



obsAIRve - air quality forecasts now online

09 March 2012

"How clean is my air?" People, businesses and public authorities across Europe can now find this out online – the new 'obsAIRve' service portal provides rolling three-day forecasts and current observations of air quality for places and regions across Europe. All information is presented in a clear and easily understandable way. Smartphone owners can also obtain this information with an 'App'. The German Aerospace Center (Deutsches Zentrum für Luft- und Raumfahrt; DLR) supplied the scientific expertise for the freely available service and provided technical support. obsAIRve is a joint project with T-Systems, GAF AG and the Austrian Federal Environment Agency and is part of the European Union's GMES (Global Monitoring of Environment and Security) Earth observation programme. The project name is a play on the words 'observe' and 'air' and conveys the simple message 'observe air quality'.

The online portal is simple to use – on the home page www.obsairve.eu, a map displays the air quality in Europe by means of varying colours. Local pollution levels can be queried by entering a place name or a postcode. The colour scale indicates the cleanness of the air by showing the Common Air Quality Index (CAQI) – this ranges from 0 (green) for very good to 100 (violet) for very bad. The index takes account of pollution due to ozone, carbon dioxide, sulphur dioxide, nitrogen dioxide and various types of particulates.

"I am pleased that we can make a direct contribution for everyone with obsAIRve, because the subject of air quality concerns each and every one of us. With this service, our aim is to inform people and support them when they make their individual plans. Joggers, for example, can avoid times when pollution is particularly high," says Julian Meyer-Arneke, obsAIRve project manager at the DLR German Remote Sensing Data Center (Deutsches Fernerkundungsdatenzentrum; DFD). For the atmospheric researchers, the focus is on the ability to forecast air quality. But in the development phase of obsAIRve, they first resolved the basic scientific questions. What information is required to be able to make statements about air quality? What information is available? How and from where can this data be obtained? How can satellite data best be integrated?

obsAIRve uses data streams already available from measurement stations and forecasting models to prepare location-specific information about pollution – in real-time. The DFD played a central role in coordinating the aggregation of all the data streams to achieve that goal. The DLR facility is further contributing its expertise from two European projects. The MACC (Monitoring Atmospheric Composition and Climate) (Monitoring Atmospheric Composition and Climate) project supplies Europe-wide forecasts on air quality for up to three days in advance. The MyAir project, led by DLR, supplies pollution forecasts at the highest resolution for specific regions in Europe; for example, the Black Forest in Germany. Both projects make use of remote sensing data from the European environmental satellites Envisat and MetOp-A. The obsAIRve information package is completed with data on pollution in 90 European cities; here, the pollution levels both adjacent to and away from roads are measured on an hourly basis. The data flow is coordinated by the European CITEAIR (Common Information to European Air) project. In Germany, the cities of Munich, Stuttgart, Freiburg, Karlsruhe, Mannheim and Berlin are involved.

The new obsAIRve online service is currently being shown at CeBIT in Hanover. The official launch will take place there at 10:00 on 9 March 2012 in Hall 11, and will include a panel discussion (conducted in German)

Contacts

Bernadette Jung

German Aerospace Center (DLR)

Public Affairs and Communications: Oberpfaffenhofen, Weilheim, Augsburg

Tel.: +49 8153 28-2251

Fax: +49 8153 28-1243

Bernadette.Jung@dlr.de

Dr. Julian Meyer-Arneke

German Aerospace Center (DLR)

Tel.: +49 8153 28-1324

Fax: +49 8153 28-1363

Julian.Meyer-Arneke@dlr.de

How clean is the air?



The issue of air quality affects everyone. The aim of obsAIRve is to inform people and to support them in making plans both at work and during leisure time. Joggers, for example, can access the online service to avoid times when air pollution is particularly high.

Credit: T-Systems.

obsAIRve – Air quality at a glance

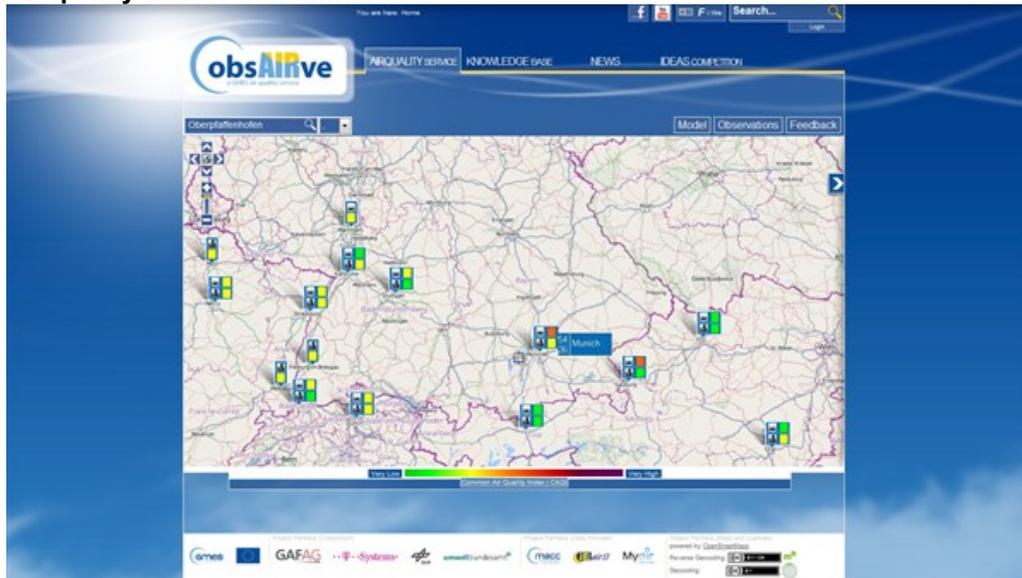


The online portal is simple to use – the home page www.obsairve.eu shows a digital map that displays the air quality in Europe by means of varying colours. Local pollution can be queried by

entering a place name or a postcode. The colour scale indicates the cleanness of the air by showing the pollution index – it ranges from 0 (green) for very good to 100 (violet) for very bad.

Credit: T-Systems.

Air quality under observation



obsAIRve nutzt bereits vorhandene Datenströme zu obsAIRve uses data streams already available from station measurements and forecasting models to prepare targeted information about pollution – in real-time. For example, air-monitoring stations in 90 European cities supply pollution levels both adjacent to and away from roads on an hourly basis.

Credit: T-Systems.

Three-day forecast



The obsAIRve portal provides rolling three-day forecasts as well as current observations of air quality for locations and regions across Europe – also for mobile users.

Credit: T-Systems.

obsAIRve 'App' for travellers



The obsAIRve 'App' is available free of charge from the Apple iTunes App Store. An app for devices using the Android operating system will be available later this year.

Credit: T-Systems.

Contact details for image and video enquiries as well as information regarding DLR's terms of use can be found on the DLR portal imprint.