Working Group on Capacity Building and Data Democracy

Jane Olwoch, SANSA

















WGCapD: History, Objectives



- The 25th CEOS Plenary (2011) held in Lucca, Italy, approved the formation of the new Working Group on Capacity Building and Data Democracy and its final terms of reference.
- The plenary also approved of the INPE and NOAA proposals to have Hilcéa Ferreira (INPE), serve as the Chair of the WG and Jacob Sutherlun (NOAA) serve as the Vice-Chair of the WG.
- Currently the leadership of WGCapD is under Dr Eric Wood (USGS) and Dr Jane Olwoch (SANSA)



WGCapD: Specific objectives



Establish effective coordination and partnership among CEOS agencies and institutions offering education and training in Earth Observation – The WGCapD will facilitate activities that substantially enhance international education and training in Earth System Science and the observation techniques, data analysis and interpretation skills, required for the use and application of Earth Observation data to meet societal needs. Meeting this objective will include the following activities



WGCapD : Activities to be covered



- Exploit the cumulative capabilities of CEOS Agencies by establishing unified and unique capacity building activities.
- Partner with locally based and managed regional partners to increase effectiveness and decrease duplication of efforts.
- Use threads such as disaster response or climate change to build capacity through discussion of a focused subject.
- Focus on user needs for data and capabilities, including IT infrastructure, to inform actions/plans for delivering the appropriate data and training for the effective use of Earth Observation data.
- Conduct remote sensing workshops and seminars to foster the use of Earth Observations and increase workforce capacity.
- Publish Earth Observation education and training materials.





- 2nd meeting of WGCapD was held in Frascati, Italy, from March 4-6, 2013:
 - 17 Participants: INPE, NOAA, CEOS CEO, CEOS SEO, DLR, ESA, GEO, SANSA, SWF, UNESCO, UNOOSA
 - 11 Virtual Attendees: INPE, IRD, ISRO, NASA, UCAR, USGS







Improved access to global DEM developed on a country-by-country basis



May 6-10: I DEM Workshop held in Nairobi, Kenya, hosted by RCMRD

12 participants (Ethiopia, Somalia, Zambia, Kenya, South Sudan and Uganda).

Instructors were from SANSA, INPE, RCMRD/SERVIR, USGS (virtual), FEWSNET and SWF.

Unique CEOS workshop benefitting people at different levels with varying amounts of resources.

"Lessons-learned" Report available at WGCapD website, link "Documents":

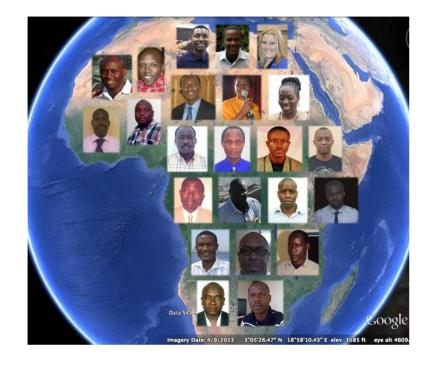
http://www.ceos.org/wgcapd





Remote-sensing E-learning course

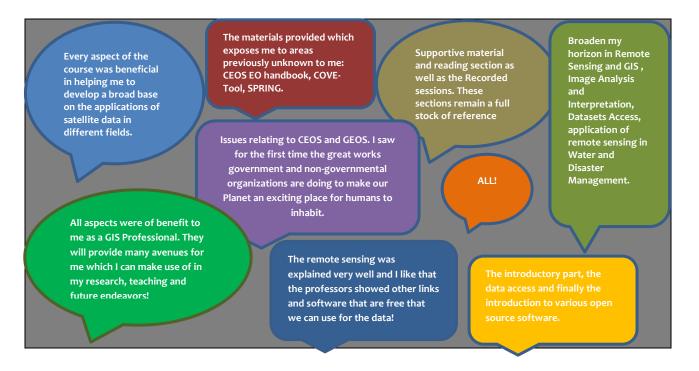
- July, 2013: e-learning course was finished and the final grades were compiled: from 30 students enrolled, 16 have successfully completed the course (55%).
- From the 13 that have failed, 5 of them have not really participated but 8 of them, although not really handing in assignments, have checked TelEduc almost every week, mainly the Readings Tool, and participated in the web-sessions.
- Certificates issued by INPE and sent to students by FEDEX.
- Course Materials organized into a WIKI: http://wiki.obt.inpe.br/doku.php?id=elearning
- Evaluation report available!







E-learning course: Lessons learned



Plans to have a <u>follow-up survey</u> in December to ask each of the students (graduated or not) if they have used any of the things they learned in the classroom!





Practical EO Education for Students and Teachers

Education Stand during ESA Living Planet Symposium, with support of ESA, UK and DLR.



- 9-12 September, 2013
 Edinburgh, UK
- 200 High School Students and Teachers
- Hands-on activities and learn about science and technology behind Earth Observation.





CB Inventory Project

First round of questionnaires, inputs were received from main points of contact (50+ inputs received):

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A B C	D E	F	_
20 # 2013-0	Naledzani Mudau, NMudau@sansa.org.za, +2 SANSA	Project	Fundisa
21 # 2013-0	Jean Poitevin, jean.poitevin@pc.gc.ca, 819-95 Parks Canada Agency	Project	dfasdf
22 # 2013-0	Sergio de Paula Pereira, sergio pereira@cptec Instituto Nacional de Pesquisas Espaciais (INPE)	Single Activity	
23 # 2013-1	Martin Medina, Martin.Medina@noaa.gov; PhoNOAA	Project	Outreach and
24 # 2013-1	Charles Hannah; Charles.Hannah@dfo-mpo.g Fisheries and Oceans Canada	Project	Synthesis of F
25 # 2013-0	S.P.Aggarwal spa@iirs.gov.in +91135252416 Indian Institute of Remote Sensing	Project	
26 # 2013-1	Jane Olwoch; jolwoch@sansa.org.za; +27 12 South Africa National Space Agency	Single Activity	
27 # 2013-0	Jason Duffe, jason.duffe@ec.gc.ca, 613 998 9 Environment canada, Wildlife and Landscape Science Directorate	Project	
28 # 2013-1	Ron Hall, ron.hall@nrcan,gc.ca,780-435-7209 Natural Resources Canada, Canadian Forest Service	Project	Multi-source \
29 # 2013-1	Kim Keith, kim.e.keith@gmail.com, 757-869-9 Systems Engineering Office (SEO) of CEOS	Single Activity	
30 # 2013-0	we ww@2.ca 111111111 fsdf	Single Activity	
31 # 2013-0	Nathalie Dionne, nathalie.dionne@ps-sp.gc.ca Emergency Magement Policy, Emergency Management and Regiona	I C Single Activity	
32 # 2013-0	Nathalie Dionne, nathalie.dionne@ps-sp.gc.ca Public Safety Canada	Single Activity	
33 # 2013-0	mike manore mike.manore@ec.gc.ca 819 \$Meteorological Service of Canada, environment canada	Single Activity	
34 # 2013-0	Ken Korporal, kenneth.korporal@ec.gc.ca, 61 Environment Canada	Single Activity	
35 # 2013-1	Hilcea Ferreira, hilcea@dpi.inpe.br, +55-12-32 Brazilian National Institute for Space Research - INPE	Single Activity	
36 # 2013-1	Hilcea Ferreira, hilcea@dpi.inpe.br, +55-12-32 Brazilian National Institute for Space Research - INPE	Single Activity	
37 # 2013-0	Hilcea Ferreira, hilcea@dpi.inpe.br, +55-12-32 Brazilian National Institute for Space Research - INPE	Single Activity	
38 # 2013-1	Hilcea Ferreira, hilcea@dpi.inpe.br, +55-12-32 Brazilian National Institute for Space Research - INPE	Single Activity	
39 # 2013-1	Hilcea Ferreira, hilcea@dpi.inpe.br, +55-12-32 Brazilian National Institute for Space Research - INPE	Single Activity	
40 # 2013-1	Hilcea Ferreira, hilcea@dpi.inpe.br, +55-12-32 Brazilian National Institute for Space Research - INPE	Single Activity	
41 # 2013-1	Hilcea Ferreira, hilcea@dpi.inpe.br, +55-12-32 Brazilian National Institute for Space Research - INPE	Single Activity	INPE Amazor
42 # 2013-1	Godela Rossner, godela.rossner@dlr.de, +492DLR Space Administration	Project	RESA
43 # 2013-1	Godela Rossner, godela.rossner@dlr.de, +49 DLR Space Administration	Project	EnMAP Explo
44 # 2013-1	Godela Rossner, godela.rossner@dlr.de, +49 DLR Space Administration	Single Activity	
45 # 2013-1	Godela Rossner, godela.rossner@dlr.de, +49 DLR Space Administration	Single Activity	
46 # 2013-0	Ursula Gessner, ursula.gessner@dlr.de, +498 DLR	Project	
47 # 2013-1	Hilcea Ferreira, hilcea@dpi.inpe.br, +55-12-32 Brazilian National Institute for Space Research - INPE	Single Activity	
48 # 2013-0	Serge Olivier Kotchi, serge-olivier kotchi@phacPublic Health Agency of Canada	Project	
49 # 2013-1	naledzani Mudau South African National Space Agency	Project	Fundisa
50 # 2013-0	Yoko INOMATA (Ms.), inomata.youko@jaxa.ji Japan Aerospace Exploration Agency (JAXA)	Project	
51 # 2013-1	Huth, Juliane, juliane.huth@dlr.de, +49815328 German Aerospace Center (DLR), Earth Observation Center (EOC)	Project	WISDOM - W -

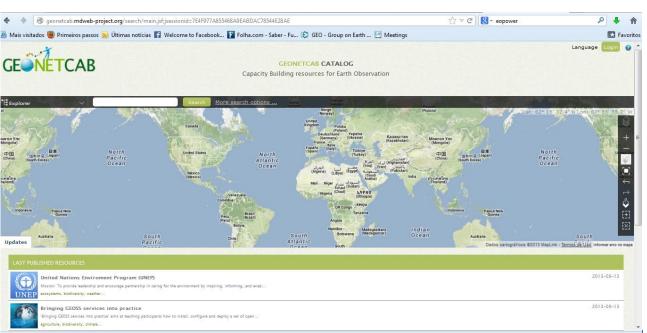




CB Inventory Project

- ✓ Partnering with the GEONetCab and EOPower (Earth Observation for Economic Empowerment) FP7 European Projects
- ✓ Planning a side event during GEO Ministerial Plenary in Geneva (13-17 January, 2014) Information from inventory will be adjusted to fit the standards of GEONetCab portal.
- ✓ Will demo portal at side event









DRM Pilots(Support to Capacity Building Activities)

WGCapD is really involved with the **Floods Pilot** and here it seems that we can add value.

Expand the reach of some workshops, involving some partners that have a lot of experience with these pilots such as Stu Frye and Nancy Searby, from NASA. Coordination with SERVIR. Two main activities are programmed for the next months:

✓ Workshop on the Use of Space Science and Technology for the Prevention of and Response to Disasters in Mesoamerica - 19 – 22 November 2013, Tuxtla Gutiérrez, Chiapas, México

Partners: CRECTEALC, SWF, NOAA, GEO and others.

Preparations for invitations for participants and potential instructors

✓ Flood and Drought Monitoring and Modeling, Namibia (January, 2014)

Partners: NASA and SANSA (INPE is willing to contribute)





Outreach Activities:

- Improving contents of our website: Resources Link
- CB Inventory Project showcase during GEO Ministerial/Plenary.
- Participation in main events: UN/IAF Conference, IAC
- WGCapD Short Video

Capacity Building Resources

WGCapD Resources

E-learning WIKI	Global Learning and Observations to Benefit the Environment (GLOBE)
GEONetCab Portal	GEONetCab Capacity Building Portal

General CEOS Resources

The CEOS Mission, Instrument, and Measurement (MIM) Database and Earth Observation Handbook	The CEOS International Directory Network (IDN)
CEOS WGISS Integrated Catalog (CWIC)	The CEOS Visualization Environment (The COVE Tool)



2014 Activities



- WGCapD meeting took place in Dehradun, India, Hosted by ISRO and was very successful
- More than 25
 participants attended physically or virtually,
- Altogether 12 institutions were represented





2014 Activities



- EOPower/GeonetCab was showcased at GLAC meeting In June in Paris
- CEOS CapD to be represented at AARSE Conference in October in South Africa
- CEOS CapD to co-host a side event during Geo Plenary in Gabon



Way forward...



- How can we define success? How can we measure the impacts of our trainings/workshops in the countries and communities?
- Inclusion of a Monitoring and Evaluation Component into training initiatives.
- Community building: creating a BLOG or Facebook community.
- Seeking new members and opportunities to <u>connect</u> <u>workshop and other training initiative participants with</u> <u>existing CEOS and GEO projects</u>.
- Exploring closer working relationship with other CEOS Working Groups and VCs





Thank you!

Jane Olwoch
Vice Chair CapD
Eric Wood
Chair CapD