## UK 2014

Project title	Contact	Institution - lea	Institution - oth	Country - Lead	Country - other	Project leader	Other participar	Project Period	Investigated are	Description/abstract
organic carbon cycle processes in the Eurasian Arctic	Dr Bart Van Dongen (bart.vandongen@m anchester.ac.uk), Dr Helen Talbot (Helen.talbot@ncl.ac .uk)	University of Manchester	Newcastle University	UK		Dr Bart Van Dongen		01/09/2011 - 31/08/2014	Tiksi, Russia	Understanding the composition and processing of organic carbon deposited within sediments of the shallow Eurasian Arctic shelf seas and how this contributes to the global carbon cycle in a warming Arctic.
* '	Dr Viv Jones (vivienne.jones@ucl. ac.uk)	University College London	University of Loughborough, University of Nottingham, University of Southampton	UK		Prof John Anderson (Loughborough)	Nadia Solovieva (UCL) Simon Turner (UCL) Suzanne McGowan (Nottingham) Erika Whiteford (L/boro) Emma Wik (l/boro) Mary Edwards, Maarten van Hardenbroek, Pete Langdon, Emma Hoopla (southampton)	2012-1215	Tundra areas NW of Vorkuta, Sisimiut	The study of sediment records from Arctic lakes in Russia, Greenland and Alaska to determine vegetation changes associated with past climate warming events, and how these have impacted on the lakes' role as carbon sinks or carbon emitters.
II: Amplifying the	Dr Paul J Mann (paul.mann@northu mbria.ac.uk)	The Woods Hole Research Center (WHRC), Falmouth, MA. USA	Northumbria	USA	UK, Russia, Colleagues in the Netherlands	Robert M Holmes	Max Holmes, Sue Natali, John Scahde, Chris linder	2010 - 2015	NE Siberia, lower Kolyma River watershed.	The Polaris Project aims to engage students, the public, and early career scientists in interdisciplinary polar research and education. The Polaris Project includes a field course and research experience for undergraduate students (rising stars) in the Siberian Arctic; several new arctic-focused undergraduate courses taught by project Co-PIs at their respective colleges across the United States and in Russia; the opportunity for Co-PIs to initiate research programs in the Siberian Arctic; and a wide range of outreach activities. The unifying scientific theme of the Polaris Project will be the impact of climate change on transport and cycling of carbon and nutrients as they move with water from terrestrial uplands to the Arctic Ocean.
signature of	"	The Woods Hole Research Center (WHRC), Falmouth, MA. USA	ETH Zurich, Northumbria University, UK.	USA		Robert G. M. Spencer	Prof. Timothy Eglington (ETH, Zurich), Max Holmes (WHRC), Paul Mann		NE Siberia, lower Kolyma River watershed	Field measurements and experiments to examine the age and bioavailability of organic carbon mobilised into Arctic streams and rivers. The project involves a large number of 14C-DOC measurements to assess the age of C released into freshwaters, as well as the age and structure of the fraction C utilised by microbial degradation processes during land-ocean transport. As climate change increases, we may expect an increase in the mobilisation of older C, so we aim to examine its fate and to further understand why we are not currently recording a marked ageing in the OC despite other lines of evidence suggesting widespread permafrost thaw.
dynamics of surface hydrology in permafrost environments	(amat2@cam.ac.uk)	Scott Polar Research Institute, University of Cambridge	Vienna University of Technology, Austria		Colleagues in Russia	Anna Maria Trofaier	(Cambridge), Dr Annett Bartsch (Vienna), Dr Marina Leibman (RAS Siberian Branch)		NW Siberia, YNAO (Yamal peninsula)	To assess the application of frequent active microwave satellite data for monitoring spring flood dynamics in permafrost environments, emphasising the need to include these data in EO research of thaw lake change.
Spectral Library of Arctic Plants (SLAP)		Scott Polar Research Institute, University of Cambridge	Geography Faculty, Moscow State University	UK	Russia	Gareth Rees	Elena Golubeva (MSU), Olga Tutubalina (MSU), Mikhail Zimin (MSU, Scanex)		Kola Peninsula, Russia	To compile systematic hyperspectral reflectance fdata in the visible and near infrared, for development of new remote sensing algorithms and for physiological characterisation of plant stress