

**Ice and Freezing Rain Event**  
**January 12<sup>th</sup> 2020**  
Update #5

January 11<sup>th</sup> 2020  
7:30 pm

**Briefing produced as guidance for emergency management officials.**

# Hazard Risk Assessment Page

## Brief Summary

A complex low pressure system will bring messy weather to the province on Sunday with an extended period of ice pellets and freezing rain expected over a very large area. Snow accumulation in the north and rainfall in the south is also expected on Sunday.

## Duration

Worst conditions to last 12 to 15 hours.

## Confidence Level

|          |   |
|----------|---|
| High     | X |
| Moderate |   |
| Low      |   |

## Onset Timing

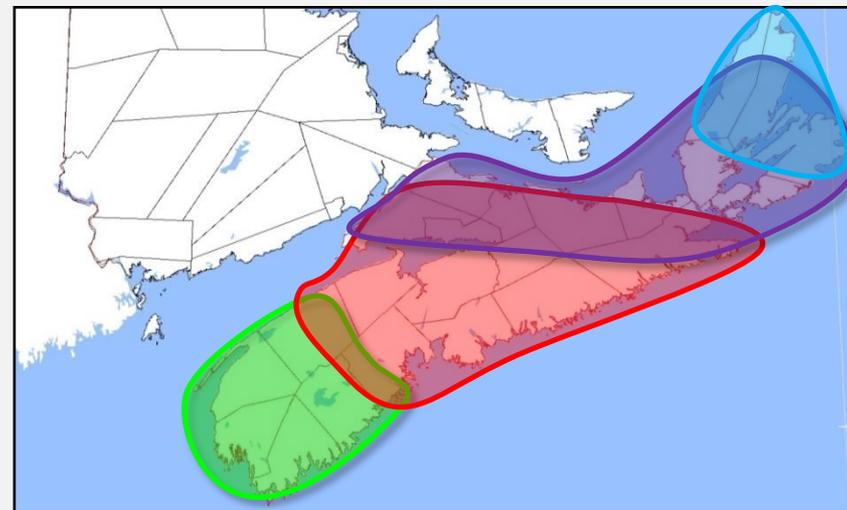
**Southern Zone:** Sunday morning

**Western Zone:** Early Sunday morning

**Central zone:** Overnight

**Eastern Zone:** Overnight

## Areas to Monitor



## Impacts

Similar storms in the past have caused:

- Hazardous driving conditions
- Major travel disruptions
- Ice accumulation on trees, power lines, etc.
- Power outages
- Slippery road and sidewalk conditions from ice build up

**This page is an experimental summary page.** Confidence level is subjective and refers to the overall confidence in the weather scenario based on its complexity and model performance. Low and moderate-confidence storms should be given a wider margin of error. The map highlights regions of higher probability of occurrence of certain hazards but these hazards could extend beyond the highlighted areas depicted on the map. Impacts are based on documented occurrences that have resulted from storms with similar extent and severity of hazards.

# Synopsis

This briefing package has the latest model (2pm this afternoon) depictions for precipitation timing and amounts included. There are no major changes to the weather situation for tomorrow so the synopsis remains the same. One thing that the last couple of models have done is slowly move the warmer (above freezing) temperatures on Sunday a bit north. This moves the boundary of the rain and freezing rain a bit further north, which would mean a bit less freezing rain for some counties (Halifax, Lunenburg, and Annapolis) but more rain.

Periods will spread across Nova Scotia this evening as a trough of low pressure crosses the region. As it passes, the warm air it brought to the region today will start to be replaced by cold air from the north. This will turn the rain over to freezing rain, ice pellets and snow overnight beginning in the north, and will spread southward across much of NS by Sunday morning. As the warm front approaches on Sunday it will maintain this set up of precipitation across NS, with snow in the far north, then ice pellets, then freezing rain, then rain furthest south. All of this precipitation will continue until Sunday evening when the warm front and its associated low, both move east and away from the Maritimes. Lingering flurries and temperatures below zero are expected Sunday night. No precipitation is expected Monday, and day time highs below zero are expected. The strongest winds from this event are occurring now ahead of the trough, with gusts to 50 or 60 km/h in southwesterlies over many areas, and some as high as 70 or 80 km/h in exposed areas along the coast. These winds will diminish as the trough passes and not expected to be significant overnight or on Sunday.

In summary, Sunday in NS looks like the following:

**Snow** –15 to 25 cm for northern Cape Breton/the Highlands.

**Ice Pellets** – An extended period (8 to 12 hours) over Northern NS and Cape Breton, near 5 cm forecast.

\*Ice pellets and snowfall accumulations are totalled together in the forecast\*

**Freezing Rain** – An extended period covering a large area of the province, with up to 6 hours in the south to 12 hours in the north.

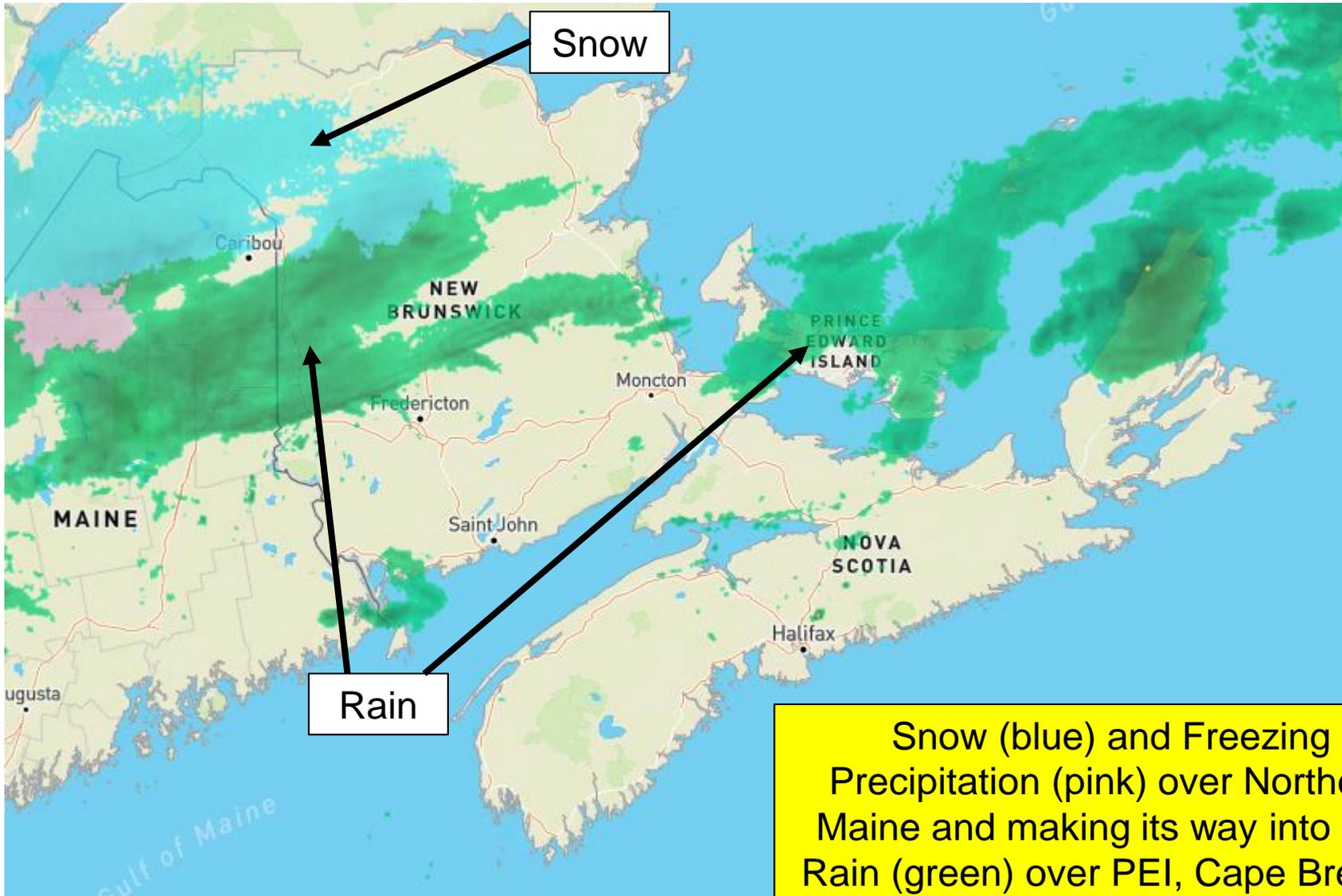
**Rainfall** – In the extreme southwest, amounts 25 to 35 mm forecast with up to 50 mm possible locally.

Freezing rain, Snowfall and Rainfall Warnings are in effect for areas of the province.

The latest alerts can be found at: [http://weather.gc.ca/warnings/index\\_e.html?prov=ns](http://weather.gc.ca/warnings/index_e.html?prov=ns)

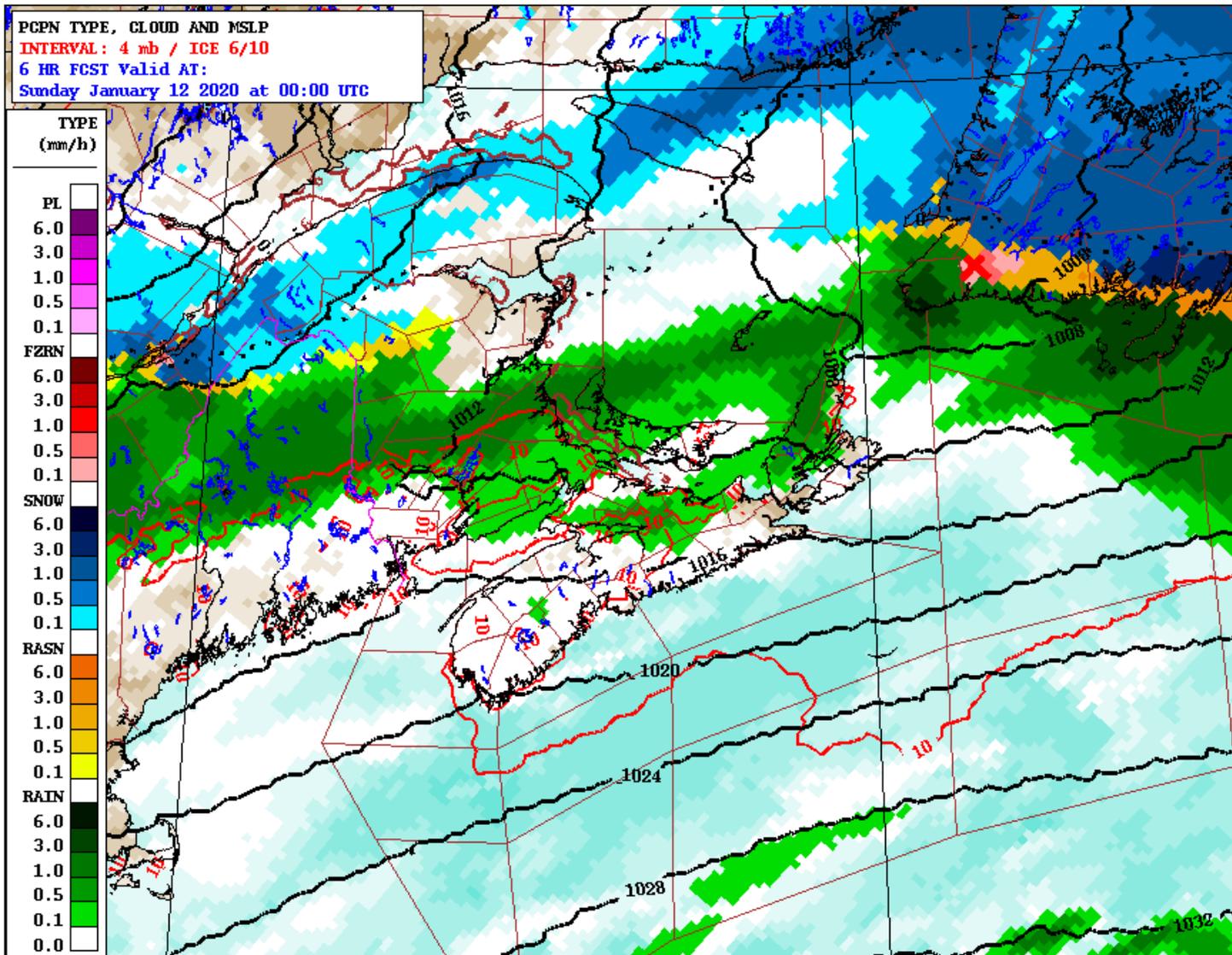
This briefing package will be updated Sunday morning.

# Current Radar Image at 7:15pm



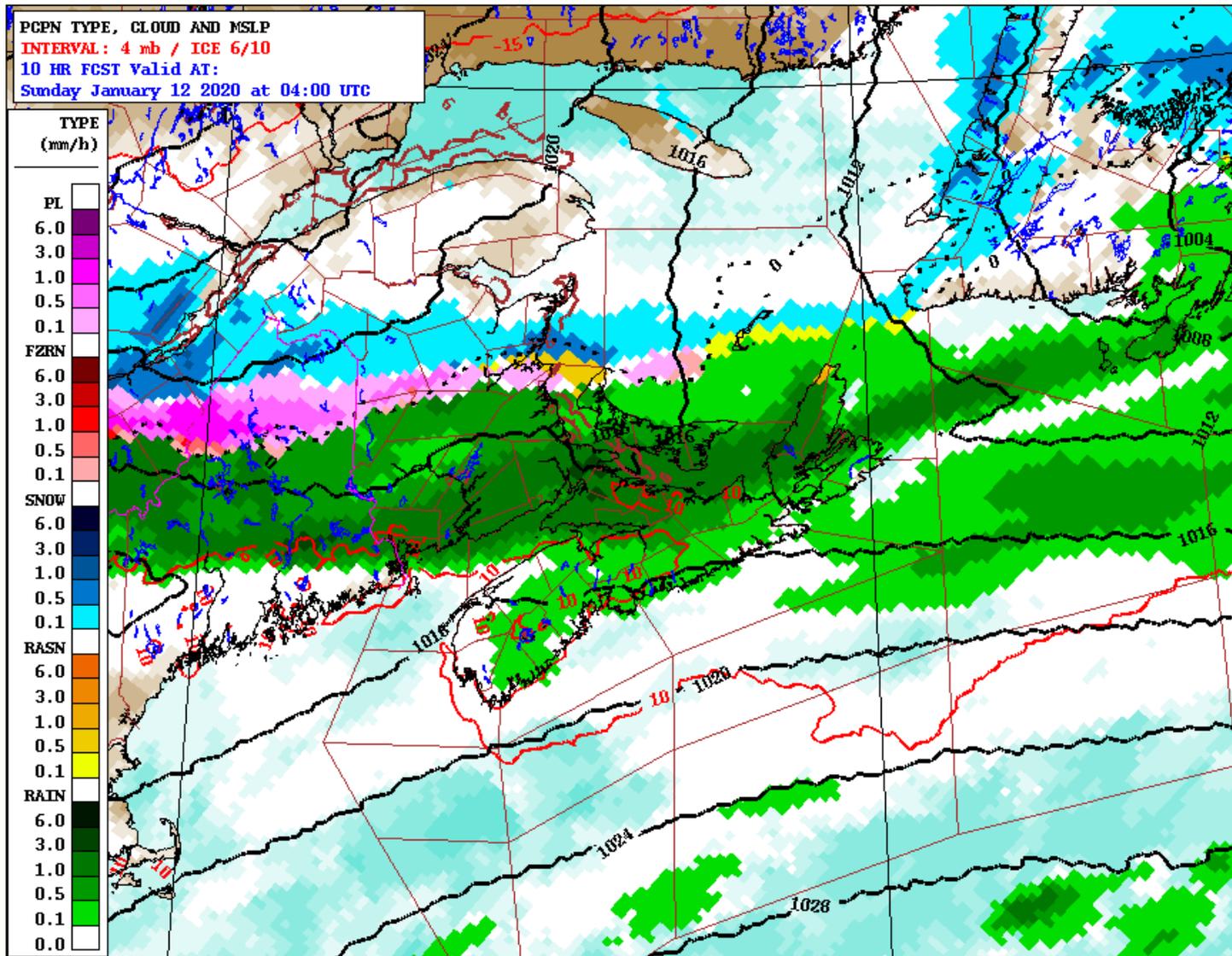
Snow (blue) and Freezing Precipitation (pink) over Northern Maine and making its way into NB. Rain (green) over PEI, Cape Breton, and part of NB.

# Model depiction for 8pm this evening



Trough of low pressure over Gulf of St. Lawrence, giving scattered to NS. Winds from the southwest with mild temperatures.

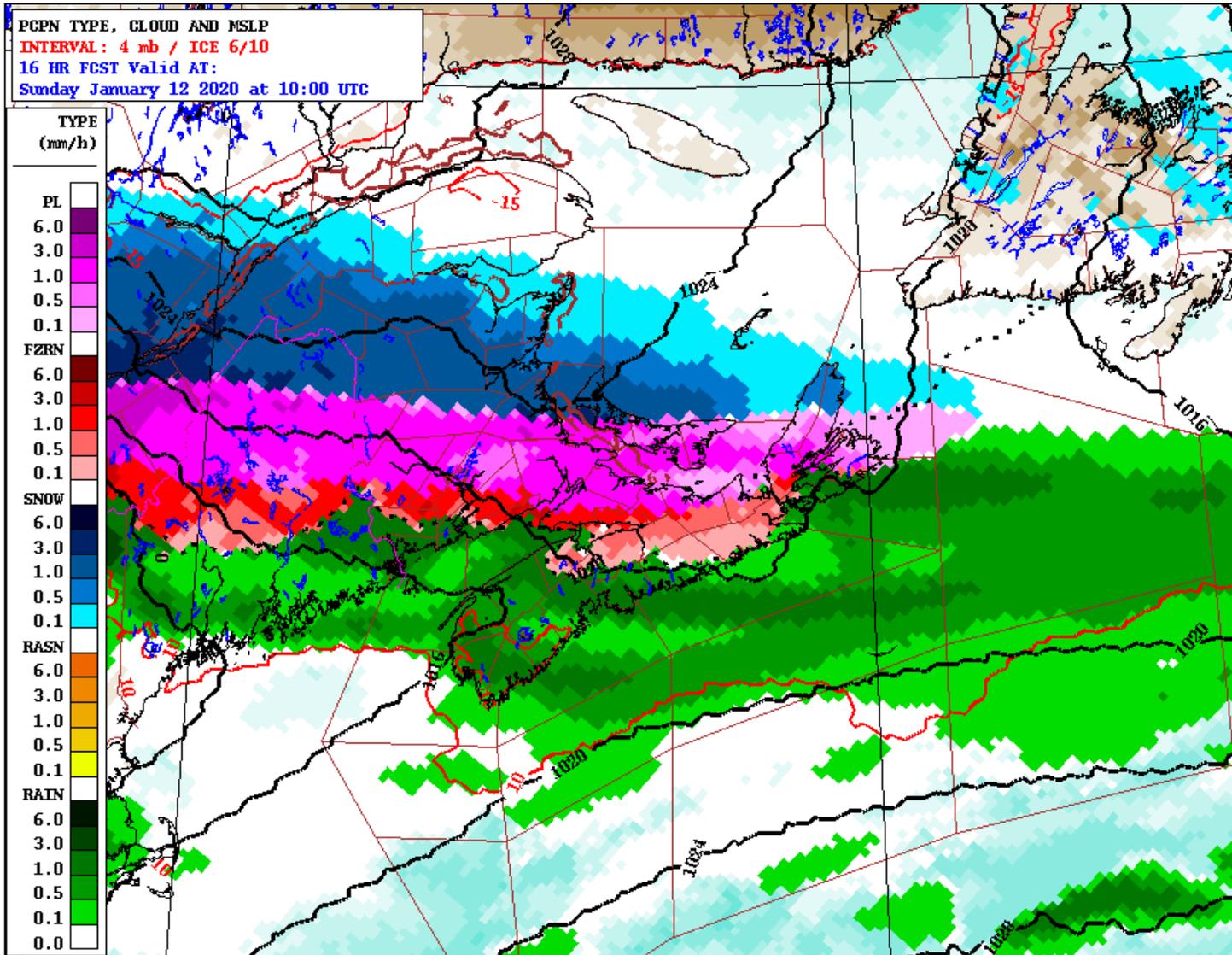
# Model depiction for 12am midnight



Trough has moved over NS and giving rain to most areas. Colder air behind the trough approaching NS from the north. Leading edge of freezing precipitation extending through NB.

Precipitation Type By Colour: Blue – Snow  
Purple – Ice Pellets  
Red – Freezing Rain  
Green - Rain

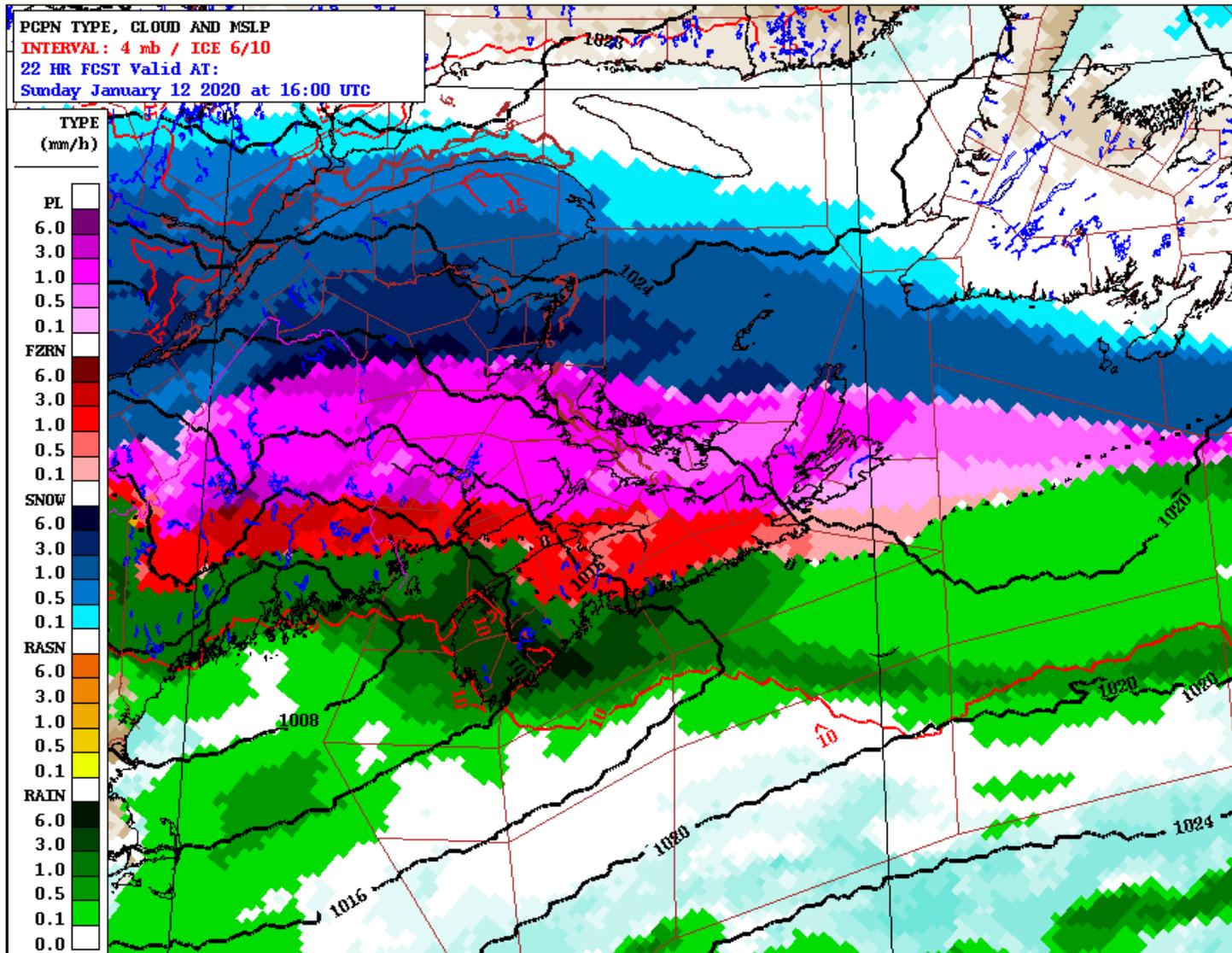
# Model depiction for 6am Sunday morning



Ice pellets has moved over Cape Breton and northern NS, with freezing rain over parts of central and eastern NS, slowly pushing southward. Rain continues in the southwest.

Precipitation Type By Colour: Blue – Snow  
Purple – Ice Pellets  
Red – Freezing Rain  
Green - Rain

# Model depiction for 12pm noon Sunday



Snow in the far north, then an area of ice pellets over Cape Breton and northern NS. Freezing rain covering an area from eastern shore down to Queens County, and over to Kings County. Heavy rain in the southwest.

Precipitation Type By Colour:

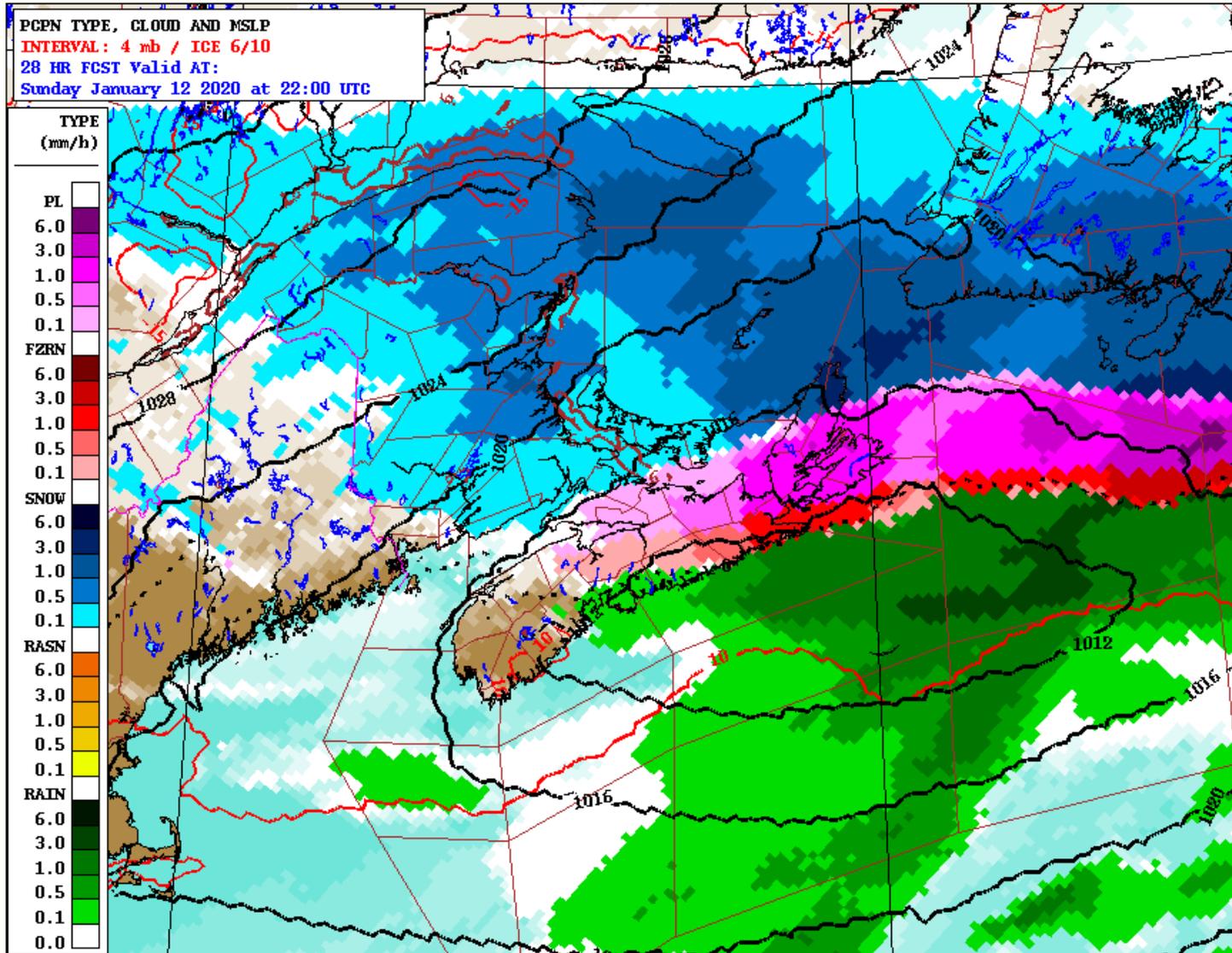
Blue – Snow

Purple – Ice Pellets

Red – Freezing Rain

Green - Rain

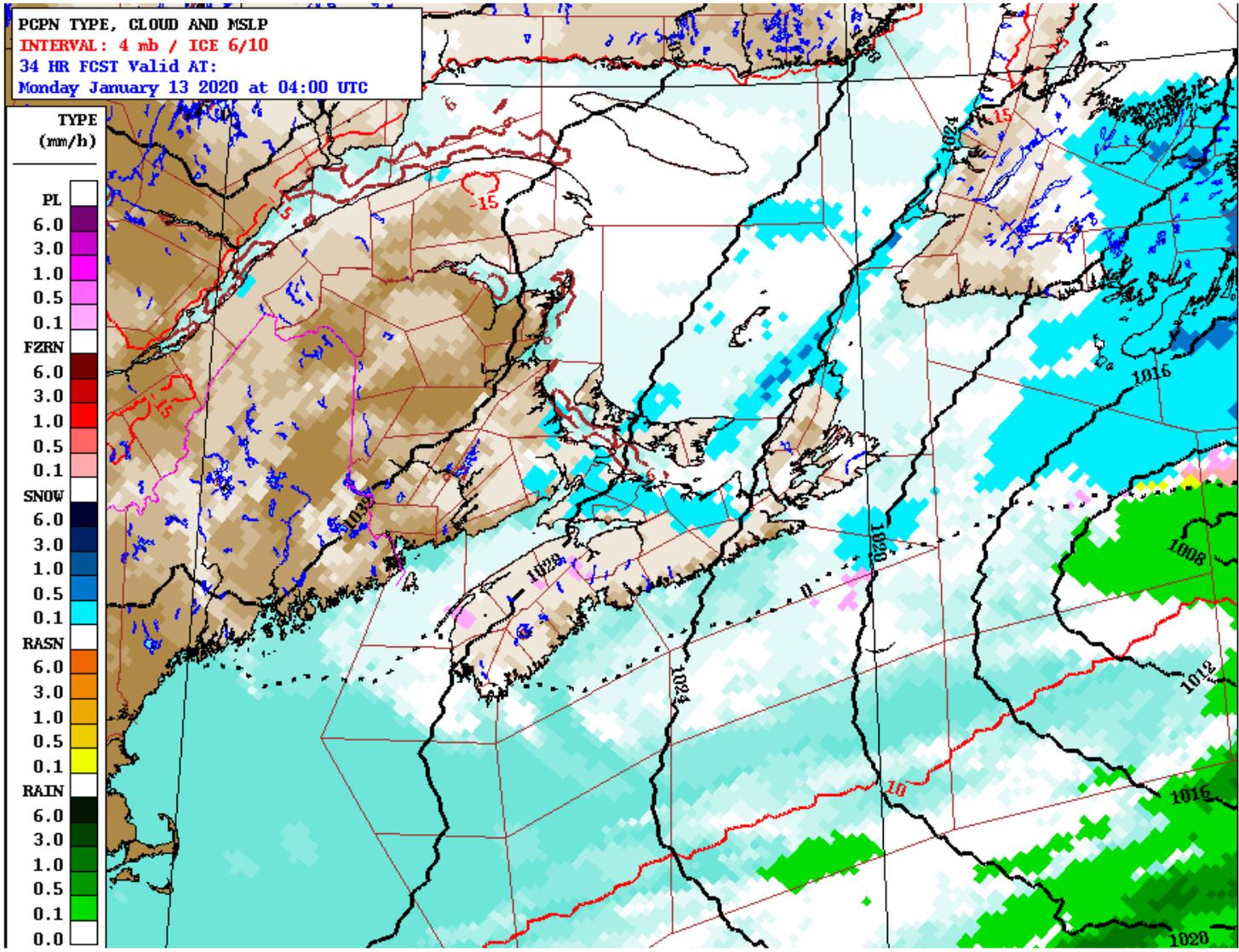
# Model depiction for 6pm Sunday evening



The low center and warm front have moved just south of NS. Precipitation continues across NS but starting to ease up in the west.

Precipitation Type By Colour:      Blue – Snow                      Red – Freezing Rain  
   Purple – Ice Pellets              Green - Rain

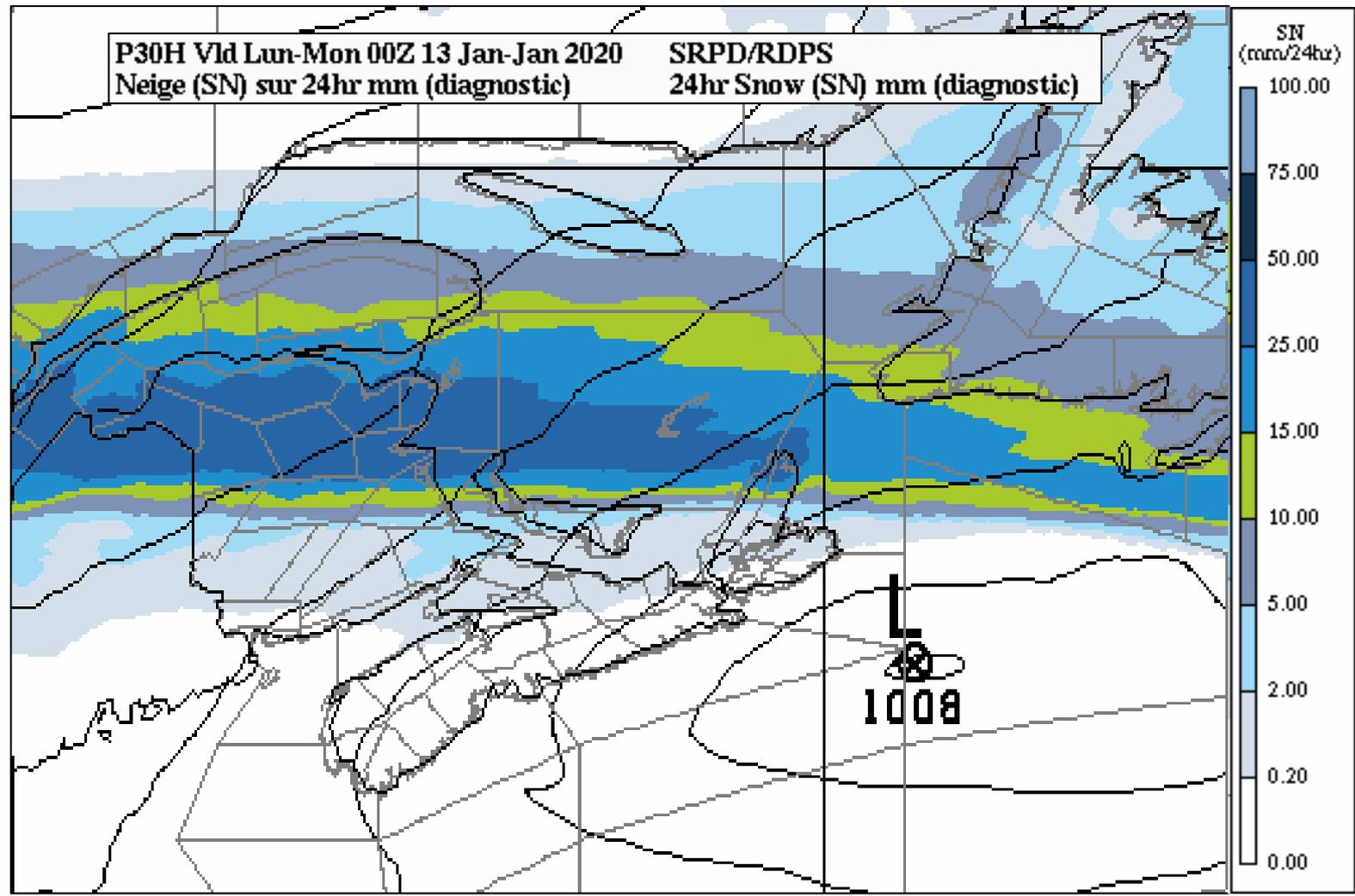
# Model depiction for 12am midnight Monday



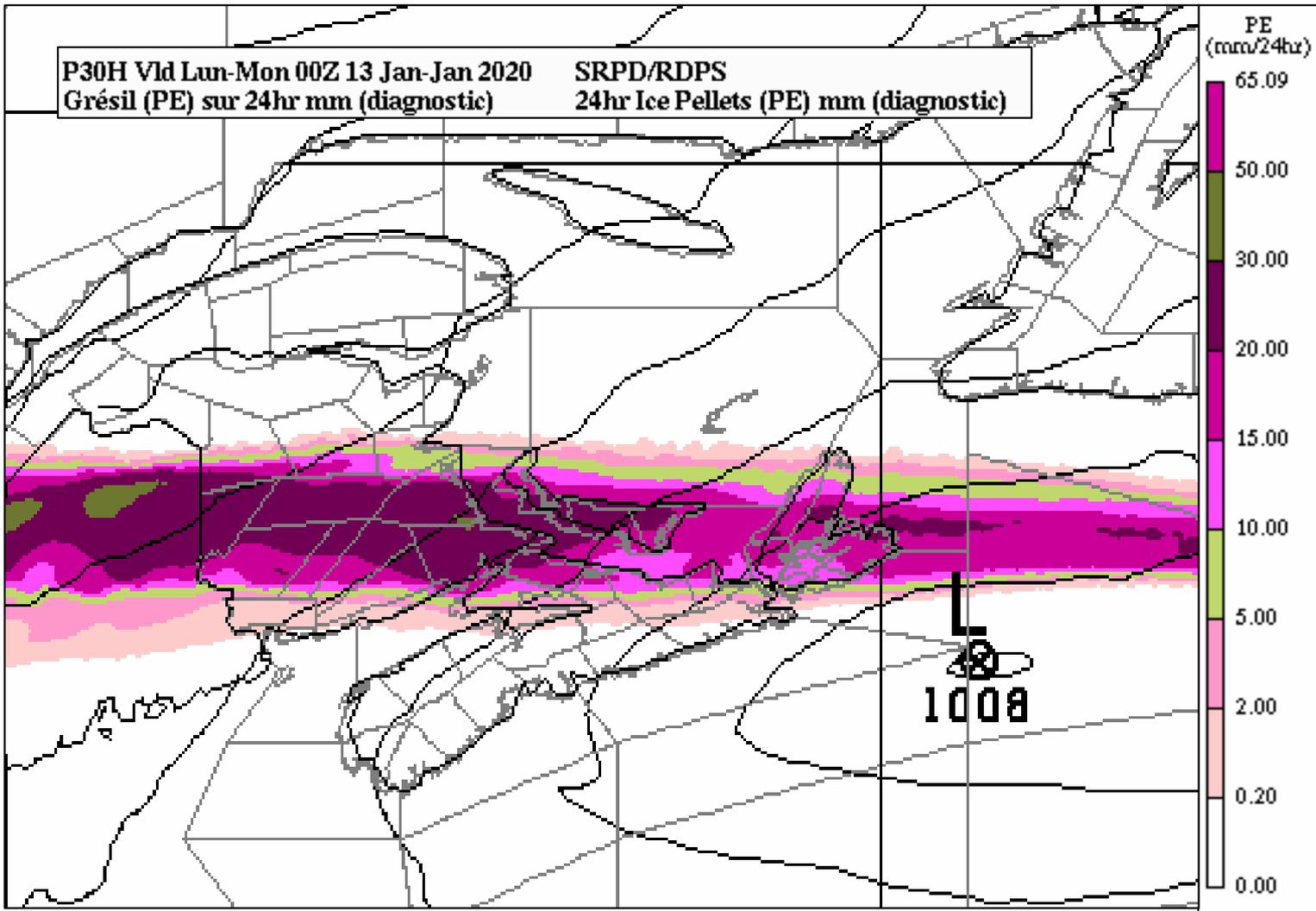
Low center and warm front have moved east and pulling away, taking with it the warmer air. Some lingering precip but will end overnight.

Precipitation Type By Colour: Blue – Snow      Red – Freezing Rain  
Purple – Ice Pellets      Green - Rain

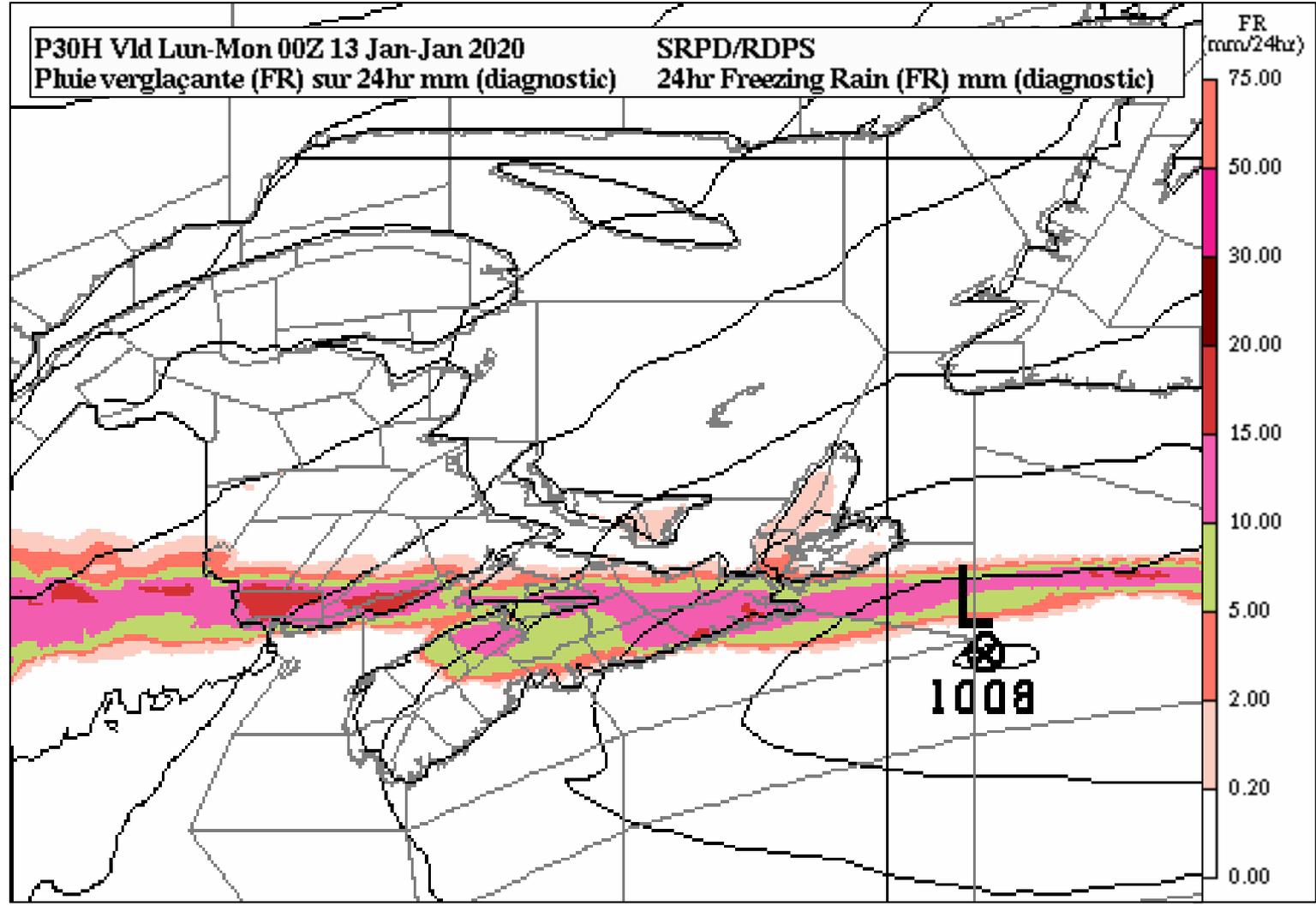
# Model Predicted Snowfall (cm) by 8pm Sunday



# Model Predicted Ice Pellets (mm water eq) by 8pm Sunday



# Model Predicted Freezing Rain (mm) by 8pm Sunday



# Model Predicted Rainfall (mm) by 8pm Sunday

