





## List of speakers & biographies

**Sergey BARTALEV** has PhD degree and Doctor of Sciences degree in remote sensing and experimental physics. His research interests are focused at the development of automated methods for land cover mapping and monitoring over large areas using Earth observation data. Prof. Sergey Bartalev is Head of Terrestrial Ecosystems Monitoring Laboratory at the Space Research Institute of Russian Academy of Sciences (Moscow, Russia). He is actively involved into development of the remote sensing method for the agricultural monitoring in Russia.

Lieven BYDEKERKE is an agricultural engineer who started his career working for the United Nations Environment Programme in Kenya. Since more than 10 years he works at VITO, where he is responsible for the Remote sensing Applications Research Team. He managed the Global Monitoring for Food Security Project, which aimed at developing Earth Observation based services in support of Food Security Monitoring in Africa. He is actively involved in many agricultural monitoring projects, specifically in Africa such as the FP7 funded AGRICAB project focused on Capacity Building in Remote sensing. Since November 2013 he also coordinates the SIGMA project, aiming to develop innovative methods to improve monitoring of Agriculture and its impact on the environment.

Jim CRUTCHFIELD studied agronomy at Virginia Tech, then attended George Mason University where he studied remote sensing. He began his career in cartography with the Defense Mapping Agency building terrain analysis maps from high resolution satellite imagery interpretation. In 1990 he was appointed to the special cadre for the deployment of the agency's first GIS system. After completing the agency's computer science curriculum in database management he worked in the agency's information technology group as a computer programmer where he led the help desk and served as a database administrator of several databases tracking satellite imagery acquisitions for mapping applications. In 1997 he joined the Foreign Agricultural Service as a crop assessment specialist. At the Foreign Agricultural Service he combines his interests and experience in information technology, monitoring foreign news, geographic information systems, and satellite image interpretation into the field of agricultural monitoring and production assessments. Regional reporting responsibilities have included the US, South Asia, Afghanistan, Indonesian and Australia. At FAS he utilizes multiple information sources to assess crop conditions, provide assessments to produce a monthly production forecast report for major grains, oilseeds and cotton in support of the USDA WASDE. As an analyst for the Foreign Agricultural Service, Mr. Crutchfield has traveled to international agricultural regions to assess agricultural conditions, establish contacts with statistical agencies, private industry, meet with farmer organizations, and others responsible for the monitoring and reporting on crop conditions in the host countries.

Michel DESHAYES has engineering degrees from École Polytechnique (1976) and ENGREF (forest, water and rural engineering, 1978), and a doctor-engineer degree in remote sensing applied to vegetation (Univ. Toulouse, 1981). From 1980 to 1987, he was posted in the French Institute of Pondichéry (India), where he carried out researches in tropical forest ecology and was later appointed as Deputy Director of the Institute. In 1987, he joined the Tropical forestry department, at ENGREF, Montpellier centre. His activities covered educational engineering (organisation of training modules and a collective yearly one-month field mission in an African national park) and research activities in remote sensing applied to forests. In 1990, he moved to the Cemagref-ENGREF remote sensing and GIS laboratory, Montpellier, France (now renamed as UMR TETIS, Territoires, Environnement, Télédétection et Information Spatiale). Since that time, he has been in charge of

forest, vegetation and biodiversity applications in the laboratory. He has been collaborating with French and European space agencies, JRC (Ispra), forest agencies like French forest inventory service and national or regional environment departments. He has been leading the laboratory participation in more than a dozen of European research projects, dealing with agriculture, forestry, forest fires and biodiversity. Since 1995 he has been serving as an EO and GIS expert for DG Research and DG INFSO. Since October 2013, he is seconded by the French Ministry of Agriculture to the GEO (Group on Earth Observations) Secretariat, where he is coordinating the GEOGLAM (Global agricultural monitoring) programme.

Carlos Marcelo DI BELLA was born in Buenos Aires, Argentina, in 1969. He graduated as an agronomist (Faculty of Agronomy, University of Buenos Aires, Argentina) in 1994 and received a PhD degree from the Institut National Agronomique Paris-Grignon, France, in 2002. Since 1998, he has been a staff researcher at the Institute of Climate and Water (INTA, National Institute of Agricultural Technology) and since 2006 at the National Scientific and Technical Research Council (CONICET). He is also a director of postgraduate career: remote sensing and information systems (GISs) applied to the study of natural resources and agricultural production (Alberto Soriano Graduate School, Faculty of Agronomy, University of Buenos Aires, Argentina). His research focuses on the application and development of remote sensing and the application of GISs to natural resources and agroecosystems study, management, and monitoring.

Tassos HANIOTIS is currently the Director of the Economic Analysis, Perspectives and Evaluations Directorate in the Directorate General for Agriculture of the European Commission. He is also acting Director of the Direct Support, Management of Market Measures and Promotion Directorate. He previously held posts as Head of Unit in the Agricultural Policy Analysis and Perspectives unit and the Agricultural Trade Policy Analysis unit in the same Directorate General, as Member and subsequently Deputy Head of the Cabinet of former European Commissioner for Agriculture Franz Fischler (with respective responsibilities the preparation of the 2003 reform of the Common Agricultural Policy, and the agricultural chapter of the Doha WTO Round and the EU-Mercosur negotiations), and as the Agricultural Counsellor of the European Commission's Delegation in the United States. He holds Ph.D. and M.S. degrees in Agricultural Economics from the University of Georgia, USA, and a B.A. in Economics from the Athens University of Economics and Business, in his native Greece. Before joining the European Commission, he spent six months as a visiting Fellow at the Centre for European Agricultural Studies, Wye College, University of London, focusing on EU-US agricultural trade relations in the Uruguay Round of GATT negotiations. He is currently a member of the International Agricultural Trade Research Consortium Executive Committee.

Katherine HARLE is the co-Director of the Agricultural Adaptation Sciences Section of the Australian Bureau of Agricultural Resource Economics and Science (ABARES). The section provides policy-relevant scientific advice on issues relating to adaptation and climate change mitigation by Australian primary industries. Dr Harle has extensive experience in researching and leading teams investigating a range of issues affecting Australian agriculture including: identifying the impacts and strategies for adapting to climate variability and climate change; reducing greenhouse gas emissions from livestock and cropping activities; and monitoring and forecasting crop performance using satellite data. Her work has focussed on climate change, natural ecosystems and agricultural systems. Prior to joining ABARES, Dr Harle has been a senior scientist at the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO) and a research scientist at the Australian Nuclear Science and Technology Organisation (ANSTO). Through her research career she led and been involved in research into the impacts of climate change (and potential adaptation options) on Australian primary industry, the energy sector and water supplies. She has also conducted research identifying past climate change in Australia, its impacts on the natural environment and its interaction with human occupation of Australia. Dr Harle has a PhD from Monash University, Australia.

**Michel JAMBOU** is Project Manager – Environment -Climate Change - in the Directorate General for Development and Cooperation - EuropeAid for intra-regional (Africa Caribe Pacific ) programs in Brussels (DEVCO E3). Prior to joining DEVCO Headquarter in March 2013, he spent more than 10 years as Project Manager in European Union Delegation in Central America and Caucasus region notably as Food Security Officer for Georgia and Armenia (2004-2009).

lan JARVIS works at the Earth Observation Service, Science and Technology Branch, Agriculture and Agri-Food Canada (AAFC). Ian joined Research Branch at AAFC in 1992, leading regional and national land use studies and later agri-environmental data development for the National Land and Water Information Service. Ian currently provides leadership for the Earth Observation service which includes both space based monitoring and soils inventory activities in Canada. Internationally lan leads the GEO Joint Experiments for Crop Assessment and Monitoring (JECAM) and is a member of the G20 GEO Global Agricultural Monitoring (GEOGLAM) implementation team, co-leading the research coordination component. The Earth Observation Service strives to deliver an innovative world class agricultural monitoring service for Canada that contributes to an international monitoring "system of systems" to support global food security and a profitable Canadian agricultural sector.

**David JOHNSON** is a Geographer for the National Agricultural Statistics Service (NASS) which is the statistical arm of the United States Department of Agriculture (USDA). His research and operational expertise is targeted toward the monitoring of production agriculture from satellite remote sensing with particular focus on crop type mapping and yield modeling. He has a Master's degree in Geography from the University of North Carolina and bachelor's degree in Electrical Engineering from the University of Colorado. David is also a member of the Landsat Science Team.

Chris JUSTICE received his Ph.D. from the University of Reading, UK and is currently the Chair of the Department of Geographical Sciences, University of Maryland. He is co-lead of the Global Component of the GEOGLAM program. He is Co-chair of the International GOFC-GOLD Fire Implementation Team and Program Scientist for the NASA Land Cover Land Use Change Program. He has been a member of the NASA MODIS and VIIRS Science Teams since their inception and has been instrumental in the land observation capabilities and products from those systems. His research includes the development and use of time-series earth observation satellite data and has developed systems for global agriculture, fire and land use monitoring.

**Benjamin KOETZ** works as an Application Scientist in the Earth Observation Directorate of the European Space Agency. His tasks focus on the development of Earth Observation applications in close collaboration with the user community, scientists and EO service providers. His background is in Applied Environmental Sciences and holds a PhD with a specialization in Earth Observation.

Tesfave KORME ODA was born in Ethiopia in 1966. He completed his secondary studies from Addis Technical School in 1984. He earned his B.Sc. Degree in Geology from Addis Ababa University in 1989 with great distinction. He was recruited at the same university as graduate assistant in September 1989. He obtained M.Sc. degree in geology in 1992, and the topic of his thesis was "Application of Landsat-TM data in structural and lithologic mapping of Lake Ziway area in Ethiopia". He processed the Landsat-4 data for his master thesis at University of Cagliary in Italy in 1992. In May 1993, He was awarded a scholarship by French Government to undertake a Ph.D. study at Pierre and Marie Curie University in Paris, France. Before starting the his Ph.D. programme, he had to do a DSS programme (specialized superior study) in Remote Sensing and GIS as a prerequisite to Ph.D study in 1994. He obtained his Ph.D. degree in quantitative modeling and GIS in 1997 with very great distinction from Pierre and Marie Currie University in Paris, France. He returned to University of Addis Ababa, Ethiopia in 1997 and became associate professor in 2000. He has been teaching GIS, RS and mapping courses at graduate and undergraduate levels. He had established M.Sc. programe in Remote sensing and GIS at Addis Ababa University, Faculty of Natural Science in 2000. He had published more than 30 research papers in peer review journals. In 2005, he joined Regional Centre for Mapping of Resources for Development (RCMRD) as Senior Remote Sensing Officer. He was promoted to Director of RS, GIS and Mapping in 2007. During his career at RCMRD he was able to manage over a hundred projects and also able to publish a number of research articles. SERVIR-Africa is one of the continuing projects that he has been involved in the implementation. SERVIR-Africa is a project that RCMRD has been implementing jointly with NASA since 2008. Its main focus areas are basically addressing the GEOSS nine societal benefit areas and the funding is obtained from USAID. His research interest areas are: application of Remote Sensing and GIS in natural resources management, environmental monitoring, disaster management and early warning.

Nataliia KUSSUL is Professor, Doctor of sciences (second scientific degree) in Applied Mathematics, Associate Director of Space Research Institute, Head of Department of Space Information Technologies and Systems. She is also Scientific secretary of specialized council on thesis defence at Space Research Institute, Professor of National Technical University of Ukraine "Kiev Polytechnic Institute" (computer science & intelligent systems, programming languages), Member of CEOS Working Group on Information Systems and Services (WGISS) and Expert of Higher Attestation Commission of Ukraine in the area of information technologies. Her main areas of scientific researches: intelligent data processing methods, satellite data processing, risk management, geospatial intelligence, neural networks, Grid technologies, distributed software systems, parallel computations. Nataliia is the author of more than 200 scientific publications, including five monographies and two educational books.

Olivier LEO is agronomist engineer (INA Paris, 1974), with a specialization in Soil sciences and natural resources, Olivier LEO has been successively responsible of a Soil and Water Laboratory (ORMVAH Marrakech, Morocco), then worked as expert in consultant firms (SCET- AGRI, BDPA, Paris) before becoming Director of SYSAME (1990-94) a French company developing services in remote sensing and GIS. He participated in numerous studies on rural development, agro-industrial projects, natural resources inventories and agricultural statistics, both in developing countries (Morocco, Burkina Faso, Cameroon, Chad, Mali, Nigeria, Niger, Haiti, Mauritius ...) and Europe (Greece, France, Romania...). In 1994, Olivier LEO joined the MARS Unit of the Joint Research Centre in (ISPRA, Italy), and has been in charge of the GEOCAP project developing, in close relationship with DG AGRI, methods and information systems for the management and control of the EU Common Agriculture policy ("Control with Remote Sensing", Land parcel information systems for the arable or permanent crops) with common standard and technical tolerances. He contributed also in 2002- 2006, in the implementation of this acquis communautaire by the 12 new EU Member-States of Eastern Europe. Since end 2006, Olivier LEO lead the FOODSEC Action of JRC ensuring crop monitoring outside Europe and providing Early warning on Food Security issues with a focus on Sub Saharan Africa in support to EC Food Security Policies. He presently acts as a one of co-chair of the GEO Community of practice on Global Agriculture Monitoring.

**Michel MASSART** is seconded from DG JRC to DG ENTR. At DG ENTR, he is currently working in the Copernicus Service Unit where he is in charge of the Land service with a specific attention to the Global Land component of this Service. Previously, Michel Massart has worked during 10 years at the DG JRC in Ispra, on global land cover mapping and in the forest domain, and during 7 years in the Food Security Action.

**Terence NEWBY** has a background in Forestry and Environmental studies. He was programme manager for Earth Observation at the Institute for Soil Climate and Water of the South African Agricultural Research Council from 1990 to 2011. During this time he was involved in, amongst other projects, developing the methodology and system used by the national crop statistics consortium that supplies data to the national crop estimates committee. He has been involved in the GEO CoP for agriculture for a number of years and is currently seconded to the CSIR to manage the National Earth Observation and Space secretariat that provides the secretariat services to SA-GEO, the national earth observation community. Mr Newby is a co-chair of the SA-GEO Agricultural Community of Practice.

Gilles OLLIER is Head of Sector - Earth Observation, Directorate-General for Research & Innovation, European Commission. Gilles is a geologist by background and he graduated at the French Institute Petroleum. He has been working at the French Oceanographic Institute (IFREMER) for 10 years as a marine geoscientist. He has notably been involved in the International Ocean Drilling Program (IODP) and contributed to it on the occasion of a sabbatical year at Columbia University. He joined the European Commission, DG research in 93 where he has done most of his career in the Environment Program. He is now the Head of the Sector on Earth Observation contributing to implement Research activities in this domain and acting as contact point for the European Commission for the international GEO initiative (Group on Earth Observation). In this context they deal with the development of Earth Observation applications through research and innovation activities for various societal challenges such as food security.

Michael SIMPSON is the Executive Director of Secure World Foundation, after joining SWF as the Senior Program Officer in September 2011 following seven and a half years as President of the International Space University (ISU). Simpson holds a post as Professor of Space Policy and International Law at ISU. He is a corresponding member of the International Academy of Astronautics. After 23 years of service, Simpson retired from the Naval Reserve in 1993 with the rank of Commander. He is the author of numerous scholarly papers, presentations, articles and book contributions and his practical experience includes service as a Political Military Action Officer, observer representative to the UN Committee on the Peaceful Uses of Outer Space, and member of the Association of Space Explorers International Panel on Asteroid Threat Mitigation. He currently serves on the Commercial Spaceflight Safety Committee of the IAF. He received his Bachelors Degree magna cum laude from Fordham University in 1970 where he was elected to Phi Beta Kappa. He has also been elected to academic honor societies in the fields of political science and business management. He completed his Ph.D. at Tufts University, The Fletcher School of Law and Diplomacy, holds the Master of Business Administration from Syracuse University; and two Master of Arts degrees from The Fletcher School. He has also completed two prestigious one year courses in Europe: the French advanced defense institute (Institut des Hautes Études de Défense Nationale) and the General Course of the London School of Economics.

Joao SOARES was born in beautiful Capitólio, Minas Gerais State, Brazil. He graduated in Agricultural Engineering from the School of Rural Engineering of the Federal University of Viçosa, where he also obtained a Master of Science degree in Agricultural Meteorology, in 1981. He passed a PhD thesis in physics of remote Sensing at the University of Paris, France, in 1987. Joao joined the Brazilian Space Research Institute (INPE) in 1988, to which he is still affiliated, where he built his scientific career and served as the head of the Remote Sensing department and Director for the Earth Observations Branch. He joined GEO in January 2011 seconded by the Ministry of Science, Technology and Innovation of Brazil, serving as technical and scientific Expert for Agriculture and Capacity development.

**Shin-ichi SOBUE** got a master degree of engineering from Toyohashi university of Technology in Japan in 1989 and got a philosophical doctor of engineering from Kennedy-Western University in USA in 2000. His major is image data analysis of earth observation data. He is a general Manager of planning department of Remote Sensing Technology Center of Japan (RESTEC), acting as a point of contact of Asia rice crop monitoring team of Group on Earth observation satellites – Global Agriculture monitoring (GEO GLAM). He joined JAXA in 1989 and had been work for earth observation satellite ground system development and data research management. From April 2003 he was assigned to work for RESTEC from April 2013 under personal exchange agreement.

Kurt VANDENBERGHE is Director for Environment at the European Commission's DG Research and Innovation since July 2013. He previously worked as head of the cabinet of European Commissioner Janez Potočnik, first in charge of science and research (2008-2009) and subsequently in charge of environment policy (from 2010). Kurt was deputy head of Janez Potočnik's cabinet between 2004 and 2008, where he was in charge of coordinating the research area and the research framework programmes. Between 1999 and 2004, he was a member of the cabinet of European Research Commissioner Philippe Busquin, where he was in charge of life sciences, biotechnology, public health, space policy, transport, science and society issues, ethical questions and press and communication. Kurt joined the European Commission in 1996 as co-ordinator of the Commission's Intermodal Transport Task Force and of the Transport Research Programme. He subsequently was co-ordinator of DG Transport's relations with the European Parliament, the Economic and Social Committee and the Committee of Regions. Before entering the Commission, Kurt worked for 4 years as a manager at Ernst & Young Association Management, where he set up, managed and represented international trade associations. Assignments included FreightForward Europe, a lobby group of the world's nine largest freight forwarding companies, and the US automotive components industry. After reading French and Italian literature at the Katholieke Universiteit Leuven (KUL) and obtaining a degree in Public and International Affairs at the University Catholique de Louvainla-Neuve (UCL), Kurt gained a Master of Arts degree in International Relations at the Johns Hopkins University School of Advanced International Studies (S.A.I.S.) in Bologna, Italy and Washington D.C., US, Kurt is co-founder and board member of Journalismfund.eu and the VZW Scriptieprijs. He is married and has three children.

James VERDIN is a Physical Scientist with the USGS Earth Resources Observation and Science (EROS) Center. He is Principal Investigator for a collection of projects involving the use of remote sensing and modeling methods to address questions of hydrology, agriculture, and hydroclimatic hazards. Jim has led USGS activities in support of USAID's Famine Early Warning Systems Network since 1995. He has extensive experience in geographic characterization of drought hazards for food security assessment in Africa, Asia, and Latin America. Jim is active in advancing the use of remote sensing for drought early warning in the U.S. as well, in support of the National Integrated Drought Information System (NIDIS). He also coordinates evapotranspiration remote sensing for the USGS National Water Census. Prior to joining USGS, he worked eleven years with the U.S. Bureau of Reclamation. Jim has a B.S. from the University of Wisconsin-Madison and an M.S. from Colorado State University in civil and environmental engineering, and a Ph.D. in geography from the University of California, Santa Barbara.

**Bingfang WU** currently is a professor and the Division head of Digital Agriculture in the Institute of Remote Sensing and Digital Earth (RADI), Chinese Academy of Sciences, Beijing, China. He is member of Education Committee of Chinese Academy of Sciences, and he is co-chair of GE/GEOSS agriculture task. His research interests include the remote sensing applications in agriculture, water resource and ecology. Being the products of research projects, His team has developed CropWatch System, ETWatch System, DroughtWatch System.