



NOTICE TO MARINERS

Deployment of Acoustic Doppler Current Profilers (ADCPs) – Chalmers Hope (Scapa Flow Harbour Area)

1. Summary of Works

Mariners are advised that six seabed-mounted Acoustic Doppler Current Profilers (ADCPs) will be deployed at Chalmers Hope, within the Scapa Flow Harbour Area, to measure current speeds and directions over approximately 30 days. The deployment forms part of a University of Edinburgh research programme investigating coastal hydrodynamics and the interaction between marine structures and local flow conditions, building on previous measurements collected in the high-energy tidal channel at the Fall of Warness. All equipment will be recovered at the end of the deployment period.

2. Deployment Schedule & Locations

The ADCPs will be deployed on a suitable date between 02 November and 16 November 2026, depending on weather conditions and vessel availability. They will remain deployed for approximately 30 days, with recovery expected between 02 December and 16 December 2026. The deployment locations are included in Table 1 and shown in Figure 1. Mariners are requested to maintain a minimum safe distance of 300 m from each listed deployment position and avoid anchoring, trawling, or dredging within 300 m of any listed position.

Table 1. Proposed ADCP deployment positions and approximate depths. Eastings and Northings are given in WGS 84 / UTM zone 30N (EPSG:32630). Latitudes and Longitudes are given in WGS 84

ADCP	Mooring	Surface buoy present	Easting (m)	Northing (m)	Latitude	Longitude	Approximate depth below Chart Datum (m)
S1 	Seabed lander	No	486520.6	6527871.9	58° 53.424'N	003° 14.033'W	26
S2 	Seabed lander	No	486014.4	6528384.1	58° 53.699'N	003° 14.562'W	30
S3 	Seabed lander	No	485924.6	6528478.2	58° 53.750'N	003° 14.655'W	30
S4 	Seabed lander	No	485781.0	6528624.5	58° 53.828'N	003° 14.805'W	33
P1 	Tripod	Yes	486369.2	6528297.4	58° 53.653'N	003° 14.192'W	35
P2 	Tripod	Yes	486554.1	6528466.4	58° 53.745'N	003° 13.999'W	40

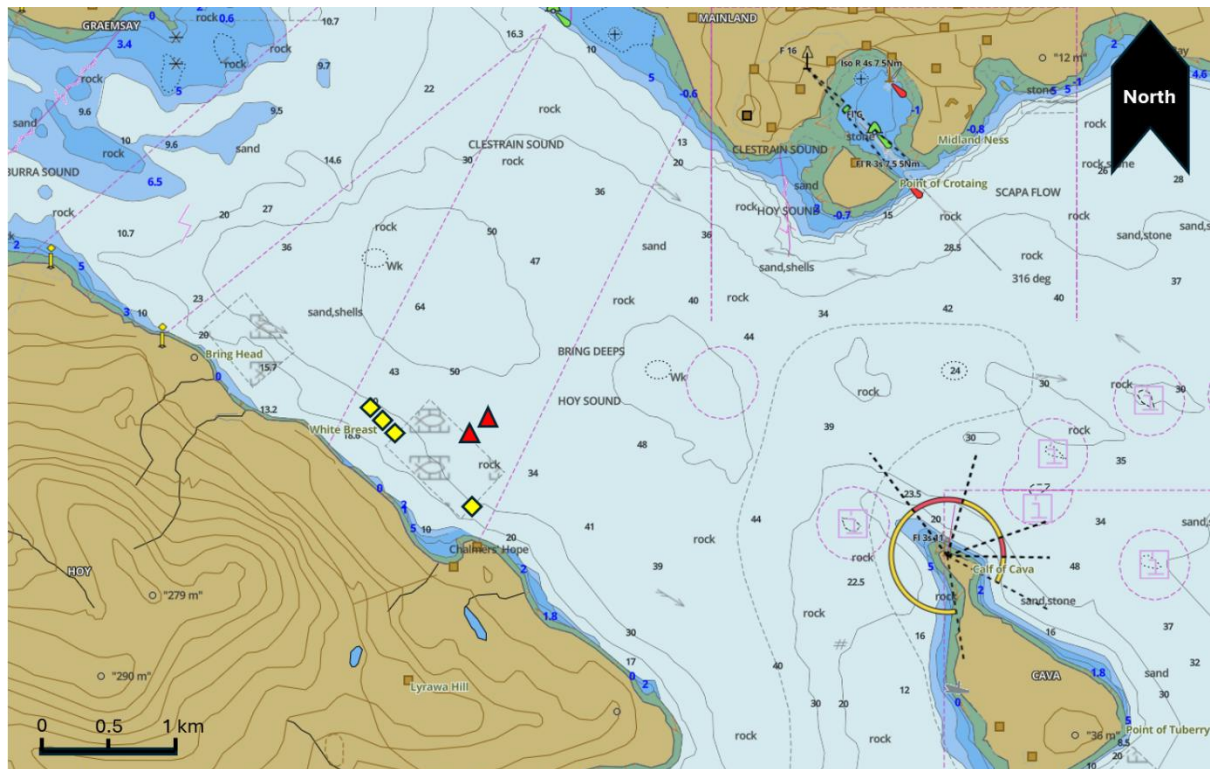


Figure 1: Bathymetry map of the proposed ADCP deployment locations. ADCPs deployed at locations marked with a yellow square will have no surface buoy present. ADCPs deployed at locations marked with a red triangle will have a surface buoy.

3. Equipment & Vessel Details

Deployment operations will be conducted using a service vessel with a crane operated by Cooke Scotland. The vessel is capable of safe deployment and retrieval of subsea instrumentation using marine-certified lifting equipment.

Two different mooring configurations will be used. Seabed landers without surface buoys are identified by square symbols at locations S1–S4. Tripods with surface buoys are identified by triangular symbols at locations P1 and P2. The same symbols and colours are used consistently in Table 1 and Figure 1.

A photograph of the first mooring configuration is shown in Figure 2. The sensor will be mounted in a seabed lander fitted with two redundant acoustic-release systems. These moorings will have no surface markers and will be deployed at the square-marked locations S1–S4.

The second mooring configuration is illustrated in Figure 3. The sensors will be mounted on tripod frame with a ground line and a surface marker buoy. These systems will be deployed at the triangle-marked locations P1 and P2.



Figure 2: Photograph of lander bedframes to be deployed at locations marked by yellow squares. Bedframes will be deployed as standalone units without surface markers or ground lines. Recovery will be handled by activation of acoustic releases which will deploy a buoy from the bedframe carrying a recovery rope to the surface. Each lander bedframe has two of these buoys to provide redundancy

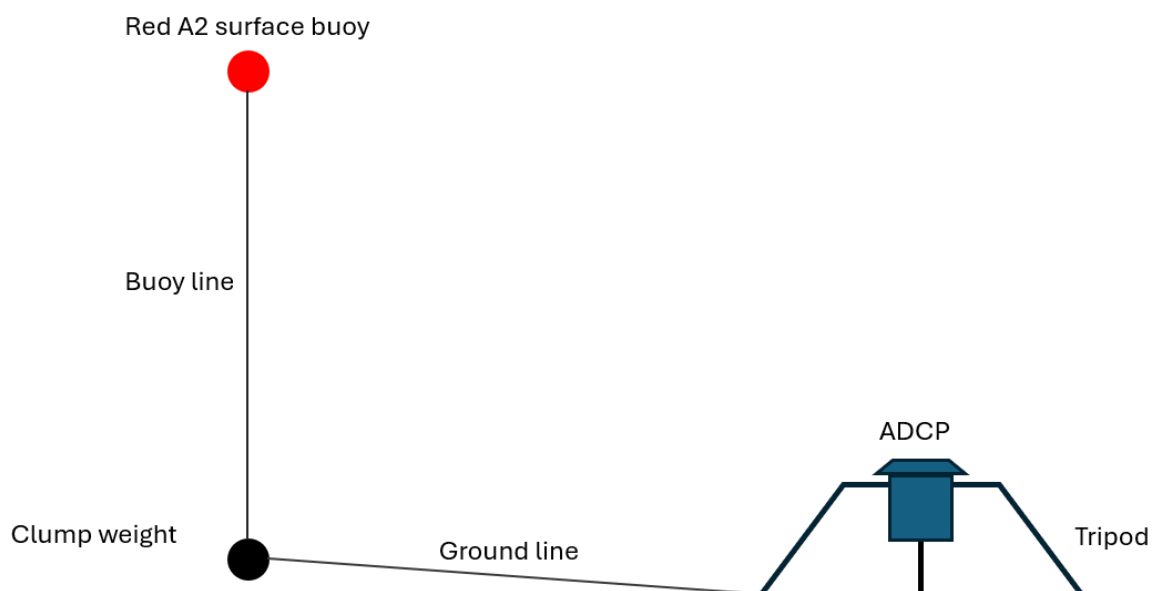


Figure 3: Diagram of deployment configuration for the ADCPs deployed at the locations marked by a red triangle in Table 1 and Figure 1.



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4. Responsible Parties and Contact

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5. Risk Assessment

A marine operations risk assessment and method statement have been completed and are available on request.

Key control measures include:

- Deployment in suitable weather/tidal conditions only
- Use of experienced crew and marine-certified lifting equipment
- Continuous vessel communications via VHF channel 14

Mariners are requested, so far as is safe and practicable, to maintain a minimum clearance of 300 m from the deployment positions and not to anchor, trawl or dredge in their vicinity.