago was +8.8. Today it is 16.4 after near a week of daily values above 30. The Australian Bureau of Meteorology released today the December value for the Southern Oscillation Index, one of the most important indicators of the Pacific Ocean conditions. The oscillation is calculated from the monthly or seasonal fluctuations in the air pressure difference between Tahiti and Darwin. Positive values are associated with stronger Pacific trade winds and La Niña episodes. Waters in the central and eastern tropical Pacific Ocean become colder while near Australia they are warmer. The December value released by BoM today for December 2007 was +14.4. This is the highest December SOI value since 1975, an indication of the strength of the ongoing Pacific cold event. It also figures among the top ten positive values for the SOI in December

Ranking	December Value	Years
1	23.0	1950
2	22.5	1917
3	22.0	1889
4	19.5	1975
5	17.9	1878
6	17.4	1970
7	15.9	1903 and 1910
8	15.4	1916
9	14.4	1886 and 2007
10	13.8	1938, 1942 and 1961

The highest December SOI value (1950) was followed by a warm January and February period in 1951 in the New York City area, but late in January and early in February there were important daily negative temperature anomalies. The second highest December value took place in 1917. The climatic winter of 1917-1918 (December-January) was the coldest in history in New York City. The third highest value in December (1889) would be followed by warmer than average temperatures in January and February in NYC. As in 2007, the year 1886 presented a +14.4 SOI value in December. January started very cold and then became warm in the second half of the month. February 1887 had lots of ups and downs with very cold days intercalated by warmer days. ICECAP's Joseph D'Aleo meteorologist already pointed that the ongoing huge and brief cold snap will be followed by a warmer pattern and looking solely on these SOI analogs the next 60 days should be warmer than average in the United States. But I still strongly suspect this winter may reserve some very cold surprises in the US if considered other analogs we pointed out in our winter trend outlook early in December.



See original thoughts by METSUL on our winter here.