

<b>Station Name:</b>
Porcupine Abyssal Plain (PAP)

<b>Type of Station (moored / ship-based) and Location (geographic region / latitude and longitude coordinates):</b>
<p><b>Type of Station:</b></p> <p>-Abyssal (4800 m) time-series environmental site since 1989; Regular visits by research vessels for ship-based pelagic and benthic physical and biogeochemical sampling. Long-term deployments of benthic autonomous equipment e.g. Bathysnap time-lapse photography.</p> <p>-Fixed-point <i>in situ</i> moorings (sea surface to seafloor) since 2002 with a suite of sensors measuring physical and biogeochemical parameters. Separate sub-surface mooring for particle flux (sediment traps).</p> <p><b>Location:</b> 49°N, 16.5°W. Northeast Atlantic Ocean in the middle of the biogeochemical region “North Atlantic Drift Province”.</p>

<b>Carbon and biogeochemistry measurements at the station (indicate frequency of observations, the year measurements began, and if they are surface/water column)</b>
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\* Real-time data available \*\* Fitted to Biogeochemical sensor frame at 30 m

Variable	Date time-series started	Depth (m)	Frequency of measurements	Sensors used
*Chl-a	2003 (July)	30**	2 hours	HobiLabs HS2, WETLabs FLNTUSB
*Nitrate	2002 (October)	30**	4 hours	NAS3, *SATLANTIC ISUS
*Dissolved Carbon Dioxide	2003 (July)	30**	2 hours	Sunburst SAMI
POC	2002	3000, 3050, 4700	Weekly	sub-surface mooring; McLane sediment trap
*Dissolved Oxygen	To be added Summer 2009	30m** (tbc)	2 hours (tbc)	tbc

<b>Principle Investigators / Contact Points:</b>
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**Contact for fixed-point mooring and biogeochemical measurements:**

Dr. Richard Lampitt: EuroSITES and PAP Coordinator: National Oceanography Centre, Southampton, UK. Email: [rsl@noc.soton.ac.uk](mailto:rsl@noc.soton.ac.uk); Telephone:+44 (0)2380 596347

**Contact for biogeochemical data:**

Maureen Pagnani: EuroSITES Data manager National Oceanography Centre, Southampton, UK. Email : [mred@noc.soton.ac.uk](mailto:mred@noc.soton.ac.uk); Telephone:+44 (0)2380 596255

**Contact for benthic (seafloor) observations:**

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**Affiliation of this station with national, regional, or global research programs and process studies:**

**National :** The PAP site is largely supported through national funds and is a named sustained observatory within the UK NERC co-ordinated marine science programme Oceans 2025: Theme 10 (Integration of sustained observations in the marine environment). The PAP site is also identified as a requirement for Oceans2025 Themes 2 (Marine Biogeochemical cycles) and Theme 5 (Continental margins and the Deep Ocean). National research cruises are scheduled to the PAP site for 2009 and 2010 for maintenance and deployment of the mooring and for large-scale ship-based sampling.

**Regional :** PAP is one of nine existing deep ocean (>1000 m) fixed-point observatories across Europe and forms part of the EuroSITES network ([www.eurosites.info](http://www.eurosites.info)). Coordinated by NOCS, UK (Dr. Richard Lampitt, Dr. Kate Larkin) this 3 year EU FP7 project will integrate and enhance these 9 sites. At the PAP site, sensors to be added include: oxygen optode and current meter. EuroSITES will also support research and development for sensors measuring climatically relevant variables not currently available for long-term deployment. At the PAP site this includes a zooplankton sampler and deep ocean oxygen consumption device.

**Global:** All EuroSITES observatories are named deepwater reference stations within the international OceanSITES project ([www.oceansites.org](http://www.oceansites.org))

**Web-site or links to other information:**

The PAP website: [www.noc.soton.ac.uk/pap](http://www.noc.soton.ac.uk/pap)

The EuroSITES network website: [www.eurosites.info](http://www.eurosites.info)