

264

FOCN45 CWWG 211900

SIGNIFICANT WEATHER DISCUSSION ISSUED BY THE PRAIRIE AND ARCTIC STORM PREDICTION CENTRE OF ENVIRONMENT CANADA AT 2:00 PM CDT SATURDAY MARCH 21 2015.

ALERTS IN EFFECT...SNOWFALL WARNING FOR CENTRAL AB, FOG ADVISORY FOR SOUTH CENTRAL AB.

SYNOPTIC OVERVIEW...

UPPER LOW OVER SRN HUDSON BAY AND FLAT UPPER RIDGE FROM MONTANA NWD ACROSS ERN ALBERTA LEAVING ERN PRAIRIES IN NWLY FLOW ALOFT. SATELLITE PICTURES ARE SHOWING STRONG VORT MAX MOVING ACROSS WASHINGTON ENEWD.

AT THE SURFACE... 1036 MB HIGH NE OF GREAT SLAVE LAKE WITH RIDGE SEWD ACROSS NRN SK TOWARDS SRN MANITOBA. 1009 MB LOW OVER SRN BRITISH COLUMBIA. TIGHT BAROCLINIC ZONE OVER AB AND SWRN SK.

DISCUSSION.

PRAIRIES...QUITE A BIT TO CONSIDER OVER ALBERTA TODAY. A BAND OF SNOW ALONG THE BAROCLINIC ZONES EXTENDS FROM NW AB TOWARDS WRN CNTRL SK AND SEWD TOWARDS SEWR SK AND EXTREME SWRN MB. HAD A HEAVY SNOW OVER PARTS OF NRN AB THIS MORNING BUT THE INTENSITY HAS DIMINISHED SINCE.

THE VORT MAX MOVING ACROSS WASHINGTON THIS MORNING WILL MOVE TOWARDS SRN AB BY EVENING AND INTO SWRN SK TONIGHT TAPPING INTO THE BAROCLINICITY AND CARVING OUT UPPER LOW OVER SWRN SK TONIGHT AND MOVE ACROSS SK TONIGHT AND SUNDAY. THE GREATEST PRECIP IS EXPECTED NORTH OF THE SURFACE LOW, WHICH LATEST GUIDANCE SUGGEST WILL FORM NEAR CALGARY. THERE ARE A FEW KEY FACTORS IN DECIDING HOW MUCH SNOW WILL FALL MAKING THIS A CHALLENGING FORECAST. CURRENTLY, THE EASTERLY SURFACE FLOW OVER PARTS OF SRN AB IS NOT ONLY MAINTAINING THE LOW LEVEL MOISTURE (HENCE THE PERSISTENT FOG) BUT ALSO KEEPING TEMPERATURES COOLER THAN EARLIER ANTICIPATED. THEREFORE, THE LOCATION OF THE LEE CYCLOGENESIS WILL GREATLY AFFECT HOW THE WINDS SHIFT WHICH WILL THEN AFFECT WHAT THE TEMPERATURES WILL BE WHICH WILL THEN AFFECT THE PRECIP PHASE - INCLUDING FREEZING RAIN.

ANOTHER CONSIDERATION WILL BE THE INSTABILITY. ASSOCIATED WITH THIS UPPER TROUGH IS A FAIR BIT OF CONVECTION AS INDICATED BY THE LIGHTNING NEAR VANCOUVER. WILL THERE BE LIGHTNING IN AB? POSSIBLY. BUT THE GREATER CONCERN WILL BE LOCALLY INTENSE FLURRIES AS THE SYSTEM MOVES IN.

THIS 'CLIPPER' WILL MOVE FAIRLY QUICKLY SO THE SHORT DURATION WILL WORK AGAINST ANY LARGE ACCUMULATIONS.

WITH ALL THAT SAID, THERE IS STILL A LOT OF UNCERTAINTY BUT A SNOWFALL WARNING HAS BEEN ISSUED ALONG A LINE FROM JASPER TO

LLOYDMINSTER FOR THIS EVENING. WE'LL HAVE TO MONITOR THINGS DURING THE DAY TO SEE HOW THINGS PLAY OUT. A FREEZING RAIN WARNING MAY ALSO BE ISSUED FOR PARTS OF AB.

ONCE AGAIN 12Z MODEL RUN SIGNIFICANTLY DIFFERENT IN SNOWFALL AMOUNTS OVER SK COMPARED TO THE 06Z AND 00Z AND 18Z MODEL RUNS. AT PRESENT TIME WE WILL KEEP A SWATH OF 5-10 CM SNOW FROM CYQW TOWARDS CYXE.

ARCTIC...RELATIVELY QUIET.

END/GERLYAND/MARK

[CLICK HERE TO GO TO PREVIOUS BULLETINS.](#)

---

[The Nexlab CANADA Page](#)



[Main Text Page](#)