



# **Landsat Science Team Technical Workshop: Advanced Landsat Products and Processing**

# Workshop Goals

- Define a set of Landsat-based products of general use and interest to the community
- Determine "best practices" (algorithms and such) for production
- Determine "best practices" for their testing and validation
- Pursue support for product implementation



# Potential data and science products that will be discussed include -

- SLC-off gap filled products  
Cloud- and shadow-screened images
- Temporal composites, data cubes
- Regional mosaics
- Surface reflectance

Land cover products: land cover, land cover change, disturbance, fire, deforestation

Biophysical products: LAI, FPAR, etc.



# Summary of Discussions from June Landsat Science Team Meeting

- **Processed Landsat archive datasets**
  - **Calibrated**
  - **Orthorectified**
  - **Cloud- and shadow-masking**
  - **Surface Reflectance**
- **Science products derived from the above**



# USGS Interests in Advanced Landsat Products

- There has been a change in USGS interest
- At the first Landsat Science Team meeting, USGS HQ presented a “single product” policy
- Over the past year, there has been a change in interest
- And there is now an interest in moving toward higher level Landsat products



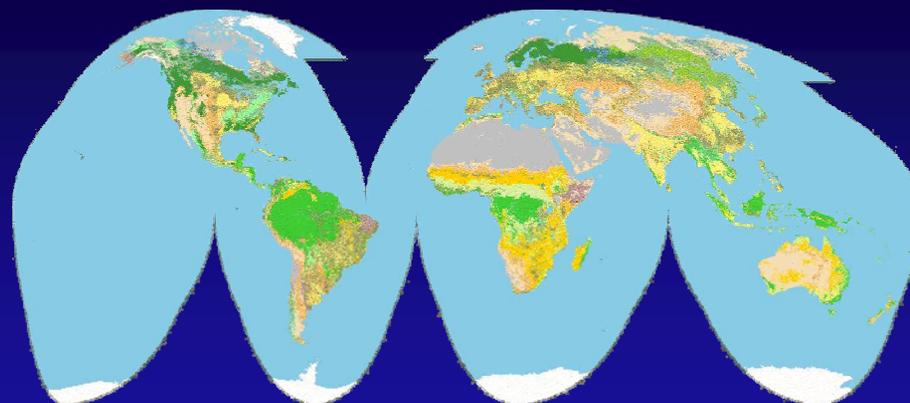
# USGS Meeting Expectations

- Identify the state of the science for producing surface reflectance Landsat products
- Determine our readiness to produce prototype surface reflectance products
- Determine priorities for future ECV production



# Terrestrial ECV's

Terrestrial ECV
River Discharge
Water Use
Ground Water
Lake Level
Snow Cover
Glaciers and Ice Caps
Permafrost
Albedo
Land Cover
fAPAR
LAI
Biomass
Fire Disturbance



**Essential Climate Variables (ECVs)** are variables that are currently feasible for global implementation for the global climate observing system, and have high impact on the UNFCCC and IPCC requirements.