

Data Manager Activity

Work Plan

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Introduction and background

Considering terms of references of RC LACE Data Manager (DM) there are several areas of interest. Activities related to the organization of observational databases, installation and maintenance of data assimilation suites of LACE Members. The DM is responsible for common planning and technical work with data covered by the data assimilation actions. The DM is involved in the maintenance and development of the common Observation Pre-processing system for LACE (OPLACE) and ensures technical background of the observational data exchange. The DM is also responsible for verification issues within the RC LACE Programme.

Goal

Meteorological observations are key aspect of data assimilation and verification. Observation database (ODB) handing and data assimilation suite is rather complex and demanding for installation and maintenance. The main objective is to provide the ODB related support, to help solving problems and further spread information inside the community. The OPLACE was built to provide observations in an appropriate format for data assimilation to the Members. The OPLACE maintenance and further development is the core DM's activity and is essential to provide stable and reliable framework for the operational data assimilation.

Main activities

This is a tentative plan of the DM activities for 2019. Priorities may change during the planning period and efforts and/or schedule can be adapted accordingly. Here follows the list of the items which are expected to be of the DM's main interest:

Action: OPLACE

Description and objectives: The OPLACE provides observation in an appropriate format for data assimilation to Members. Regular maintenance is required in order to ensure stable and reliable bases for the operational purposes and further extension by the new data is essential for a general progress in area of data assimilation.

In 2019 the migration from TAC to BUFR format for conventional data has the highest priority and a redesign of OPLACE scripts will continue to improve the OPLACE operations.

Proposed contributors & Estimated efforts: DM, 4 PM

Planned time frame and deliverable: continuous local work and a short stay at HMS; the system and observation monitoring maintenance and development.

Action: Data exchange

Description and objectives: A substantial number of high resolution observations is available in LACE and non-LACE countries. The regular overview of exchanged data and a necessary support for the operation and further extension will be provided.



Proposed contributors & Estimated efforts: DM, 1 PM

Planned time frame and deliverable: data exchange overview, system maintenance and extensions.

Action: ODB support

Description and objectives: The main objective is to provide ODB related support. This comprises help in the configuration and usage of ODB and related applications at Members' site. The DM will also continue to act as a contact point for Continuous Observation Processing Environment (COPE) and will follow development of colleagues at ECMWF, Météo France and HIRLAM, but a very limited work on COPE is proposed for the short term.

Proposed contributors & Estimated efforts: DM, 1 PM

Planned time frame and deliverable: continuous work

Summary of resources

Here follows a summary of the planned RC LACE Data Manager activity for 2019.

| Subject | Manpower | LACE stays |
|---------------|----------|------------|
| OPLACE | 4.0 PM | 0.5 PM |
| ODB support | 1.0 PM | |
| Data exchange | 1.0 PM | |
| Total: | 6.0 PM | 0.5 PM |

Meeting and events

- 1) Joint 29th ALADIN Workshop & HIRLAM All Staff Meeting, 1-5/4/2019, Spain.
- 2) 41st EWGLAM and 26th SRNWP meeting
- 3) OPLACE maintenance stays, 2 weeks dates to be defined, Budapest, Hungary.

Risk and constrain

Adaptation of the OPLACE to the migration from TAC to BUFR format is progressing slowly and related issues starts to appear. A high priority should be given to the migration to prevent risks of an interference with the operational data assimilation applications.

Maintenance of the OPLACE system is more demanding as number of processed data and a complexity of the system grow. Furthermore, a development of the observation monitoring system, in particular extensions to the new data, is delayed due to lack of time.