

WINTER ANALOGS FOR 2006-2007 WINTER

.CLIMATOLOGY...

NOW THAT ITS TIME FOR OUR ANNUAL EXERCISE IN CAN WHAT OCCURRED THIS AUTUMN GIVE US CLUES FOR THIS UPCOMING WINTER. THIS WILL BE OUR FIRST EL NINO WINTER SINCE 2004-5. IT APPEARS THAT THIS EL NINO SHOULD PEAK IN THE MODERATE CATEGORY (LAST TWO MODERATE EL NINO WINTERS WERE 2002-3 & 1994-5). THE OTHER IMPORTANT PLAYERS ARE THE STATUS OF THE EASTERN PACIFIC (PDO/PNA) AND NORTHERN ATLANTIC (NAO) WITH OUR UPCOMING WINTER. IF THE ENSO BECOMES STRONG IT USUALLY OVERWHELMS THE LATTER. BUT IF IT DOES NOT, THE PREDOMINATE PHASE OF THE PDO/PNA AND NAO WILL HAVE A SAY IN THE OUTCOME OF OUR WINTER WEATHER. THE SNOWIER WINTER OF 2002-3 HAD A POSITIVE PDO/PNA (MORE RIDGING TO OUR WEST AND TROFFING IN THE EAST). WHILE THE LESS SNOWY WINTER OF 1994-5 HAD A POSITIVE NAO WHICH FAVORS WARMER THAN NORMAL WEATHER ALONG THE EASTERN SEABOARD. THE ONLY OFFICAL NAO FORECAST WE ARE AWARE OF ISSUED BY A METEOROLOGICAL AGENCY IS BY THE UKMET WHO IS FORECASTING A WEAKLY POSITIVE NAO FOR THIS UPCOMING WINTER. NOT KNOWING EXACTLY THE ENSO PEAK OR HOW THE OTHER OCEANIC PLAYERS WILL COME TOGETHER WE HAVE PUT TOGETHER A LIST OF WHAT OCCURRED IN PAST ENSO WINTERS AFTER A NORMAL OCTOBER AND A WARMER THAN NORMAL NOVEMBER IN PHILADELPHIA. THIS NOVEMBER HAS A SHOT AT BEING ONE OF THE TEN WARMEST NOVEMBERS ON RECORD IN PHILADELPHIA.

YEAR	ENSUING DEC	ENSUING JAN	ENSUING FEB	AVG TEMP	ENSUING PCPN	ENSUING SNOW
1877-8	40.8	33.0	36.9	36.9	6.41	N/A
1902-3	33.7	32.6	36.5	34.3	14.44	16.8
1930-1	36.6	36.2	37.4	36.7	6.59	4.1
1963-4	27.9	33.0	31.8	30.9	8.51	30.9
1982-3	41.3	34.1	34.0	36.5	8.14	35.9
1994-5	41.9	38.2	31.5	37.2	7.62	9.8
2004-5	37.8	31.8	36.1	35.2	10.23	30.4
AVERAGE	37.1	34.1	34.9	35.4	8.85	21.3
NORMAL	37.4	32.3	34.8	34.8	9.57	19.3

THE OFFICIAL CPC FORECAST FOR THIS WINTER HAS THE DIVIDING LINE BETWEEN EQUAL CHANCES AND A GREATER CHANCE FOR A WARMER THAN NORMAL WINTER ACROSS THE PHILADELPHIA CWA. THE PRECIPITATION FORECAST HAS EQUAL CHANCES OF IT BEING EITHER WETTER OR DRIER THAN NORMAL.

THE RATHER LARGE SPREAD IN SNOWFALL POINTS TOWARD THE CONFLUENCE OF EVENTS OCCURRING OR NOT OCCURRING DURING ENSO WINTERS. THE SNOW OPTIMIST WILL NOTE THAT HALF THE ANALOGS ABOVE HAVE WINTERS OF GREATER THAN 30" OF SNOW. IN THE PAST ABOUT 20 PERCENT OF ALL WINTERS IN PHILADELPHIA HAVE EXCEEDED 30 INCHES. THE SNOW PESSIMIST WOULD THEN NOTE THAT A THIRD OF THE ANALOGS ABOVE HAVE LESS THAN 10 INCHES OF SNOW OCCURRING THIS WINTER. IN THE PAST ABOUT THIRTEEN PERCENT OF ALL WINTERS IN PHILADELPHIA HAVE HAD SNOWFALL IN THE SINGLE DIGITS.

WITH THE MORE VIRILE SUBTROPICAL JET, EL NINO WINTERS ARE USUALLY MORE ACTIVE. ITS A QUESTION WHETHER OR NOT IT WILL BE COLD ENOUGH FOR SNOW WHEN THESE LOW PRESSURE SYSTEMS COME ALONG AND HOW CLOSE THEY COME. WE HAVE HAD ALREADY THREE NOR'EASTERS THIS AUTUMN (THANK-YOU WWPL) AND MANY UPPER AIR SYSTEMS THAT HAVE CLOSED OFF (WETTER, SLOWER STORMS). MODERATE ENSO (BEST ESTIMATE) WINTERS TEND TO HAVE AT LEAST ONE 6 INCH OR GREATER SNOW EVENT WITHIN THEM BASED ON PHILADELPHIA CLIMATOLOGICAL RECORDS. THE SEVEN MODERATE ENSO WINTERS IN PHILADELPHIA SINCE 1950, ALL BUT ONE HAD AT LEAST ONE SIX INCH OR GREATER SNOW EVENT. OR, SINCE 1950 ONLY ABOUT 10 PERCENT OF ALL WINTERS HAVE BEEN ENSO MODERATE, BUT THOSE WINTERS HAVE ACCOUNTED FOR 24 PERCENT OF ALL 6 INCH OR GREATER EVENTS IN PHILADELPHIA. THE QUESTION (TO WHICH WE DON'T HAVE THE ANSWER) IS WILL THIS WINTER BE A ONE HIT WONDER LIKE 1994-5 OR A MULTIPLE TYPE WINTER LIKE 1963-4 OR 1982-3. THE STRONGER THE EL NINO BECOMES, THE LESS OF A CHANCE (BUT NOT TOTAL REMOVAL) EXISTS OF A LARGER SNOW EVENT OCCURRING. WE'LL GET BACK TO YOU WITH THE FINAL RESULTS IN APRIL.

HAVE A HEALTHY AND HAPPY WINTER WHICH WE HOPE LIVES UP TO EVERYBODY'S EXPECTATIONS.

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