

Lineage:

- Initial version – Rachid and Radim, Aug 2016
- Edits – Bruce, Jan 2017

User Story**6.1.2 Generate Climate Monitoring Grids – remotely sensed imagery - NDVI****Version: 0.1**

Bruce Bannerman 24/1/2017 14:47

Comment [1]:

This needs much more work

==== User Story ====**Related components:** 6.1.2, 4.1, 4.3, 4.4, 4.5, 5.4, 8.1.1, 8.3.1, 7.1**Related User Stories:**

- **6.1.2 Generate Climate Monitoring Grids.**

A Climate Data Manager requires functionality to monitor climatic conditions over a region of interest by analysing remotely sensed satellite imagery.

Automated software generates climate monitoring grids by analysing remotely sensed imagery using an appropriate algorithm across a country or selected area and over defined time periods (e.g. yesterday, last month, last year). An example algorithm is a Normalised Difference Vegetation Index¹ (NDVI).

The software then generates climate grids using spatial and image statistical analysis, replacing existing grids where observation values had been changed due to climate quality control processes.

Architectural Comments:

- There are many variants to this common architecture pattern. It is required to generate a wide range of grids.
- This type of analysis will typically require a workflow of processing algorithms prior to generating the required derived gridded product.

===== end =====*Reference: WMO 1131*

¹ https://en.wikipedia.org/wiki/Normalized_Difference_Vegetation_Index