

The H-SAF EPS-SG MWI and MWS Precipitation Products: Machine Learning Techniques for Snowfall and Rainfall retrieval

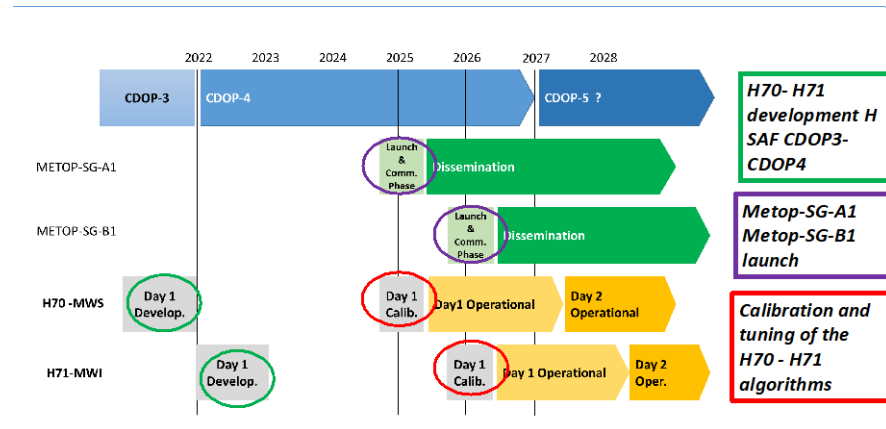
Daniele Casella, Paolo Sanò, Andrea Camplani, Leo Pio D'Adderio, Giulia Panegrossi

National Research Council – Institute of Atmospheric Sciences and Climate (CNR-ISAC) Rome, Italy

MetOp-SG-A Microwave Sounder
MetOp-SG-B Microwave Imager

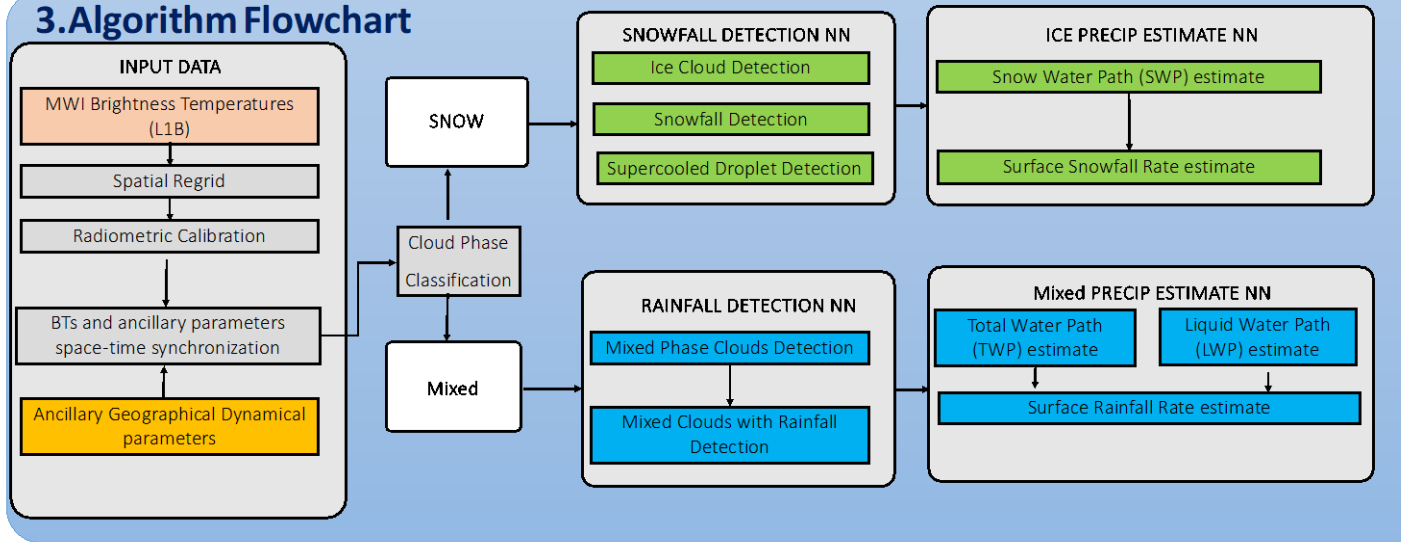


Day-1 precipitation products



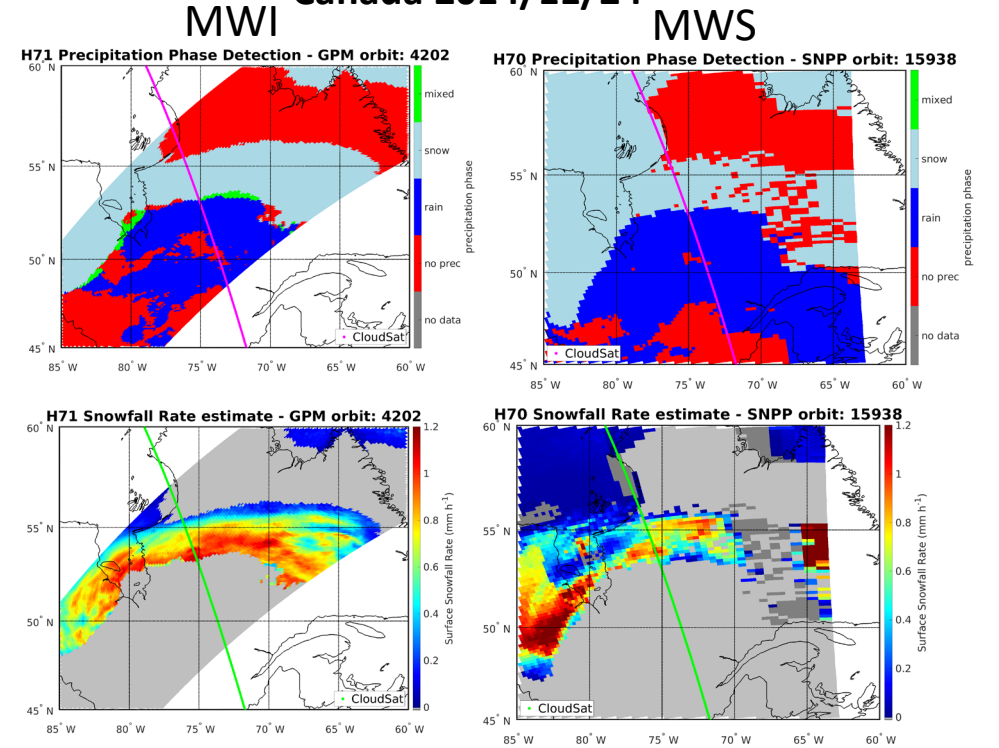
- ML approach
- Use of ATMS (MWS) and GMI (MWI)
- Rainfall/mixed precipitation detection and quantification modules: based on GPM-CO
- Snowfall detection and quantification modules: based on CloudSat CPR/Calipso

3. Algorithm Flowchart



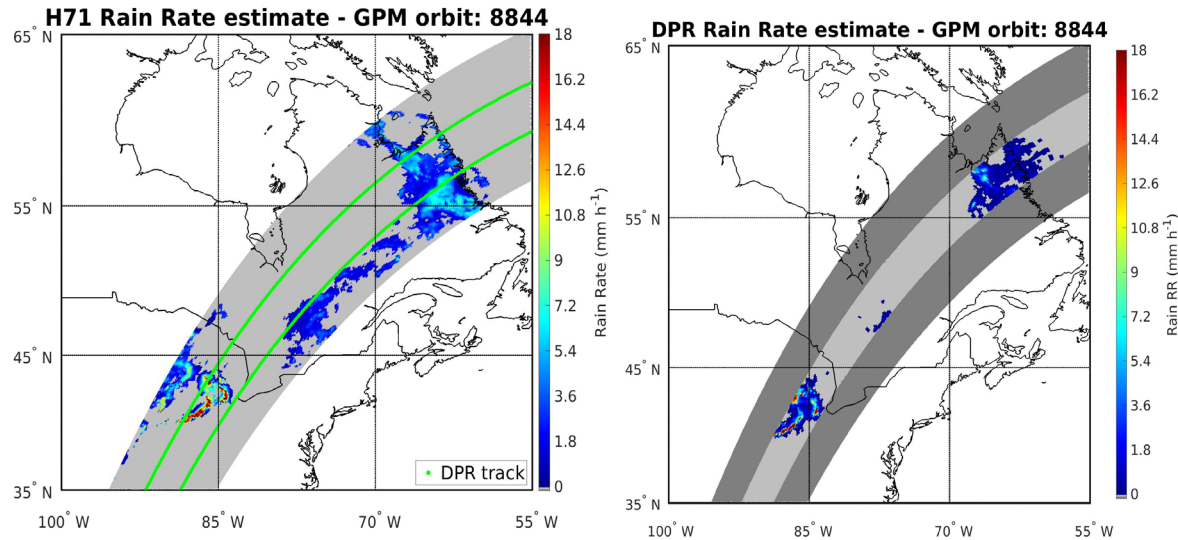
EPS-SG snowfall modules

Canada 2014/11/24



Rainfall event Canada 2015/09/19

Comparison with DPR



Comparison with CloudSat CPR 2C-Snow

