



Atmospheric Data Access for the Geospatial User Community



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<http://adaguc.knmi.nl>

To disseminate atmospheric data to the geospatial community is very cumbersome: in general the geospatial community uses other data formats and uses GIS for analyses. Therefore, time-consuming and inefficient conversions are needed to use atmospheric data. Within the ADAGUC project (Atmospheric Data Access for the Geospatial User Community) we provide space borne atmospheric and land datasets using web services that can be used for data comparison, resampling, selection, manipulation and visualization in GIS.

The ADAGUC project started in 2006 and will end December 2008. At the Final ADAGUC Workshop (December 4-5 2008, Amsterdam) the project results will be presented. On this poster we present 3 of the main results.

1 User Requirements and Use Cases

During the first ADAGUC workshop use cases were defined and 4 main user communities were identified: 1) Policy makers, 2) Atmospheric Scientists, 3) GIS Users, 4) Risk Assessment community. For each community we analyzed at least one use case for requirements.

The use cases and requirements were extensively reviewed by key use case stakeholders. The use cases and requirements documents are the main input for our web service infrastructure development.



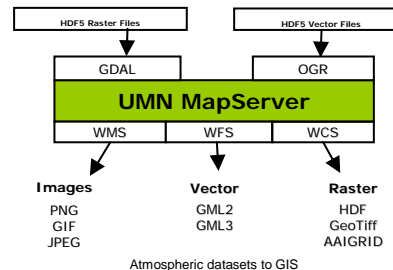
Risk Assessment Community, one of the four ADAGUC user communities

2 Web Service Infrastructure

For providing the temporal atmospheric and land dataset products, OGC compliant web services are used: WMS for visualization, WFS for download of vector data and WCS for downloading raster data.

We use UMN MapServer as basis and other Open Source solutions like THREDDS when needed.

Main challenge encountered: our datasets are dynamic, temporal and huge. While most OGC solutions are optimized for small static datasets.



3 ADAGUC Data products Standard

Besides 'just' providing data, an important requirement is standardized, clearly defined and structured format.

We defined the HDF-5 ADAGUC data products standard, which includes structured metadata (ISO 19115). All ADAGUC data will be archived in this format. Converters for converting this data into GIS friendly formats are developed (e.g. GeoTIFF, GML) within the project.



Final ADAGUC Workshop
December 4-5 2008, Amsterdam

At the Final ADAGUC Workshop the main project results will be presented. The workshop is open to present papers related to the ADAGUC subjects. Details on registration and how to submit (extended) abstracts will be published on the ADAGUC website:

<http://adaguc.knmi.nl>

