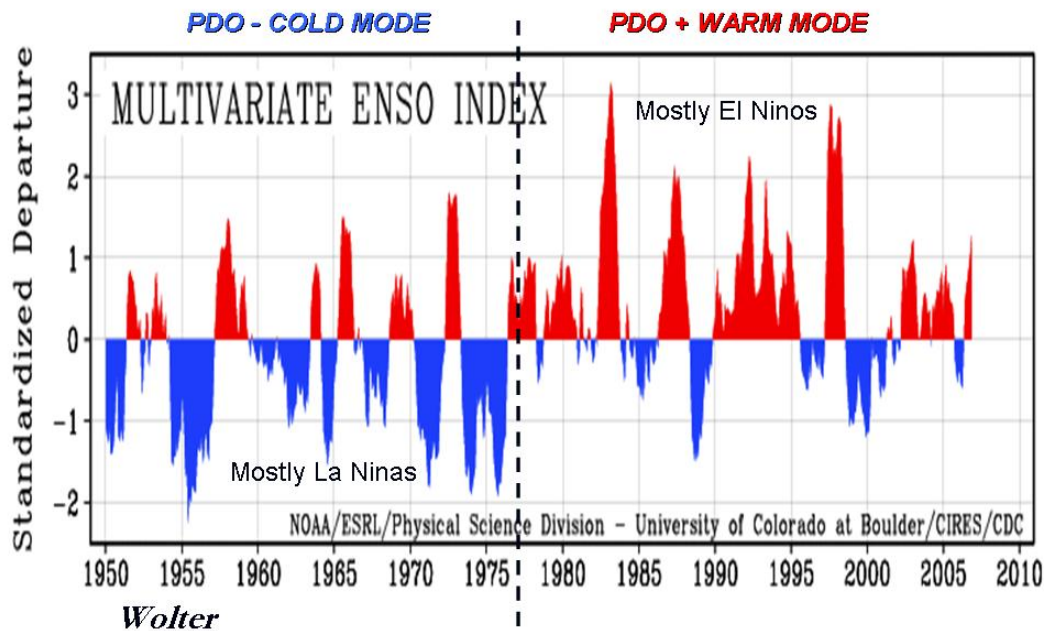


It is All in the Timing – Another Cherry Picking Data Study

By Joseph D'Aleo, CCM

A [new study](#) funded by the Pew Charitable Trusts and conducted by the Vermont Public Research and Education Fund purports to show increased extreme precipitation events -- rain and snow -- in the United States over the last 59 years, perhaps linked to global warming. It has gained a lot of attention in the states where frequency of such events is reported to have increased substantially, including Vermont, with news stories noting that it was reviewed by two climate scientists, Kenneth Kunkel of the Illinois State Water Survey, and David Easterling of the U.S. Climatic Data Center (both excellent climate scientists).

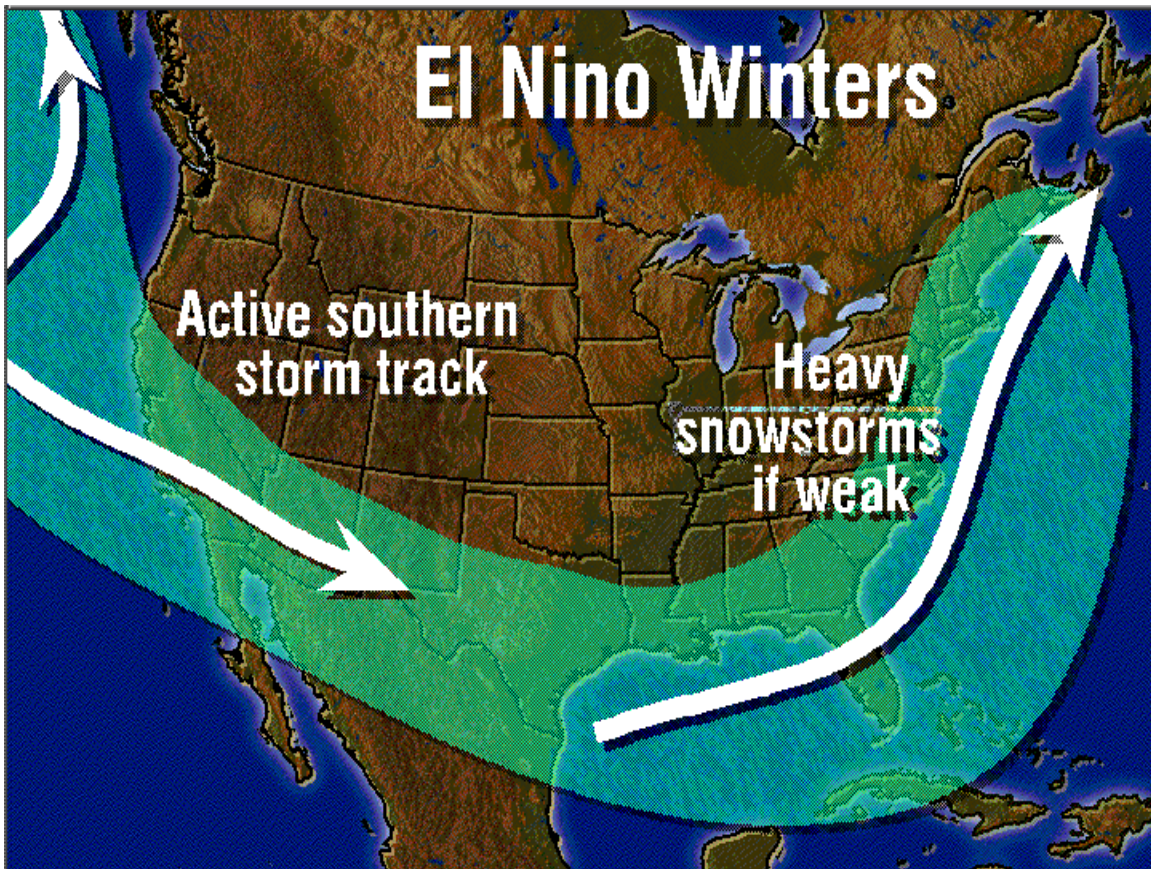
1948 was chosen as a starting point for the study. This ironically was at the beginning of the last cold phase of the Pacific Decadal Oscillation, a multidecadal flip flop in ocean temperatures over the entire North Pacific Basin. This cold phase lasted until 1977 when it transitioned to the warm phase which dominated the last half of the study period. This is important because the PDO has a major influence on the frequency of El Ninos and La Ninas and through them the favored storm tracks and thus precipitation. Thus the regime changed from the first half to last half of the chosen period.



The cold PDO period from 1947 to 1977 was characterized by mainly La Ninas while the warm PDO after 1977, mainly El Ninos.

# Years	Cold PDO 1947-1976	Warm PDO 1977-2006
El Nino		
Strong	3	8
All	7	13
La Nina		
Strong	8	3
All	13	7

La Ninas bring a variety of mostly northern storm tracks while El Nino favors the southern storm track affecting the southern tier from California to Florida and then up the Atlantic Coast to New England.



This period dependent result is similar to the often referenced but flawed work by Mote (BAMS 2005) which showed a decline in western snowpack from 1950 to 2000, again

reflecting PDO shifting storm tracks and NOT greenhouse warming. His own assistant stated that had the study started earlier in the century, no trend would have been found. That [cost him his job](#).

Ironically Easterling himself was a coauthor of a [study of precipitation changes](#) between 1895 and 2000 across the United States published in Geophysical Research Letters in 2003 that found the "frequencies at the beginning of the 20th Century were nearly as high as during the late 20th Century for some combinations of duration and return period, suggesting that natural variability cannot be discounted as an important contributor to the recent high values." It noted that after the increase in the early 1900s there was a decline in extreme events through the 1930s before increasing again in the late 1990s. Indeed, the highest years for the new study appear to be the years between 1995 and 1999. Since then, extreme events on average appear to have declined.