# McGill: Data from both VertiX – January 2023 status

- Moments data are on the archive;
- Spectral data from the VertiX were of variable quality for some times (more so for the western VertiX than for the downtown one)
  - → Not added in the archive; ask me if you want them, I'll check if they are good for the IOP of interest.





# Added Data: Transport Quebec Stations



Watch the sites photos (Google Maps works...)! Not always the best sites for winds...



# Other Data/Images Not on the Master Catalog (Yet?)

#### Text soundings of AMDAR for the Some images from forecasts Surface Precipitation Type (colors) most interesting IOPs ALB(Dn) 2045 22Feb22 Descent sounding from 265° into Albany, NY (ALB) lasting 57 min, and covering 436 nautical miles (Aircraft #23806 lean Sea Level Pressure (hPa: black lines) and Precin. Type P alt t/td w dir/w spd Time mb Bnq/Rnq (°C) (ft) (kts) (UTC) (nm) 6.5/----161°/017 2045 351°/002 650 990 1330 965 6.3/----159°/028 2044 354°/004 1940 944 7.0/----173°/039 2043 356°/006 8.4/-----193°/036 2500 925 194°/036 2042 357°/009 2530 924 8.5/----850 5.1/-----4644 199°/040 700 -2.9/----9563 211°/049 18088 500 -16.8/-----232°/065 21580 436 -22.5/----241°/071 2029 267°/067 401 -26.3/-----252°/078 2028 267°/075 23540 23574 400 -26.4/-----252°/078 24560 383 -28.8/-----252°/085 2027 267°/083 252°/085 2026 267°/091 25570 367 -31.0/-----350 -33.8/-----250°/086 2025 267°/099 26600 48-h Fcst Valid on Wed Feb 23 00:00:00 2022, Initialized on Mon Feb 21 00:00:00 2022 334 -36.5/-----250°/084 2024 267°/108 CMC-HRDPS data provided by Environment Canada - https://meteocentre.com 27660 29980 300 -42.4/-----251°/091 33879 250 -52.4/-----253°/102 39000 197 -65.5/-----256°/116 2009 265°/243 39010 197 -64.3/-----245°/141 1948 265°/436 ALB(Up) 2152 22Feb22 Ascent sounding toward 293° from Albany, NY (ALB) lasting 3 min, and covering 8 nautical miles (Aircraft #23806)

P_alt (ft)	mb	t/td (°C)	w_dir/w_spd (kts)	Time (UTC)	Bng/Rng (nm)
400	999	6.8/	151°/006	2152	207°/000
720	987	6.5/	168°/014	2152	197°/000
1100	974	6.3/	172°/024	2152	191°/001
1480	960	7.3/	173°/032	2152	186°/001
1800	949	7.5/	172°/037	2152	185°/001
1990	942	7.3/	173°/040	2152	184°/001

<sup>48-</sup>h Fcst Valid on Wed Feb 23 00:00:00 2022, Initialized on Mon Feb 21 00:00:00 2022 NCFP-NM-HIBES - https://melacentre.com/

2022/02/23 – Diverted airplane



# Possible Research Interest: Small-Scale Variability

Surface Precipitation Type (colors)



### Radar-observed IP confirmed at Airport halfway in between:

02017G24KT	4SM -RAPL BR						
02017KT 3SM	1 - PL BR						
03022G28KT	1 3/4SM -PLSN	BR					
03023G32KT	7SM -SN						
02016G28KT	4SM -PLSN						
03020KT 4SM	1 -PLSN						
03018G25KT	2 1/2SM -PLSN						
02018G27KT	2 1/2SM -SN						
Warm pocket hinted by aircraft sounding (heading NE towards snow):							
CYUL Ascent sounding 0400 18Feb22							
t/td w_c	dir/w_spd Time	Bng/Rng					
(°C)	(kts) (UTC)	(nm)					
-0.3/	76°/008 0401	52°/006					
0.1/	193°/021 0402	46°/010					
-1.1/	212°/035 0403	45°/014					
	02017G24KT 02017KT 3SM 03022G28KT 03023G32KT 02016G28KT 03020KT 4SM 03018G25KT 02018G27KT ed by aircraft sou unding 0400 t/td w_c (°C) -0.3/ 0.1/	02017G24KT 4SM -RAPL BR 02017KT 3SM -PL BR 03022G28KT 1 3/4SM -PLSN 03023G32KT 7SM -SN 02016G28KT 4SM -PLSN 03020KT 4SM -PLSN 03018G25KT 2 1/2SM -PLSN 02018G27KT 2 1/2SM -SN ed by aircraft sounding (heading NE to unding 0400 18Feb22 t/td w_dir/w_spd Time (°C) (kts) (UTC) -0.3/ 76°/008 0401 0.1/ 193°/021 0402 -1.1/ 212°/035 0403					

Also: Some evidence of secondary ice starting at ~2.6 km

And some KH waves, probably associated with the frontal surface

