



## **River and lakes level variability in middle Yang Ze Kiang basin using ENVISAT altimetry data**

S. Daillet (1), M.-C. Gennero (1), and H. Yesou (2)

(1) CNES/LEGOS 18 avenue Edouard Belin 31401 TOULOUSE cedex 9 - France, (2) SERTIT Boulevard Sébastien Brant BP 10413, 67412 ILLKIRCH

Satellite radar altimetry is now available for observation of continental large hydrological systems but use of altimetry over rivers requests a very precise selection of the data to avoid river sides, islands and wet zones. Rice farmlands can also perturb altimetry measurements in lakes area.

The main objective of this study is to demonstrate the real interest of altimetry over this region and to improve the knowledge of the middle Yang Ze Kiang basin system, including Yang Ze river, Dongting and Poyang lakes. The Three Gorges Dam has also to be taken into account.

Six years of data from ENVISAT altimeter have been processed at several crossing points between satellite track and Yang Ze river. Same algorithms have been used for determination of Poyang and Dongting lakes level to get coherent determinations. Results have been validated against ground truth hydrological survey data.

This work is a participation to the ESA DRAGON II Program.