



**Garmin GSD24 testing in False Bay, South Africa
Phase 1: In-Shore Testing
08 December 2011
Report by Marine Category Manager: Adrian van Lieshout**

Our Test Boat: FantaSea

- 30ft Citation 900 Mono Hull by Mallards Marine
- Twin Suzuki Outboards

Garmin Electronics Fitted:

- GPSMAP 7012 Multi Function Network Display
- GMR 24HD Radar
- GHP 10 Autopilot with a 2.1l Pump Kit
- VHF300i AIS
- GSD22 *Upgraded to the GSD 24*
- Twin Pair Dual Frequency AIRMAR SS264W Transducers



Introduction to testing :

These test was preformed in False Bay, Cape Town onboard a 30ft Citation 900 Mono built by Mallards Marine. Due to hull shape, the transducers location are around 20cm apart fitted either side of the keel ensuring a stable reading especially in poor Sea conditions.

We were out in typical False Bay waters experiencing 2-3m swell with gusting winds around 15-20kts. Not ideal Sea conditions but very relevant to what most experience on a regular basis.

I started the testing by updating the network first and ensuring that system was working properly with the GSD22 fitted including inspecting the transducers. I backed up and cleared all the current user data and setup the system to my units of measurements as well as setting all the sonar settings to automated Garmin settings.

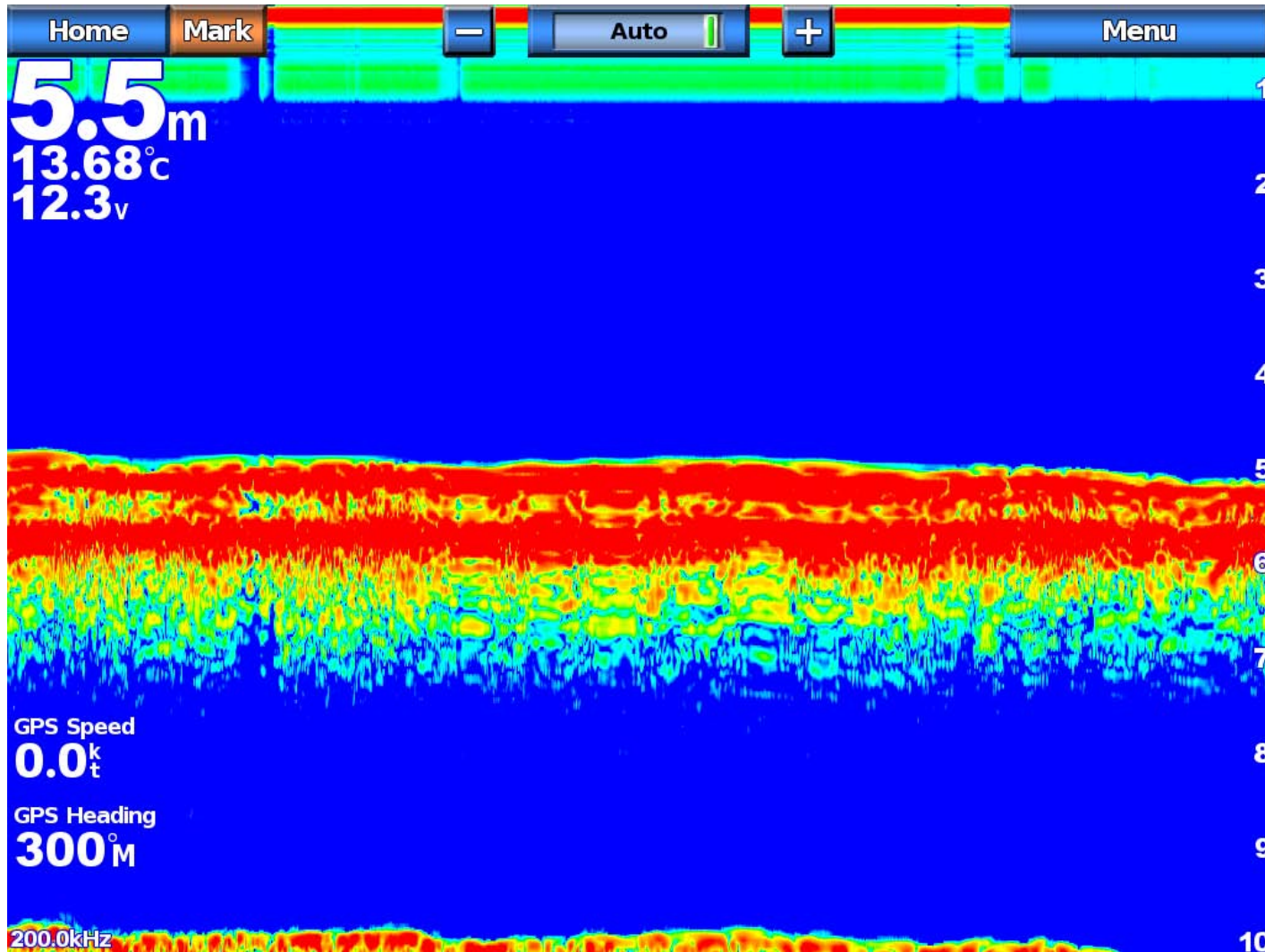
Gain – Auto (both 200kHz and 50kHz)

Range – Auto

Scroll Speed – Ultra Fast

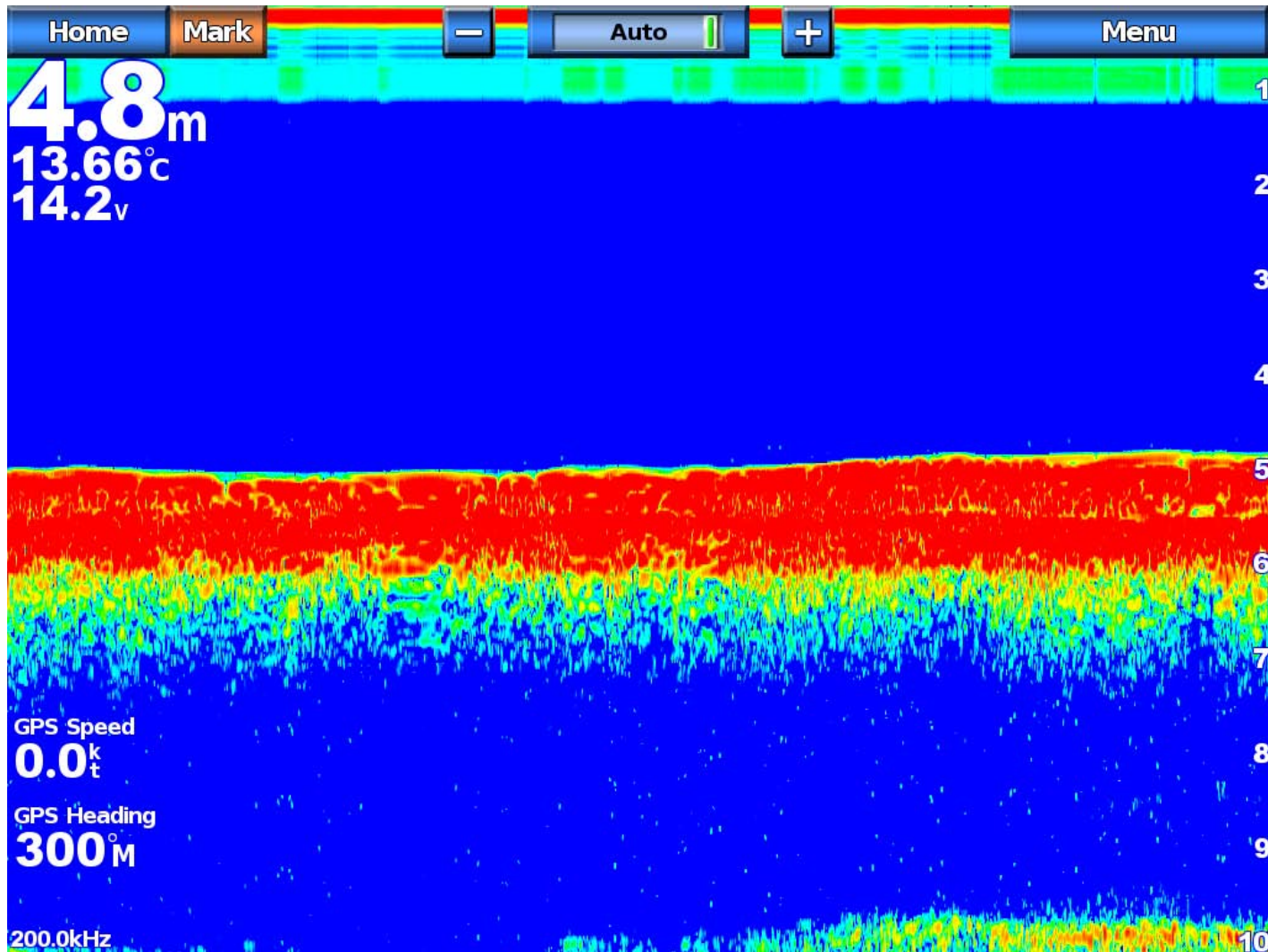
Using BlueChart g2[®] Fishing Charts to find reef, wrecks and structure, we navigated around the bay recording screen shots of performances of the GSD 22 first. I then fitted the GSD24 and wired the transducers 8 pin adaptor. Returning to the same places visited earlier, I gather comparative soundings of the GSD 24.

GSD22 Screen Shots



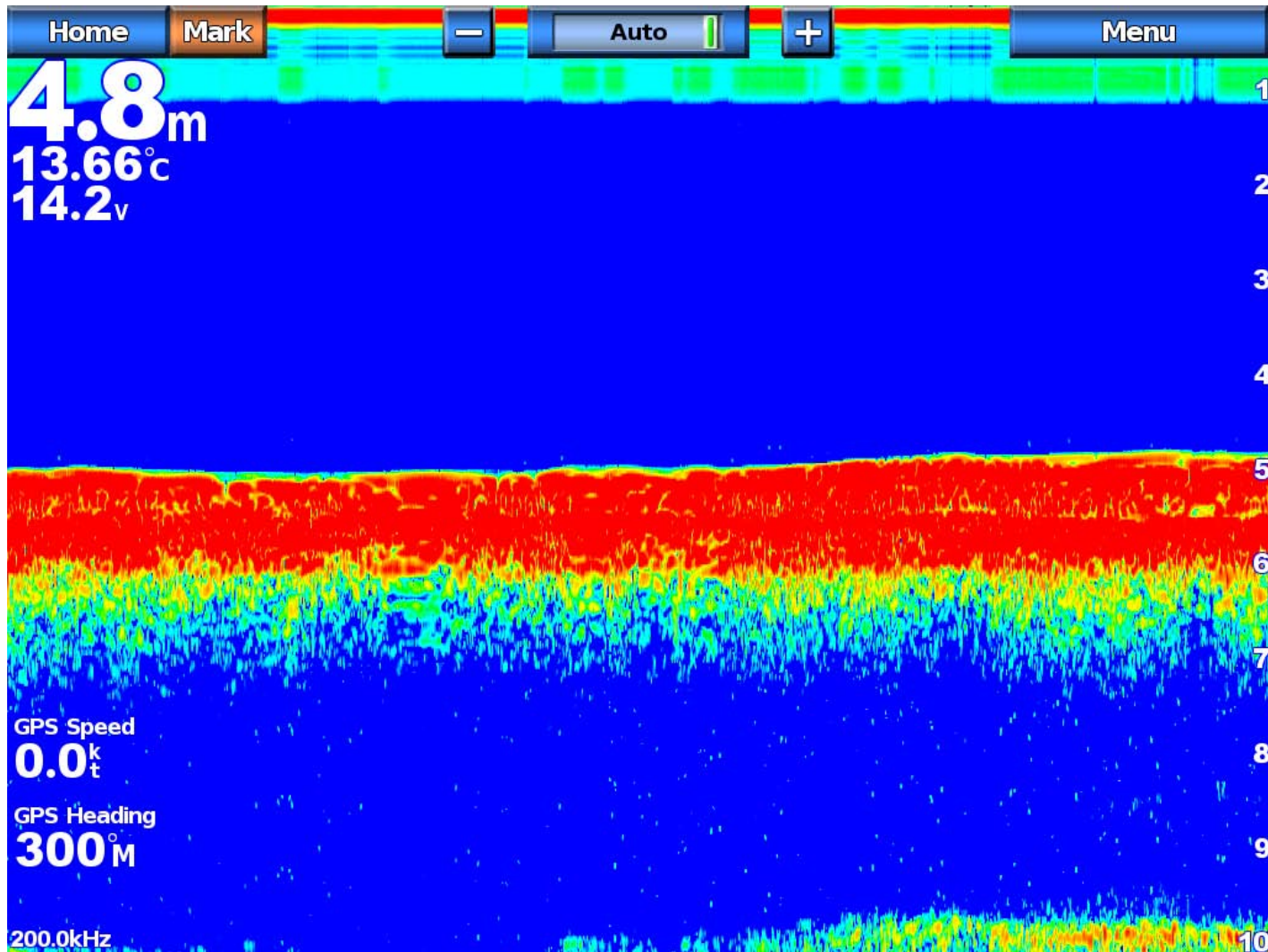
At the marina tied up in the mooring, note the system voltage (low at 12.3V) as well as the bottom return. Visible soft second layer on top of the Sea bed.

GSD22 Screen Shots– Cont.



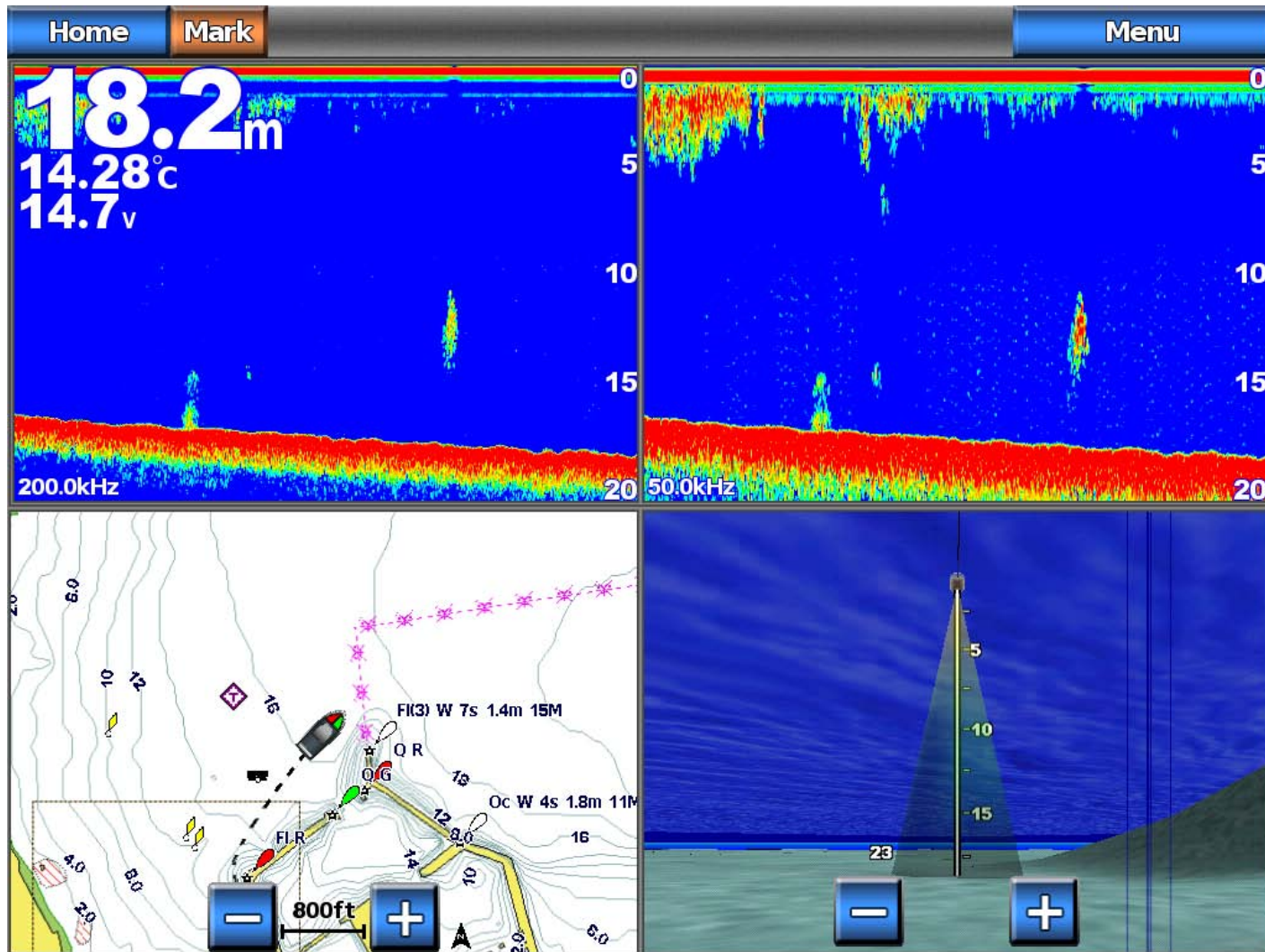
Same position but with the engines started. System voltage up to 14.2v and note the change in depth, 5.5m to 4.8m.

GSD22 Screen Shots– Cont.



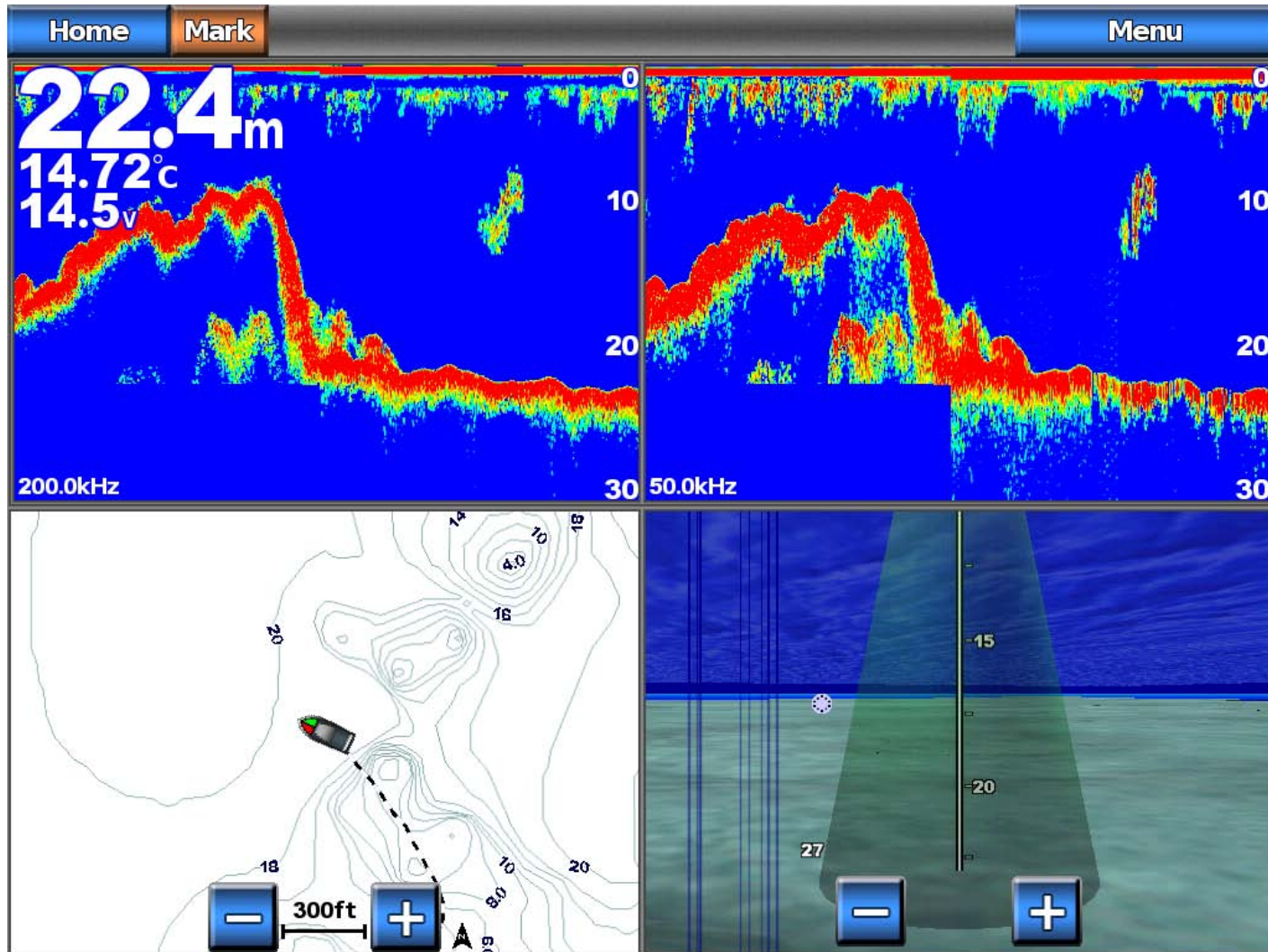
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GSD22 Screen Shots– Cont.



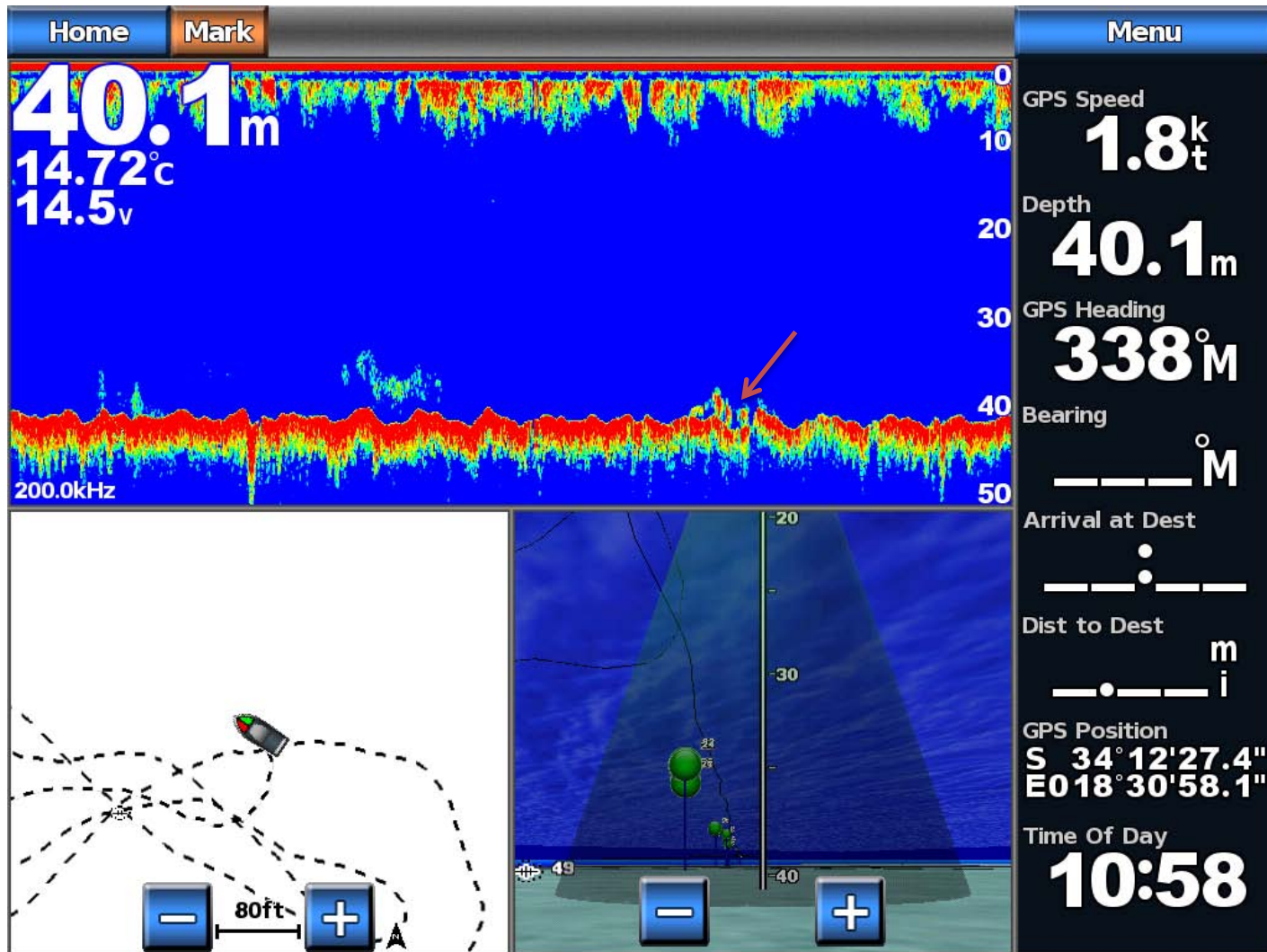
Split Frequency showing a bit of bait fish

GSD22 Screen Shots– Cont.



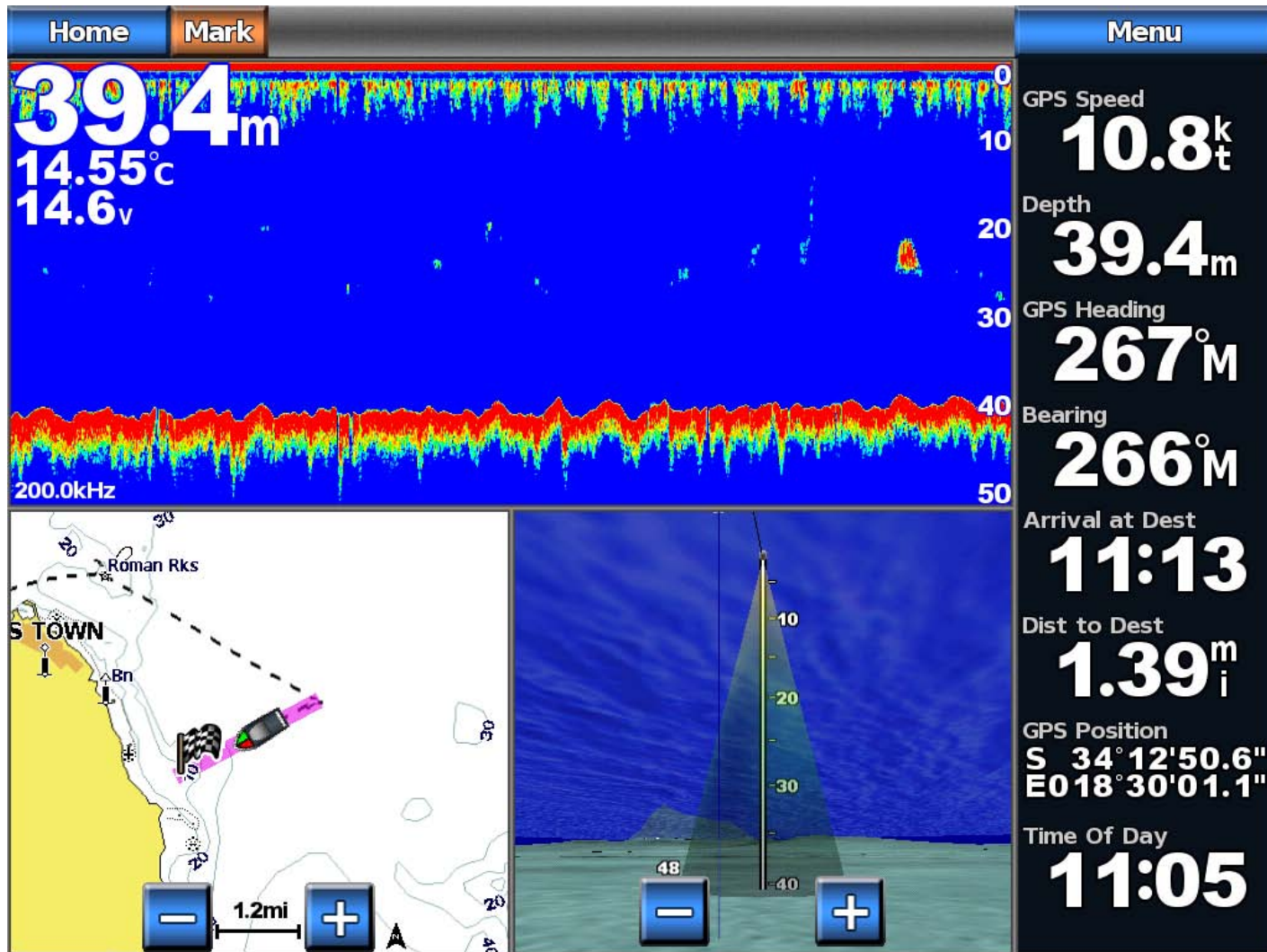
Reef structure with some bait fish. Fish Eye 3D shows me how effective the 25° beam angle is on these transducers.

GSD22 Screen Shots– Cont.



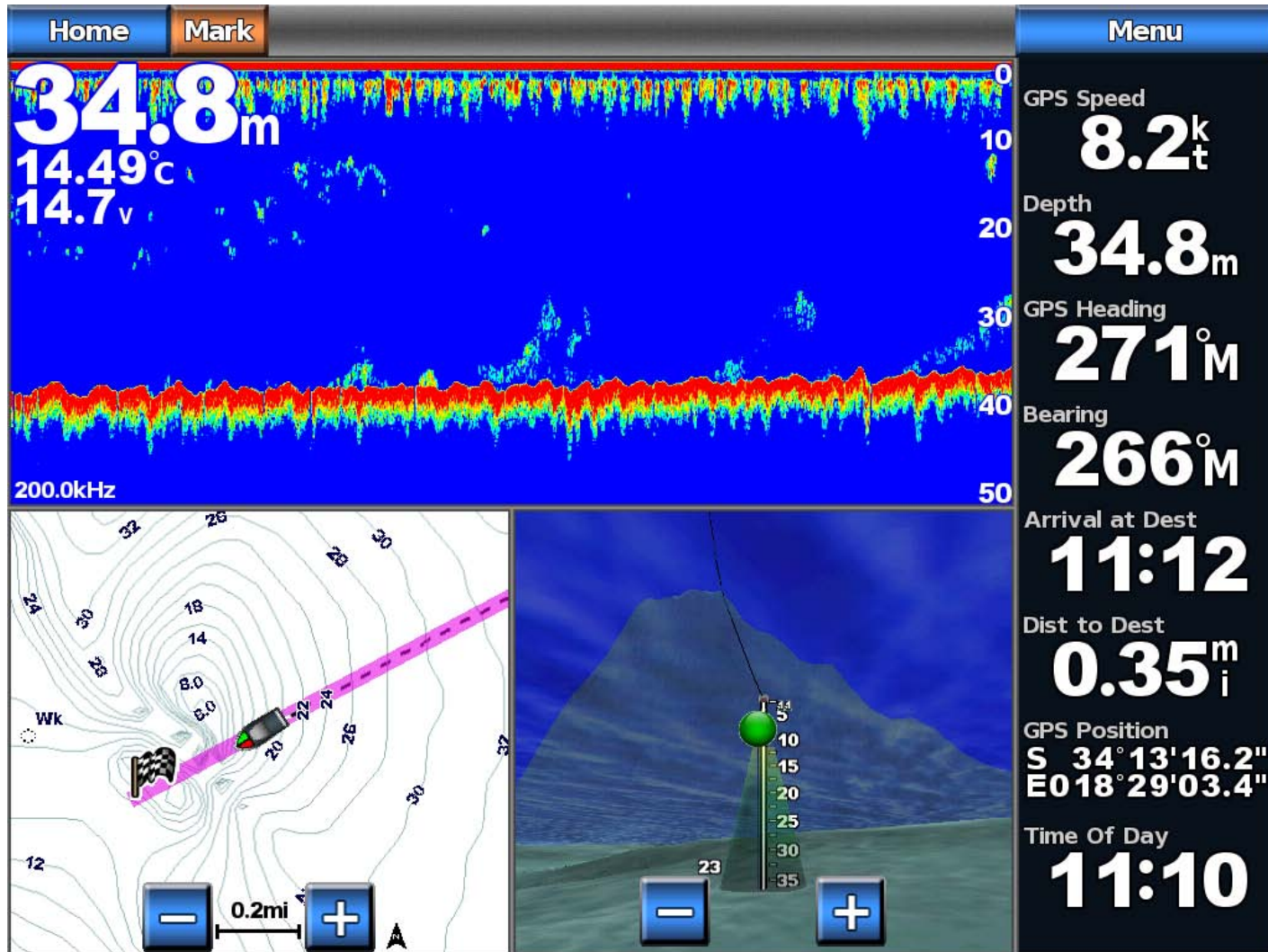
Looking for wrecks, big swell and strong winds complicate this a bit. The wreck can be seen in this screen shot.

GSD22 Screen Shots– Cont.



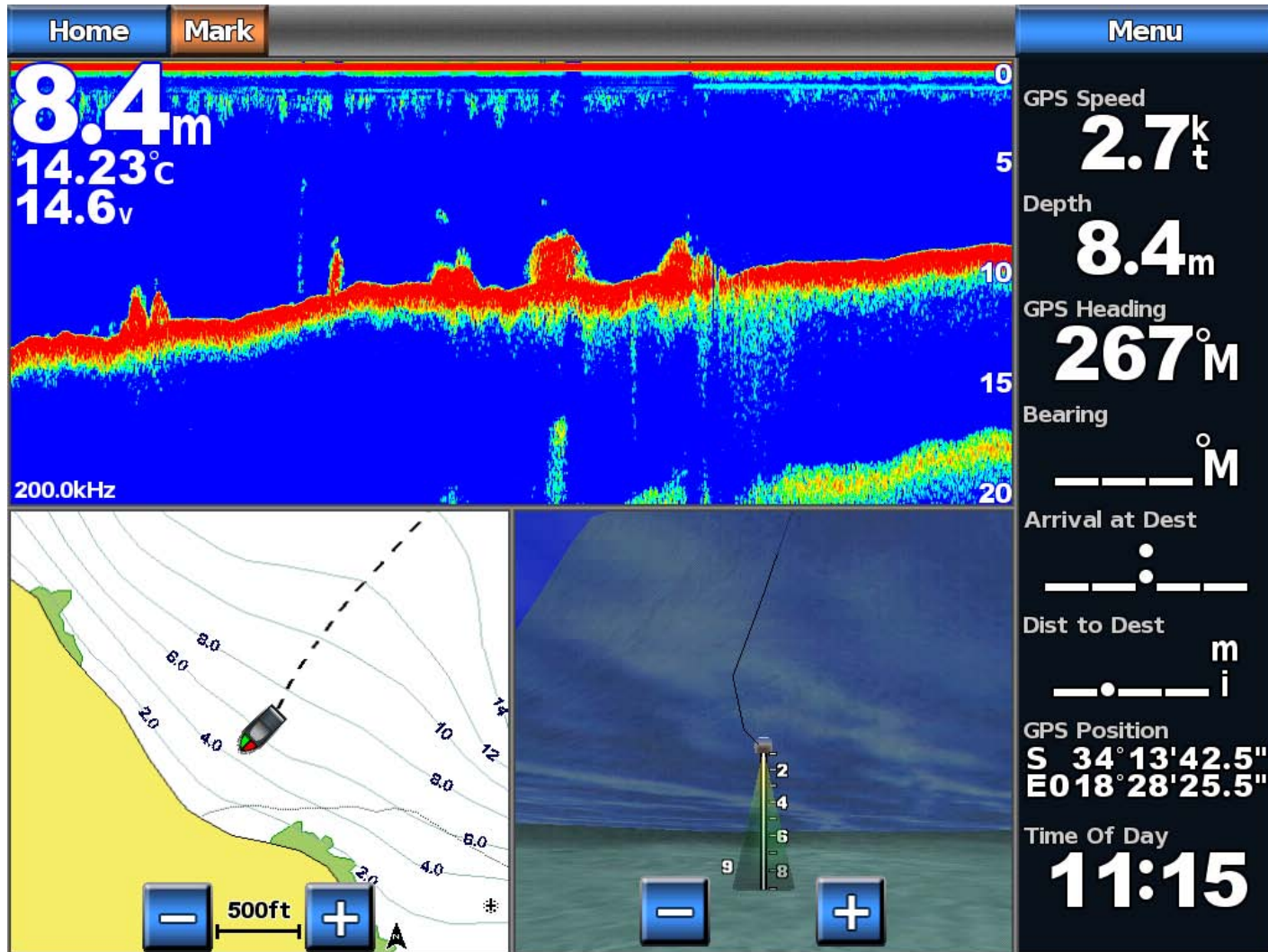
Running to more structure.

GSD22 Screen Shots– Cont.



Approaching the structure, note the returns. Good returns, what seems to be semi visible fish arches but showings of fish none the less.

GSD22 Screen Shots– Cont.

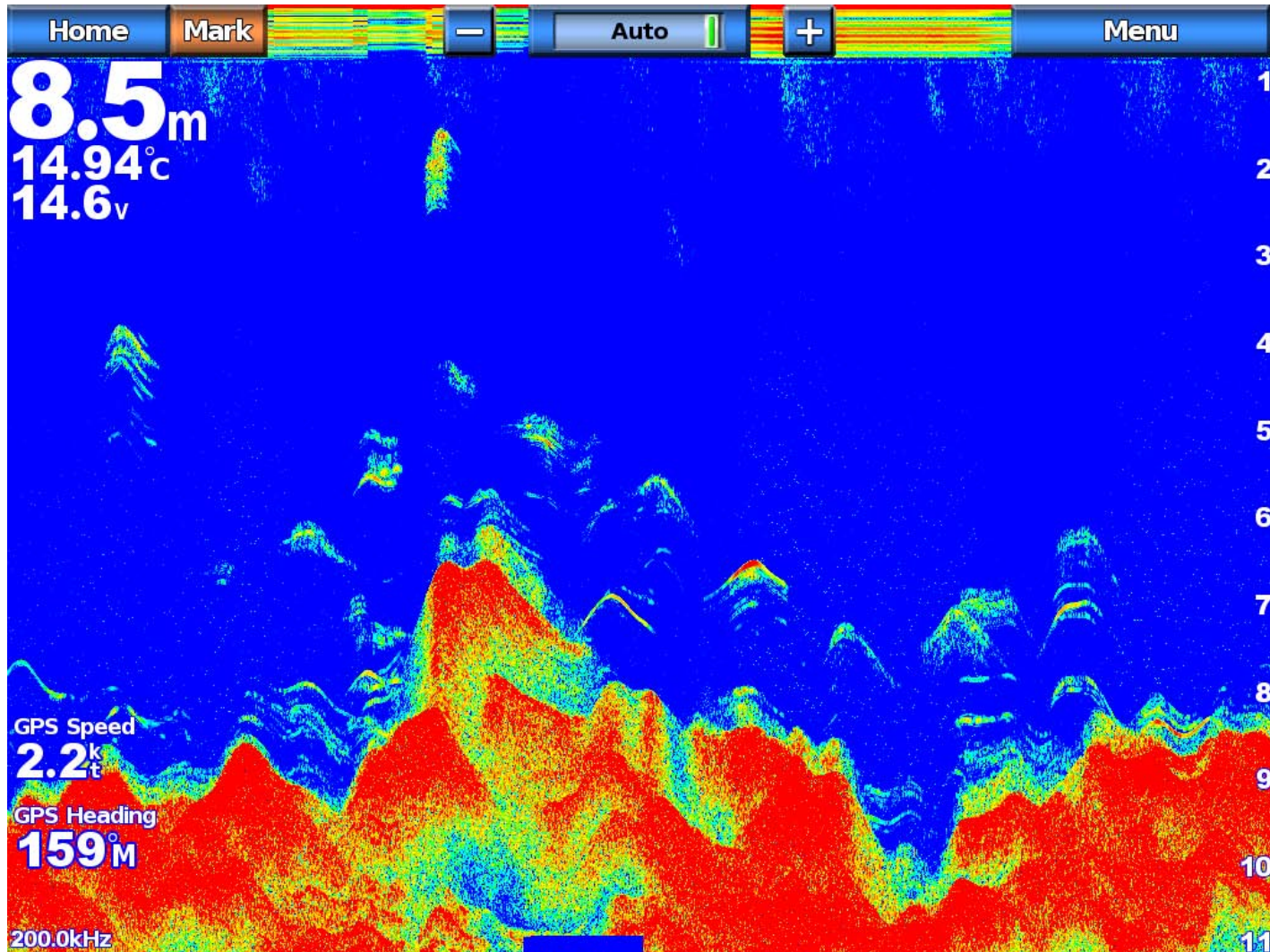


Reef and structure with showings of fish.

Wait for it...

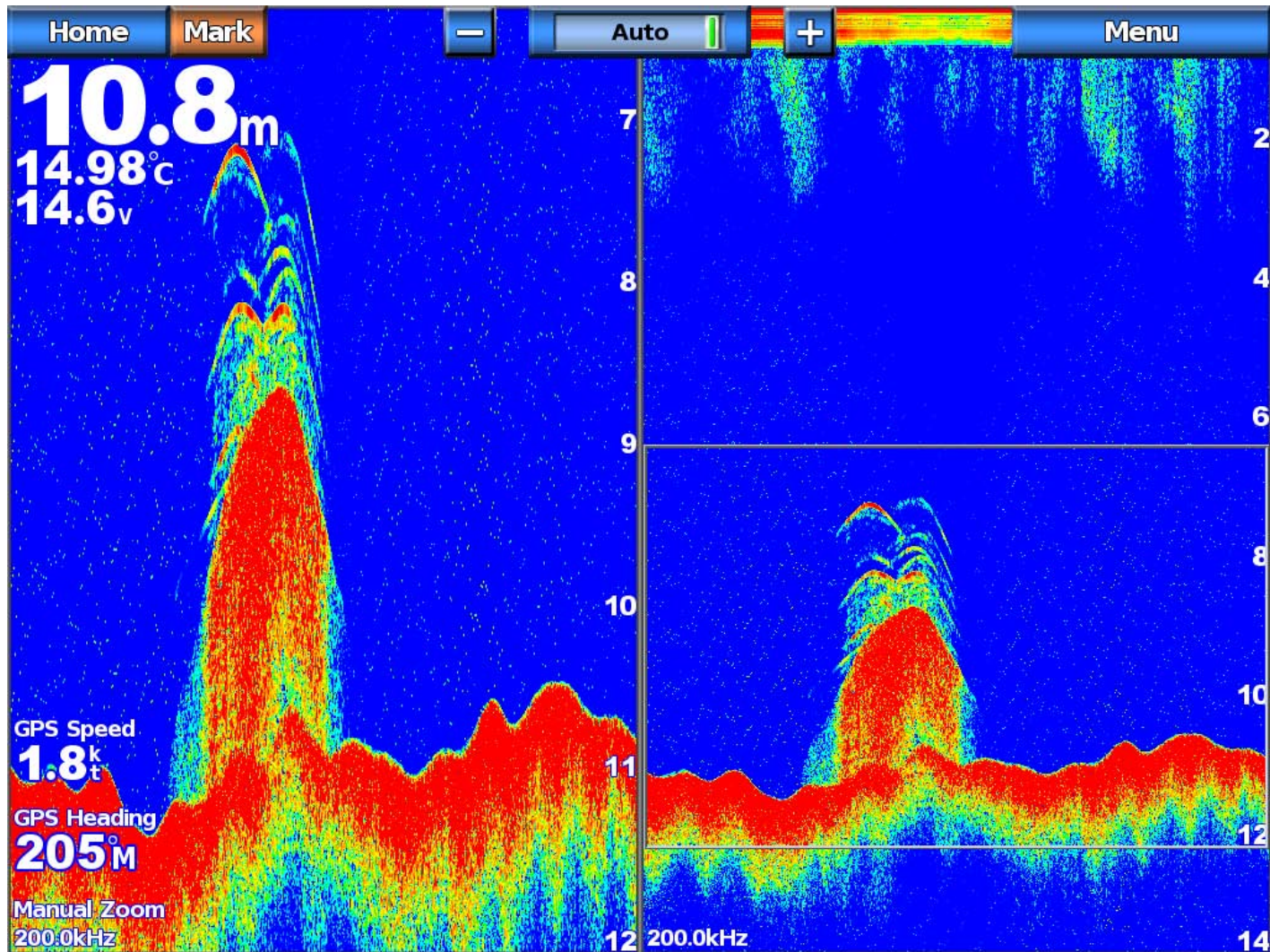
GSD24 results up next

GSD24 Screen Shots



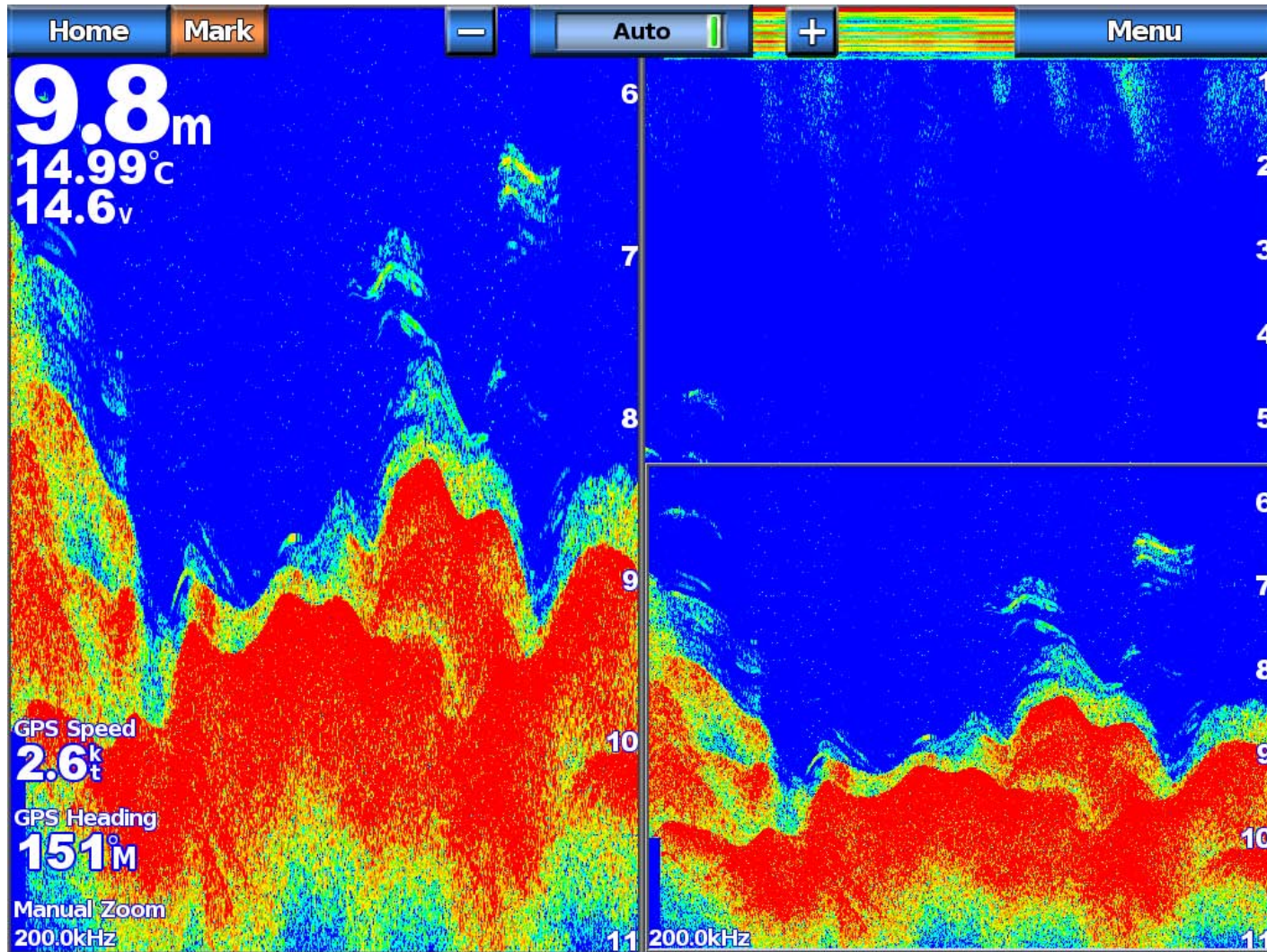
Amazing!!!! Completely different image! Whole new game, clearly!
Reef teaming with life that on the GSD22 looked dead. Incredible fish arches, solid returns, fantastic separation and resolution.

GSD24 Screen Shots – Cont.



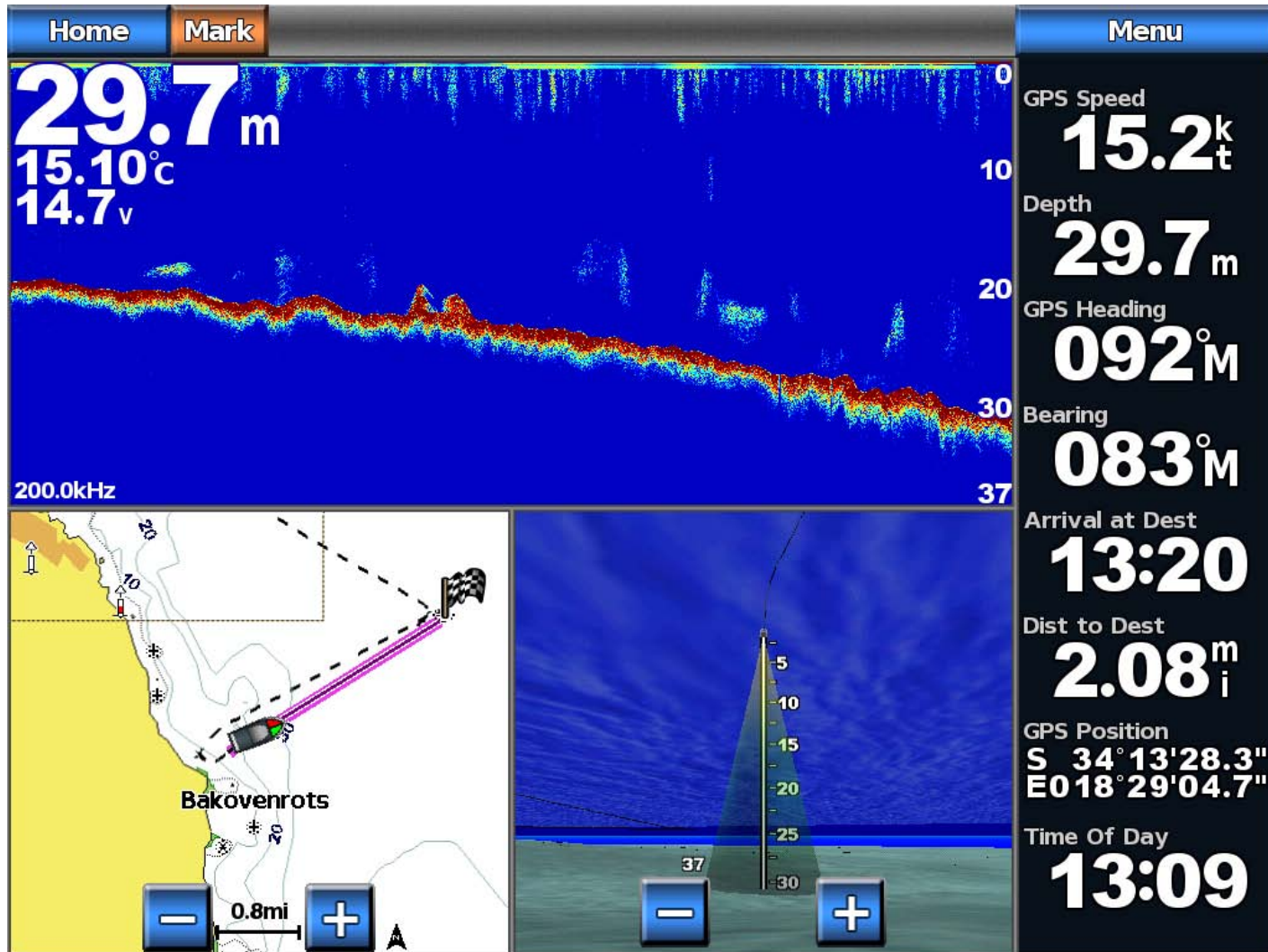
Split zoom, focusing on 6m from the bottom. Fish hanging off the structure.

GSD24 Screen Shots – Cont.



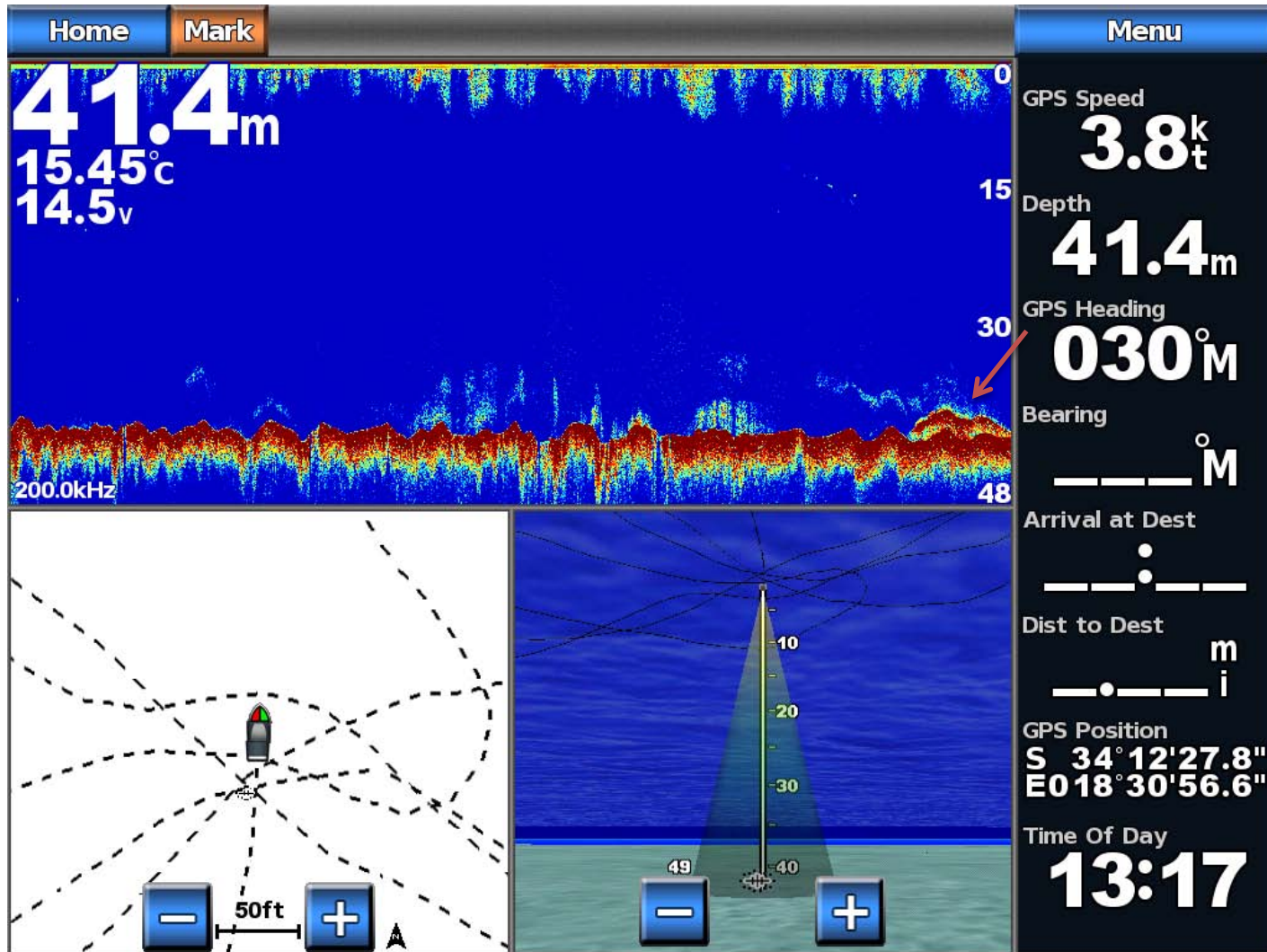
Split zoom, focusing on 6m from the bottom. Great separation and resolution!

GSD24 Screen Shots – Cont.



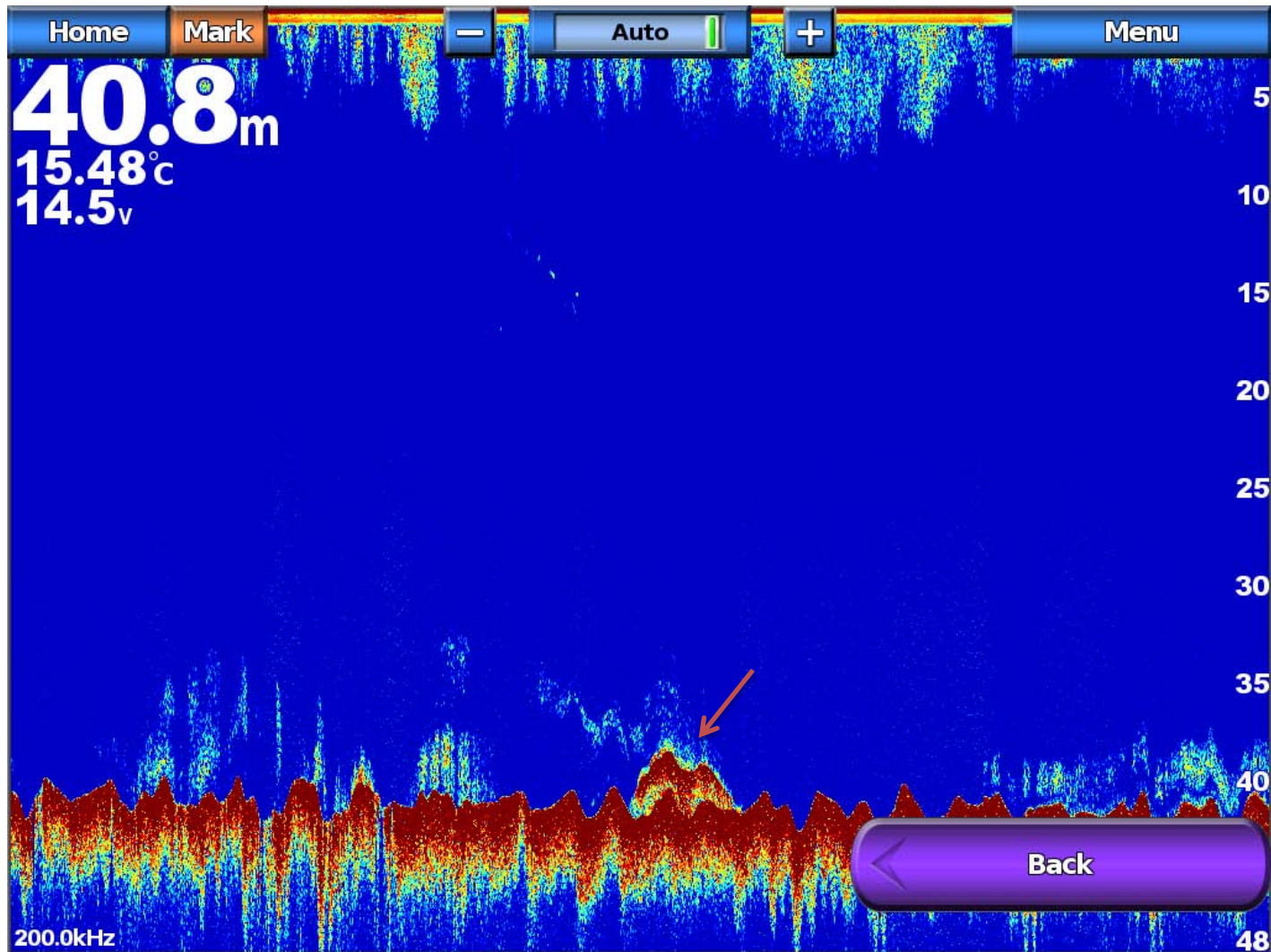
Running at 15.2 kts receiving great bottom returns!

GSD24 Screen Shots – Cont.



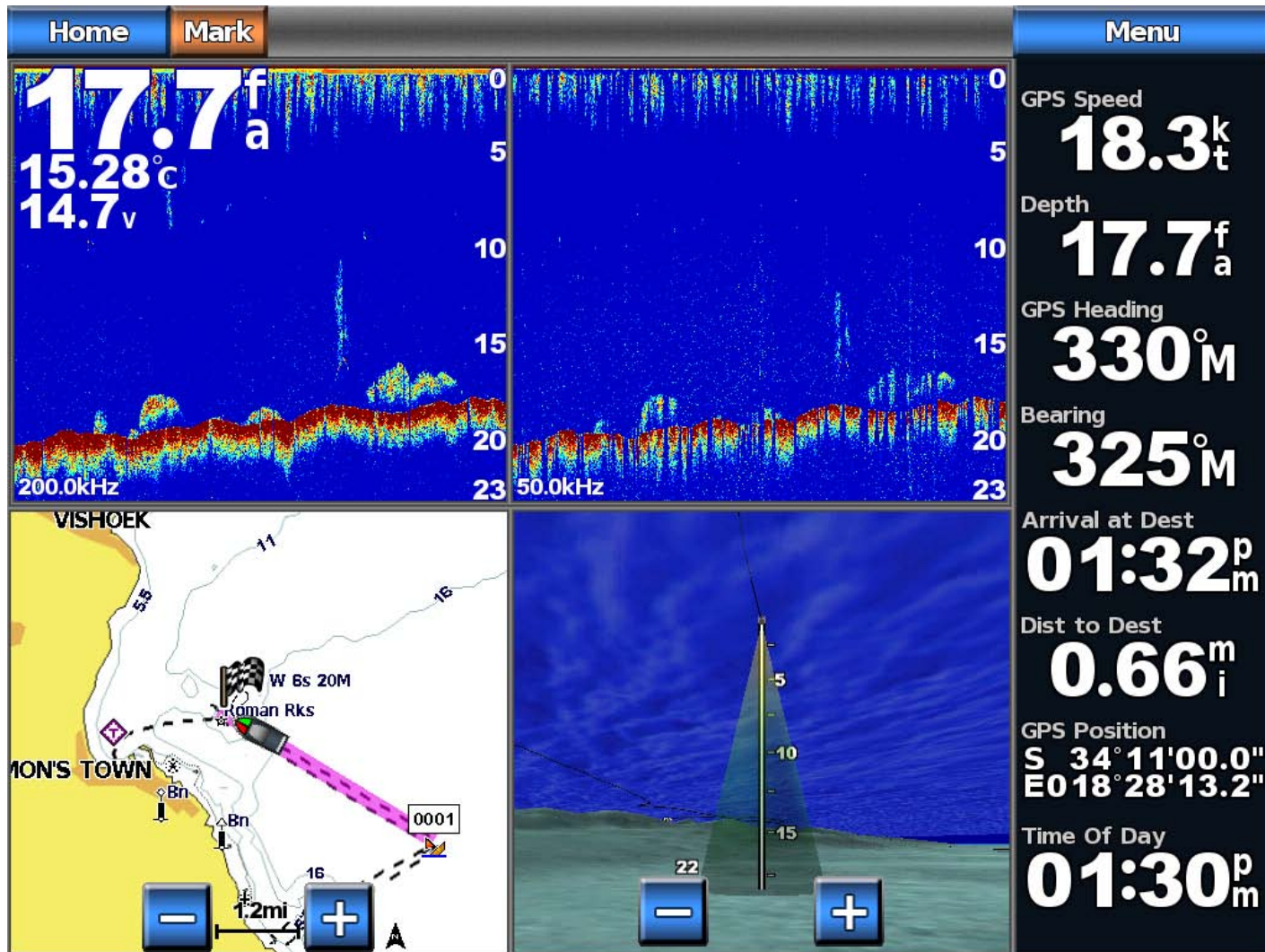
Back to the same wreck, clearly visible with the GSD24

GSD24 Screen Shots – Cont.



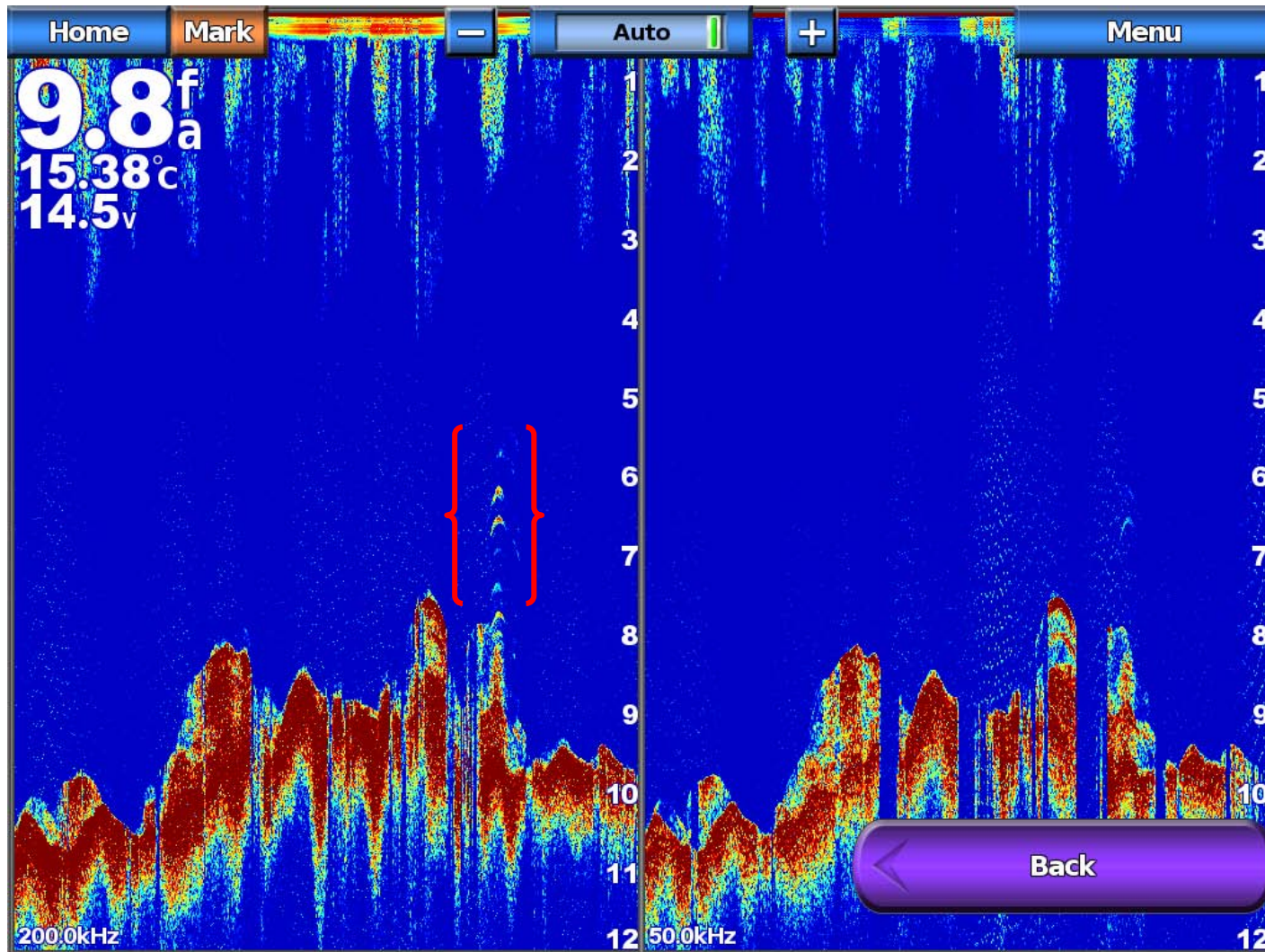
Full screen on the wreck.

GSD24 Screen Shots – Cont.



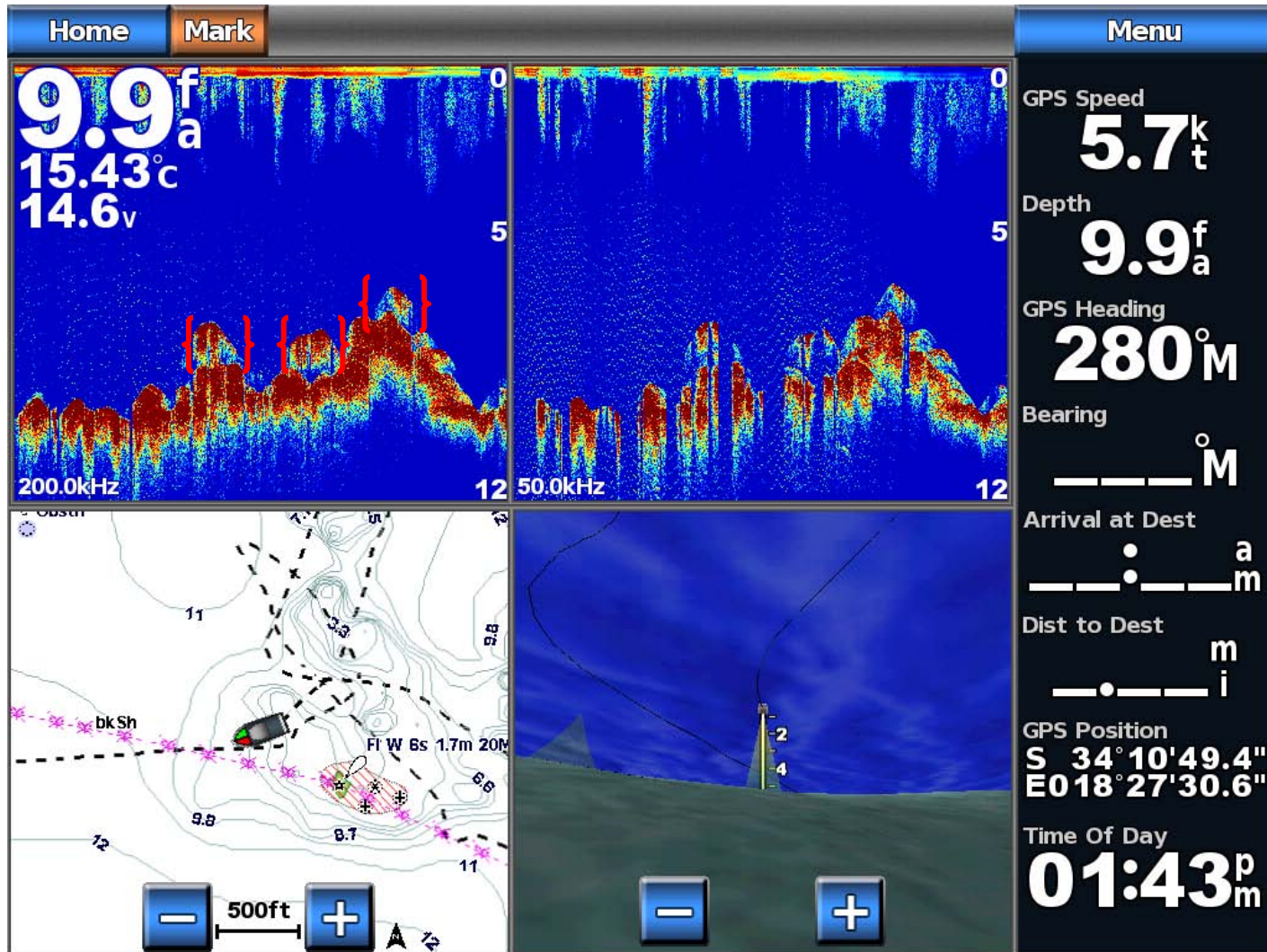
Running back to the first reef at 18.3kts, still getting a great bottom readings and returns.

GSD24 Screen Shots – Cont.



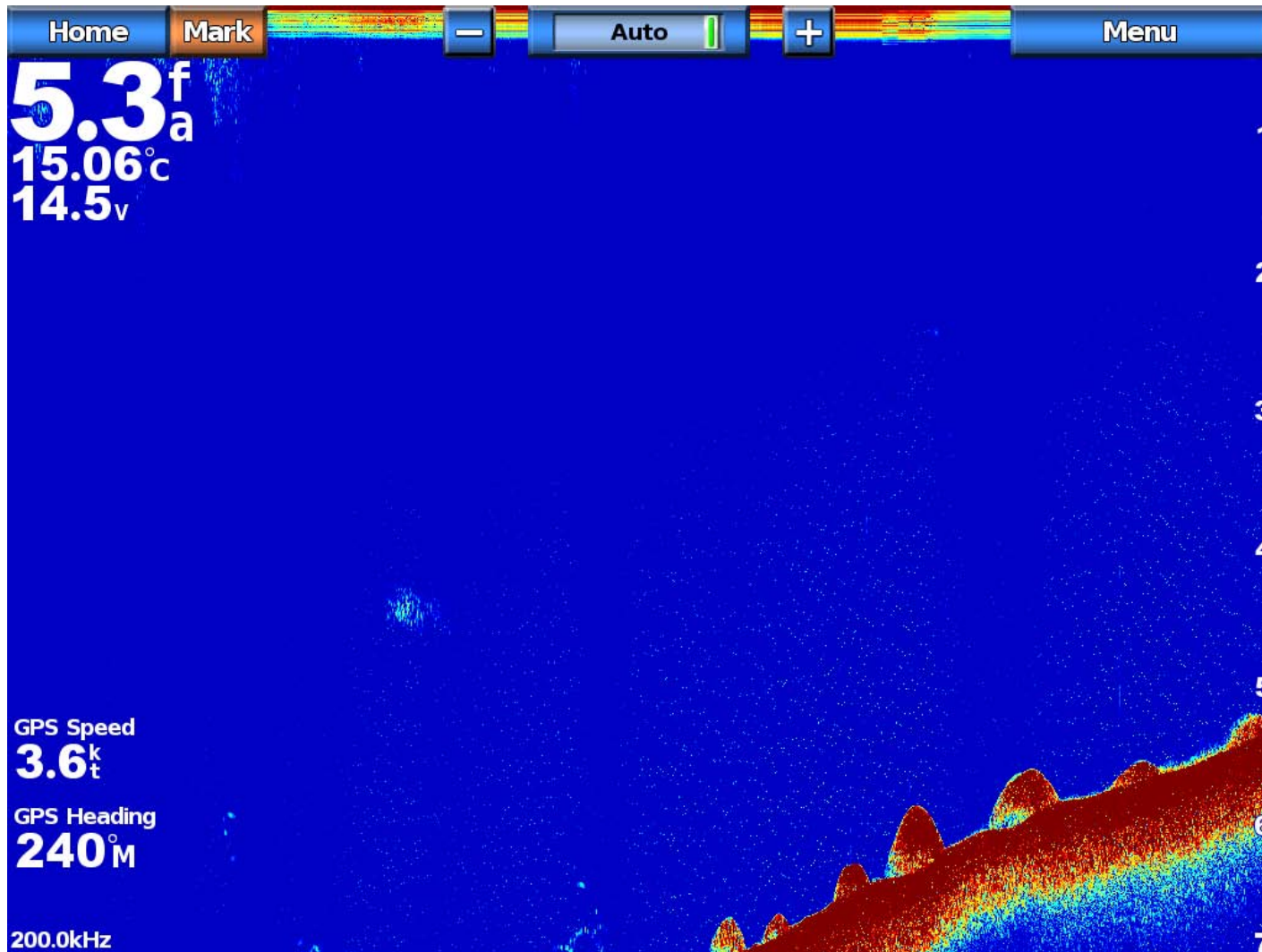
Back on the reef, small Hottentot Fish on it.

GSD24 Screen Shots – Cont.



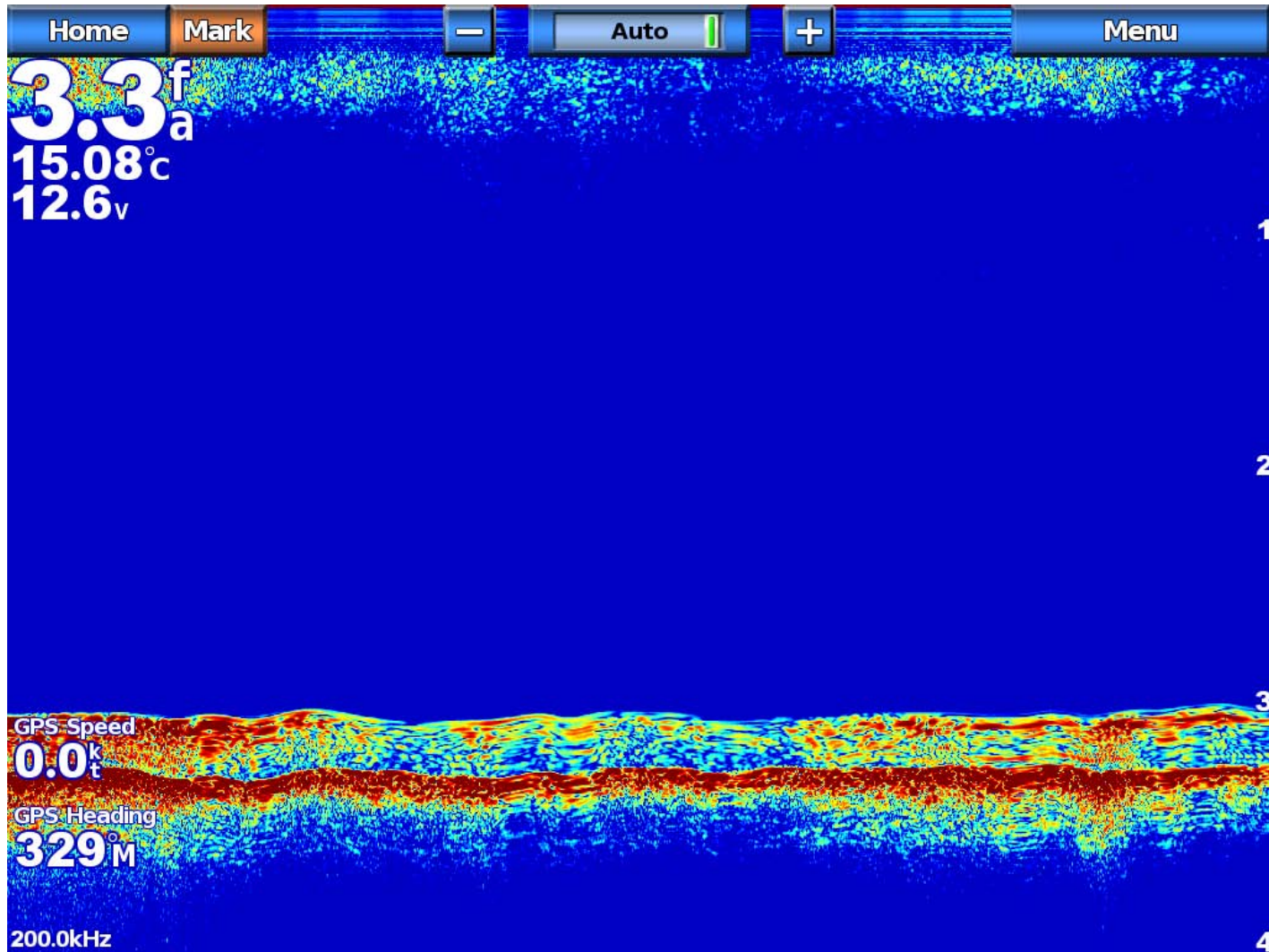
On the reef. Kelp clearly visible on the structure.

GSD24 Screen Shots – Cont.



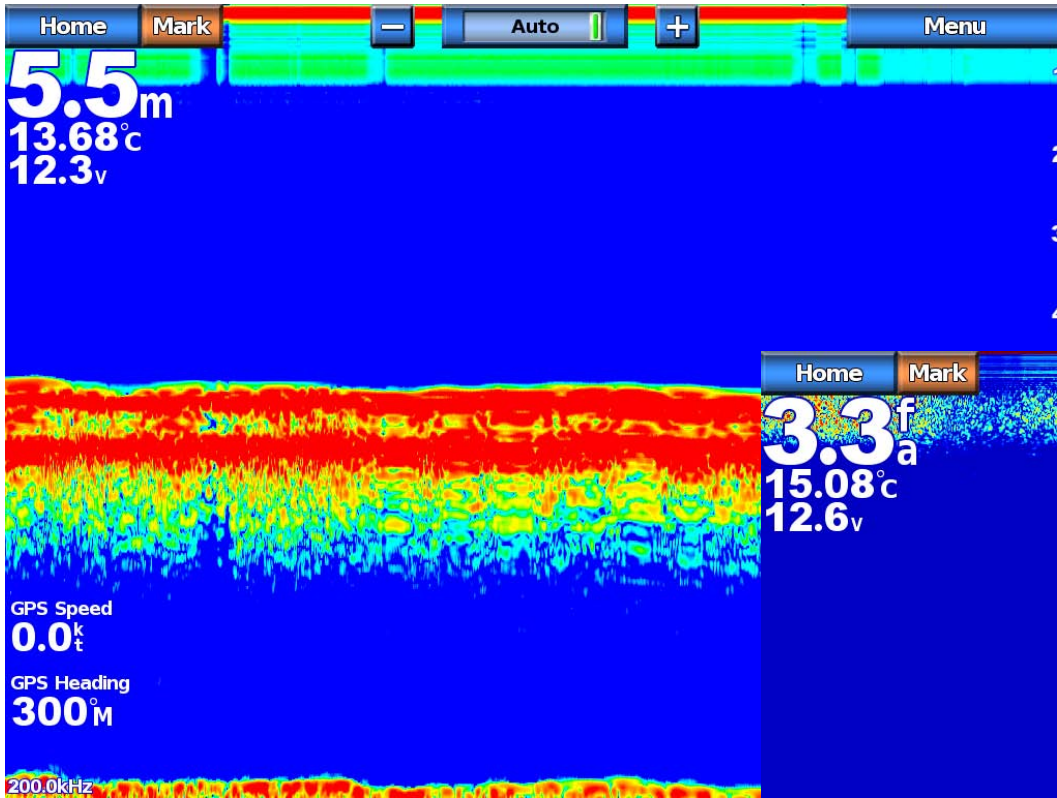
In the marina on the way back in.

GSD24 Screen Shots – Cont.

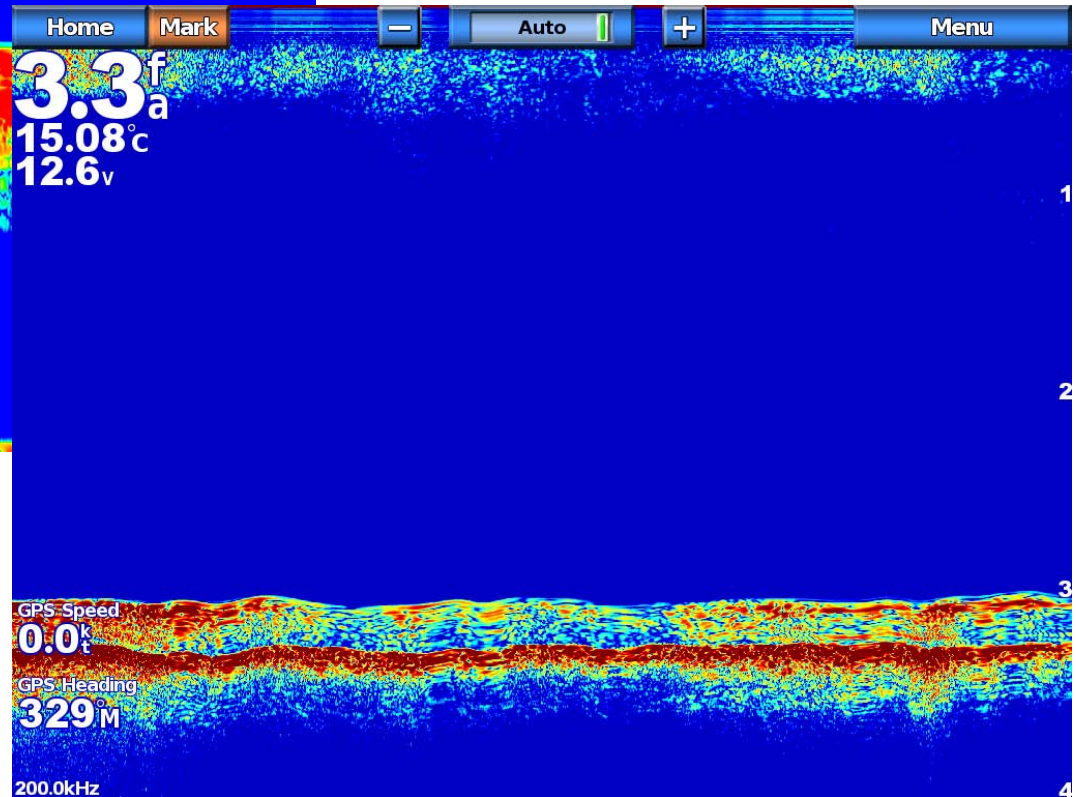


Back on the mooring.

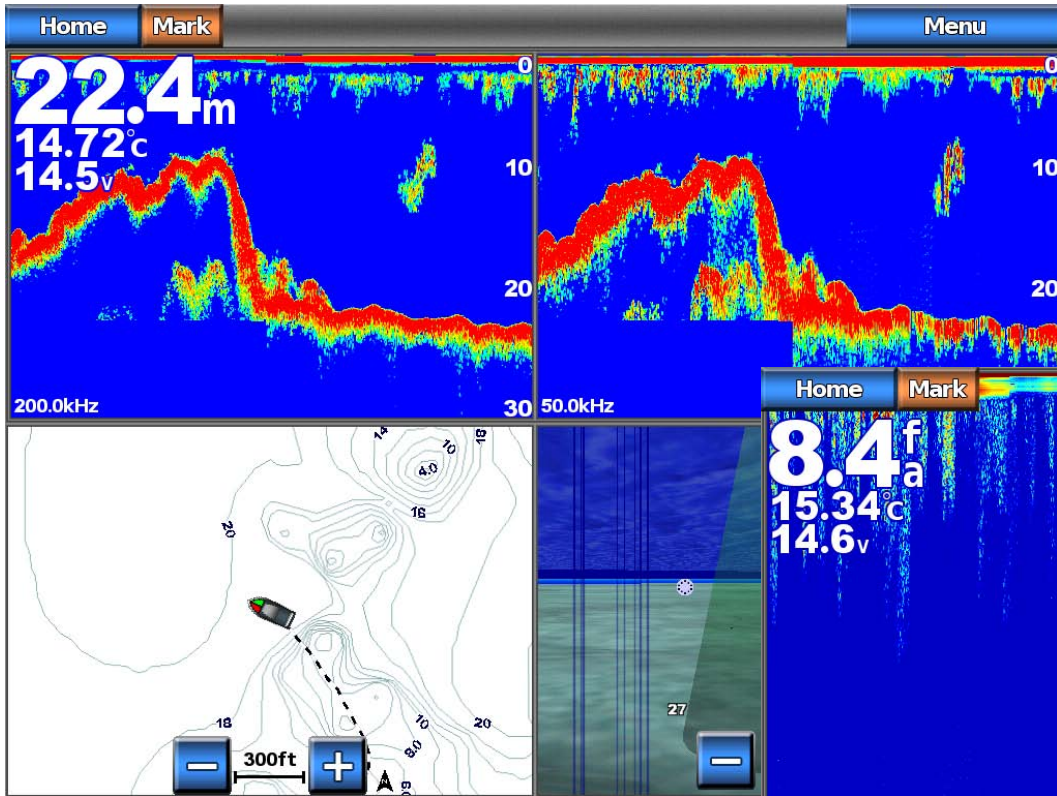
Comparisons – GSD 22 vs. GSD24



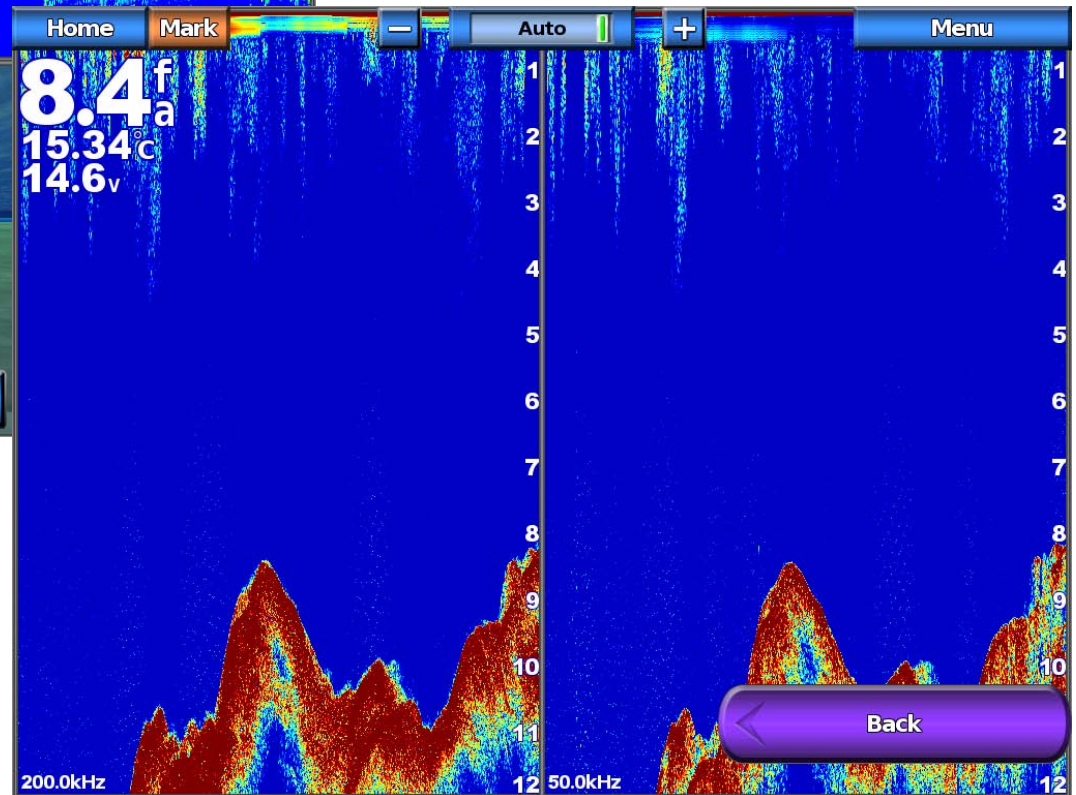
On the mooring



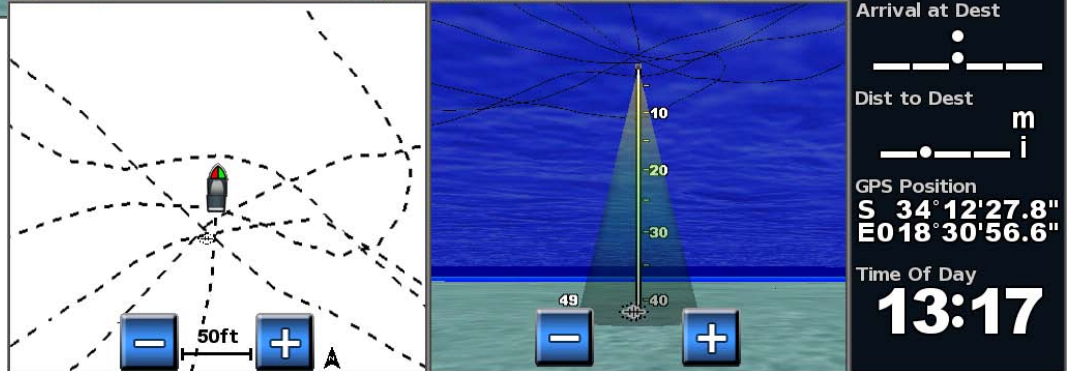
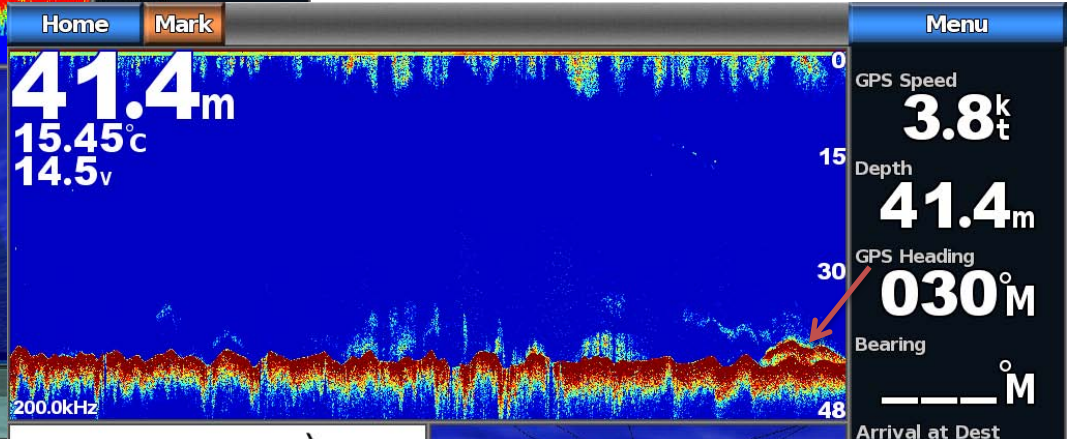
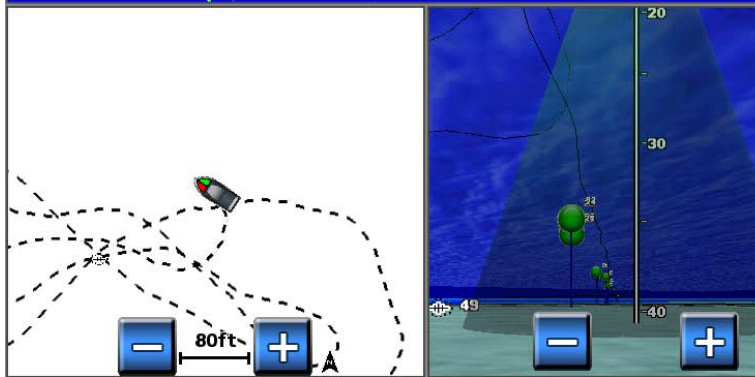
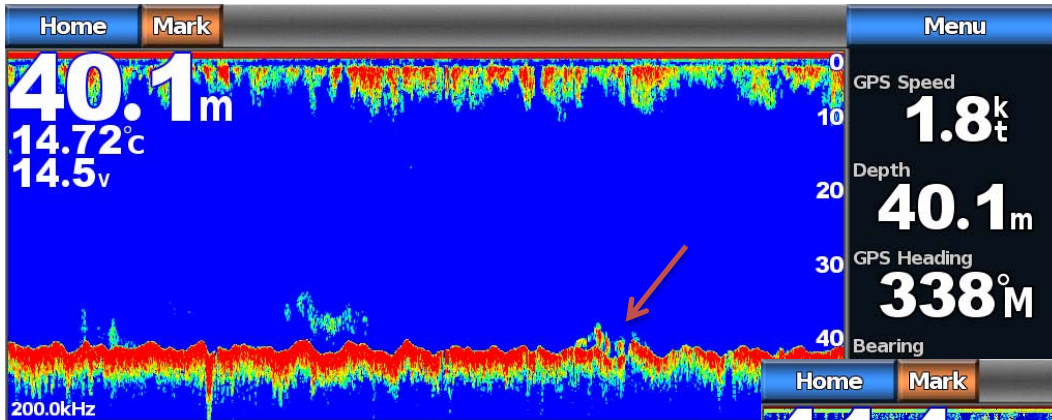
Comparisons – GSD 22 vs. GSD24



On the reef

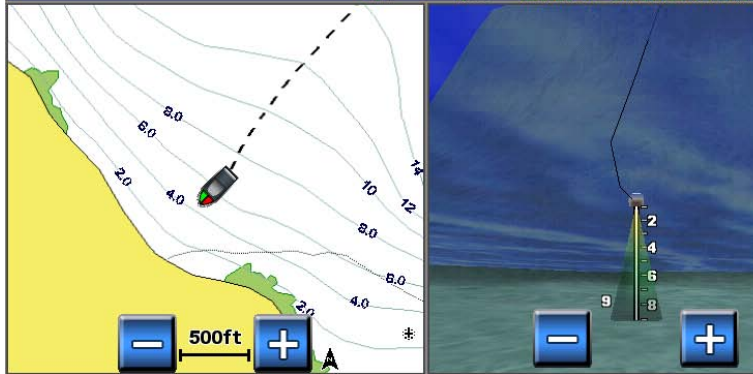
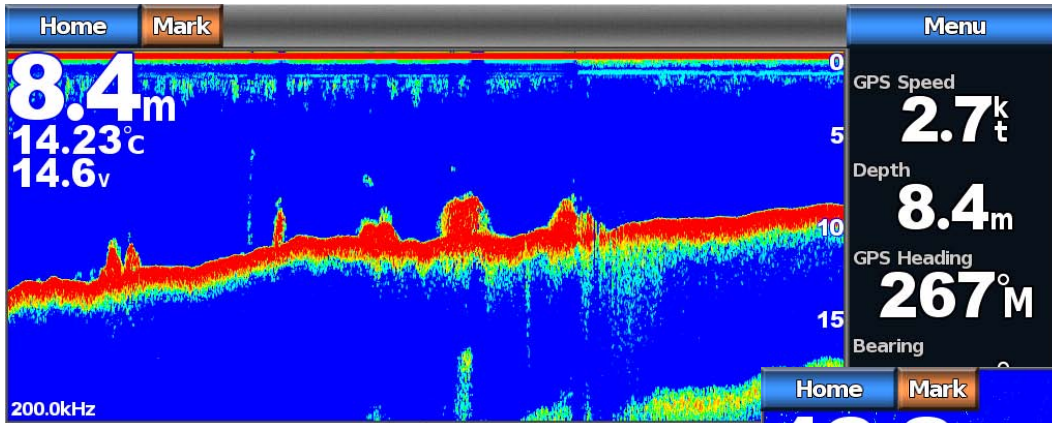


Comparisons – GSD 22 vs. GSD24

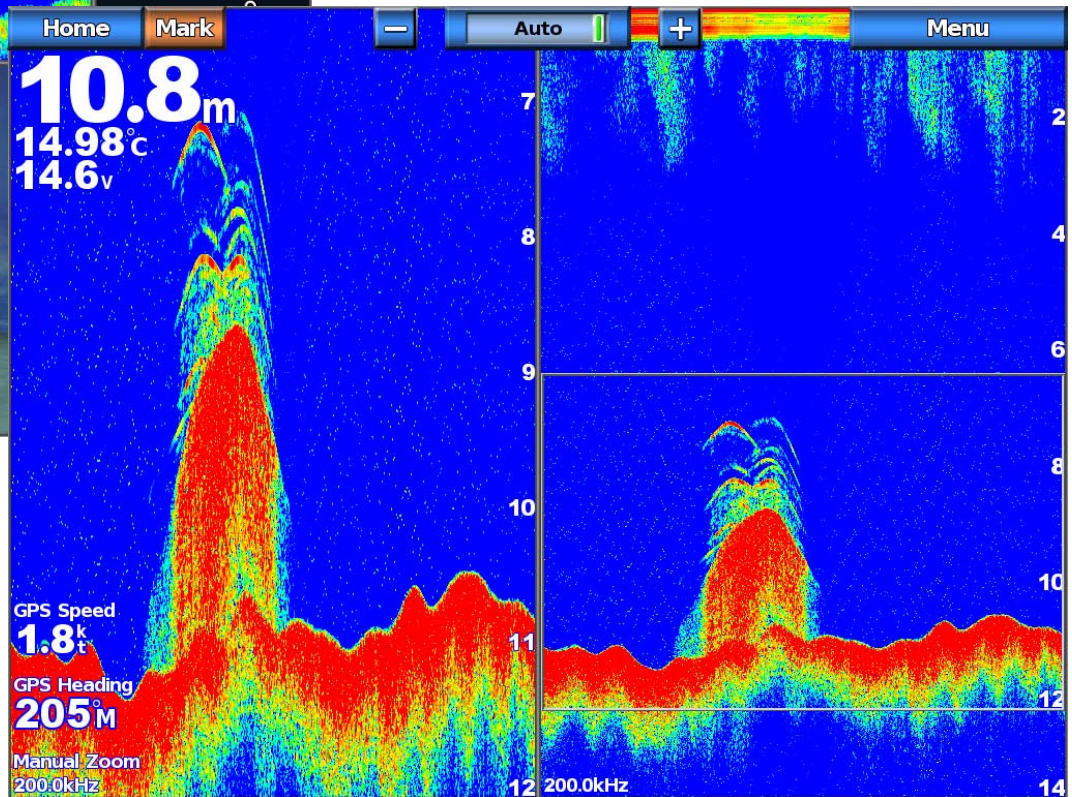


The wreck

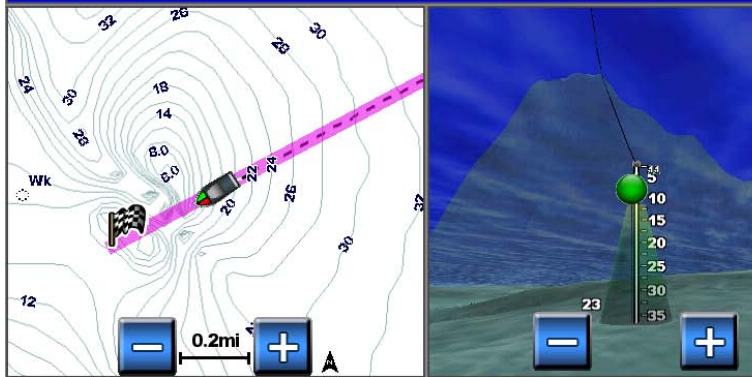
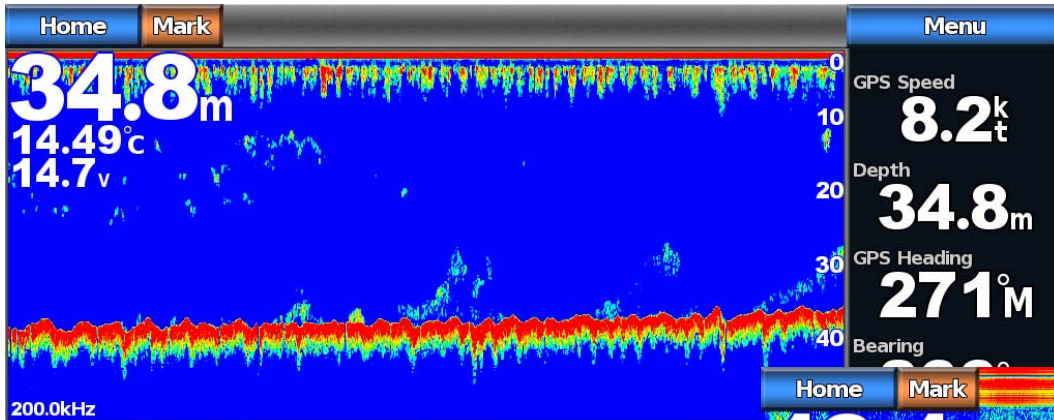
Comparisons – GSD 22 vs. GSD24



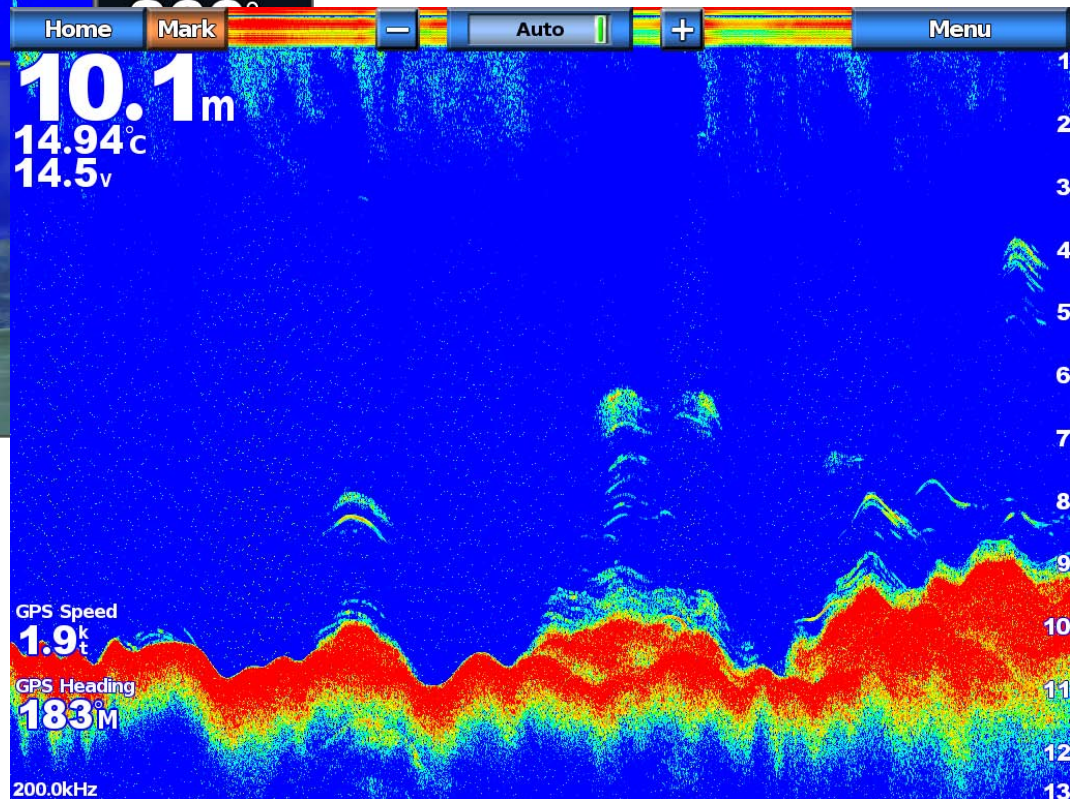
Life on structure



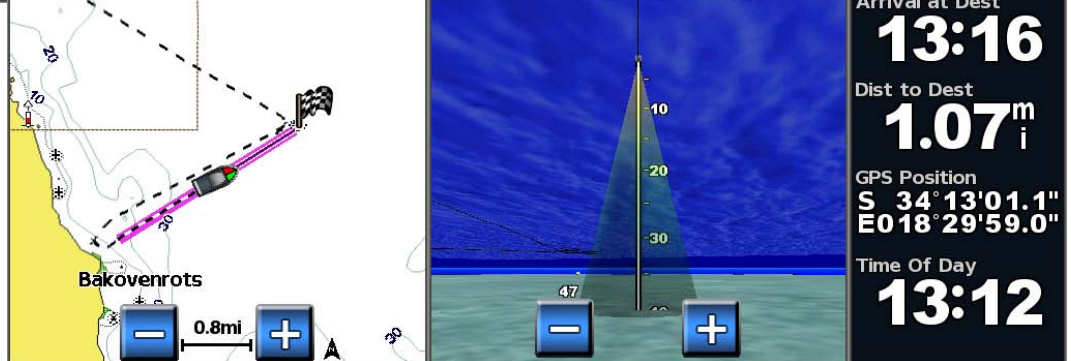
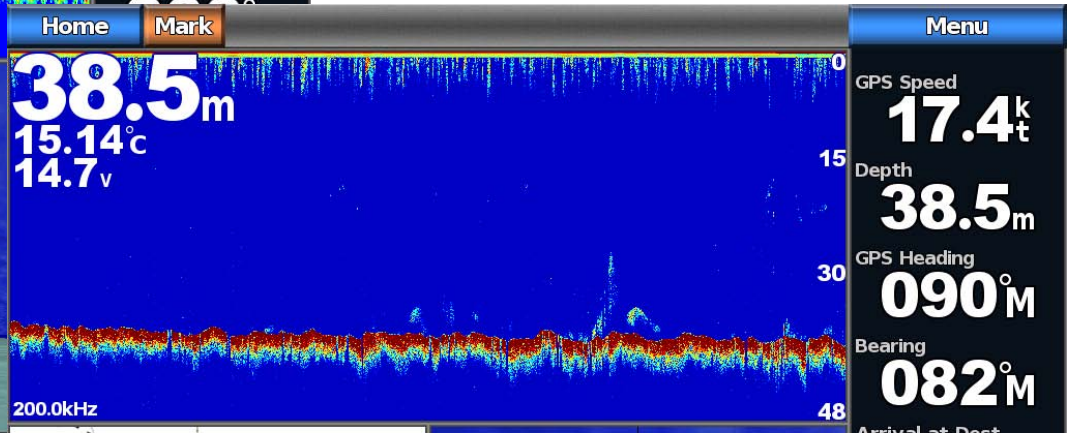
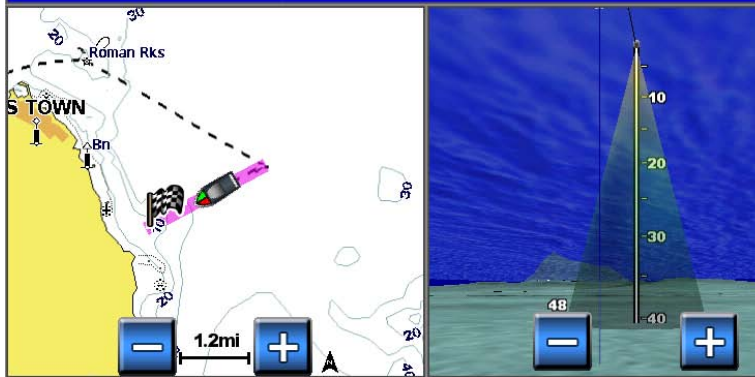
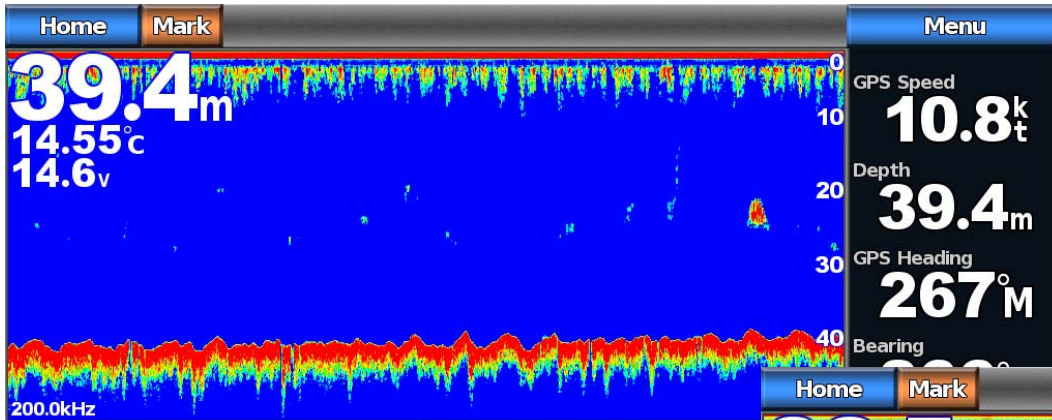
Comparisons – GSD 22 vs. GSD24



Fish life around the structure



Comparisons – GSD 22 vs. GSD24



Returns at cruising speed -

Conclusions :

I enjoyed the testing and was pleased with the returns from the GSD22, however as soon as I had the GSD24 running, I was completely blown away!

The GSD24 is a huge upgrade on the GSD22 and definitely worth the time! My key message here would be that for a minimal cost, current network owners can buy a whole new system by just replacing the sounder module!

The installation instructions were clear and the exchange fitment was painless.

The next phase of testing will take me into deep water hunting Tuna species and other Game Fish.

Waiting for a gap in the weather and looking forward to reverting back.

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