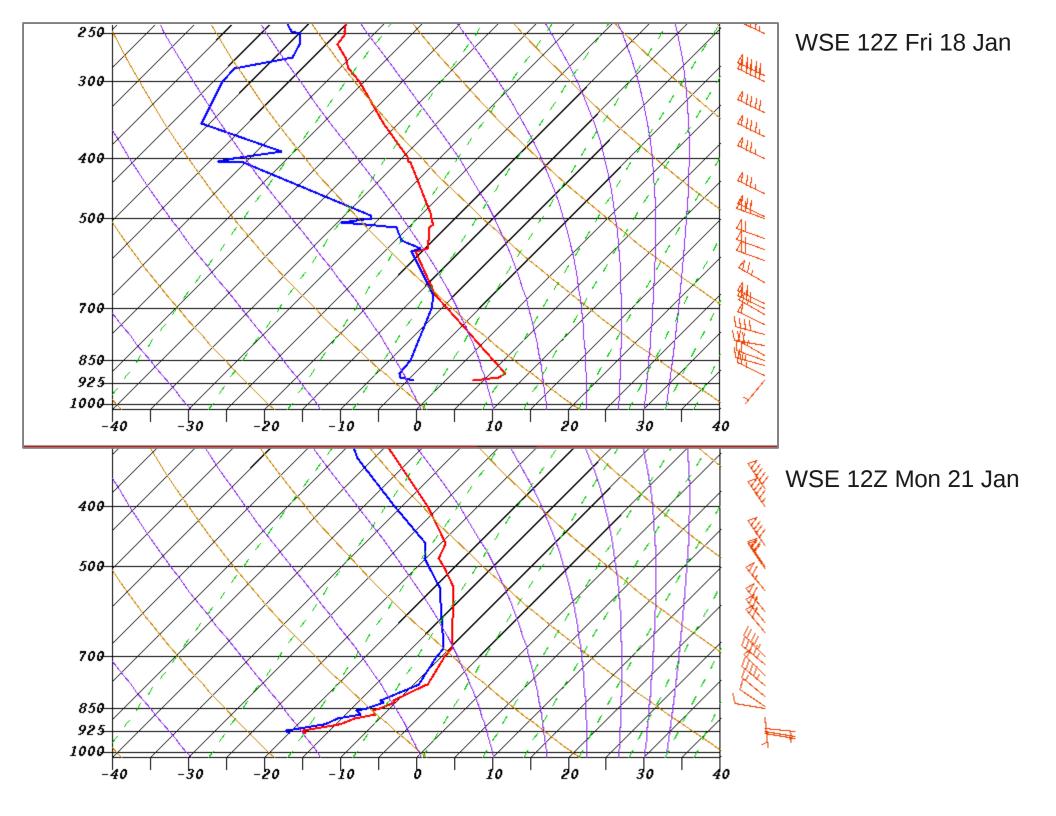
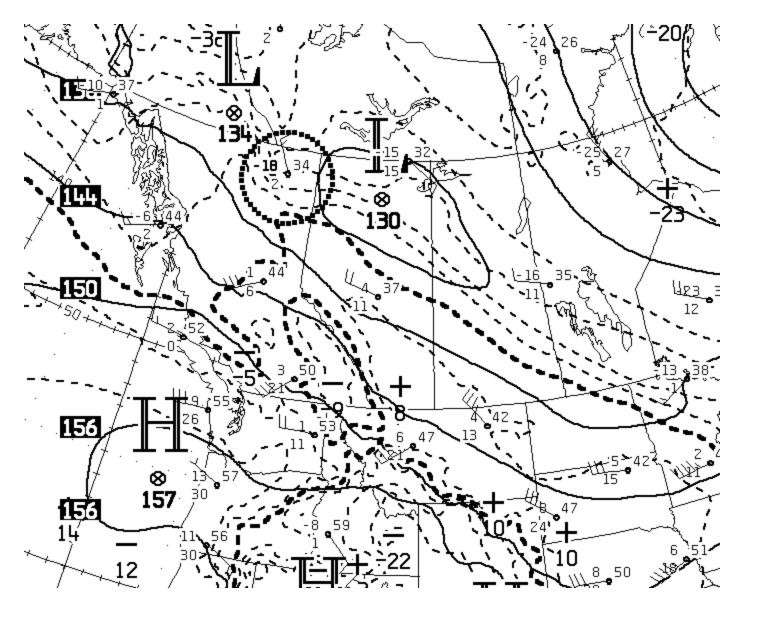
Activities

- overview of weather development in Ab since previous class
- background for assignment 2
- complete exercise of previous class (computing geostrophic wind and temperature advection rate)

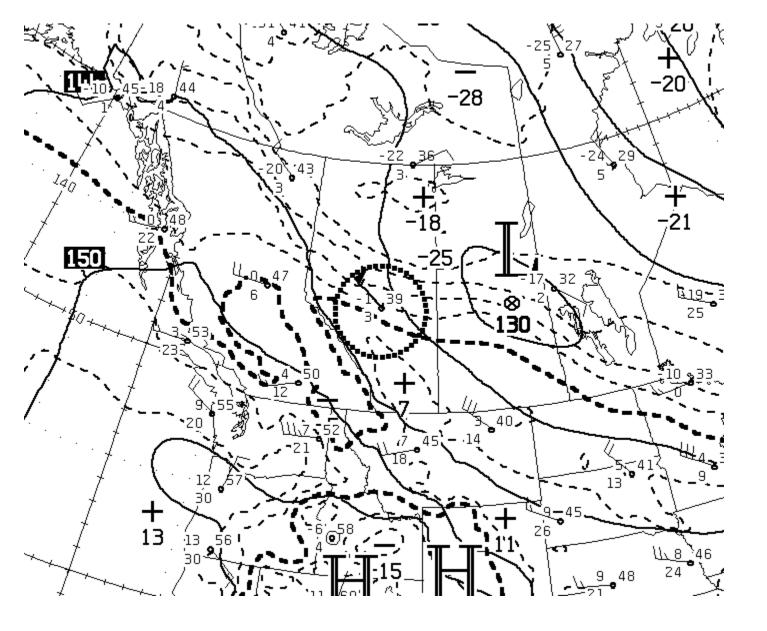
Exercises – please submit (prog no longer available as of 24 Jan.)

- the GEM reg run initialized 06Z today forecast a swath of light precip (0.1-0.5 cm liquid equivalent, or roughly 1-5 cm snow, as 6-hr accumulation valid 12Z) running diagonally from northern B.C. across AB into southern Sask (see slide 13, over). Using Vizaweb (and this same GEM reg run), investigate which (if any) other GEM field(s) correlate with this feature
- are above-freezing temperatures expected to occur over central Alberta at any time within the range of the latest GEM glbl run? What is the largest forecast 12-hr accumulation of precip over the forecast range?
- summarize (qualitatively) the conditions to be expected in St. John's Newfoundland around 00Z Wed 23 Jan

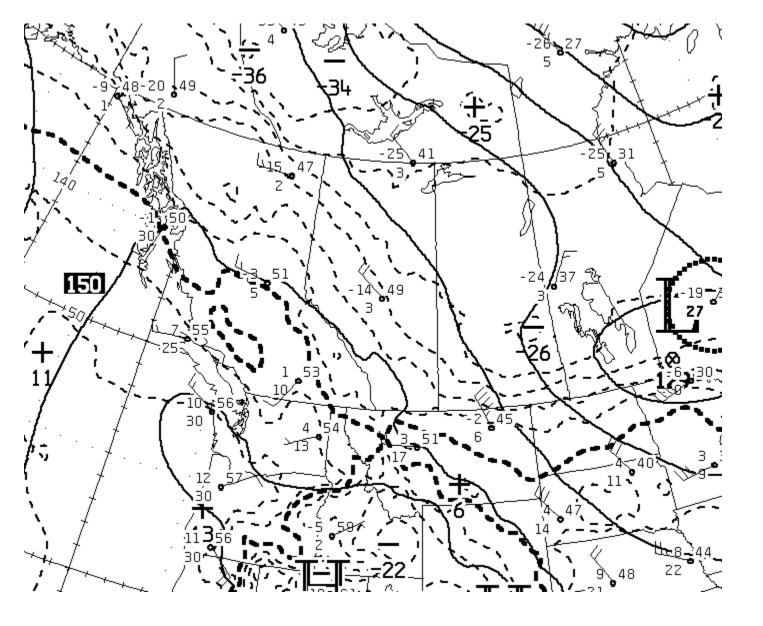




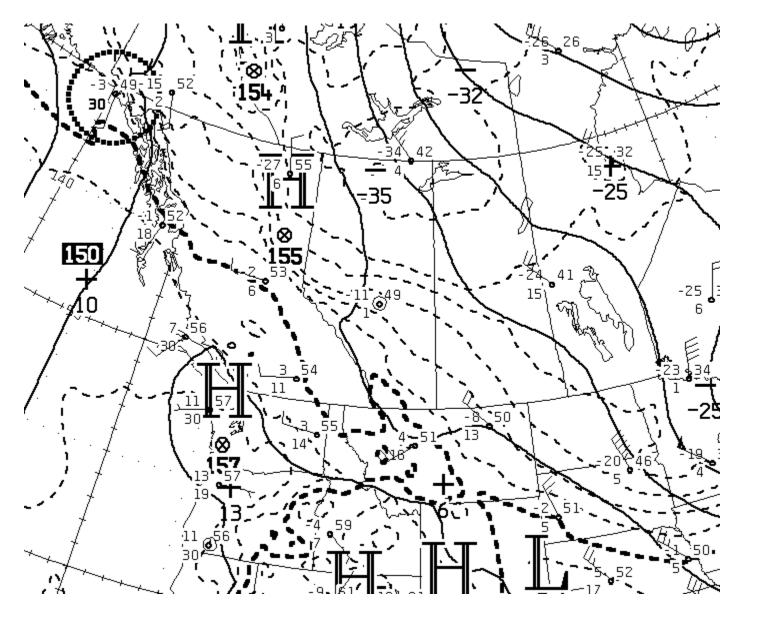
CMC 850 hPa analysis 12Z Fri 18 Jan. 2013



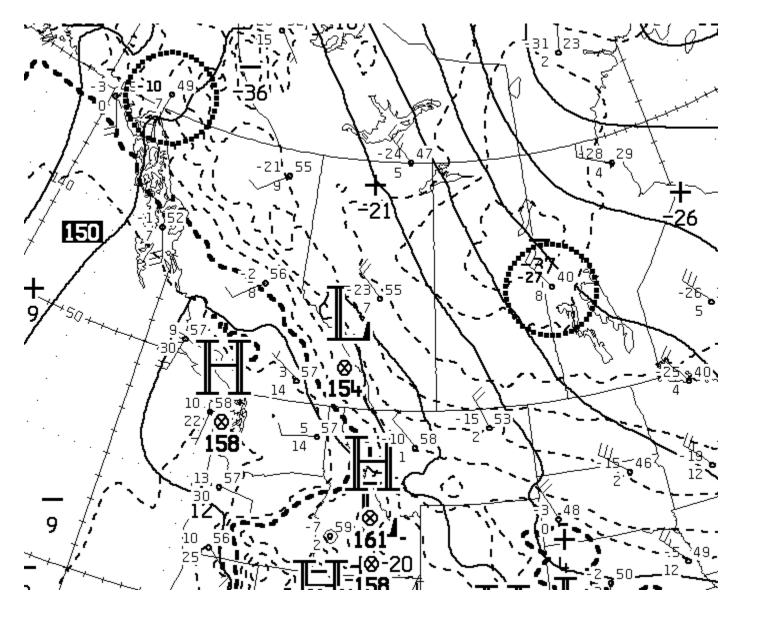
CMC 850 hPa analysis 00Z Sat 19 Jan. 2013



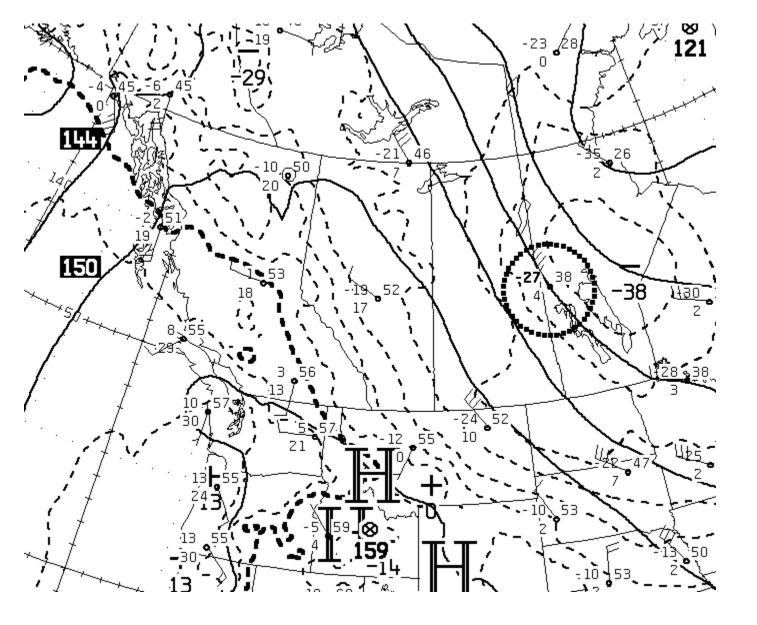
CMC 850 hPa analysis 12Z Sat 19 Jan. 2013



CMC 850 hPa analysis 00Z Sun 20 Jan. 2013



CMC 850 hPa analysis 12Z Sun 20 Jan. 2013



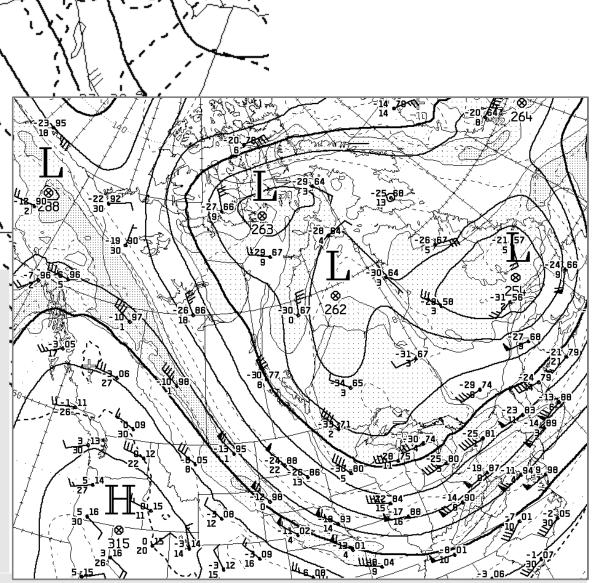
CMC 850 hPa analysis 00Z Mon 21 Jan. 2013

1, 50 19 EC 2:00 PM CST MON JAN. 21 2013... **OVERVIEW...THE 12Z UPPER ANALYSES** SHOWED AN ARCTIC VORTEX OVER HUDSON BAY WITH DEEP TROFFING INTO **GREAT LAKES WHILE STRONG UPPER** RIDGE WAS ANCHORED ALONG THE WEST COAST OF NORTH AMERICA. RESULTANT STRONG NW UPPER FLOW OVER PRAIRIES ADVECTING ARCTIC AIRMASSES SOUTHWARD. THE 18Z SURFACE ANALYSIS SHOWED 1041 MB ARCTIC HIGH PRESSURE RIDGE FROM NWT INTO SRN SASK WITH NW FLOW OF COLD AIR OVER ERN PRAIRIES EAST OF RIDGE.

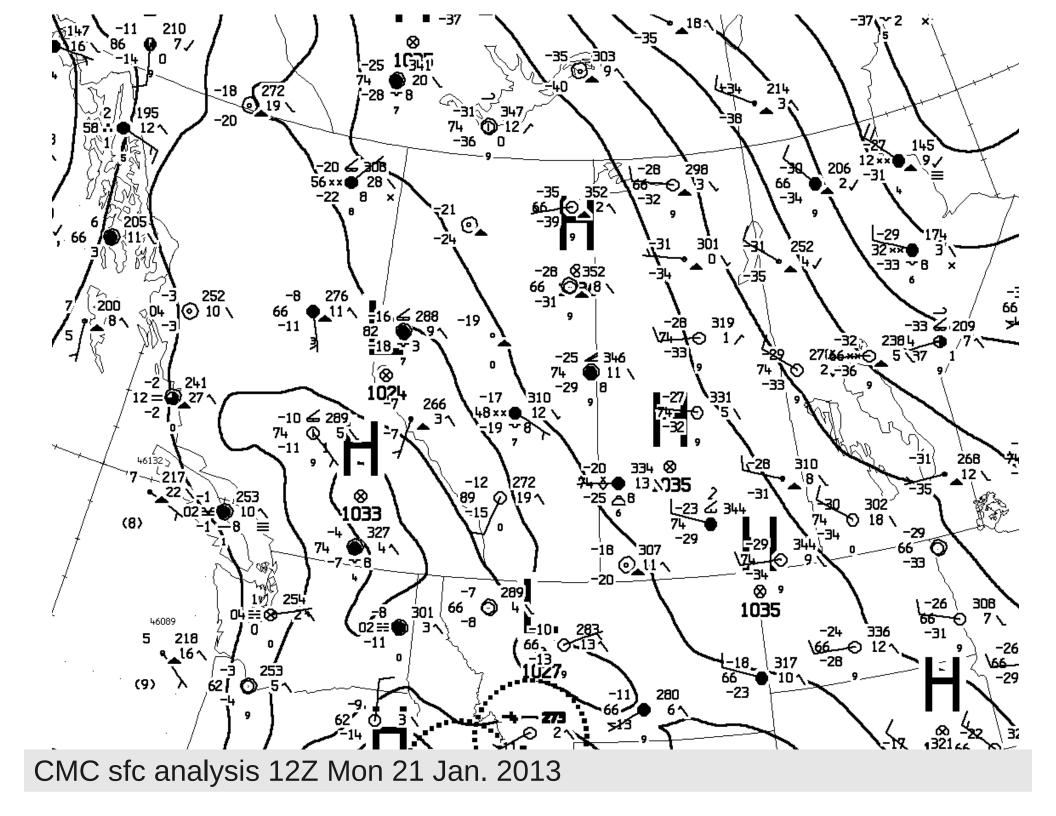
14L

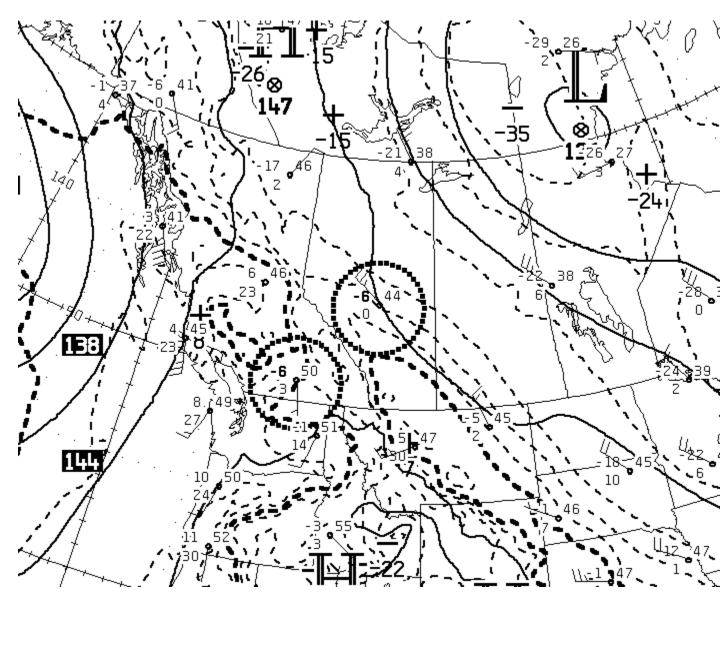
150

CMC 850 & 700 hPa analyses 12Z Mon 21 Jan. 2013



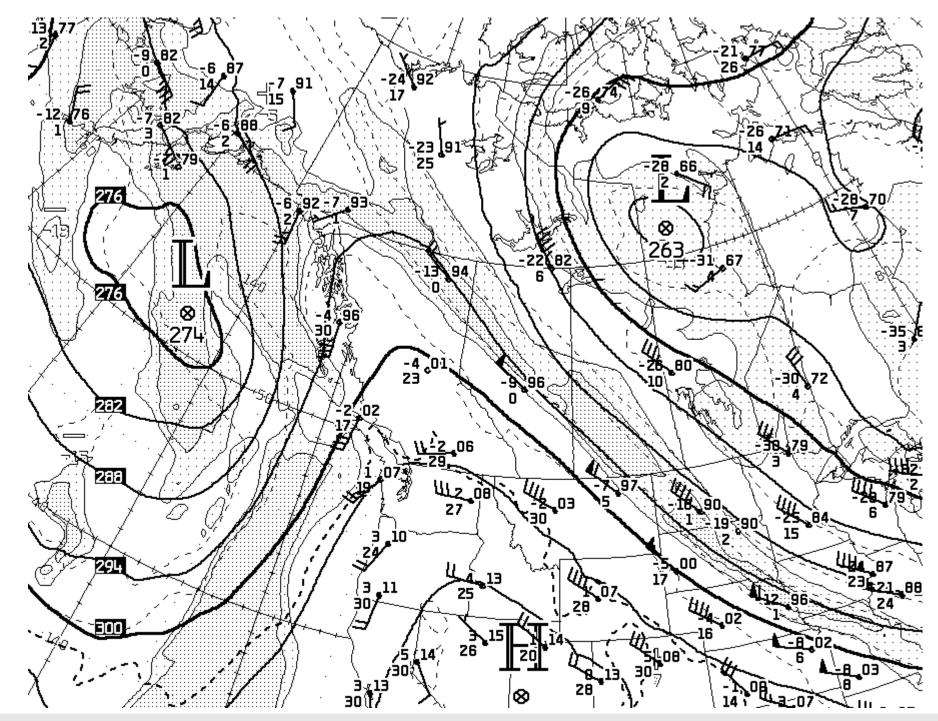
23



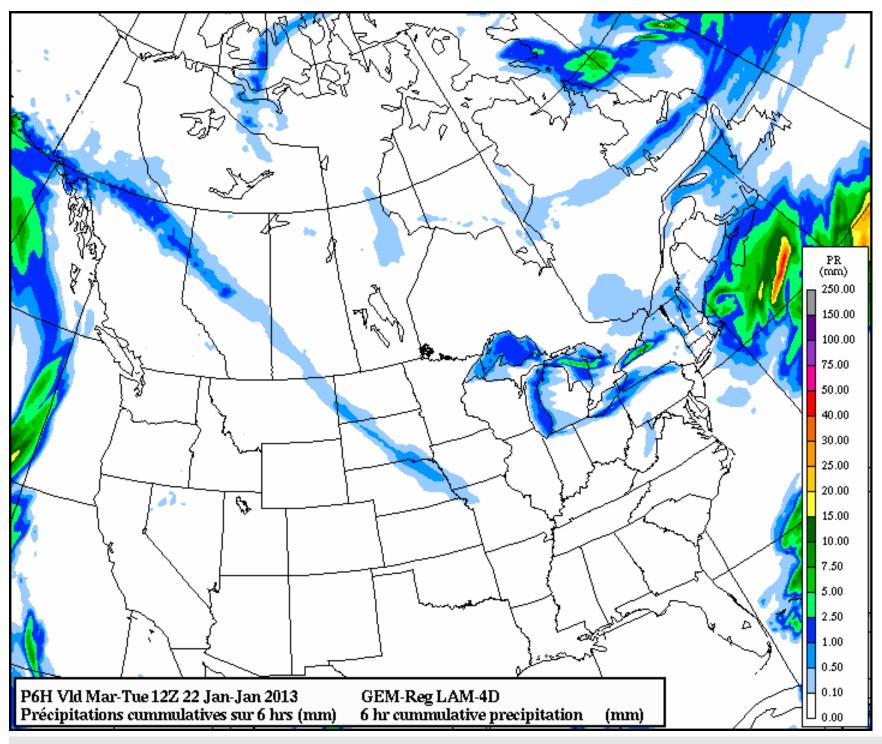


EC 7:00 AM CST TUES JAN 22 2013. OVERVIEW...THE 00Z UPPER ANALYSES SHOWED THE PERSISTENT RIDGE OVER THE WEST COAST OF THE CONTINENT AND THE TROUGH OVER THE GREAT LAKES. IN BETWEEN A STRONG FLOW REFLECTED THE STRENGTH OF THE **BAROCLINIC ZONE AT THE** SURFACE...THE EASTERN PRAIRIES WILL BE ONCE AGAIN PLUGGING IN THEIR CARS THIS MORNING, TAKING THE BUS OR STAYING HOME. AS OF 08Z THE **TEMPERATURE IN WINNIPEG** HAD HIT -34.4C, THE COLDEST SINCE JANUARY 30, 2011... CLOUD AND SOME LIGHT SNOW CONTINUES TO MOVE ALONG STRONG BAROCLINIC ZONE FROM NW ALBERTA TO SW SASKATCHEWAN, CLOUD AND SNOW IS MODERATING **TEMPS SOMEWHAT WITH** MUCH COLDER AIR TO THE **NE. NEXT SYSTEM BEGINS** TO MOVE INTO AB LATE WEDNESDAY WITH LOW EVENTUALLY FORMING OVER CENTRAL AB.

CMC 850 hPa analysis 12Z Tues 22 Jan. 2013



CMC 700 hPa analysis 12Z Tues 22 Jan. 2013



GEM reg initialized 06Z Tues 22 Jan.