



Committee on Earth Observation Satellites

## 3.2: Working Groups Showcase

**WGClimat: Use Case Exercise**

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- WGClimat#12 in May 2020 decided to start a new routine activity on collecting use cases for climate data records.
- Use Case gathering tool, developed by WMO Space Programme Office, has been integrated into climate “Use Cases” web page (<https://climatemonitoring.info/use-cases>), which was opened on July 27, 2020 for submission with widespread distribution on social media.
- Use cases will be published on the web and selected use cases will become part of a special report issued by WMO in 2021/22.

## Climate Monitoring from Space



### Use Cases for Climate Monitoring from Space

Building on the **architecture for climate monitoring from space** and on an initial set of **case studies** for establishing the architecture, published in 2015, as well as on the **ECV Inventory of Climate Data Records**, the joint **CEOS/CGMS Working Group on Climate** together with the **World Meteorological Organisation (WMO)** are soliciting use cases to demonstrate the value of Earth Observation satellites for societal benefit and decision making.

All cases submitted with complete information will be published here, and some selected use cases will also be considered for publication in a WMO special report to illustrate the importance of satellite observations for climate monitoring and climate service. Please consider submitting your use case using the **web-based submission form** below.

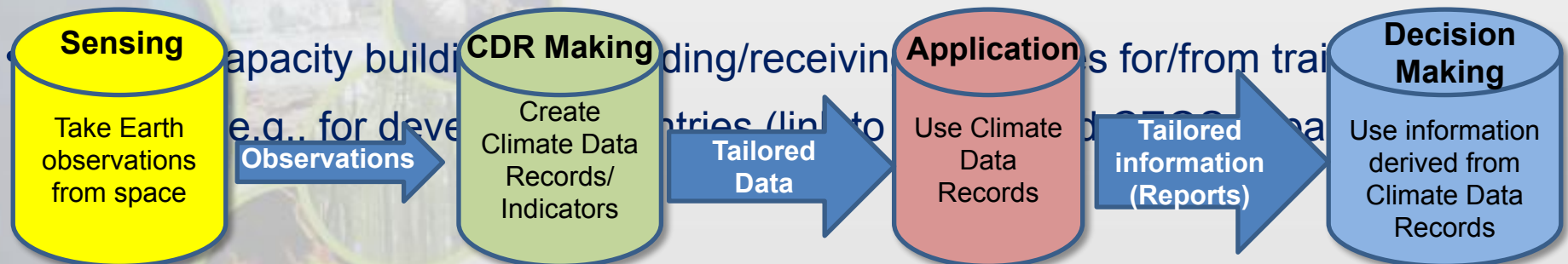


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Tell us a story! 🤔 How have you used [#ClimateDataRecords](#) from satellite [#EarthObservations](#) for societal benefit? Tell us about it here to enhance awareness and expand the space-based [#climatemonitoring](#) user community: [climatemonitoring.info/use-cases](https://climatemonitoring.info/use-cases)

# Use Cases for Climate Data Records: Major Objectives

- Demonstrate the value of climate data records for decision/policy making, e.g., usage of satellite data in a use case with UNFCCC Parties to support the Global Stocktakes
- Understand the application needs to provide feedbacks towards quality improvements for the ECV requirements defined by GCOS
- Validate the top-down architecture for climate monitoring from space with a down-top approach ensuring traceability from usage to space-based observing system
- Optimize the use of climate data records in applications relevant for climate services and science





- **Coastal Risk Information Service (C\_RISe)**
  - Satellite-derived sea-level record, ocean surface wind speed/direction, currents and wave height are used to provide coastal risk information service for countries on the east coast of Africa.
  - Information on sea level rise and storm surge helps reducing the social and economic impact of coastal inundation and extreme weather through coastal zone management, infrastructure protection and development, operational planning, fishery support, etc.
- **Parametric insurance for agricultural communities using weather and climate information**
  - Satellite-derived precipitation, temperature, land cover, soil moisture, and leaf area index are used to provide real-time risk assessment profiles for insurance policies that are designed to protect individual farmers and agribusinesses against drought, flood, excess rainfall, pest/disease, hail, cyclone, etc.