

# Global Land Survey Update

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# GLS 2005 Status

- **GLS2005 now “essentially complete”**
  - about 140 images still missing from Indonesia (Thailand IC) and Brazil
  - Action: replace these with “best of” US archive
  - Product quality, accuracy reports?
- **GLS2005 EO-1 ALI data available through GLOVIS by end of July**
- **Bulk Distribution of GLS2005 through UMD Global Land Cover Facility**



# GLS 2010 Activities

- **Campaign Stations for 2009 (+2008)**

Station	Location	Start	End	Scenes
MLK	Malindi, Kenya	6/1/09	7/18/09	576
		4/29/08	6/17/08	2395
		9/1/08	10/3/08	"
KIS	Kiruna, Sweden	6/8/09	ongoing	975
MPS	Maspalomas, Spain	6/3/09	ongoing	375
CHM	Chetumel, Mexico	10/15/09	2/15/10	0
IKR	Irkutsk, Russia	6/17/09	ongoing	138
MGR	Magadan, Russia	6/10/09	ongoing	389
MOR	Moscow, Russia	6/5/09	ongoing	729
KHC	Kashi, China	1/1/09	ongoing	9047
		4/9/08	12/31/08	13337

JSA

Johannesburg, SA

3/15/2009

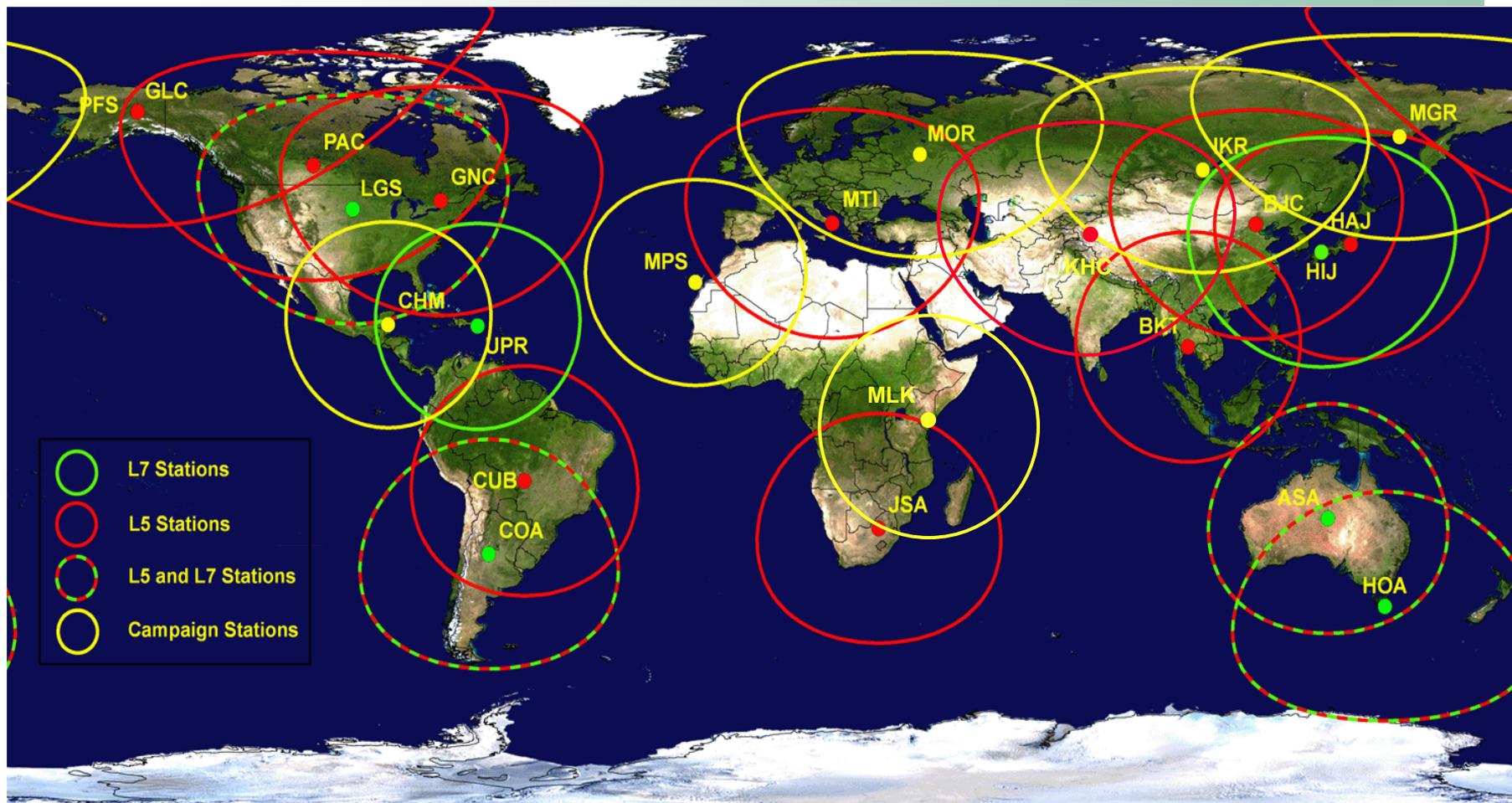
6/1/2009

1745



KHC

# Combined Ground Station Network



# Landsat-5 Power Issues and GLS

- **High-latitude campaign stations represent a drain on limited L5 power**
- **Acquisition schedules revised on June 18:**
  - Full Greenland coverage through June 24; reduce to every other path through July 10
  - Through July 15, reduce KIS/Russia stations, place priority on Australia acquisitions
  - After July 15, place priority on KIS/Russia acquisitions
  - Discontinue L5 coverage of non-continental polar land masses (e.g. small Arctic islands).



# International Participation

- **CEOS LSI Constellation invited international operators to provide Landsat-like data for GLS2010 and/or Regional Dataset Initiative (November 2008)**
- **Positive responses from INPE, CONAE, JAXA, GISTDA**
- **CNES interested but no control over SPOT archive**
- **No response from ISRO**
  - **Do we need a higher level bilateral arrangement?**
- **Some limited international data will be part of GLS2010, hosted through CEOS WGISS web portal**



# Next Steps

- **Ingest 2009 Campaign Station data at EROS**
- **Continue IC/Campaign acquisitions for 2009**
- **Sort metadata, obtain IC selections, process during 2010-2011**
- **Continue to push for greater international contributions**

**...Questions?**



## Topic 2: GLS “1995” Lessons

**Needed to assemble cloud free, “GLS” like collection of imagery for North America, 1994-96 ...**

- Grab all Landsat-5 metadata & browse for the region;
- Use LASSI to select optimal data set
- Submit bulk processing request



# But... it's not so easy

- **Grab Landsat metadata**
  - **No mechanism exists for downloading Landsat catalog metadata**
    - Z39.50 access protocol supported (?)
    - No client tools or user support identified
    - Use EarthExplorer to select ~900 images out of population of ~25,000?
- **Submit order for bulk processing**
  - Done as personal favor - **not generally available**
- **Pick up data**
  - **No provision for collection-level ftp**
  - No multi-directory FTP access except UMD and SDSU



# A Simple Proposal

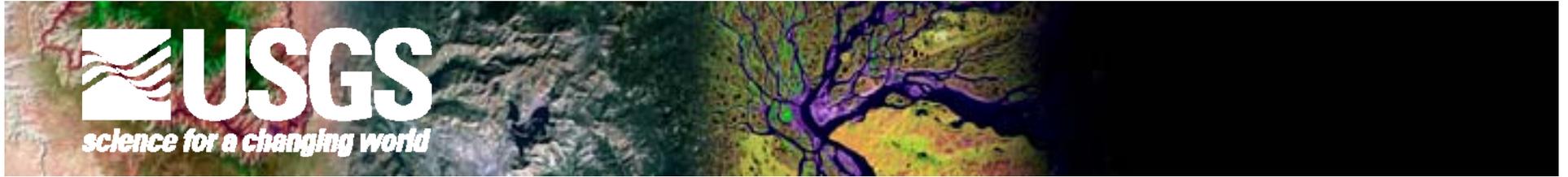
- **Make Landsat metadata catalog available for download**
  - **Put online in standard format (e.g. DBF, ascii)**
  - **Include “searchable” attributes (p/r, date, sensor, cloud cover...)**
  - **Update catalog every 6 or 12 months**
  - **Bonus points for segmenting by year and/or continent**
  - **Virtually zero cost impact**



# A General Thought...

- **Are the data access tools we have available ideal for “new modes” of using Landsat?**
  - **Dense time series: “I want the reflectance for a given location from every available clear acquisition in the archive”**
  - **Data cubes: “I want an annual mid-summer image for my region”**
  - **Large-area: “I want clear, early Fall images from 2009 that cover all of Canada”**
- **GLOVIS and EarthExplorer are still fundamentally scene oriented**
  - **ORNL MODIS time series tool**
  - **WELD project for standard quarterly products**





**Thank You**

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