

SATELLITE APPLICATIONS CALAPULT, ASTRIUM & THE NATURAL ENVIRONMENT RESEARCH COUNCIL

Call for EXPRESSIONS of INTEREST

AIRBORNE SAR DATA COLLECTION: MARCH 2014

CLOSING DATE FOR RECEIPT OF PROPOSALS: MONDAY 9th DECEMBER 2013

The Satellite Applications Catapult, Astrium and the NERC invite expressions of interest for airborne Synthetic Aperture Radar (SAR) data to be collected in the UK during the month of March 2014. Expressions of Interest should be submitted to Dr Gary Llewellyn, NERC Airborne Research and Survey Facility (contact details below). The NERC will provide flying time and Astrium will provide data pre-processing for those projects approved for support. Although flights and data pre-processing will be at no cost to the applicant, fieldwork and the post-processing of data will need to be resourced by the applicant.

A User Information Meeting to discuss the SAR instruments, data, airborne platform and the process by which successful Expressions of Interest will be selected will be held at the Satellite Applications Catapult Offices on the Harwell Campus (Oxfordshire) on the 21st November 2013. To register for the meeting, please go to <https://sa.catapult.org.uk>. Please contact Dr Wyn Cudlip (Wyn.Cudlip@sa.catapult.org.uk) if you require any additional information.

This call aims to promote the use of X and S band Synthetic Aperture Radar (SAR) for the support of cutting-edge internationally important science and to promote future and existing science space missions to both academic and commercial science partners. Airborne data will be collected in the UK (ideally the South of England) and each project will be restricted in its extent in terms of flying time (~ one or two days) unless natural clustering of location and / or objectives is possible for different projects.

Eligible persons wishing to take advantage of this opportunity are invited to submit detailed proposals (Expressions of Interest), including a supporting scientific case, by Monday 9th December 2013. Expressions of Interest should be on a single page of A4 (text size no smaller than size 10) and include a scientific and/or commercial justification. A supplementary map depicting the area of interest should also be provided. An evaluation committee composed of the funding partners and representatives from academia and commerce will evaluate the proposals. The evaluation committee will review the applications using both standard NERC science criteria and commercial development priorities set out by the Satellite Applications Catapult. A project may be successful based on one set of criteria or as a combination of both. Successful applicants will be notified by January 2104 of their inclusion in this campaign. NERC eligibility information is available via <http://arsf.nerc.ac.uk/howtoapply/eligibility.asp>, commercial eligibility is defined as a registered company with business in space or airborne systems; either eligibility criterion will be valid.

Instrumentation (for information on other instruments flown by the ARSF see <http://arsf.nerc.ac.uk/instruments/>)

Astrium Airborne SAR demonstrator; X-band (9.5-10.7GHz) and S-band (3.1-3.3GHz) with a choice of quad polar, triple polar, dual polar or single polar (linear H & V polarisation).

Spatial resolution (finest) for the X-band ~18cm and for S-band ~1m (far) to 2.2m (near).

The ambiguity ratio and sensitivity (NE σ O) typically <<-20dB (for range and azimuth).

Higher data products will be available for slant range or ground range.

Potential users are encouraged to contact:

Capt Carl Joseph (Chief Pilot and Head of ARSF)

Tel +44 (0)1452 859945 / Mob +44 (0) 7768 032714. Email: cjos@nerc.ac.uk

or **Dr Gary Llewellyn** (Science/Operations Coordinator for the NERC ARSF)

Tel +44 (0)1452 859945 / Mob +44 (0) 7919 697851. Email: gaew@nerc.ac.uk

Address for both is ARSF-Firfax Building, Meteor Business Park, Cheltenham Road East, Gloucester UK, GL2 9QL.