



# **CEOS Database and the ECV Inventory**

## ***Curating CCI Entries***

**20<sup>th</sup> October 2014**

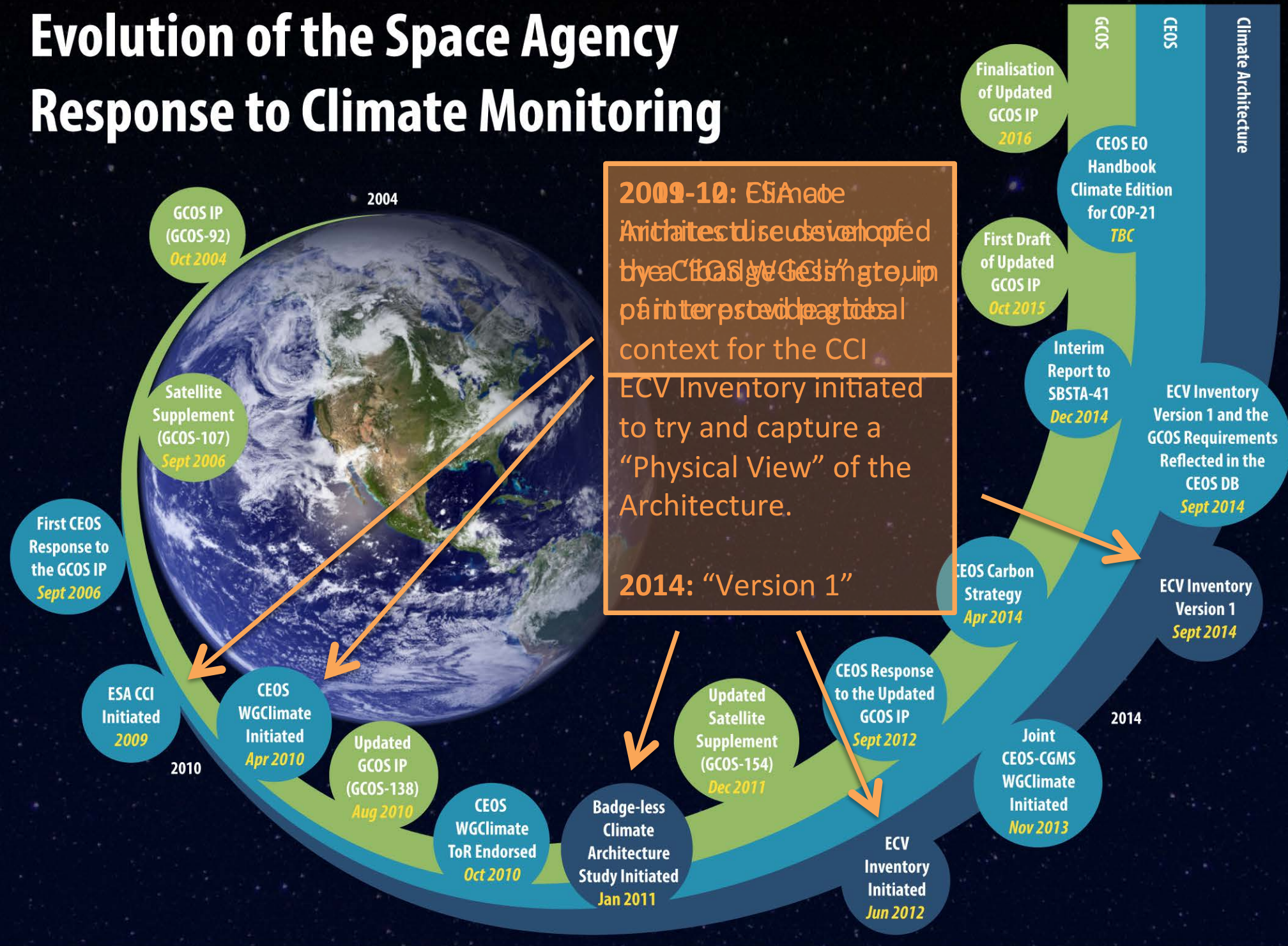
**Presented by George Dyke**

## Overview

- **Evolution of the space agency response to climate monitoring**
- **Status of the ECV Inventory**
- **Status of the ESA CCI records in the ECV Inventory**
- **CEOS Database status**

- **CEOS support to climate monitoring has followed the GCOS IP both in terms of structure and timing**
- **First full CEOS response to the GCOS IP in 2006**
- **Most recent CEOS response was in September 2012**
  - **To the 2010-2011 GCOS IP and Satellite Supplement**
  - **GEOGLAM IP action-by-action response**
- **CEOS WGClimate was initiated in 2010**
  - **Became a joint CEOS-CGMS WG in 2013**

# Evolution of the Space Agency Response to Climate Monitoring



- **“Version 1” has approximately 220 ECV records**
  - **Several technology iterations in addition to content iteration**
  - **Latest <http://ecv-inventory.com/ecv2/>**
- **Content currently quite heterogeneous**
  - **To be expected – long term effort to curate and ensure quality**
- **Content likely incomplete**
  - **Perhaps 20% of actual ECV records represented?**
  - **“Good start”**

- **Objective is that the ESA CCI records in the ECV Inventory are as complete and high quality as possible**
  - **27 ESA CCI records currently in the ECV Inventory**
- **Provide the community with a “good citizen” example to encourage refinement of the resource**
- **This was the purpose of the review cycle undertaken earlier this year**
  - **Thanks for your support!**
- **Some follow-up will take place in the coming months**

- **Completed most recent survey in September**
- **Currently features details of 257 Earth observing satellite missions currently operating or planned for launch in the next 15 years**
  - **762 instruments (383 distinct instruments, some being repeats)**
- **Updated mission and instrument data now online at [database.eohandbook.com](http://database.eohandbook.com)**

- **Symbios continue to support:**
  - **CEOS Database update & development**
  - **ECV Inventory application within the CEOS Database**
  - **CCI representation in the Inventory**

**CEOS EO HANDBOOK – CATALOGUE OF ECV RECORDS**

Responsible Agency:  Keyword Filtering (max 20 char):

ECV Category:  Keyword:

ECV:  Start Year:

Display:  Results Per Page End Year:

ECV Record	Responsible Agency	Time Span	ECV and Applications	Satellite Instruments	Physical Quantity & Details
CDR_ECV04_32 Record Name TBA	ESA	Jan 1982 through Dec 2014 Approx. 32 years.	Cloud Properties (Atmosphere) Cloud Feedback, Radiation Budget Studies: Energy And Water Cycle	AVHRR/2, AVHRR/2, AVHRR/2, AVHRR/2	Physical Quantity: CLOUD COVER Units: not selected Accuracy: 20% bias Horizontal Resolution: 0.5 x 0.5 Vertical Resolution: Temporal Resolution: daily and Coverage: Global
CDR_ECV04_33 Record Name TBA	ESA	Jan 1982 through Dec 2014	Cloud Properties (Atmosphere)	AVHRR/2, AVHRR/2, AVHRR/2, AVHRR/2	Physical Quantity: CLOUD COVER Units: not selected Accuracy: 20% bias

**Search and Discovery of the ECV Inventory  
Linked to CEOS DB Mission, Instrument and  
Measurement Information**



**Thank You For Your Attention!**

## **Questions?**

- **Evolution of space agency support**
- **ECV Inventory**
- **CEOS Database**



- **Development of the ECV Inventory initiated in 2012**
  - **On behalf of, and in consultation with WGClimate**
  - **Based on the heritage of the CEOS Systems Engineering DB, which shares a heritage with the CEOS DB**
- **“Version 1” has just been completed by SEO based on agency survey process**

- **Based on CEOS 2014-2016 Work Plan CMRS actions, WGClimate formulating ECV gap analysis process and tools**
  - **Expecting to trial for 1-2 ECVs as a first step**
  - **CMRS = Climate Monitoring, Research and Services**
- **Based on CEOS 2014-2016 Work Plan OUT actions, CEOS DB team formulating ECV Inventory discovery and browsing tools**
  - **OUT = Outreach**
- **“Work in progress”**



Essential  
Climate  
Variables

Observation  
Coordination

Climate Data  
Records

**Explore the GCOS IP  
*Actions, CEOS Response, Supporting Satellites  
and Instruments***

Essential  
Climate  
Variables

**GCOS has defined  
Essential Climate Variables (ECVs)  
*Explore ECVs*  
*Read about implementation actions***

GCOS