

## **The Observation of the Earth Radiation Budget: A Set of Challenges**

*Dominique Crommelynck[dcr@oma.be] and Steven Dewitte, Royal Meteorological Institute of Belgium, Brussels.*

The determination of the Earth Radiation Budget and its terms is described step by step to show the multiple challenges that need to be overcome. They are mostly due to the high spatiotemporal, spectral and angular variability of the target, associated with the imperfect spectral integration of the radiation to be measured. The necessary conversion of filtered radiances to total irradiances will require the best attention and constructive interaction of the different observation groups in view to be able to provide coherent Earth Radiation Budget data.