

## **SITE P700**

This site had a seabed of fine sand and a rich benthic community when it was photographed in August 1996. There is some evidence from observations of slight asymmetry in form of shallow sand-ripples for bed-modification by oscillatory benthic currents which move NNW - SSE. There were dense populations of tube-dwelling cerianthid anthozoans and brittle stars (*Ophiocten gracilis*). The anthozoans were leaning towards the NW at the time of the photographs, but no instrumental benthic current data are available for this site at the time of photography and so the behaviour of the animals cannot be correlated with known current-directions. Comparison with surface current data derived from tide tables and tidal-stream atlases is too unreliable to be conclusive about average current-direction affecting biota or bedforms. Ten photographs were taken in August 1996.

Reference No: **II/57/2/6:**

Site:	P700
Cruise:	Challenger CH128B
Position:	56° 35.22' N
	09° 10.90' W
Depth:	705 m
Date:	6th August 1996.
Time:	22:45:48 GMT

This shows a bed of fine muddy sand, and there was a rich benthic community when the site was photographed in August 1996. Oscillatory benthic currents which moves NNW - SSE have produced small ripples with crests aligned ENE - WSW and wavelength 5 cm approx.: there is no evidence of large-scale advection. There is a dense population of tube-dwelling cerianthid anthozoans; some appear to be drawing their arms in slightly. Benthic current strength and direction at the time of photography are not known. There are some brittle stars *Ophiocten gracilis* - disc-diameter up to 1 cm approx., overall diameter up to 3 – 5 cm approx., a small sea urchin, *Echinus* sp. (2 cm diameter approx.) and a synphobranchid eel (length 15cm approx.). The branched growths visible to the left of the compass have not been identified. The view looks towards the NNE.



Reference No: **II/57/2/7:**

Site:	P700
Cruise:	Challenger CH128B
Position:	56° 35.22' N
	09° 10.91' W
Depth:	705 m
Date:	6th August 1996.
Time:	22:48:51 GMT

This shows a bed of fine muddy sand and a rich benthic community when it was photographed in August 1996. Oscillatory benthic currents which moves NNW - SSE have produced small ripples with crests aligned ENE - WSW: there is no evidence of long-term or large-scale advection. There is a widespread population of tube-dwelling cerianthid anthozoans which are leaning towards the West: many appear to be drawing their arms in slightly. Benthic current strength and direction at the time of photography are not known. There are many white brittle stars *Ophiecten gracilis* - disc-diameter up to 1cm approx., overall diameter up to 3 - 5 cm approx., a large white sea urchin , *Echinus* sp. (5 cm diameter approx., excluding spines) and a synphobranchid eel (length 12 cm approx.). The view looks towards the North.



Reference No: **II/57/3/11:**

Site: P700  
Cruise: Challenger CH128B  
Position: 56° 35.19' N  
09° 11.02' W  
Depth: 706 m  
Date: 6th August 1996.  
Time: 22:50:41 GMT

This shows a bed of fine muddy sand and a rich benthic community when photographed in August 1996. Weak oscillatory benthic currents which move approx. NW - SE have modified the crestlines of shallow ripples and bio-induced bedforms, with crests aligned NE - SW: there is no evidence of large-scale advection. There are some old and degraded urchin feeding-tracks. There is a widespread population of tube-dwelling cerianthid anthozoans that are leaning towards the West: many appear to be partially withdrawn. Benthic current strength and direction at the time of photography are not known. There are many white brittle stars *Ophiecten gracilis* - disc-diameter up to 1 cm approx., overall diameter up to 3 – 5 cm. Most are lying fully against the bed; they are not raised up on their arms as in some other photographs. The view looks towards the NNE.





Reference No: **II/57/3/12** (part-frame enlargement):

Site:	P700
Cruise:	Challenger CH128B
Position:	56° 35.22' N 09° 10.95' W
Depth:	707 m
Date:	6th August 1996.
Time:	22:51:36 GMT

An enlargement of a dense community of *Ohpιοcten gracilis* and tube-dwelling cerianthid anthozoans. The arms of many of the *OphiocTen* overlap, and their arm tips are bent back slightly, probably in the direction of the weak current. The anthozoans lean towards the West and their arms are partially withdrawn. Benthic current strength and direction at the time of photography are not known with certainty.



