

MVP



- Atlantic nutrients sensor
- AML CTD
- AML Oxygen
- Atlantic Radiance and Irradiance
- Tilt/Roll
- Wetlabs fluorometer
- BOT Telemetry module.



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Circumstances of Loss



- Discovery 284 – Atlantic Meridional Transect 14
- 1830 - Deployed over the side
- 2100 - Profiling automatically. Behaving well and giving good profiles.
- 0200 - Brought the fish to the surface for CTD station.
- 0400 - End of CTD station - set profiling again.
- 0445 – MVP left after watching casts closely, but being checked at 20 - 30 minute intervals
- 0550 – Emergency stop message noticed during a check. it was also immediately noticed that the wire was no longer leading aft out of the sheave and that the winch drum had lots of slack cable on it. The PC controller lost contact with the fish at about 0535) when the fish was at 180m on it's downwards profile. Coincidentally this was when the ship took a violent roll which shifted unsecured gear around the ship.

Damage to Guard



Severed & Worn Cable



Conclusions??...

- BOT - "Our conclusion is that with the rough sea state the cable became slack and caught on the "traversing shaft guard". The guard should not allow this to happen and may have been bent or out of position. This interaction allowed the cable to essentially destroy the guard and cut the cable which then parted."
- The techs who mobilised the equipment are naturally adamant that the guard was not bent or out of position.
- We therefore do not positively know what caused this incident, but:
- The violent roll seems too coincidental, and we must consider that perhaps the equipment is more sea-state limited than we understood.



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