

SMALL SATELLITE MISSIONS SYMPOSIUM (B4)  
Small Satellites Potential for Future Integrated Applications and Services (4)

Author: Dr. Mike Cutter  
Surrey Satellite Technology Ltd (SSTL), United Kingdom, m.cutter@sstl.co.uk

A CONSTELLATION OF SMALL SATELLITES PROVIDING OPERATIONAL OCEANOGRAPHIC  
DATA

**Abstract**

Surrey Satellite Technology Ltd (SSTL) has evaluated the feasibility of using a constellation of small satellites for oceanographic applications.

The mission concept is based on the use of radar altimetry and the provision of operational oceanography with the specific goal of addressing the need for improved re-visit times, which is particularly useful for coastal zones. The capability to be described can in principle only be provided by a constellation of satellites. The aim of the mission concept is to provide sea surface height, significant wave height and wind speed with accuracies approaching that of the existing high cost systems but with greater timeliness of data and at an affordable price.

The paper will present the work undertaken by Surrey Satellite Technology Ltd to derive this concept and indicate where further evaluation is required.