

JOB DESCRIPTION

Vacancy Ref: A3110

 Job Title:
 Senior Research Associate in Satellite Altimetry
 Present Grade: 7

 Department/College:
 LEC

 Directly responsible to:
 Malcolm McMillan

 Supervisory responsibility for:
 Some supervision of postgraduate students

Other contacts

Internal:

Academic and teaching staff, post-doctoral researchers and postgraduate students within LEC, CEEDS and DSI; university central administration.

External:

UK Centre for Polar Observation & Modelling (CPOM) staff, Centre for Ecology and Hydrology (CEH) staff, JASMIN computing staff, ESA technical staff.

Major Duties:

This position will focus on the development of state-of-the-art Level-2 radar altimetry processing chains for deriving ice sheet elevation measurements. The successful candidate will work as a radar altimeter expert within the UK Centre for Polar Observation & Modelling, and more broadly as part of an international team on several large European Space Agency (ESA) projects. Specific duties will include:

- 1. To develop and implement new Level-2 dedicated ice sheet altimetry processing algorithms, including software design and implementation within the CPOM system.
- 2. To develop new high-level ice sheet altimetry products for use by the European Space Agency (ESA), as part of the Cryo-TEMPO project.
- 3. To undertake scientific analysis of the new datasets, and to publish the results in leading international journals.
- 4. To work with CPOM colleagues, both in Lancaster and nationally, to develop and implement methodological advances in satellite altimetry.
- 5. To analyse measurements from new satellite altimeter missions, including Sentinel-3 and ICESat-2.
- 6. To undertake testing of datasets within the scope of the Cryo-TEMPO project, and to write associated reports and technical documents.
- 7. To participate and present at Cryo-TEMPO project meetings with ESA and international project partners.
- 8. To generate and pursue independent research objectives, including contributing to proposals as appropriate.
- 9. To present at national and international conferences.
- 10. To supervise less experienced colleagues and postgraduate students as appropriate.