Lineage:
- Initial version – Radim and Rashid, Aug 2016
- Minor Edits – Bruce, Jan 2017

User Story

6.1 Analyse and Generate Climate Data - Generic

Version: 0.1

==== User Story ====

Related components: 6.1, 4.1, 4.3, 4.4, 4.5, 5.1, 5.3, 8.1.1, 7.1

Related User Stories:

- .

A Climate Data Manager requires functionality to effectively analyze climate observation and model data and produce new useful elaborated data that will help analyze the climate of a region.

This functionality will allow a Climate Data Manager to generate new climate data from the existing climate observation data in the database or from model data, which will be used for the analysis of climate.

The Climate Data Manager requires functionality to allow data management staff to:

- Generate new time series data from the database by applying very broad range of analysis techniques such as generating climate change indices.
- Generate gridded data from stations climate observations using different raster and vector spatial analysis techniques combined with different statistical techniques if needed and plot the corresponding maps or export them in different format.
- Process image data available in the database to generate new useful data such as processing remotely sensed satellite imagery to generate a normalized difference vegetation index to measure vegetation greenness.
- Use different homogenization techniques and process time series data with their related metadata to produce new homogenized data time series and either store them in the database or export them in a suitable format.
- Allow data management staff to modify/correct a database observations record by linking the graphical visualization to the climate database where possible and appropriate (e.g.: from a time series plot); and keep the changes.

Architectural Comments:

- .

===== end ====

Reference: WMO 1131