



# ADAGUC Workshop 2018 @ KNMI, 21-23 November

KNMI organizes a 3-day workshop to provide hands-on experience with the ADAGUC software suite.

## Wednesday November 21<sup>th</sup> 13:00 – 18:00:

- 13:00 Opening of the workshop, coffee, tour de table, demo
- 13:30 Overview and new features since last workshop:  
*Improved docker containers for easier installation*  
*adaguc-webmapjs NPM package to build your own viewer*
- 16:00 Installation of ADAGUC Viewer and ADAGUC Server

## Thursday November 22<sup>th</sup> 09:00 – 18:00

Continue installation / Get your data into the system / Hands on experience

## Friday November 23<sup>th</sup> 09:00 – 18:00

Continue installation / Get your data into the system / Hands on experience

For detailed information look at <http://adaguc.knmi.nl/>

**When:** 2018 November 21-23

**Where:** KNMI - A0.10 and A0.12

**Contact:** <https://www.knmi.nl/contact>

**Sign-up:** Send an email to:  
[maarten.plieger@knmi.nl](mailto:maarten.plieger@knmi.nl) / [ernst.de.vreede@knmi.nl](mailto:ernst.de.vreede@knmi.nl)

- **Bring your own data and laptop!**

A preinstalled virtual machine will be provided, 20Gb free space is required

<http://adaguc.knmi.nl>

<https://dev.knmi.nl/projects/adagucserver>

## What is ADAGUC?

ADAGUC is an Open Source geographical information system to visualize scientific data formats like NetCDF, HDF5 and GeoJSON over the web. Supported file formats are “true color netCDF” for satellite imagery, structured grids, curvilinear grids, satellite swaths, point observations, point time series and polygons stored in GeoJSON. The software consists of a server-side C++ application and a client-side JavaScript application. It uses OGC Web Mapping and Web Coverage standards for data dissemination and OGC Web Processing for data analytics. Web clients like GoogleMaps, OpenLayers and Leaflet are supported and can directly use the exposed webservice.

ADAGUC is used in numerous projects like KNMI GeoWeb, KNMI Data Centre, EUNADICS-AV, IS-ENES Climate4impact, CLIPC and C3S-34a lot 2 Magic. ADAGUC has a number of data converters and data post processors to support various data conventions. Datasets consisting of several netCDF files can be aggregated into a single dataset and are offered over WMS, WCS and OPeNDAP. Any number of dimensions are supported (e.g. time, elevation, ensemble member, threshold, reference times), and it can update and aggregate data on an operational webservice. ADAGUC can be used as a component for Web Processing Services to subset data and convert GeoJSON to grids. Latest developments include tiling of huge satellite imagery like HIMAWARI and NOAA GOES-16 to provide interactive zooming and panning while running an animation loop.

In the KNMI GeoWeb project we are building a new and open web based meteorological working station to support operational weather forecasting. ADAGUC is used to provide real-time visualization and animation loops of satellite imagery in combination with observations from automated weather stations and predictions from weather models. Areas of interest can be indicated by drawing polygons on a map. The frontend is built using ReactJS, a JavaScript library for building user interfaces and integrates ADAGUC-viewer as a component. The GeoWeb project includes unit tests, continuous integration and Docker containers to ensure high code quality which can run anywhere. Development is done using Agile methodology and deployment of the system is done frequently in an operational environment using Docker. We are open for collaboration to use, extend or join our project.

