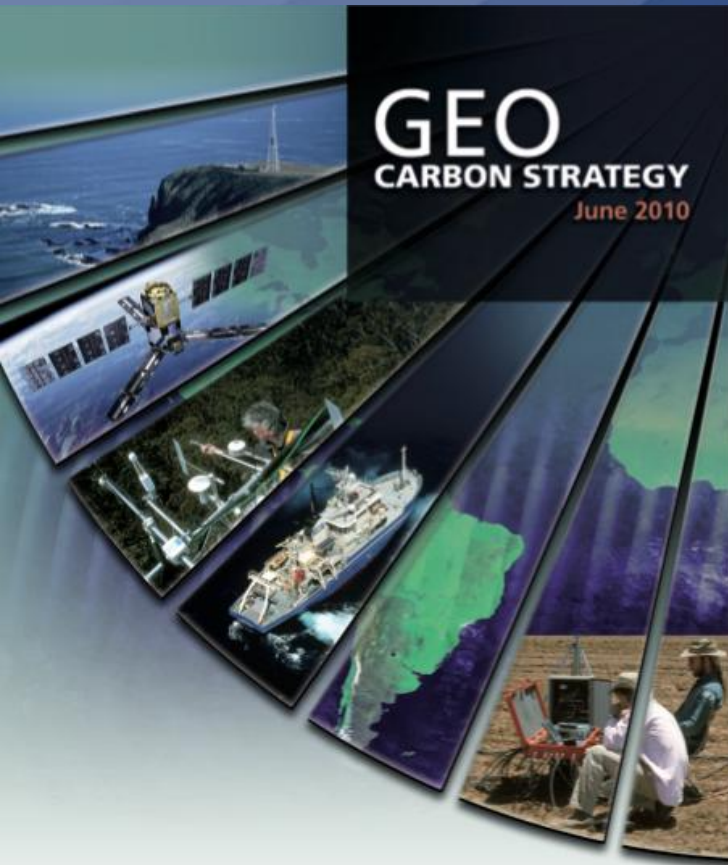


The CEOS Strategy for Carbon Observations from Space

Progress report



SIT Workshop
Washington DC, 13th September 2011



- ❖ **GEO Carbon Strategy report of 2010 – updates the IGOS Carbon Theme Report from 2005**
(<http://www.falw.vu/~dola/downloads.html>)
- ❖ **CEOS has agreed to consider how to respond to the requirements for satellite observations laid out in the GEO Carbon Strategy report**
- ❖ **CEOS established the Carbon Task Force (CTF) to manage the development of a CEOS response to the GEO Carbon Strategy; the CTF will interface with the GEO Carbon Community of Practice (CoP) in doing so**



❖ CEOS Response to the GEO Carbon Strategy Report:

- Follow successful model of the IGOS-CEOS relationship
- Help definition of next generation missions for individual agencies
- Provide big picture understanding for CEOS in defining space segment in support of emerging ambitions for global carbon monitoring and information to be used in reporting, verification and/or accounting of carbon emissions and sequestration
- Take into account information requirements of both the UNFCCC and IPCC and consider how future satellite missions will support them
- Also take account of, and be consistent with, the GCOS Implementation Plan requirements.

Scope and Schedule



- ❖ **In response to recommendations made at the Carbon From Space Workshop, the CTF determined that CEOS should develop a comprehensive response covering atmospheric, terrestrial (land), and oceanic observations and the interfaces among them.**
- ❖ **Given the current number of missions for new atmospheric observations in early planning stages and CTF's initial focus on atmospheric carbon, CTF will move forward with Atmospheric domain chapter and aims to have a draft ready by early 2012.**
- ❖ **The Land and Oceanic domain chapter drafts will lag by a few months, to then be followed by the Integration chapter. The final report will be completed by the end of 2012.**



- ❖ **Carbon Task Force co-leads (JAXA & NASA) take overall responsibility for the implementation of the CEOS Response**
- ❖ **Domain leads have been identified to develop the atmospheric, terrestrial (land) and oceanic chapters**
 - **Atmosphere: Prof Berrien Moore (Univ. Oklahoma, USA)**
 - **Land: Prof Christiane Schmullius (Univ. Jena, Germany)**
 - **Ocean: Dr Shubha Sathyendranath (Plymouth Marine Laboratory, UK)**
- ❖ **Domain leads have recruited qualified co-authors to help in the development of each chapter; co-authors have been drawn from the international scientific community based on recommendations made by CTF members as well as from the domain leads.**
- ❖ **Carbon Community of Practice has agreed to supply experts to interface with the CEOS process and with the domain teams, as requested.**



- ❖ **Domain chapters will identify the observation systems and strategies required to address the requirements raised in the GEO Carbon Strategy Report**
- ❖ **Following the model of the CEOS Response to the GCOS IP, actions will be identified for each domain and for integration as the basis for monitoring and reporting on progress towards the CEOS Carbon Strategy.**
- ❖ **Effective institutional arrangements and process planning are an important part of a credible strategy**
 - **CEOS Roadmap will be included**
 - **Report Review and Consultation Meeting scheduled back-to-back with SIT-27 in March 2012**
 - **Essential to have representation from CEOS stakeholders during the consultation phase of drafting and at review meetings (e.g., after SIT-27)**

Timetable



Committee on Earth Observation Satellites



Work Plan Schedule CEOS Carbon Strategy Report Development 2011-2012 Draft V0-1		Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	Atmospheric Chapter Outlining and internal draft versions Consultation Finalisation	█			█	█	█	█	█	█							
2	Terrestrial Chapter Outlining and internal draft versions Consultation Finalisation		█	█	█	█	█	█	█	█	█						
3	Ocean Chapter Outlining and internal draft versions Consultation Finalisation		█	█	█	█	█	█	█	█	█						
4	Integration & CEOS roadmap chapters Draft versions for CEOS workshop CEOS Carbon Strategy Workshop at time of SIT-27, La Jolla Revised versions		█					█	█	█	█	█	█				
5	Report Finalisation & Consultation Consolidation, review etc Final community consultation (workshop?)											█	█	█	█		
6	Report production and publicity Design, printing														█	█	█



- ❖ **Conclude draft of Atmospheric Chapter**
 - **Community meeting at AGU, 5-12 December 2011 (San Francisco)**

- ❖ **Draft Land and Ocean Chapters**
 - **Community and writing meetings in October 2011 and December 2011 (Land) and February 2012 (Ocean)**

- ❖ **Review chapter drafts at Community Consultation and Review meeting to occur immediately after SIT-27 meeting in March 2012**

- ❖ **Develop Integration chapter – writing meetings tbd**

- ❖ **Ensure close cooperation with Carbon CoP and full engagement of the Carbon Task Force members as domain leads develop drafts**



- ❖ **Ensure your agency's interests are represented on CTF, as appropriate**
- ❖ **Ensure your MIM 2011 return includes information on all planned and proposed carbon measurement missions**
- ❖ **Support community consultation meetings through your representatives**
- ❖ **Plan to attend the CEOS Carbon Strategy Consultation and Review Meeting on March 29-30, 2012 in La Jolla, California (right after SIT-27)**
- ❖ **Address in Plenary discussions, as appropriate**
- ❖ **Provide Feedback to CTF Co-Chairs at any time**