

TRAVEL REPORT FORM

출장보고서

결 재	선임연구 원	팀장	부서장	원장
	02/17	02/17	02/17	02/18
협 조	박경원	김옥연	김형진	정진승

I. Reporter 보고자

Department 소속	Position 직위(직급)	Name 성명	Travel Date 날짜	Note 비고
기후변화연구팀	선임연구원	박경원	2016.2.1.-2016. 2.5	

II. Major Activities 주요업무 수행내용

1. Main Contents and Activities 주요내용 및 활동

- 1st GEO Programme Board Meeting 참석
- 프로그램 위원회 공동의장 선출
- 2016년 프로그램 리뷰
- 2017-2019년 GEO 프로그램 준비
- 향후 프로그램 위원회 일정 조정

2. Relevance to APEC Climate Center's Activities 결론 및 소감

- 2016-2025 새롭게 시작하는 GEO 2기 활동에 대한 각국의 대표와 기관과의 회의가 있었음.
- 작년에 마무리된 GEO 활동에 대한 보고와 리뷰가 있었고, 2016년 활동계획에 대한 회의를 진행함.
- 각각의 프로그램 내용에 따라 그룹으로 나누어서 활동하기로 함.
- 현재 한국대표로 한국항공우주연구원 김현옥 박사가 프로그램 위원회 및 집행위원회 대표로 참석 및 한국과의 연계를 위해 활동하고 있음.
- 미래부와 한국항공우주연구원에서 K-GEO를 정부 3.0에 맞추어 적극적으로 운영할 예정임.

III. References 참고사항

(with attachment of any information or report in case of attendance of conferences, workshops and meetings) 학술대회, 워크숍, 회의 등 참석 시 관련 정보 및 문서 첨부

1. Presented and Collected Materials 주요 수집자료

2. Suggestions and Remarks 권의사항

Dear Programme Board Participants,

This note is to inform you of the first meeting of the 2016 GEO Programme Board which will take place here in Geneva on Tuesday and Wednesday, 2-3 February 2016.

A draft agenda for the two-day meeting will be sent in early January. For planning purposes, however, the meeting will start at 09h00 on Tuesday, 2 February and end at 18h00 on Wednesday, 3 February.

If any of you need individual invitations for Visa purposes, please let us know, and we will do our best to issue those invitations before the holidays.

Thank you, in advance, for your willingness to participate on this Board in 2016, and all the best for a healthy and happy holiday season.

Barbara Ryan

Barbara J. Ryan

Director, GEO Secretariat

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<http://www.earthobservations.org>

1st GEO Programme Board Meeting

2-3 February 2016, GEO Secretariat
“Salle B”, Ground Floor, WMO building, Geneva

Meeting Objectives

- Appoint Programme Board co-chairs
- Review Programme Board membership in 2016
- Review transitional 2016 Work Programme
- Initiate preparation of 2017-2019 Work Programme
- Appoint Programme Board PO Observer seats on Executive Committee

2 February, 2016

	Topic	Who/Documents
08:30-09:00	Registration	
09:00-10:15	<i>Chair: GEO Secretariat</i> 1. Welcome and Opening • Secretariat Director • GEO Co-Chair 2. Adoption of the agenda 3. Introductions & overview of participants (Members / POs) 4. Overview of Terms of Reference of Programme Board	GEO Secretariat
10:15-10:45	5. Appointment of Programme Board co-chairs	
10:45-11:15	Break	
11:15-12:45	<i>Chair: Programme Board co-chair 1</i> 6. Lessons learned • Implementation Boards • DSWG & DMTF	IB Co-chairs DSWG & DMTF Co-chairs
12:45-13:45	Lunch	
13:45-14:45	7. Monitoring and Evaluation	GEO Secretariat
14:45-15:30	8. GEO Strategic Plan 2016-2025: Implementing GEOSS a. Implementation Mechanisms b. Cycle of Programme Board planning and reporting	GEO Secretariat
15:30-16:00	Break	

16:00-18:00	9. Review of transitional 2016 Work Programme a. Structure and implementation arrangements b. Overview of current activities i. Community Activities ii. Initiatives iii. Foundational Tasks c. Reporting through end 2016	<i>GEO Secretariat</i>
18:00	<i>Adjourn</i>	

Board members are invited to attend a no-host dinner from around 19:00-20:30. Casual clothing suggested.

3 February, 2016

Topic		Who/Documents
09:00-10:30	<i>Chair: Programme Board co-chair 2</i> 10. Preparation of the 2017-2019 Work Programme a. Implementation Plans b. Resources c. Candidate Flagships	
10:30-11:00	<i>Break</i>	
11:00-12:30	**Session 10 continued**	
12:30-13:30	<i>Lunch</i>	
13:30-14:30	<i>Chair: Programme Board co-chair 3</i> 11. Appointment of Programme Board PO Observer seats on Executive Committee a. Nominations b. Selection	
14:30-15:30	12. Messages for Executive Committee (8-9 March 2016)	
15:30-16:00	<i>Break</i>	
16:00-17:15	13. Next Steps a. Reporting cycle b. Milestones c. Meeting cycle (PB & ExCom) d. Expectations for WPSymposium	
17:15-17:30	14. AOB and Wrap up	<i>GEO Secretariat</i>
17:30	<i>Adjourn</i>	

Nominated by		Order	Title	Last Name	First Name	Email	Professional Affiliation	Expertise	Date
Members	Caucus								
Canada	Americas		Ms	Bourassa	Marie-Josée	marie-josee.bourassa@asc-csa.gc.ca	Program Advisor, Space Utilization Branch, Canadian Space Agency	Remote-sensing, program management, policy, geomatics, industrial engineering	05-Nov
			Mr	Jarvis	Ian	ian.jarvis@agr.gc.ca	Director, AgroClimate, Geomatics and Earth Observation (ACGEO) Division, Science and Technology Branch, Agriculture and Agri-	Agroclimatics, geomatics, remote sensing, soils science, agri-environmental monitoring.	05-Nov
Central African Republic	Africa		Mr	Padou	Lambert	padou_lamb@yahoo.fr	Ministry of Tourism and Environment	Ecotourism, protected areas, anthropology, policy.	27-Nov
China	Asia/ Oceania	Main	Dr	Li	Pengde	lipd@sbsm.gov.cn	Deputy Director General National Administration of Surveying, Mapping and Geoinformation of China; Co-Chair of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM).	GIS, mapping, cadastral applications.	21-Oct
		Alternate	Prof	Gu	Xingfa	guxingfa@radi.ac.cn	Professor and Deputy Director General of Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences (CAS)	Remote sensing applications, astronautics, high-resolution EO systems, data policy, program management.	21-Oct
Colombia	Americas	Main	Ms	Cordoba	Natalia Esperanza	ncordoba@ideam.gov.co nataliacordoba1552@gmail.com	Department of Ecosystem and Environmental Information of IDEAM	Vegetation cover issues, deforestation, climate change, carbon flows in forest ecosystems, international negotiations, policy, regulation and environmental institutions, international donors.	23-Oct
		Alternate	Mr	Cabrera Montenegro	Edersson	ecabreram@ideam.gov.co edersson.cabrera@gmail.com	Forest and Carbon Monitoring System Project Director, Institute of Hydrology, Meteorology and Environmental Studies - IDEAM	Remote sensing, GIS, digital image processing, forest monitoring system, carbon tracking.	27-Nov
		Alternate	Mr	Quiroga	Ricardo	hquiroga@ideam.gov.co		-----	02-Dec
Ecuador	Americas			Perugachi Salamea	Carlos Fernando	carlos.perugachi@inocar.mil.ec cperugachis@gmail.com	Lieutenant, Ecuadorean Oceanographic Institute (INOCAR)	Physical oceanography, naval sciences, hydrography.	18-Nov
Egypt	Africa		Prof	Ibrahim	Ayman El Dessouki	aeldessouki2011@gmail.com	Electronics Research Institute, NRC Building, El-Tahrir Street, Dokki, Giza, Egypt	Information systems, computer science, artificial intelligence, neural networks, knowledge-based systems, and robotics.	21-Oct
European Commission	Europe	Main	Dr	Annoni	Alessandro	alessandro.annoni@jrc.ec.europa.eu	Head, Digital Earth and Reference Data Unit, European Commission's Joint Research Centre (JRC)	Information Infrastructures and advancing research on multidisciplinary-interoperability, private sector, Information Technology applied to Earth and space sciences.	26-Oct
		Alternate	Dr	Craglia	Max	massimo.craglia@jrc.ec.europa.eu	Scientific Project Manager Digital Earth and Reference Data Unit, European Commission's Joint Research Centre (JRC)	Technical coordination of the INSPIRE Directive, socio-economic impact assessments, spatial data infrastructure (SDI), interoperability of multi-disciplinary e-infrastructures, civil engineering, urban and regional planning, applications of geographic information systems and science.	26-Oct
France	Europe		Prof	Ranchin	Thierry	thierry.ranchin@mines-paristech.fr	Professor (Directeur de Recherche) of MINES ParisTech	Applied mathematics, image processing in the field of Remote Sensing, use of Earth Observation data (as defined in GEOSS, i.e. satellite, in-situ data and models) for renewable energy resources assessment.	26-Nov
Gabon	Africa		Mr	Mambimba Ndjoungui	Aboubakar	aboubakar.mambimba@ageos.ga	Agence Gabonaise d'Etudes et d'Observations Spatiales (AGEOS)	-----	24-Nov
Germany	Europe	Main	Dipl.-Ing.	Dettmann	Carsten	Carsten.Dettmann@bmvi.bund.de	Federal Ministry of Transport and Digital Infra	Policy, Earth Observations and Spatial Information, Federal Ministry for the Environment, Federal Ministry of Transport, Building and Urban Development Nature Conservation and Nuclear Safety, International Nature Conservation, Ramsar Convention, Wadden Sea Cooperation.	16-Oct
		Alternate	Mr	Buesselberg	Thorsten	thorsten.buesselberg@dwd.de	Deutscher Wetterdienst (German Meteorological Service) DWD, Frankfurt	Computer science, Polar and Marine Research, Geophysical Observations.	16-Oct

		<i>Alternate</i>	<i>Dr.-Ing.</i>	<i>Richter</i>	<i>Bernd</i>	bernd.richter@bkg.bund.de	Federal Agency for Cartography and Geodesy, Frankfurt	Gravimetrics and Geodesy, Fluid mechanics, Global Reference Systems, Geo-information, WEB services.	16-Oct
Greece	Europe		Dr	Gerasopoulos	Evangelos	egera@noa.gr	Research Director, Institute for Environmental Research and Sustainable Development, National Observatory of Athens	Atmospheric physics, Environmental Research and Sustainable Development, Scientific Council for the Environment and Energy of the National Council for Research and Technology.	27-Nov
Israel	Asia/ Oceania		Prof	Ben Dor	Eyal	bendor@post.tau.ac.il	Tel Aviv University, Israel Space Agency	Agronomy, Soil Science, Geosciences, Remote Sensing, Geography and Human Environment.	23-Nov
Italy	Europe	Main	Dr	Brugnoli	Enrico	enrico.brugnoli@cnr.it	Director of the Department of Earth System Science and Environmental Technologies Consiglio Nazionale delle Ricerche (CNR), Rome	Agronomy, Earth System Science, Environmental Technologies, Physiological Plant Ecology, Forest Biology.	28-Oct
		<i>Alternate</i>	<i>Dr.-Eng.</i>	Munafò	Michele	michele.munafò@isprambiente.it	Head, Environmental Monitoring and Pressures Database Unit, Italian Environmental Information System, Istituto Superiore Ricerche Ambientali (ISPRA)	Environmental Information Systems and Monitoring, biodiversity and land use, urban environmental quality, web services.	30-Nov
Japan	Asia/ Oceania		Prof	Oki	Taikan	taikan@iis.u-tokyo.ac.jp	Professor, Institute of Industrial Science, The University of Tokyo	Policy, IPCC, civil engineering, atmospheric science, meteorology, global hydrology and water resources, ecology, environment and energy.	22-Oct
			Prof	Muraoka	Hiroyuki	muraoka@green.gifu-u.ac.jp	Senior Professor, River Basin Research Center, Gifu University	Biology, plant ecology, ecosystem ecophysiology, tundra ecosystems, forest carbon cycle, remote sensing, in-situ monitoring, disaster risk mitigation, river basin management	09-Dec
Madagascar	Africa		Ms	Noasilalaonomenjanahary	Lucie Ambinintsoa	noasilalao@meeft.gov.mg	Ministry of Environment, Ecology, Oceans and Forests	Environment, Sustainable Development, Climate Change, Communication, Prediction, GIS, Earth Observation, Psychology, Study Assessment, Environmental, Management.	12-Oct
Mexico	Americas		Dr	De La Torre Barcena	José Eduardo	jdelatorre@inegi.org.mx	INEGI - National Institute of Statistics and Geography	Genomics & Systems Biology, Plant Developmental Genetics, Geographic and Environmental Information, Sustainable Development, Economic Development and Tourism.	24-Oct
Somalia	Africa		Mr	Moallin	Mohamed	moallinm56@gmail.com	Ministry of Energy and Water Resources, Mogadishu	Earth Science, Environmental and Physical Science, Science Instruction, curriculum development, Science education policies and Research Methodology (qualitative and quantitative) on improvement of resilience and livelihoods, Geology/hydrology/Hydrogeology, WASH (WHO Water, Sanitation and Hygiene) programme.	23-Oct
South Korea	Asia/ Oceania	Main	Dr.-Ing.	Kim	Hyun-Ok	hokim@kari.re.kr	Korea Aerospace Research Institute) 169-84 Gwahak-ro, Yuseong-gu, Daejeon	International Charter on Space and Major Disasters, Policy, Landscape Architecture, Environmental Planning, Urban Ecology, environmental information systems, remote sensing, geoinformation.	26-Oct
		<i>Alternate</i>	Dr	Park	Kyungwon	kwpark@apcc21.org	Research Fellow, Climate Change, APEC Climate Center	Remote Sensing, Atmospheric Science, Satellite Meteorology, Hydrology and water resources, Statistics, Radiation Physics, Computer Science.	02-Dec
Spain	Europe		Dr	Masó	Joan	joan.maso@uab.cat	Center for Ecology Research and Forestry Applications (CREAF), Madrid	Geography, Electronic engineering, geospatial standards and GIS, Global Ecosystems Monitoring.	23-Oct
United Kingdom	Europe	Main	Prof	Baltzer	Heiko	hb91@le.ac.uk	Professor of Physical Geography Director of the Centre for Landscape and Climate Research, University of Leicester	Landscape and Climate Research, terrestrial remote sensing, carbon cycle research and ecosystem modelling, IPCC, Earth Observation Research Training, agriculture, geography, Environmental Sustainability.	27-Oct
		<i>Alternate</i>	Prof	Marsh	Stuart	stuart.marsh@nottingham.ac.uk	Leader, Geohazards and Earth Processes Group & Deputy Director, Nottingham Geospatial Institute	Professor of Geospatial Engineering, applications of EO to geological mapping, 3D and elevation modelling, geohazard mitigation, mineral, energy and water resources, waste management and environmental change, data systems and monitoring.	27-Oct

United States	Americas	Main	Mr	John	Matuszak	MatuszakJM@state.gov	US Department of State, Bureau of Oceans and International Environmental and Scientific Affairs (OES)	Senior Policy Advisor: Oceans, International Environmental and Scientific Affairs, Environmental Quality and Transboundary Issues, Sustainable Development; environment and natural resource assessment and monitoring and the integration of environmental information with economic and social data for policy considerations, Wealth Accounting and Valuation of Ecosystem Services (World Bank, UNEP); Regional Coordinator for Latin America and the Caribbean Global Environment Center - U.S. Agency for Development (USAID).	06-Nov
		Alternate	Ms	Yana	Gevorgyan	Yana.Gevorgyan@noaa.gov	Senior International Relations Specialist, NOAA Satellite and Information Service	-----	06-Nov
Zimbabwe	Africa		Prof	Murwiram	Amon	murwira@gis.ac.zw	Department of Geography and Environmental Science, University of Zimbabwe, Harare	Environmental Systems analysis and monitoring, Aerospace Earth Observation, Geographic Information Systems (GIS), Remote Sensing (RS) and Global Positioning Systems (GPS) in resource detection, environmental monitoring and management. Geodatabase Development and Applications in Land, Agriculture and Forestry spatial Information acquisition and management, and Vulnerability Analysis, Near real time Geodata collection systems.	16-Oct

Americas 5
Africa 6
CIS 0
Europe 7
Aisa/Oceania 4
Total 22 53.66%

Participating Organizations									
CEOS		Main	Prof	Briggs	Stephen	Stephen.Briggs@esa.int	Senior Adviser in the Directorate of Earth Observation Programmes, ESA; Chairman of the Global Climate Observing System (GCOS) Steering Committee since 2014.	Astrophysics, meteorology, Earth Observation Science, Applications & Future Technologies, Chair of the Global Forest Observations Initiative, Incoming Chair of the Strategic Implementation Team of the Committee on Earth Observation Satellites (CEOS), Senior Adviser to the Chinese National Remote Sensing Programme.	16-Oct
		Alternate	Mr	Petiteville	Ivan	Ivan.Petiteville@esa.int	CEOS Executive Officer Team	-----	14-Nov
		Alternate	Mr	Ross	Jonathan	jonathon.ross@ga.gov.au	CEOS Executive Officer Team	-----	14-Nov
CODATA			Dr	Hodson	Simon	simon@codata.org	Executive Director, CODATA (ICSU Committee on Data for Science and Technology)	Policy, Best Practices for Research Data Management Policies, European data infrastructure for the social sciences, Copernicus Access Platform(s), knowledge exchange.	30-Nov
COSPAR			Dr	Halpern	David	david.halpern@jpl.nasa.gov	NASA Jet Propulsion Laboratory, Pasadena, California	Atmospheric and Oceanic Sciences, research scientist ocean-atmosphere-climate interactions; Senior Advisor Earth Science Research, NASA Earth Science Division (ESD); OSTP Senior Policy Analyst, Executive Office of the President.	20-Oct
EEA			Mr	Haigh	Tim	tim.haigh@eea.europa.eu	Executive Directors Office, European Environment Agency	Information (technology), stakeholder management, international relations, environmental awareness, climate change, renewable energy, data policy, mapping services, GMES atmosphere services, air quality, information management, project management, negotiation, strategic planning.	30-Nov
ESCAP			Mr	Wang	Keran	wangk@un.org	Chief, Space Applications Section, Information and Communications Technology and Disaster Risk Reduction Division, ESCAP	Electronic Engineering and spacecraft system engineering, Deputy Chief Designer of remote sensing satellite in including China Brazil Earth Resources Satellite (CBERS), space international cooperation.	21-Oct
ESIP			Dr	Fontaine	Kathleen	kathy.fontaine22@gmail.com	Rensselaer Polytechnic Institute	-----	11-Nov /1-Dec
GBIF			Dr	Freyhof	Jörg	joerg.freyhof@idiv.de	Executive Director, Group on Earth Observations Biodiversity Observation Network (GEO BON), German Centre for Integrative Biodiversity Research (iDiv), Leipzig	Freshwater Ecology and Inland Fisheries, Diversity, systematics and conservation of Eurasian freshwater fishes, Infrastructures for Supporting Biodiversity research.	27-Oct

GOOS			Dr	Buch	Erik	erik.buch@eurogoos.eu	Chair, EuroGOOS Director for the Centre for Ocean and Ice	Physical oceanography, observational oceanography, Greenland Sea Project, project management, stakeholder engagement, international cooperation.	30-Nov
GRSS			Prof	Milne	Anthony	T.Milne@unsw.edu.au	Director of the Australian Cooperative Research Centre for Spatial Information (CRCSI), Radar Research and Applications Facility; Visiting Professor of Geography and Remote Sensing in the School of Biological, Earth and Environmental Sciences, University of New South Wales, Sydney; Fellow of the Institute of Electrical and Electronics	Geography, Geomorphology, remote sensing research, radar backscattering properties of Australian tree types and forests; image processing techniques for retrieval of geophysical parameters from radar; methods for mapping vegetation and estimating the biomass, investigation of SAR to map flood patterns and the distribution of wetland environments in Australia and Asia.	19-Oct
IEEE			Dr	Khalsa	Siri-Jodha Singh	sjsk@nsidc.org	National Snow and Ice Data Center, University of Colorado, Boulder	-----	05-Oct
IOC			Dr	Fischer	Albert	a.fischer@unesco.org	Head of the Ocean Observations and Services Section of the Intergovernmental Oceanographic Commission of UNESCO (serving also as the Global Ocean Observing System Project Office director.	Physical oceanography, climate modelling, air-sea interaction and climate variability, ocean observations in situ and satellite platforms, coupled climate models.	30-Nov
ISDE			Prof. Dr.-Ing	Wang	Lizhe	Lizhe.Wang@computer.org	Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences (CAS)	Remote Sensing Data Processing, High Performance Computing.	23-Nov
ISPRS		Main	Prof	Gu	Xingfa	guxingfa@radi.ac.cn	Professor and Deputy Director General of Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences (CAS)	Remote sensing applications, astronautics, high-resolution EO systems, data policy, program management.	21-Oct
		Alternate	Dr	Li	Pengde	lipd@sbsm.gov.cn	Deputy Director General National Administration of Surveying, Mapping and Geoinformation of China; Co-Chair of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM).	GIS, mapping, cadastral applications.	21-Oct
ITC			Prof	van der Meer	Freek	f.d.vandermeer@utwente.nl	Geology and Tectonics, Faculty of Geo-Informatoin Science and Earth Observation, ITC	EO and geoinformation, oil and gas sector, mining sector, geothermal sector, capacity building, program management.	13-Nov
IUGG			Prof	Sideris	Michael	sideris@ucalgary.ca	University of Calgary , Edmonton; IUGG President	Geodesy and Earth Observation, satellite observation of water resources, postglacial rebound, mass transport phenomena, regional hydrology, satellite radar and laser altimetry for global and regional sea level and ice change monitoring; airborne gravimetry and gravity gradiometry for resource exploration; spatial and temporal gravity field and geoid modeling; height reference systems and vertical datums; and geodetic applications of statistical, spectral, and wavelet methods.	20-Oct
OGC			Mr	Reichardt	Mark	mreichardt@opengeospatial.org	President & CEO, Open Geospatial Consortium, Wayland, MA	Outreach and Communications Programs, cartography, computer science, Spatial Data Infrastructure (SDI) practices (emphasis on developing nations in Africa, Asia and Latin America), Systems Engineer.	24-Nov
POGO		Main	Mr	Chavez	Francesco	chfr@mbari.org	Monterey Bay Aquarium Research Institute, CA	Biology and chemistry of the ocean in relation to global change. Instrumentation and systems for long-term ocean observing. Satellite remote sensing.	24-Nov
		Alternate	Dr	Steven	Andy	Andy.Steven@csiro.au	Research Director- Coastal Oceans & Atmosphere Flagship, Commonwealth Scientific and Industrial Research Organisation (CSIRO)	-----	24-Nov
		Alternate	Dr	Seeyave	Sophie	ssve@pml.ac.uk	Executive Director, Partnership for Observation of the Global Oceans (POGO), Plymouth Marine Laboratory (PML)	-----	24-Nov
WDS			Dr	Diedhiou	Arona	aronadiedhiou@ird.fr	Institute of Research for Development (IRD) in Grenoble, France, and the Université Félix Houphouët Boigny in Abidjan, Côte d'Ivoire; member of the WDS Scientific Committee	Climate change and climate variability, high impact weather events, data management including large datasets, satellite data and reanalyses as well as assessment of regional, global models outputs (such as CMIP or CORDEX).	20-Oct

WMO		Main	Dr	Zhang	Wenjian	wzhang@wmo.int	Director, Observing and Information Systems Department (OBS), World Meteorological Organization (WMO).	Satellite atmospheric remote sensing, meteorology and weather dynamics, observing systems, climate services, Meteorological Observation for Disaster Prediction and Warning.	27-Nov / 1-Dec
		<i>Alternate</i>	Dr	Riishojgaard	Lars Peter	lriishojgaard@wmo.int	WIGOS Project Manager, WMO Secretariat, Geneva	Meteorology, climate, remote sensing, observation systems, data assimilation and management.	27-Nov / 1-Dec

Total 19 46.34%