#### SNOWFALL WARNING IN EFFECT

### **Current Conditions**



SIGNIFICANT WEATHER DISCUSSION... PRAIRIE AND ARCTIC STORM PREDICTION CENTRE... 7:00 AM CST THURSDAY FEBRUARY 5 2015.

... SNOWFALL WARNINGS CENTRAL ALBERTA.
FREEZING RAIN WARNING FOR SE ALBERTA AND SW
SASKATCHEWAN...

WARM PUSH OF AIR OFF THE PACIFIC ACROSS ALBERTA AND SWRN SASKATCHEWAN PUSHING EAST INCREASING BAROCLINICITY...

WESTERN PRAIRIES... GREATER AMOUNTS OF SNOW ARE EXPECTED FARTHER WEST ALONG THE BAROCLINIC ZONE WITH ACCUMULATIONS OF 10 TO 20 CM FORECAST BY END OF FRIDAY THROUGH PARTS OF CENTRAL ALBERTA.

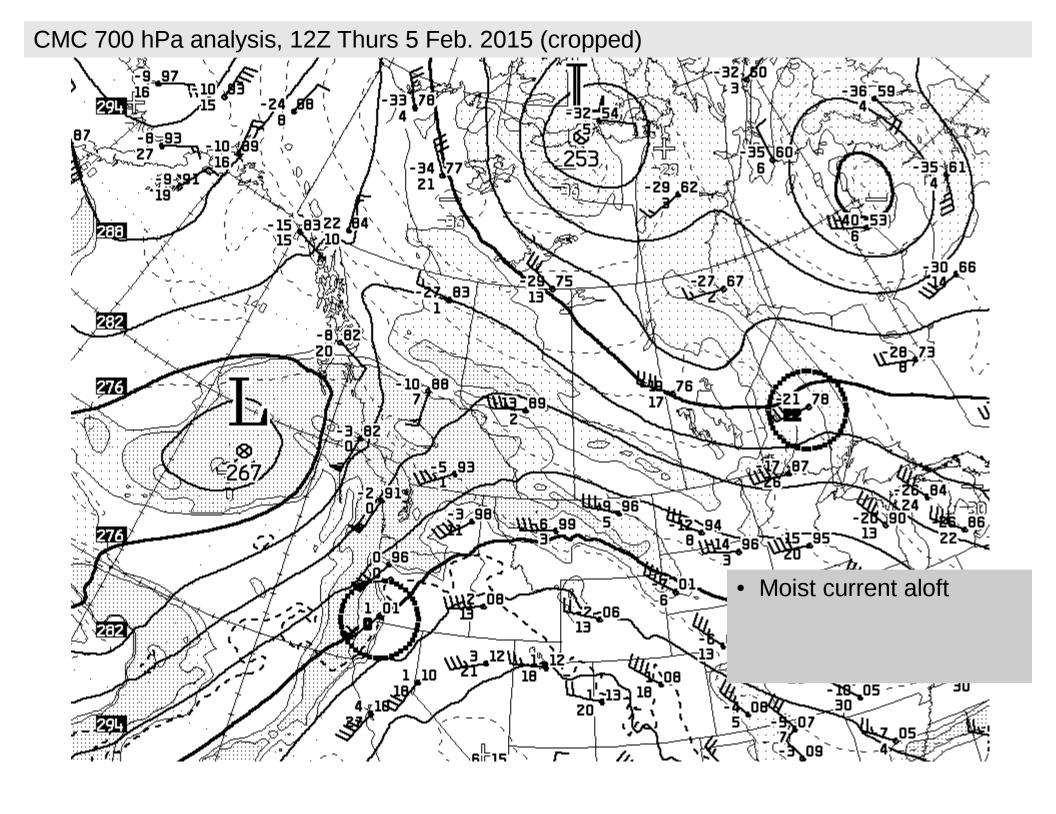
CONCERN IS NOT THE INTENSITY OF THE SNOW BUT THE PROLONGED NATURE OF IT AS THE SYNOPTIC PATTERN DOESN'T SHIFT UNTIL THE WEEKEND.

GUSTY EASTERLIES COULD RESULT IN LOCALIZED BLOWING SNOW

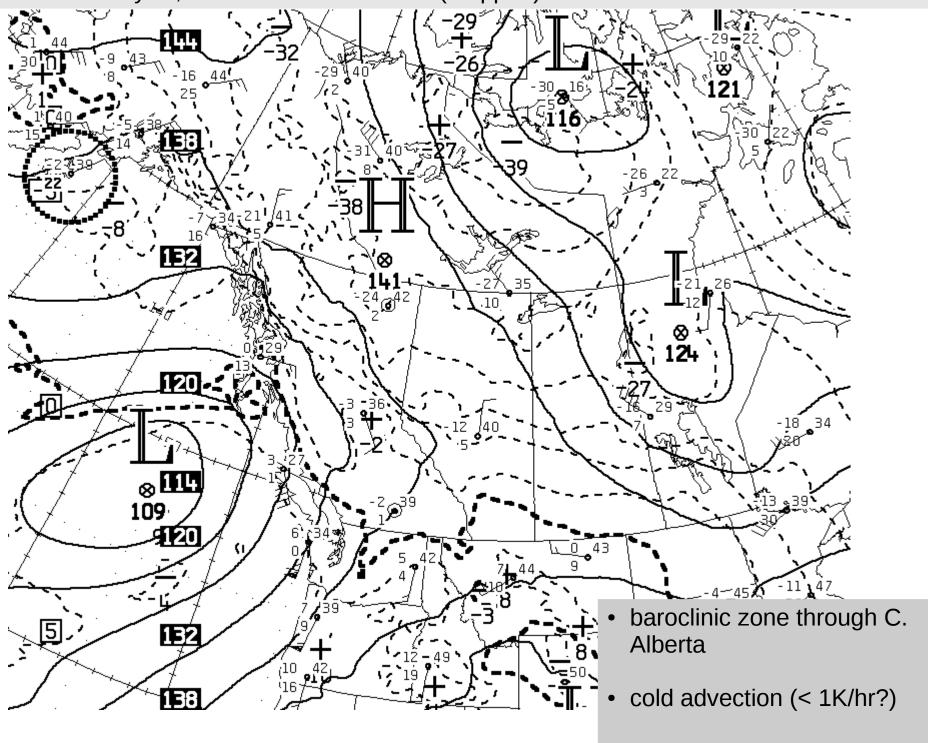
## Forecast

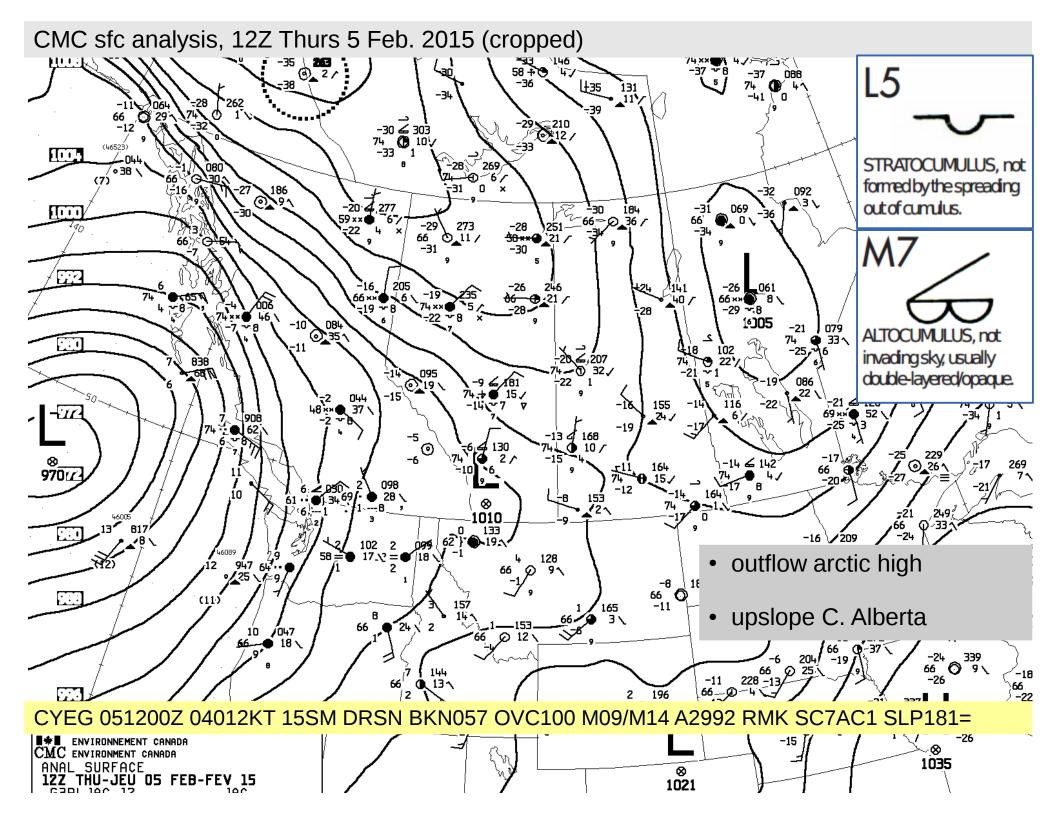
Thu	Fri	Sat
<u>5 Feb</u>	6 Feb	7 Feb
****	* * *	
-15°C*	-14°C	-10°C
-17	°C -2	L5°C

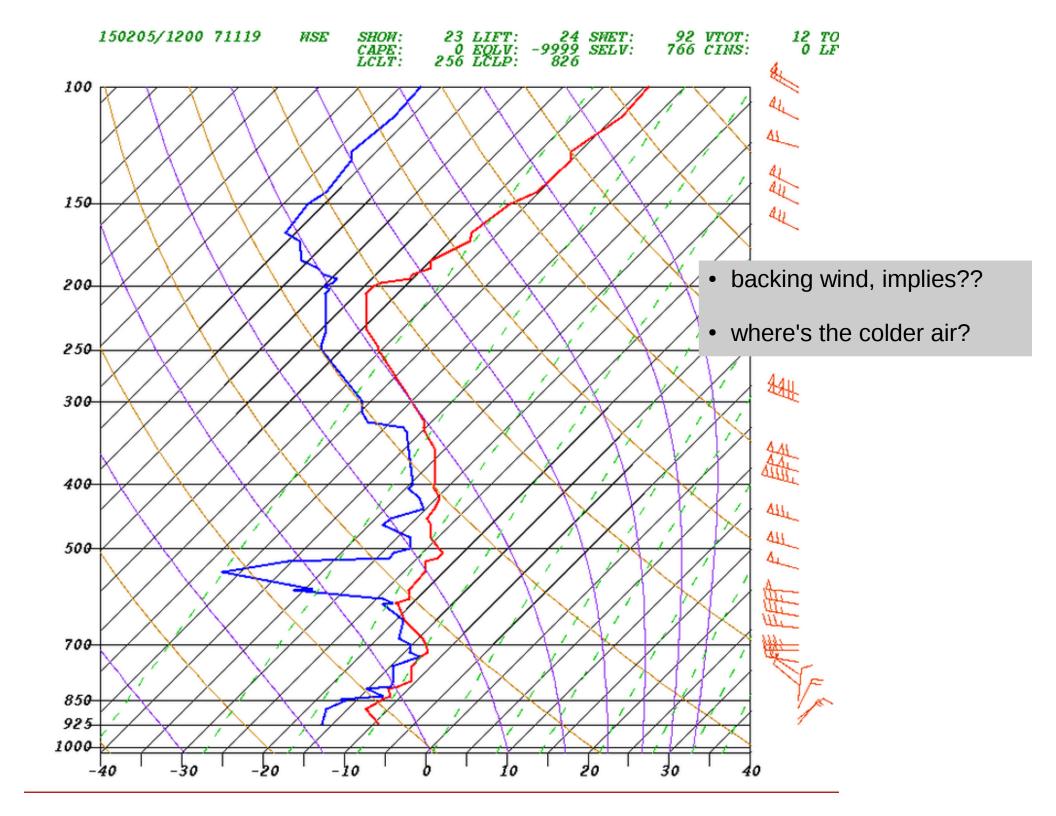
\* Denotes an <u>abnormal</u> temperature trend

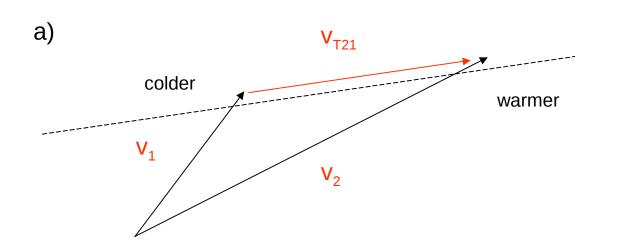


# CMC 850 hPa analysis, 12Z Thurs 5 Feb. 2015 (cropped)

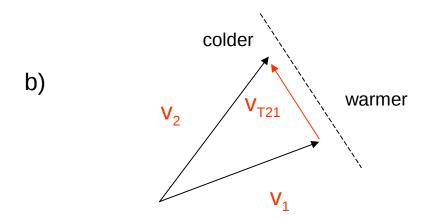




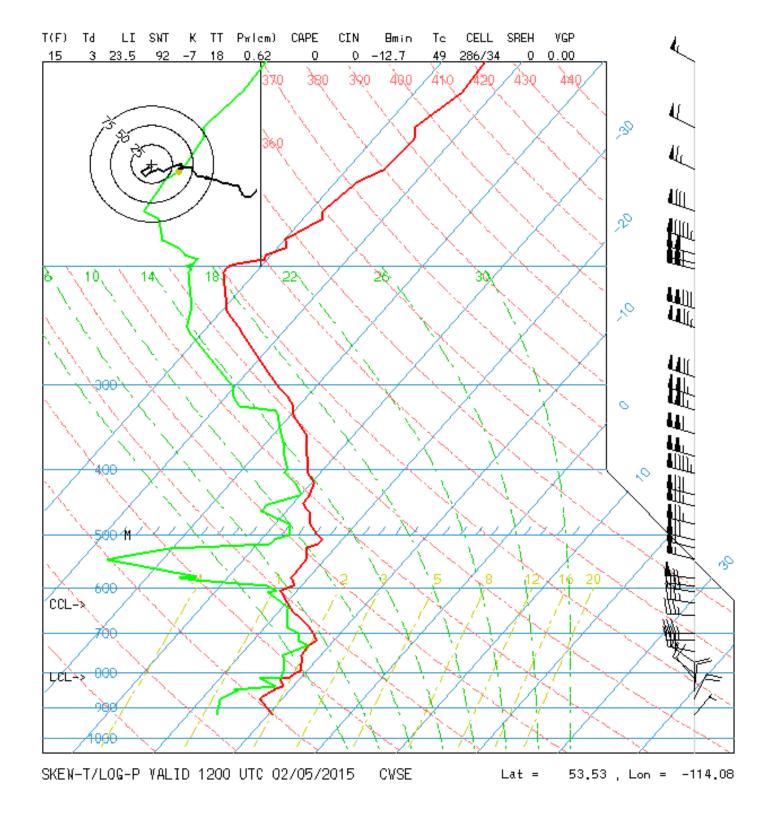


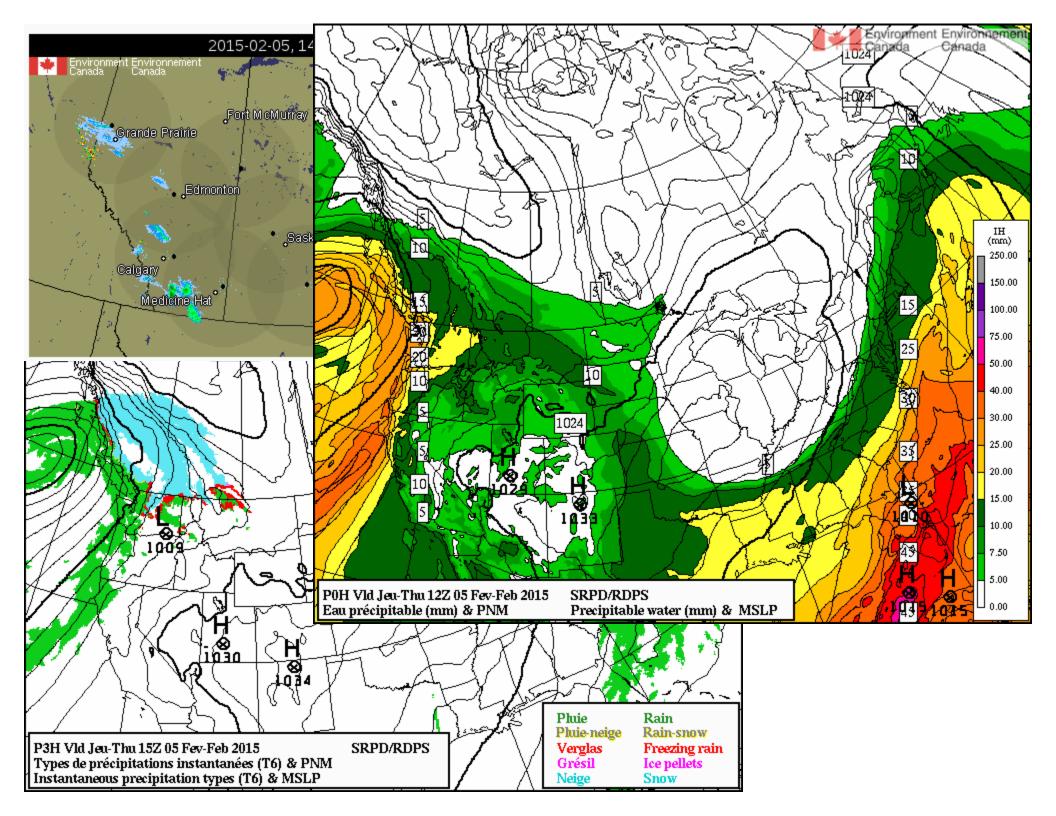


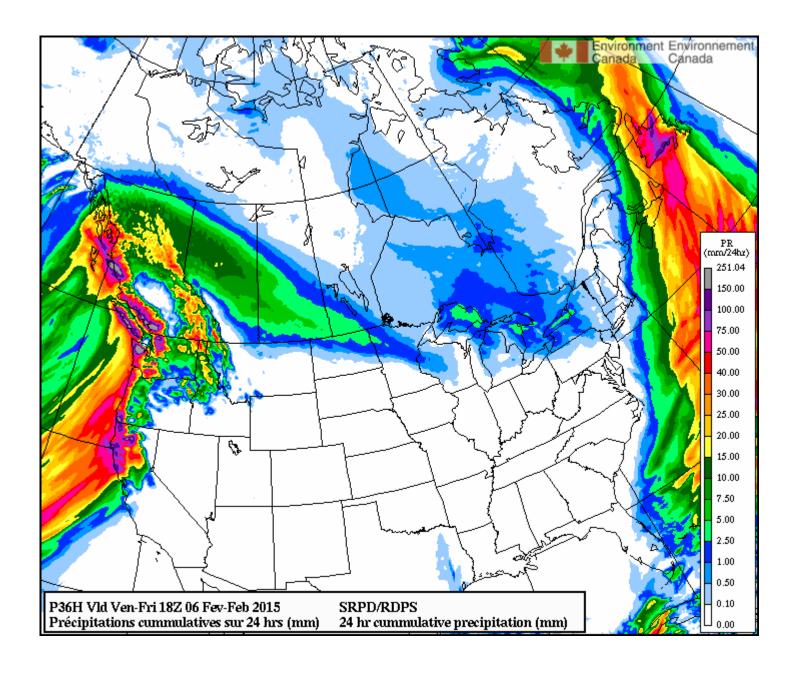
"veering wind": wind vector turns anticyclonically with increasing height (clockwise in N. hemisphere)... associated with warm advection

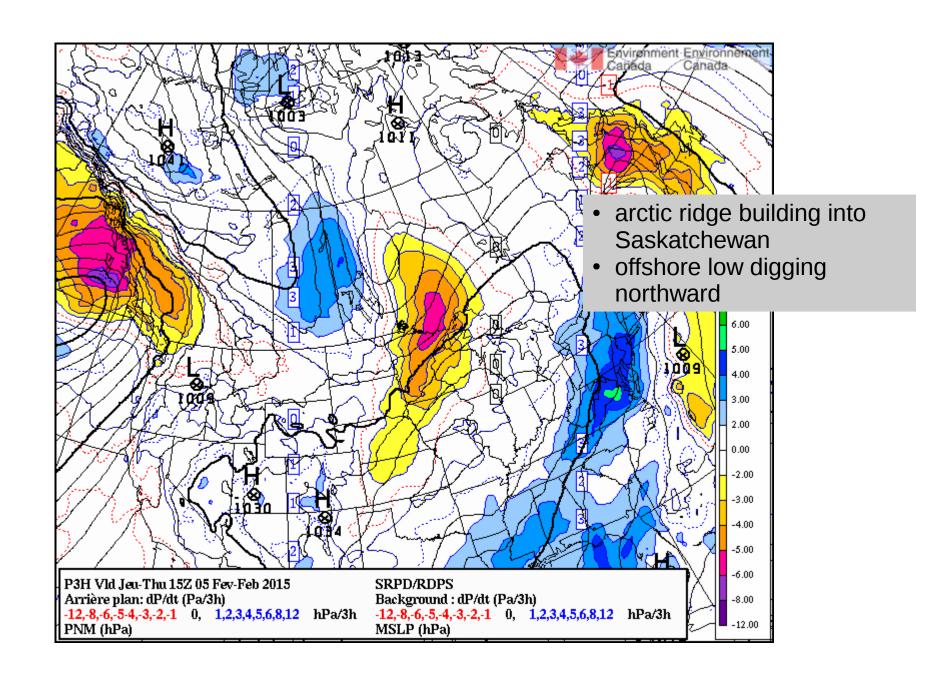


"backing wind": wind vector turns cyclonically with increasing height (anti clockwise in N. hemisphere)... associated with cold advection





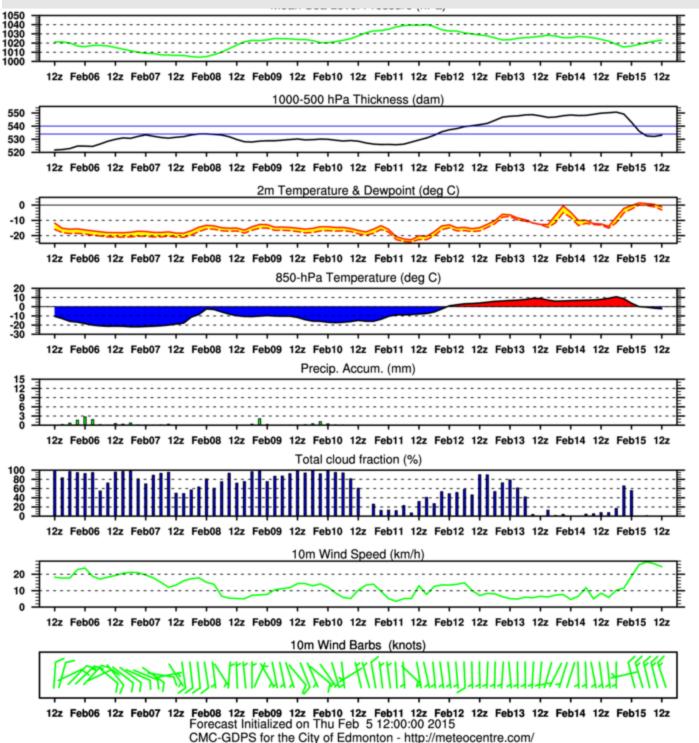




### GDPS initialized 00Z Thurs 5 Feb. 2015 1030 1020 1010 1000 Feb05 12z Feb06 12z Feb07 12z Feb08 12z Feb09 12z Feb10 12z Feb11 12z Feb12 12z Feb13 12z Feb14 12z Feb15 1000-500 hPa Thickness (dam) 540 530 520 12z Feb06 12z Feb07 12z Feb08 12z Feb09 12z Feb10 12z Feb11 12z Feb12 12z Feb13 12z Feb14 12z Feb15 2m Temperature & Dewpoint (deg C) -12 -16 -20 850-hPa Temperature (deg C) 10 -10 Feb05 12z Feb06 12z Feb07 12z Feb08 12z Feb09 12z Feb10 12z Feb11 12z Feb12 12z Feb13 12z Feb14 12z Feb15 Precip. Accum. (mm) 12z Feb08 12z Feb09 12z Feb10 12z Feb11 12z Feb12 12z Feb13 12z Feb14 12z Feb15 Total cloud fraction (%) Feb05 12z Feb06 12z Feb07 12z Feb08 12z Feb09 12z Feb10 12z Feb11 12z Feb12 12z Feb13 12z Feb14 12z Feb15 10m Wind Speed (km/h) 15 10 Feb05 12z Feb06 12z Feb07 12z Feb08 12z Feb09 12z Feb10 12z Feb11 12z Feb12 12z Feb13 12z Feb14 12z Feb15 10m Wind Barbs (knots) Feb05 12z Feb06 12z Feb07 12z Feb08 12z Feb09 12z Feb10 12z Feb11 12z Feb12 12z Feb13 12z Feb14 12z Feb15 Forecast Initialized on Thu Feb 5 00:00:00 2015 CMC-GDPS for the City of Edmonton - http://meteocentre.com/

See over, the 12Z GDPS prog has Edmonton quite a bit warmer at the end of the forecast period

### GDPS initialized 12Z Thurs 5 Feb. 2015



## Added after class (CRAS45NA fcst, assimilates GOES sounder water vapor and clouds)

