Eric Calais - Publications

I. International journals

Published

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III. Books

Science et conscience dans la post-urgence du séisme d'Haïti, eds. L'Harmattan, Paris, 92 pages, mars 2017 [in French].

IV. Communications

Prof. Calais co-authored about 150 presentations at national and international meetings, including the American Geophysical Union Fall and Spring meetings, the International Union of Geodesy and Geophysics General meetings, the European Geophysical Union annual meetings. Invited presentations are listed below.

V. Invited Lectures and Seminars

- Les Houches School of Physics, October 1998.
- National Committee of Geographic Information (CNIG), France, January 1999.
- Regional Council for Geographic Information (CRIGe), France, March 1999.

- Presentation to the Senate Committee for Space, France, July 1999.
- French National Program on Natural Hazards (PNRN), Paris, January 2000.
- French Ministry for Research and Technology, Paris, February 2000.
- 10th General Assembly of the Wegener Project, San Fernando, September 2000.
- International GPS Service Analysis Center Workshop, Washington DC, September 2000.
- American Geophysical Union, Fall meeting, San Francisco, 2000.
- National Committee for Geodesy and Geophysics (CNFGG, France), January 2001.
- Workshop on the Geodynamics of the western part of the Eurasia-Africa plate boundary (Azores-Tunisia), San Fernando, June 2001.
- International Conference on Seismic Risk in the Caribbean and Central America, Santiago, Dominican Republic, Fall 2001.
- Interamerican Development Bank Seminars Series on Natural Hazards, Port-au-Prince, Haiti, Fall 2002 (3 lectures).
- Workshop on the Geodynamics of Central Asia, Bishkek, Kyrgyztan, Fall 2002.
- Heiskanen Conference, Ohio State University, Fall 2002.
- American Geophysical Union, Fall meeting, San Francisco, 2003.
- Scientech Club, Indianapolis, Spring 2004.
- U.S. - Africa workshop on "Anatomy of Continental Rifts", Addis Ababa, June 2004.
- U.S.-Japan Natural Resources (UJNR) Panel on Earthquake Research October 12-16, 2004, Pacific Grove, California.
- Workshop on the Geodynamics of Central Asia, University of Paris 6, France, January 2005.
- W. Hinze Geophysics Symposium, Purdue University, November 2005.
- Workshop on Faults, Earthquakes, and Geodesy, Invited Lecture, Nov. 2005, Montpellier, France.
- UNAVCO Science Workshop, *"Geodetic strain in plate interiors"*, March 2006.
- USGS National Seismic Hazard Workshop, *"Intraplate deformation in North America, a CEUS perspective"*, Boston, May 2006.
- Montreal Earth Observatory, *"Deformation of Continents: from stability fo breakup – Some constraints from GPS geodesy"*, Montreal, April 2007.
- 26th ECGS Workshop on Active Volcanism and its Relation with Continental Rifting, Luxembourg, November 19-21, 2007.
- American Geophysical Union, Invited Speaker, session G13 Plate motions and Deforming Zones, December 2007.
- Geospatial Sciences for Sustainable Development in Africa - Global Dialogue on Emerging Science and Technology (GDEST), Cape Town, South Africa, March 17-19, 2008.
- European Geophysical Union, Keynote Speaker, Vienna, April 2008.
- AfricaArray meeting, Keynote Speaker, Cape Town, June 2008.
- University of Dar Es Salaam, Tanzania, August 2008 – Principles of GPS Data Processing.
- WEGENER 2008 - 14th General Assembly of WEGENER, Darmstadt, September 2008.
- IASPEI General Assembly, Invited speaker, Cape Town, January 2009.
- Workshop #2 of the Central and Eastern United States (CEUS) Seismic Source Characterization for Nuclear Facilities Project, Invited Expert, February 18-20, 2009, Electric Power Research Institute, Palo, Alto, CA.

- Lecturer and instructor, High Precision GPS Data Processing for Geodynamic Applications, African Institute for Mathematical Sciences, Cape Town, South Africa, July 20-24, 2009.
- Lecturer and instructor, Advanced Workshop on "Evaluating, Monitoring and Communicating Volcanic and Seismic Hazards in East Africa", Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy, August 17-28, 2009.
- Invited panel member, "Monitoring North American Geoid Change", NOAA workshop, Boulder, Co, October 21-23, 2009.
- Alliance for Risk Management and Continuity of Activities, Haiti (AGERCA), *"The January 12, 2010, Haiti earthquake, why it happened, how to prepare"*, January 2010.
- GRAHN colloquium (Groupe de Réflection pour une Haiti Nouvelle), Montreal Polytechnic University, *"The January 12, 2010, Haiti earthquake and its tectonic context"*, March 2010.
- U.S. State Department conference on "Rebuilding for Resilience: How Science and Engineering Can Inform Haiti's Reconstruction", *"The January 12, 2010 and future seismic hazards in Haiti"*, March 2010.
- UNAVCO Science Workshop, *"The January 12, 2010, Haiti earthquake and its tectonic context"*, March 2010.
- Congressional briefing, Washington DC, *"The January 12, 2010, Haiti earthquake: chronicle of a disaster foretold"*, April 2010.
- Broad audience conferences in Haiti (Cap Haitian, Ouanaminthe, Fort Liberté), *"Seismic hazard in Haiti: scientific context"*, April 2010.
- Conference to high school science teachers in Haiti, *"The January 12, 2010, Haiti earthquake and its tectonic context"*, April 2010.
- Understanding Risk, organized by the World Bank, Washington DC, *"The January 12, 2010, Haiti earthquake and its tectonic context"*, June 2010.
- United Nations country team meeting, Haiti, *"Seismic threat in Haiti"*, September 2010.
- Southern California Earthquake Center annual meeting, *"The January 12, 2010, Haiti earthquake: a reality check"*, September 2010.
- Congress of Scientific Haitian Diaspora, *"Haiti's tectonic context and the January 12, 2010 earthquake"*, Montréal, Canada, March 2010.
- UNAVCO Annual meeting, *"Haiti earthquake response"*, Boulder, Co, March 2010.
- U.S. State Department conference on "Science and Engineering for Earthquake Resilience", *"The Haiti earthquake and future seismic hazards in Haiti"*, Miami, March 2010.
- U.S. Congressional Briefing on the 2010 Haiti earthquake, *"Chronicle of a Disaster Foretold"*, May 2010.
- Dominican Republic Geological Society meeting, *"The M7.0, 2010, Haiti earthquake: context and mechanism from an integrated geodetic study"*, Santo Domingo, July 2010.
- American Geophysical Union Joint Assembly, *"The M7.0, 2010, Haiti earthquake: context and mechanism from an integrated geodetic study"*, Brazil, August 2010.
- American Geophysical Union Joint Assembly, *"Engaging Haiti on the path toward earthquake safety"*, Brazil, August 2010.
- FUNDGLODE conference, *"Seismic hazard in Hispaniola, level of threat, ways to move forward"*, Santo Domingo, Dominican Republic, August 2010.
- Southern California Earthquake Center (SCEC) annual meeting, *"The M7.0, 2010, Haiti earthquake: context and mechanism from an integrated geodetic study"*, Palm Springs, Ca, September 2010.

- U.S. National Science Foundation workshop on RAPID grants for the Haiti 2010 earthquake, *"Science and engineering research for sustainable earthquake safety in Haiti"*, September 2010.
- Incorporated Research Institutions for Seismology (IRIS) workshop, *"Lessons for seismic hazard and societal impact in the Caribbean"*, San Jose, Costa Rica, October 2010.
- Meeting of the G12, Group of International Donors in Haiti, *"Seismic hazard in Haiti: the 2010 earthquake and beyond"*, October 2010.
- American Geophysical Union fall meeting, *"The January 12, 2010, Mw 7.0, Haiti earthquake: Context and mechanism from an integrated geodetic study"*, San Francisco, December 2010.
- American Geophysical Union fall meeting, *"The January 12, 2010, Haiti earthquake: Science and Engineering for Earthquake Resilience"*, San Francisco, December 2010.
- International Conference on "Building Back Better Communities" in Haiti, *"Seismic hazard in Haiti"*, Port-au-Prince, Haiti, January 2011.
- Workshop on Seismic Risk Reduction, Oxford University, U.K., *"The 2010 Haiti earthquake: moving forward"*, February 2011.
- American Association for the Advancement of Science (AAAS) annual conference, *"The January 12, 2010, Haiti earthquake: a science diplomacy opportunity"*, January 2011.
- Multidisciplinary Center for Earthquake Engineering Research (MCEER) seminar series, *"Quantification of seismic hazard in Haiti"*, March 2011.
- U.N. Fund for Population conference on Natural Disasters, Population, and Development, *"Population and seismic risk"*, March 2011.
- Seismological Society of America Annual Meeting, *"Present-day strain accumulation in the New Madrid seismic zone from GPS geodesy"*, April 2011.
- U.N. Headquarters Press Briefing on *"Seismic hazard and risk reduction in Haiti in the wake of the 2010 earthquake"*, April 2011.
- Clinton-Bellerive Commission on the Reconstruction of Haiti, invited presentation on *"Seismic hazard and risk reduction in Haiti in the wake of the 2010 earthquake"*, July 2011.
- UNDP office, Dominican Republic, conference on *"Seismic hazard and risk reduction in Hispaniola in the wake of the 2010 earthquake"*, September 2011.
- UN-Habitat workshop on Urban Planing for the Port-au-Prince Metropolitan Area, invited presentation on *"Risk Prevention Plans: A Tool for Reasoned Urban Planing"*, November 2011.
- World Bank workshop on Natural Hazards, invited presentation on *"Seismic hazard and risk reduction in Haiti"*, October 2011.
- Red Cross International Federation, workshop on Educating the Media on Risk Reduction, invited presentation on *"Natural hazards and risks: the proper messages"*, December 2011.
- Asian Seismological Commission, 9th Assembly, Ulan Baatar (Mongolia), *"Kinematics and Dynamics of Present-Day Deformation in Asia*, September 2012.
- Syracuse University Department of Earth Sciences, Annual Holmes Lecture, Syracuse, USA, April 2013.
- UNESCO Expert Meeting on *"Earthquake and Tsunami Hazard in Northern Haiti: Historical Events and Potential Sources"*, Port-au-Prince, Haiti, July 2013.
- Ecole Normale Supérieure, Paris, Center for Environment Studies, invited lecture on *"Earthquake Hazard, Societal Impacts"*, Paris, October 2013.

- Royal Astronomical Society (U.K.) workshop on Earthquakes: from Mechanics to Mitigation, invited lecture on *"From hazard to mitigation in the wake of the 2010 Haiti earthquake"*, London, U.K., February 2014.
- INERIS Science Workshop on "Vulnerability, Risk, and Disasters", invited lecture on *"Earthquake hazard, lessons learned from the 2010 Haiti earthquake"*, Nancy, France, November 2014.
- Workshop for the Delivery of the Post-earthquake ANR Program, invited lecture on *"An Integrative Curriculum in Disaster Risk Reduction for Haiti"*, Port-au-Prince, Haiti, December 2014.
- French Committee for Geodesy and Geophysics, Conference on GNSS and Science, invited lecture on *"Recent contributions of space geodesy to Earth's deformation*, Paris, January 2015.
- First International Congress of Engineers, Architects and Surveyors/Second Panamerican of Construction. Colegio Dominicano de Ingenieros, Arquitectos y Agrimensores (CODIA), Santo Domigo, Dominican Republic, May 2015.
- French Geological Society Conference on Seismic risk, *"Risk reduction in the aftermath of the 2010 Haiti earthquake"*, Paris, June 2015.
- University of Grenoble, Geophysics Department, Seminar series on Urban Seismology, Seismic hazard assessment and risk analysis, Grenoble, July 2015.
- French-Japanese Symposium on Earthquakes and Triggered Hazards, *"Large earthquakes in stable continental plate interiors: the need for a new paradigm"*, Orléans, France, September 2015.
- Colloquium on "Exploring the Unpredictable", Institute for Risk Management, invited lecture on *"From ground motion prediction to preparedness decision: risk mitigation in the wake of the 2012 Haiti earthquake"*, Paris, November 2015.
- Scientific workshop of the SYNAPS project (Synergy between Scientists and Engineers to Improve Seismic Risk Assessment), Cachan, November 2015.
- Doctoral School Annual workshop, University of Montpellier, *"Risk reduction in the aftermath of the 2010 Haiti earthquake"*, Montpellier, France, March 2016.
- UNESCO Expert Meeting on *"Earthquake and Tsunami Hazard in the Southern Dominican Reupblic"*, Santo Domingo, Dominican Republic, May 2016.
- Académie Royale des Sciences d'Outre-Mer de Belgique, *"Risk reduction in the aftermath of the 2010 Haiti earthquake"*, Bruxelles, May 2016.
- French Academy of Sciences, Meeting of the Science Application Committee, *"Science and seismic risk: from pre-earthquake space geodesy to post-emergency reconstruction*", Paris, May 2016.
- Academia dei Lincei, Coloquium on the Resilience of Art Cities to Natural Catastrophes, Rome, October 2016.
- Biennial meeting of the French Strong Ground Motion Network, *"Seismic risk reduction in Haiti: is there a before and after January 2010?"* Guadeloupe, November 2016.
- ENS–ENA colloquium on "Gouverner en connaissance de cause. Comprendre, prévoir et décider", *"Du rôle de l'expert dans la décision publique"*, March 2017.
- Seismological Society of America, 2017 Annual Meeting, *"A New Paradigm for Large Earthquakes in Stable Continental Plate Interiors"*, Denver, Colorado, April 2017.

- Vienna Catchment Science Symposium, "Explaining phenomena through models of different complexity", *"From observation to decision in aftermath of the 2010, Haiti, earthquake: complexity at the heart"*, Vienna, Austria, April 2017.
- Geological Society of America, 2017 Annual Meeting, *"A New Paradigm for Large Earthquakes in Stable Continental Plate Interiors"*, Seattle, Colorado, October 2017.
- European Seismological Commission, 2018 Annual Meeting, *"A New Paradigm for Large Earthquakes in Stable Continental Plate Interiors"*, Malta, September 2018.
- WEGENER Meeting, *"Large Earthquakes in Stable Continental Plate Interiors"*, Grenoble, September 2018.
- Geological Society of France Special Colloquium on Caribbean and Alpine Geodynamics, a Trinute to Marc Tardy, October 2018.
- 6th International Colloquium Historical Earthquakes, Paleoseismology, Neotectonics and Seismic Hazard, *"Large Earthquakes in Stable Continental Plate Interiors"*, Han-sur-Lesse, Belgium, October 24-26, 2018.

- Southwestern University, Georgetown, Texas, March 1993.
- University of Texas, Austin, March 1994.
- University of Strasbourg, School and Earth Observatory, France, March 1999.
- Veinig Meinesz School of Geodynamics, Utrecht, March 1998.
- University of Brest, European Institute of Marine Studies, France, March 2000.
- Ecole Normale Supérieure, Paris, France, May 2000.
- University of Montpellier, France, November 2000.
- Côte d'Azur Observatory, France, April 2001.
- University of Grenoble, France, Department of Geophysics, May 2001.
- University of Illinois, Chicago, Dept. of Earth Science, October 2003
- U.S. Geological Survey (USGS) Semimar Series, Menlo Park, May 2004
- Oxford University, United Kingdom, Dept. of Earth Sciences, June 2004.
- University of Illinois, Champaign-Urbana, Dept. of Geology, September 2004.
- Northwestern University, Dept. of Geological Sciences, October 2004.
- University of Arkansas, Dept. of Geology, February 2006.
- Indiana University, Dpt. of Geology and Geophysics, February 2008.
- University of Brest, UMR Oceanic Domains, May 2008.
- University of Brest, European Institute for Marine Studies, June 2008.
- University of Missouri, Dept. of Geosciences, October 2008.
- Virginia Institute of Technology, Department. of Geosciences, October 2009.
- Lamont Doherty Earth Observatory, and Department of Earth and Environmental Science at Columbia University, October 2009.
- Institut de Physique du Globe, Strasbourg, France, November 2009.
- Université d'État d'Haïti, Port-au-Prince, August 2010.
- Purdue University, College of Civil Engineering, February 2011.
- Northwestern University, Dept. of Earth Sciences, October 2011.
- Ecole Normale Supérieure, Paris, General Seminar, May 2012.
- Institut de Physique du Globe de Paris, General Seminar, May 2012.
- San Diego State University, Geophysics Seminar, October 2012.

- Institut de Radioprotection et de Sureté Nucléaire (IRSN), General Seminar, February 2013.
- Ecole Normale Supérieure, Paris, Geophysics Seminar, February 2013.
- University of Leeds, Institute of Geophysics and Tectonics Seminar, May 2013.
- University of Nice, GeoAzur Seminar Series, May 2013.
- Ecole Normale Supérieure, Paris, Center for Environment Studies, October 2013.
- Oxford University, United Kingdom, Dept. of Earth Sciences Seminar Series, February 2014.
- University Pierre and Marie Curie (Paris 6), Geosciences Department Seminar Series, February 2014.
- University of Rennes, Geosciences Department Seminar Series, September 2014.
- University of Nancy, Research Center for Petrography and Geochemistry Seminar Series, November 2014.
- University of Montpellier, Earth Sciences Department Seminar Series, January 2015.
- University of La Rochelle, Geosciences Seminar Series, January 2015.
- University Antilles-Guyane, Earth Science Department Seminars, February 2015.
- Cambridge University, U.K., Bullard Labs Seminar Series, March 2015.
- GeoForschungZentrum (GFZ), Potsdam, Germany, March 2015.
- University of Utrecht Geophysics Seminar Series, The Netherlands, March 2015.
- University of Nantes, Geosciences Seminar Series, March 2015.
- Total (Pau, France), Geophysics Research Seminar, January 2016.
- Los Alamos National Laboratory Colloquiim Series, December 3, 2018.