

Speakers and poster presenters:

Christophe Arviset is leading the ESA Science Archives and Virtual Observatory Team at ESAC, Madrid, Spain. As such, he is responsible for the design, development, operations and maintenance of ESA Astronomy Archives (ISO, XMM-Newton, Integral, Herschel) and of ESA Planetary Science Archive (Giotto, Mars Express, Rosetta, Smart-1, Huygens). Furthermore, he is in charge of the ESA VO project, ensuring that all ESA Astronomy data at ESAC are also being published through the VO. In addition, he is the manager of the Computer Support Group which provides IT support to all ESA scientific missions at ESAC. In that context, he is coordinating all GRID activities at ESAC.

Dr. Bruce R. Barkstrom spent about twenty years leading the ERBE and CERES science teams involved in producing and analyzing Earth radiation budget data, using multiple instruments on multiple satellites. For this work, he received a NASA Exceptional Scientific Achievement Medal. In his last five years with NASA, Dr. Barkstrom was Head of the NASA Langley Distributed Active Archive Center (now the Atmospheric Sciences Data Center), conducting research in web interfaces, metadata, and data production engineering. He also received a NASA Exceptional Achievement Medal for contributions to the NASA EOSDIS effort. In March, 2006, he moved to the National Climatic Data Center as Project Manager for NOAA's Science Data Stewardship project, which is aimed at ensuring long-term access to much of the Earth's climate data.

Dr. Reta Beebe is the Program Scientist for the Planetary Data System and manager of the Planetary Atmospheres Node. She is a College Professor at New Mexico State University, holds a Ph.D. in astrophysics, and specializes in the atmospheres of giant planets. Dr. Beebe was a NASA Headquarters IPA in 1997-99 and has served on numerous committees at the national and international levels, including those of the National Academy of Science.

Jeanne Behnke serves as the Science Operations Manager at NASA's Earth Science Data and Information System. She has had several roles in the development of the EOSDIS system and presently manages the eight discipline science data centers in the EOSDIS program, also known as DAACS - Distributed Active Archive Centers. Prior to EOSDIS, Jeanne worked with the NSSDC and the HEASARC at GSFC.

Bruce Berriman holds a joint appointment with the Infrared Processing and Analysis Center (IPAC) and the Michelson Science Center (MSC). His scientific interest is in the discovery of brown dwarfs with archived source catalogs.

Dr. Kirk Borne has over 20 years experience in astrophysics research and in managing science data systems. He teaches graduate courses in scientific databases and data mining. He currently manages the Space Science Data Operations Office contract for Perot Systems Corporation at NASA-GSFC and is Associate Professor at George Mason University, where he supports the Large Synoptic Survey Telescope and National Virtual Observatory projects.

Paul Butterworth was a planetary scientist till he realized he didn't like writing abstracts - and giving presentations. Since then he has supported a range of projects at NASA/GSFC - notably NSSDC, Konus-Wind, GCN, and WMAP/LAMBDA. Recently he has discovered that what he enjoys most is teaching.

Dr. Robert S. Chen is the Director of CIESIN, a unit of the Earth Institute at Columbia University and the World Data Center for Human Interactions in the Environment of the International Council for Science (ICSU). He manages the NASA Socioeconomic Data and Applications Center, an interdisciplinary data archive focused on human dimensions data, and is currently Secretary-General of the Committee for Data for Science and Technology (CODATA) of ICSU.

Daniel Crichton is the manager of the Planetary Data System Engineering Node. He is currently employed at the Jet Propulsion Laboratory where he is a Program Manager and Principal Computer Scientist. He has worked on variety of data system projects and has a specific interest in architecting large-scale distributed data-intensive science information systems. He holds a M.S. degree in Computer Science

Dr. Andrew Davis is responsible for data processing, archiving, and data distribution for the nine science instruments aboard the ACE spacecraft. He is the technical lead for the SAMPEX Resident Archive and a co-investigator for the Virtual Heliospheric Observatory. He also develops flight software and Level 1 data processing software for the Solar Energetic Particles sensor suite on the STEREO mission.

Ken Ebisawa: primarily studying X-ray astronomy. Worked on high energy satellite data archives at NASA/GSFC in 1992-2001 and at INTEGRAL Science Data Centre (Geneva) in 2001-2004. Current responsibility is to archive JAXA's solar, astronomical and solar-terrestrial physics satellite data (possibly moon and planetary data too, in future).

Dr. Vincent Génot is a researcher at CESR, Observatoire Midi-Pyrénées, Toulouse, France. His research topics includes magnetosheath dynamics and auroral acceleration using both numerical simulations and data analysis. At CDPP he is responsible for value-added services and, as such, participated into the design of AMDA. CDPP is a major actor in space physics data management at the French level with a 10-year experience in perennial data archiving (in collaboration with CNES). The CDPP has been implicated at the European level in CAA data description; CDPP is also engaged in worldwide collaborations: the CDPP is an active contributor to SPASE and is involved in the V(HO)2 proposal of NSSDC.

David Giaretta chaired the CCSDS panel under which the OAIS reference Model was produced and made significant contributions to that and several other ISO standards. He chairs the group whose work is described in this presentation. He is also the project director of CASPAR, a large EU funded, OAIS based, project which is working in the area of long-term preservation of scientific, cultural and artistic information, and is Associate Director for Development of the UK Digital Curation Centre.

Dr. Ed Grayzeck is the Head of the National Space Science Data Center (May 2004) and Program Manager for the Planetary Data System (April 2005). At NSSDC he has been involved in outlining possible scenarios for the heliophysics Resident Archive concept. While at the PDS Small Bodies Node, he was the local Archive Manager and worked closely with both US and ESA missions.

Dr. Edward Guinness is a Senior Research Scientist in the Department of Earth and Planetary Sciences at Washington University. His research interest is in studying Mars sedimentary processes. Dr. Guinness has worked with the PDS Geosciences Node for nearly 20 years

Dr. Ted Habermann works at NOAA's National Geophysical Data Center (NGDC) in Boulder Colorado. He has recently been working on a number of projects that integrate NOAA data using geospatial databases, metadata and Internet mapping.

Dr. Robert Hanisch is a senior scientist at the Space Telescope Science Institute in Baltimore, and is currently the project manager for the US National Virtual Observatory Project. At STScI he been involved in science software development, archive development, and management of computing and information technology systems. He led the development of MAST, the Multimission Archive at Space Telescope, which is the NASA optical-UV mission data center.

Dr. H. Kent Hills has been an Acquisition Scientist at NSSDC since 1978. Before that he had been a data provider to the archive. He is participating in the ongoing re-design of NSSDC's archival systems and practices.

David Hogg is Associate Professor at New York University and the main architect for “Astrometry.net,” a system to automatically generate and record standards-compliant and consistent astrometric metadata.

Joe Hourcle is a Principal Software Engineer with RS Information Systems, currently working at the Solar Data Analysis Center at NASA's Goddard Space Flight Center. His current projects include archival support for the STEREO Science Center and development and operations support for the Virtual Solar Observatory. He holds a Master's degree in Information Management from the University of Maryland's College of Information Studies.

J. Steven Hughes is a Principal Computer Scientist at Jet Propulsion Laboratory and has extensive experience in architecting and implementing system architectures in complex, distributed, heterogeneous environments. He has over 30 years of systems architecture, data management, and software development experience. He has had numerous roles on the Planetary Data System and is an expert in the whereabouts of PDS skeletons.

Dr. Barry E. Jacobs is a Research Computer Scientist, National Space Science Data Center, NASA/Goddard Space Flight Center and the developer of Electronic Handbooks (EHBs). Dr. Jacobs has applied EHBs to NASA's Small Business Innovation Research (SBIR) Program, Earth Sciences Technology Office (ESTO) Program, Education Division Computer Aided Tracking System (EDCATS), and the NASA On-line Directives (Policies and Procedures) Information System (NODIS). Dr. Jacobs has also applied EHBs to the Department of Justice's Bulletproof Vests Partnership (BVP) Program, Department of Justice's Local Law Enforcement Block Grants (LLEBG) Program, Department of Health and Human Service's Health Resources and Services Administration (HRSA), Federal Emergency Management Administration's US Fire Administration (USFA) Firefighters Grant Program, Treasury Department's Community Development Financial Institutions (CDFI) Program, Department of Interior's Property Disposal, Department of Justice's Office of State and Local Domestic Preparedness Support (OSLDPS) Program, and the Federal Financial Assistance Management Improvement (FFAMI) project. His work on the Department of Justice's Bulletproof Vests Partnership (BVP) Program has earned him the Federation of Government Information Processing Council (FGIPC) Intergovernmental Open Systems Solutions (IOSS) Gold Award.

Nathan James is a Computer Scientist responsible for managing and coordinating World Wide Web activities at NASA/Goddard's National Space Science Data Center (NSSDC). He is the chair of the NSSDC Web Developers group, a forum for both novice and expert webmasters to exchange technical information, address common issues, and discuss how GSFC and NASA web policies impact the NSSDC web environment. Nathan is also the Education Resource Directory coordinator at GSFC for the Sun-Earth Connection Education Forum (SECEF), a partnership between Goddard and the University of California at Berkeley to facilitate the dissemination of Sun-Earth Connection science into the education and general communities.

Todd King has been actively involved in the Planetary Data System since its inception. He is the lead for the SPASE data model group which is a highly collaborative international effort. He is also the system engineer and manager for the Virtual Magnetospheric Observatory at UCLA.

Dan Kowal is the data administrator for NGDC. He has been in this position for nearly three years now and oversees logistics for archiving the heterogeneous nature of geophysical data flowing into the data center. Prior to his new administrative career, Dan was involved in educational web development projects such as GLOBE and was a former environmental science educator for 15 years.

Mike Martin is currently a consultant to the PDS Project Manager on science data archiving and information systems technology. He was formerly the manager of the Data Distribution Lab which pioneered the use of CD and DVD media for NASA data distribution and produced award winning software and multi-media products. Mike was one of the chief designers of the Planetary Data System standards architecture during the 80's and 90's and was a longtime participant in CCSDS standardization efforts and a member of the OAIS Reference Model team.

Patrick McCaslin been active in system development since 1989. He currently leads the primary information systems development team at the NSSDC.

Robert H. McDonald (mcdonald@sdsc.edu) is the Chronopolis Project Manager at the San Diego Supercomputer Center. Chronopolis is the national-scale digital preservation environment that is being led by SDSC, the UCSD Libraries, the National Center for Atmospheric Research, and the University of Maryland. Previously McDonald was the Associate Director of Libraries for Technology and Research at Florida State University. He holds an MLIS from the University of South Carolina and an MMUS from the University of Georgia.

Thomas McGlynn is the Chief Archive Scientist for NASA's High Energy Astrophysics Science Archive Research Center (HEASARC). He developed and is the Principal Investigator for the SkyView Virtual Telescope which provides simple multi-wavelength access to astronomical surveys from all regimes from radio to gamma-rays. Dr. McGlynn has played a major role in the development of astronomy's National Virtual Observatory.

Reagan Moore is director of data and knowledge systems at the San Diego Supercomputer Center. He coordinates research efforts in development of data grids, digital libraries, and persistent archives, and is the principal investigator for the development of the Storage Resource Broker (SRB) data grid technology and the integrated Rule-Oriented Data System (iRODS). Persistent archives using the SRB technology include the NARA Transcontinental Persistent Archives Prototype, the NSF National Science Digital Library persistent archive, and the California Digital Library - Digital Preservation Repository.

John Moses is currently working for the ESDIS Project as NASA's Ground System Engineer monitoring NASA's EOSDIS Distributed Active Archive Centers, science data operations and interfaces with Science Investigator-led Processing Systems. He has over 30 years experience in US environmental satellite programs, including science operations management and staffing, scientific applications research, ground systems development and operations. He has knowledge and experience with the development and evolution of NASA data systems architectures since formation of the EOSDIS DAACs in the early 1990's. He coordinated NASA EOS data systems operations readiness reviews for Aqua, ICESat and Aura missions. He is familiar with NOAA and NASA spacecraft and ground system facilities and operations, as well as research into new applications of remotely sensed data.

Joey Mukherjee is a Group Leader at SwRI, specializing in data analysis and data archival needs for various space science projects, such as UARS, Cluster, Mars Express, and IMAGE. His primary focus has been on database management, data visualization and data automation.

Aaron Roberts has been doing heliospheric physics research at NASA's Goddard Space Flight Center for nearly 20 years. This work has required access to a wide variety of datasets, an need that has led to his involvement in the development of Virtual Observatories and related visualization tools. Recently he has been working at NASA HQ as the Heliophysics Data Environment Program Scientist, helping, among other things, to formulate a Heliophysics Data Policy.

Arnold Rots received his PhD from the University of Groningen, The Netherlands, and started his career as a radio astronomer. He was on the staff of the VLA for 10 years, then designed and implemented the RXTE archive, and currently is the archive astrophysicist for the Chandra X-ray Observatory. He is chair of the ADEC, the ADASS Program Organizing Committee, and the North American FITS committee; and he is active in Virtual Observatory standards and Smithsonian digitization efforts.

Donald Sawyer did his graduate work in Cosmic Ray physics and is the author of the AP-8 Trapped Radiation Belt Proton Model. He has been active in the development of data standards since 1985, was a co-editor of the OAIS reference model, and he currently serves as the chair of the Data Archive Ingest Working Group within the Consultative Committee for Space Data Systems and ISO TC20, SC13. He is also leading a re-engineering of the National Space Science Data Center's archival systems and practices.

Dr. Mark Showalter is a Principal Investigator at the Carl Sagan Center for the Study of Life in the Universe, part of the SETI Institute in Mountain View, California. He has managed the Rings Node since the PDS began in 1990. His research accomplishments include the discovery of Jupiter's outer "gossamer" rings, Saturn's moon Pan, and two moons and two rings of Uranus.

Ani Thakar is a Research Scientist in the Center for Astrophysical Sciences at the Johns Hopkins University. Although an Astronomer by training, research in the last 10 years has focused on the challenges of archiving and mining very large scientific datasets. Involved in four large international projects at the moment - SDSS (Sloan Digital Sky Survey), the Virtual Observatory (VO), PAN-STARRS (Panoramic Survey Telescope and Rapid Response System) and LSST (Large Synoptic Survey Telescope).

Dr. James Thieman is a scientist/data systems manager who leads the international Space Physics Archive Search and Extract (SPASE) program. He also manages the continuing development and maintenance of the National Space Science Data Center's information systems. These systems provide access to NASA space science data for scientists and general public users around the world.

Raymond Walker is Professor in Residence, Institute of Geophysics and Planetary Physics and Department of Earth and Space Science, UCLA and Research Geophysicist, Institute of Geophysics and Planetary Physics, UCLA. From 1973 to 1977 he was on the research staff of the School of Physics and Astronomy of the University of Minnesota, after which time he joined the Institute of Geophysics and Planetary Physics at UCLA. He is now Professor in Residence in IGPP and the Department of Earth and Space Science. He has studied both particle and fields observations from the Earth, Jupiter, Saturn and Uranus and is a co-investigator for the magnetometer on the Galileo mission to Jupiter. He also has worked on magnetohydrodynamic simulations of reconnection and has worked on global magnetohydrodynamic simulations of the interaction of the solar wind with planetary magnetospheres. Special emphasis in this work has been on the comparison of simulations and observations. He has worked on applying computer data management techniques to spacecraft and to simulation derived "data". He is author of over 100 papers in professional journals. He is currently the Principal Investigator for the Planetary Plasma Interactions Node of the Planetary Data System (PDS) and served PDS as Project Scientist.

Joe Zender is chairperson of the International Planetary Data Alliance, and main architect for ESA's Planetary Science Archive (PSA). He has been a research scientist in the Solar System Science Operations Division of the European Space Research and Technology Centre (ESTEC), a facility of the European Space Agency (ESA), for the past 10 years, and co-authored with Ed Grayzeck the paper: "Lessons Learned from Planetary Science Archiving" in *Advances in Space Research*, vol 38, issue 9, 2006 (pg 2013-2022).