

ENVIRONMENT CANADA 7:00 AM CST  
WEDNESDAY JANUARY 18 2017.

ALERTS IN EFFECT...WIND WARNING FOR  
SRN ALBERTA...

SYNOPTIC OVERVIEW...SOUTHWEST  
FLOW ALOFT OVER THE PRAIRIES  
ALLOWING MILD PACIFIC AIRMASS TO  
SPREAD ACROSS THE PRAIRIES...

WESTERN PRAIRIES... ONCE AGAIN  
EXPECT TO SEE STRONG WESTERLY  
WINDS ACROSS SRN AB. GUSTS TO 100  
KM/H ARE POSSIBLE FROM THE  
CROWSNEST TO MEDICINE HAT.

ENVIRONMENT CANADA 7:00 AM CST  
THURSDAY JANUARY 19 2017.

SYNOPTIC OVERVIEW...SOUTHWEST  
FLOW ALOFT CONTINUES TO ALLOW  
MILD PACIFIC AIR TO SPREAD ACROSS  
THE PRAIRIES. LARGE UPPER TROUGH  
OVER THE WEST NOAM COAST IS  
SHIFTING SLOWLY TO THE EAST...















DISCUSSION... WESTERN  
PRAIRIES...LOW PRESSURE SYSTEM  
DEVELOPING IN THE FOOTHILLS TODAY  
WILL BRING AN AREA OF MIXED  
PRECIPITATION TO MOST OF CENTRAL  
AND NORTHERN ALBERTA OVER THE  
NEXT 24-36 HRS.

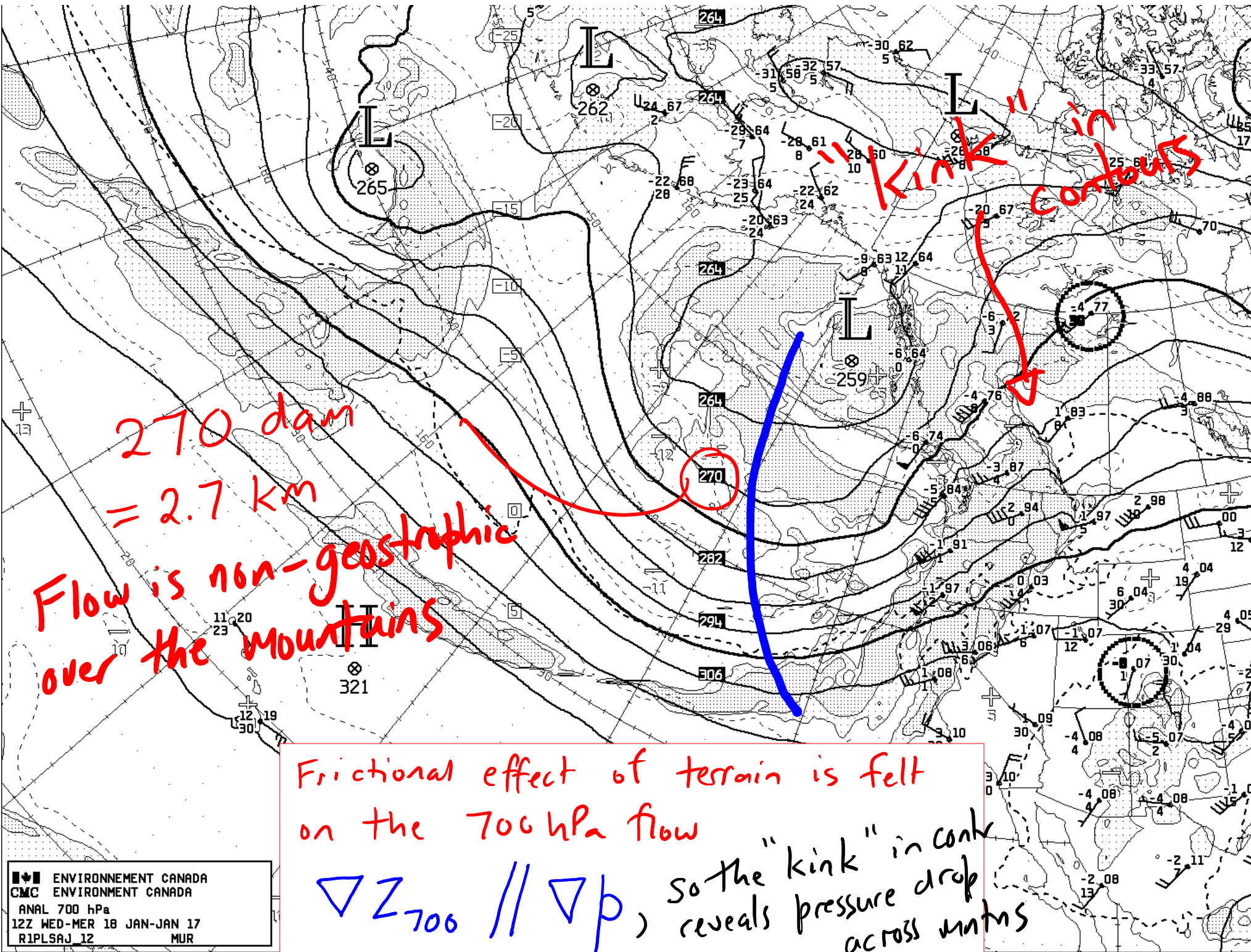
21 warm weather records fall  
around Saskatchewan...  
CBC News Posted: Jan 19,  
2017 7:40 AM CT

# Pincher Creek Airport, Alberta

Latitude 49.52° N | Longitude 114.0° W

## Past 24 Hour Conditions

Date / Time (MST)	Conditions	Temperature (°C)	Wind (km/h)
18 January 2017			
23:00	 Mostly Cloudy	5 (5.2)	W 37
22:00	 Mostly Cloudy	5 (4.5)	W 37
21:00	 Mostly Cloudy	5 (4.7)	W 35 gust 52
20:00	 Mostly Cloudy	4 (4.2)	W 55 gust 65
19:00	 Mostly Cloudy	4 (3.8)	W 43 gust 55
18:00	 Mostly Cloudy	4 (4.2)	W 45 gust 54
17:00	 Sunny	5 (4.6)	W 46 gust 55
16:00	 Sunny	6 (6.0)	W 52 gust 68
15:00	 Sunny	6 (6.1)	W 54 gust 68
14:00	 Sunny	7 (6.6)	W 55 gust 76
13:00	 Sunny	7 (6.5)	<b>W 78 gust 93</b>
12:00	 Sunny	7 (6.7) ↑	<b>WSW 71 gust 97</b>
11:00	 Sunny	6 (5.7)	W 59 gust 81
10:00	 Sunny	5 (4.5)	W 55 gust 65

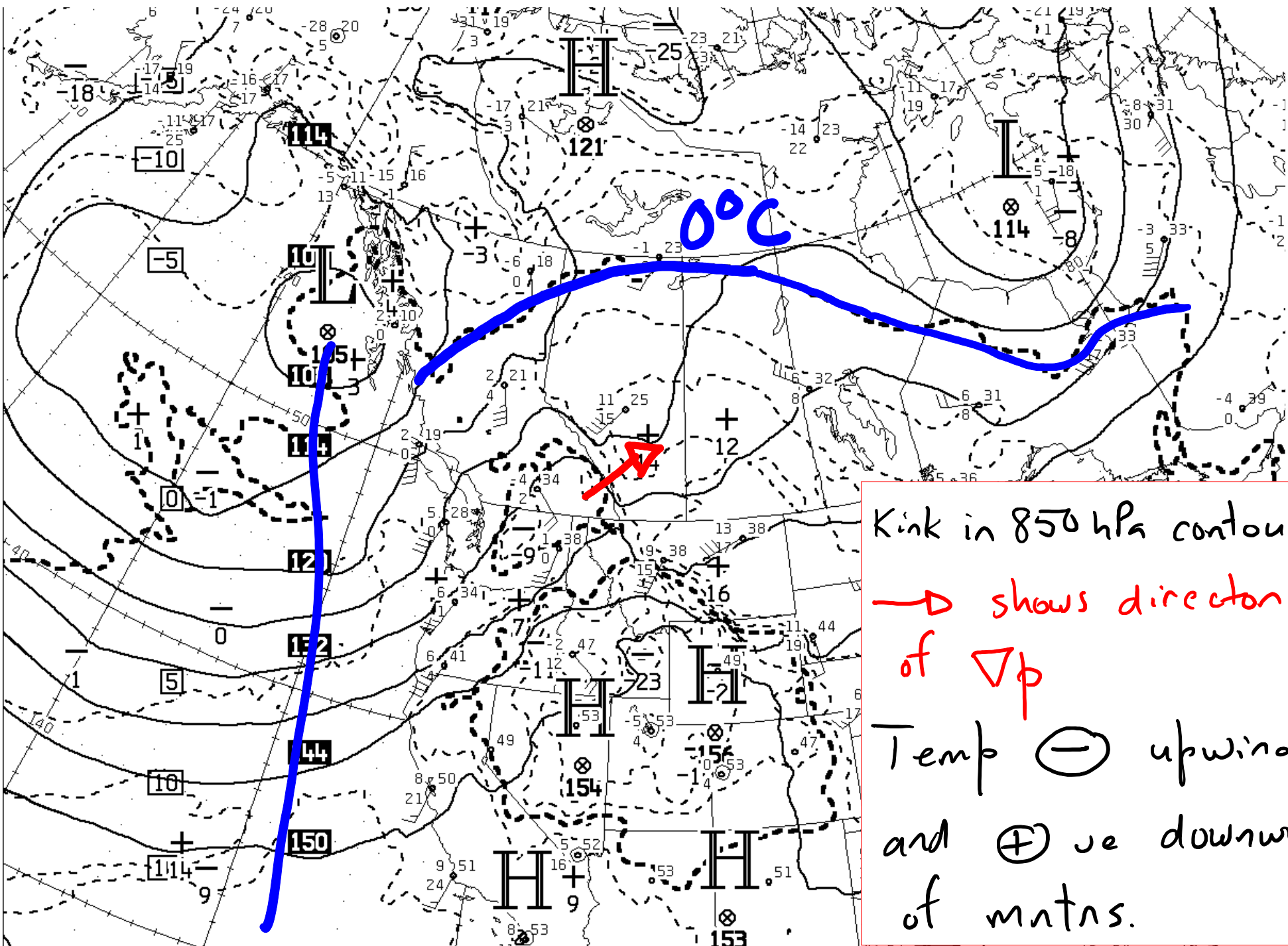


270 dam  
 = 2.7 km  
 Flow is non-geostrophic  
 over the mountains

"Kink" in contours

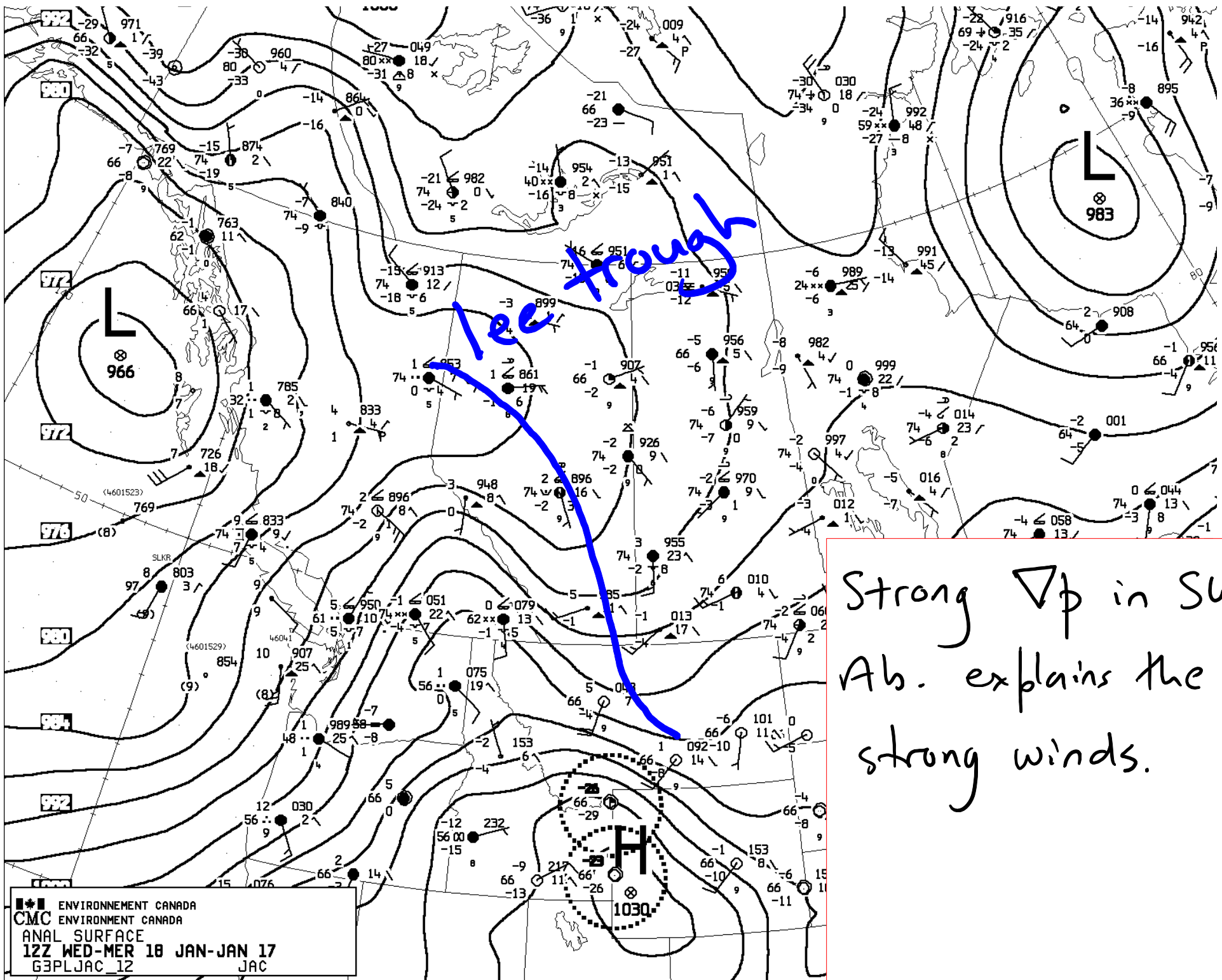
Frictional effect of terrain is felt  
 on the 700 hPa flow

$\nabla Z_{700} \parallel \nabla p$ , so the "kink" in contours reveals pressure drop across mtns



Kink in 850 hPa contour  
 → shows direction  
 of  $\nabla p$   
 Temp  $\ominus$  upwind  
 and  $\oplus$  or downwind  
 of mntns.





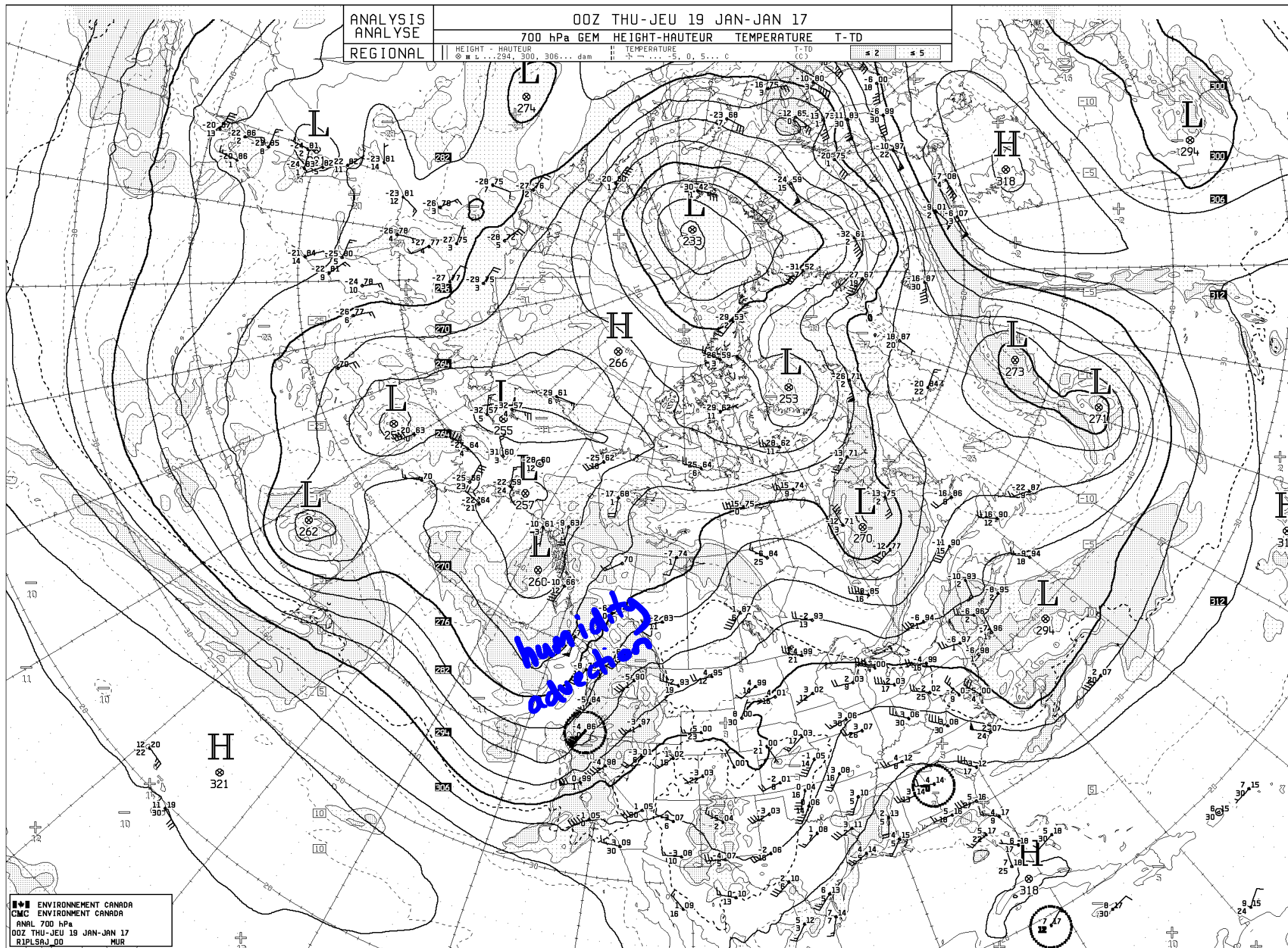
■■■ ENVIRONNEMENT CANADA  
 CMC ENVIRONMENT CANADA  
 ANAL SURFACE  
 12Z WED-MER 18 JAN-JAN 17  
 G3PLJAC\_12 JAC

ANALYSIS  
ANALYSE  
REGIONAL

00Z THU-JEU 19 JAN-JAN 17

700 hPa GEM HEIGHT-HAUTEUR TEMPERATURE T-TD

HEIGHT - HAUTEUR 300, 306... dam TEMPERATURE T-TD 5, 0, 5... C



ENVIRONNEMENT CANADA  
CMC ENVIRONMENT CANADA  
ANAL 700 hPa  
00Z THU-JEU 19 JAN-JAN 17  
RIPLSAJ DO MUR

