

## **RECENT PREDOMINANT COLD AND STORMY TREND BECOMING OUR "FRIEND"?**

*The recent trend toward colder than normal weather since mid November has been quite persistent with just an above normal day, here and there. From November 16<sup>th</sup> through Dec 12<sup>th</sup>, 2008 temperatures have averaged a good (or "bad" depending on your point of view) six degrees below normal (see chart below).*

Chart - 1

<b>NOVEMBER 16TH - DECEMBER 12TH</b>				<b>SEASON SNOWFALL TO DATE</b>		
LOCATION	AVE TEMP	NORM	DEPART	SEA SNOW	NORM	DEPART
DETROIT	29.6	35.5	-5.9	5.8	6.5	-0.7
FLINT	26.6	32.8	-6.2	17.4	7.7	9.7
SAGINAW	26.8	32.8	-6.0	23.8	7.2	16.6

*Many of our analogue years had called for a colder than normal period from late fall into at least, early winter. Just re-checking Detroit's analogue winters into January shows many below normal temperature Decembers and Januarys. The below normal departure does become a bit more temperate come January and therefore, the average departure isn't quite as large as December's but there are still quite a few cold ones to go around! The good news is you will also notice some above normal months (and there were some warmer spells intra-months as well), so we can still look forward to some milder breaks and hopefully a **January Thaw**, This still looks promising this winter just by witnessing the recent upper wind pattern variability (even if most of the changes have brought a predominance of cold weather).*

DETROIT	T	E
SEASON	DEC	JAN
1876-77	17.8	19.2
1887-88	23.9	23.0
1894-95	32.4	20.0
1904-05	25.8	17.9
1939-40	33.5	19.0
1951-52	28.4	29.3
1956-57	34.9	21.1
1976-77	21.5	12.8
1985-86	22.2	23.9
1989-90	18.0	33.6
2000-01	19.3	26.2
Ave	25.2	22.4
NORM 30Y	29.6	24.5
Dep	-4.4	-2.1

Keeping one eye on our [Outlook](#) and the other on recent trends we see the **projected storm track pattern** has materialized (at least for the time being) with about two thirds of the region receiving above normal snow (and quite a bit above as one travels further north) check out the snowfalls thus far (thru 12/12) this season compared to average (back up in Chart-1).

#### **From Outlook**

**This winter indications suggest the best snows (normal to above) will fall across the northern areas of the region...or from Detroit's northern suburbs across Flint and Port Huron and on into the Saginaw Valley and Thumb Region. Near normal snow is expected south of a line from Ann Arbor to Detroit. The analogue winters are strongly hinting toward a two-tier snowfall pattern this winter with the heaviest amounts to the north... along with a better chance for mixed precipitation the entire region.**

#### **Back to the Future:**

**Projections for the upper air pattern the next couple of weeks (and into the early holiday) are quite interesting with cold air continuing to dump from the North Pole southward into US. And, whether the Polar flow pushes down into the west or east, it seems sooner or later most areas in the northern half of the US get a piece of the action (check out the 6-10 500MB projection below with annotations which bears a strong resemblance to CDC's 500 MB general winter flow pattern annotated in our local Outlook ). What presents the biggest challenge is where the Polar air will visit first and the interaction (storm-wise) between the two jets in the split flow. In the split flow, if the main jet takes the low road (four pt star) and dives south into the Southwest then shoots northeast across the Midwest and into the northern Ohio Valley, milder but messy weather is the rule. If it takes the high road (five pt star), mainly cold and occasional snow can be expected. At this time, it looks like both will compete for center stage the next few weeks. This means the upper wind pattern will oscillate (or waver up and down) in the current southwest to northeast wind flow trajectory. This generally is a busy, changeable and stormy pattern with timing and precipitation type issues (of course, interspersed with occasional breaks). Stay alert to changeable winter weather here at the [NWS White Lake Home Page](#) during your pre-holiday and after travel. Oh well, think on the bright side; with this type of pattern, Santa should pick up a good tail wind come Christmas.**

