VirES for Aeolus

Virtual Workspaces for Earth Observation Scientists

Specification, Development, Maintenance & Pre-Operations

VirES for Aeolus
Online visual analysis of Aeolus data

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Daniel Santillan, Christian Schiller, Markus Meringer, Oliver Reitebuch, Fabian Weiler, Dorit Huber

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Outlook

- Presentation of service
- Overview of webclient
- Examples of available products
  - L1B, L2A, L2B, L2C
  - AUX MRC, RRC, ISR, ZWC, MET
  - ADAM Albedo

- Conclusion
VirES for Aeolus Service

Web client accessible with any modern browser to directly visualize and interact with ESA's Earth Explorer Aeolus wind profiling mission

https://aeolus.services

Service provided by ESA, implemented and operated by EOX

Highly interactive data exploitation and retrieval interface

Collaboration between experts in the field and project partners DLR and DoRIT and service developer EOX to understand and provide functions relevant to users

Service has been actively further developed and improved since the Aeolus launch August 2018 in close collaboration with its users and project partners

Currently made available for Cal/Val users, will be open to the public when the data is made available publicly

05 May 2020
Webclient overview

_workflow:
- Interactive tutorial available to quickly get you introduced to the client features
- Selection of desired product
- Selection of time of interest
  - Timeline shows data availability
- Analysis of displayed data on 3D globe and on analytics panel
- Possibility to download selected data for further processing (netCDF and packaged original files)

3D globe:
- Fully interactive 3D visualization
- Provides 3 different projections (3D globe, 2.5D “columbus” and 2D)
- Selection and styling of parameter to be shown in products settings
- Possibility to import kml to display additional features

Analytics panel:
- Fully interactive plotting widget
  - Axis independent zoom, pan, information on every rendered point, and more
- Customizable plot configuration
  - Any number of connected plots
  - Axis configuration
  - Extensive parameter configuration options
- Interactive filters panel with histogram information on data distribution
Web client overview (L1B)

- 3D globe
- Analytics panel
- Filters panel

Timeline

Import kmz | Select Area | Save as image | Help

VirES
Aeolus

05 May 2020
Multiple connected plots (e.g. SCA and MCA parameters)
Special filters for different flags
Visualization of parameters with different dimensions with shared x Axis

Real time rendering of regression after filters applied
Visualization of albedo on globe

Visualization of 1D data
Visualization of 1D on plots, customization of symbol, colour, line connection, ...
Customization of rendering style for individual parameters
Conclusion

VirES for Aeolus will be made available to the general public synchronized with the NRT wind data release planned on the **12 May 2020**

Web service access currently only granted by ESA (Contact EO Help desk to request account)

Service in continuous development, all feedback, questions and feature suggestions are welcome!

https://aeolus.services

Contact

feedback@vires.services
daniel.santillan@eox.at