NOTIFICATION OF PROPOSED RESEARCH CRUISE

Part A: GENERAL

1. Name of research ship: **RV Pelagia** **Cruise number: 64PE365**

2. Cruise dates: 7 March 2013 – 14 March 2013

3a. Operating authority:
NIOZ Royal Netherlands Institute for Sea Research
Telephone: (+31) (0)222-369300
Telefax: (+31) (0)222-319674

3b. Operating agent:
NIOZ Royal Netherlands Institute for Sea Research
Telephone: (+31) (0)222-369300
Telefax: (+31) (0)222-319674

4. Owner: NIOZ Royal Netherlands Institute for Sea Research

5. Particulars of ship:

name:	Pelagia
nationality:	Dutch
overall length:	66.00 meters
maximum draught:	4.00 meters
nett tonnage:	1553 NRT
propulsion:	2 diesel electric Elliot White Gill Bow Truster
call sign:	PGRQ
IMO nr:	9001461

6. Crew:

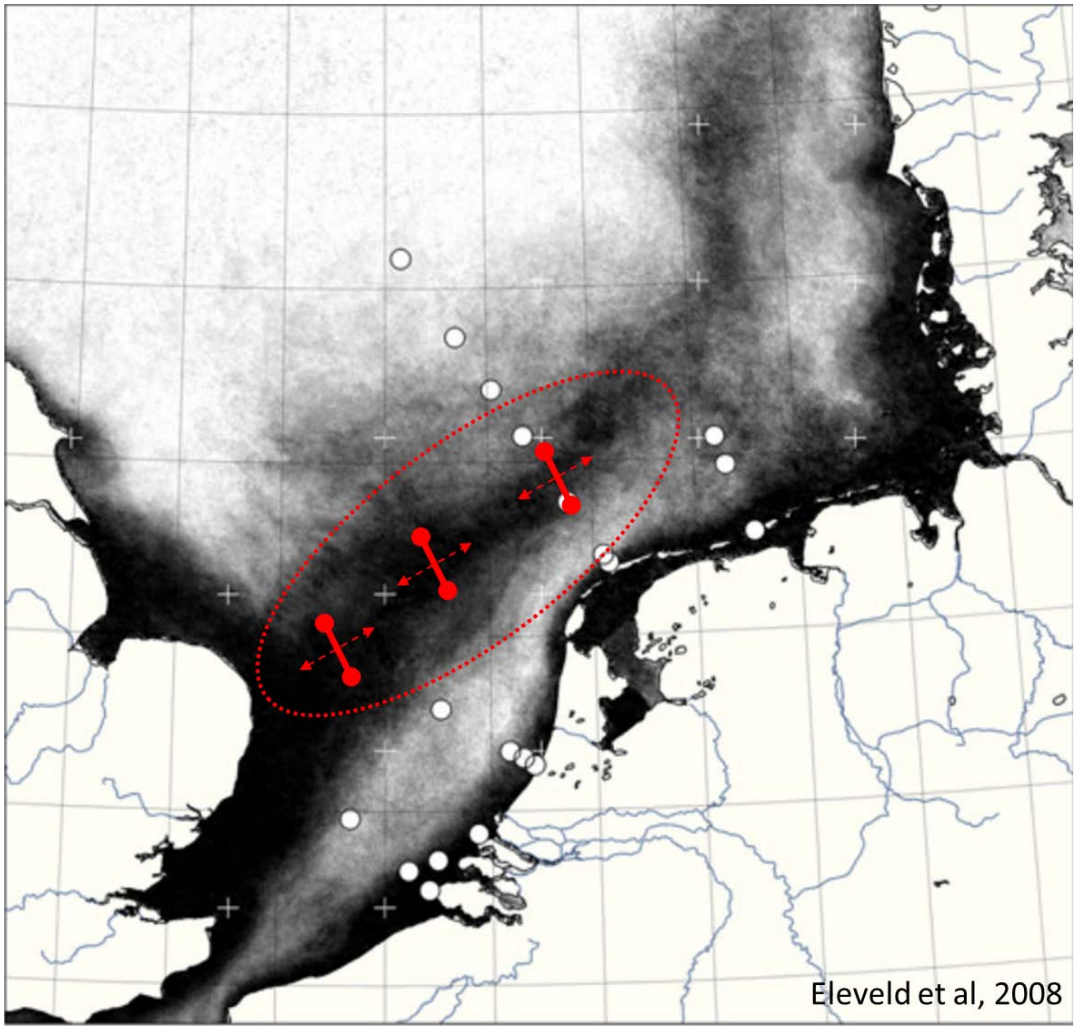
name of master:	J.C. Ellen / P. Kuijt
number of crew:	11

7. Chief scientist:

name:	Meinard Tiessen
addresses:	Landsdiep 4, 1797 SZ Den Hoorn
telephone:	(+31) (0) 222 319414
telefax:	(+31) (0) 222 319674
e-mail address:	meinard.tiessen@nioz.nl

8. Geographical area in which the ship will operate: (with reference in latitude and longitude)

The cruise will entail three transects, across a fine-sediment plume, extending from East Anglia towards the German Bight. Each transect will take two or three days and will entail several stations where water samples will be taken. The exact position of the transects depends on the position of the sediment plume, but the research domain will be within 52.5 – 55 Lat and 2 – 4.5 Lon. For a satellite image of the research domain (showing the sediment plume in black), and preliminary locations of the transects (depicted as red lines), see figure below:



9. Brief description of purpose of cruise:

The North Sea is characterized by an intense benthic-pelagic coupling, which has been often investigated in one-dimensional vertical view. However, the North Sea is also characterized by the across- and along-shelf exchange of water and material. The aim of this project is to investigate the transport patterns of sediment and particulate organic matter and the biogeochemical consequences of this transport. This transport is in winter enhanced by a sediment plume, called the East Anglia Plume. This cruise aims at determining the rate of transport of organic and in-organic sediments along this plume.

10.Names and dates of intended ports of call:

None

11.Any special logistic requirements at ports of call:

None

Part B: DETAIL

1. **Name of research ship:** **RV Pelagia**

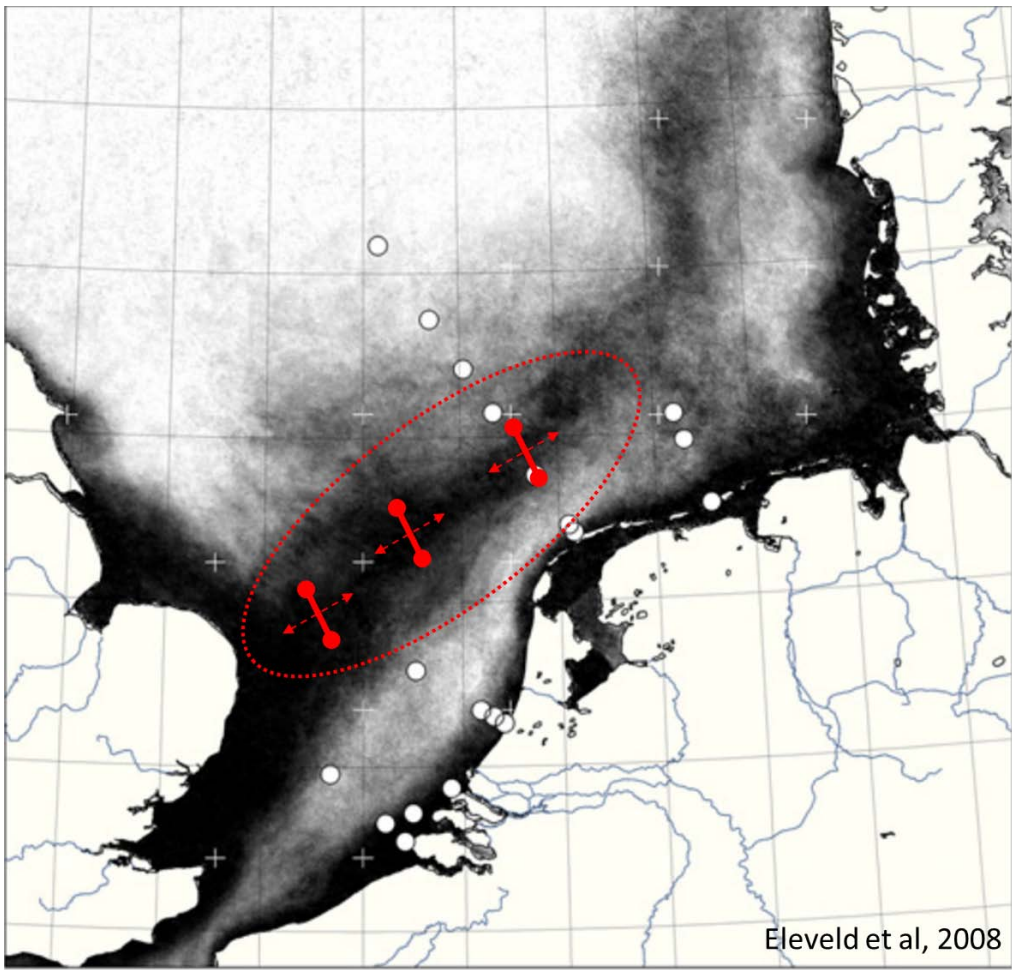
2. **Cruise dates:** 7 March 2013 – 14 March 2013

3. **Purpose of research and general operational methods:**

The cruise will entail three transects, across a fine-sediment plume, extending from East Anglia towards the German Bight. Each transect will take two or three days and will entail several stations where water samples will be taken, along with salinity, temperature and sediment concentrations.

4. **Attach chart showing (on an appropriate scale) the geographical area of the intended work, positions of intended stations / hydrographic sections:**

The exact position of the transects depends on the position of the sediment plume, but the research domain will be within 52.5 – 55 Lat and 2 – 4.5 Lon. For a satellite image of the research domain, and preliminary locations of the transects (shown as red lines), see figure below:



5a. Type of samples required:

Water samples

5b. Methods by which samples will be obtained (including dredge/core/drill techniques):

CTD-rosette and Niskin bottles.

6. Details of moored equipment:

none

7. Explosives:

None

8. Detail and reference of:

a. Any relevant previous/future cruises:

No relevant previous cruises have occurred and so far, no further cruises are planned.

b. Any previous published research data relating to the proposed cruise:

(Attach separate sheet if necessary)

Dyer, K.R., Moffat, T.J., 1998. Fluxes of suspended matter in the East Anglian plume Southern North Sea. Continental Shelf Research 18, 1311–1331.

Eleveld, M.A., Pasterkamp, R., van der Woerd, H.J., & Pietrzak, J.D. (2008). Remotely sensed seasonality in the spatial distribution of sea-surface suspended particulate matter in the southern North Sea. Est. Coast. Shelf Sci. 80(1), 103-113. doi:10.1016/j.ecss.2008.07.015

Pietrzak, J.D., de Boer, G.J., Eleveld,M.A. (2011). Mechanisms controlling the intra-annual mesoscale variability of SST and SPM in the southern North Sea. Continental Shelf Research 31(6), 594-610. doi:10.1016/j.csr.2010.12.014.

9. Names and addresses of scientists of the coastal state in whose waters the proposed cruise takes place with whom previous contact has been made:

Liam Fernand (liam.fernand@cefas.co.uk)
CEFAS
Pakefield Road
Lowestoft, Suffolk
NR33 0HT
Tel: 01502 562244

10. State:

a. Whether visits to the ship in port by scientist of the coastal state concerned will be acceptable:

YES

b. Whether it will be acceptable to carry on board an observer from the coastal state for any part of the cruise and dates and ports of embarkation/-disembarkation:

YES

c. When research data from intended cruise is likely to be made available to the coastal state and if so, by what means:

Cruise data will be made freely available according to the NIOZ data policy, via a website by this institute. Cruise report will be made available if required.

COASTAL STATE: UK

SCIENTIFIC EQUIPMENT

11. Complete the following table - include a separate copy for each coastal state (indicate "Yes" or "No" if applicable)

Marine scientific equipment used	**water depth (m)**	**fisheries research**	**distance of research to coast in nautical miles**			
			< 3	**3-12**	**12-50**	**50-200**
UK:						
- Niskin bottle water samples	20-40 m	No	No	No	possible	Yes
- CTD for salinity and temperature	20-40 m	No	No	No	possible	Yes
- OBS turbidity measurements	20-40 m	No	No	No	possible	Yes
- ADCP current profile	20-40 m	No	No	No	possible	Yes

Please note that due to the uncertainty of the location of the sediment plume sampling stations may be in the 12-50nm or in the 50-200nm zone. The actual sampling locations will be determined shortly before the cruise starts.