

GFCS User Case Studies

ET-SUP-8

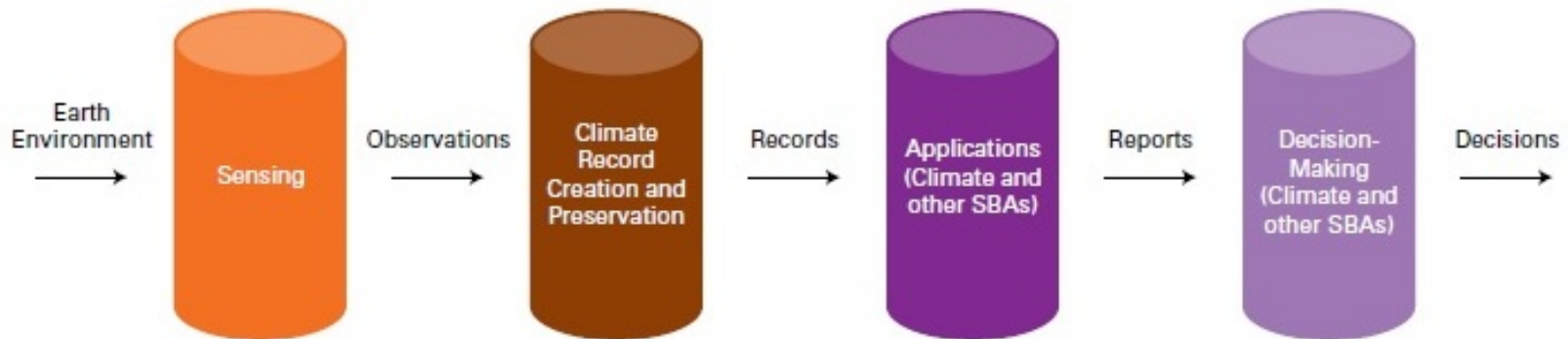
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- At ET-SUP-7, reference was made to the **CEOS/CGMS/WMO Strategy Towards an Architecture for Climate Monitoring From Space**
 - The Architecture should be validated against the objectives of the GFCS



- **Action 7.7 from WMO ET-SUP-7 directed that a paper be developed that demonstrates the value of satellite data for climate services.**



- **2012 WMO publication, *Climate ExChange*, provides case studies of climate services worldwide and how modeling and observations can inform the decision making processes of end users**
 - **Can provide basis of an end to end analysis of the effectiveness of the Climate Architecture's logical view**
- **Space & meteorological agencies have created programs to improve the uptake of these observations for decision making on both near-term and climatic timescales**
 - **Analyses of these Program's successes can also inform the process**



- **Many research and observational agencies have created programs to demonstrate the usability of space-based observations to end users across the GEO SBAs, including applications relevant to climate services.**
 - **Some agency programs of interest include CSA, ESA, Copernicus, Geoscience Australia, ISRO, NASA, NOAA, NCEO**
 - **Analysis of annual reports and peer-reviewed papers from these programs can assist in validating the Climate Architecture's logical view**



- **Assessment of these case studies identified key attributes of each project, including region, climate service, space-based observation (if relevant), essential climate variable(s) employed, and end user**

Title of Case study	Country/Region	Climate service identified	Satellite Component	Essential Climate variables addressed	Comments
Climate information services for food & agric. Pg 16	Global	Weather & climate forecasts	Contribution to forecasting	Precipitation	Early disease/pest detection is dependent on accurate forecasts
Informing decision-making in health using seasonal climate outlooks – page 96	Australia, Solomon Islands	Monitoring of floods, droughts, determination of malaria vs ENSO	Contribution to seasonal forecasting	ENSO, temps, precipitation, SSTs	In support of vulnerable sectors in decision-making



- **Further analysis ideas:**
 - **Concentrate on a few examples per GFCS priority area and validate against the logical architecture**
 - Expand “Satellite component” in tables
 - Are the right components in place?
 - Are users sufficiently connected to these components?
 - Are there deviations from the Climate architecture?
 - Interact with case study authors
 - **Examine other methodologies for analysis**
 - **Barriers to delivering products developed from CDRs to end users**
 - Data availability
 - Formats used by non-science end-users/decision makers



- **Further analysis ideas:**
 - **Examine regional programs like SERVIR**
 - **Role of end-user training / capacity building**
 - **Collaboration with CGMS/CEOS WGClimate**