GPM Level 3 Products for Enhanced NOAA Applications

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- GPM will generate products at several levels (L0,1,2,3..)
- Many NOAA end users will be accessing Level 3 grided precipitation fields (e.g. 3B42RT, CMORPH)

Daily Precipitation for: 18 Aug 2003 (00Z–00Z)
Data on .25 x .25 deg grid; UNITS are mm/day

CMORPH Precipitation Estimates
Do the Components and Upgrade Strategy of GPM Products Reflect NOAA’s Needs

- NASA tries to get the best out of GPM
  - Satellite centric
  - Advanced techniques
  - Frequent updates of products

- NOAA works to make best use of the GPM information for improved precipitation products
  - Unified suite of products
  - Consistency with other precipitation products
  - Homogeneity
  - Reasonable frequency of version upgrade

- We need a good strategy and implementation plan
  - What we need from GPM
  - How to enhance NOAA products and service taking advantage GPM
  - How to enhance the collaborations with GPM science community
Enhance R&D for GPM Applications in NOAA

- Create a short list of precipitation products
  - Check through the NASA GPM products list
  - Generate a list of products most demanded by various parts of NOAA
  - Identify the GAPS

- NOAA teams continue to be a part of GPM development activities from early stages
  - Reflect NOAA’s needs
  - Accelerate transition

- Support / coordinate efforts across NOAA for the development of NOAA GPM product
  - Strengthen collaborations among NOAA GPM PIs
  - Support efforts to combine GPM with other sources of information
  - Close collaboration with products users
One NOAA, One Precipitation

- We have **TOO MANY** precipitation data sets
  - New data sets come with new instruments / platforms
  - Many centers generate their own data sets
  - Inconsistencies among different data sets

- Ideally, we should consolidate them into a unified suite of precipitation products
  - Composed of products based on individual platforms (gauge, radar, satellites, ..), as well as their combination
  - A combination of time/space resolution and coverage
  - Reasonable quantitative consistency
  - Serving most NOAA applications

- Long way to go ~~~~~
  - We may take advantage of the GPM projects to start with something through collaboration