

# Black Carbon Portal

## Geo Portal for Visualization of Black Carbon Concentration during Flight Around the World

On 8 January 2012, the Virus SW ultra light plane set out on a three-month journey around the world. Weighing merely 290 kilos, this plane, which uses a minimum amount of fuel, was constructed by the Slovenian manufacturer Pipistrel, a recurrent winner of the NASA award for the top energy-efficient planes.

The goal of the flight was to invite the entire international community to become even more devoted to protecting the environment and solving the problem of climate change, protecting local cultures and friendlier social relations.

The pilot Matevž Lenarčič, a biologist, photographer and nature protectionist, flew his plane from Slovenia, across Africa, to North and South America, the Antarctic, to Australia and Asia, over Mount Everest and India, and back home again.

During the flight, black carbon concentration (soot) was measured with a special sensor attached to the body of the plane. Black carbon is among the leading causes of climate change. It is recognized as the second most important cause of global warming.



### Customer

Pipistrel, Aerosol, Matevž Lenarčič

### Benefits

Online publishing of black carbon concentrations

### Used Technologies

Google Maps, MS Windows .NET, MS SQL

### Link

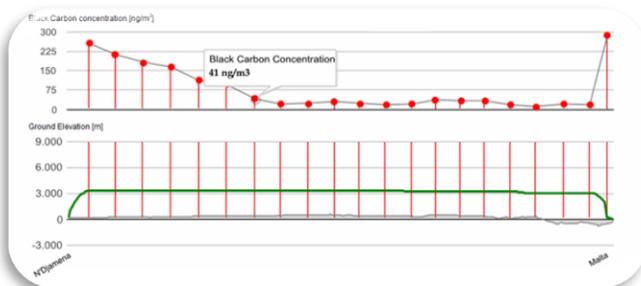
[www.worldgreenflight.com](http://www.worldgreenflight.com)

# CGS Web portal



## Web Portal

CGS plus developed a web portal to demonstrate the path of the plane on Google Maps and the total weight of black carbon measured during the flight. Black carbon data was updated each day immediately after arrival to the daily destination.



## Public awareness

International community was able to select daily stage and see BC concentration in a  $\mu\text{g}/\text{m}^3$ . After the project the data are still available to the public and experts around the world.

