



The Use of GIS* in Maritime Archaeology – The Cattewater Wreck Case Study

Peter Holt

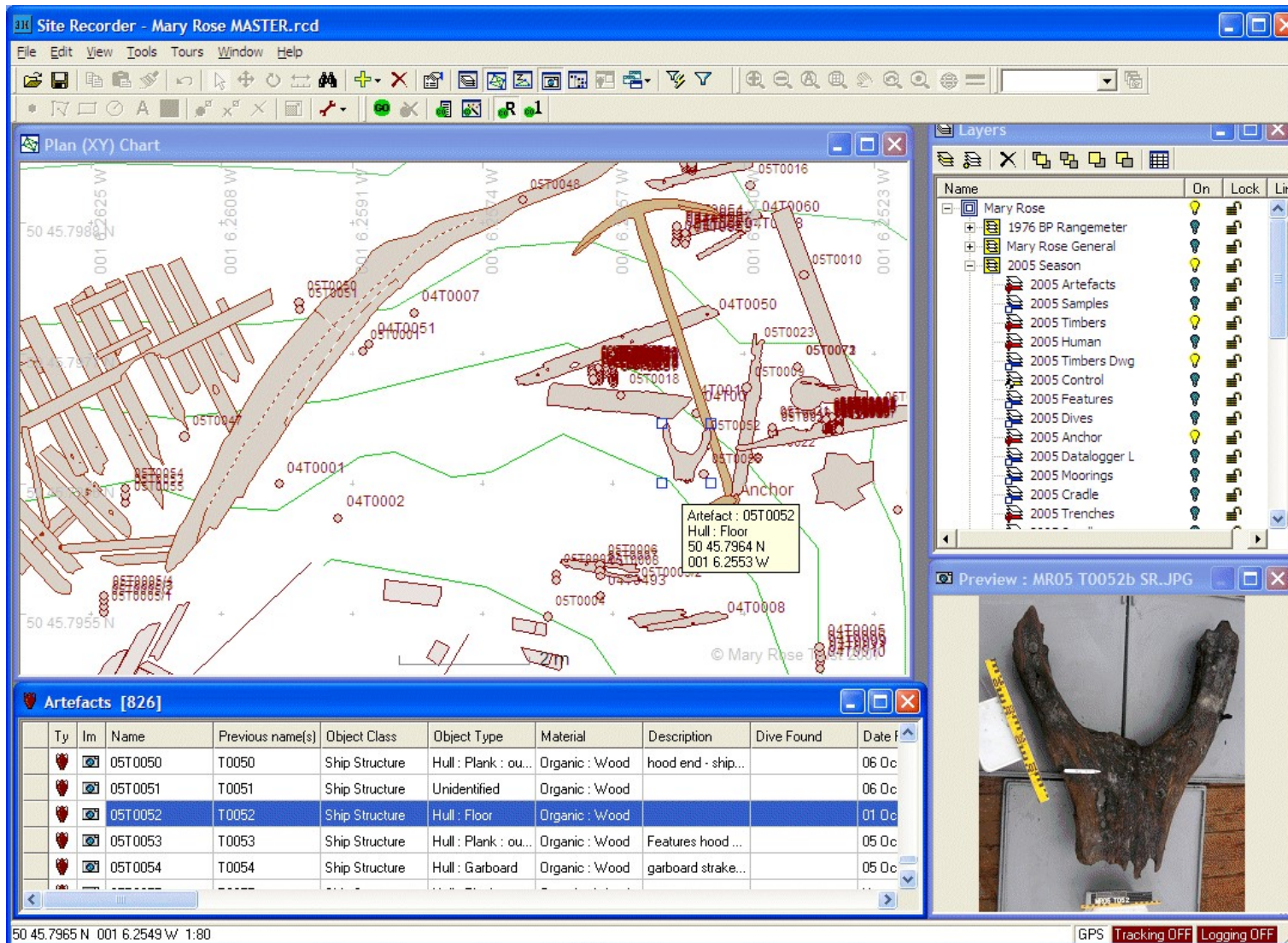
3H Consulting Ltd



*** Geographic Information Systems**

Geographic Information Systems (GIS)

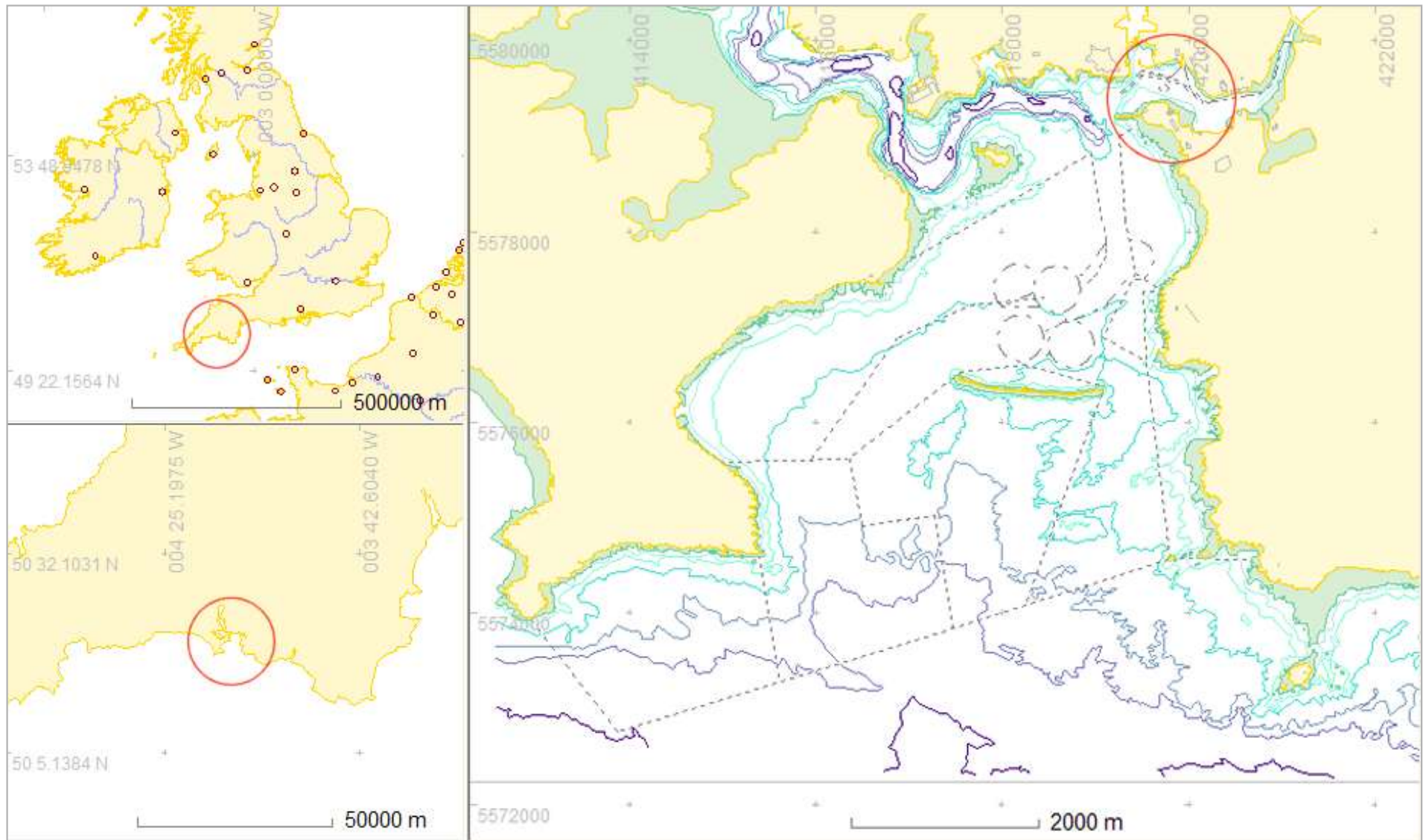
‘A bucket for keeping (and finding) information’



The Cattewater Wreck: Location

50 21.7218N 004 7.6750W (WGS84)

Cattewater, Plymouth Sound, Devon, UK



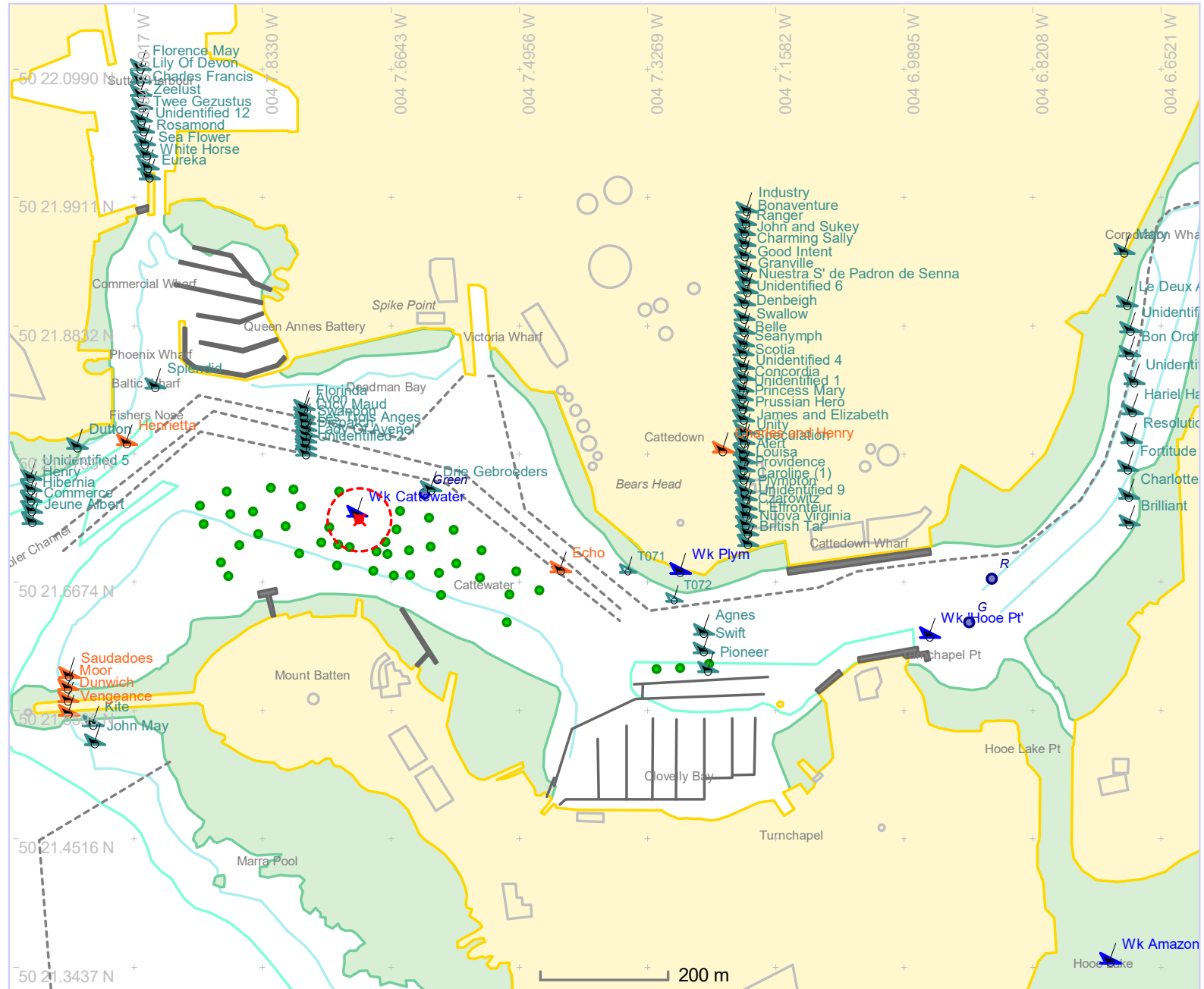
The Cattewater Wreck: 1540 Map

Catwater.

Cat-water is a good Place, where Ships ride that are bound to the Westward; going in, there lieth a Buoy, against *Mount-Batten*; you sail in close by the West-side of the Buoy: Being in, you must haul out a good Anchor well over to *Mount-Batten* side; for want of so doing many Ships have drove a-shore on *Catdown*-side. There is a Place



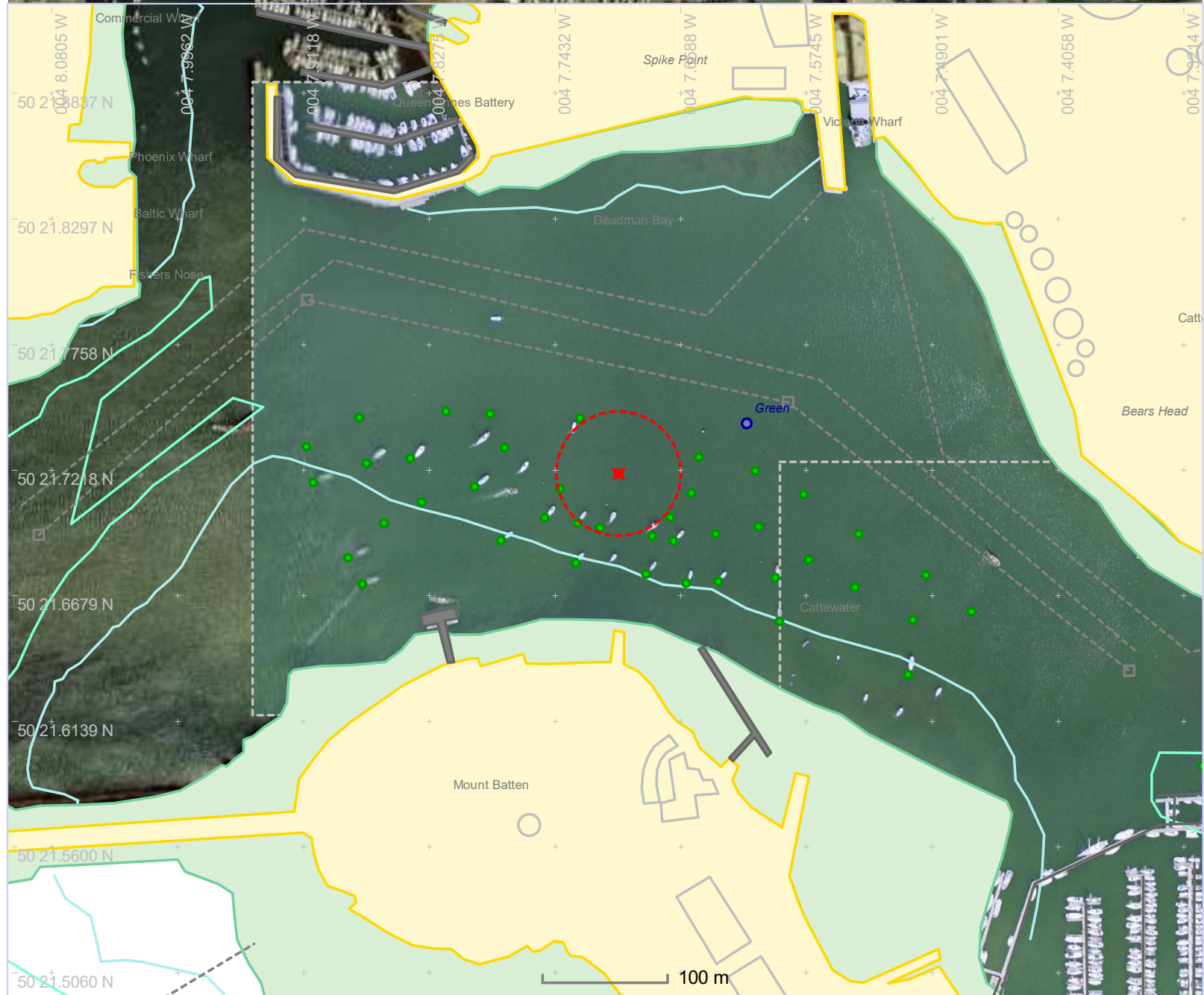
The Cattewater Wreck: Recorded Wrecks



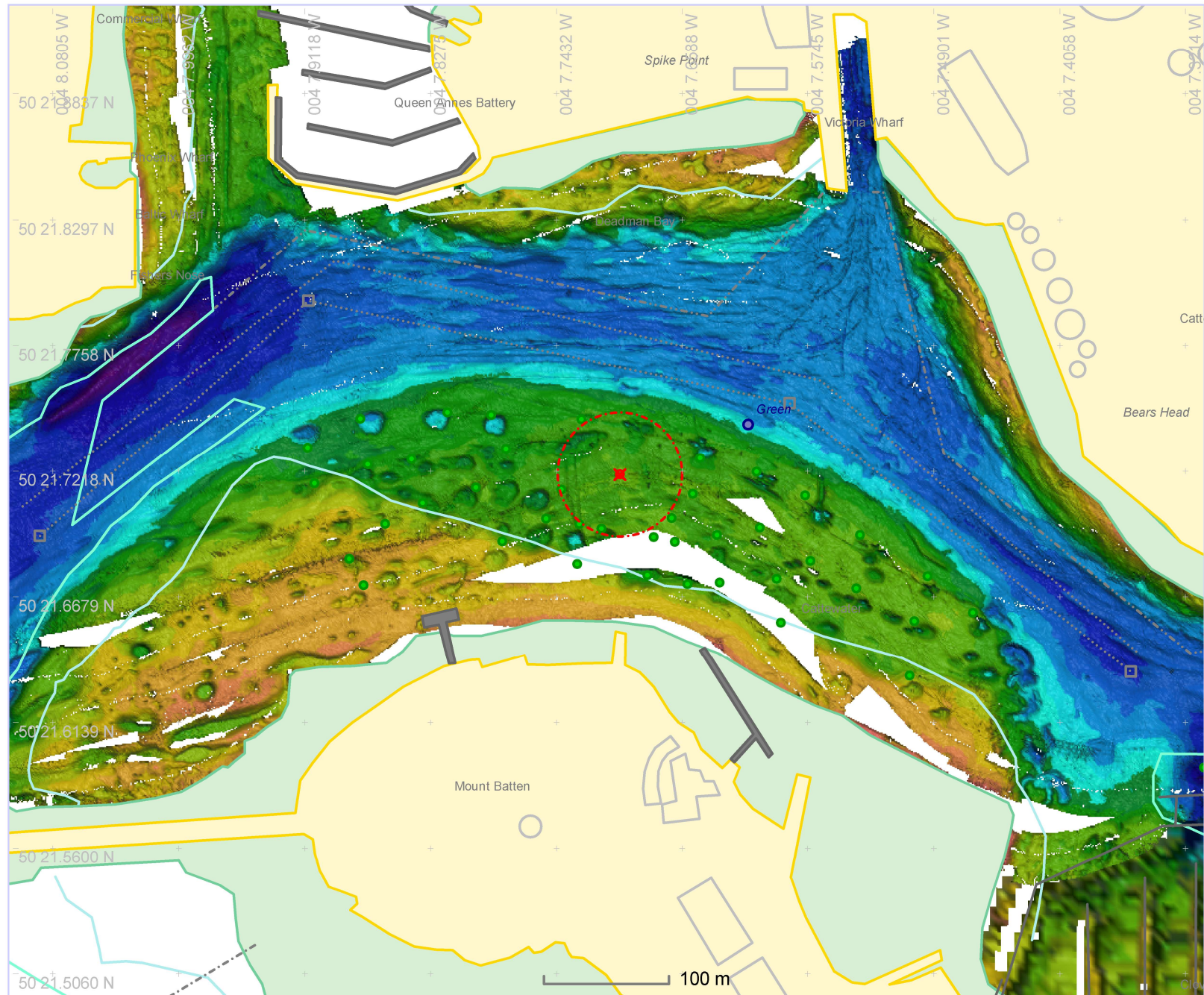
The Cattewater Wreck: From Turnchapel Looking North-West



The Cattewater Wreck: Aerial View



The Cattewater Wreck: Channel from Multibeam (MBES) Survey



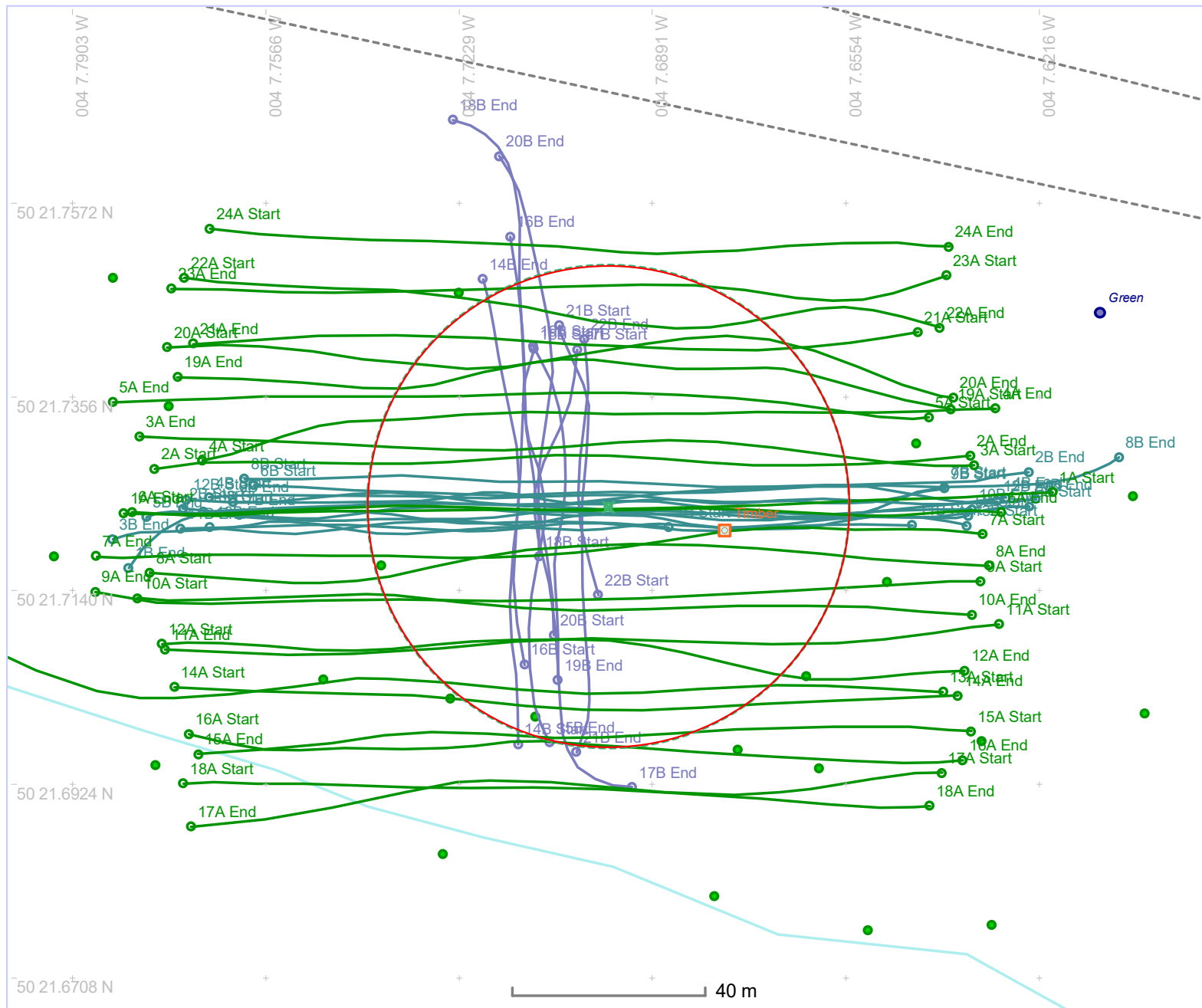
The Cattewater Wreck: 2006 Innomar Sub-bottom Profiler Survey

Innomar Parametric
SES-2000 SBP

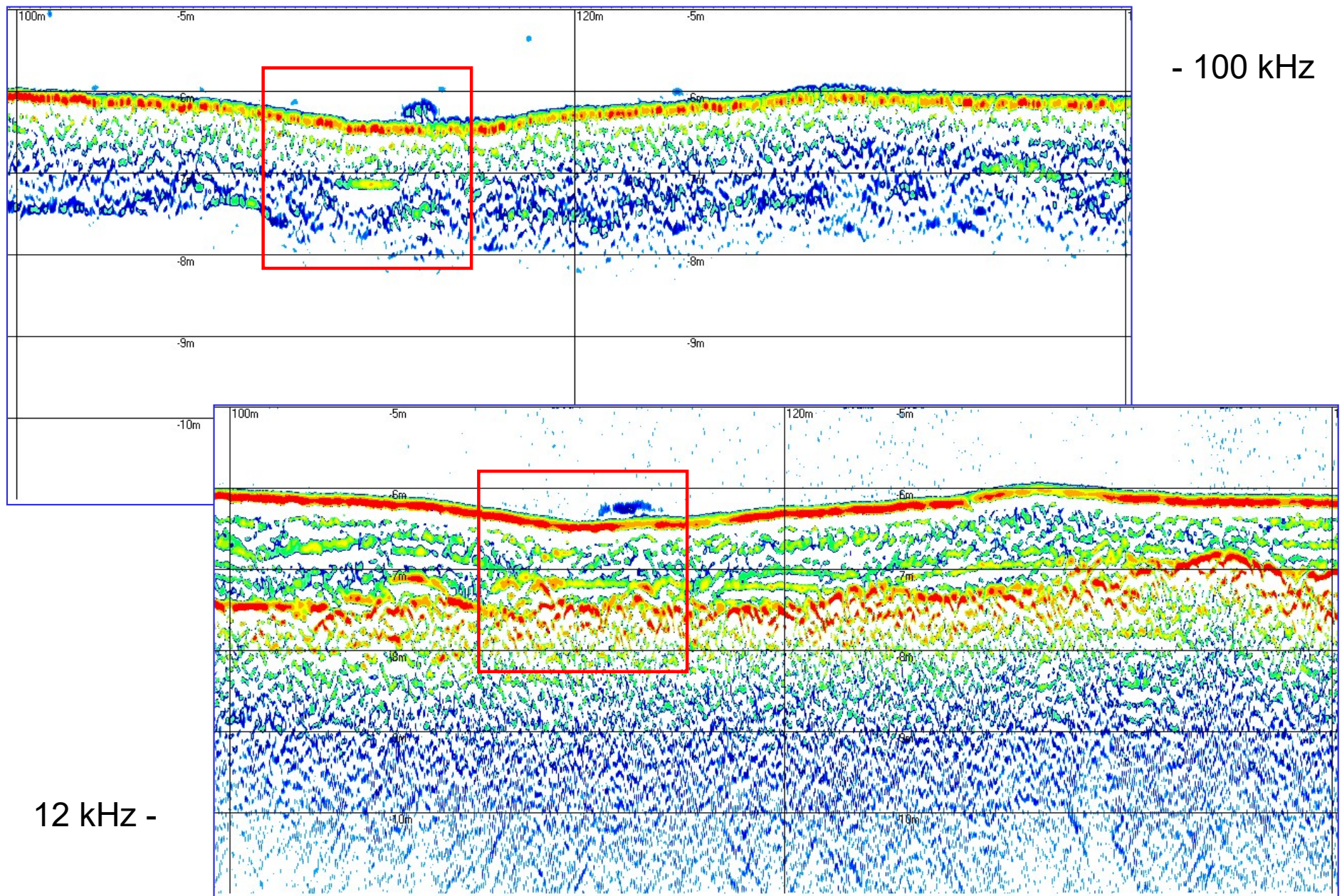
100 kHz / 12 kHz
3.6° beam ~0.5m@6m



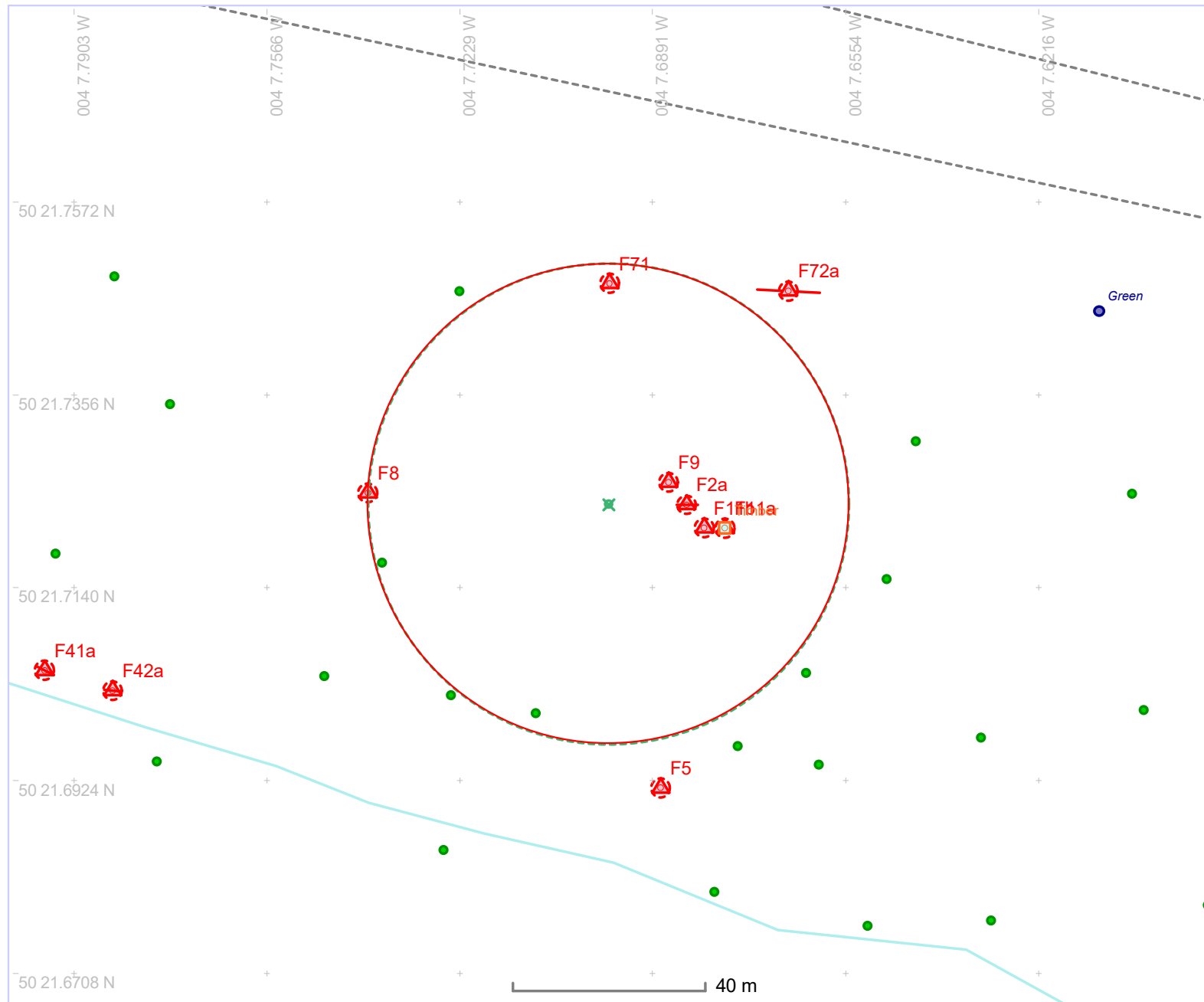
The Cattewater Wreck: 2006 Innomar SBP Tracklines



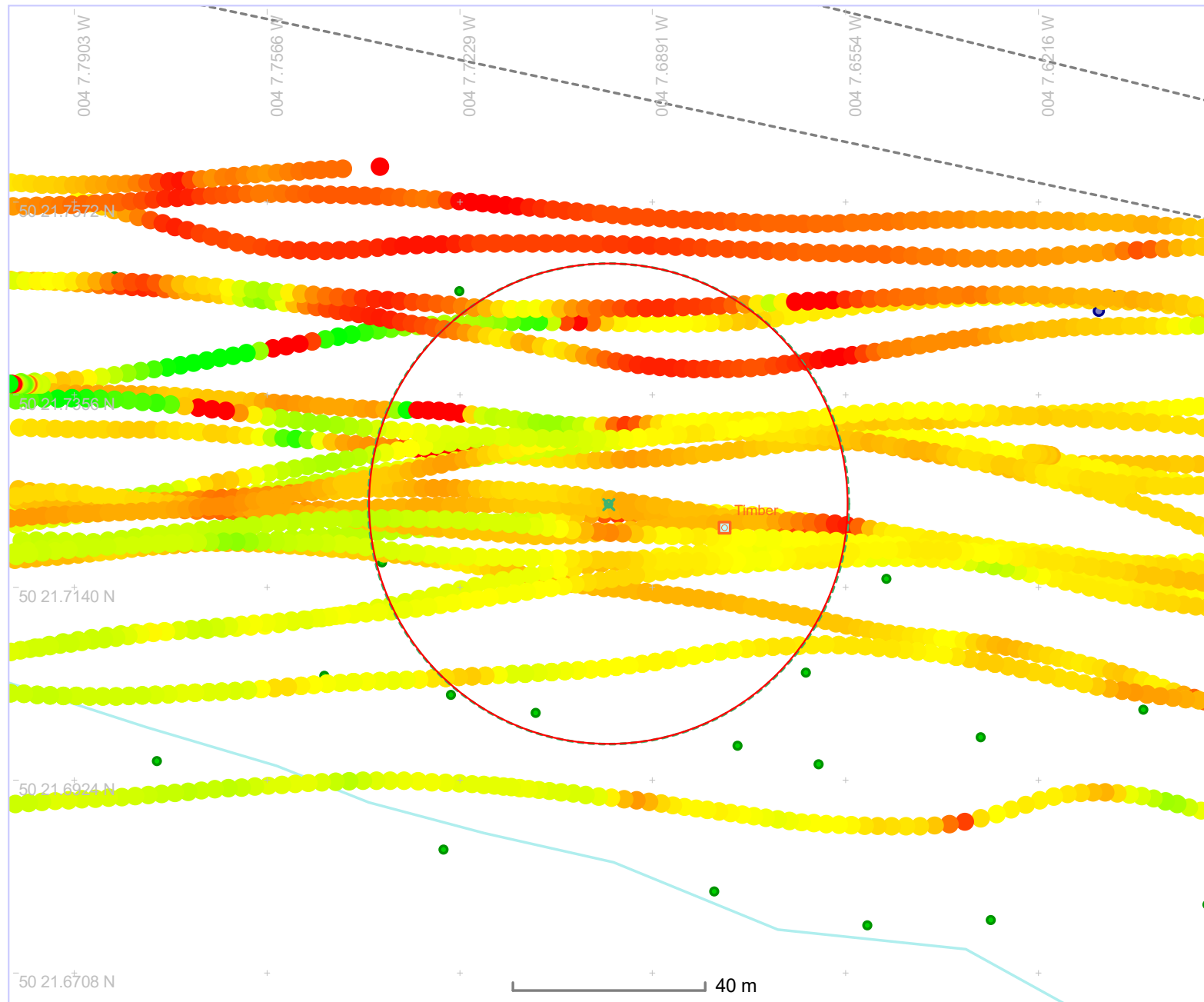
The Cattewater Wreck: 2006 Innomar SBP Sections



The Cattewater Wreck: 2006 Innomar SBP Targets



The Cattewater Wreck: 2007 Lo-Res Magnetometer Survey



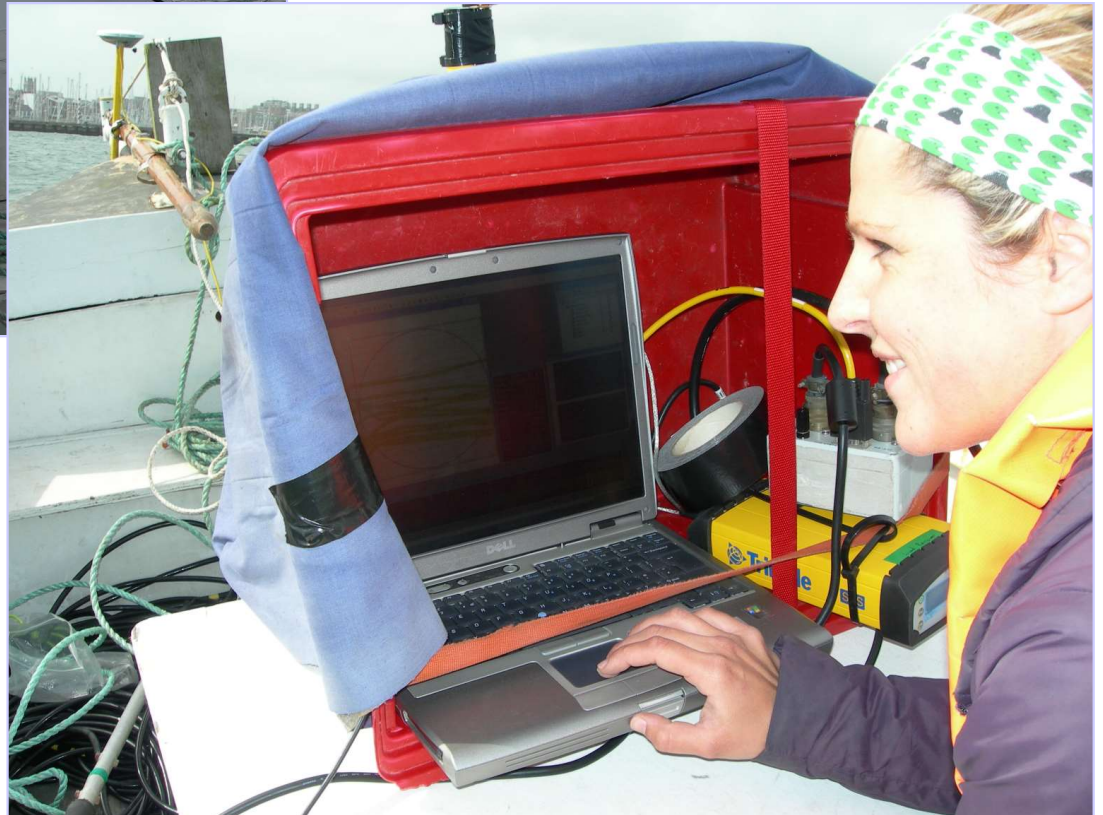
The Cattewater Wreck: 2007 Hi-Res Magnetometer Survey



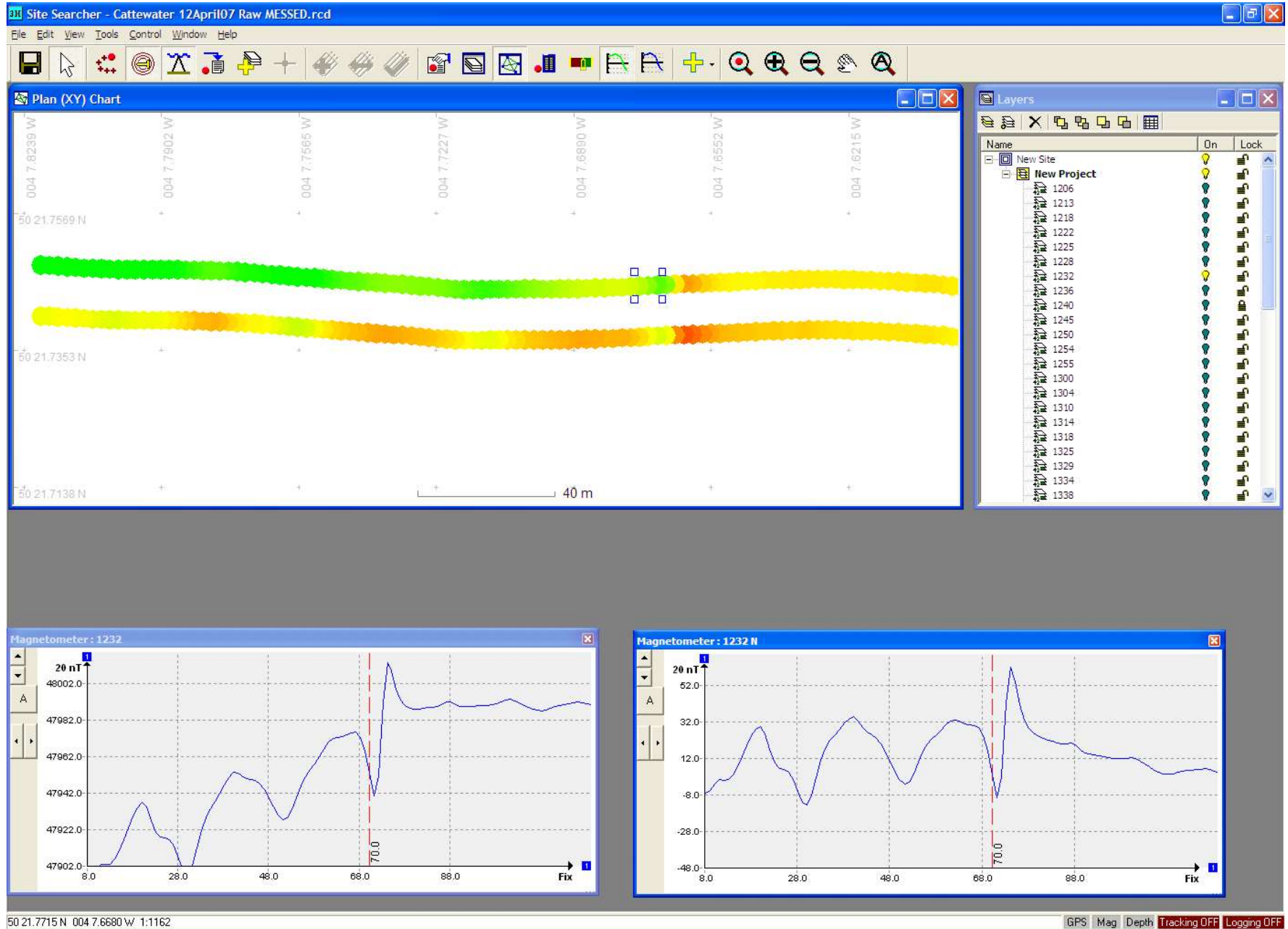
The Cattewater Wreck: 2007 Hi-Res Magnetometer Survey



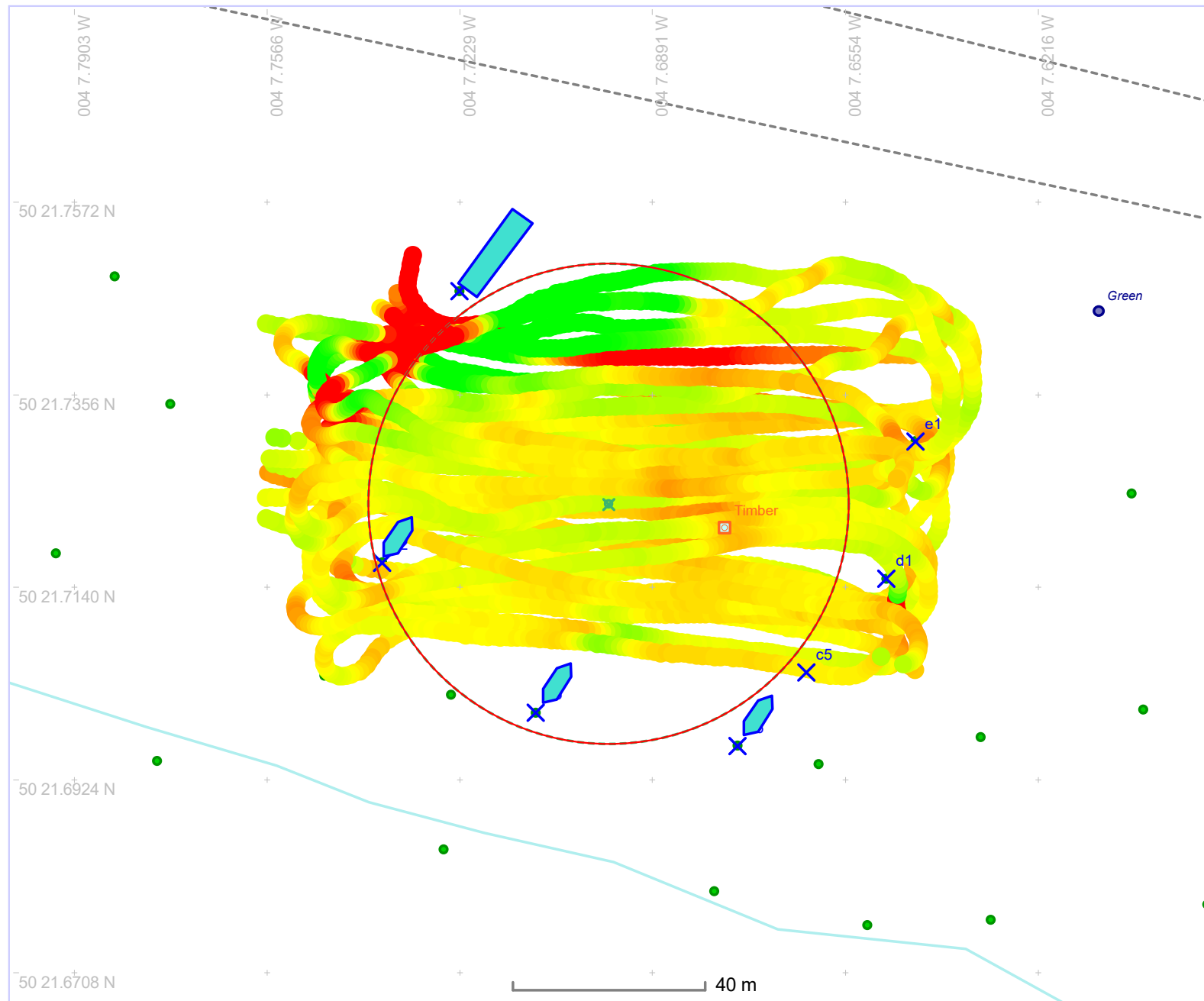
- Geometrics G-881
Caesium Magnetometer
- Trimble SPS RTK GPS
- *Site Searcher* software



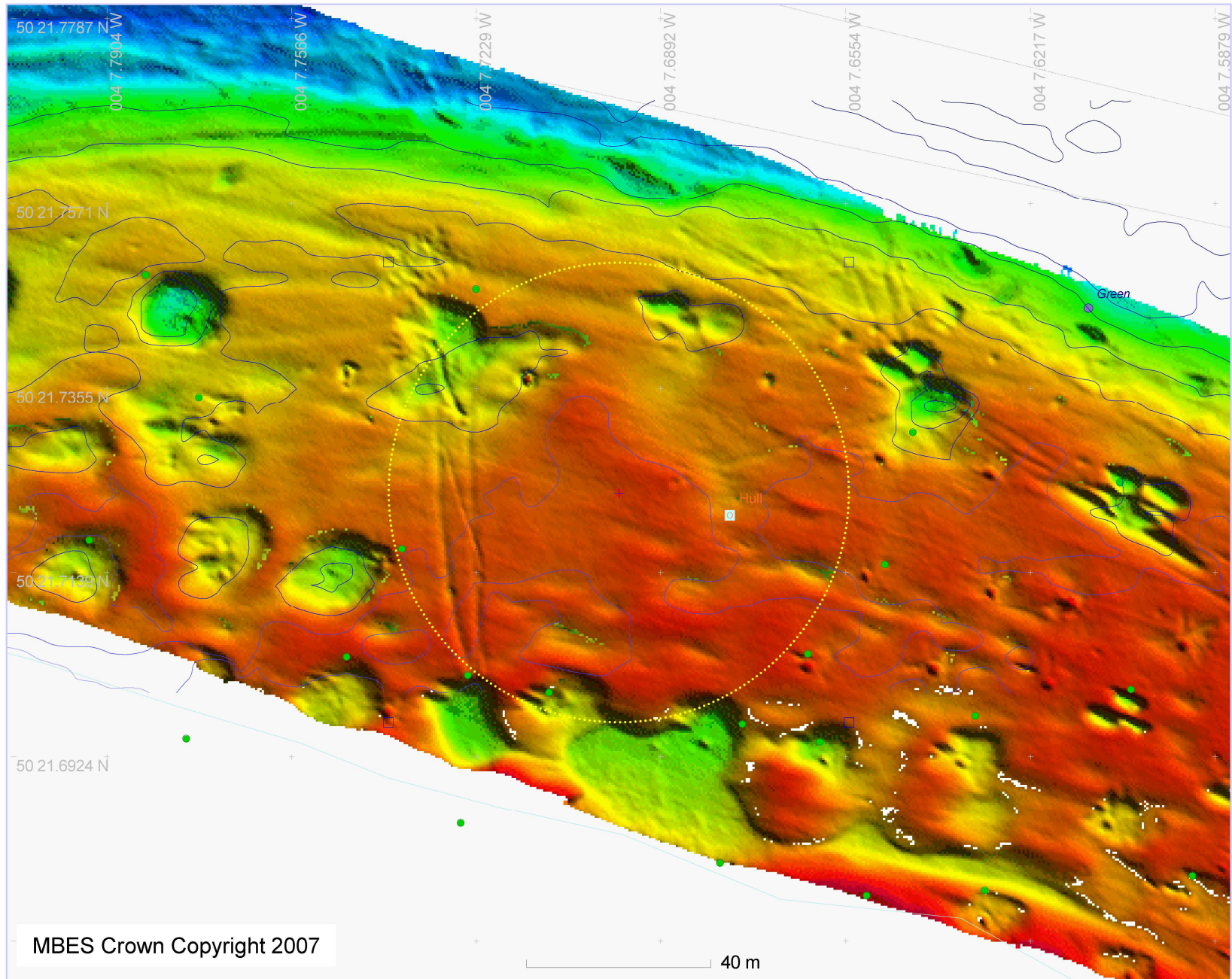
The Cattewater Wreck: Site Searcher Processing



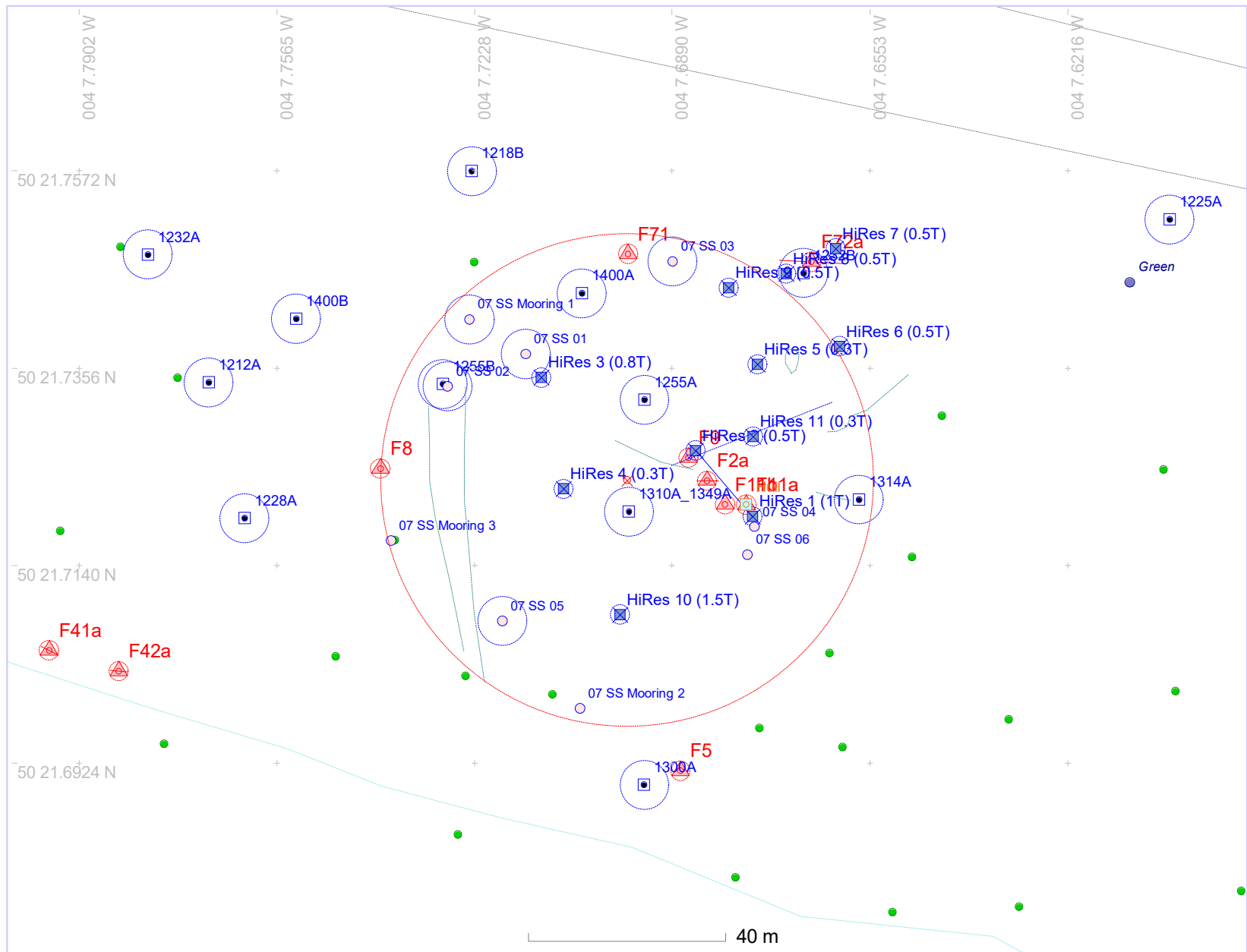
The Cattewater Wreck: 2007 Hi-Res Magnetometer Survey



The Cattewater Wreck: 2007 RN Multibeam (MBES) Survey

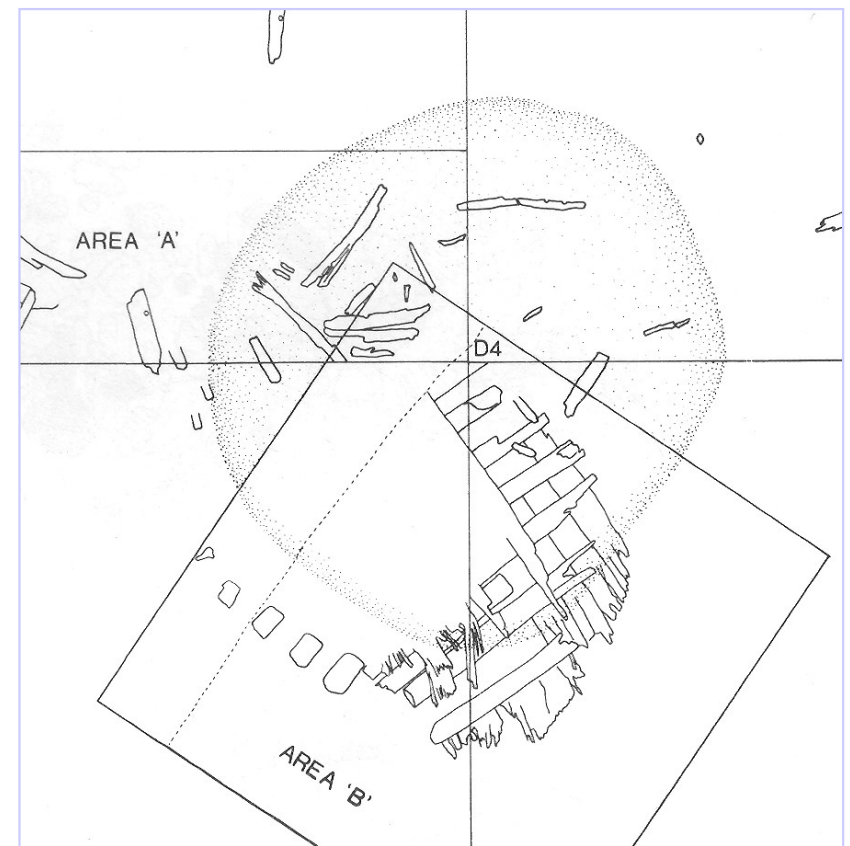


The Cattewater Wreck: 2007 Targets Combined

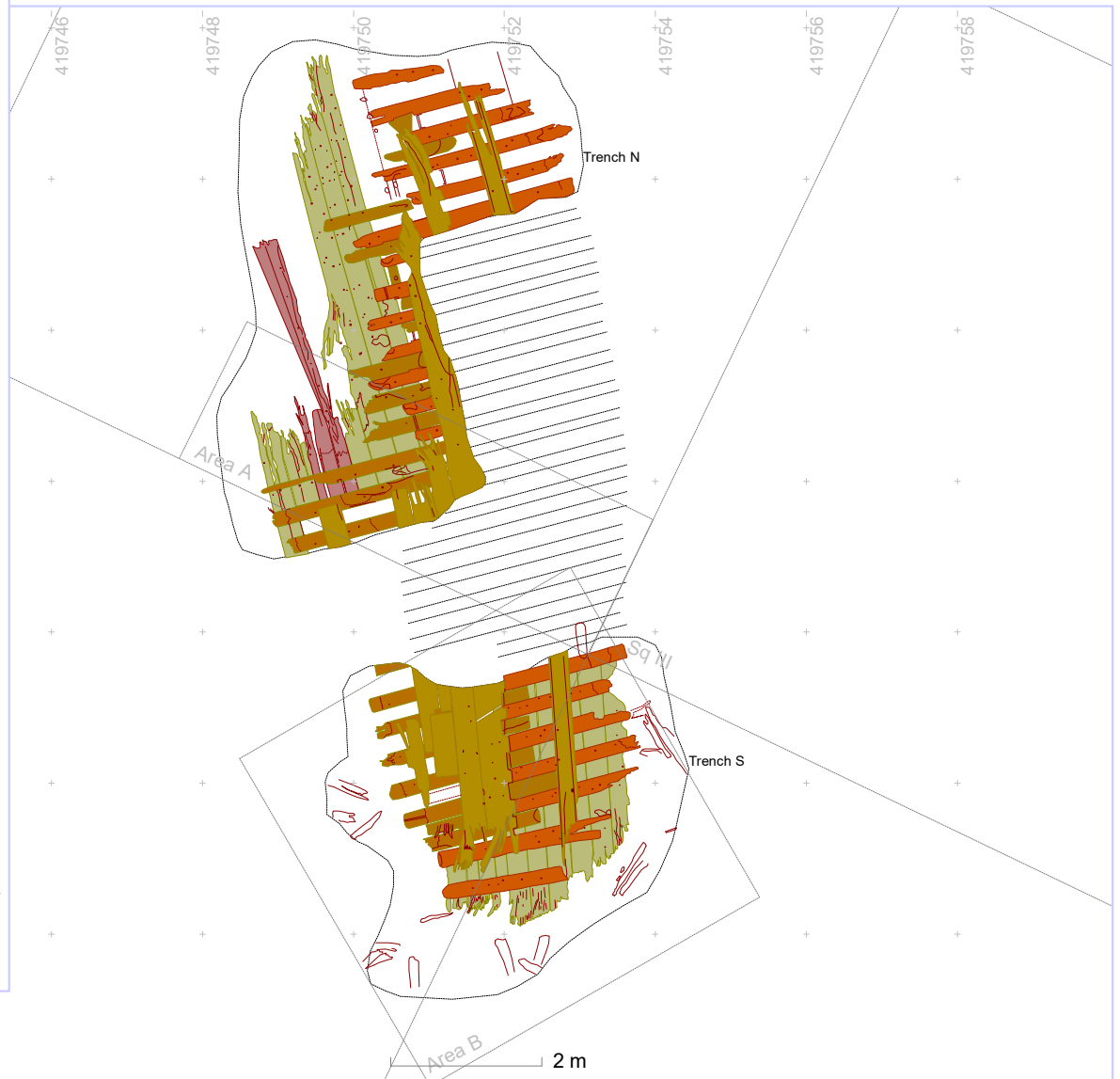


The Cattewater Wreck: Migrating Legacy Data

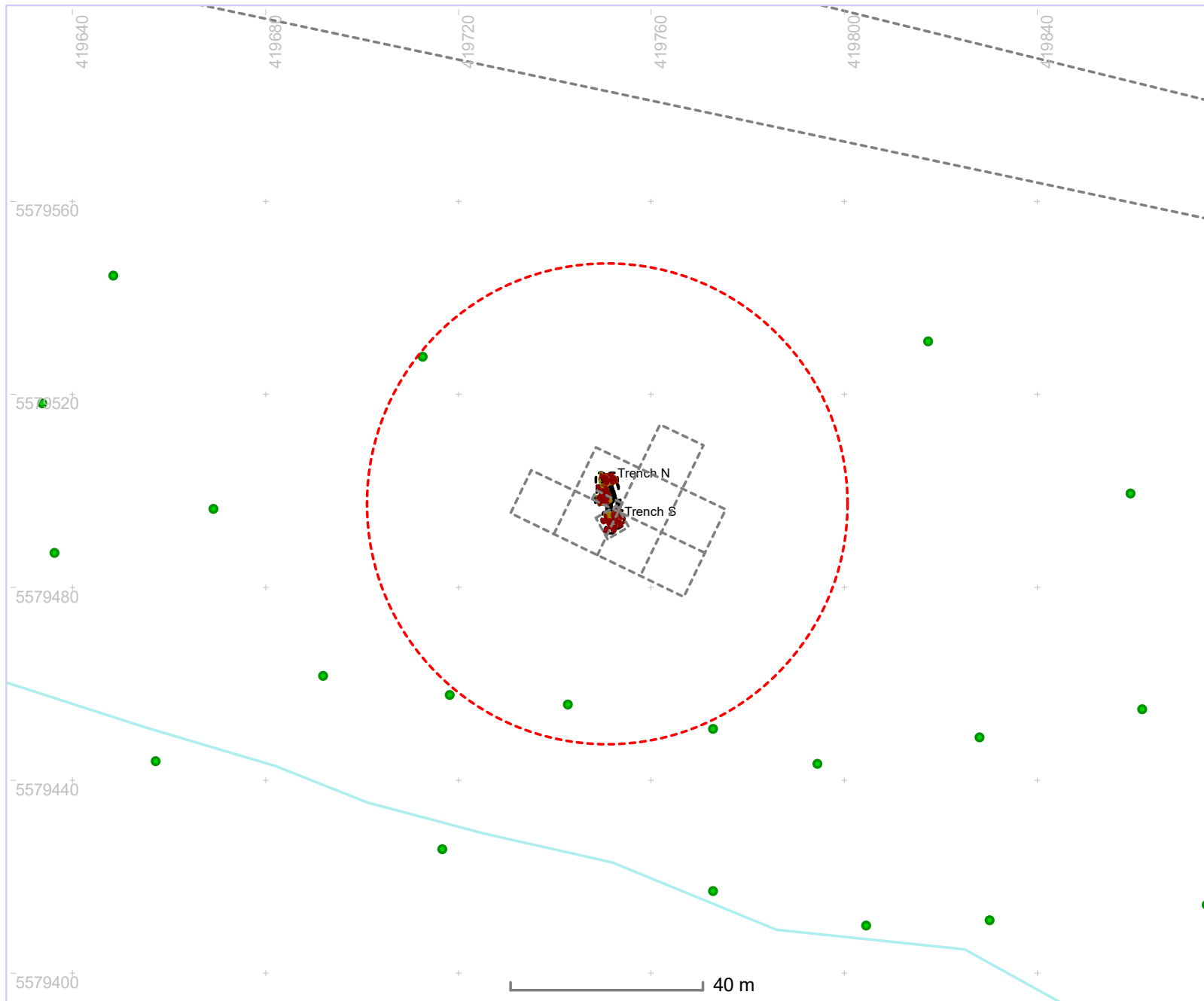
- The Cattewater Wreck, NMM 13, 1974
- The Tudor Shipwreck in the Cattewater, Bax A., 1976, 1977
- The Cattewater Wreck, Mortlock B. & Redknapp M., 1978, IJNA
- The Cattewater Wreck, Redknapp M., 1984



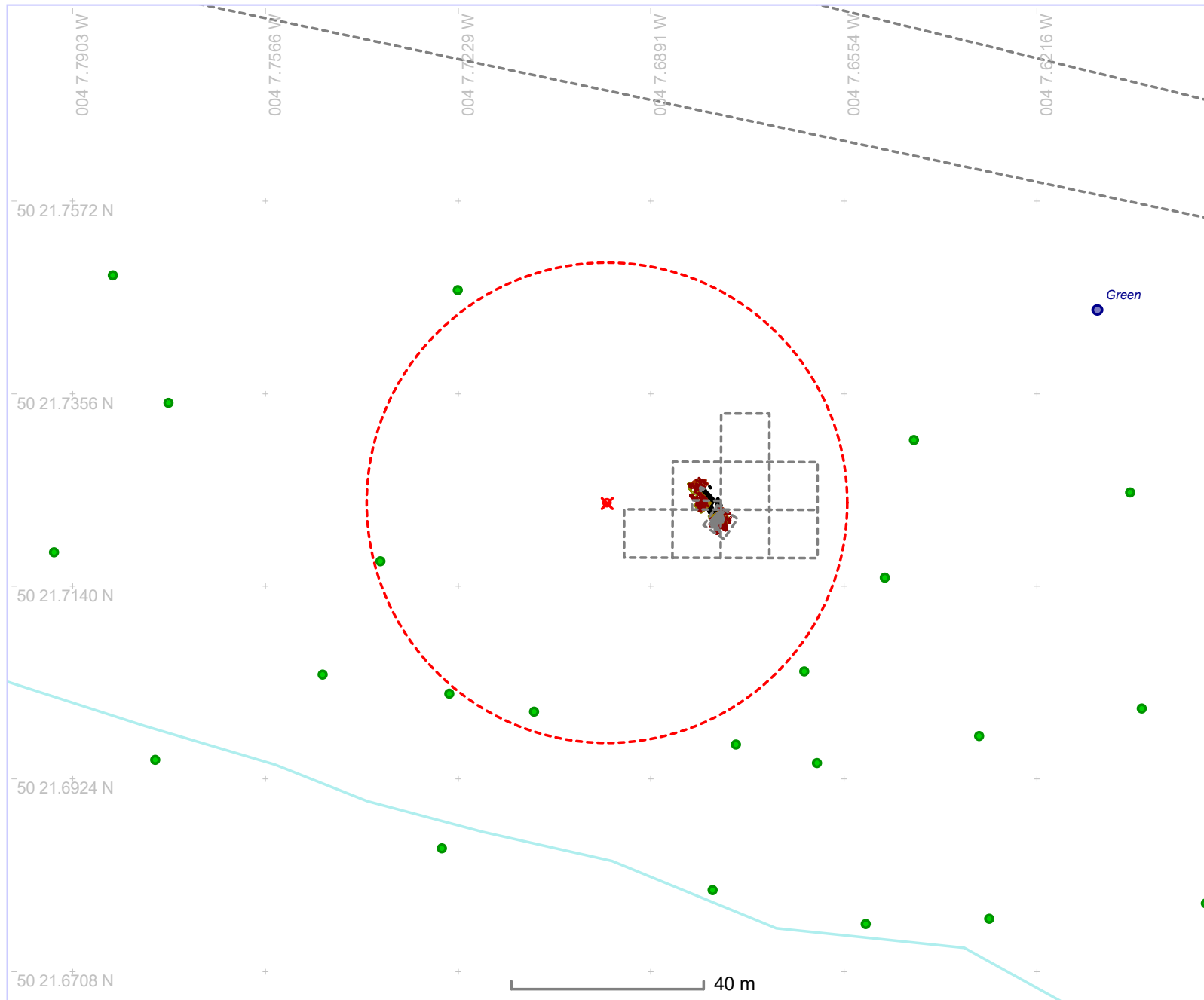
The Cattewater Wreck: Digitised 1984 Plan



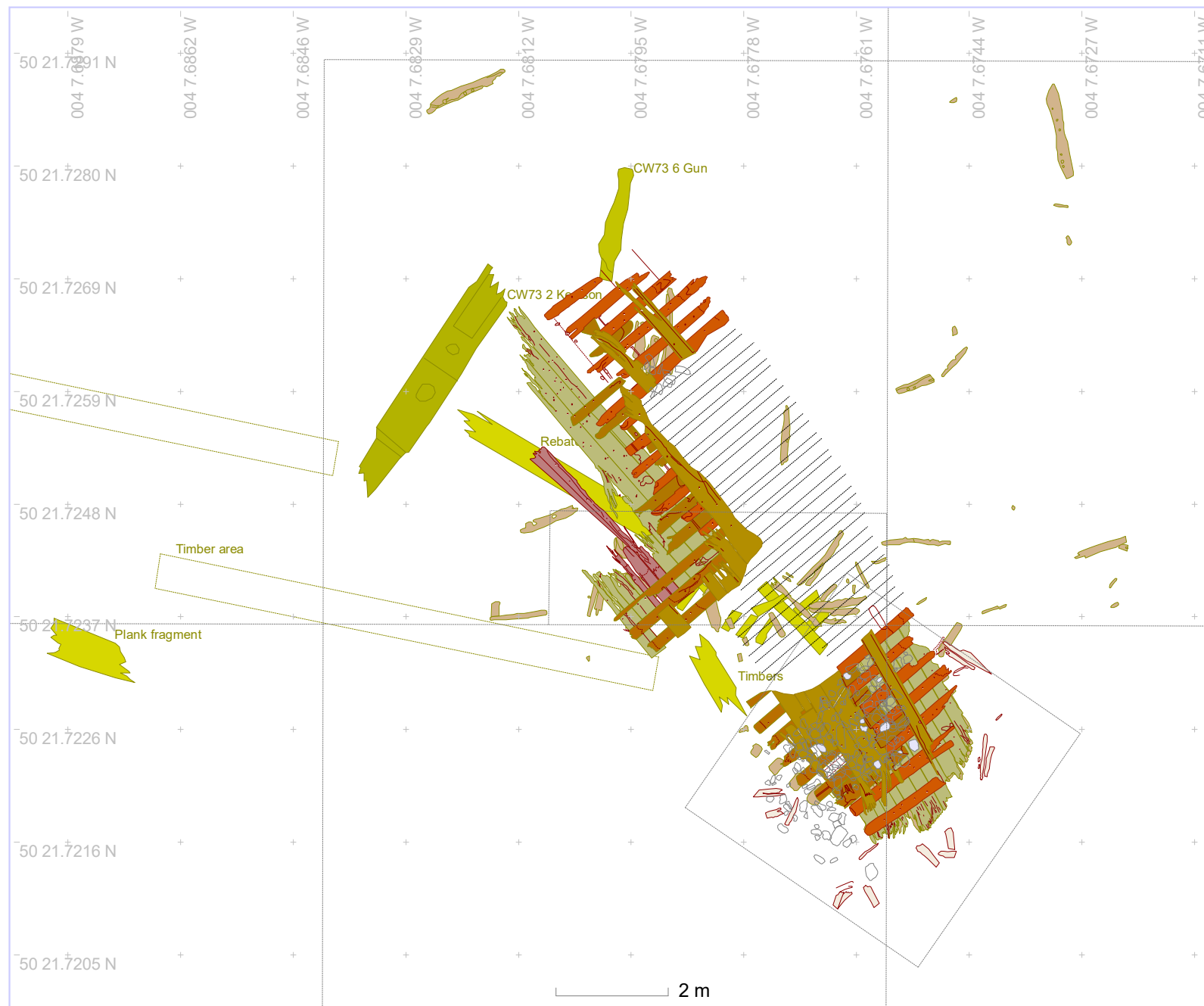
The Cattewater Wreck: Original Hull Position 1984



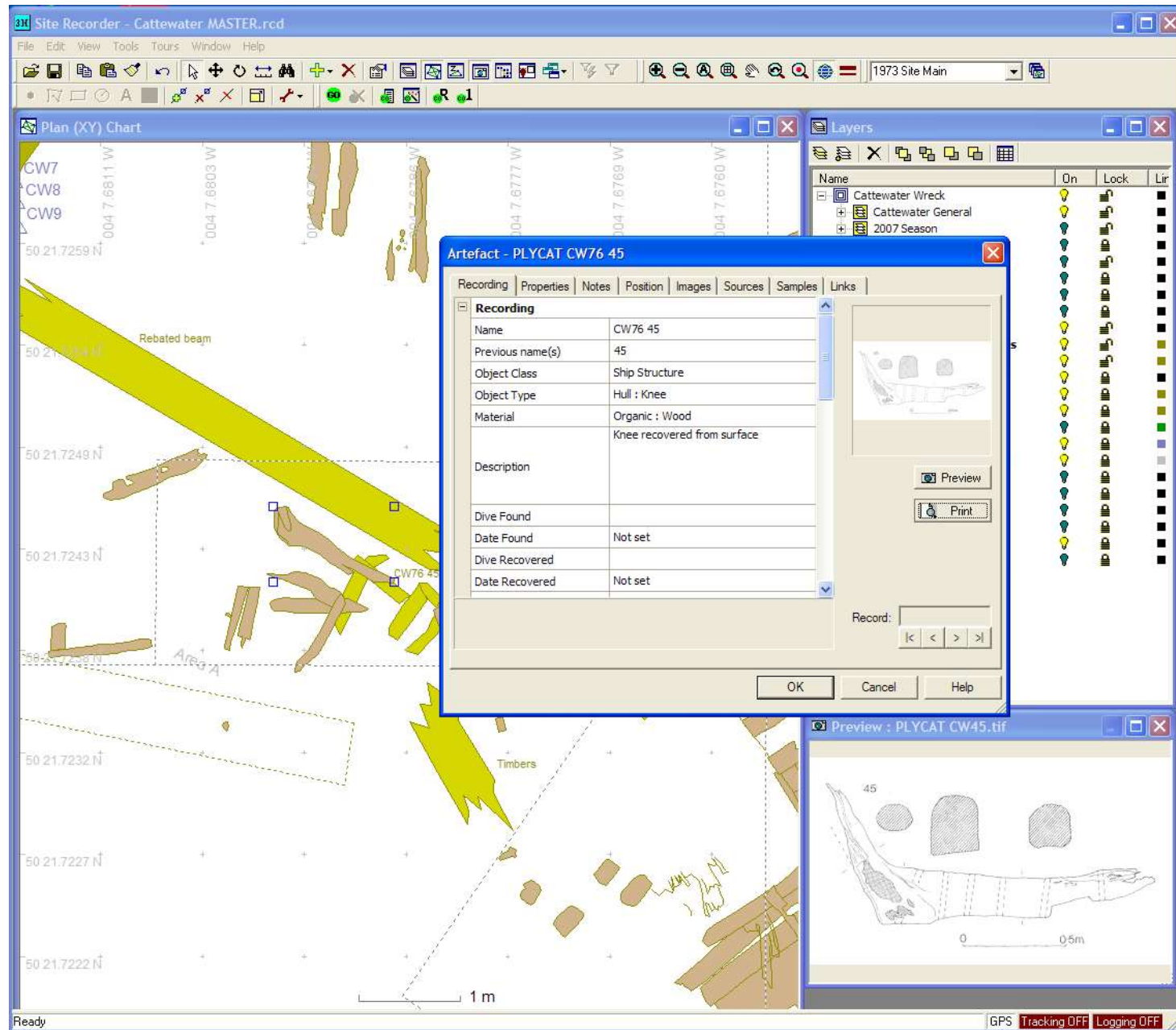
The Cattewater Wreck: Updated Hull Position 2007



The Cattewater Wreck: New Site Plan (1973 – 1984 Combined)



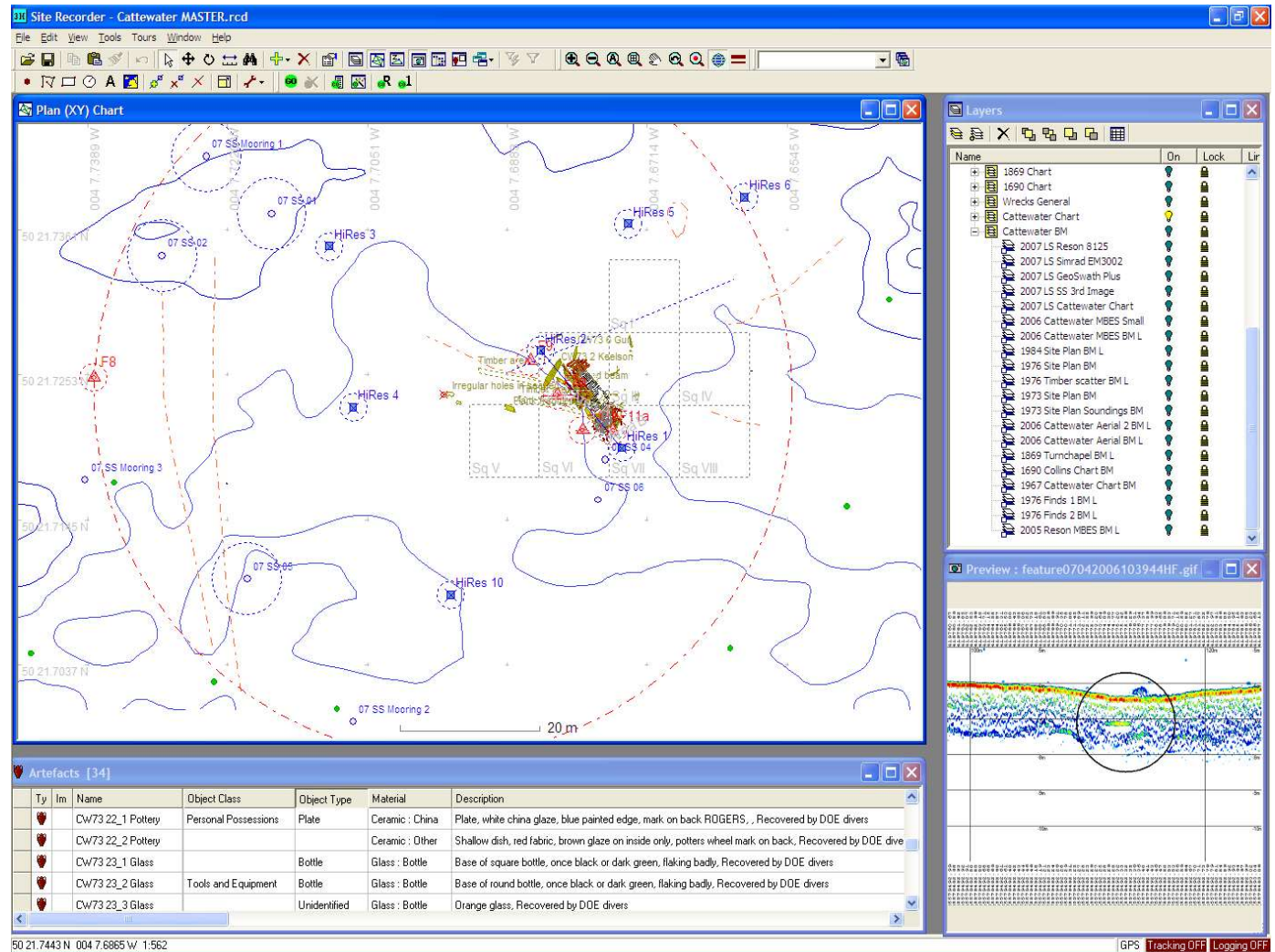
The Cattewater Wreck: Artefacts and Samples



The Cattewater Wreck: Digital Publication (Nov 2007)

Site Recorder

- Site plans
- Artefacts
- Samples
- Photographs
- Drawings
- Mag. targets
- Sidescan targets
- SB profiler targets
- Multibeam images
- Bathymetry data
- Sidescan images
- Source documents
- Contacts (people)
- Events
- Recorded wrecks
- Modern charts
- Old charts



The Cattewater Wreck: CD & Web Publication (Nov 2007)

- Free viewer program – *Site Reader*
- Full data set available on CD from 3H Consulting Ltd
- Download lo-res version free from web - www.3HConsulting.com

Cattewater Wreck - Windows Internet Explorer

http://www.3hconsulting.com/SitesCattewater.htm

File Edit View Favorites Tools Help

3H Consulting

Home Site Map

Sites : *The Cattewater Wreck*

Location - Cattewater, Plymouth, South Devon, UK Coordinates : 50 21.7218 N 004 7.6750 W (WGS84) Depth : 5m Conditions : Sheltered, poor visibility Type : Armed merchantman Lost : Tudor Diving restricted - Designated under the UK Protection of Wrecks Act (1973) National Monuments Record No.: 1082125	Download Site file Show Site in Google Earth Photo Album	
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The lower reaches of the Plym river, known as the Cattewater, have been used as an anchorage for ships for centuries. In 1973 a dredger being used to

Thanks to:

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Ashley Gould
Dr. Mark Redknapp
Elizabeth Swann**

**Boston Shipping Ltd.
GSE Rentals Ltd.
Innomar Technologie GmbH.
Ixsea SAS
Royal Navy
Sonardyne International Ltd.
University of Bristol
University of Plymouth
University of St Andrews**



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