



Port and Harbour Multibeam Survey System using NORBIT iWBMS

Foyle Port, UK
July 2020

In early 2020, Foyle Ports entered procurement phases to commission a multibeam survey system for new survey vessel 'Foyle Surveyor' along with installation, and long term training support.

Delivered Scope of Supply:



HYPACK
a xylem brand



NORBIT
WBMS



Foyle Port is the key marine gateway to the North West of Ireland for both commerce and tourism.

The Port handles approximately two million tonnes of cargo per annum and offers a diverse range of services including towage, dredging, engineering and steel fabrication. Supporting in the region of 1000 jobs, the Port makes a vital contribution to the North West regional economy.



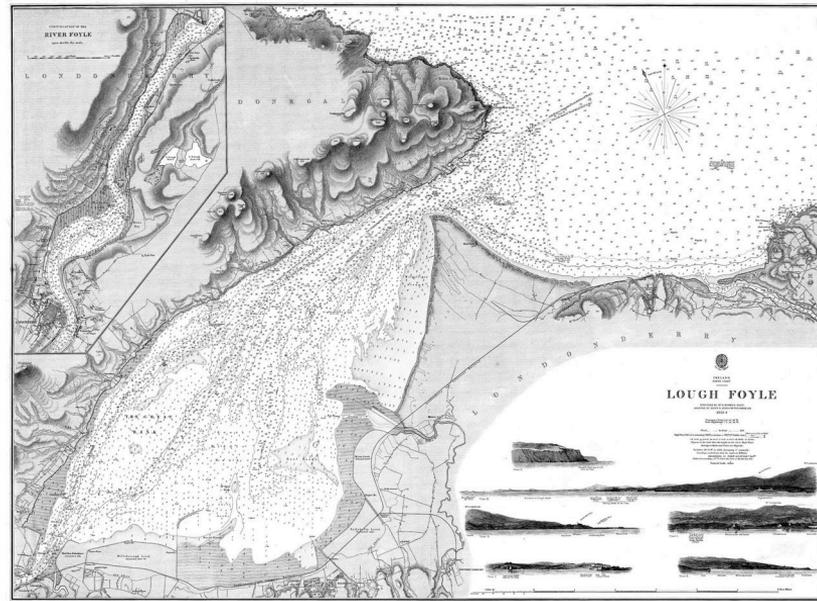
Both Vikings and Normans used the Foyle. The Vikings sailed inland as far as Dunalong, while the Normans established a stronghold at Greencastle and controlled Derry.

In 1664 King Charles II granted a Charter to Londonderry Corporation giving it responsibility for the Port. Over the next 200 years shipping increased greatly with exports of linen and provisions, as well as emigration. In 1771 the city's merchants owned 67 ships with a total tonnage of 11,000 tonnes.

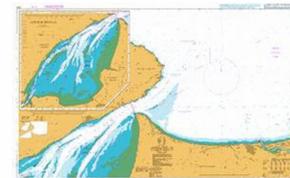
In 1854 the Londonderry Port & Harbour Commissioners were established to take control of the port and the waters of the Foyle, thus began strategic development of the Port.

Livestock was an important element of the shipping trade from Derry. In 1884 over 57,000 cattle almost 15,000 sheep and more than 19,000 pigs were exported.

During the Second World War Londonderry became the most important escort base in the UK. In mid-1940, convoys were routed through the North-West Approaches around Ireland's north coast.

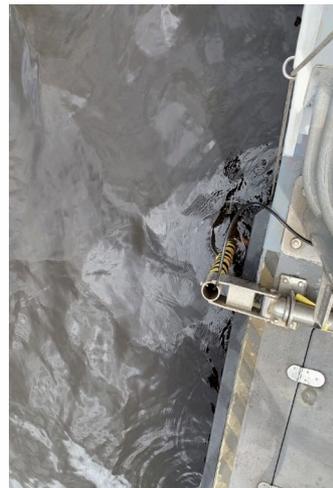


Lough Foyle Navigational Chart from 1853 and modern day equivalent





'Foyle Surveyor'



Overhead view of port side small diameter survey pole with single sonar, SVP and INS cable exiting top



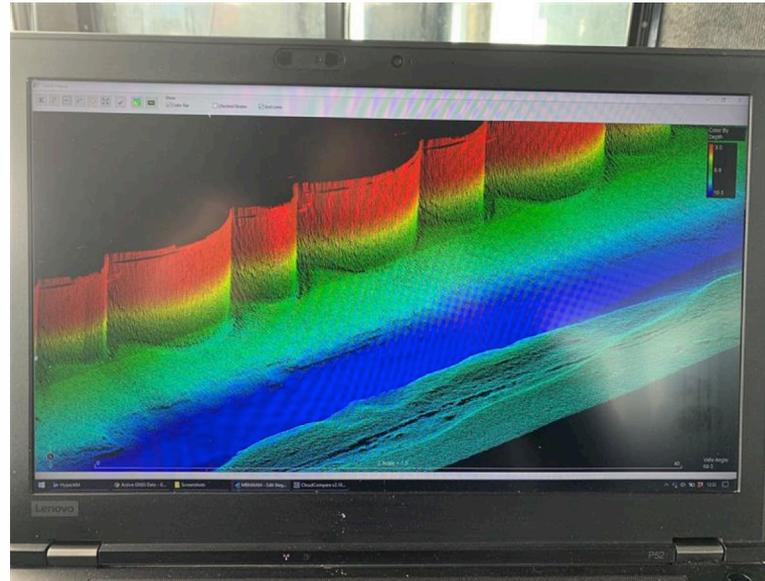
NORBIT SIU

'Foyle Surveyor' cabin roof with Port and Starboard NORBIT GNSS Antennas





Surveyor station in cabin with laptop control for NORBIT and HYPACK



Real time data visualisation display on the vessel



Helmsman control area

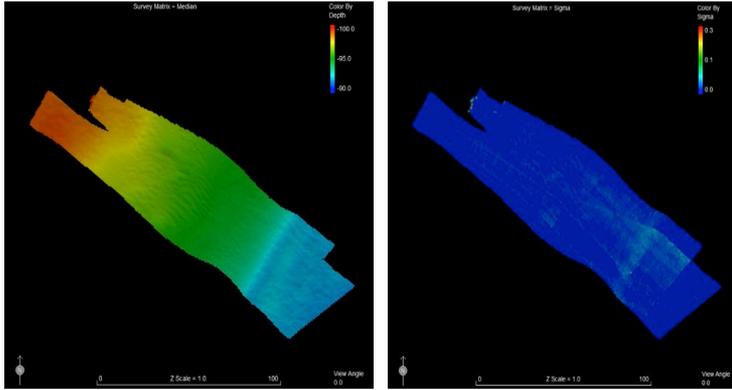
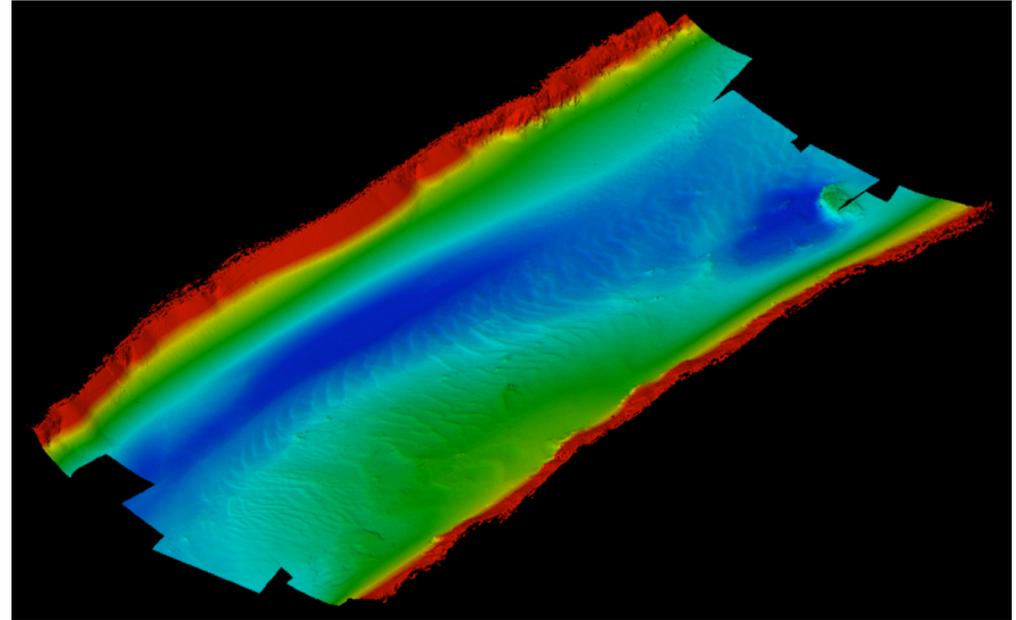
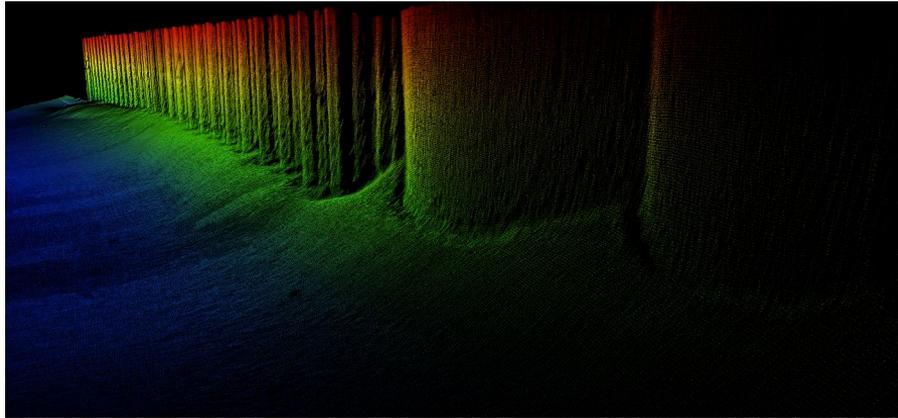


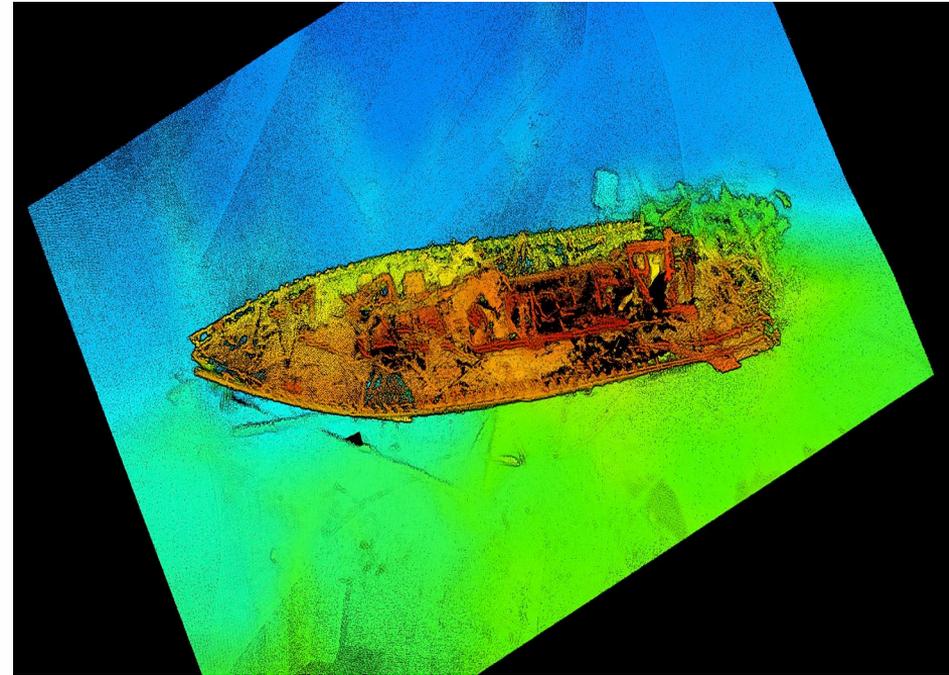
Illustration of data quality and continuously 0.5m matrix colored by median depth (left) and sigma (right)



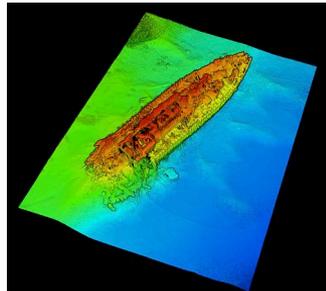
15m max depth in wide channel with multiple survey lines showing excellent data overlap repeatability



High data density of soundings on quay wall showing discrete scouring



High resolution wreck survey, showing small debris



Produced with thanks to all the staff at



www.norbit.com/subsea