

NOTIFICATION OF PROPOSED RESEARCH CRUISE

1. PART B: DETAILS

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| 1. | <u>NAME OF RESEARCH SHIP</u>
RRS James Clark Ross | <u>CRUISE NO.</u>
JR288 |
| 2. | <u>DATES OF CRUISE</u> | From 10 July 2013 To 16 August 2013 |

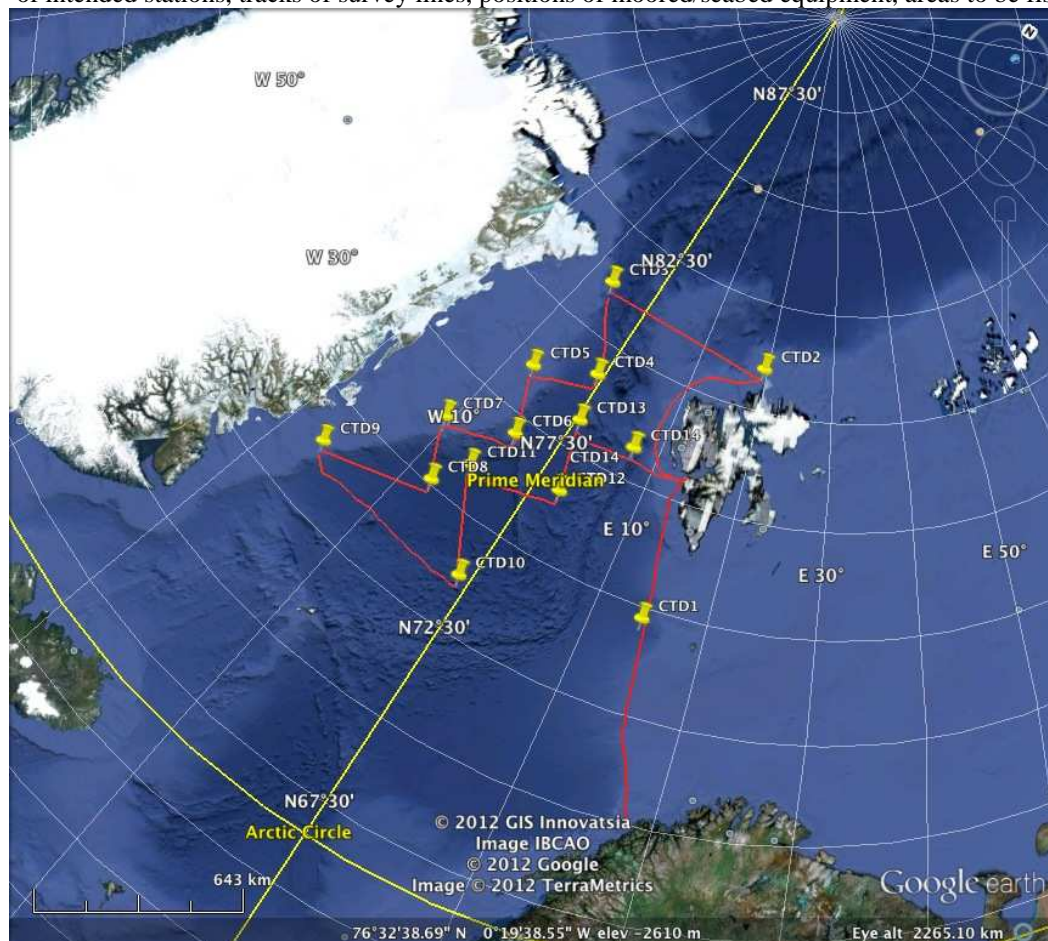
3. a) PURPOSE OF RESEARCH

Study of chemistry of marine aerosol particles. This is a contribution to a study of the interaction of aerosol and cloud properties in the Arctic with a view to predicting how changes in sea-ice extent with affect: (a) aerosol production and chemistry, (b) resulting cloud properties, and (c) feedbacks on Arctic climate.

b) GENERAL OPERATIONAL METHODS (including full description of any fish gear, trawl type, mesh size, etc.)

- in-situ sampling of atmospheric gases and aerosols.
- in-situ analysis of dissolved gases and concentration of biological material via underway water sampling
- small volume water sampling from CTD casts for subsequent laboratory analysis (both on the ship and after return of samples to UK laboratory). Total water sample volume for return to UK approx 10-20 litres.

4. ATTACH CHART showing (on an appropriate scale) the geographical area of intended work, positions of intended stations, tracks of survey lines, positions of moored/seabed equipment, areas to be fished



a) TYPES OF SAMPLES REQUIRED (e.g., geological/water/plankton/fish/radionuclide)

5. water, plankton, air