



GEO-CRADLE at GEO WEEK 2017, 23-27/10/2017, Washington D.C., USA

INSIGHT FOR A CHANGING WORLD

The Group on Earth Observations (GEO) community, with over 700 people from diverse geographies, sectors and technical areas, came together from 23-27 October 2017 in Washington D.C., USA, for GEO Week 2017 (<http://www.earthobservations.org/geo14.php>).

GEO Week 2017, consisting of GEO-XIV Plenary, side events and exhibition, highlighted and promoted the role, applications and opportunities to use Earth Observations (EO) in delivering 'Insight for a changing world'. With a focus on delivery and impact, GEO Week 2017 explored the use and applications of EO in both the public and private sectors for the benefit of humankind.

GEO-XIV PLENARY, 25-26/10/2017

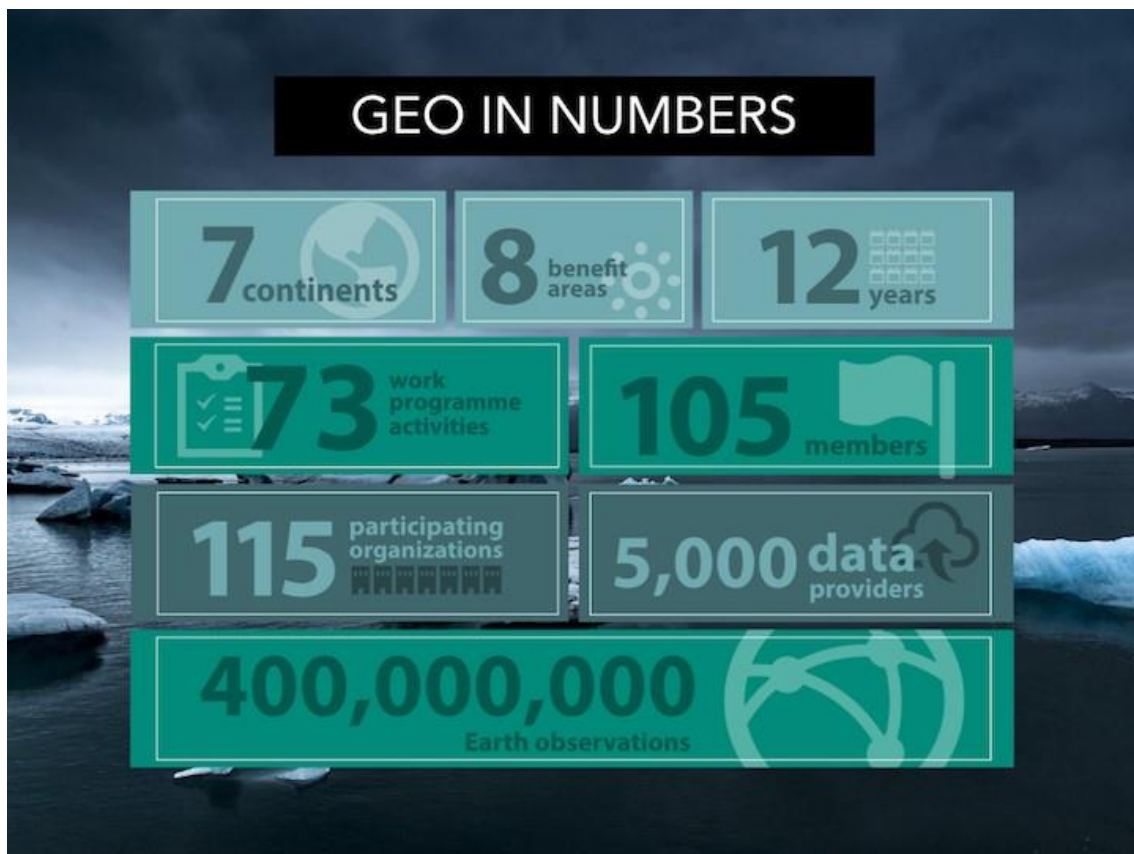
In the GEO-XIV Plenary it was underlined that GEO's goal is to combine in situ and space-based EO into easily accessible information to be used in decision-making at local, national, regional and global scales. GEO has amassed more than 400 million EO resources so far, and pivots its strategic mission to focus on putting these assets in the hands of end-users around the world.

The 1st session on 25/10 was entitled "**Opening Session**". It included the welcome from the USA, the opening remarks, the approval of Agenda, the approval of Draft Report of GEO-XIII, and a presentation by the Secretariat Director "Earth Observations: Insight for a Changing World".

As Ms Barbara Ryan, GEO Secretariat Director, said "*We are moving from a data-centric approach to a user-centric approach; it's about closing the gap between users and providers.*"



Ms Barbara Ryan, GEO Secretariat Director. Panel of the 1st session. Image Credit: GEO / CHIEF



GEO in numbers showing its significant impact. Image Credit: GEO

The 2nd session on 25/10 was entitled “**Earth Observations in Public Policy**”. It was a panel discussion with city-and country-level policy makers examining the current use of data to inform public policy. The discussion outcome informed and advanced GEO Members’ approach to engage with the public sector to further support efforts promoting sustainable development and building resilient communities.



Panel of the 2nd session. Image Credit: GEO / CHIEF

The 3rd session on 25/10 was entitled “**Earth Observations in the Commercial Sector**”. It was a panel discussion with commercial sector decision makers who explored current uses of EO by commercial companies to assess and manage risks, thereby optimizing their investments. Discussion outcomes informed how GEO will best engage with business communities to promote and advance utilization of EO data.



Panel of the 3rd session. Image Credit: GEO / CHIEF

The 4th session on 25/10 was entitled “**Earth Observations in International Development**”. It was a panel discussion with representatives from national and international funding and development agencies who discussed their role and interest in increasing the world’s EO capacity, and how this is incorporated in their own policies and programmes.



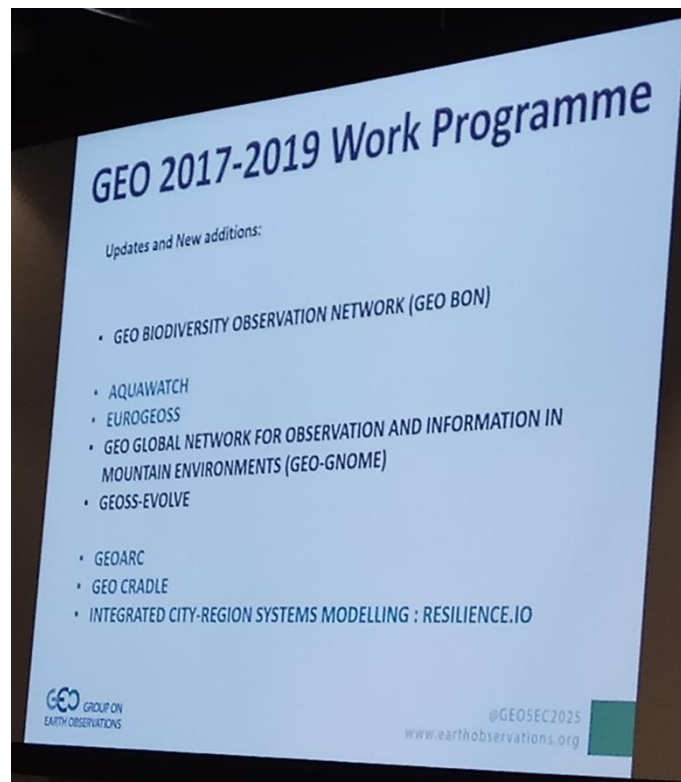
Panel of the 4th session. Image Credit: GEO / CHIEF

The 5th session on 26/10 was entitled **“2017-2019 GEO Work Programme”**. It included a spotlight on emerging successes, the GEO Programme Board Report, GEO Highlights 2016-2017, the 2017-2019 GEO Work Programme Update, as well as the 2018 GEO Trust Fund Budget and Strategy for a Sustained Resourcing.

In his presentation on the updates and new additions in the GEO 2017-2019 Work Programme, Mr Robert-Jan Smits, GEO Lead Co-Chair 2017 and Director-General for Research and Innovation of the European Commission, included the GEO-CRADLE project and underlined its scope and impact.



Mr Robert-Jan Smits, GEO Lead Co-Chair 2017 and EC DG R&I. Panel of the 5th session.



Updates and new additions in the GEO 2017-2019 Work Programme including GEO-CRADLE.

The 6th session on 26/10 was entitled “**National Earth Observations**”. It was a panel discussion with representatives from developed and developing GEO Member States who discussed the value and best practices in developing and assessing national EO portfolios.



Panel of the 6th session. Image Credit: GEO / CHIEF

Professor Hesham El-Askary, from the GEO-CRADLE partner CEDARE, Regional Coordinator for North Africa and Middle East, took the floor and shared two success stories from the GEO-CRADLE project, funded from the European Union’s Horizon 2020 research and innovation programme:

- 1) The first solar atlas of Egypt was developed by GEO-CRADLE in close cooperation with the Egyptian government. It was adopted by the New & Renewable Energy Authority (NREA) in the Ministry of Electricity & Energy as the official map for the exploitation of solar energy in Egypt.
- 2) A spin-off has been done through the Magdi Yacoub Heart Foundation of the Heart Surgeon Professor Sir Magdi Yacoub who is establishing a center of excellence in upper Egypt. For this center GEO-CRADLE is also developing an economical business plan for a solar farm so that this hospital is completely “green”.

Both initiatives are successful examples of EO contribution at national level, working between academia, government, and non-profit organisations in Egypt. What is more, the Central Agency for Public Mobilization And Statistics (CAPMAS), which is the official statistical agency of Egypt, is now working to establish EO as part of the assessment for the SDGs.



Professor Hesham El-Askary, Regional Coordinator for North Africa and Middle East, GEO-CRADLE project. Image Credit: GEO / CHIEF

The 7th session on 26/10 was entitled “**Other Business, Session Outcomes and Closing Remarks**”. It included the update on the Legal Status of GEO, 2016 Financial Statements and Audit Report, the update of the GEO Rules of Procedure, the announcement of 2018 Lead Co-Chair and Slate of 2018 Executive Committee Members, GEO-XV Announcements, Any Other Business, Session Outcomes, and Closing Remarks.

GEO-XIV Demonstrations & Side Events, 23-24/10/2017

Launching EuroGEOSS (Side Event, 23/10)

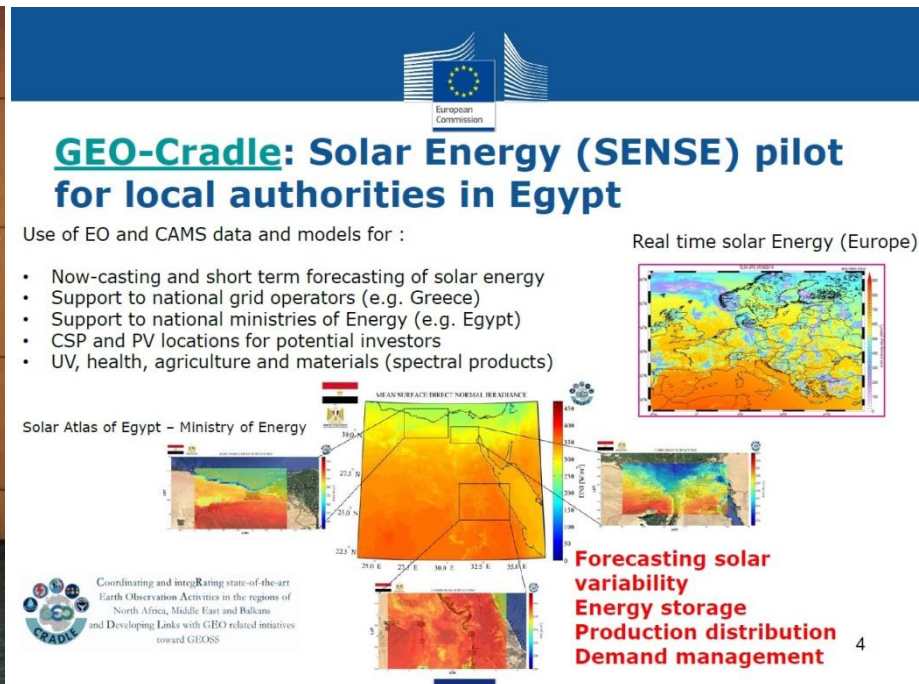
EuroGEOSS is a new regional initiative in the GEO Work Programme 2017-2019. It is the European component of the Global Earth Observation System of Systems (GEOSS) with a focus on coordination and scaling up user-driven applications being developed in Europe. EuroGEOSS is supported by the GEO European countries and participating organisations and the European Commission. This initiative aims to improve user uptake of EO data and improve forecasting capabilities for sound decision-making by governments for Europe's benefit. EuroGEOSS will coordinate, combine and seek cooperation and synergies within existing European Earth Observation assets and initiatives, with Copernicus as a major element and the focus on the Sustainable Development Goals and GEO's Societal Benefit Areas. Government decision makers on all levels, researchers/scientists, private-sector companies and citizens will benefit from EuroGEOSS.

This side event, which was organized by the European Commission, was the occasion to present EuroGEOSS. It included the presentation of concrete European applications / services falling under the scope of EuroGEOSS, namely three sample pilots: "Protected areas", "Renewable energy", "Agriculture". It was also an opportunity to discuss collaboration with other Regional initiatives.



Mr Robert-Jan Smits, GEO Lead Co-Chair 2017 and EC DG R&I.

The Sample pilot "Renewable energy" was presented by Mr Thierry Ranchin, Director of the Centre Observation, Impacts, Energy, MINES ParisTech/ARMINES. He included GEO-CRADLE in the GEO Community Activities with Renewable Energies links and gave an overview of the GEO-CRADLE's Solar Energy (SENSE) pilot for local authorities in Egypt.



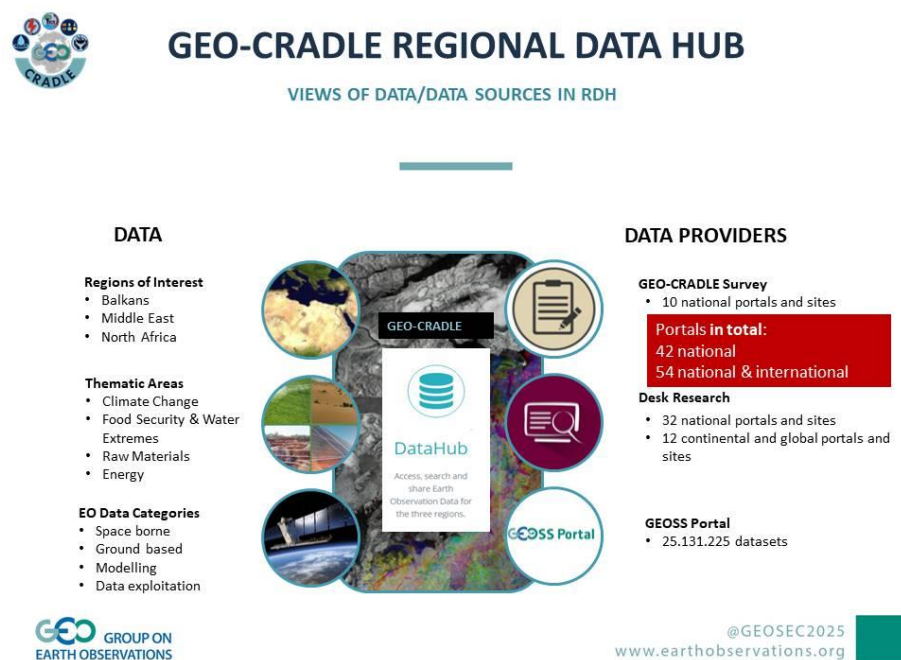
Mr Thierry Ranchin, Director of the Centre Observation, Impacts, Energy, MINES ParisTech/ARMINES.

GEO in ACTION (Demonstration, 23/10)

This demonstration was organized by the GEO Secretariat and focused on showcasing all the various applications built using GCI components, such as GEO DAB APIs and GCI EO open data, and thus emphasizing on the value of the GCI for decision making.

The GEO-CRADLE Regional Data Hub (RDH) using GEO DAB APIs was presented by Dr. Haris Kontoes, GEO-CRADLE Coordinator and NOA Research Director. He analyzed the concept of the

RDH, the solution it provides, and its connection with GEOSS, and he then focused on its highlights, and showed a screenshot and views of data / data sources in the RDH.

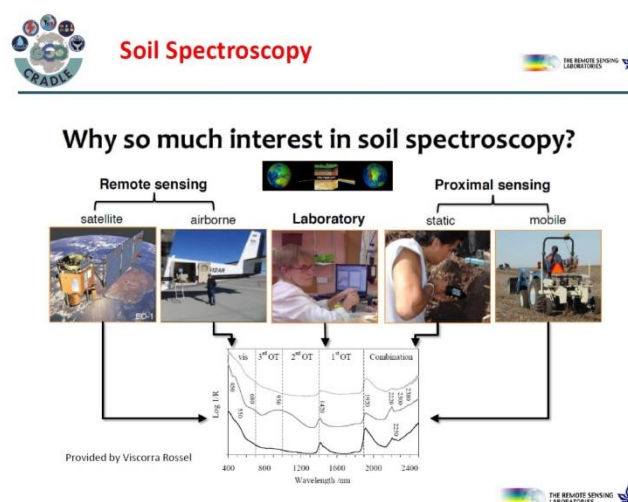


Dr Haris Kontoes, GEO-CRADLE Coordinator and NOA Research Director.

Open geo data to achieve food security and sustainable agriculture for SDG 2030 (Side Event, 23/10)

This was a think tank workshop, organized by the Global Open Data for Agriculture and Nutrition (GODAN), aiming to bring together all stakeholders from public institutions, private sector, and NGOs to discuss ideas and develop partnerships for expanding capacity building to support global food security with open geospatial data and open tools. Open earth observations and open geospatial information are key in supporting and achieving the 2030 agenda for Global Food Security.

Professor Eyal Ben-Dor from GEO-CRADLE partner TAU made a presentation on the role of soil spectral library for the food security issue, focusing on the work done in the framework of the relevant GEO-CRADLE pilot “Improved Food Security & Water Extremes Management”.



Professor Eyal Ben-Dor, GEO-CRADLE partner TAU.

He underlined that reflectance spectroscopy of soils is an important property for food security issues worldwide, and that spectral libraries are generated under regional, national, continental and global scales. Soil spectral libraries from North Africa, Mediterranean and Balkan countries should be extended in order to be a database for modern precision agriculture activities. Standard and protocols are existing and should be used for the GEO SSL on behalf of the GODAN and other initiatives.

Earth Observations in Service of the 2030 Agenda for Sustainable Development (Side Event, 24/10)

This side event was co-organised by EO4SDG / GEO, CEOS, and Member Countries and provided a platform for sharing experiences and lessons learned in terms of strengthening the means of implementation for sustainable development and achievement of the 2030 Agenda. The meeting featured techniques for producing reliable, timely, and quality Earth observation and geospatial data and integrating these with national statistics and other data sources to track, monitor, and achieve progress on the Sustainable Development Goals (SDGs), Targets, and Indicators.

The Side Meeting provided real-world, evidence-based examples with a focus on four SDG thematic areas: Goal 6: Clean Water and Sanitation, Goal 11: Sustainable Cities and Communities, Goal 14: Life below Water, and Goal 15: Life on Land. Each example provided the meeting attendees with perspectives on lessons learned in terms of SDG implementation, innovative actions, key policy standards, data and technology challenges, relevant information products and tools, governance mechanisms, and opportunities for cooperation and partnership.

Professor George Zalidis from GEO-CRADLE partner i-BEC was one of the speakers in the panel on SDG 6: Clean Water and Sanitation. Based, amongst others, on the example of the relevant GEO-CRADLE pilot “Improved Food Security & Water Extremes Management”, he highlighted the need to leverage the on-going projects, including GEO-CRADLE, and build further synergies with regional and global initiatives.



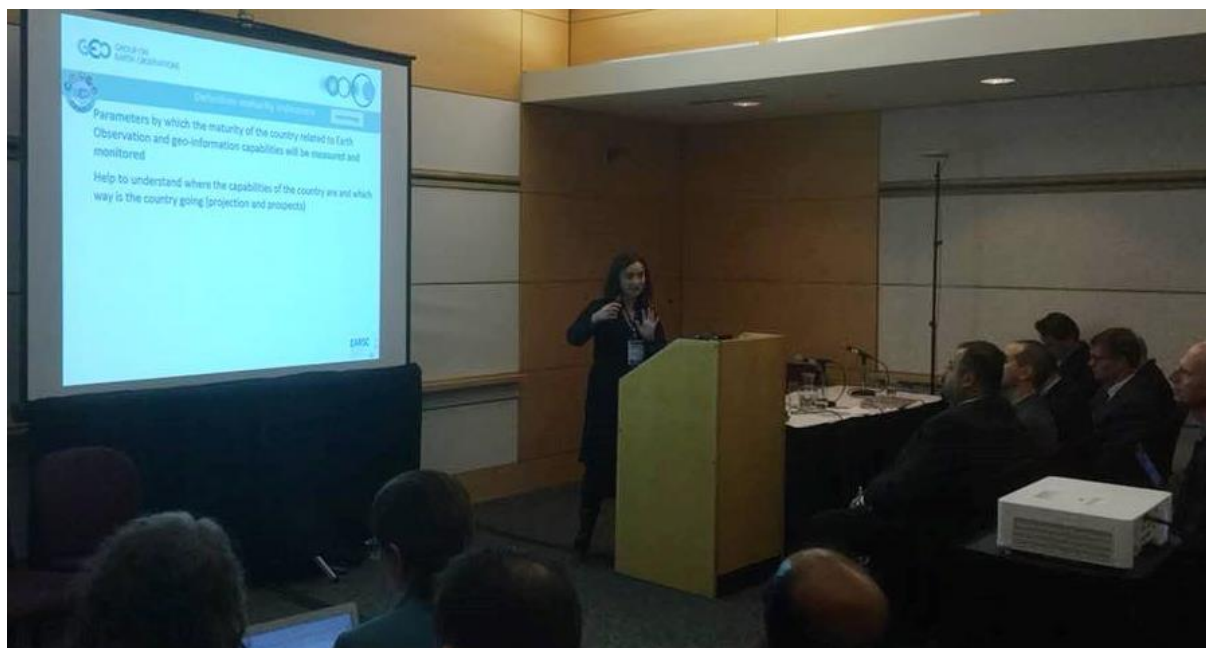
Professor George Zalidis, GEO-CRADLE partner i-BEC.

From Data to Decisions to Impact - New Practices in Capacity Building for Earth Observations (Side Event, 24/10)

This side event, which was co-organised by NASA and ITC, showcased new capacity building practices and activities.

Ms Mónica Miguel-Lago from GEO-CRADLE partner EARSC made a presentation on the methodological aspects for assessing regional EO maturity, as it was done in the framework of the GEO-CRADLE project. This work included the establishment of a robust methodology and some preliminary assessment of few countries as model for the maturity indicators, the analysis of all the countries and its presentation in a country maturity card, as well as lessons learnt from the application of the proposed methodology and proposals for further improvements in the future.

These maturity indicators allow to capture the level and measure the progress of each country's involvement in the implementation of GEO and Copernicus vision. Overall, the maturity indicators could provide a framework to assess the effectiveness of capacity building as they could help measure how far a country has gone in terms of capacity in a given dimension.



Ms Mónica Miguel-Lago, GEO-CRADLE partner EARSC.

AfriGEOSS: Strengthening partnerships with African Diaspora on Earth Observations (Side Event, 24/10)

The AfriGEOSS Initiative aims to improve the uptake of EO in decision-making in Africa. Its Action Areas include data and infrastructure for improved access to data; individual and institutional capacity development; addressing user needs and applications in areas such as water resource management, food security and agriculture, sustainable urban development and forest management, and climate services and adaptation. To achieve this goal, AfriGEOSS recognizes the need for strengthened intra-continental and international collaborations. The role of the Diaspora is deemed critical in ensuring sustained international partnerships.

This side event was jointly organized by AfriGEOSS and the City University of New York. It raised awareness on the AfriGEOSS Initiative and explored the emerging synergy between existing programmes such as the Cube/Nano satellites, African Space Programme and the growth in national Space Programs, Geospatial Technology & Education in African countries. It provided a much-needed forum for cross-collaboration among Researchers and Educators from Africa and partners in the Diaspora with particular focus on advancing uptake of EO through the AfriGEOSS initiative. Potential areas of collaboration were outlined between African institutions and the Diaspora in realizing use of EO in achieving the 2063 African Union agenda and the 2030 sustainable development agenda.

Professor Hesham El-Askary from Chapman University USA, GEO-CRADLE Regional Coordinator for North Africa and Middle East, was one of the speakers in the session “Diaspora Perspective”. He shared the successful example of the Dynamical Solar Atlas of Egypt, which was developed in the framework of the GEO-CRADLE Solar Energy Nowcasting System (SENSE) pilot, and has gained the support both of the government and the private sector.



Professor Hesham El-Askary, Chapman University USA, GEO-CRADLE Regional Coordinator for North Africa and Middle East.

Exhibition, 24-26/10/2017



The GEO-CRADLE team with Ms Barbara Ryan, GEO Secretariat Director, at the European Commission booth.



The GEO-CRADLE team with Mr Robert-Jan Smits, GEO Lead Co-Chair 2017 and EC DG R&I at the GEO-CRADLE stand.

GEO Executive Committee Meetings

The 41st and 42nd GEO Executive Committee Meetings took place on the 24/10/2017 and 27/10/2017 respectively.



For more information about the GEO WEEK 2017 please visit the official website:

<http://www.earthobservations.org/geo14.php>

GEO Week 2018

Kyoto, Japan will host the GEO Week 2018.

GEO-CRADLE will be there too!



<http://geocradle.eu>