

Mark A. Parsons

Secretary General
Research Data Alliance
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PERSONAL INFORMATION

Born 17 May 1965 in Ithaca, New York, USA
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EMPLOYMENT HISTORY

Rensselaer Polytechnic Institute, Troy, NY

Secretary General, Research Data Alliance, March 2014 - present

- Lead and promote the Research Data Alliance (RDA) as its chief executive officer and primary public face.
- Manage the distributed RDA Secretariat and overall RDA operations including bi-annual Plenary Conferences.
- Manage and act as formal Secretary for the Research Data Alliance Foundation.
- Lead overall communications for RDA.
- Operate the RDA Foundation as directed by the RDA Council.
- Develop and maintain RDA strategic plans, reports, and budgets in collaboration with Council.
- Represent the RDA in discussions with governments, research funders, members, and other organizations.
- Work with Council, private foundations, and government agencies to sustain the organization.

Managing Director, Research Data Alliance/U.S., Center for a Digital Society, February 2013 – June 2014

- Coordinated the Research Data Alliance (RDA) Secretariat within the US and internationally.
- Developed and implemented operational processes for the RDA.
- Promoted the RDA to funders, participants, and the public at large.
- Coordinated bi-annual RDA Plenary Conferences.
- In collaboration with the Chair, developed the vision and implementation plan for the Center for Digital Society.

National Snow and Ice Data Center (NSIDC), University of Colorado, Boulder, CO

Lead Project Manager, 2010 – 2013

- Led and coordinated development of proposals to support international and interdisciplinary data management and informatics research at NSIDC.

- Coordinated different data center projects (i.e. independent grants and contracts) to fund and implement collaborative projects that support the data center as a whole.
- Led international data activities at NSIDC as manager of the World Data Center at the University of Colorado.
- Researched scientific and data management practice and published on informatics issues and approaches.
- Developed and implemented consistent data management practices and policies across the data center.
- Represented NSIDC to clients, funding agencies, review panels, and data users and providers.
- Supervised and mentored other project and program managers.

Program and Project Manager, 2001 - 2013

- Principal investigator and manager of multiple NASA and NSF polar data management and informatics research projects. (See Funded Awards below.)
- Led and coordinated international networks working to improve Arctic and polar data management. This began with forming and leading a large international coalition to conduct the International Polar Year Data and Information Service. Coordination activities continued under the intergovernmental Sustaining Arctic Observing Networks initiative and the International Council of Science Polar Information Commons (<http://polarcommons.org>).
- Conducted applied informatics research around interdisciplinary data management systems and practice. Major initiatives include:
 - Research on effective tools and social structures to enable distributed discovery and access to very diverse data and metadata around the world (e.g., <http://nsidc.org/libre>).
 - Development of a formal sea ice ontology that incorporates climate research, operational shipping, and Indigenous perspectives on sea ice and related processes (<http://nsidc.org/ssiii>).
 - Led a collaborative effort to develop a prototype web-services-based data discovery, access, and visualization system for arctic coastal data.
- Managed projects to acquire, archive, curate, and distribute cryospheric and polar data. Major projects included:
 - The Cold Land Processes Experiment, 2001 – 2005 (<http://nsidc.org/data/clpx>)—a large, intensive ground-, air-, and satellite-based field campaign, producing more than 30 data sets totaling about 1 terabyte. The team developed and implemented innovative data management and data quality assurance processes in the field, improved the data collection protocol, developed custom subsetting and gridding schemes and a custom data distribution and support web site.
 - The International Permafrost Association Frozen Ground Data Center, 2002 – 2009 (<http://nsidc.org/fgdc>)—an international data center coordinating global investigators, and organizations to identify and steward more than 100 permafrost and frozen ground related data from around the world. The team quality controlled and improved the data sets and developed assorted information products, including an extensive, permafrost bibliography; maps and figures to support permafrost research; and the Circumpolar Active-Layer Permafrost System version 2.0 CD set (nsidc.org/data/g01175.html).

- The Exchange for Local Observations and Knowledge in the Arctic , 2007 - 2013 (<http://eloka-arctic.org>)—an international project facilitating the ethical preservation, and use of local observations and knowledge of the Arctic. The team applies principles of knowledge stewardship where knowledge is valued, preserved, respected, and broadly used along with other data in understanding the Arctic system. The team develops and sustain relationships with local Arctic communities, building custom tools and specialized data management approaches to help maintain the context and meaning of the original information and knowledge.
- The Advanced Cooperative Arctic Data and Information Service, 2011 - 2013 (<http://aoncadis.org>)—a, multi-million dollar, collaborative, multi-institution project managing all Arctic data produced by National Science Foundation supported investigators. The team supports very diverse physical, life, and social science investigators according to a defined “level of service” model. We produce formal archive information packages according to the *Open Archives Information System Reference Model*, federate data across multiple international sources, and produce value-added products integrating data from multiple disciplines and sources.
- Organized international workshops and serve on committees working to improve interdisciplinary data stewardship.
- Presented and advised frequently on data management issues and international and interdisciplinary informatics.
- Actively participated in international informatics organizations and initiatives.

Data Manager, 1995 – 2013

- Led teams that ingest, document, publish, distribute, and support various data sets.
- Created and maintained data tools and product web sites.
- Supported data providers and users.

Operations and Communications Manager, 1995 - 2002

- Developed and implemented NSIDC’s overall data management process based on product teams addressing all aspects of data stewardship.
- Supervised up to 12 positions, coordinating data set ingest, processing, archiving, documentation, distribution, and promotion.
- Managed production of data center’s online information services.
- Defined new product concept leading to the regular creation of “information products.”
- Oversaw data set definition, selection, and production process.
- Represented NSIDC to clients, funding agencies, and review panels.
- Created the NSIDC Communications Group, and generally raised the profile of data set documentation and public outreach.
- Initiated and lead overhaul of NSIDC Web site using information design and project management principles.

Project Management Assistant, 1994 - 1995

- Assisted NSIDC Scientific Manager and System Engineer in managing the multi-million dollar contract to operate NASA’s Snow and Ice Distributed Active Archive Center.
- Developed and implemented data center policies and procedures.

Coe-Truman Technologies, Inc., Alexandria, VA

Project Manager and Environmental Scientist, July 1991- May 1993

- Established and managed the U.S. Army’s initial overseas environmental program.

- Managed a \$300,000 contract for the Department of Defense's "Legacy," a nation-wide natural and cultural resource management project.
- Helped implement an Army-wide environmental electronic bulletin board.
- Researched and wrote information papers and policy analyses on aboveground and underground storage tanks, oil pollution control regulations, and environmental legislation and policy.
- Analyzed Army Environmental Office audit system and designed database and tracking system to enhance that system.

AScl Corporation, McLean, VA

Project Manager and Environmental Scientist, February 1989 - July 1991

- Managed a \$100,000 contract with the U.S. Environmental Protection Agency.
- Supported the development of an international project on the assessment of human exposure to environmental pollutants for the WHO and UNEP.
- Designed, wrote, and laid out a brochure on this project.
- Acted as a liaison between different scientists and managers around the world.
- Organized conferences and workshops.

Edinburgh University, Edinburgh, Scotland

Research Associate, August 1988 - January 1989

- Organized a forestry input/output study that had fallen into disarray.
- Collected data for an input/output model by consulting people in the industry and following up survey responses.
- Acted as a liaison between sponsors and research team and between two research groups in Edinburgh and Newcastle University.
- Wrote parts of and edited the entire final report on the economic value of forestry in the UK.

International Population Program, Cornell University, Ithaca, NY

Research Assistant, October 1987- July 1988

- Compiled and analyzed demographic data from Costa Rica and Peru with the SAS data processing package.
- Organized past computer files. Wrote code book for the project

EDUCATION

University of Colorado, Boulder; Geography	MA, 2010
Thesis: <i>Data for Modelers: Helping Understand the Climate System</i>	
Cornell University; Natural Resources and Communications	BSc., 1988
University of Edinburgh	1986-87

FUNDED AWARDS

Principal Investigator, National Institute for Standards and Technology, "Amplifying and Standardizing the Work of the Research Data Alliance." \$150,000. August 2014 - July 2019.

Contract Manager, Monash University, "Supporting the Research Data Alliance Secretary General." \$300,000. March 2014 - Feb 2015.

Principal Investigator, National Institute for Standards and Technology, "Building the Research Data Alliance through support of the Second International Plenary Conference." \$79,245. July 2013 - June 2014.

Principal Investigator/Mentor, Council on Library and Information Resources, "Postdoctoral Fellowship in Data Curation for the Sciences and Social Sciences." \$75,000. July 2013 – July 2015 (transferred PI status Feb 2013).

Principal Investigator, National Science Foundation, Office of Polar Programs, "Collaborative Research - Development and innovation of the Barrow Area Information Database (BAID): A cyberinfrastructure that supports arctic science, outreach and education." \$132,199, September 2012 – September 2015 (transferred PI status Feb 2013).

Principal Investigator, National Science Foundation, Office of Cyberinfrastructure, "INTEROP: International Network of Arctic Knowledge." \$1,000,000, October 2010 – September 2014 (transferred PI status Feb 2013).

Principal Investigator, National Aeronautics and Space Administration, Advancing Collaborative Connections for Earth-Sun System Science, "ASIS: Aggregation of Services for Ice Sheets." \$930,423, January 2010 – December 2012.

Principal Investigator, National Science Foundation, Office of Polar Programs, "IPY: The International Polar Year Data and Information service." \$391,041 May 2007 – April 2010, plus a \$78,071 supplement extended work to April 2011.

Co-principal Investigator and Project Manager, National Science Foundation, "RCN: Building the Research Data Alliance Community through U.S. and International Engagement (RDA 2)." \$5,018,914. October 2013 - September 2015.

Co-principal Investigator and Project Manager, National Science Foundation, Office of Polar Programs, "Exchange for Local Observations and Knowledge in the Arctic III." \$2,163,368, October 2012 – September 2015 (transferred co-PI status Feb 2013).

Co-principal Investigator and Project Manager, National Science Foundation, Office of Polar Programs, "Collaborative Research: Integrated Arctic Data Management Services (IADS) to Support Arctic Research." \$699,736, July 2011 – June 2012.

Co-principal Investigator, National Science Foundation, Office of Polar Programs, "Collaborative Community-Enabled Data Discovery, Access, Publishing, and Enhancement: Enabling an Information Commons." \$250,000, October 2009 – September 2012.

Co-principal Investigator and Project Manager, National Science Foundation, Office of Polar Programs, "ELOKA Phase II: Toward Operational Data Management Support for Community-Based Observations Contributing to the Arctic Observing Network." \$1,968,016, August 2009 – July 2012.

Co-principal Investigator and Project Manager, National Science Foundation, Office of Polar Programs, "IPY: Exchange for Local Observations and Knowledge of the Arctic (ELOKA)." \$658,093, May 2007 – April 2010.

Co-principal Investigator, National Science Foundation, Office of Polar Programs "IPY: A Cooperative Arctic Data and Information Service (CADIS)." \$ 697,497, March 2007 – February 2010.

Co-principal Investigator and Project Manager, National Aeronautics and Space Administration, Advancing Collaborative Connections for Earth-Sun System Science, "Discovery, Access, and Delivery of Data for IPY." \$690,000 June 2006 – June 2008.

Co-principal Investigator and Project Manager, National Science Foundation, Office of Polar Programs, "Development of a Strategy and Architecture for an IPY Data and Information Service: A Planning Proposal." \$99,000 March 2006 – March 2007.

Co-principal Investigator and Project Manager, National Science Foundation, Office of Polar Programs, "Data Management for a Community-Based Monitoring Network—A Pilot Project." \$38,000 Sept. 2005 – Sept. 2006.

EXTERNAL COMMITTEES

Member, *Data Science Journal* Editorial Board, August 2015 - present.

Member, Federation for Earth Science Information Partners Nomination Committee, September 2014 - present.

Member, Panel on the American Geophysical Union's Statement on Data Accessibility and Preservation, July 2014 - June 2015. Member, National Research Council (NRC) Committee on Development of a Strategic Vision for the U.S. Antarctic Program, November 2013 - August 2015.

Member, Belmont Forum e-Infrastructures Work Package 3, November 2013 - October 2015

Member, Community Inventory of EarthCube Resources for Geoscience Interoperability (CINERGI) Advisory Committee, November 2013 - present

Member, CODATA-ICSTI Task Group on Data Citation Standards and Practices, January 2013 - present

Member, World Data System Open Metadata Catalogue and Knowledge Network Working Group, January 2013 - present

Member, Next Generation Ecosystem Experiment Science Advisory Board, November 2012 - March 2013.

Chair, International Arctic Science Committee (IASC) Data Policy Task Group, October 2012 - April 2013.

Founding Member, Federation of Earth Science Information Partners (ESIP) Preservation and Stewardship Committee, January 2012 - present.

Member, Data Review Board for the NOAA Climate Services Portal, April 2011 - February 2013.

Member, Joint International Arctic Science Committee/Scientific Committee for Antarctic Research Bipolar Action Group on Science Cooperation, December 2010 - December 2012.

Member, National Ecological Observing Network (NEON) Data Services Working Group, November 2010 - February 2013.

Chair and member, American Geophysical Union Falkenberg Award Committee, July 2010 - June 2014 (appointed chair 2012).

Member, Global Research Data Infrastructure 2020 Technical Working Group, March 2010 - 2012.

Ex-Officio Member, National Research Council Board on Research Data and Information, February 2009 – October 2010.

Member, International Union of Geodesy and Geophysics (IUGG) Commission for Data and Information, December 2007 – July 2015.

Member, American Geophysical Union Information Technology Committee, 2006 – 2010.

Member, Electronic Geophysical Year (eGY) International Committee, March 2006 – December 2008.

Member, U.S. Study of Environmental Arctic Change (SEARCH) Data Management Working Group, January 2006 – December 2008

Member, National Research Council (NRC) Committee on Archiving Environmental and Geospatial Data at NOAA, February 2006 – November 2007.

Co-Chair, International Polar Year Data Management and Policy Subcommittee, November 2005 – October 2010. This committee also served as an official task group of the International Council of Science Committee on Data for Science and Technology (CODATA).

Co-Chair and member, International Permafrost Association Standing Committee for Data, Information and Communication, July 2003 – July 2012 (appointed as co-chair July 2008)

OTHER PROFESSIONAL SERVICE

Guest editor for *GeoResJ* 6, (June 2015) *Rescuing Legacy Data for Future Science*.

Judge for the 2013 International Data Rescue Award in the Geosciences sponsored by IEDA and Elsevier

NSIDC representative to the Federation of Earth Science Information Partners (ESIP), January 2012 - January 2013.

Formal Liaison from the International Union of Geodesy and Geophysics (IUGG) to the International Council of Science (ICSU) Committee on Data for Science and Technology (CODATA), August 2011 - November 2013.

Member of the University of Colorado Data Management Task Force and report writing team that developed recommendations for developing a Research Data Services unit at the University, 2011-2012.

Associate Editor, Permafrost: Ninth International Conference 29 June - 3 July 2008.

Reviewer of NSF, DoE, and NASA proposals, National Academy reports, journal articles, book chapters, conference proceedings, and other publications.

Professional Society Membership: American Geophysical Union, American Society for Information Science and Technology, Association of American Geographers, European Geosciences Union, United States Permafrost Association.

Conference Activity

Chair, Program and Organizing Committees for the Research Data Alliance 2nd Plenary: "Building Global Partnerships" Washington, DC 16-18 September 2013

Co-Chair of second International Polar Year Data Management Workshop, 30 Sept. -2 Oct. 2009, Ottawa, Canada. See Parsons et al. (2011).

Chair of the International Polar Year Data Management Workshop, 3-4 March 2006, Cambridge, UK. See Parsons et al. (2006).

Program or organizing committee member for:

- All Research Data Alliance Plenaries from September 2013 forward.
- SciDataCon, New Delhi, India, 2-4 November 2014.
- International Forum on Polar Data Activities in Global Data Systems, Tokyo, Japan, 15-16 October 2013.
- NSF Workshop on Cyberinfrastructure for Polar Sciences, Minneapolis, MN, 10-12 September 2013.

- IEEE e-Science 2010 Conference, Brisbane, Australia, 7-10 December 2010.
- Second International Circumpolar Conference on Geospatial Sciences and Applications (GeoNorth), Fairbanks, AK, 4-6 August 2009.
- First International Circumpolar Conference on Geospatial Sciences and Applications (GeoNorth), Yellowknife, NWT, Canada, 22 August 2007
- Virtual Observatories in Geosciences (VOiG), Denver, CO, 12-15 June 2007.
- Several small conferences and workshops around building the International Polar Year Data and Information Service and networks of local and traditional knowledge.

Convener of science sessions, workshops, and townhall meetings at conferences of the, American Geophysical Union, ICSU World Data System and Committee on Data for Science and Technology (CODATA), European Geosciences Union, International Union of Geodesy and Geophysics, IEEE International Geoscience and Remote Sensing Symposium (IGARSS), IPY Open Science Conferences, and others.

Invited speaker, panelist, or expert at multiple conferences and workshops, including: the International Union of Geodesy and Geophysics, the American Geophysical Union, the Association of American Geographers, the American Society of Information Science and Technology, International Conference on Digital Government Research, several National Academy of Science workshops, IPY Open Science Conferences, Global Research Data Infrastructure 2020, eResearch Australasia, various agency planning workshops, and others.

HONORS

- American Geophysical Union Charles S. Falkenberg Award recognizing a “scientist under 45 years of age who has contributed to the quality of life, economic opportunities, and stewardship of the planet through the use of Earth science information and to the public awareness of the importance of understanding our planet.” 2009
- Certificate of Appreciation from the World Meteorological Organization and the International Council for Science for valuable contributions to the International Polar Year 2009
- 15-year service award, Cooperative Institute for Research in Environmental Sciences 2009
- NASA Group Achievement Award 2006
- NASA recognition of the Cold Land Processes project and data management as one of NASA’s “Top Ten” projects 2003
- Three letters of commendation from the US Environmental Protection Agency 1990 & 1991
- Dean’s List for the Cornell College of Agriculture and Life Sciences 1984, 1986 & 1988

PUBLICATIONS

Peer-Reviewed Articles and Book Chapters

- Parsons, M. A.** 2014. “Data archiving and distribution” in Njoku, E. (ed.). *Encyclopedia of Remote Sensing*. Heidelberg, Germany: Springer.
- Duerr R. E., J. McCusker, **M. A. Parsons**, S. S. Khalsa, P. L. Pulsifer, C. Thompson, R. Yan, D. L. McGuinness, and P. Fox. 2014. “Formalizing the semantics of sea ice.” *Earth Science Informatics* 8:51-62. <http://dx.doi.org/10.1007/s12145-014-0177-z>
- Parsons, M. A.** 2013. “Data policy”. *Data Science Journal* 12:GRDI43-GRDI50. <http://dx.doi.org/10.2481/dsj.GRDI-008>

- Parsons, M. A.** and P. A. Fox. 2013. "Is data publication the right metaphor?". *Data Science Journal*. 12(WDS32-WDS46). <http://dx.doi.org/10.2481/dsj.WDS-042>
- Kanao M., A. Kadokura, M. Okada, T. Yamnouchi, K. Shiraishi, N. Sato, and **M. A. Parsons**. 2013. "The state of IPY data management: The Japanese contribution and legacy." *Data Science Journal*. <http://dx.doi.org/10.2481/dsj.WDS-021>
- Pulsifer, P., S. Gearheard, H. Huntington, **M. A. Parsons**, C. McNeave, and H. McCann. 2012. "The role of data management in engaging communities in Arctic research: Overview of the Exchange for Local Observations and Knowledge of the Arctic (ELOKA)." *Polar Geography*. <http://dx.doi.org/10.1080/1088937X.2012.708364>.
- ESIP (Federation of Earth Science Information Partners). 2012. *Data Citation Guidelines for Data Providers and Archives*. Edited by **M. A. Parsons**, B. Barkstrom, R. R. Downs, R. Duerr, C. Tilmes, and ESIP Preservation and Stewardship Committee. *ESIP Commons*. <http://dx.doi.org/10.7269/P34F1NNJ>.
- Parsons, M. A.** 2011. "Making data useful for modelers to understand complex Earth systems." *Earth Science Informatics*. 4(4):197-223. <http://dx.doi.org/10.1007/s12145-011-0089-0>.
- Parsons, M. A.**, Ø. Godøy, E. LeDrew, T. F. de Bruin, B. Danis, S. Tomlinson, and D. Carlson. 2011. "A conceptual framework for managing very diverse data for complex interdisciplinary science." *Journal of Information Science*. 37(6). <http://dx.doi.org/10.1177/0165551511412705>.
- Peterson, W. K., D. N. Baker, C. E. Barton, P. Fox, **M. A. Parsons**, and E. A. Cobabe-Ammann. 2011. The Electronic Geophysical Year (eGY). In H. K. Gupta (ed.). *Encyclopedia of Solid Earth Geophysics, 2nd Edition* Dordrecht, The Netherlands: Springer. pp. 283-285.
- Parsons, M. A.**, T. de Bruin, S. Tomlinson, H. Campbell, Ø. Godøy, J. LeClert, and IPY Data Policy and Management SubCommittee. 2011. "The state of polar data—the IPY experience". In I. Krupnik, I. Allison, R. Bell, P. Cutler, D. Hik, J. López-Martínez, V. Rachold, E. Sarukhanian and C. Summerhayes (Ed.s) *Understanding Earth's Polar Challenges: International Polar Year 2007-2008*. CCI Press. issn: 0068-0303, isbn: 1-896445-55-1. pp. 457-476. <http://www.icsu.org/news-centre/publications/reports-and-reviews/ipy-summary>.
- Gearheard, S., H. Huntington, **M. A. Parsons**, C. McNeave and P. Pulsifer. 2011. "Exchanging and sharing knowledge with local stakeholders – ELOKA." In I. Krupnik, I. Allison, R. Bell, P. Cutler, D. Hik, J. López-Martínez, V. Rachold, E. Sarukhanian and C. Summerhayes (Ed.s) *Understanding Earth's Polar Challenges: International Polar Year 2007-2008*. CCI Press. issn: 0068-0303, isbn: 1-896445-55-1. pp. 581-584. <http://www.icsu.org/news-centre/publications/reports-and-reviews/ipy-summary>.
- Schofield, P. N., T. Bubela, T. Weaver, L. Portilla, S. D. Brown, J. M. Hancock, D. Einhorn, **et al.** 2009. Post-Publication sharing of data and tools. *Nature* 461 (7261): 171-173.
- Duerr, R., **M. A. Parsons**, and R. Weaver, 2009. "A New Approach to Preservation Metadata for Scientific Data - A Real World Example", in Di, Liping and H. K. Ramapriyan (eds.). 2009. *Standards-Based Data and Information Systems for Earth Observations*, 113-127, Springer, Art. No. 7, isbn: 978-3-540-88263-3.
- Parsons, M. A.**, S. L. Smith, V. E. Romanovsky, N. I. Shiklomanov, H. H. Christiansen, P.P. Overduin, T. Zhang, M. R. Balks, and J. Brown. 2008. "Managing permafrost data: Past approaches and future directions." *Permafrost Ninth International Conference 29 June - 3 July 2008 Proceedings*. Fairbanks, AK: University of Alaska.

- Ballagh, L. M., **M. A. Parsons**, and R. Swick. 2007. "Visualising cryospheric images in a virtual environment: present challenges and future implications." *Polar Record* 43:305-310.
- NRC (National Research Council). 2007. *Environmental Data Management at NOAA: Archiving, Stewardship, and Access*. Washington, DC: National Academies Press. http://www.nap.edu/catalog.php?record_id=12017.
- NRC (National Research Council). 2006. *Preliminary Principles and Guidelines for Archiving Environmental and Geospatial Data at NOAA: Interim Report*. Washington, DC: The National Academies Press.
- Parsons, M. A.** and R. Duerr. 2005. "Designating user communities for scientific data: challenges and solutions." *Data Science Journal* 4:31-38. 24 August 2005. http://www.jstage.jst.go.jp/article/dsj/4/0/4_31/article.
- Duerr, R., **M. A. Parsons**, M. Marquis, R. Dichtl, and T. Mullins. 2004. "Challenges in long-term data stewardship" *Proc. 21st IEEE Conference on Mass Storage Systems and Technologies*. NASA/CP-2004-212750: 47-67. <http://romulus.gsfc.nasa.gov/msst/conf2004/Papers/MSST2004-05-Duerr-a.pdf>.
- Parsons, M. A.**, M. J. Brodzik, and N. J. Rutter. 2004. "Data management for the Cold Land Processes Experiment—Improving hydrological science." *Hydrological Processes*. 18: 3637 - 3653. <http://dx.doi.org/10.1002/hyp.5801>.
- Cline, D., K. Elder, B. Davis, J. Hardy, G. E. Liston, D. Imel, S. H. Yueh, A. Gasiewski, G. Koh, R. Armstrong, and **M. A. Parsons**. 2003. Overview of the NASA cold land processes field experiment (CLPX-2002). In Kummerow, C. D., J. Jiang and S. Uratuka (eds.). *Microwave Remote Sensing of the Atmosphere and Environment III*, 361-372. SPIE.

Other Articles and Essays

- Parsons M. A.** 2015. "Creating the culture and technology for a global data infrastructure." *ERCIM News*, no. 100. <http://ercim-news.ercim.eu/images/stories/EN100/EN100-web.pdf>
- Wyborn L., L. Hsu, K. Lehnert, and **M. A. Parsons**. 2015. "Guest editorial: Special issue rescuing legacy data for future science." *GeoResJ* 6:106-107. <http://dx.doi.org/10.1016/j.grj.2015.02.017>
- Pulsifer, P. L., L. Yarmey, Ø. Godøy, J. Friddell, **M. A. Parsons**, W. Vincent, T. DeBruin, W. Manley, A. Gaylord, A. Hayes, S. Nickels, C. Tweedie, J.R. Larsen, and J. Huck. 2014. "Towards and international polar data coordination network." *Data Science Journal* 13:PDA94-PDA102. <http://dx.doi.org/10.2481/dsj.IFPDA-16>
- Mokrane M. and **M. A. Parsons**. 2014. "Learning from the international polar year to build the future of polar data management." *Data Science Journal* 13:PDA88-PDA93. <http://dx.doi.org/10.2481/dsj.IFPDA-15>
- Berman F. and **M. A. Parsons**. 2014. "As Research Data Balloons, How To Share?". *InformationWeek Government*. 30 April 2014. <http://www.informationweek.com/government/big-data-analytics/as-research-data-balloons-how-to-share/d/d-id/1234888?> (accessed 30 April 2014).
- Parsons M. A.** 2014. "Organizational status of RDA". *D-Lib* 20 (1/2). <http://dx.doi.org/10.1045/january2014-parsons>.
- Parsons M. A.** 2013. "Building global partnerships — second plenary meeting of the Research Data Alliance." *D-Lib Magazine* 19 (11/12). <http://dx.doi.org/10.1045/november2013-parsons>.

- Parsons, M. A.** and F. Berman. 2013. "The Research Data Alliance: Implementing the technology, practice and connections of a data infrastructure." *Bulletin of the Association for Information Science and Technology* 39 (6). http://www.asis.org/Bulletin/Aug-13/Bulletin_AugSep13_Final.pdf (accessed 8 August 2013).
- Parsons, M. A.**, R. Duerr, and J. B. Minster. 2010. "Data citation and peer-review." *Eos, Trans. AGU* 91(34): 297-298. <http://dx.doi.org/doi:10.1029/2010EO340001>.
- Parsons, M. A.** 2009. Polar science: global partnership to work on data sharing. *Nature*, 458 (7240) 830-830. <http://dx.doi.org/10.1038/458830a>.
- LeDrew, E., **M. A. Parsons**, and T. de Bruin. 2008. "Securing the Legacy of IPY." *EarthZine*, 27 March 2008. <http://www.earthzine.org/2008/03/27/securing-the-legacy-of-ipy/>.
- Parsons, M. A.**, S. L. Smith, and H. H. Christiansen. 2007. "Building the IPA-IPY data legacy: An editorial." *Frozen Ground* 31, December 2007. <http://ipa.arcticportal.org/files/fg/FrozenGround31.pdf>.
- Parsons, M. A.** and B. E. Wilson. 2007. "User-driven design of a data system for the International Polar Year." *EOS, Transactions American Geophysical Union* 88(8):98, 20 Feb. 2007. <http://dx.doi.org/10.1029/2007EO080010>.
- D'Ignazio J., J. Qin, Y. M. Braunstein, C. Whitbeck, **M. A. Parsons**, T. E. Eastman, and S. Xie. 2006. "Access to scientific data: The social and technical challenges and strategies." *Proceedings of the American Society for Information Science and Technology* 43 (1): 1-4. <http://dx.doi.org/10.1002/meet.14504301154>.
- Khalsa, S. J. S. and **M. A. Parsons**. 2006. "Achieving Semantic Interoperability for the IPY." In *IGARSS 2006: IEEE International Conference on Geoscience and Remote Sensing Symposium*, pp. 3835-37. <http://ieeexplore.ieee.org/iel5/4087812/4241146/04242131.pdf?tp=&isnumber=%3Cb%3E%3Cfont%20color=990000%3E4241146%3Cfont%3E%3C/b%3E&arnumber=4242131&punumber=4087812>.
- Parsons, M. A.** et al. 2006. *International Polar Year Data Management Workshop, 3-4 March 2006, Cambridge, UK*. Glaciological Data Series, no. GD-33. Boulder, CO: National Snow and Ice Data Center. <http://nsidc.org/pubs/gd/index.html>.
- Parsons, M. A.** and R. G. Barry. 2006. "Interdisciplinary Data Management in Support of the International Polar Year." *EOS, Transactions American Geophysical Union* 87(30):295. 25 July 2006. <http://dx.doi.org/10.1029/2006EO300006>.
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Data Sets

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- Elder, K. and D. Cline. 2003. *CLPX-Ground: ISA Snow Depth Transects and Related Measurements, Ver. 2*. In situ data edited by **M. A. Parsons** and M.J. Brodzik. Boulder, CO: National Snow and Ice Data Center. <http://dx.doi.org/10.5060/D4MW2F23>.
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Keynote Presentations and Lectures

- Parsons, M. A.** 2015. "Going Glocal—Polar Data in a Global Infrastructure." Keynote presentation at Polar Data Forum 2, Waterloo, Canada, 27 October 2015.
- Parsons, M. A.** 2015. "Open Data is Not Enough—Making Data Sharing Work." Keynote presentation at the 2nd SPARC Japan Seminar 2015 Tokyo, Japan, 21 October 2015.
- Parsons, M. A.** 2015. "A Report on RDA." Keynote presentation at "Open Science and Open Data." Helsinki, Finland, 1 October 2015.
- Parsons, M. A.** 2015. "Infrastructure, relationships, trust, and RDA." Keynote presentation at e-Infrastructures & RDA for data intensive science Paris, France, 22 September 2015.
- Parsons, M. A.** 2015. "Data Policy for Open Science." Keynote presentation at e-Infrastructure Reflection Group Riga, Latvia, 3 June 2015.
- Parsons, M. A.** 2015. "Open Data is Not Enough" Keynote Lecture presented in slightly different forms at European Grid Infrastructure Conference, Lisbon; Open Research Data: Implications for Science and Society, Warsaw; Science Foundation Ireland, Dublin; International Union of Geophysics and Geodesy, Prague; Our Common Future under Climate Change, Paris; RDA Southeast Europe Meeting, Athens; RDA Spain Meeting, Barcelona; and RDA Italy Meeting, Pisa. Similar presentations made to the European Commission, various European government representatives, and the Organisation for Economic Cooperation and Development (OECD). May-July 2015.
- Parsons, M. A.** 2014. "Plans are Worthless, but Planning is Essential." Keynote presentation at CASRAI Canada ReConnect14, Ottawa, Canada, 20 November 2014.
- Parsons, M. A.** 2014. "The Research Data Alliance—Creating the culture and technology for an international data infrastructure." Seminar at the Australian National Data Service, Melbourne, Australia, 24 October 2014.
- Parsons, M. A.** 2014. "Data Citation Then and Now." Keynote presentation at GeoData 2014, Boulder, CO, 17 June 2014.
- Parsons, M. A.** 2014. "Identity, Location, and Citation." Lecture in *Data and Society*, Rensselaer Polytechnic Institute, Troy, NY, 25 April 2014.
- Parsons, M. A.** 2013, 2014, 2015. "Playing in the International Data Space." Lecture in *Fundamentals of Data Curation*, University of Illinois, Urbana-Champaign, 24 October 2013, 13 February 2014, 16 October 2014, 19 March 2015.
- Parsons, M. A.** 2013. "Lessons from the International Polar Year—Creating the culture and technology for an international data ecosystem." Keynote presentation at the International Forum on Polar Data Activities in Global Data Systems, Tokyo, Japan, 15 October 2013.

- Parsons, M. A.** 2013. "Infrastructure, Curation, and Metadata." Keynote presentation at the NSF Workshop on Cyberinfrastructure for Polar Sciences, Minneapolis, MN, USA, 10 September 2013.
- Parsons, M. A.** 2012. "How to cite an Earth science data set" Invited presentation at Bridging Data Lifecycles: Tracking Data Use via Data Citations Data Workshop, Boulder, CO 5 April 2012.
- Parsons, M. A.** 2011. "Managing Very Diverse Data for Complex, Interdisciplinary Science—The IPY Experience." Keynote lecture at the International Symposium of Scientific Resource Sharing at Sokendai, Okazaki, Japan, 17 Dec. 2011.
- Parsons, M. A.** and the ESIP Preservation and Stewardship Cluster. 2011. "Data Citation." Plenary lecture at Geo-Data Informatics: Exploring the Life Cycle, Citation and Integration of Geo-Data, Broomfield, CO, 3 March 2011.
- Parsons, M. A.** 2010. "The State of Polar Data." Plenary lecture at the IPY Oslo Science Conference; Oslo, Norway, 11 June 2010, <http://video.hint.no/mmt201v10/osc/?vid=56&ti=4>.
- Parsons, M. A.,** S. Gearheard, and many people of the Arctic. 2010. "A Human Perspective on Arctic Change." Lecture in Regional Geography, Boulder, CO, 26 May 2010.
- Parsons, M. A.** 2010. "The Arctic: Rapid Change in Action." Lecture in Geographies of Change, Boulder, CO, 10 March 2010.
- Parsons, M. A.** 2009. "An International Polar Year Perspective on Data Sharing." Keynote presentation at GeoNorth 2009; Fairbanks, Alaska, 4 August 2009.
- Parsons, M. A.** 2009. "Data Sharing in IPY: Policy, Practice, and Services." Keynote presentation at the Swedish IPY Workshop on Data Management, Stockholm, 14 January 2009.
- Parsons, M. A.,** 2007. "Information Technology Vision for Data Synthesis." Invited presentation at the Arctic System Synthesis Workshop: New Perspectives through Data Discovery and Modeling, Seattle, WA, 2 April 2007.
- Parsons, M. A.** 2006. "Canada, the IPY, and Data Management." Keynote presentation at the Cryospheric System in Canada Annual Science Meeting, Toronto, Canada, 24 February 2006.

Select Major Presentations (* invited)

- *Parsons, M. A.** 2014. "Learning from Past Infrastructure to Embrace Friction and Create the Research Data Alliance." Abstract GC22C-07. Invited presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 16 December 2014.
- *Parsons, M. A.** and the ESIP Stewardship Committee. 2014. "Provenance, Context, and Data Sharing." Invited presentation at e-Science Australia Data Provenance Workshop, Melbourne, Australia, 27 October 2014.
- Parsons, M. A. 2014.** "Curating for Value in Different Data Stewardship Paradigms." Presentation at the International Digital Curation Conference, San Francisco, California, 26 January 2014
- *Parsons, M. A.** 2013. "Curation roles in theory and practice." Abstract IN51D-03. Invited presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 13 December 2013.
- *Parsons, M. A.** 2013. "Identity, Location, and Citation." Invited presentation to US Geological Survey Data Committee, 12 June 2013.

- ***Parsons, M. A.** 2013. "The Research Data Alliance: Making Data Work." Invited presentation at Research Data Access and Preservation Summit 13, Baltimore, MD, 4 April 2013.
- Parsons, M. A.**, P. L. Pulsifer, R. E. Duerr, P. A. Fox, S. J. S. Khalsa, J. P. McCusker, and D. L. McGuinness. 2012. "Interoperability and different ways of knowing: How semantics can aid in cross-cultural understanding." Presented at American Geophysical Union Fall Meeting, San Francisco, CA, 5 Dec. 2012.
- ***Parsons, M. A.** 2012. "Data Equivalence." Invited presentation at the National Information Standards Organization (NISO) Forum: Tracking it Back to the Source: Managing and Citing Research Data, Denver, CO, 24 Sep. 2012.
- ***Parsons, M. A.** 2012. "Lessons from IPY: The Challenge of Diversity." Invited presentation at IPY 2012 Conference; From Knowledge to Action, Montreal, Canada, 26 Apr. 2012.
- ***Parsons, M. A.** 2012. "How to Cite a Data Set." Invited presentation at IPY 2012 Conference; From Knowledge to Action, Montreal, Canada, 24 Apr. 2012.
- ***Parsons, M. A.**, Ø. Godøy, E. LeDrew, T. F. de Bruin, B. Danis, S. Tomlinson, and D. Carlson. 2012. "A conceptual framework for managing very diverse data for complex interdisciplinary science." Invited presentation at IPY 2012 Conference; From Knowledge to Action, Montreal, CA, 24 Apr. 2012.
- Parsons, M. A.**, R. Duerr, S. J. Khalsa, P. Pulsifer, P. Fox, D. McGuinness, and J. McCusker. 2012. "Interoperable Arctic Data: 'Egg-codes' as Boundary Objects." Presented at Association of American Geographers, New York, NY, 25 Apr. 2012.
- ***Parsons, M. A.**, and P. Fox. 2011 "Is Data 'Publication' the Right Metaphor?" Invited Presentation at the First ICSU World Data System Conference, Kyoto, Japan, 5 September 2011.
- ***Parsons, M. A.**, Ø. Godøy, E. Le Drew, T. F. de Bruin, B. Danis, S. Tomlinson, and D. Carlson. 2011 "Managing Very Diverse Data for Complex, Interdisciplinary Science—Lessons from the International Polar Year." Invited Presentation at the First ICSU World Data System Conference, Kyoto, Japan, 4 September 2011.
- ***Parsons, M.A.** 2011. "How to Cite an Earth Science Data Set." Invited Presentation at Developing Data Attribution and Citation Practices and Standards: An International Symposium and Workshop hosted by the National Academy of Sciences, Berkeley, California, 22 Aug. 2011.
- ***Parsons, M. A.**, Ø. Godøy, E. Le Drew, T. F. de Bruin, B. Danis, S. Tomlinson, and D. Carlson. 2011 "Diverse data for interdisciplinary science-another dimension of the Fourth Paradigm." Invited Presentation at the International Union of Geodesy and Geophysics Conference, Melbourne, Australia, 7 July 2011.
- Parsons, M. A.**, R. Duerr, and R. Chen. 2010. "Freeing Polar Data in an Information Commons." Presentation at the American Meteorological Society, Seattle, WA, 25 January 2010. <http://ams.confex.com/ams/91Annual/flvgateway.cgi/id/17465?recordingid=17458>.
- Duerr, R. and **M. A. Parsons**. 2010. "Libre: Freeing Your Data—Free to Share, Free to Discover and Use." Presentation at the American Meteorological Society, Seattle, WA, 25 January 2010. <http://ams.confex.com/ams/91Annual/flvgateway.cgi/id/17458?recordingid=17465>.
- Parsons, M. A.** and R. Duerr. 2010. "Freeing Polar Data in an Information Commons with New Technologies and Norms of Science." Presentation at Geological Society of America, Denver, CO, 2 November 2010.

- Parsons, M. A.**, T. de Bruin, S. Tomlinson, Ø. Gødoy, H. Campbell, J. LeClert, E. LeDrew, and D. Carlson. 2010. "The State of Polar Data—the IPY experience." Presentation at the 22nd CODATA International Conference, Cape Town, South Africa, 24 October 2010.
- Parsons, M. A.**, S. Gearheard, P. Pulsifer, C. McNeave, and H. Huntington. 2010. "Local and Traditional Knowledge in Understanding Arctic Change" Presentation at the Association of American Geographers Annual Meeting, Washington, DC, 16 April 2010.
- Parsons, M. A.** and R. Chen. 2010. "Creating a Polar Information Commons." Presentation at the American Association of Geographers, Washington, DC, 14 April 2010.
- ***Parsons, M. A.**, D. Carlson, K. Cass, R. Chen, T. de Bruin, K. Finney, and K. Thaney. 2010. "A Vision for a Polar Information Commons." Invited presentation to the World Data System Scientific Committee, Paris, France, 21 March 2010.
- Parsons, M. A.**, S. Gearheard, P. Pulsifer, C. McNeave, and H. Huntington. 2010. "The Exchange for Local Observations and Knowledge of the Arctic." Presentation at the State of the Arctic meeting, Miami, FL, 18 March 2010.
- Parsons, M. A.**, T. Bruin, S. Tomlinson, Ø. Godøy, H. Campbell, J. Leclert, E. LeDrew, D. Carlson. 2010. "The State of Arctic Data." Presentation at the State of the Arctic Conference, Miami, FL, 16 March 2010
- ***Parsons, M. A.** 2009. "The Future of Polar Information Systems" *Eos Trans. AGU*, 90(52) Fall Meeting Suppl. Abstract C53B-01. Invited presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 18 December 2011.
- ***Parsons, M. A.**, T. de Bruin, and E. LeDrew. 2009. "Data Management in the IPY." Invited presentation to the WMO Executive Committee Panel of Experts on Polar Observations, Research and Services; Geneva, Switzerland, October 2009.
- ***Parsons, M. A.**, D. Carlson, K. Cass, R. Chen, T. de Bruin, K. Finney, and K. Thaney. 2009. "A Vision for a Polar Information Commons." Invited presentation at the meeting of the IPY Data Management Workshop; Ottawa, Canada, 29 September 2009.
- ***Parsons, M. A.**, D. Carlson, K. Cass, R. Chen, T. de Bruin, K. Finney, and K. Thaney. 2009. "A Vision for a Polar Information Commons." Invited presentation at the meeting of the Standing Committee for Antarctic Data Management; Amsterdam, The Netherlands, 10 September 2009.
- ***Parsons, M. A.** 2009. "Current Status of IPY Data Management." Invited presentation at the IPY Data Workshop; Ottawa, Canada, 29 September 2009.
- ***Parsons, M. A.** 2009. "The International Polar Year Data and Information Service." Invited presentation at the meeting of the Standing Committee for Antarctic Data Management; Amsterdam, The Netherlands, 10 September 2009.
- ***Parsons, M. A.** 2009. "Data Sharing Lessons from the Poles." Invited presentation at the CASIMIR Sharing Data and Resources for Functional Genomics meeting; Rome, Italy, 21 May 2009.
- ***Parsons, M. A.** 2008. "Scientific Data as the Core Legacy of IPY." *Eos Trans. AGU* 89(53), Fall Meeting Supplement, Abstract U23F-07. Invited presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 16 December 2008.
- Parsons, M. A.** and J. Collins. "Report From the Cryospheric Cyberinfrastructure: Discovery, Access, and Delivery of Data for IPY (DADDI)." *Eos Trans. AGU* 89(53), Fall Meeting Supplement, Abstract IN22A-04. Presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 16 December 2008.

- *Wilbanks, J. and **M. A. Parsons**. 2008. "Data Sharing and Science: Legal, Normative, and Social Issues." *Eos Trans. AGU* 89(53), Fall Meeting Supplement, Abstract IN12A-02. Invited presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 15 December 2008.
- *Duerr, R., **M. A. Parsons**, and R. Weaver. 2008. "Provenance: Promise and Practice." *Eos Trans. AGU*, 89(53), Fall Meeting Supplement, Abstract IN11C-1040. Invited presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 15 December 2008.
- ***Parsons, M. A.** 2008. "Scientific Data as the Core Legacy of IPY." Invited presentation at International Symposium: Fifty Years after IGY, Tsukuba, Japan, 13 November 2008.
- Parsons, M. A.**, 2008 "The International Polar Year Data and Information Service: Challenges and Opportunities." Presentation at the 21st International CODATA Conference, Kyiv, Ukraine, 8 October 2008.
- Parsons, M. A.**, S. L. Smith, V. E. Romanovsky, N. I. Shiklomanov, H. H. Christiansen, P.P. Overduin, T. Zhang, M. R. Balks, and J. Brown. 2008. "Managing permafrost data: Past approaches and future directions." Presentation at the Ninth International Conference on Permafrost, Fairbanks, AK, 29 June 2008.
- ***Parsons, M. A.** 2008. "Securing the legacy of the International Polar Year." Invited presentation at the Unidata Seminar, Boulder, CO, 6 May 2008.
- ***Parsons, M. A.**, 2008. "Data, Libraries, and Scientists: Understanding the Arctic and the Earth." Invited presentation and position paper at the 2nd Global Research Library 2020 Workshop (GRL2020), Tirrenia, Italy, 27 March 2008.
- *Weaver, R. S. and **M. A. Parsons**. 2008. "Arctic Data: Past, Present, and Future." Invited presentation to the Arctic Research Commission, Boulder, CO. 6 February 2008.
- ***Parsons, M. A.**, 2007. "Exploring the new world of the Arctic: Change, trust, and data." *Eos Trans. AGU* 88(52), Fall Meeting Supplement, Abstract IN52A-04. Invited presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 14 December 2007.
- Parsons, M. A.**, 2007. "Data sharing, access, and archiving in IPY." *EOS Trans. AGU* 88(52), Fall Meeting Supplement, Abstract U24D-01. Presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, USA, 11 December 2007.
- ***Parsons, M. A.**, 2007. "Data and Scientists in a Sustained Arctic Observing Network." Invited presentation and position paper at the International Polar Year (IPY) workshop on Sustaining Arctic Observing Networks, Stockholm, Sweden, 13 November 2007.
- ***Parsons, M. A.**, 2007. "Data sharing in IPY: Policy, practice, and services". Invited presentation at the Government of Canada Program for IPY Researchers Workshop, Gatineau, Quebec, Canada, 18 October 2007.
- Parsons, M. A.**, 2007. "The challenge of and approach to IPY data management—Building the legacy." Presentation at the First International Circumpolar Conference on Geospatial Sciences and Applications (IPY GeoNorth), Yellowknife, NWT, Canada, 22 August 2007.
- ***Parsons, M. A.** 2007 "A Polar Perspective on IGY+50 and eGY." Invited presentation at the official launch of the Electronic Geophysical Year, Perugia, Italy, 7 July 2007.
- ***Parsons, M. A.**, R. Duerr, R. Weaver, and V. Papitashvili. 2007. "Data for the Ages: Data's role in science over the 125-year history of IPY." Invited presentation at International Union of Geophysics and Geodesy General Assembly, Perugia, Italy, 3 July 2007.
- Duerr, R., R. Barry, and **M. A. Parsons**. 2006. "Data, Data Management, and the Ethos of Science." *Eos Trans. AGU* 87(52), Fall Meeting Supplement, Abstract C21D-01.

Presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 12 December 2006.

- Parsons, M. A.** and T. F. de Bruin. 2006 "The Challenge of and Approach to IPY Data Management—Building the Legacy." *Eos Trans. AGU* 87(52), Fall Meeting Supplement, Abstract U14C-06. Presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 11 December 2006.
- ***Parsons, M. A.** 2006. "International Polar Year Data Management." Invited presentation at NSF Biodiversity and Ecosystem Informatics, Arlington, VA, 14 November 2006.
- Parsons, M. A.** 2006. "International Polar Year Data Management." Presentation at CODATA 2006, Beijing, China, 25 October 2006.
- ***Parsons, M. A.** 2006. "Data Access. The Human Element." Invited presentation at American Society of Information Science & Technology Annual Meeting, Austin, TX, 8 November 2006.
- Parsons, M. A.** and T. F. de Bruin. 2006. "Data Management for the International Polar Year—Ensuring the Legacy." Presentation at IGARSS 2006: IEEE International Conference on Geoscience and Remote Sensing Symposium, 4 August 2006.
- ***Parsons, M. A.** 2006. "Data Management for IPY." Invited presentation at the Antarctic Peninsula Climate Variability Workshop, Boulder, CO, 16 May 2006.
- ***Parsons, M. A.** and T. de Bruin. 2006. "Data Management for the International Polar Year." Invited presentation at the European Geosciences Union General Assembly, Vienna, Austria, 4 April 2006.
- ***Parsons, M. A.** 2006. "IPY Data Management." Invited presentation at the eGY Annual Meeting, Boulder, CO, 13 March 2006.
- Parsons, M. A.** and R. Duerr. 2005. "Data Management, a Utility for Science." *Eos Trans. AGU*, 86 (52), Fall Meeting Supplement, Abstract IN24A-02. Presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 6 December 2005.
- ***Parsons, M. A.** 2005. "Data Management for International Permafrost Association during the International Polar Year." Invited presentation at the meeting of the International Permafrost Association, Copenhagen, Denmark, 14 November 2005.
- ***Parsons, M. A.** 2005. "Data Management for the International Polar Year." Invited presentation at the IPY Discussion Forum, Copenhagen, Denmark, 13 November 2005.
- Parsons, M. A.**, T. Zhang, and R. Barry. 2005. "New Developments at the Frozen Ground Data Center." Presentation at the Association of American Geographers, Denver, CO, 8 April 2005.
- ***Parsons, M. A.** 2005. "The Electronic Geophysical Year (eGY) 2007-2008." Invited presentation at the IPY Open Consultative Forum, 11 March 2005.
- ***Parsons, M. A.** and W. Meir. 2005. "Data Management Considerations for the International Global Observing Strategy." Invited presentation at the IGOS Cryosphere Theme workshop, Kananaskis, Canada, 3 March 2005.
- Parsons, M. A.**, R. Duerr, R. Weaver, and R.G. Barry. 2004. "Data Management Considerations for the International Polar Year." *Eos Trans. AGU*, 84(47), Fall Meeting Supplement, Abstract C23B-05. Presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 14 December 2004.
- Parsons, M. A.** and R. Duerr. 2004. "Designating User Communities for Scientific Data: Challenges and Solutions" Presented at the 19th International CODATA Conference, Berlin, Germany, 8 November 2004.

Parsons, M. A., M. J. Brodzik, T. Haran, and N. Rutter. 2003. "Data Management for the Cold Land Processes Experiment." *Eos Trans. AGU*, 84(46), Fall Meeting Supplement, Abstract C42B-01. Presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 11 December 2003.

Select Poster Presentations

Parsons, M. A. and P. A. Fox. 2014. "Why Data Citation Currently Misses the Point." Abstract IN51B-3780. Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 19 December 2014.

***Parsons, M. A.** 2013. "The Value of Friction, Tension, and Disparity in Global Collaboration." Abstract IN23B-1429. Invited Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 10 December 2013.

Parsons, M. A. and R. Duerr. 2012. "Data Identifiers, Versioning, and Micro-citation." Abstract IN23C-1529. Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 4 December 2012.

Parsons, M. A. 2011. "The Evolution of a Data Scientist." Invited poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 6 December 2011.

Parsons, M. A. 2011. "How to Cite an Earth Science Data Set." Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 9 December 2011.

Duerr, R., S. J. Khalsa, M. A. Parsons, P. Pulsifer, J. McCusker, P. Fox, and D. McGuinness, 2011. "Multi-Disciplinary Sea Ice Ontologies." Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, December 2011.

Parsons, M. A., Ø Godøy, E Le Drew, TF de Bruin, B Danis, S Tomlinson, and D Carlson. 2011. "Managing Very Diverse Data for Complex, Interdisciplinary Science". Poster presentation at World Climate Research Program, Denver, CO, 25 Oct. 2011. http://conference2011.wcrp-climate.org/posters/C21/C21_Parsons_%20T256A.pdf.

Parsons, M. A., S. J. Khalsa, P. Pulsifer, R. Duerr, P. Fox, D. McGuinness, and J. McCusker, 2011. "The Many Dimensions of Sea Ice - A Beginning Ontology." Poster presentation at the Federation of Earth Science Information Partners Summer Meeting, Santa Fe, NJ, July 2011.

Parsons, M. A., R. Duerr, S. J. Khalsa, P. Fox, D. McGuinness, and P. Pulsifer., 2011. "The Semantic Sea Ice Interoperability Initiative." Poster presentation at the Federation of Earth Science Information Partners Winter Meeting, Washington, DC, January 2011.

Duerr, R. and **M. A. Parsons**. 2010. "Libre: Freeing Data through the Information Commons." Abstract GC23E-0956. Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 13 December 2010.

Parsons, M. A., S Gearheard, and C. McNeave. 2009. "Ethics, Collaboration, and Presentation Methods for Local and Traditional Knowledge for Understanding Arctic Change." *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract IN31B—1005. Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 16 December 2009.

Parsons, M. A. 2008. "The International Polar Year Data and Information Service." Poster presentation at the SCAR/IASC IPY Open Science Conference, St. Petersburg, Russia. 11 July 2008.

Parsons, M. A., McCaffrey, M. S., 2008. "Data and Scientists in a Sustained Arctic Observing Network." Poster presentation at the 2nd International Polar Year (IPY) workshop on Sustaining Arctic Observing Networks, Edmonton, Canada. 9-11 April 2008.

- McCaffrey, M. S., and **M. A. Parsons**. 2007. "International Polar Year Data Information Service." Poster presentation at the Arctic Forum, Washington, DC 23-24 May 2007.
- Wilson, B. E., **M. A. Parsons**, and G. Palanisamy. 2006. "The DADDI Project: Delivering a Working Prototype for Arctic Coastal Data." *Eos Trans. AGU*, 87(52), Fall Meeting Supplement, Abstract IN41A-0874. Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 14 December 2006.
- Brodzik, M. J., R. L. Armstrong, and **M. A. Parsons**. 2006. "Graphical representation of Cold Land Processes Experiment snow pit data" Poster presentation at 74th Annual Western Snow Conference, Las Cruces, NM. 14-15 April 2006.
- Duerr, R., **M. A. Parsons**, and J. Beitler. 2005. "Distributed Data Management for the Long Term." *Eos Trans. AGU*, 86 (52), Fall Meeting Supplement, Abstract IN31B-1156. Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 7 December 2005.
- Armstrong, R., M. J. Brodzik, and **M. A. Parsons**. 2005. "Graphical Representation of Snow Pit Data from CLPX." *Eos Trans. AGU*, 86 (52), Fall Meeting Supplement, Abstract C21A-1054. Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 6 December 2005.
- Duerr, R., **M. A. Parsons**, R. Weaver. 2004. "The International Polar Year: Making Data and Information Available for the Long-Term." *Eos Trans. AGU*, 85(47), Fall Meeting Supplement, Abstract C21A-0962. Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 14 December 2004.
- Weaver, R., **M. A. Parsons**, and R. G. Barry. 2004. "Glaciological Data Management from IGY57 to IPY07 — Lessons from the WDC Glaciology, Boulder." *Eos Trans. AGU*, 85(47), Fall Meeting Supplement, Abstract C21A-0963. Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 14 December 2004.
- Cline, D., K. Elder, R. Davis, J. Hardy, G. Liston, **M. A. Parsons**. 2002. "The NASA Cold Land Processes Field Experiment (CLPX)" Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 9 December 2002.
- Parsons, M. A.**, T. Zhang, 2002 "The Frozen Ground Data Center: New Data for the International Permafrost Community" *Eos Trans. AGU*, 83(47), Fall Meeting Supplement, Abstract B12A-0784. Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 9 December 2002.
- Parsons, M. A.**, R. G. Barry, and A. Frei. 1999. "Recent Developments at NSIDC in Cryospheric Data for Model Verification." Poster presentation at the Symposium of the International Glaciological Society, Zurich, Switzerland, 16-20 August 1999.
- Parsons, M. A.**, T. Zhang, and R. G. Barry. 2004. "New Developments at The Frozen Ground Data Center." Poster presentation at the European Geosciences Union, Nice, France, 25 April 2004.
- Parsons, M. A.**, T. Zhang, R. G. Barry, and J. Brown. 2001. "The Frozen Ground Data Center at NSIDC." Poster presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, 10-14 December 2001.