WINTRE-MIX manual hydrometeor obs. report [group XXXX]

* Required

1. Observer initials *

_____

2. Location *

Mark only one oval.

- ◯ Sorel
- ◯ Trois-Rivieres
- ◯ Other: _____

3. Date & time (UTC) *

Date and time that collection/observation begins

_____

Example: January 7, 2019 11:03 AM

Precipitation type and weather

4. Primary precipitation type *

RA=rain; FZRA:=Freezing rain; DZ=Drizzle; FRDZ=Freezing Drizzle; SN=Snow; SG=Snow grains; IC= Ice crystals (diamond dust); PL= Ice pellets; GS= Snow pellets (graupel)
https://cloudatlas.wmo.int/en/hydrometeors-other-than-clouds-falling.html If "Unknown/Uncertain" explain in "weather / p-type comments".

Mark only one oval.

- None
- Unknown or Uncertain
- RA
- FZRA
- DZ
- FRDZ
- SN
- SG
- IC
- PL
- GS

5. Secondary precipitation type *

RA=rain; FZRA:=Freezing rain; DZ=Drizzle; FRDZ=Freezing Drizzle; SN=Snow; SG=Snow grains; IC= Ice crystals (diamond dust); PL= Ice pellets; GS= Snow pellets (graupel)
https://cloudatlas.wmo.int/en/hydrometeors-other-than-clouds-falling.html If "Unknown/Uncertain" explain in "weather / p-type comments".

Mark only one oval.

- None
- Unknown or Uncertain
- RA
- FZRA
- DZ
- FRDZ
- SN
- SG
- IC
- PL
- GS

6. If a frozen p-type was identified, was it visibly wet/melting?

If SN, SG, IC, PL, or GS is observed, attempt to determine if the hydrometeor was melting *before* it reached the ground.

Mark only one oval.

- Yes
- No
- Uncertain

7. If PL was identified, does it have a liquid core?

Mark only one oval.

- ◯ Yes
- ◯ No
- ◯ Uncertain

8. mPING report submitted? *

Mark only one oval.

- ◯ yes
- ◯ no

9. Fog present?

Mark only one oval.

- ◯ Yes
- ◯ No

10. Blowing snow?

Mark only one oval.

- ◯ Yes
- ◯ No

11. Primary cloud type?

Cb=Cumulonimbus; Cu=Cumulus; St=Stratus; Ns=Nimbostratus; Sc=Stratocumulus; As=Altostratus; Ac=Altocumulus; Ci=Cirrus; Cc=Cirrocumulus; Cs=Cirrostratus
https://cloudatlas.wmo.int/en/cloud-identification-guide.html

Mark only one oval.

- ◯ Cb
- ◯ Cu
- ◯ St
- ◯ Ns
- ◯ Sc
- ◯ As
- ◯ Ac
- ◯ Ci
- ◯ Cc
- ◯ Cs

12. Sky cover

0–8 Oktas (eighths of sky covered). https://worldweather.wmo.int/oktas.htm

Mark only one oval.

- ◯ 0
- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4
- ◯ 5
- ◯ 6
- ◯ 7
- ◯ 8

13. Weather / p-type comments

Notes about observation methods, uncertainties, etc.

_____

Hydrometeor photography

14. Hydrometeor photos taken? *

Mark only one oval.

- ◯ Yes (macro DSLR)
- ◯ Yes (cell phone only)
- ◯ No

15. DSLR settings

Shutter speed, ISO, focal length,...

Mark only one oval.

- ◯ Same as previous photo
- ◯ Other: _____

16. Photo comments

_____

Snow and ice amount

17. Snow / ice measurements collected *

Mark only one oval.

- ◯ Snow board only
- ◯ Snow board and ice accretion
- ◯ Ice accretion only
- ◯ None

18. Interval snow depth (mm)

Taken on snow board. Average of at least 3 depth measurements. Default is to clear board after measurement. If otherwise, note in comments.

_____

19. Interval snow water equivalent (mm)

Taken from snow board. Single measurement. Default is to clear board after measurement. If otherwise, note in comments.

_____

20. Snow board interval (h)

Time since snow board was deployed or cleared. In most cases this should be 3 hours. Default is to clear board after measurement. If otherwise, note in comments.

_____

21. Ice accretion caliper reading (mm)

Full thickness measured with calipers (object thickness not subtracted, not divided by 2). Average of readings at multiple angles, locations.

_____

22. Ice accretion period (h)

Mark only one oval.

- ◯ From start of IOP operations
- ◯ Other: _____

23. Snow and ice amount comments

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