Polar Snowfall Hydrology: Opportunities

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27 June 2007
Snowfall Hydrology: Missions

Atmospheric Chemistry
Aerosols
Clouds
Precipitation
Winds
Evaporation
Snow Extent
Snow Water Equivalent
Soil Water Content
Frozen-Thawed Soil
Vegetation

APOCC
CloudSat
EarthCARE (ESA/JAXA)
PCW
Mission Concepts RFP
SMOS (ESA)
HYDROS – SMAP(?)
Mission Concept Studies

Request For Proposals summer 2007
Mission Concept Studies to begin 2008

APOCC (Atmospheric Processes of the Earth's Climate and its Change)
Atmospheric Science Community has stated interest in:
- Tropospheric Trace Gases, Aerosols and Air Quality
- Upper Troposphere – Lower Stratosphere Exchanges
- Middle Atmosphere Dynamics

New EO Mission Concepts
PCW

= Polar Communication & Weather

Concept Study to begin 2007

Two satellites in Molniya orbit for 24/7 observation of latitudes 45° - 90° N

GEO-type meteorological instrument(s)
Seek Value

- We seek to maximize the benefit from our EO investments through missions that:
  - Complement existing and planned missions with synergistic observations
  - Fill recognized gaps
  - Are done in partnership
  - Address questions of particular importance for northern latitudes