

Use of NCMRWF products for Operational Mountain Weather Forecast



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Mountain Weather Forecast work flow

Data from DGRE
Observatory and
AWS

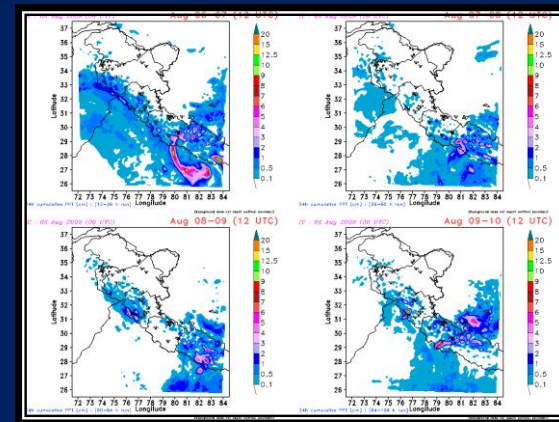


MMC SRINAGAR
MMC SASOMA
MMC JOSHIMATH
RDC MANALI
RDC LACHUNG



DGRE, Chandigarh

Weather
Forecast
Bulletin



Generation of Mtn
Weather forecast



MMC SRINAGAR
MMC SASOMA
MMC JOSHIMATH
RDC MANALI
RDC LACHUNG



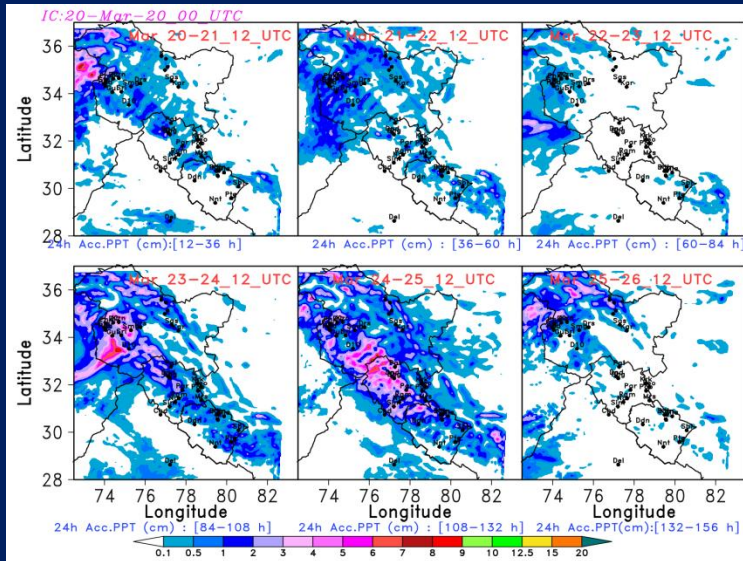
USERS
(ARMY, ITBP,
BRO), PRESS &
NDMA 2

NWP model for mountain weather forecast

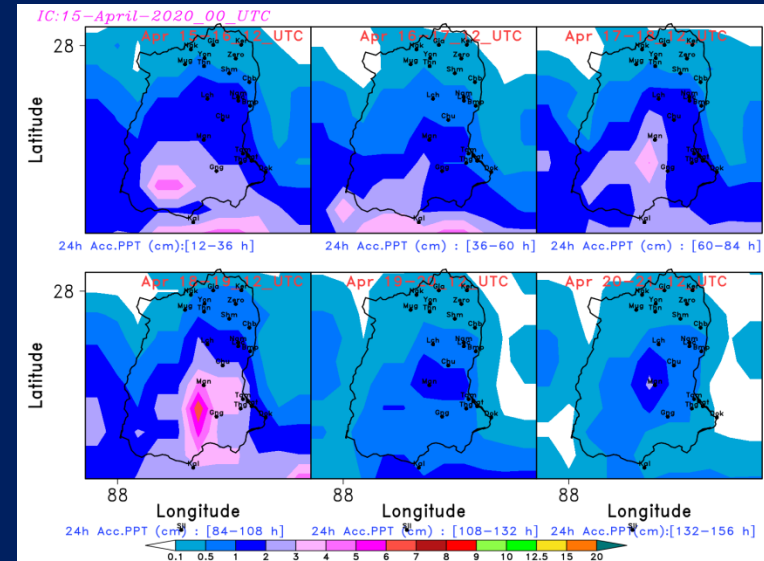
- Started with Mesoscale Model version 5 (MM5) model at 81, 27 and 09 km.
- NCMRWF T80 and T256 data (more recently T512 at $0.25^\circ \times 0.25^\circ$) as boundary condition in WRF.
- Satellite radiances (AMSU-A & AMSU-B) and NCMRWF Prepbufr data for 3D-VAR data assimilation.
- 03 hrs precipitation meteograms for all the stations.
- 24hrs precipitation forecast 06 days in advance.



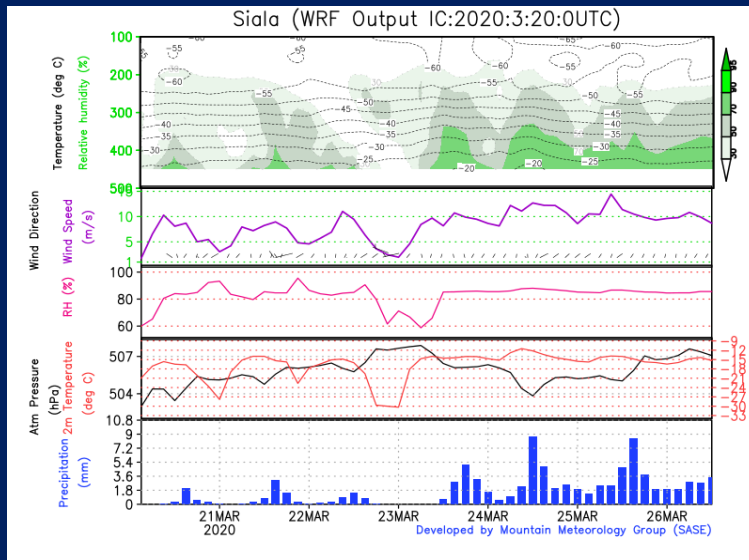
Mountain Weather forecast



@06 days for Western and Central Himalaya



@06 days for Sikkim, Northeast Himalaya



Location specific Meteograms

NCMRWF Noida, India Global Data for ICBC and Prepbufr data in WRF Model.

Assimilation of DGRE and Satellite Data

Forecast at 3km x 3km for 06 days in advance

Signing of extended MoU between DGRE (then SASE) and NCMRWF

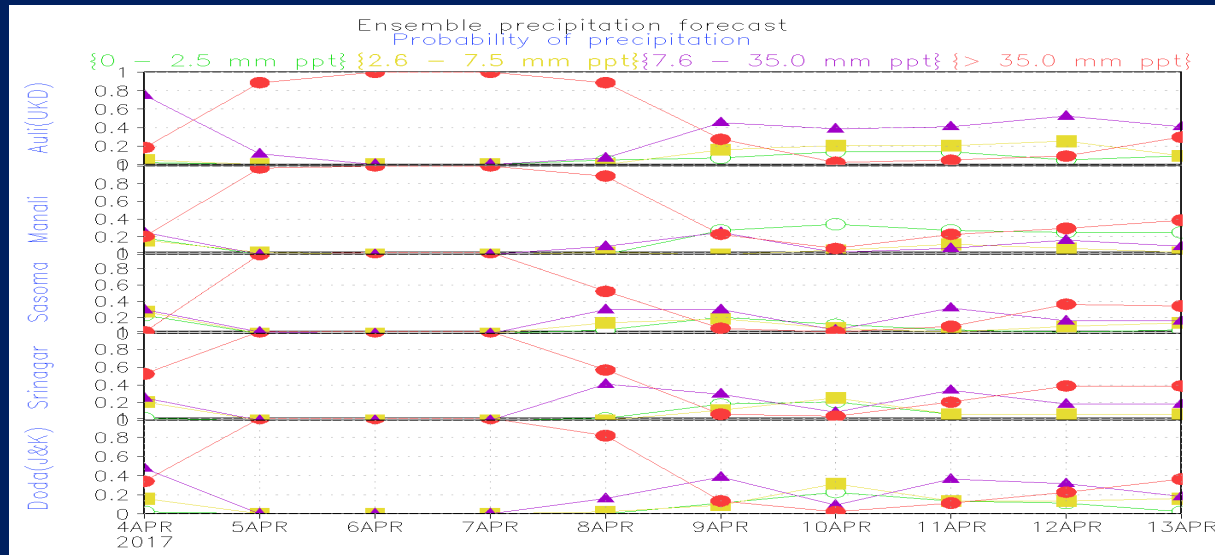


Joint SASE – NCMRWF Workshop on Ensemble Weather Prediction System and its use in developing new applications for users (ENSEMBLE-2017)

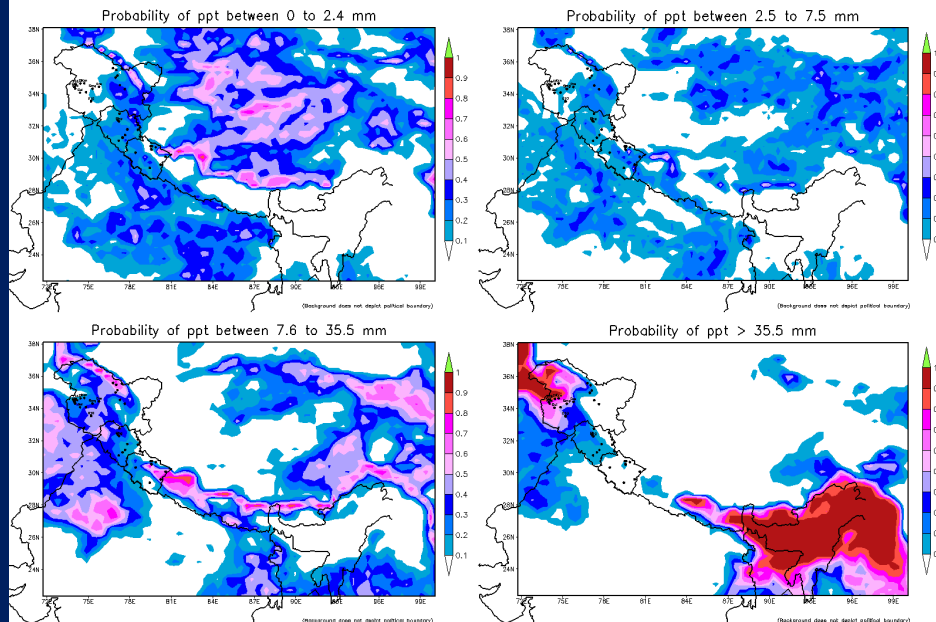
17-18 March 2017, SASE, Chandigarh



NCMRWF Ensemble Prediction System (EPS) products for Indian Himalaya



Ensemble data forecast for Day-1 (IC of 20170403)

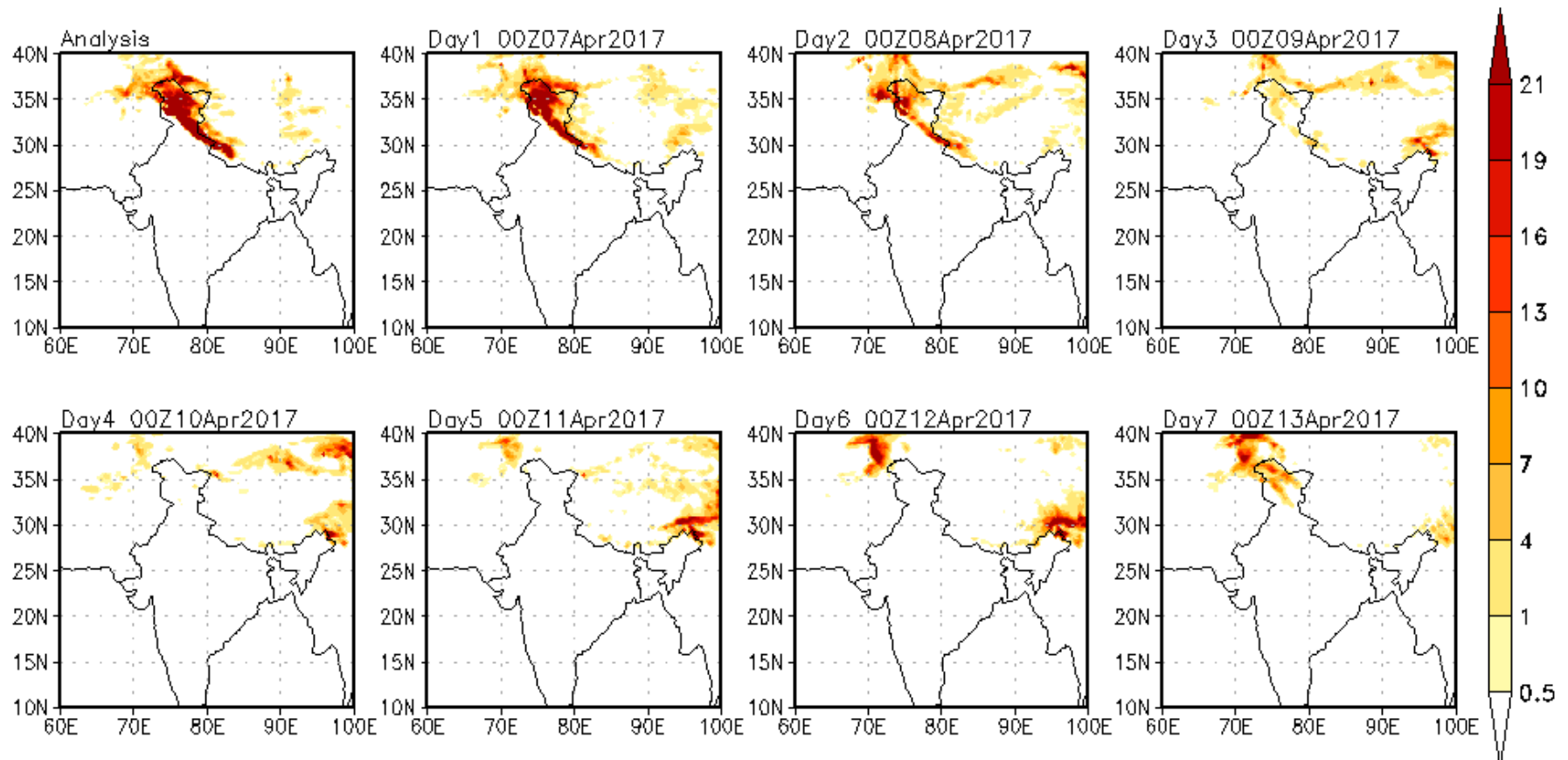


After 1st Nov 2016

- Total members : 44
- Forecast days : 10
- Total files : 440
- Data resolution: 0.35 deg x 0.30 deg

Verification of NCMRWF snow forecast

NCMRWF Global Model Snowfall Rate Water Equivalent (mm/day) FCST based on 00Z06Apr2017_IC



Thank you