Release Note for ClimSA Station version 1.3.1

This Note describes the main modifications contained in version 1.3.1, with respect to the features (Section 1), the datasets treated on the system (Section 2) and the bug fixing changes (Section 3).

1. FEATURES

1.1 GENERAL FEATURES

- CDS-beta is replaced by CDS system, so ClimSA station is adapted to new CDS-beta API. Also, the authentication has been changed. The existing CDS credentials cannot be used anymore. The new user on the CDS-beta should be created and input in the ClimSA station.
- The Jupyter notebooks are adapted to new CDS-beta system.
- In the Portfolio page, under the Data Provider credentials, the two providers HYDROWEB and CGLS are removed because these providers do not need registration anymore.
- LANCE Near Real Time (NRT) Credentials used for downloading MODIS firms product requires token which expires every two months. So, the user should update the token every two months. We also made available the JRC data source to download the same product without credentials, but it must be manually activated.

- Impact Tool box new features:

    - Openlayers 10 and proj4.
    - Reverse order of the Logs.
    - ESRI, Planet base maps.
    - RUSLE: general improvements, detailed Report file.
    - New toolbar with GoTo option.
    - New Raster and Vector Legends (ESA CCI + WORLDCOVER).
    - Fix bug in DBF editing.
    - Image segmentation: now handles class '0' from existing map.
    - Minor fix.

1.2 DOCUMENTATION

- The following document are updated to 1.3.1 version in the current release:
    - Data Provider Registration Manual (in English)
    - Product Report (in English and French)

2. PRODUCTS

Some products are introduced in replacement of phased-out products. These products are described in the Product Report document (accessible from the Help tab) and listed below.

2.1 ACQUISITION

- New reprocessed datasource for ARC Rain products made available.
- There are new reanalysis products from ERA5 as well as CDAS NCEP NCAR such as Mean Sea level pressure, Geopotential, Relative humidity and U & V component of the wind at different pressure level.
- Seasonal forecast product from ECCC model system 3 is obsolete.

2.2 PROCESSING

- New processing chain for ERA5 2meter temperature is made available to convert temperature from Kelvin to Celsius & compute its anomaly.
- ERA5 temperature hourly to daily max, min computation processing chain is created.
- For ERA5 precipitation products processing chain is implemented to compute the cumulation to daily and dekad by converting to mm.
- New processing chain is made available for computing dekad products for Mean Sea level pressure, Geopotential, Relative humidity and U & V component of the wind at different pressure level.

3. BUG FIXING

A number of bugs were identified by JRC or indicated by the Users and addressed in the current version. These activities are reported for completeness' sake and for traceability, though they are not of primary interest for the Users (more for JRC internal reference).

3.1 ANALYSIS TOOL

- Fixed Unicode issue in product navigator.
- Fixed opening pinned workspaces when user logs in.

3.2 SYSTEM

- The data sync mechanism is modified to better handle the download mechanism from the ClimSA server as well as from the CDS server.
- Corrected and integrated WMS webservice.

NOTE on versioning

The Climate stations defines 3 distinct versions, as below

Software Version:	1.3.1	(is the main version, visible in the header of every page)
Database Version:	1.3.1	(PostgreSQL DB version, as displayed in the System page)
Configuration Version:	1.1.3	(internal only)
IMPACT:	5.201b	