

Current Issues for NASA LCLUC

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Current Issues for NASA LCLUC

- **Visibility of Scientific Findings** – making the case for continued research
- **Program Leverage** – paying off
- **Societal Relevance of LU** – gaining momentum
 - US CCSP – increasing the social science component
- **Landsat class data** – crisis management - community leadership and guidance needed MDGLS, 2010 data initiative, LDCM >FLI
 - International context needed (GEOSS/CEOS/GOFC-GOLD)
- **Evolving science focus**
 - Cont'd Carbon / Water / Biodiversity
 - Cont'd Regional Initiatives and Participation
 - Robust LU Change Models
 - LU Climate interactions + *context of mitigation / adaptation*
 - *LU and Sustainability, Vulnerability*
- **An engaged LCLUC community** (in addition to science results)
 - Web site, Special Editions, Workshops, Editorials
- **New Program Web Site**
 - <http://lcluc.umd.edu/LCLUC-new/index.asp>

This Meetings Agenda

- **Science Review Presentations**
 - Land Use and Climate
 - Land Use and Biodiversity
 - Land Use, Vulnerability and Resilience
 - Regional Initiatives – NEESPI (Boreal, Arctic) , LBA, NACP
- **Programmatic Presentations**
 - Applications – Agricultural Efficiency
 - GOFC/GOLD Deforestation Initiative
 - Landsat related issues: MDGLS, LDCM
- **Breakout sessions**
 - Priority Research Areas for Land Use and Climate
 - LCLUC Data Needs and Initiatives
- **Poster Session (50 Posters)**
- **SAXTA Demonstration**
- **Discussion on Future Program Directions**

Science Team Coordination

- **Need an active science team, strengthening the program and making the case for continued funding**
 - Publish results and let the program management know
 - Need a stream of **CCSP LULCC** contributions
 - Contribute to the **revamped LCLUC Web Site – we need**
 - Page project summaries with interesting photos/maps/images/etc to be used for the rotating feature item on the front page
 - Information on data PIs plan to share out of their sets - what the data is, formats, scripts/tools, and hosting (if they will host the data on their own website/ftp server or will need us to do so)
 - Help promote the program
- **We welcome team ‘community’ initiatives e.g.**
 - Journal Special Editions, Conference Sessions, Books
 - Letters, Editorials etc
 - Topical Workshops Planned
 - **Land Direct Broadcast Workshop, Mexico October 9-11, 2007** (Bobbe, Quayle, Coronado, Ressler, Justice et al.)
 - GEOSS Agriculture, Rome July 16-18, 2007, NASA Applications w. USDA (Justice et al.)
 - **LCLUC Water Science Workshop in 2008** (Fisher, Goetz, Townsend, McNeil, Eshleman)
 - GOFC/GOLD Fire Workshop w. Earsel SIGFire, Greece, Sept. 2007

'High' Resolution Satellite Data (Landsat class observations)

- **A current crisis for LCLUC Science**
 - Lengthening data gap – to earliest date of the LDCM (2011)
 - Cost of currently Landsat data inhibiting large area/regional studies – archives sitting unused
 - No mechanism currently in place for coordinating acquisition or purchase of data from international assets
- **Mid-Decadal Global Land Survey**
 - NASA/USGS initiative to provide a global orthorectified data set for 2005-2007 to extend the 1990 and 2000 GEOCOVER data sets
- **International effort needed for 2010**
 - We need a GEOSS Task specific to a 2008-2011 data set
 - International coordination bodies in place (GOFCC/GOLD, CEOS)
 - Start now w. a coordinating effort – Breakout Group 2
- **LDCM and the Future Land Imaging (2012 and beyond)**
 - NASA Community involvement

International Observation Initiatives

- **GOFC/GOLD (Global Observation of Forest Cover/Global Observation of Landcover Dynamics)**
 - Observation Coordination
 - Land Cover (Woodcock, Schullius)
 - Fire (Justice, Goldammer, Csiszar)
 - **Deforestation Working Group (Martin Herold)**
 - Regional Networks (Africa, N. Eurasia, S. America, SE Asia, China)
 - Links to CEOS and UNFCCC requirements
 - Responding to **GEOSS Land Cover** related Tasks
 - Partnering w. CEOS Cal Val Working Group on implementation and validation issues

Evolving Data Systems

- **‘Moderate’ Resolution Data Production**
 - MODIS Collection 5 underway (MODAPS/GSFC)
 - Collection 5 workshop held January at UMD
 - AVHRR>MODIS Long Term Data Record Development (Masuoka, Vermote et al.) - **Poster**
 - NPP Land PEATE being developed at GSFC for Land Production (Masuoka et al)
 - Increasing interest in Direct Broadcast Land Products
 - **Land DB Workshop Mexico Oct 2007 w. USFS RSAC, CONABIO**
- **High Resolution Data Processing and Management**
 - A number of automated processing and access systems in the community being developed to support LCLUC research
 - GLCF (UMD), TRFIC (MSU), LEDAPS (GSFC), etc
 - **Data Sharing Systems (e.g. SAXTA)**
 - EDC Plans for LDCM Processing TBD – Landsat Science Team
 - **MDGLS seen as a prototyping activity**
- **LCLUC PI Data Sets: availability and accessibility**

Current and Future Emphases

- Predictive Land Use Modeling
- Landsat MDGLS processing and 2010
- Land Use Climate Interactions/Feedback
- Land Use, Sustainability and Vulnerability
- Applications
 - Agriculture,
 - Water Quality,
 - Human Health,
 - Carbon Management
- CCSP Land Use and Carbon Workshop (w. USDA)
- Data initiatives and Access

Logistics

- General Session – Room 2100-2104
- Posters – Rooms 2110 and 2112 *Wednesday and Thursday only*
- Break outs – Rooms 1105 and 2100-2104
- Lunch 2101, 2103, 2105
- All presentations, one pagers and PPTS should go to Lydia
- Group Photo – Lunchtime Today 12:00 today
- Parking: give the name of the meeting