



CEOS Strategy

for

Space Data Coverage & Continuity

in

Support of FCT/GFOI

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U.S. Geological Survey

Background

- **Since 2009 Data Acquisition Coordination for FCT**
 - National Demonstrators
- **CEOS Endorsed at 2011 Plenary**
 - *CEOS Strategy for Space Data Coverage and Continuity in Support of the GEO Global Forest Observations Initiative and Forest Carbon Tracking Task*
- **2011 CEOS Plenary Established**
 - Space Data Coordination Group
- **CEOS Agencies Invited to Participate**

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Scope

- **CEOS Agencies Possess Varied Data Policies**
- **GFOI Data Needs are Large**
 - Support from Many CEOS Space Missions Anticipated
- **CEOS Data Strategy**
 - Focus on No-Fee Data
 - Take Account For-Fee Data
- **CEOS Coordinated Acquisition Strategy**
 - Annually Updated
 - Determine Gaps
 - Observational Coverages
 - Needs Requiring \$

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The USGS logo, featuring a stylized wave icon to the left of the letters "USGS" in a bold, white, sans-serif font.

CEOS Data Strategy - Overview

- Level – 1: Global Scale
- Level – 2: National/Sub-National Scale
- Level – 3: Local Scales

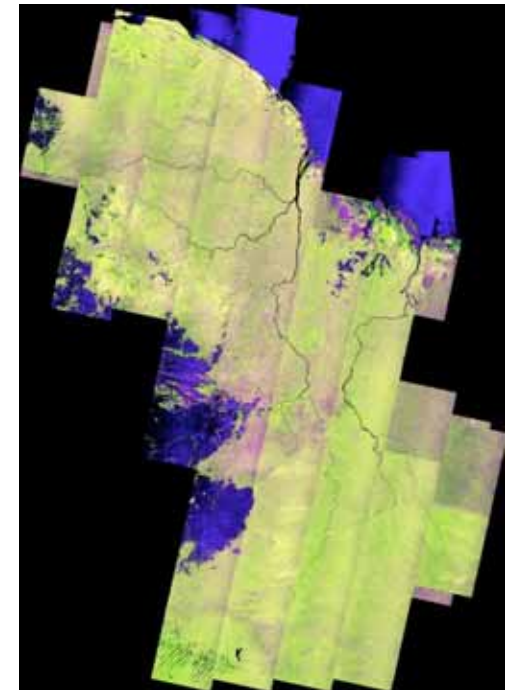
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Level – 1 Global Scale

- **Baseline, Coordinated Data Acquisition Strategy**
 - “Wall-to-Wall”
 - Involving Core Data Streams
 - Consistent with GFOI Implementation Principles
 - Sub-30 meter data
 - No Fee for GFOI Purposes
 - Expected Long-Term, Sustained:
 - Coverage
 - Processing
 - Distribution

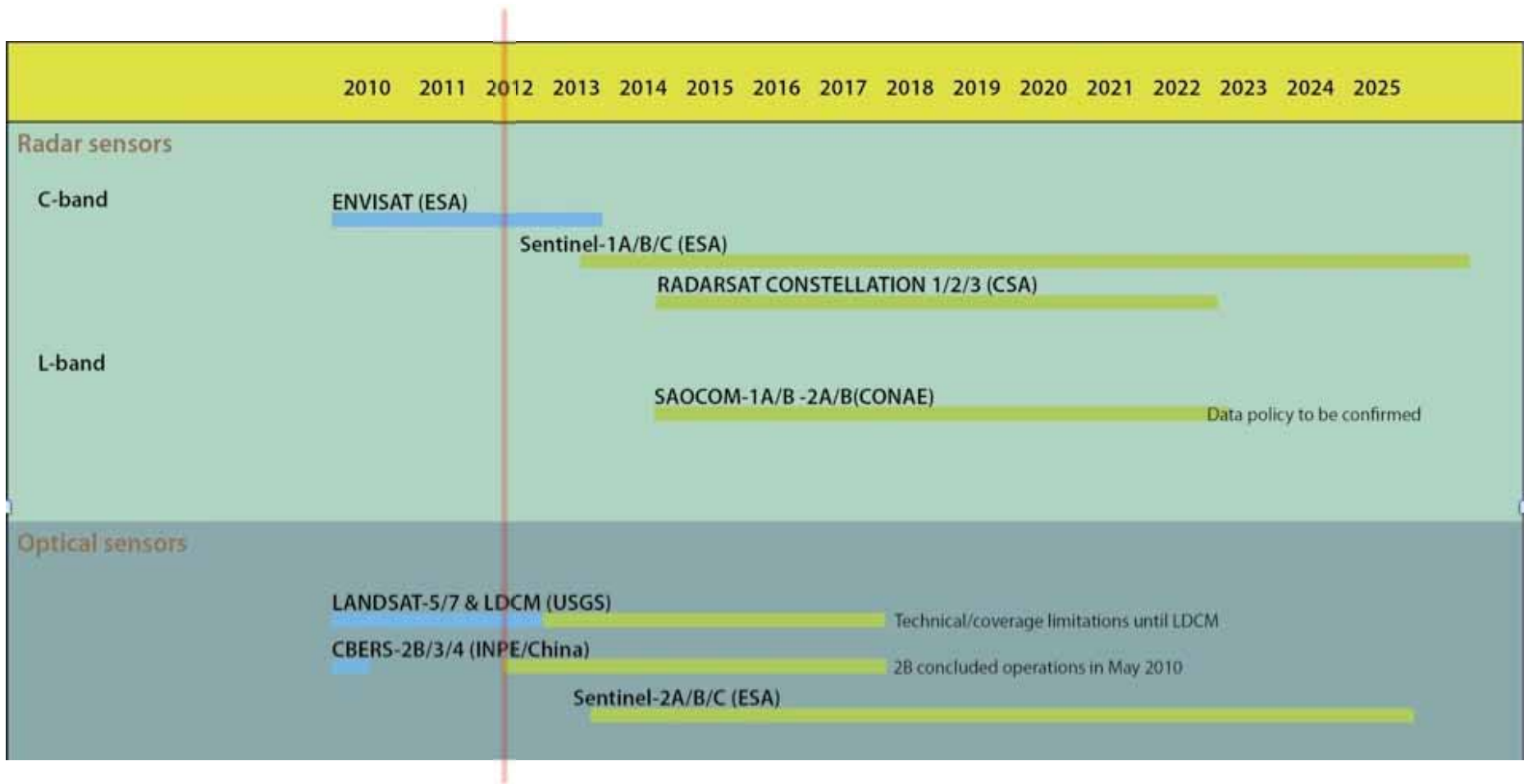
Guyana ENVISAT ASAR



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Core Data Streams (as of CEOS Plenary Nov 2011)



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Level – 2 National / Sub-National Scale

- **Coordinated National Data Acquisition Strategies**
 - In Response to National Needs Assessments
 - Through GFOI Implementation

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Level – 3 Local Scales

- **Data in Support of FCT Research & Development**
 - Support of FCT Science Studies
 - Assist Development and Evolution of GFOI
 - Results feed into the GFOI Methods & Protocol Documents
 - Focus over Validation Sites in the FCT National Demonstrator countries

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Further Data Streams

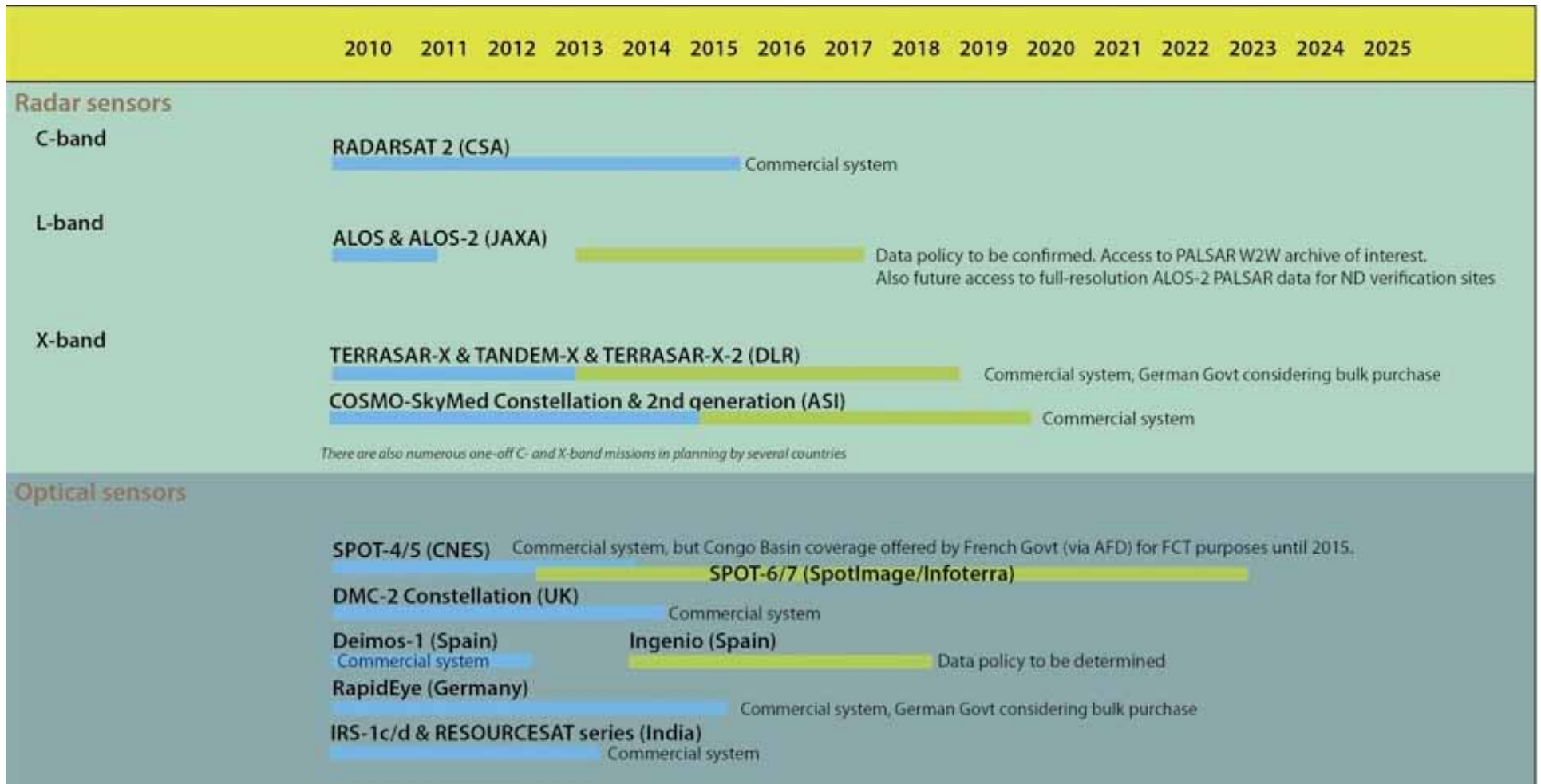
- **Systematic, Local/National/Regional/Global**
 - Optical High-Resolution
 - X-Band SAR
 - L-Band SAR
- **True Coordination Effort**
 - Large Number of CEOS Agencies
 - Interaction with Commercial Operators

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Further Data Streams of Interest



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Further Data Streams

- *The CEOS Data Strategy encourages all missions to contribute to the long-term building of consistent wall-to-wall time series archives on scales from national to global – even if an explicit commitment to free-of-charge data provision cannot be guaranteed.*
- *Uninterrupted time-series archives of wall-to-wall data are fundamental to the success of GFOI and all interested agencies are encouraged to participate in the GFOI coordinated acquisition strategies, even if future data policies are not yet fully defined.*

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Schedule

- **GFOI Implementation Plan (IP) suggests key components operational by 2014.**
- **CEOS data strategy should reflect & support GFOI IP schedule.**
- **Limited core data stream capacity until into 2013/14.**
 - ALOS, Landsat 5 out of operations. ENVISAT ASAR with limited capacity
 - CBERS, Sentinels, LDCM, RCM, SAOCOM to be launched 2012-2014
- **Enough is known of expected reporting requirements**
 - Provisional definition of the first level of the CEOS Data Strategy – the baseline, coordinated global data acquisition strategy.

Schedule

- **Second level - coordinated national data acquisition strategies**
 - determined by the GFOI schedule & national needs assessments
 - which are to be undertaken.
- **The third level - data supply in support of the FCT R&D activities**
 - to continue uninterrupted, transitioning to become part of the GFOI Project Office
- **Initial coverage priorities can be expected to reflect current levels of engagement of different countries**
 - Priority over FCT National Demonstrators, REDD+ Pilot countries and countries participating in UN-REDD and the World Bank Forest Carbon Partnership Facility (FCPF)

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Space Data Coordination Group

- **Established December 2011**
 - To Implement CEOS Data Strategy
- **Troika**
 - Norwegian Space Centre
 - European Space Agency
 - U.S. Geological Survey
- **Secretariat**
 - Australia (DCCEE)
- **All Agencies Invited**
- **Commercial Data Providers Liaison**
 - Norwegian Space Centre / KSAT

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