Air-sea fluxes estimated from remotely sensed data

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This session will encompass remotely sensed observations, theory and model studies dealing with air-sea interaction process. The objective is to demonstrate the importance and benefit of satellite observations as related to air-sea interactions, climate monitoring, operational oceanography, coastal oceanography, marine ecosystems, sea-ice monitoring and applications in seasonal forecasting.

During this session, a particular emphasis will be given to the accuracy of the flux estimates as currently attainable at global and regional scales, analysis of the fluxes at various temporal and spatial scales including trend investigations, and demonstration of usefulness in forcing and/or assimilation into numerical models. Applications to monsoonal regions are welcomed.

Papers are solicited on methods and algorithms for estimating turbulent and radiative fluxes over the sea surface using observations from satellites; analyses, interpolation, and downscaling of these fluxes; combination of measurements and/or estimates of fluxes to enhance flux accuracies at global or regional scales; validation methodologies and assessment of error and uncertainty of flux estimates; net budget estimation and characterization.

Subtopics might include:

Flux Climatology: Regional and global climatology. Statistical characterizations of fluxes at various scales. Spatial and temporal characteristics of fluxes. Methodologies adopted and their uncertainties. Studies based on comparisons with numerical analyses or re-analyses.

Remotely Sensed Flux Impact: Numerical assimilation and/or forcing simulations using remotely sensed fluxes. Methods dealing with the characterization of the impact of surface flux products in modeling of ocean circulation process.

Biography

Bentamy is the Research Engineer at French Research Institute for Exploitation of the Sea. His main research of interest is Science of active and passive detection, Numerical modeling, Ocean circulation and process studies.

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