

## Near-Term Successes Project n° 4 : Solar Energy Data for Developing Countries.

Building upon the SoDa Service for demonstrating the GEOSS potential

Contact Point: Thierry Ranchin (thierry.ranchin@ensmp.fr)

### Objectives of the project

**Support GEOSS outcomes** related to application of EO data for energies.

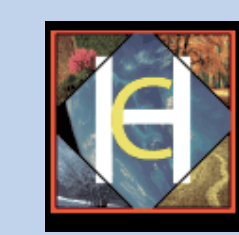
**Support the development of EO products and services** for improving the resource assessment, monitoring and forecast of fluctuating energy sources (Task EN-07-01).

**Encourage the use of EO for informed energy-policy planning** in developing and developed countries (Task EN-07-03).

#### Specific Objectives:

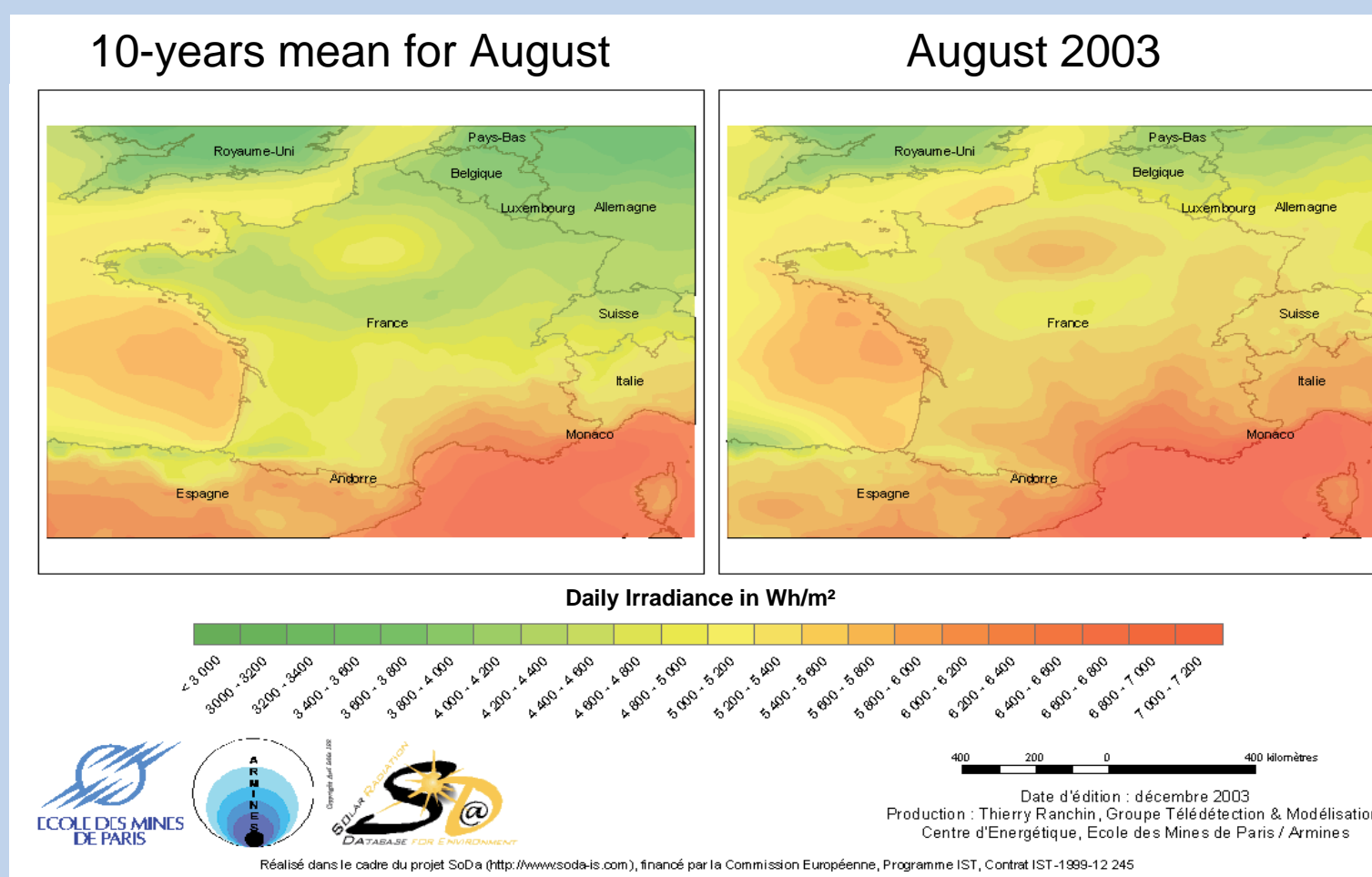
**Offer a global service providing access to solar radiation information worldwide** by combining the Helioclim database (from Ecole des Mines de Paris), and the Surface Meteorology and Solar Energy (SSE) data set (from NASA) within the SoDa Service. Further it will be extended to other data sets.

### Helioclim Database

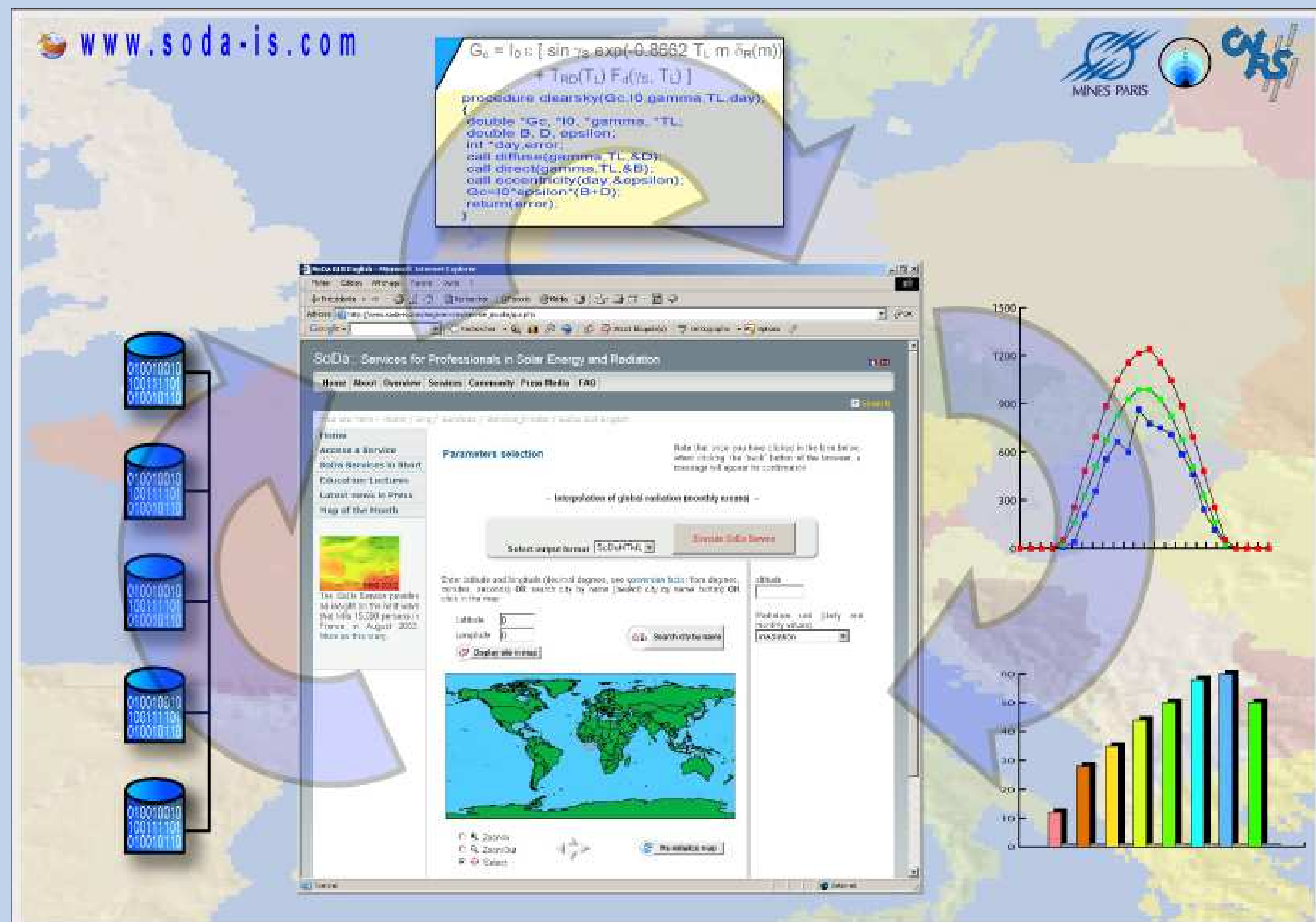


Access through SoDa:  
<http://www.soda-is.com/>

- Database and time-series of irradiance or irradiation
- Produced by the processing of satellite images, especially from the Meteosat series of satellites
- Covering Europe, Africa, the Mediterranean Basin, the Atlantic Ocean and part of the Indian Ocean
- Period runs from 1985 onwards



### The SoDa Service Integrator

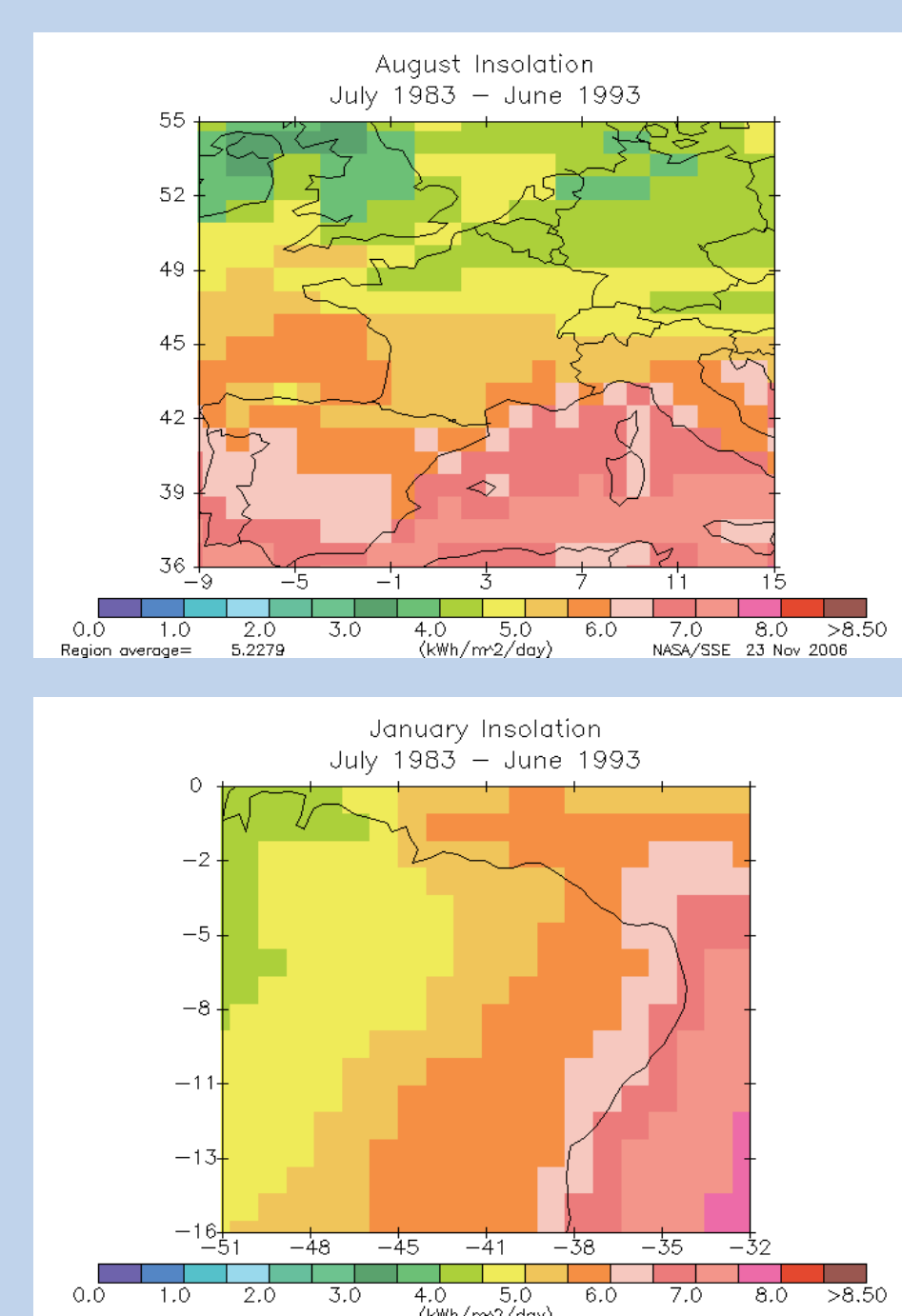


### SSE Data Set



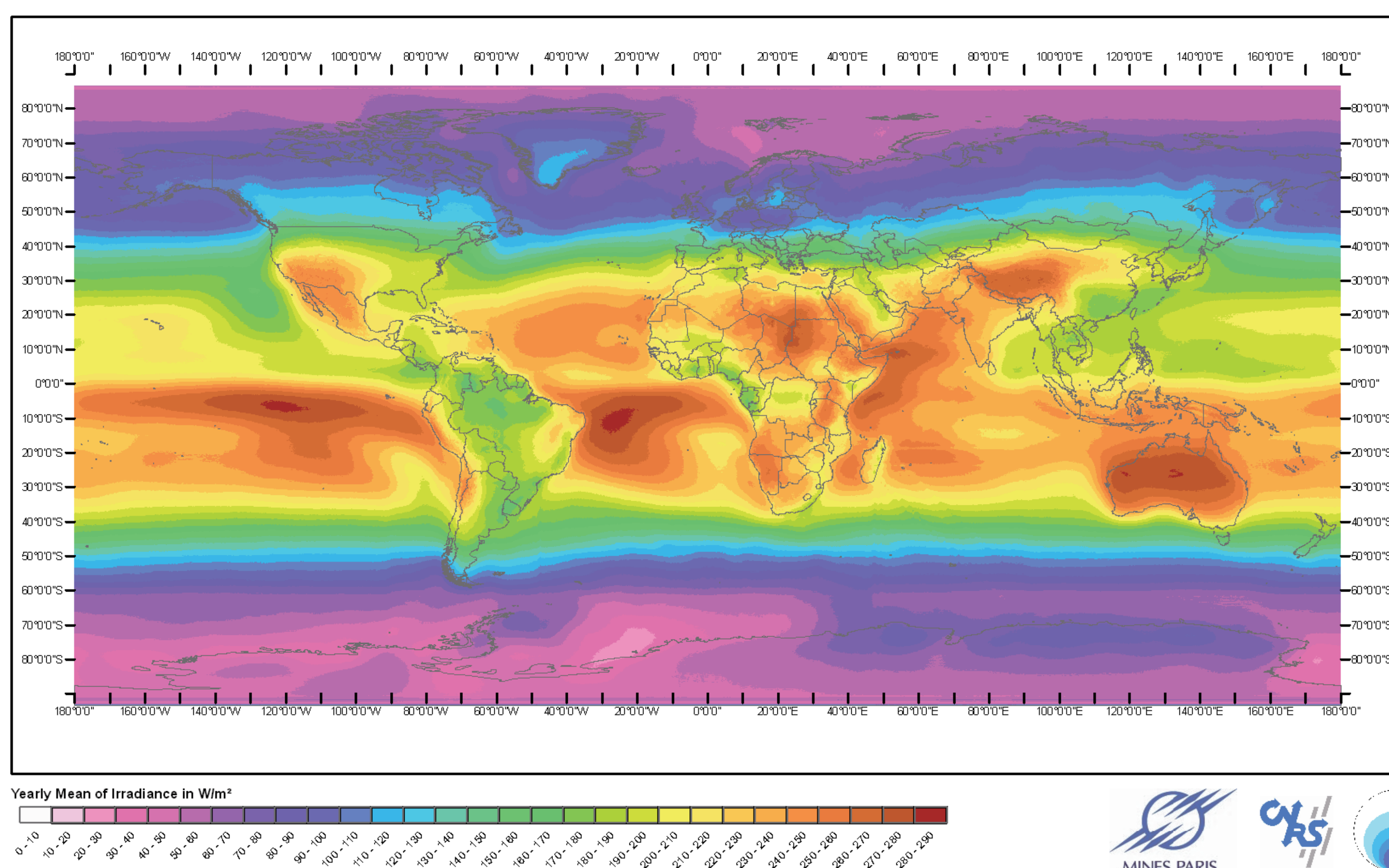
Access through:  
<http://eosweb.larc.nasa.gov/sse/>

- Monthly averaged from 11 years of data (1983-1993)
- Data tables for a particular location
- Color plots on both global and regional scales
- Over 200 satellite-derived meteorology and solar energy parameters
- Data for the RETScreen® Clean Energy Project Analysis Software



### The Proposed Compound Service

Averaged Solar Radiation 1990-2004



#### Benefits:

- A World-Wide Coverage
- An Easy Web Access
- Homogenized Services for Energy
- Demonstration of GEOSS Proof of Concept
- A Driver for Development of New Services