



WP7/VA2: Data standards, distribution and processing services

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WP Partners:

BSC, CNRS-IPSL, CMCC, DKRZ, DLR, KNMI, LIU, NLeSC, SMHI, UKRI, UREAD-NCAS

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WP Objectives

▪ Main Objectives

- Establish VA and TNA activities for ENES Climate Data Infrastructure (CDI) service provisioning
- Provide climate data (CMIP, CORDEX) access services (ESGF, WDCC, C4I)
- Provide (new) processing services to the climate modeling community, climate impact community as well as interdisciplinary research
- Additionally provide services on data documentation (es-doc) and data standards (CF, CMIP data-request).

▪ Specific Objectives

- Integration of processing functionality (ESMValTool, derived data products, WPS services, C4I portal) (VA)
- Overall user support organization (first level, second level)
- Outreach in cooperation with WP3/NA2
- KPI reports



WP Tasks: Data dissemination

- **Task 0: Coordination (DKRZ, KNMI)**
- **Task 1: ESGF data dissemination, data archival and user support (DKRZ, CNRS-IPSL, UKRI, KNMI, BSC, LiU, SMHI)**
 - ESGF data node distribution services (DKRZ, IPSL, UKRI, BSC, LiU)
 - C4I based data distribution service (KNMI)
 - Data archival services (including citation) (DKRZ)
 - User support:
 - DKRZ, IPSL, UKRI first level support for ESGF data service
 - KNMI first level support for impact community oriented services
 - SMHI provides CORDEX and regional climate related support



WP Tasks: compute services (VA and TNA)

- **Task 2: Compute services (VA) - “Comp1” (KNMI, DKRZ, IPSL, UKRI, CMCC, DLR, NleSC)**
 - Access to derived data products via processing services
 - SW stack evolved in WP10/JRA3 and WP9/JRA2
 - Distribute ESMValTool data products (portal at DKRZ, integration in C4I portal)
 - Support:
 - ESMValTool: DLR
 - Technical support: DKRZ, KNMI
 - Stepwise exposure of additional compute services (e.g. ESGF WPS services accessed by the C4I portal)
- **Task 3: Virtual workspaces (TNA) - “Comp2” (UKRI, DKRZ, IPSL, CMCC)**
 - Access to (center specific) compute and storage resources (hosting CMIP data pools)
 - Data pools are integrated into the ENES CDI replication infrastructure
 - TNA based access: selection panel



WP Tasks: Support for data standards

- **Task 4: Support for CF convention and data request (UKRI, UREAD-NCAS, SMHI)**
 - UREAD-NCAS: maintaining standards doc, cf data model
 - UKRI: moderation of CF standard names discussions, maintenance of CF tables, CMIP6 data request
 - SMHI: CORDEX data request

- **Task 5: ES-DOC operational support for CMIP6/7 (CNRS-IPSL, UREAD-NCAS)**
 - Operational es-doc support for CMIP modeling groups, maintenance of CIM database and related services



WP First actions planned

- Define external board for service reviews (together with WP1/MGT)
- Preparation of TNA service provisioning: selection panel and definition of selection criteria, call for bids preparation, center specific technical preparations
- ..
- Preparation of service activity reporting
 - Definition of kind and granularity of statistics (and KPIs) for data access, compute and data standards services usage
- Start the coordination of support activities
 - Initial documentation at portals (IS-ENES, ESGF, C4I,..)

M7.1 (Task1, mo8): ENES CDI help desk

M7.2 (Task0, mo12): setup of review committee and user selection panel

D7.1 (Task1-5, mo18): First KIP and TNA report for ENES CDI services

D7.2 (Task0, mo24): First external review report for ENES CDI services



WP Issues to be addressed

- ENES CDI processing services coordination with evolving ESGF processing services (--> WP9/JRA2 and WP10/JRA3)
- External service review board: ideas, proposals..