

“Monitoring atmospheric composition in a changing climate: a pathway to informed actions”

A short review of the side event hosted by the European Centre for Medium-Range Weather Forecasts (ECMWF) at the Ballon Generali of Paris, on the 9th July.

In the context of the UNESCO conference “Our Common Future Under Climate Change” (Paris, 7 to 10th of July 2015) and in preparation for the environmental Conference of Parties COP21 (Paris, November 2015), this side-event organized by ECMWF highlighted the importance of monitoring atmospheric data in the context of climate change services available through Copernicus, the European Union’s earth observation programme.

The European Commission has assigned ECMWF with two of the six Copernicus Services: Climate Change Service (C3S) and Atmosphere Monitoring Service (CAMS). **Jean-Noël Thépaut** and **Vincent-Henri Peuch**, the Services’ heads, were the first speakers of the conference. They were followed by **Jean-Baptiste Renard**, CNRS scientist, **Laurence Rouil**, head of the Environmental Modélisation and Decision Making Department at INERIS and Jean-Louis Caffier, journalist at Néoplanète.

Jean-Noël Thépaut, Head of Copernicus Climate Change Service, began the conference by stressing the necessity for policy-makers to use data and information provided by programmes such as Copernicus in order to develop and implement efficient science-based environmental policies.



He explained that the Climate Change Service (C3S) will combine various observations with reanalysis techniques in order to provide authoritative and quality-assured modelling of past, current and future states of climate in Europe and worldwide.

Vincent-Henri Peuch, Head of Copernicus Atmosphere Monitoring Service (CAMS), presented results of the service’s research on the composition of the atmosphere. As an operational service, CAMS is able to provide measurements of air quality and to account for its evolution through satellite and in-situ observations. The data will play a crucial role in the conduct of environmental policies.

The CNRS scientist, Jean-Baptiste Renard presented research on urban air quality conducted aboard the Ballon Generali de Paris through the LOAC (Light Optical Aerosol Counter). When identifying the main pollution peaks in the Parisian region, he observed that some pollution events remain unnoticed because only specific particles are taken into account.

Laurence Rouil, Head of the Environmental Modélisation and Decision Making Department at INERIS, raised the legislative topic of atmospheric composition and air quality. She also mentioned the costs of environmental inaction, specifying that a reduction of air pollution would represent a benefice of \$62 billion per year for society.

The last speaker was Jean-Louis Caffier, journalist for Néoplanète and founder of the association "Energy-Climate-Humanity-Medias". He spoke about the crucial role of the media in the fight against global warming.



The conference took place at the Ballon Generali de Paris, a landmark of the city's air quality, measuring the pollution levels and making these available to the Parisian public. The participants of the side event had the opportunity to enjoy a flight aboard the Ballon de Paris. A drink reception followed, allowing guests from the business and political worlds to engage more informally with scientists and Copernicus team members. We were honoured by the presence of a former British Cabinet Member, Gregory Barker (Minister of State for Energy and Climate Change, 2010-2014) and of two members of COP21 General Secretariat: Ambassador Philippe Delacroix and Estelle Forget. They inaugurated the presence of a COP21 label on the Ballon Generali de Paris.