

## **SITE N140**

At this site, predominantly rounded gravel, which in places appears to be partially immersed in mobile coarse sand, is seen. It is a hydrodynamically energetic site: erosional moats forward of and around the sides of cobbles are complemented by depositional tails, indicating that sand was being advected northward in March 1995. The visible biota are usually attached to stones, but large, thick-spined sea-urchins (*Cidaris cidaris*) do move over the sandy surfaces, sometimes leaving characteristic tracks: at other times these urchins are seen clinging onto stones. Twenty-six photographs were taken at this site - one in March 1995 and 25 in August 1996.

Reference No: **II/34/1/6A:**

Site:	N140
Cruise:	Charles Darwin CD91B
Position:	56° 37.38' N 08° 57.72' W
Depth:	140 m nominal
Date:	26th March 1995.
Time:	07:22 GMT approx.

In the foreground, cobbles (average size 15 cm approx., the largest 30 cm approx.) are bedded in interstitial sand and covered in fine sediment and biota. In the background, a drift of sand is covering most stones; those that do protrude cause scour round their southern faces and tails are deposited from their northern faces. This indicates a strong, steady northerly current. The view looks towards the West.



Reference No: **II/58/2/9A:**

Site:	N140
Cruise:	Challenger CH128B
Position:	56° 36.09' N
	08° 55.04' W
Depth:	136 m
Date:	7th August 1996.
Time:	00:37:08 GMT

The picture shows predominantly coarse sand, moulded by turbulence into linguoid-shaped ripples, which appear to be partially degraded by biological activity. There was little gross sediment-movement at the time the picture was taken. Some stippled areas indicate the passage of an organism, possibly the large, thick-spined sea urchin *Cidaris cidaris*. In the foreground, the sand-surface has a lower reflectivity on some of the ripple-crests: this could either be caused by winnowing and mineral sorting or by biogenic agencies. The view looks towards the North.



Reference No: **II/58/6/29A:**

Site:	N140
Cruise:	Challenger CH128B
Position:	56° 35.99' N 08° 54.96' W
Depth:	134 m
Date:	7th August 1996.
Time:	00:50:14 GMT

This shows a sandy gravel site. Rounded cobbles predominate in the foreground with cobbles and boulders in the background: some appear to rest on each other. The gravel has a washed appearance and is clean of any sediment. However, there are many sessile biota on the cobbles (possibly solitary corals), and a large, thick-spined sea-urchin, *Cidaris cidaris*, while a small squat lobster is partially visible just to the left of centre. The water is exceptionally clear. The view looks towards the SSW.



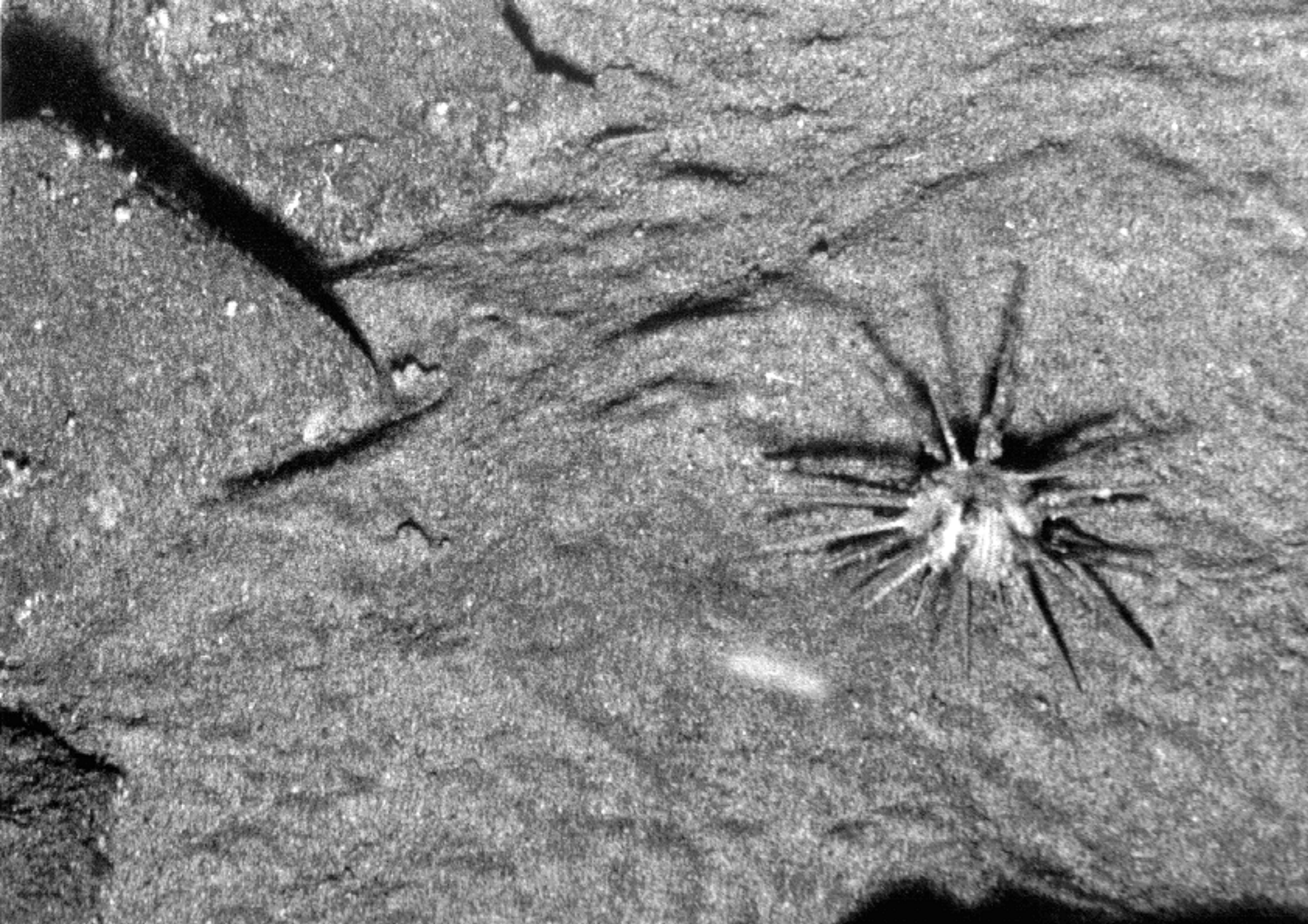


Reference No: **II/58/3/11A** (part-frame enlargement):

Site:	N140
Cruise:	Challenger CH128B
Position:	56° 36.07' N 08° 55.03' W
Depth:	135 m
Date:	7th August 1996.
Time:	00:38:50 GMT

A large, thick-spined sea urchin, *Cidaris cidaris*, is moving towards the left, leaving a stippled track in the sand surface behind it. The urchin is 15 cm in diameter overall approx.; the test is about 4 cm in diameter.





Reference No: **II/58/3/12A** (part-frame enlargement):

Site:	N140
Cruise:	Challenger CH128B
Position:	56° 36.08' N 08° 55.03' W
Depth:	135 m
Date:	7th August 1996.
Time:	00:39:48 GMT

This picture shows the growth of small biota on stone-surfaces: they may include cup corals and bryozoans. The cobble on the left is largely covered in a smooth, dark, velvety layer, which may be an encrusting sponge or a colonial ascidian. A large, thick-spined sea- urchin *Cidaris cidaris* (overall diameter 16 cm approx.) is clinging to the large stone on the right.



Reference No: **II/58/3/14A** (part-frame enlargement):

Site:	N140
Cruise:	Challenger CH128B
Position:	56° 36.06' N 08° 55.01' W
Depth:	135 m
Date:	7th August 1996.
Time:	00:41:36 GMT

Two large, thick-spined sea urchins, *Cidaris cidaris*, are seen on a bed of cobbles and coarse sand. They are both about 16 cm in diameter overall (test-diameter 4-5 cm approx.); that on the left is clinging to the cobble (grazing?); that on the right is leaving a characteristic track of stipple-marks as it moves across the sandy bed. The spines of both can be seen to carry attached fouling organisms.



