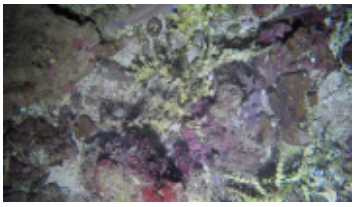
EATLAS DATA CATALOGUE (AIMS)

ROV Surveys of Scott Reef from the RV Falkor



Metadata | Metadata (XML)
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Title	ROV Surveys of Scott Reef from the RV Falkor
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Abstract	In NW Australia a range of emergent reefs bound the western margin of the Oceanic Shoals bioregion, but with the major feature being numerous submerged shoals lying along and across the shelf edge. Scott Reef, the largest emergent reef system, has a diverse shallow water coral reef ecosystem that has demonstrated impressive resilience to cyclone and coral bleaching disturbances over the last 15 years (Gilmour et al, 2013). The adjacent deeper lagoon of South Scott Reef covers approximately 300 km2 in depths of 30--?70m. This deeper lagoon has areas of very high live coral cover and represents the largest example of a mesophotic reef system in the region. The slightly deeper distribution of these habitats appears to have ameliorated those impacts such as thermal stress and cyclones, which have caused significant disturbance to the adjacent shallow areas. A spatial model using multibeam and seabed surveys with towed video and AUV in 2009 and 2011 has been developed by AIMS to describe and predict the distribution of the key mesophotic habitats. While this model is the most advanced of its type for such a reef system, additional research suggests that fine?scale water movement, including turbulence and upwelling driven by internal waves, may be a key driver of these habitat patterns. We used the RV Falkor's time at Scott Reef to characterise these detailed oceanographic processes with the goal of integrating the physical and biological data to further develop the spatial model, then extend this approach to other reefs and shoals in the region. The fine scale hydrodynamics and their relationship to patterns of seabed biodiversity was explored from RV Falkor with intensive oceanographic measurements of the water column across these features and detailed imaging transects of the seabed habitats using the SOI DDROV and other camera gear.

Metadata language	eng
Character set	UTF8
Hierarchy level	Dataset

OnLine resource

Linkage	http://eatlas.org.au/data/uuid/6ef94e1e-a739-47b5-9c64-0fe8486fb9ba
Protocol	WWW:LINK-1.0-http--metadata-URL
Linkage	http://maps.northwestatlas.org/index.html?intro=false&z=11&ll=121.90510,-14.08393&l0=nwa_aims%3AScottReefROVSitesVisitedIn1999_2015,nwa-ea_ea-be%3AWorld_Bright-Earth-e-Atlas-basemap,g_SATELLITE,g_ROADMAP&v0=,f,,f
Protocol	WWW:LINK-1.0-http--related
Linkage	http://maps.northwestatlas.org/maps/wms
Protocol	OGC:WMS-1.1.1-http-get-map

Linkage	https://data.tropicaldatahub.org/aims/Falkor/
Protocol	WWW:LINK-1.0-http--downloaddata

Point of contact

Individual name	eAtlas Data Manager
Organisation name	Australian Institute of Marine Science (AIMS)
Role	Point of contact

Topic category	Biota

Extent

Description	Scott Reef, North West Australia

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Individual name	eAtlas Data Manager
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