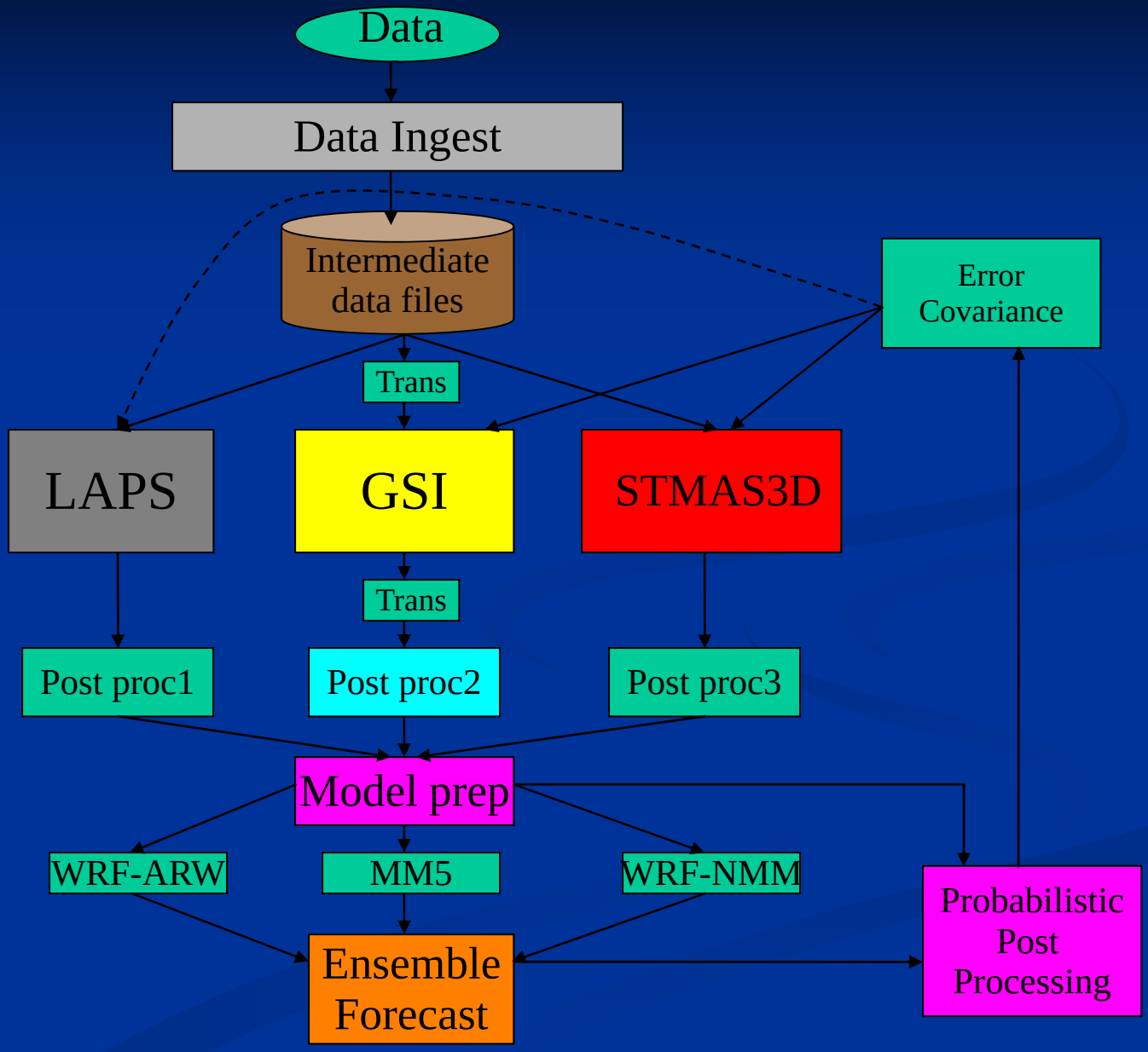
LAPS DA Configuration

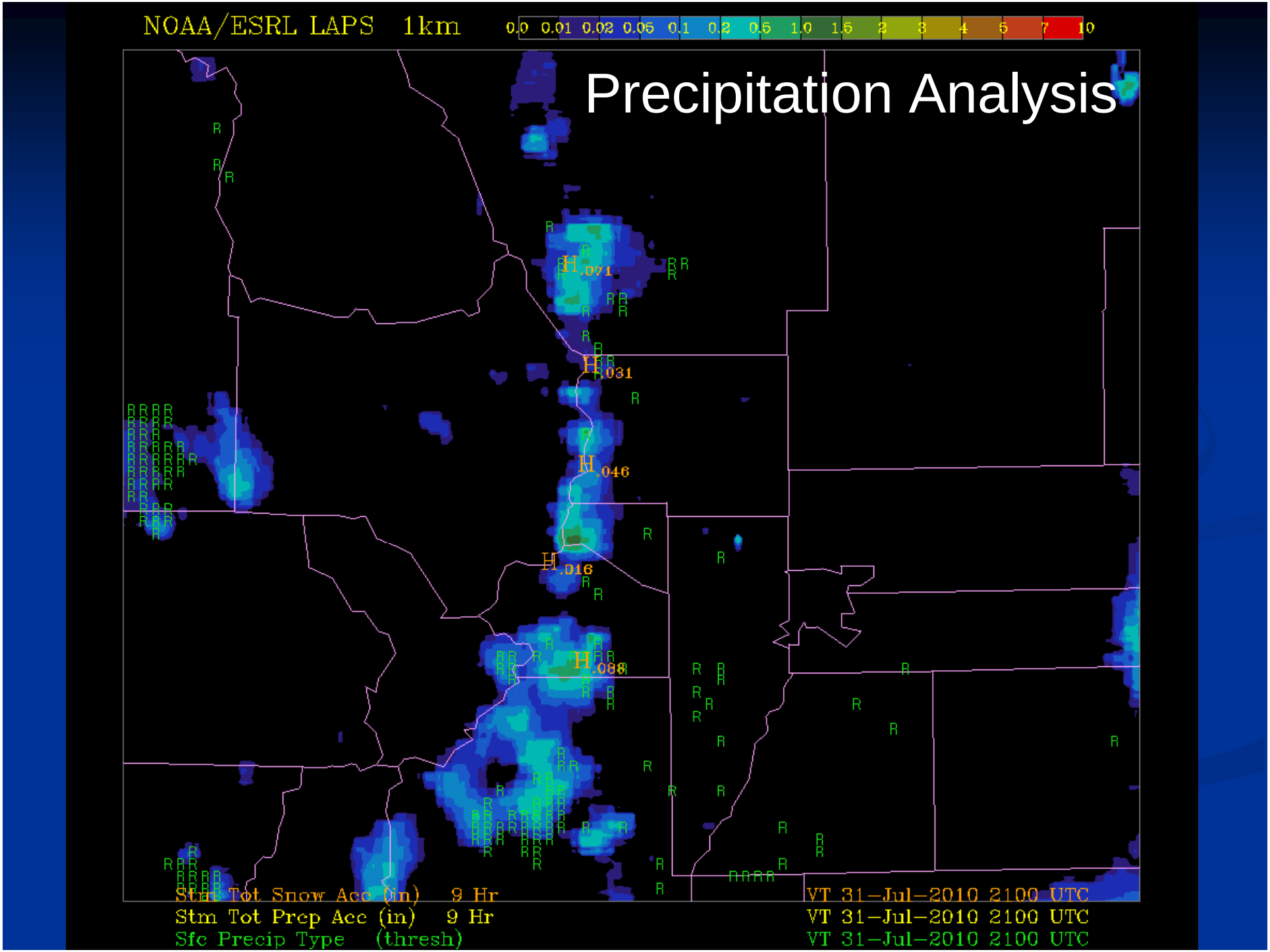


Precipitation Analysis Inputs

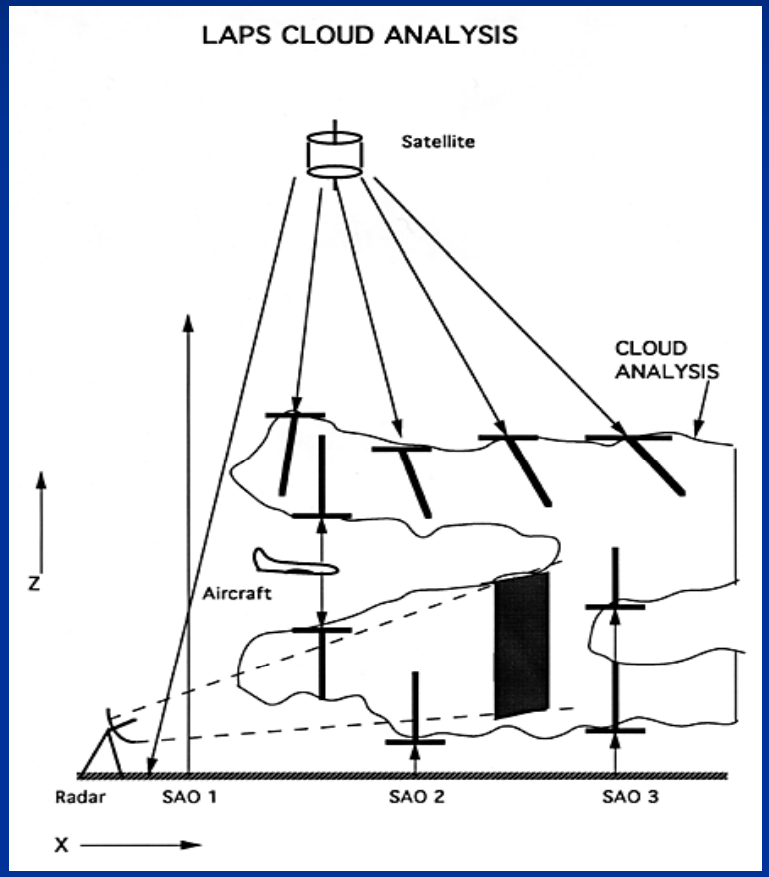
Radar Reflectivity

Rain Gauges

Model First Guess

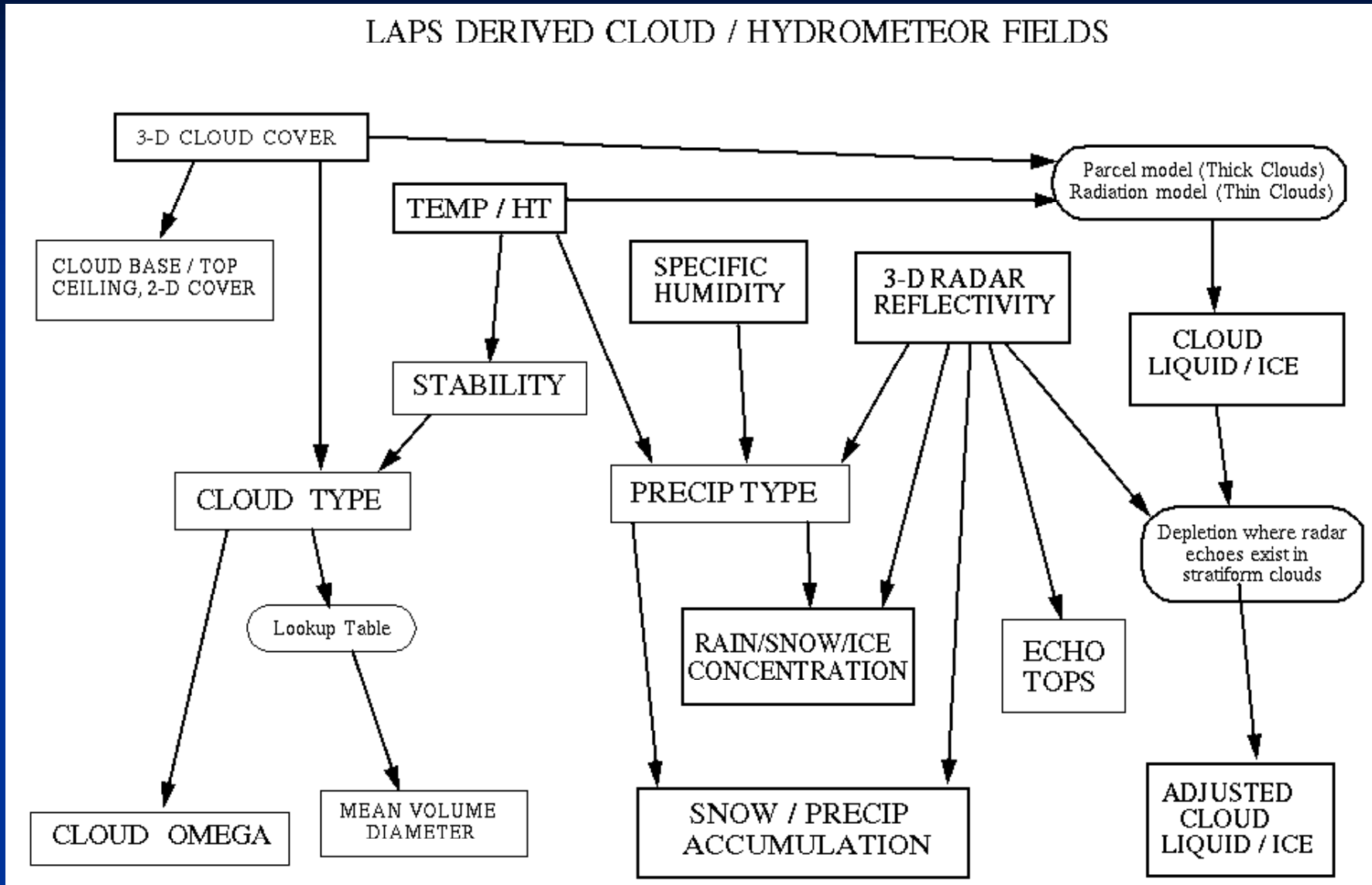

NOAA/ESRL LAPS 1km
0.0 0.01 0.02 0.05 0.1 0.2 0.5 1.0 1.5 2 3 4 5 7 10
Precipitation Analysis
H .071
H .031
H .046
H .016
H .088
Stm Tot Snow Acc (in) 9 Hr
VT 31-Jul-2010 2100 UTC
Stm Tot Prcp Acc (in) 9 Hr
VT 31-Jul-2010 2100 UTC
Sfc Precip Type (thresh)
VT 31-Jul-2010 2100 UTC

Cloud Analysis Scheme

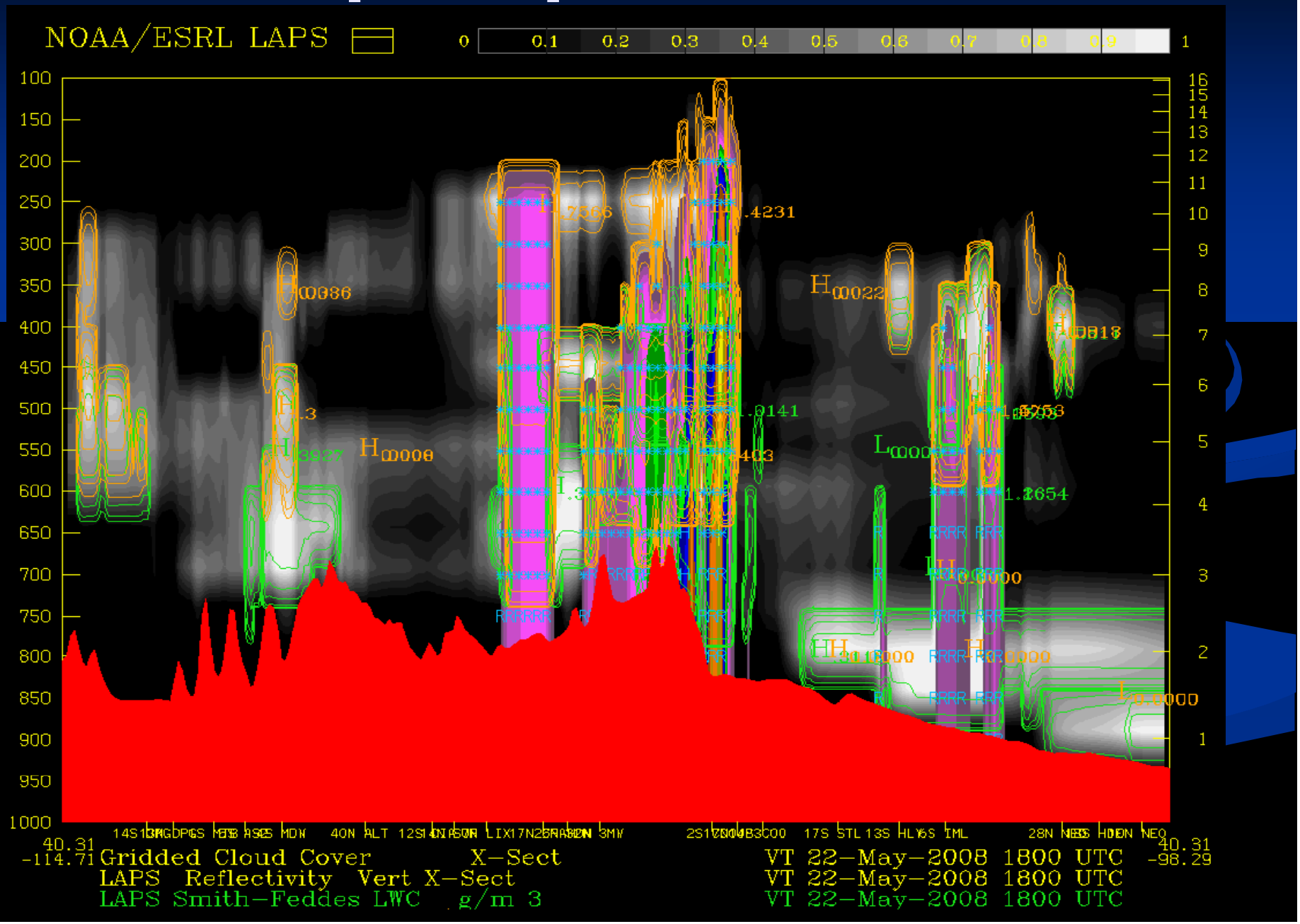


- Uses satellite Vis and IR
- Aircraft observations
- Surface observations
- Radar
- Interpolates cloud obs to grid with SCM
- Cloud feeds back into water vapor analysis

Derived products flow chart



Cloud/precip cross section



What FAB can do with GPM

- Validation by comparing with 3-D radar & microphysical analysis
- Development of forward models to bring GPM data into STMAS analysis and WRF model forecasts