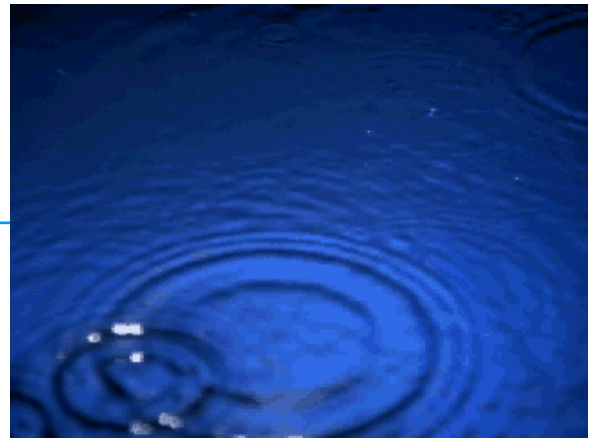
Global Precipitation Measurement

System Requirements Review
Technical Risk Assessment



June 4 - 5, 2002

David Everett 301/286-1596
David.Everett@gsfc.nasa.gov
Goddard Space Flight Center

Key Technical Risks

- ***Calibration and error characterization across the constellation***
  - *Ground validation*
    - *Can measurements from the ground be matched with spacecraft measurements?*
    - *Can measurements at a few sites be extrapolated to the whole planet?*
    - *How accurate can ground measurements be?*
  - *Orbit crossings between primary spacecraft and constellation spacecraft*
    - *Infrequent – with precipitation they will be rare*

- ***Primary Spacecraft Mass***
  - *Launch mass allocation is still uncertain*
  - *Payload mass is greater than TRMM, but launch allocation will be less than TRMM*
  - *Design studies show that target launch mass (3200 kg) is achievable*
  - *Descopes are available (auxiliary payload)*
  - *Japan controls most of the instrument mass and the launch allocation*
  - *In-house build gives us some flexibility*