

NWCSAF2ADAGUC



- ADAGUC/GEOWEB OVERVIEW on behalf of KNMI
- LIVE EXAMPLES
- SUITE OVERVIEW

jllisov@aemet.es

maarten.plieger@knmi.nl (R&D KNMI)

ADAGUC open source visualization - 2020

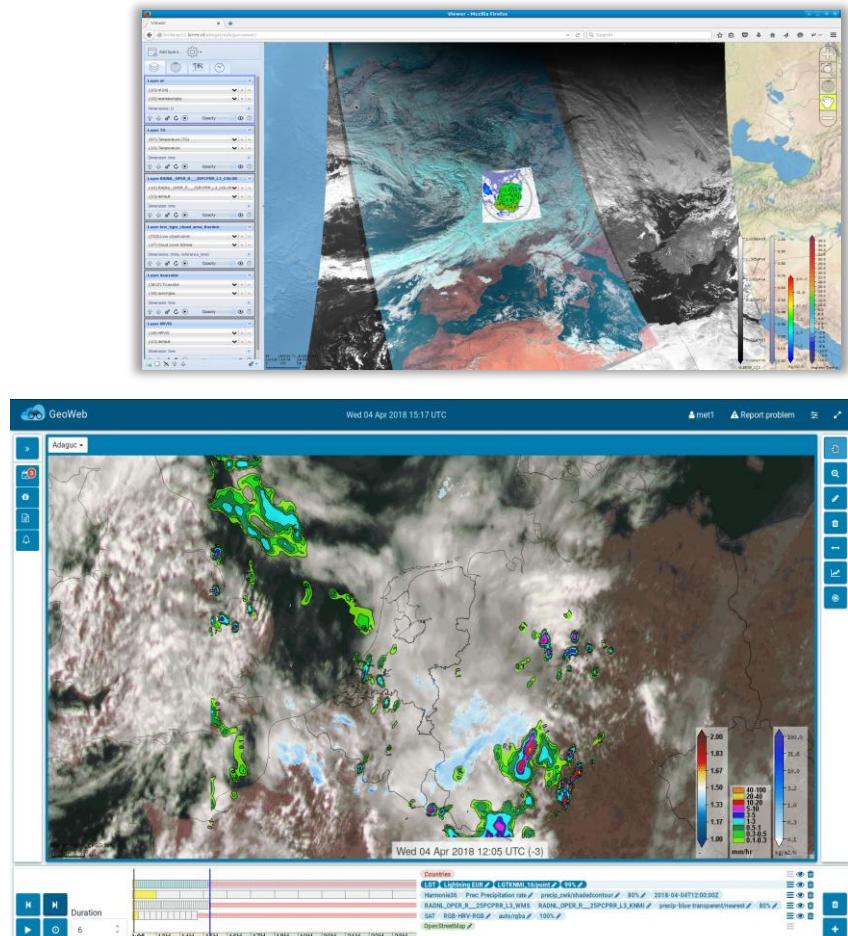
Maarten Plieger, Ernst de Vreede – KNMI – adaguc@knmi.nl

- ADAGUC open source visualization
- Realtime OGC Web Map Services
- Used in production and research
- GeoWeb meteorological working station
- Currently in development
- Open source software
- Web based
- Fast

ADAGUC is an open-source project from
KNMI:

<http://adaguc.knmi.nl/>

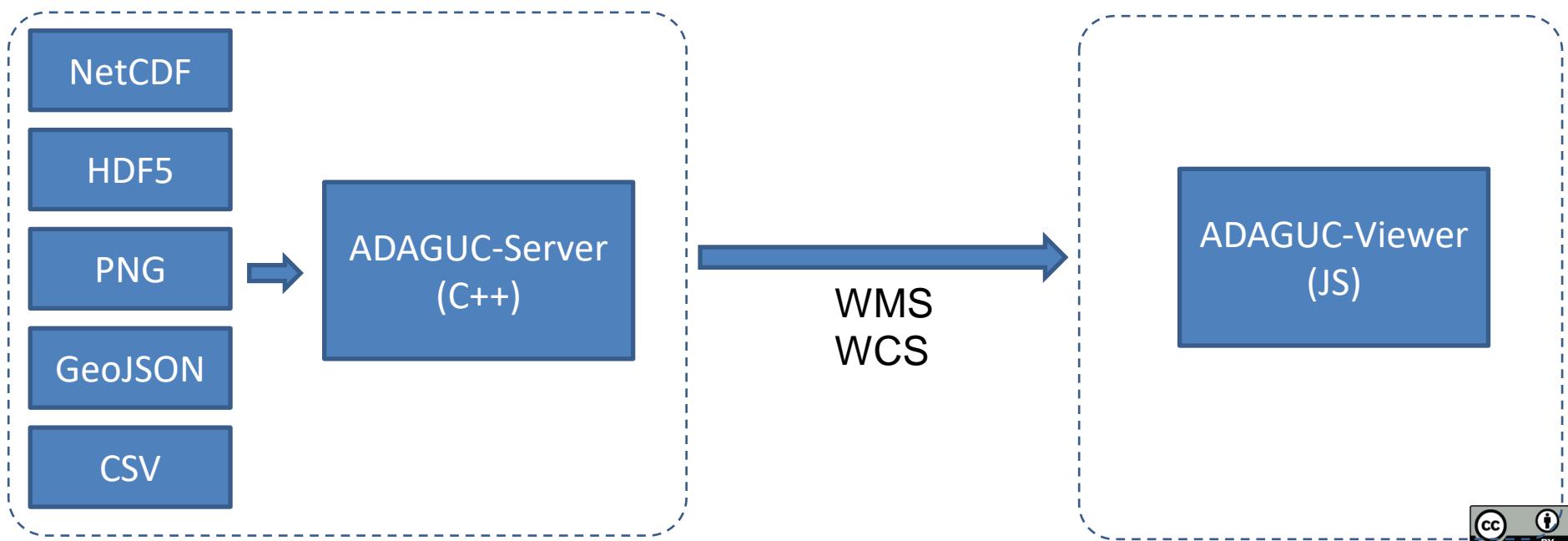
maarten.plieger@knmi.nl (R&D KNMI)





ADAGUC

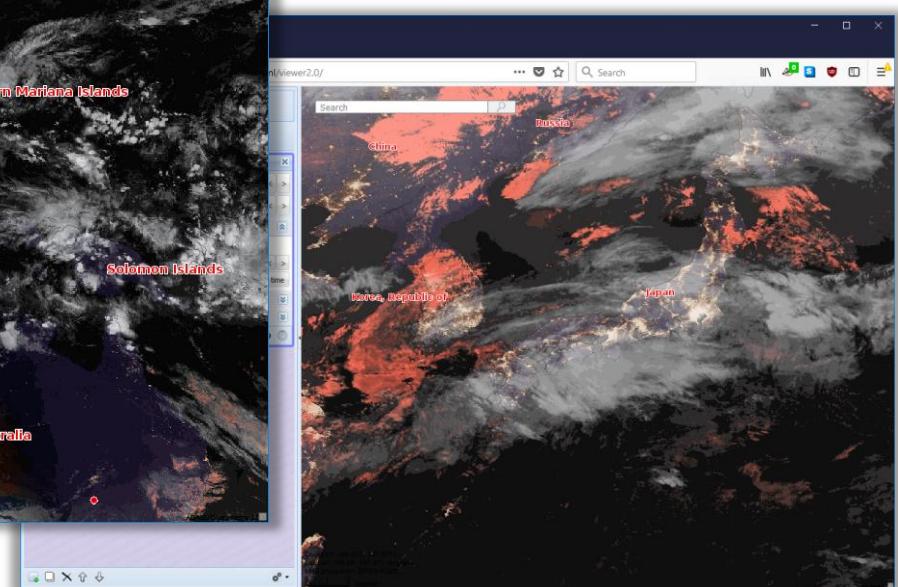
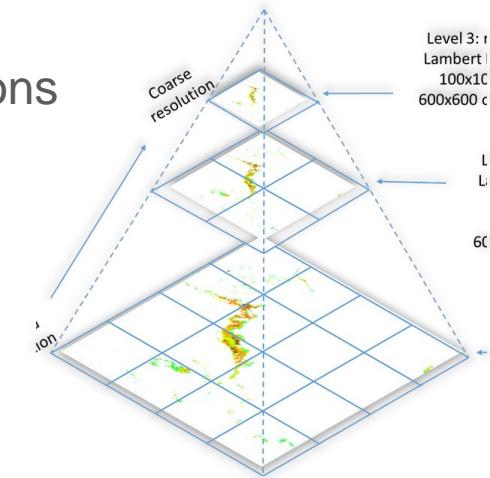
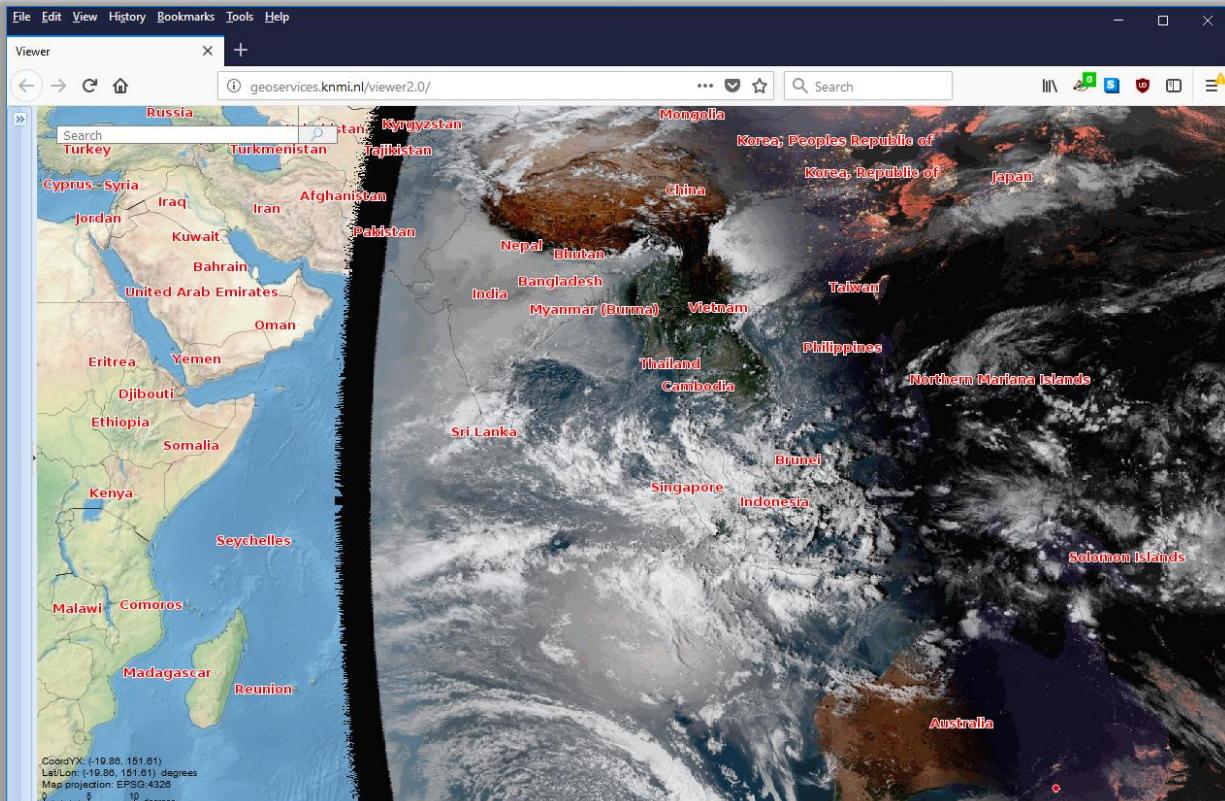
- Open source since 2010
- Supports live updating of dynamic datasets with any dimension
- Uses postgresql to store references to the data (and concatenation of timesteps)
- Easy to run on your laptop / workstation via Docker containers
- Source code hosted on GitHub (with instructions)
- Re-usable frontend components for ReactJS via ADAGUC react-webmapjs
- AutoWMS visualizes your files automatically
- It enables you to view, combine and share your data
- Server ↔ client architecture via open standards from the OGC (WMS and WCS)





Supports high resolution datasets with pyramid tiling

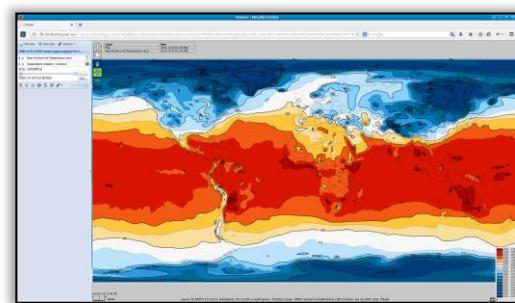
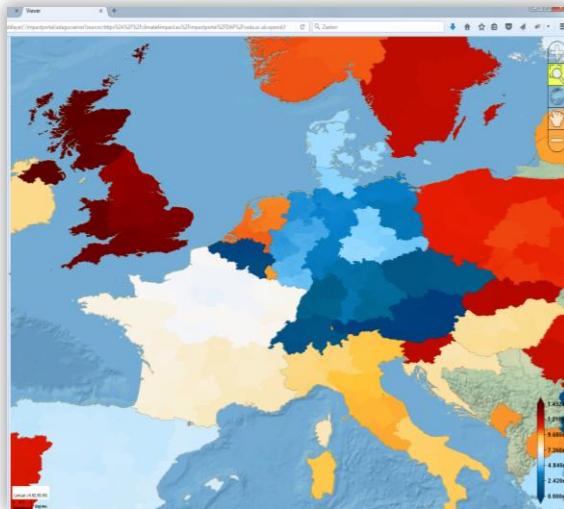
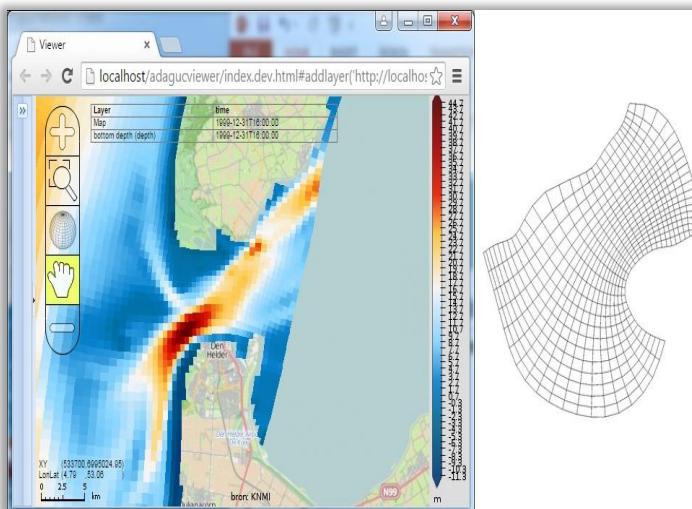
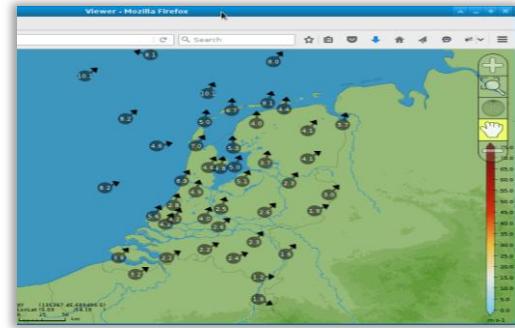
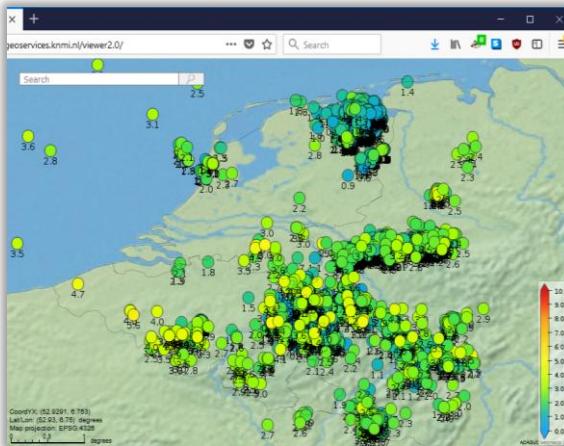
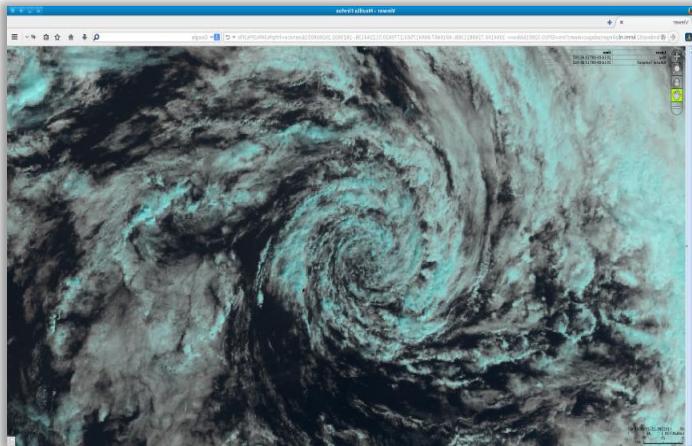
- Himawari imagery
- Including animations and on the fly geographical transformations
- Tiles are stored in NetCDF as well.





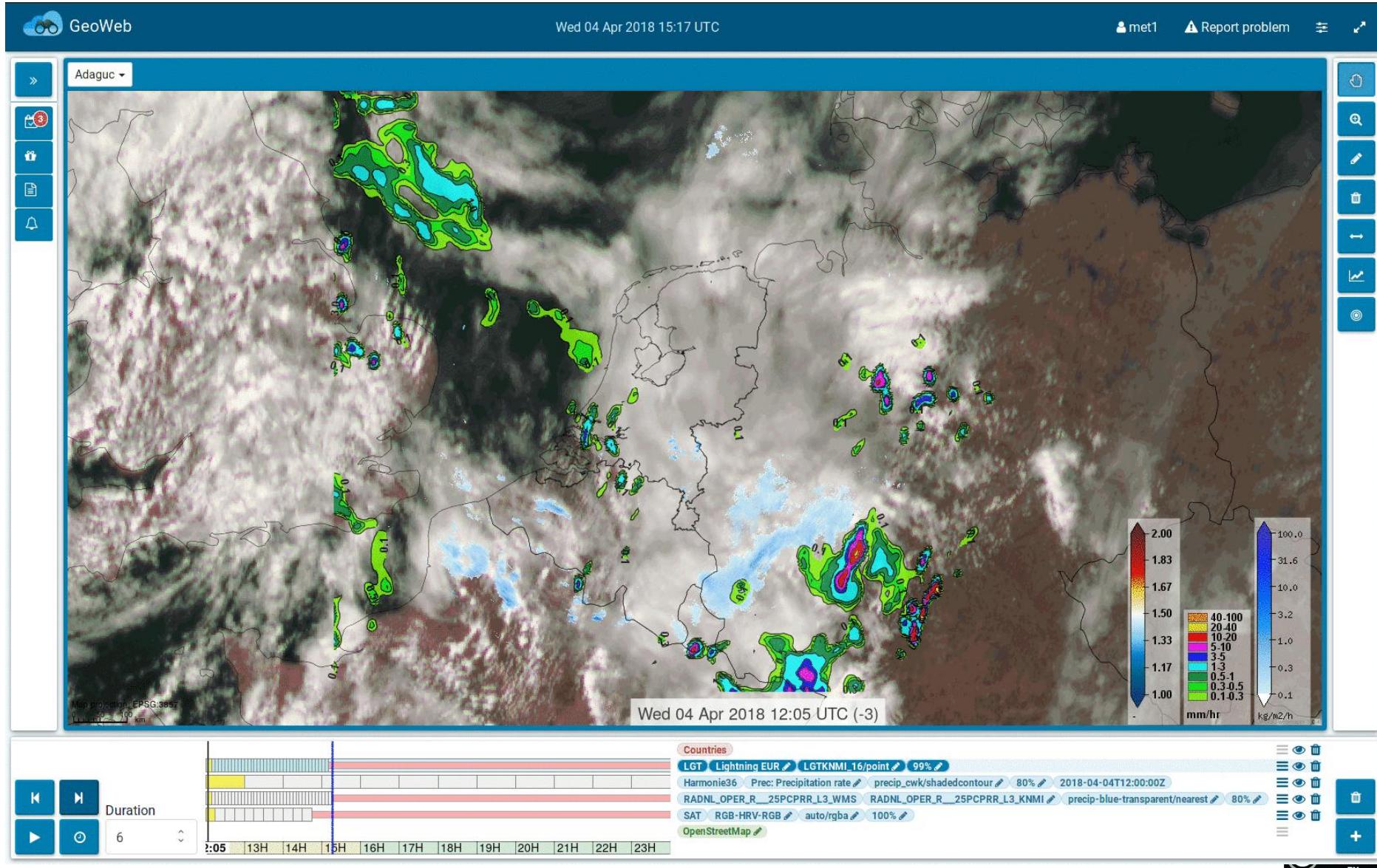
Supported types (Raster, points, vector, curvilinear, swath)

- HDF5, NetCDF, CSV, PNG and GeoJSON are currently supported by ADAGUC



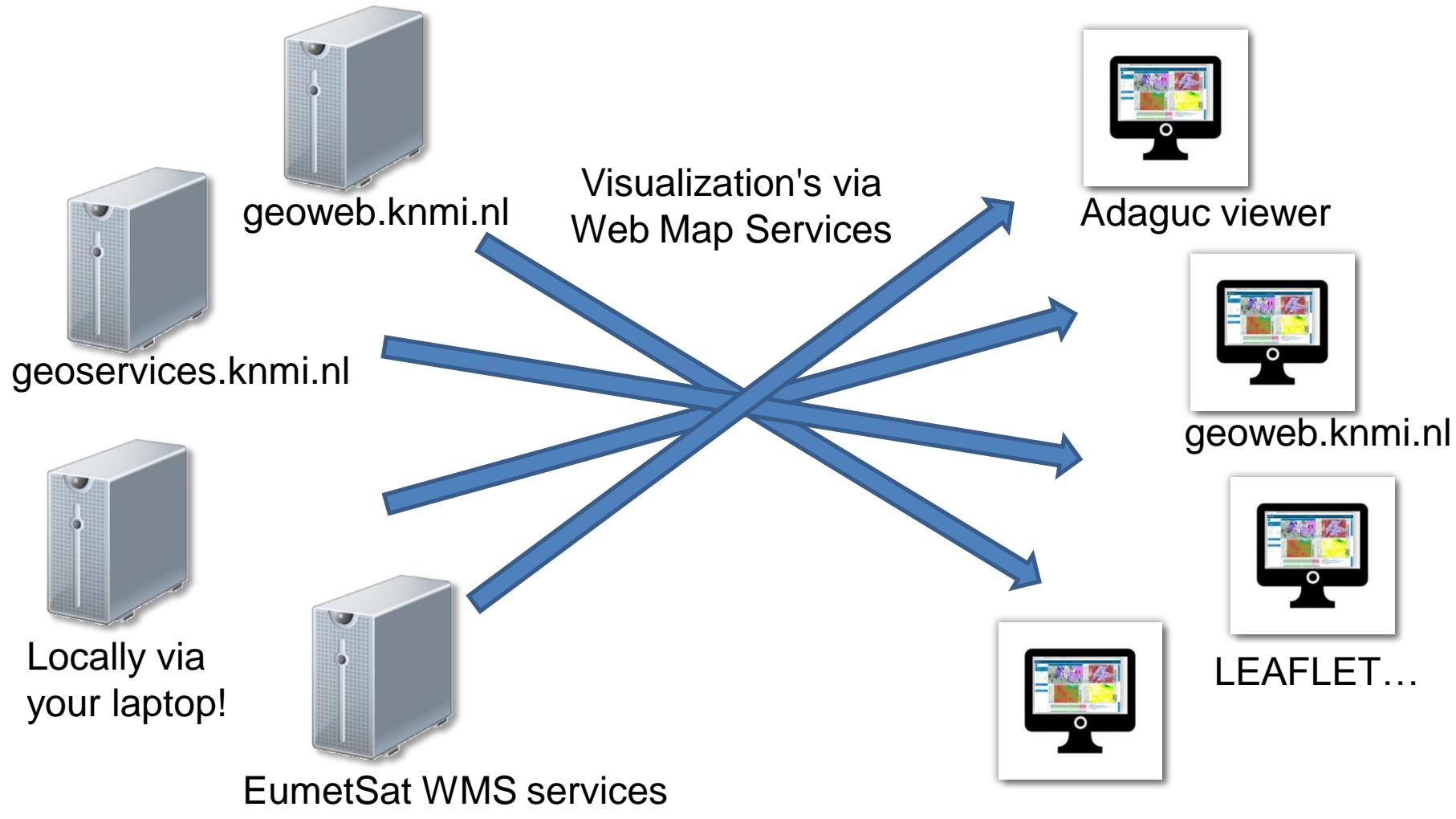


GeoWeb: Model data, satellite data, animation loops, forecasts





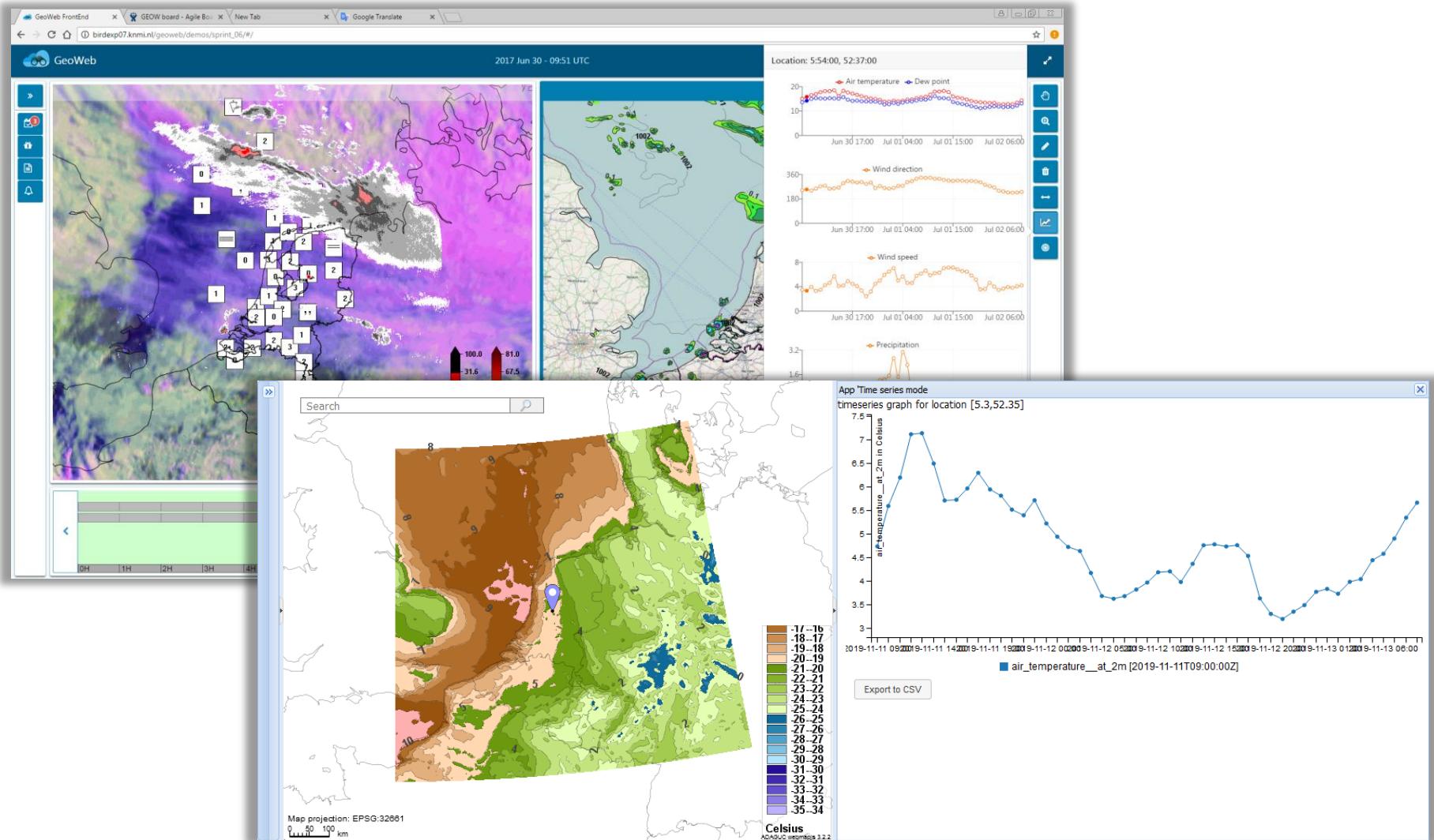
Web based Client ↔ Server architecture using open standards



Others, EUMETSAT, ECMWF, GFS, INSPIRE, researchers, etc ...



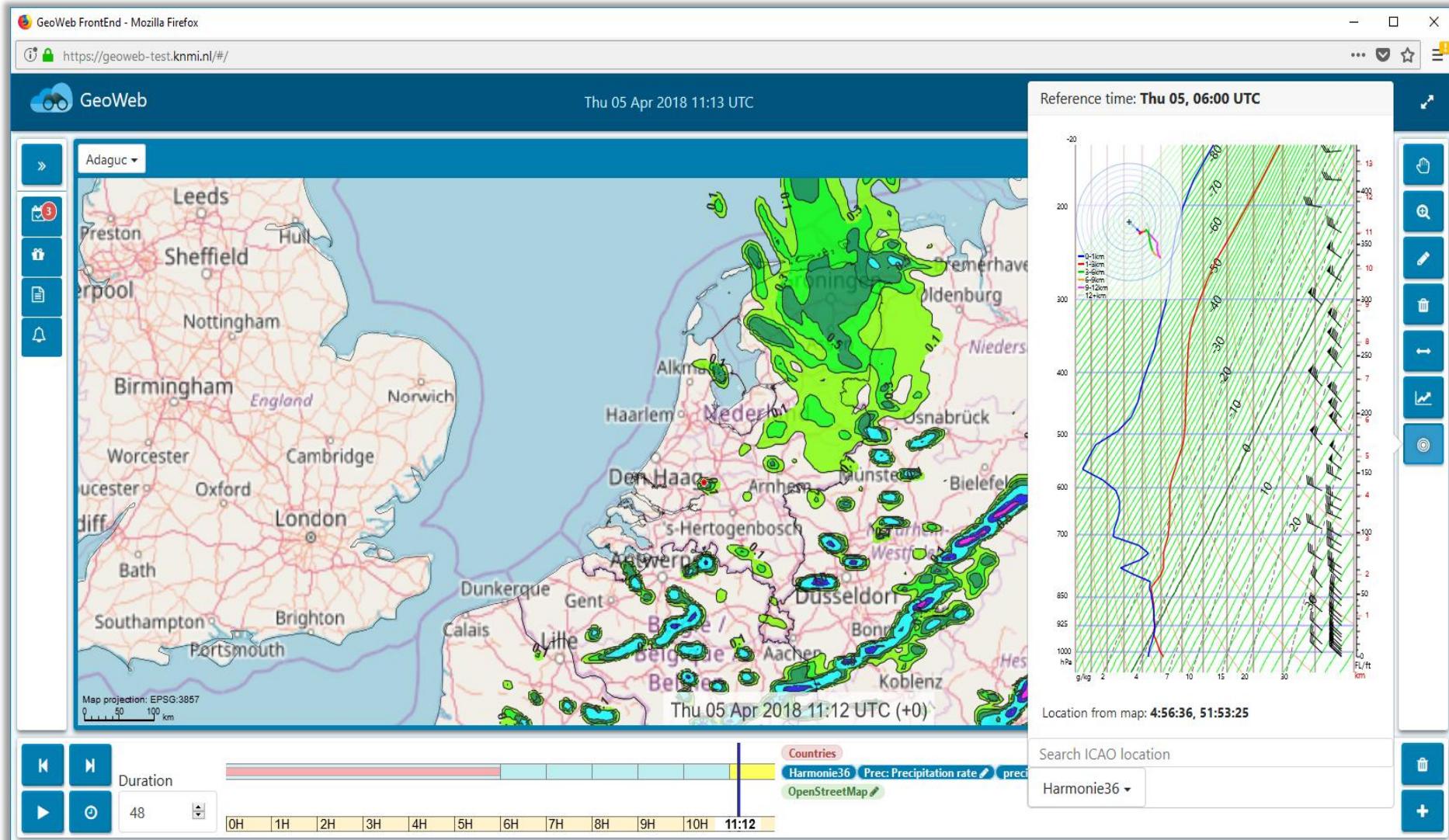
Interactive timeseries – click any location to get timeseries



BY



Interactive progtemp – Vertical profiles anywhere on the map

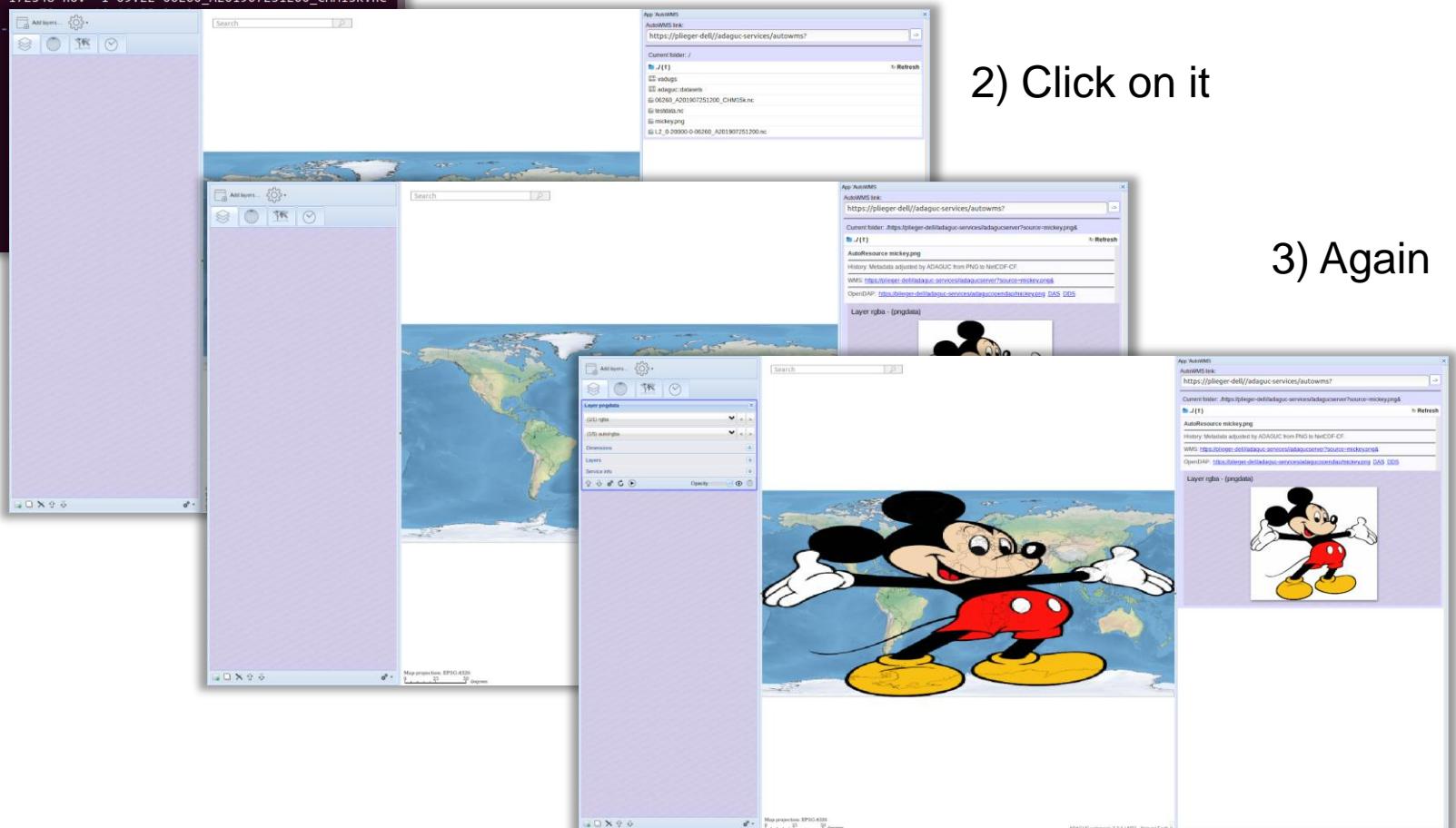




ADAGUC AUTOWMS: Explore your own local files with WMS

```
pieger@pieger-dell: ~/adaguc-autowms
File Edit View Search Terminal Help
pieger@pieger-dell:~/adaguc-autowms$ ls /home/pieger/adaguc-autowms -lrt
total 304
-rw-r--r-- 1 pieger afd_rwd 14591 jul  4 11:57 testdata.nc
-rw-r--r-- 1 pieger afd_rwd 27278 jul  4 13:07 mickey.png
drwxr-xr-x 2 pieger afd_rwd 4096 sep 26 11:23 vadugs
-rw-r--r-- 1 pieger afd_rwd 76339 nov  1 09:21 L2_0-00000-0-06260_A201907251200
00.nc
-rw-r--r-- 1 pieger afd_rwd 172548 nov  1 09:22 06260_A201907251200_CHM15k.nc
-rw-r--r-- 1 pieger afd_rwd
pieger@pieger-dell:~/adaguc-
```

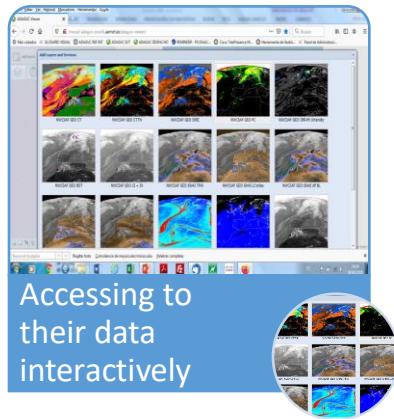
1) Put your file of interest in the auto-wms folder



4) Your data is now added to the viewer as a WMS Layer

Helping the NWCSAF users to extract maximal benefit

Live Examples:



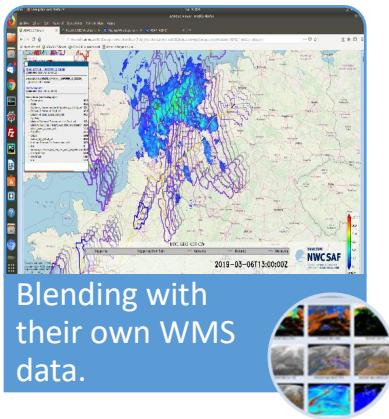
Accessing to
their data
interactively



Combining
products

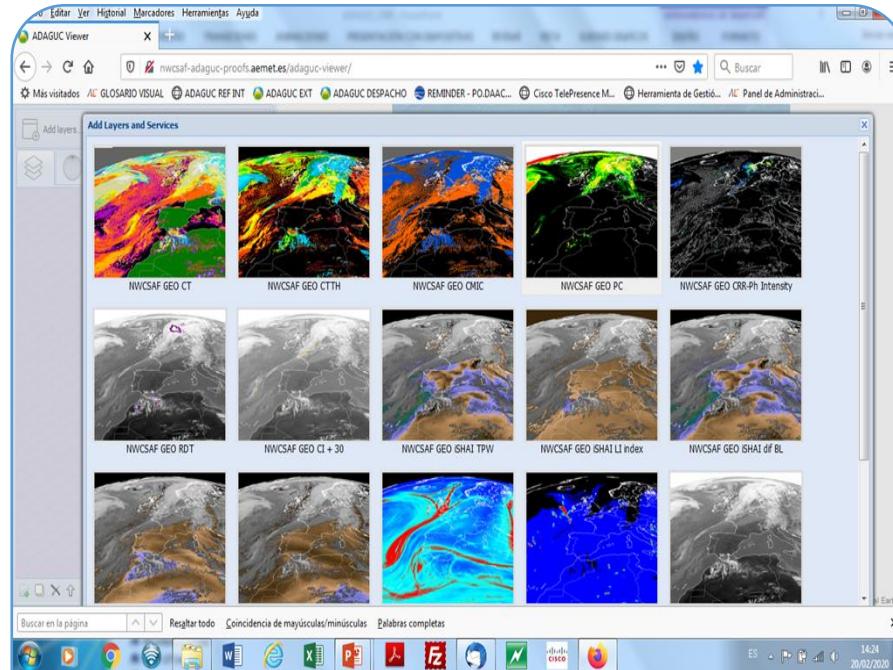


Releasing in
their own
systems

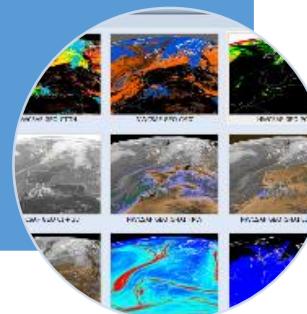


Blending with
their own WMS
data.

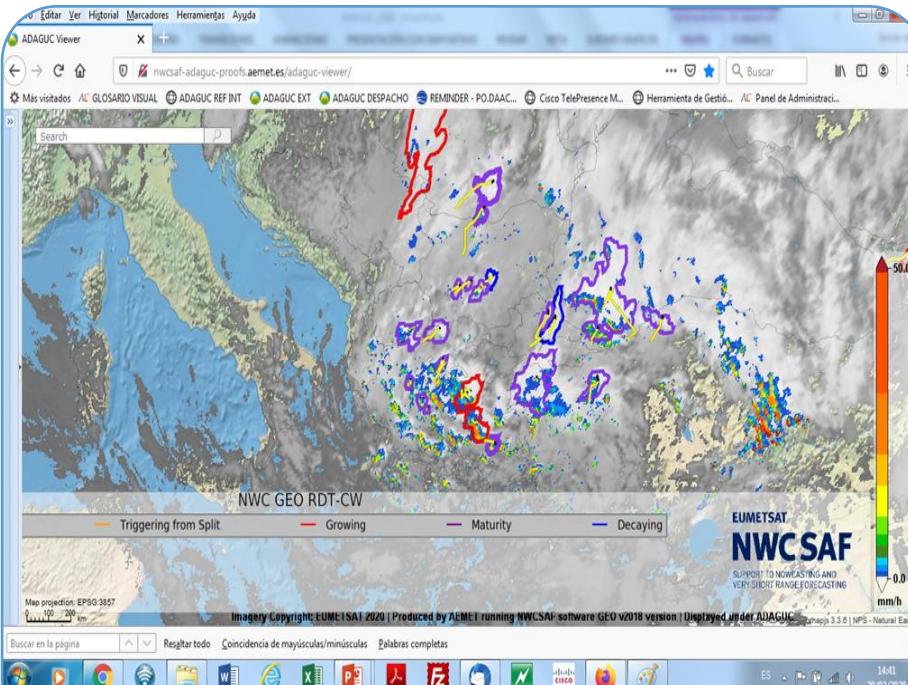
Helping the NWCSAF users to extract maximal benefit



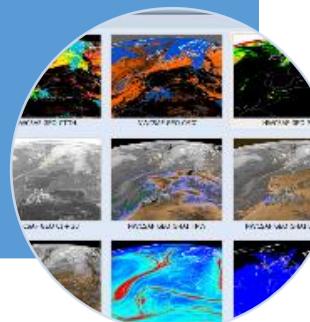
Accessing to
their data
interactively



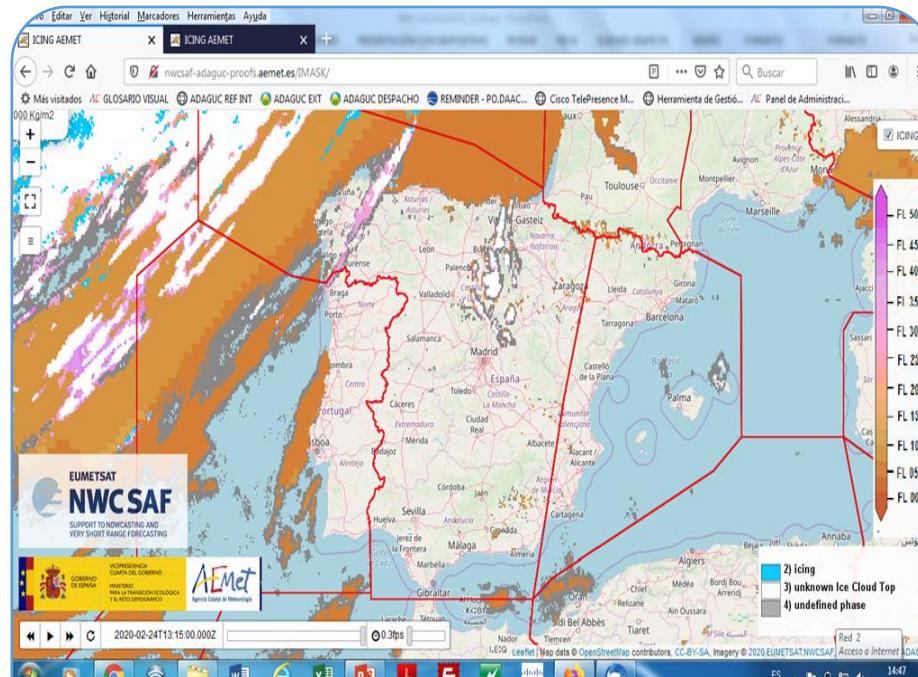
Helping the NWCSAF users to extract maximal benefit



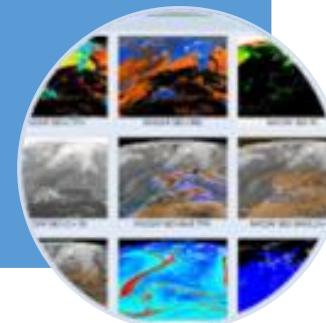
Combining products



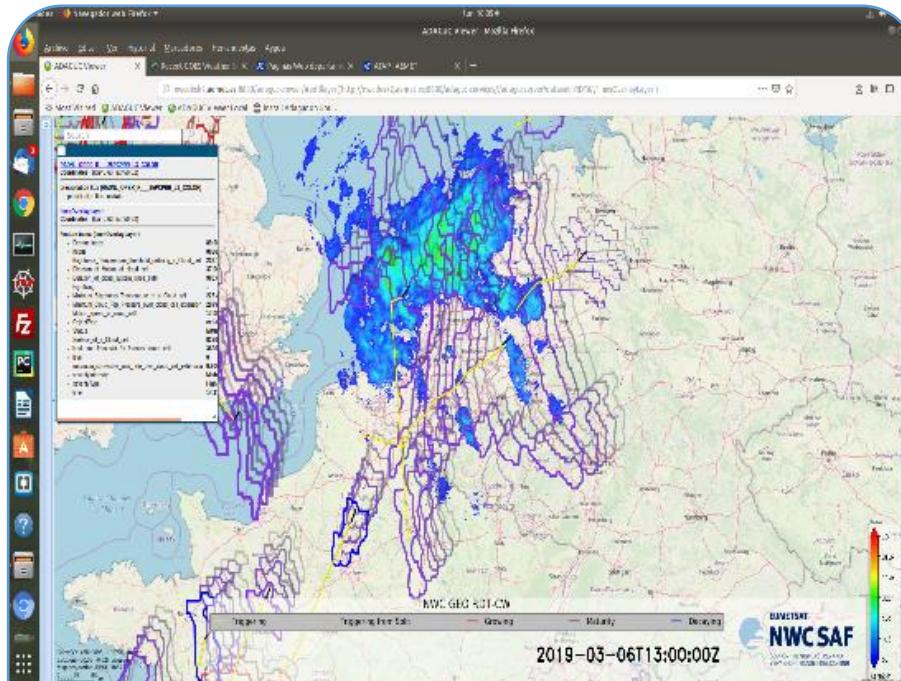
Helping the NWCSAF users to extract maximal benefit



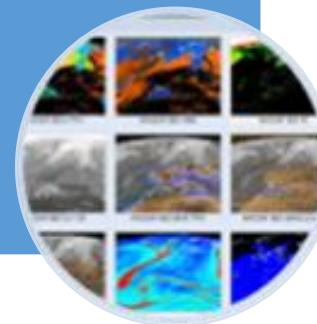
Releasing in
their own
systems



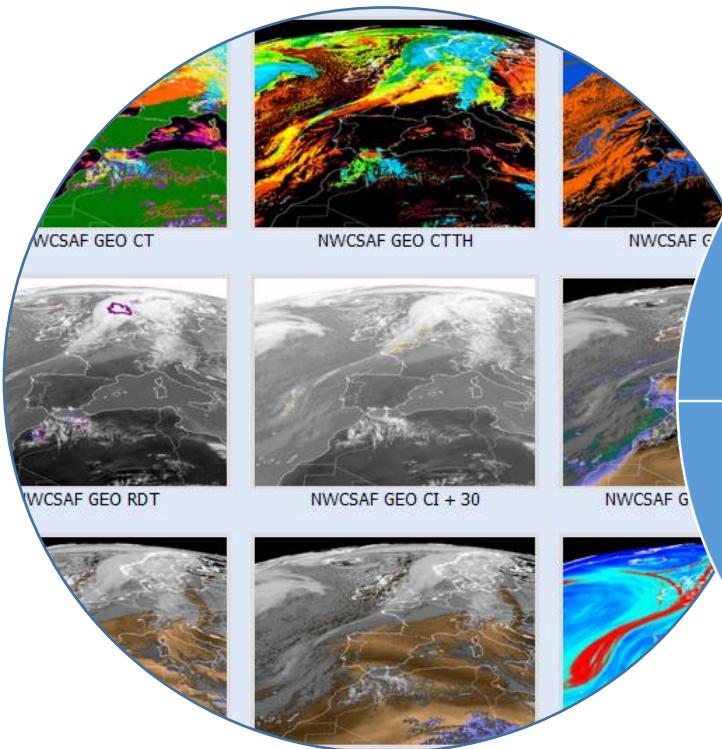
Helping the NWCSAF users to extract maximal benefit



Blending with
their own WMS
data.



THE LINK:



[http://nwcsaf-
adaguc-
proofs.aemet.e
s/CT/](http://nwcsaf-adaguc-proofs.aemet.es/CT/)

Show
case

[http://nwcsa
f-adaguc-
proofs.aem
et.es/adagu
c-viewer/](http://nwcsaf-f-adaguc-proofs.aemet.es/adaguc-viewer/)

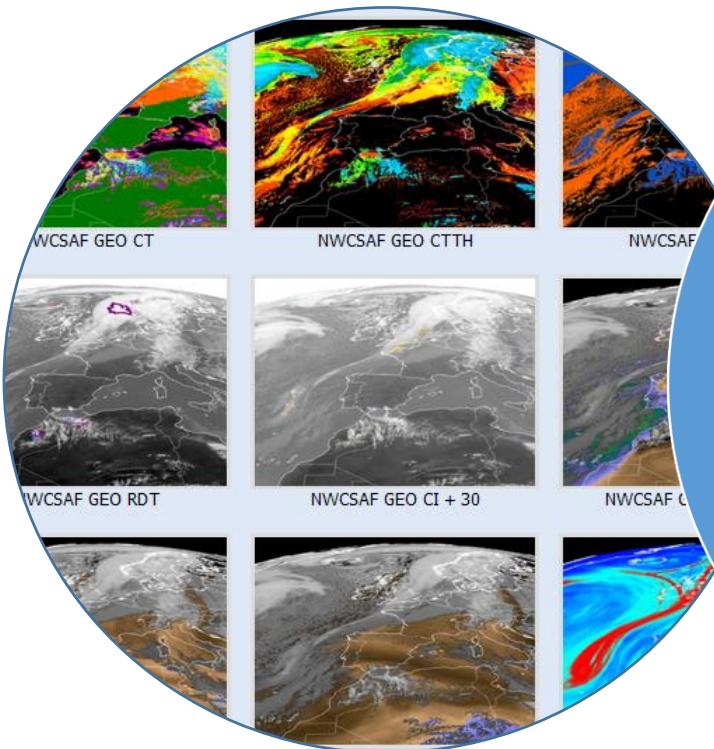
Live
access

OUR PLACE:



<http://nwcsaf-adaguc-proofs.aemet.es/adaguc-viewer/>

THE CONVERTER:

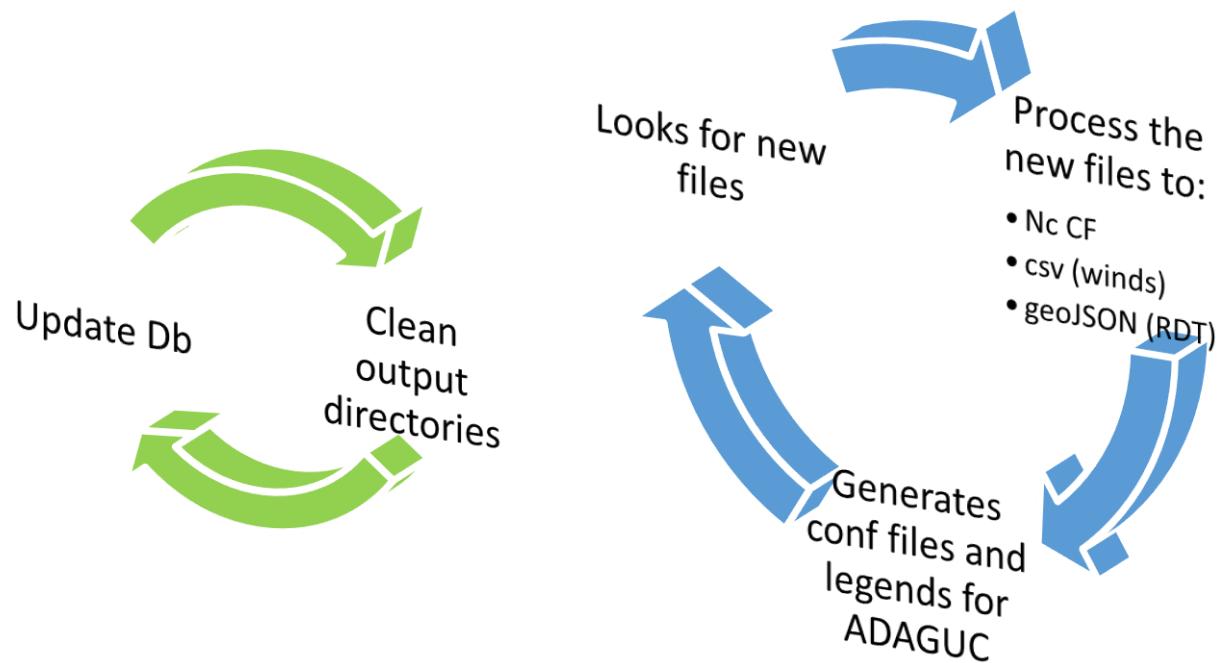
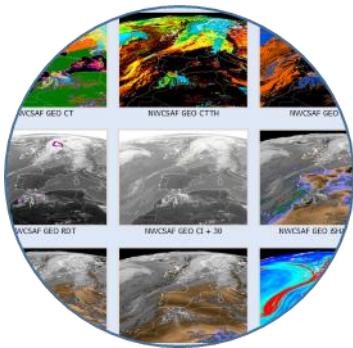


Git
available

Output files
handeable by
Panoply, WCT,
mclDASV..

<https://gitlab.aemet.es/xcalbeta/ADAGUC-utilities>

THE SYSTEM:



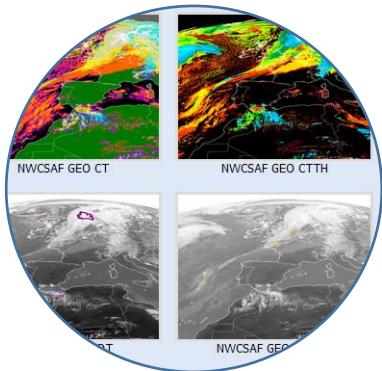
OUR gitlab:



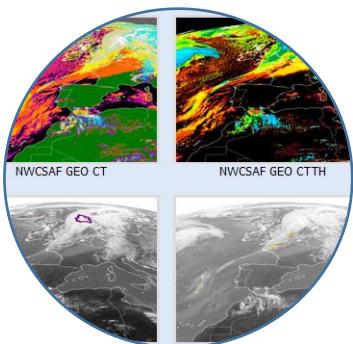
<https://gitlab.aemet.es/xcalbeta/ADAGUC-utilities>

- ADAGUG is configurable
- The NWCSAF2ADAGUC suite is configurable.

Please see the documentation



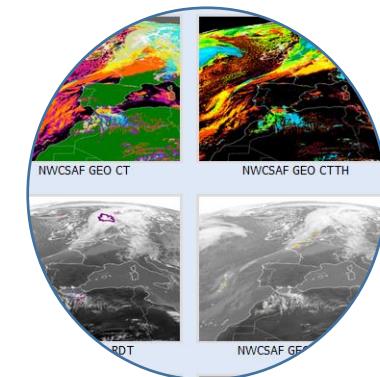
- i. AVAILABLE ON GIT.
- ii. LINK TO THE ADAGUC
INSTALATION
INSTRUCTIONS.
- iii. STEP BY STEP SUITE
CONFIGURATION
INSTRUCTIONS.



NWSAF2ADAGUC RELEASE:



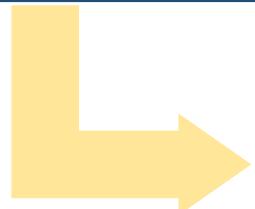
1. Adaguc-viewer link on the helpdesk.
 - i. The converter software to do the in-house exploitation
 - ii. The documentation



NWSAF2ADAGUC RELEASE:

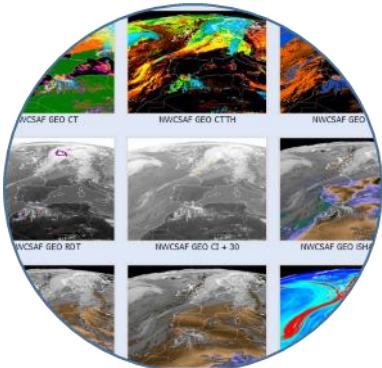


Link on the
helpdesk



Test Users

- Please Write to
jllisov@aemet.es



Git on the
helpdesk

CONFIGURATION:



mié 14:17 ●

Editor de textos ▾

data

Equipo

- Carpeta ...
- Escritorio
- Documentos
- Música
- Imágenes
- Vídeos
- Descargas
- en torno...
- nimbusd...
- Sistema ...
- Papelera

data

adaguc-autowms adaguc-datasets adaguc-services-base adaguc-services-space legends

cma_cloudsnow.xml

Guardar

```
<palette index="223" color="#fabea7"/>
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<palette index="226" color="#fabea7"/>
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<palette index="238" color="#fabea7"/>
<palette index="239" color="#fabea7"/>
</Legend>

<Style name="cma_cloudsnow">
  <Legend fixedclasses="true" tickinterval="10000" tickround="1">cma_cloudsnow</Legend>
  <RenderMethod>nearest</RenderMethod>
  <Min>0</Min>
  <Max>3</Max>
  <ValueRange min="0" max="3"/>
</Style>

<Layer type = "database" >
  <FilePath filter = "^.*\.\nc\$">/data/adaguc-autowms/CMA/</FilePath>
  <Variable>cma_cloudsnow</Variable>
  <Name>CMA_cma_cloudsnow</Name>
  <Styles>cma_cloudsnow</Styles>
</Layer>
```

hrw.conf

Abrir Guardar

```
#####
# configuration file for nwcpyp_rdt_to_geoJSON.py
# has to be in the same directory than the executable
#####

#####
# Supported output ADAGUC
#
#####

& PLATFORM & viewer = ADAGUC

#####
# you can change the value corresponding to main out directory and in directory
#####

& PATH & inDir = ./data
& PATH & outDir = ./csv

#####
# select if you wish to query winds by FL, by pressure or keep all the winds in the
# same csv file. The output will be stored in a subdir of "outDir"
#####
& QUERY & HRN = 1000,100
& QUERY & PL = 1000,900,800,700,600,500,400,300,200,100
& QUERY & FL = 0,50,100,150,200,250,300,350,400,450,500,550
#####
& TO_CSV & csv key = netcdf key v2018 == netcdf key v2016
# only the csv key could be changed
# uncomment the elements that you wish to have in the final csv
#####
& TO_CSV & wind_id = wind_idx == wind_id
& TO_CSV & wind_prev_id = previous_wind_idx == wind_prev_id
& TO_CSV & n_winds = number_of_winds == n_winds
& TO_CSV & quality_test = quality_test == quality_test
& TO_CSV & segment_x = segment_x == segment_x
```

Matlab Ancha del tabulador: 8 INS

es por: Remitente Destinatarios Asunto Cuerpo

Fecha

- 8/4/19 15:26
- 3/4/19 14:07
- 3/4/19 13:53
- 2/4/19 11:45
- 1/4/19 15:49
- 29/3/19 9:56
- 28/3/19 16:44

Más ▾

TM.conf:



Editor de textos • vie 13:44 • TM.conf ~/Escritorio/NWCSAF2ADAGUCU16 Guardar

```
#####
# configuration file for NWCSAF2ADAGUCTM.py
# has to be in the working directory or any of its subdirs
# TO AVOID ERRORS BE SURE THAT YOU HAVE ONLY ONE TM.conf FILE <<<<<<<<<<<<
#####
# SETTINGS & timeout = 30
# SETTINGS & slotsToKeep = 80
# SETTINGS & rdtSlotsToKeep = 80
#####
# you can change the value corresponding to the in directory
# executing under TM this value will bypass the modules in directories
# TO SET ABSOLUTE PATHS IS HIGHLY RECOMMENDED <<<<<<<<<<<<<<<<<<<<<
#####
PATH & inDir = /home/llorenc/Escritorio/ARCHIVOSAF
PATH & outDir = /data/adaguc-automs
PATH & ADAGUCdatasets = /data/adaguc-datasets

#####
# xml database update configuration for ADAGUC
# you can select which XML files will be updated after postprocessing the
# NWCSAF files, your own new XML could be included or you could also suppress
# & XML & <product> = <xmlds>
#####

XML & CMA = ['cma_dust.xml', 'cma_volcanic.xml', 'cma_clothesnow.xml', 'cma_smoke.xml', 'cma.xml']
XML & CT = ['ct.xml', 'ct_multilayer.xml', 'ct_cumuliform.xml']
XML & CTTH = ['ctth_pres.xml', 'ctth_effectiv.xml', 'ctth_tempe.xml', 'ctth_alth.xml']
XML & CMIC = ['cmic_cot.xml', 'cmic_iwp.xml', 'cmic_lwp.xml', 'cmic_reff.xml', 'cmic_phase.xml']
XML & PC = ['pc.xml']
XML & PC-PH = ['pcph.xml']
XML & CRR = ['crr.xml', 'crr_intensity.xml']
XML & CRR-Ph = ['crrph_accum.xml', 'crrph_iqf.xml', 'crrph_intensity.xml']
XML & RDT-CW = ['RDT_MAIN.xml', 'RDT_LAST.xml', 'RDT_ALL.xml']
XML & CI = ['ci_prob90.xml', 'ci_prob60.xml', 'ci_prob30.xml']
XML & iSHAI = ['IR_band', 'ishai_diffshw.xml', 'ishai_diffli.xml', 'ishai_diffbl.xml', 'ishai_ki.xml', 'ishai_diffkit.xml', 'ishai_diffhl.xml', 'ishai_difftoz.xml', 'ishai_li.xml', 'ishai_hl.xml', 'ishai_toz.xml', 'ishai_shw.xml', 'ishai_residual.xml', 'ishai_diffskt.xml', 'ishai_ml.xml', 'ishai_tpw.xml', 'ishai_skt.xml', 'ishai_bl.xml', 'ishai_diffml.xml', 'ishai_diffpw.xml']
XML & ASII-GW = ['asti_turb_wave_prob.xml']
XML & ASII-TF = ['asti_turb_trop_prob.xml']
XML & HRW = ['PL500_PL400HRW.xml', 'FL50_PL100HRW.xml', 'PL400_PL300HRW.xml', 'PL200_PL100HRW.xml', 'HRW.xml', 'FL200_FL250HRW.xml', 'FL400_FL450HRW.xml', 'PL800_PL700HRW.xml', 'FL350_FL400HRW.xml', 'PL600_PL500HRW.xml', 'FL450_FL500HRW.xml', 'PL900_PL800HRW.xml', 'FL100_FL150HRW.xml', 'FL300_FL350HRW.xml', 'FL250_FL300HRW.xml', 'FL0_FL50HRW.xml', 'FL150_FL200HRW.xml', 'PL300_PL200HRW.xml', 'PL1000_PL900HRW.xml', 'PL700_PL600HRW.xml']
XML & L1SD = ['data.xml']
```

Thanks for listening:

For ADAGUC questions

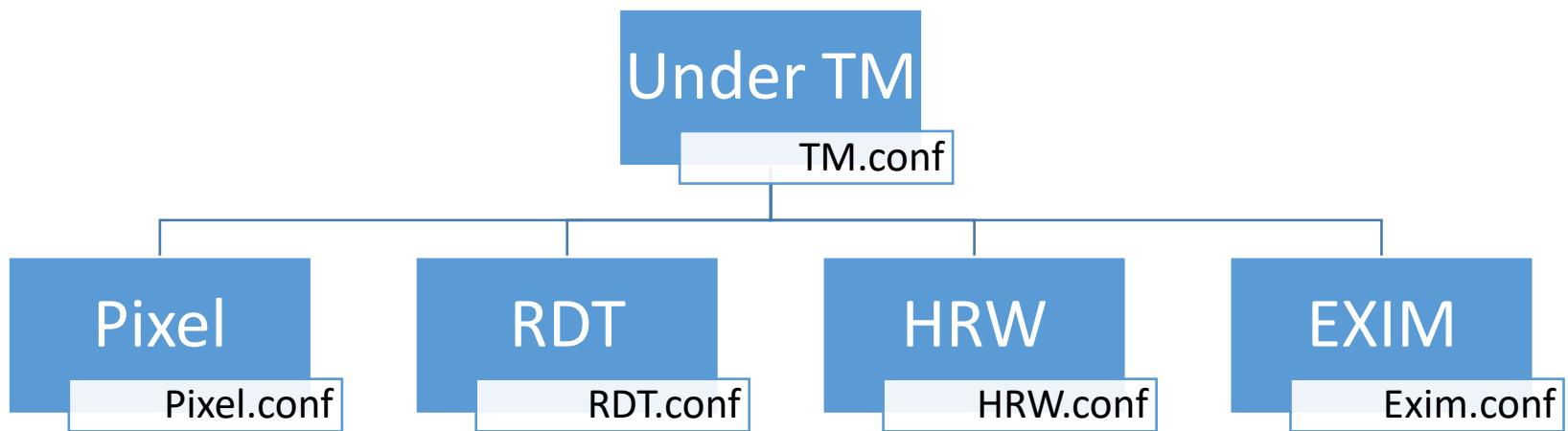
maarten.plieger@knmi.nl (R&D KNMI)

ernst.de.vreede@knmi.nl (R&D KNMI)

For support on NWSAF2ADAGUC

jllisov@aemet.es

Postprocessors usage.



Postprocessors standalone usage.

