



SCIDIP-ES

SCIENCE DATA INFRASTRUCTURE FOR PRESERVATION - EARTH SCIENCE

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**Science & Technology
Facilities Council**





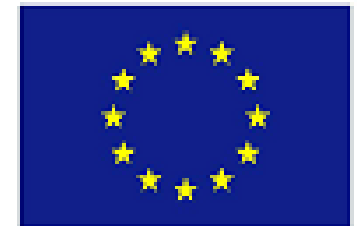
Overview

- Introduction
- The Problem
- Preservation Infrastructure
- Current Status
- Summary



SCIDIP-ES Project

- An EC FP7 funded project
 - under the Grant Agreement 283401
- 13 Work packages
 - to be completed by 17 beneficiaries
- Project time frame
 - October 2011 – September 2014
- Antecedent projects
 - CASPAR, SHAMAN



Scidip-es Partners

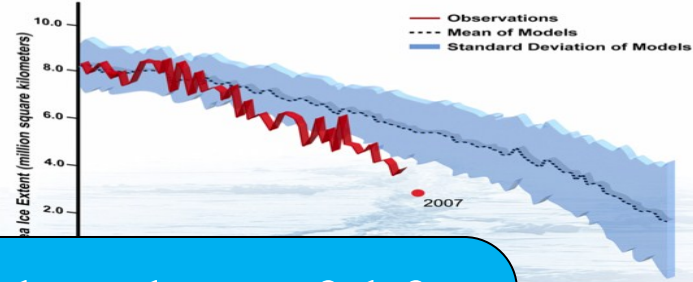
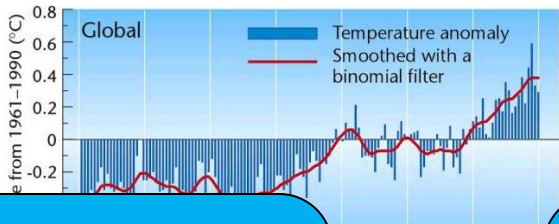
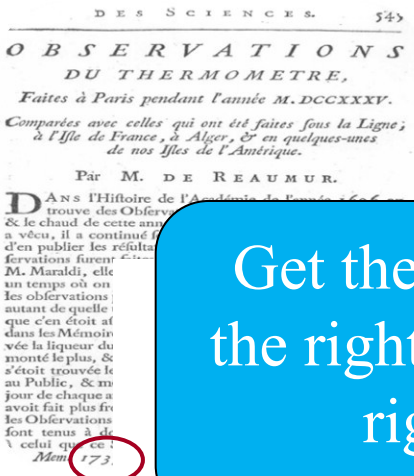


The Need

“A fundamental characteristic of our age is the raising tide of data – global, diverse, valuable and complex . In the realm of science, this is both an opportunity and a challenge.”

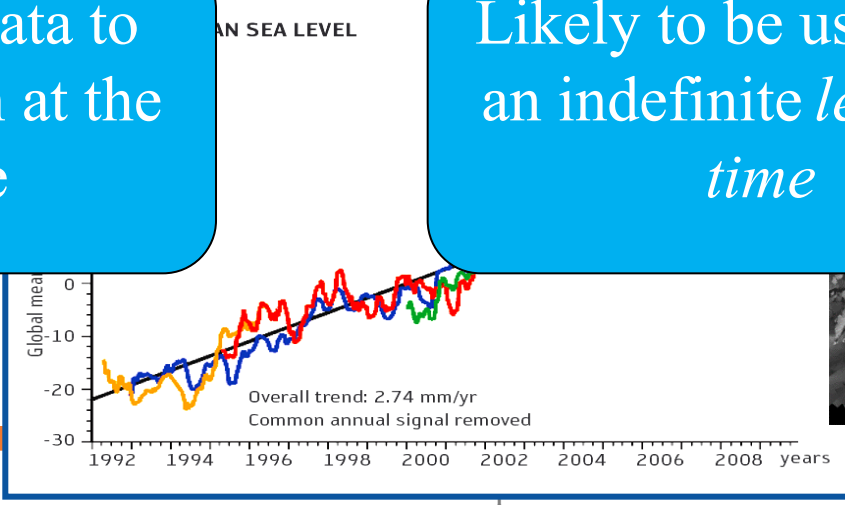
Report of the High-Level Group on Scientific Data, October 2010

“Riding the Wave: how Europe can gain from the raising tide of scientific data”



Get the right data to the right person at the right time

Likely to be useful for an indefinite length of time



Earth Science Data



Data on:

- Oceans
- Atmosphere
- Land use
- Biosphere
- Geology
- Seismology
- Cryosphere

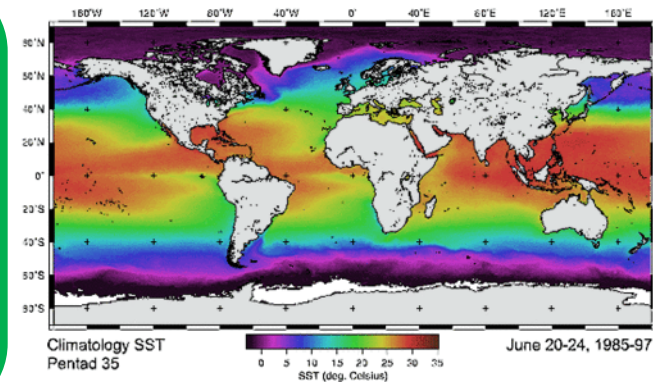


Used for:

- Disaster management
- Health
- Energy
- Climate Change
- Water
- Ecosystems
- Agriculture

Collected by:

- Samples
- Monitoring sites
- Traverses
- Satellite Observation





Data Preservation

- More than keeping the data safe
 - “the bits are retrievable and the same as the original”
- Keeping the data usable
 - “the data can be understood and reused at a later date”

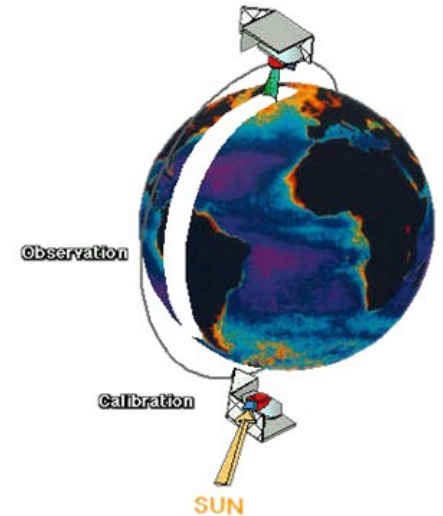
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Ionosonde Data Retrieval results (CEDA)
IIWG format, URSI Codes

Further Barriers and Challenges of ES Data Preservation



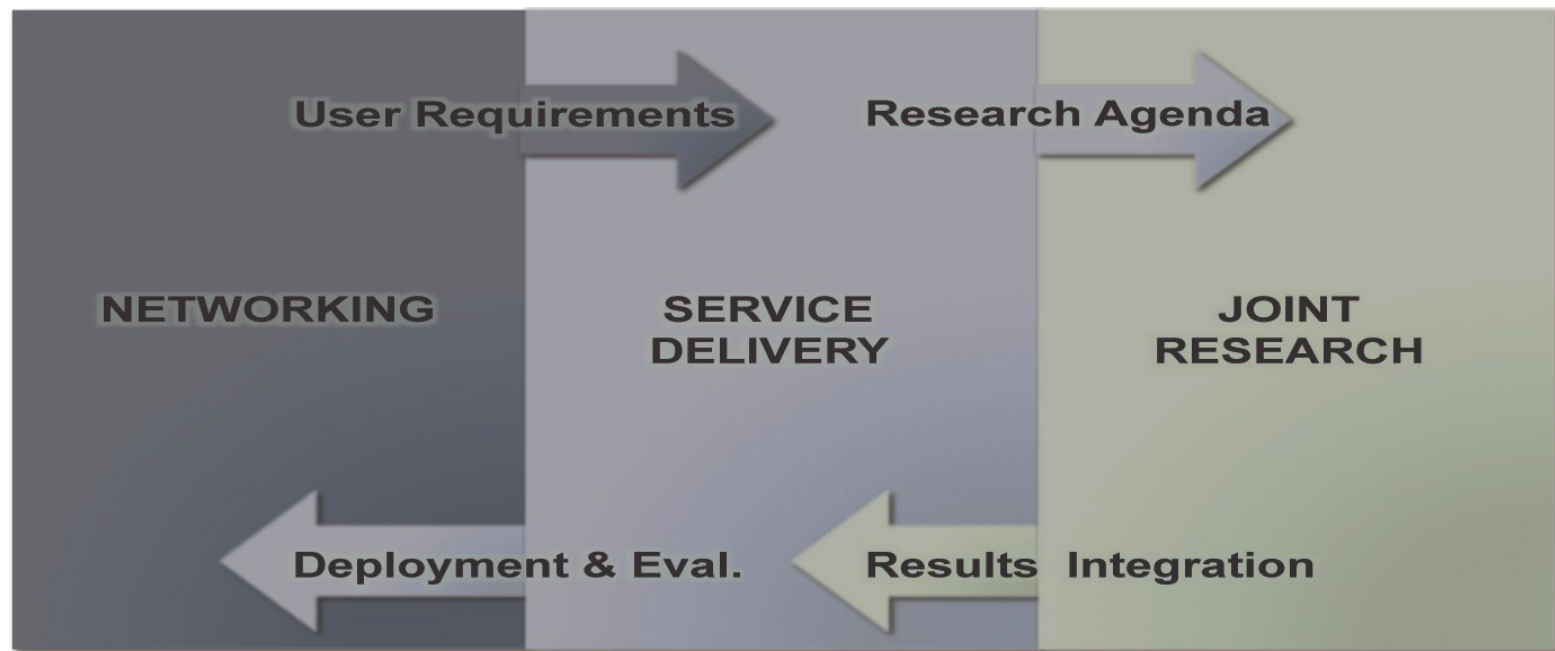
- Designing a cost effective long-term preservation solution
 - Maintaining data reusability for long-term is complex
 - Need methods and tools to make this manageable
- Reacting to changes in preservation requirements
 - Things change
 - Monitor change and propose suitable actions
 - Sharing knowledge
- Maintaining Authenticity
 - Gathering evidence of the extent that authenticity can be maintained.
 - Provenance, fixity, context, access rights, reference
- Supporting Practical Business Models for Data Preservation





SCIDIP-ES Objectives

- **Deliver generic sustained services** for long-term preservation and usability as part of the data infrastructure for e-Science.
- **Harmonize data preservation** policies, approaches and tools in the Earth Science Domain.



The Context



High Level Expert Group
European preservation agenda

Earth Science Case

European E-Infrastructure

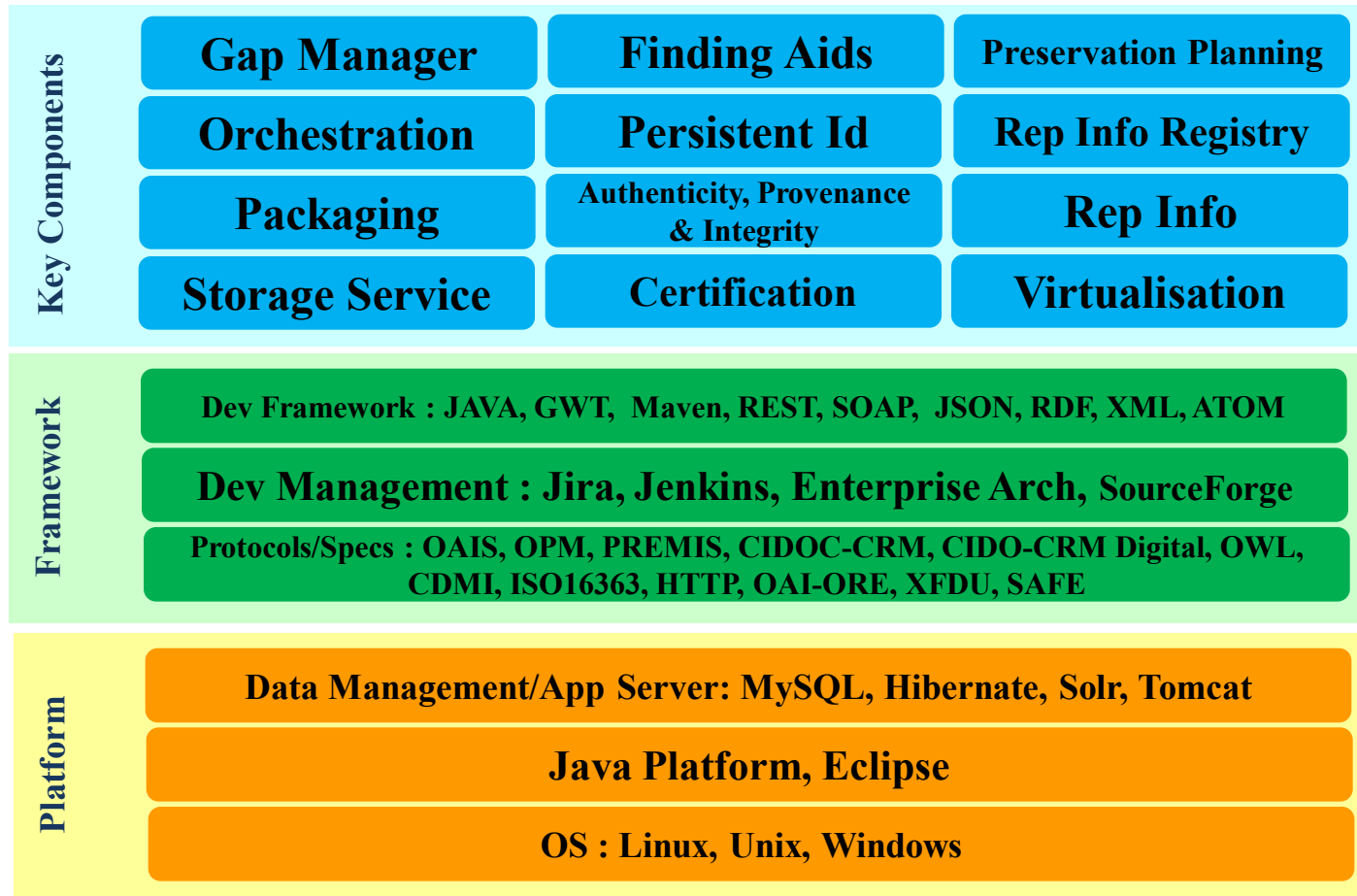
Earth Science

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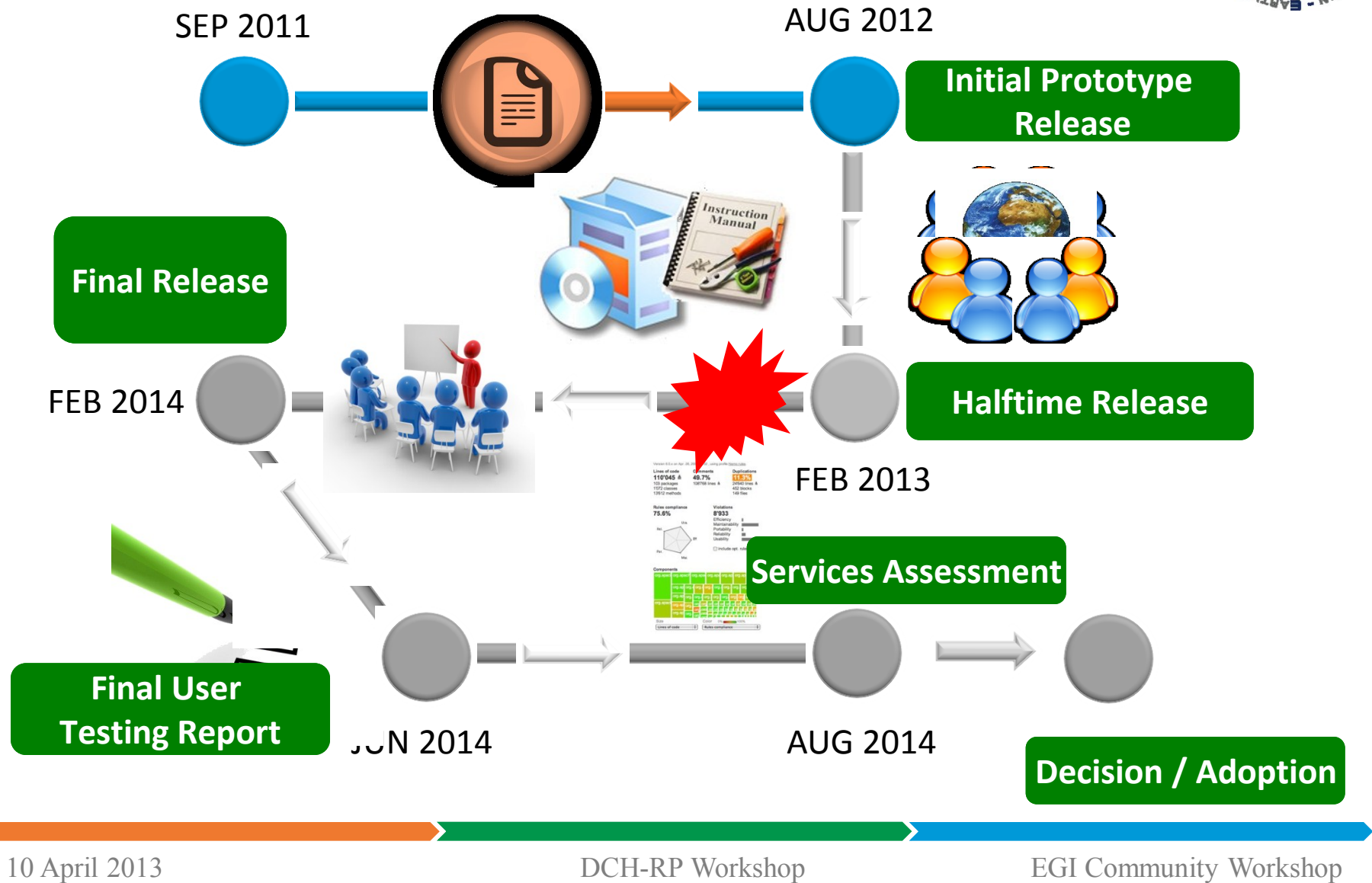
From generic to specific

From specific to generic

SCIDIP-ES PRESERVATION INFRASTRUCTURE (System Layers)



SCIDIP-ES Road Map



Get Involved



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Jenkins

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10 April 2013

DCH-RP Workshop

EGI Community Workshop