



Satellites for Precipitation Measurement 1987-2010

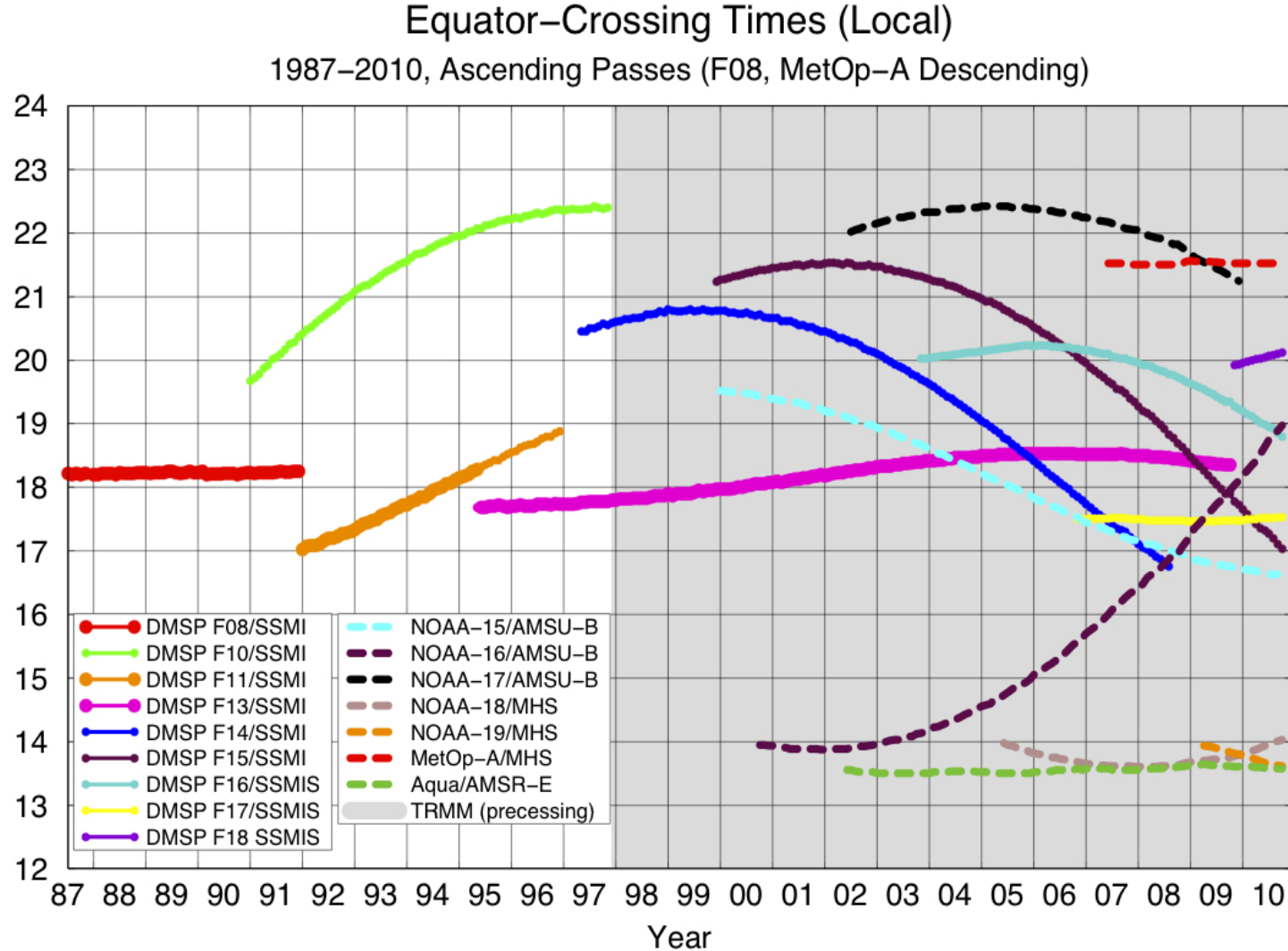


Radar/radiometer combination allows TRMM/GPM to do a very good job of measuring precipitation and act as a transfer standard for inter-satellite calibration

TRMM/ GPM help unify a diverse, changing, uncoordinated set of input precip estimates, with assorted

- periods of record
- regions of coverage
- sensor-specific strengths/limitations

Enables us to seek the longest, most accurate record of “global” precipitation



Thickest lines denote GPCP calibrator.

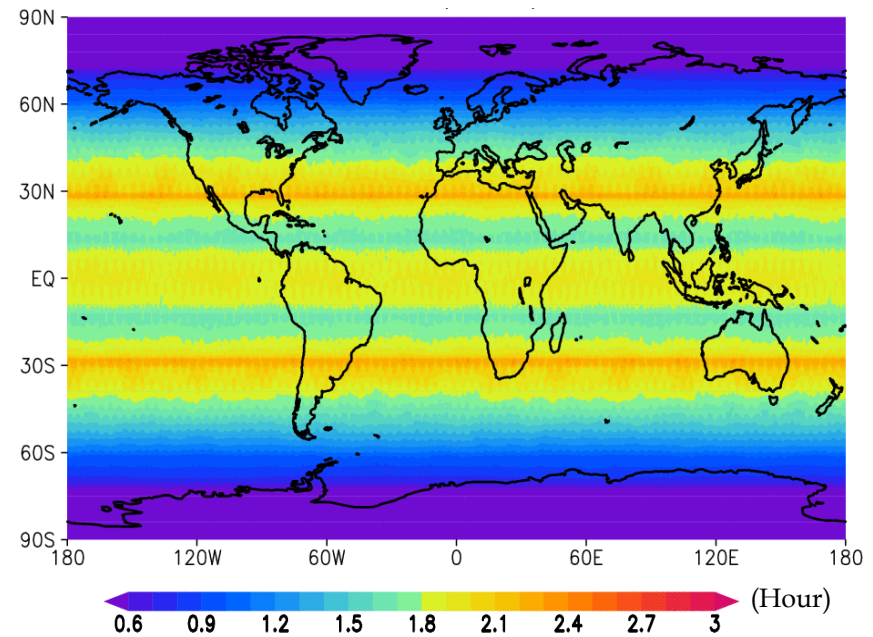
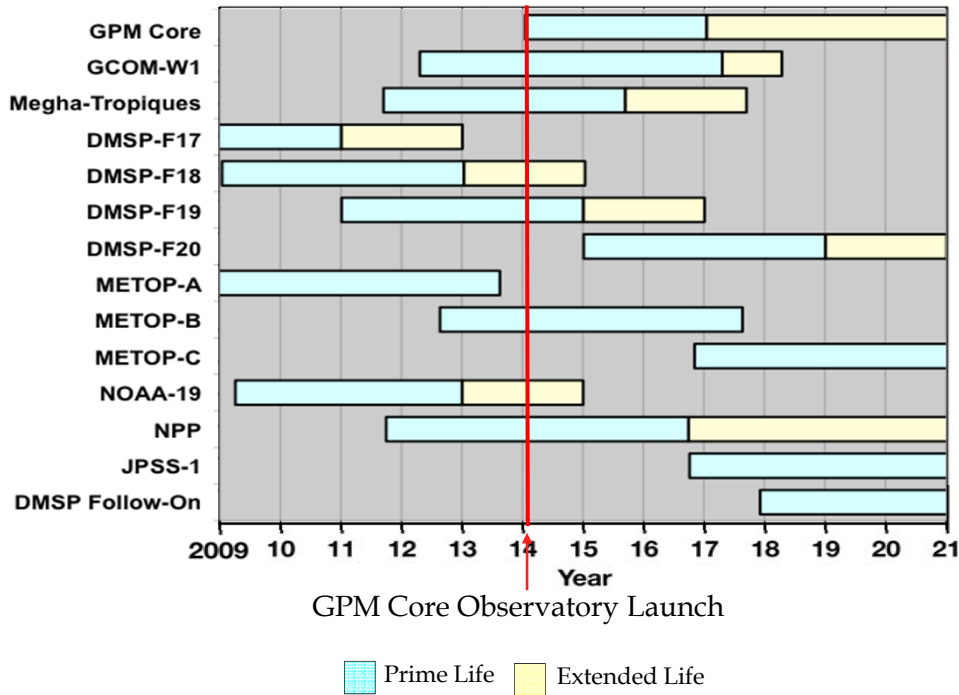
Image by Eric Nelkin (SSAI), 20 October 2010, NASA/Goddard Space Flight Center, Greenbelt, MD.



GPM Constellation Coverage and Sampling



Baseline Constellation Schedule



Average Time Interval Between Observations by GPM Constellation Satellites (2015)

- More than 50% of observations are less than 1 hour apart at all latitudes
- Percent observations less than 3 hrs apart:
 - 80% in the tropics
 - 70% in the midlatitudes
 - 90+% in polar regions