

A large, semi-transparent globe with a light blue and white color scheme, showing the continents of North and South America. It is centered in the background of the slide.

Annual Report of the LNO

Science Council Meeting
May 18, 2012



Defining events provide context for LNO activities

- ▶ Implementation of SIP and new annual reporting format
- ▶ Truncation of ARRA funding to LNO as of September 2013
- ▶ 30 Year Review recommendations and NSF response
- ▶ Transition to new Chair (Scott)
- ▶ Transition to new NSF PD (Saran)
- ▶ Mid-term review of LNO on May 30–31



Major accomplishments 2011–2012

- ▶ In five areas of effort:
 - Support for LTER synthesis
 - Development and maintenance of cyberinfrastructure
 - Development of the PASTA framework of the Network Information System
 - Provision of core services
 - Communication within and beyond the LTER Network
 - Implement elements of the Strategic Communication Plan
 - Develop and maintain external relationships
 - Train LTER scientists, information managers, and students



Synthesis support

- ▶ Supported four LTER Science Themes
- ▶ Continued development of Network Information System
- ▶ Supported *BioScience* special feature and media blitz
- ▶ Facilitated two Science Council and one ASM meeting
- ▶ Supported six research working groups and three post-doctoral projects



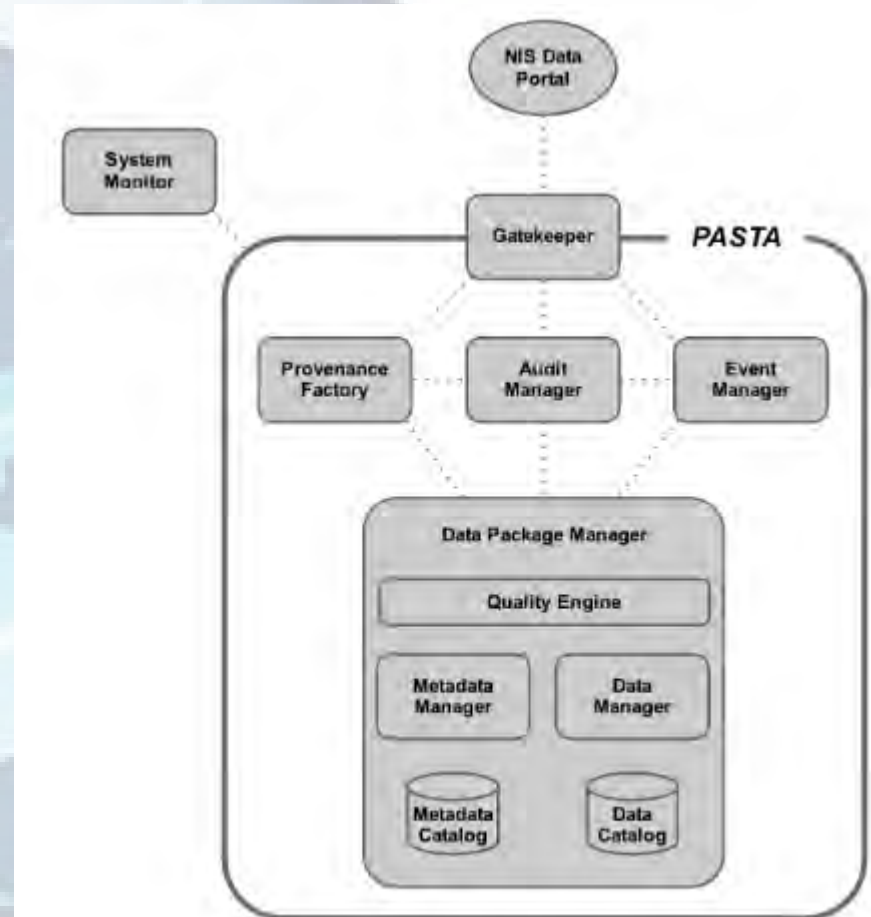
Cyberinfrastructure

- ▶ Revised [Intranet](#) and [LTER](#) web presence
- ▶ Prepared North Inlet data for ingestion into NIS
- ▶ Provided TB of off-site storage for each LTER site
- ▶ Streamed mini-symposium live to 36 viewers
- ▶ Maintained Personnel, Bibliography, and Site [Characteristics](#) databases
- ▶ Supported IMC virtual and actual meetings as well as six IM “product-oriented” working groups and four IM site compensation [efforts](#)



PASTA framework of the NIS

- ▶ *System Monitor* – checks system operation
- ▶ *NIS Data Portal* – user access
- ▶ *Application Programming Interface (API) to Data Portal* – port for researcher-developed applications
- ▶ *Identity Management Services* – the gatekeeper
- ▶ *Data Package Manager* – screens and keeps track of data packages
- ▶ *Audit Services* – records noteworthy events
- ▶ *Metadata Factory* – creates metadata for new datasets
- ▶ *Event Manager* – notifications of relevant events



PASTA Service Oriented Architecture and related systems.



NISAC review of PASTA progress

Summary statement

Overall, NISAC is very pleased with the progress on PASTA. An important process in the development of PASTA was to incorporate feedback from the user community via Tiger Teams, including several NISAC members. Due to the design and development goals guided by this input, NISAC is confident that PASTA is well poised to support the data sharing requirements of network science.



PASTA framework of the NIS

- ▶ Linking user applications to LTER data – an example using [Matlab](#)
- ▶ More [information](#) on the PASTA framework and the Network Information System



Core Services

- ▶ Facilitate research, training, planning, and governance meetings
- ▶ Maintain persistent record of LTER activities in LoboVault
- ▶ Acquire imagery for all LTER sites from the NASA Landsat-5 archive
- ▶ Obtain supplemental funds for ASM, ILTER dues, and EML/Drupal support
- ▶ Successfully respond to truncation of ARRA award



Development and Outreach

- ▶ Implement elements of the Strategic Communication Plan
 - Initiated E-newsletter
 - Created new LTER web presence
 - Collaborated with LTER sites, the Communication Committee, NSF, and AIBS on the *BioScience* media blitz
 - Facilitated Congressional visits
 - Edited “Transformational Science” bullets
 - Initiated development of LTER expert database



Development and Outreach

- ▶ External relations – focal points
 - NEON
 - DataOne
 - California Digital Library
 - InCommon identity management federation
 - EarthSky
 - National Phenology Network
 - NCEAS
 - Genomics Standards Consortium
 - Water Science Software Institute



Development and Outreach

▶ Training

- Acquisition and management of data from remote locations – PI, Don Natvig
- Tools and training for sensor network establishment and management – PI, Donald Henshaw
- Integrating local knowledge into Long Term Ecological Research – MALS training and planning workshop – PI, Roger Ruess
- Drupal Environmental Information Management System (DEIMS) workshop: A workshop for new and advanced DEIMS users – PI, Kristin Vanderbilt
- Retrieving and using information from web services to improve EML content – PI, Corinna Gries

