Recent progresses of the use of satellite observation in the CPTEC/INPE data assimilation systems

Center for Weather Forecast and Climate Studies (CPTEC)
National Institute for Space Research (INPE)
GDAD – Group on Data Assimilation Developments

CURRENT

Physical-space Statistical Analysis System

UNDER IMPLEMENTATION

Local Ensemble Transform Kalman Filter

3D-Var (GSI)

\[ J(x) = (x - x^b)^T B^{-1} (x - x^b) + (z - H(x))^T R^{-1} (z - H(x)) \]

First Cut Priorities:
- ATOVS (NOAA-18, 19, MetOp-A)
- IASI (MetOp-A)
- SSMIS (F16, 17, 18)
- GPSRO, AMVs, ASCAT
- ATMS (NPP-1)*
- SEVIRI (MSG)
- CrIS (NPP-1)*
- AIRS (Aqua)

MWTS, MWHS, IRS (FY-3)