Environmental data analyst for the BOUSSOLE bio-optics time series

The BOUSSOLE project seeks applicants for a 2-year position, with a start as soon as possible. The position is proposed at the Laboratoire d'Océanographie de Villefranche (LOV) within the Marine Optics, Ocean Colour Remote Sensing and Marine Biogeochemistry (OMTAB) group (http://www.lov.obs-vlfr.fr/en/the_laboratory/research_groups/omtab_group.html)

The goals of the BOUSSOLE project are fundamental research in bio-optics and calibration/validation of satellite ocean colour observations. The project started in 2000 and has built (and continues to build) a unique data set of inherent and apparent optical properties plus biogeochemical properties in the North-western Mediterranean Sea. These data are collected from an offshore mooring and during monthly cruises to the mooring site. BOUSSOLE is funded by the European Space Agency (ESA), the National French Space Agency (CNES), and the French National Scientific Research Institute, CNRS/INSU. See at http://www.obs-vlfr.fr/Boussole.

The applicants are expected to work on the assessment of the error (uncertainty) budget for the radiometry measurements performed on the mooring, in particular by working on the identification and quantification of uncertainties associated to measurement of radiometric quantities (radiance and irradiance) and their propagation to the ocean colour products (e.g., remote sensing reflectance and diffuse attenuation coefficients). This work will be carried out in collaboration with the BOUSSOLE staff and the UK National Physical Laboratory (NPL). NPL is indeed engaged with LOV in improving calibration of BOUSSOLE radiometers and in establishing a full error budget of radiometry measurements. Other research topics related to the BOUSSOLE objectives, and to be developed in parallel to the main activity described here, will be possibly discussed with the project PI.

Applicants should be suitably qualified (Ph.D level) in oceanography with a background in marine optics, and should have the necessary experience in data processing. Some background in theory of measurements and errors and in statistical analyses is required.
Capabilities to conduct radiometric work in the laboratory and fieldwork would be appreciated but are not essential. Either French or English are appropriate as working languages.

The annual salary will depend on the level of experience of the candidate. The laboratory is located in Villefranche-sur-mer, near Nice on the French Riviera. The position will start for a year, renewable in case the candidate and the project PI are willing to do so (can expand up to four years, funding permitting).

CVs and covering letters, as well as requests for additional information, are to be sent to the project manager Vincenzo Vellucci (enzo@obs-vlfr.fr, with "Boussole-Position" in the subject line), with copy to the project PI, David Antoine (antoine@obs-vlfr.fr). Deadline for applications is 8 March 2015.