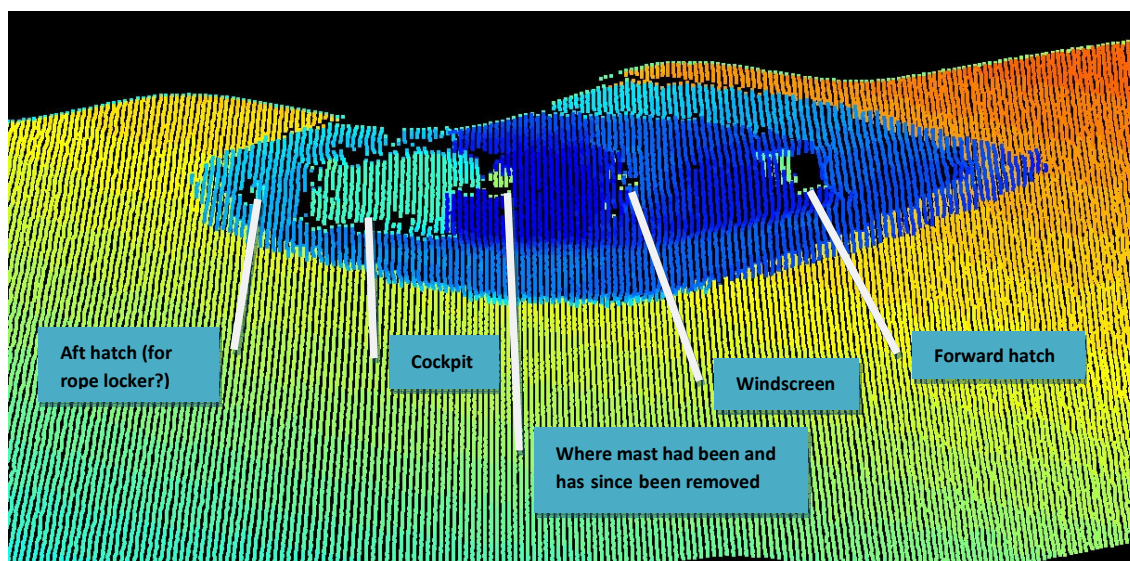


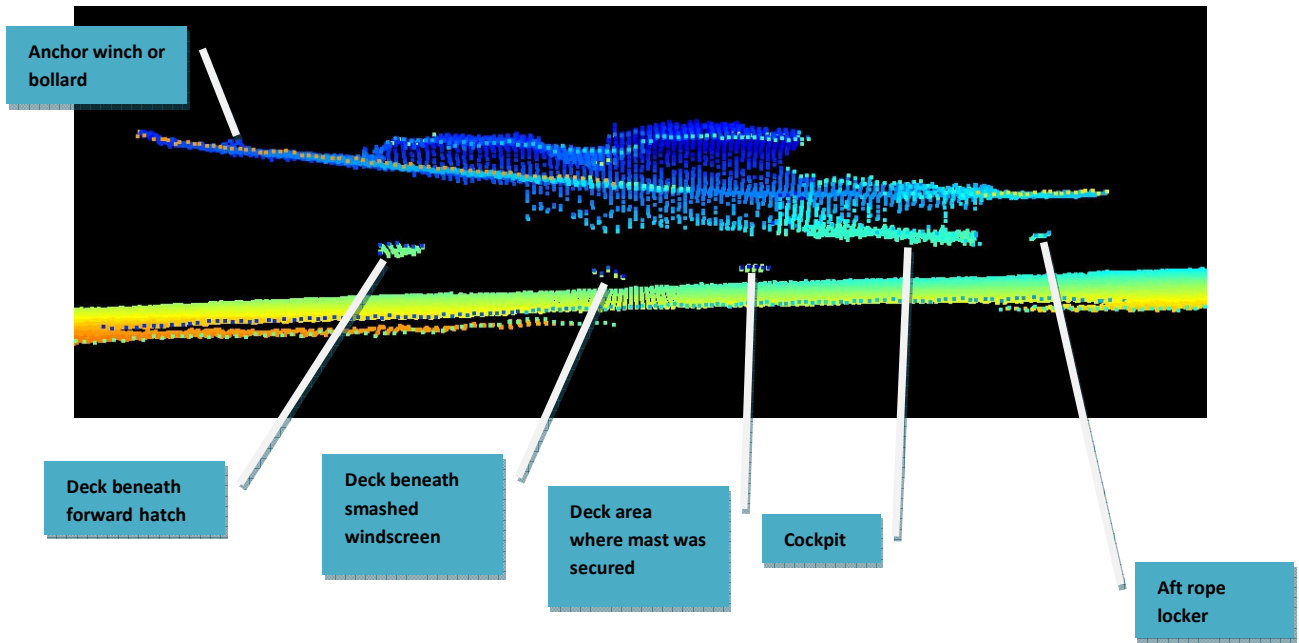
Sonic 2024 Survey of Small Sailing Yacht; Sydney, NSW Australia

A small (10 metre) sailing yacht was found sitting proud on the bottom in approximately 13 metres of water with the Sonic 2024 operated at a 130° opening angle. The opening angle was reduced to 30° and the yacht was surveyed again. The top of yacht is at approximately 11 metres.

The features, seen in the plan view, include the forward hatch (for the forward cabin) with an opening of approximately 500 x 500mm. Just aft of the forward hatch, is an area where the main cabin wind screen is located, which has been apparently smashed or removed. There is a 350mm round hole in the top deck where the mast had been and has since been removed. The cockpit area is easily seen and, just aft, is a small hatch (200 x 200mm) which may be a rope locker.



When the dataset is rotated, it is clearly seen that the Sonic 2024 has mapped through each opening and presented a very clear image of the deck, or area, below. In profile view, the small anchor winch or, possibly bollard, can be seen in the forecabin.



Below are more detailed images of each of the features, as mapped by the Sonic 2024.

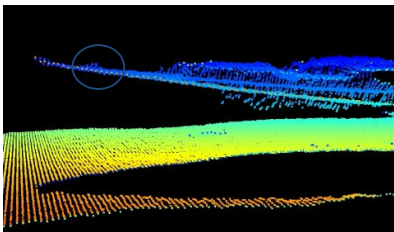


Figure 1 Winch on forecastle

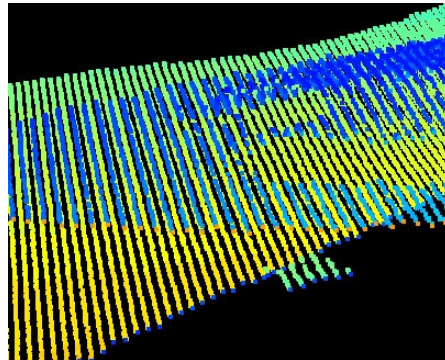
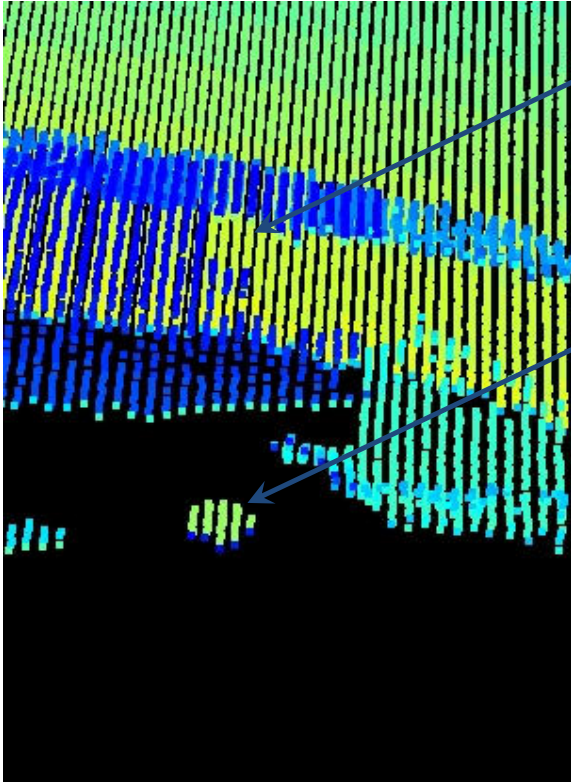


Figure 2: Deck beneath forward hatch



The opening, in the top deck where the mast had been, measures approximately 35 x 35cm. It is, more or less, perfectly round. The Sonic 2024 was able to 'see' through this hole to the deck below where the mast had been secured, the result is seen in this image with a round set of soundings beneath the opening.

Figure 3: Area where mast had been and has since been removed

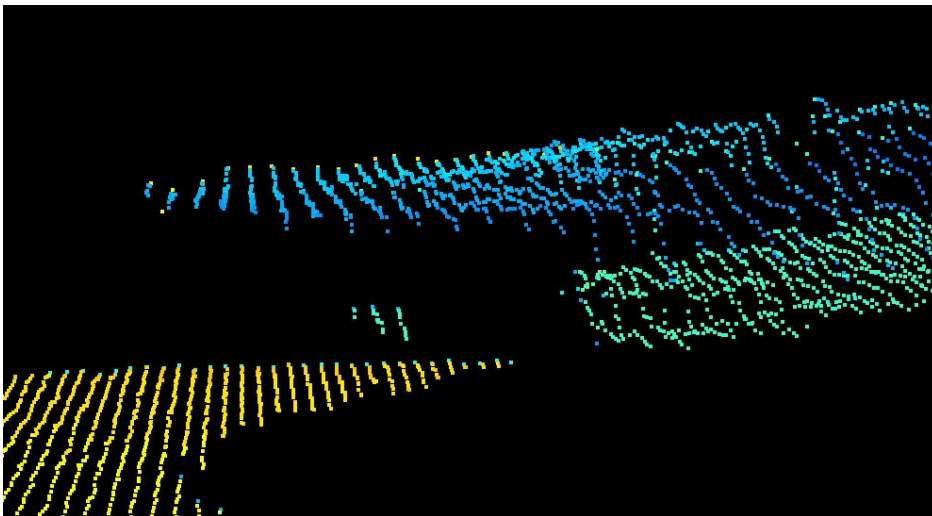


Figure 4: Soundings below aft hatch which could be the bottom of the rope locker

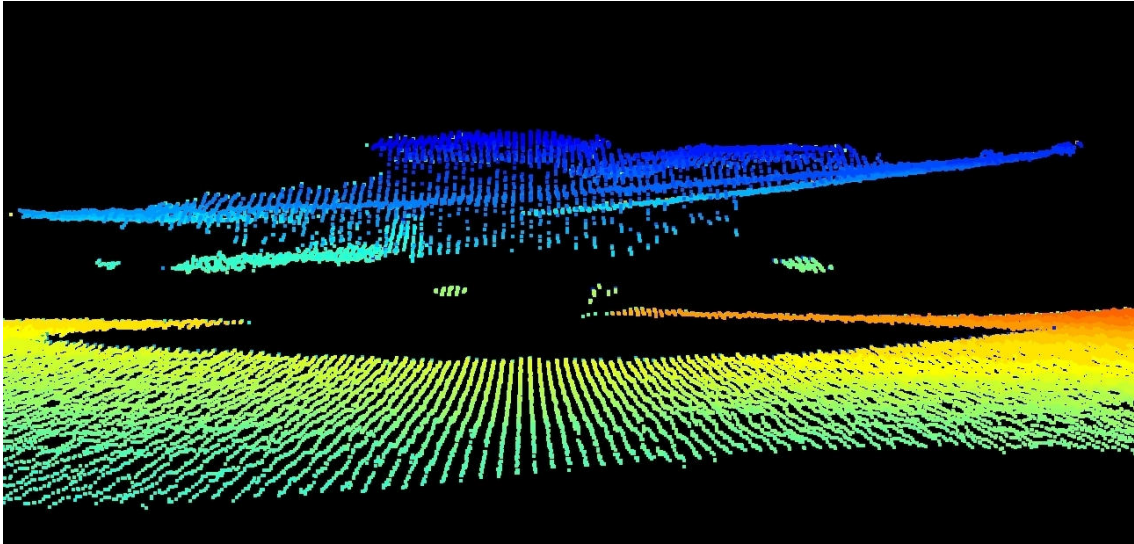


Figure 5: As seen from starboard side of vessel. Due to the path of the survey vessel, some of the starboard hull is seen.

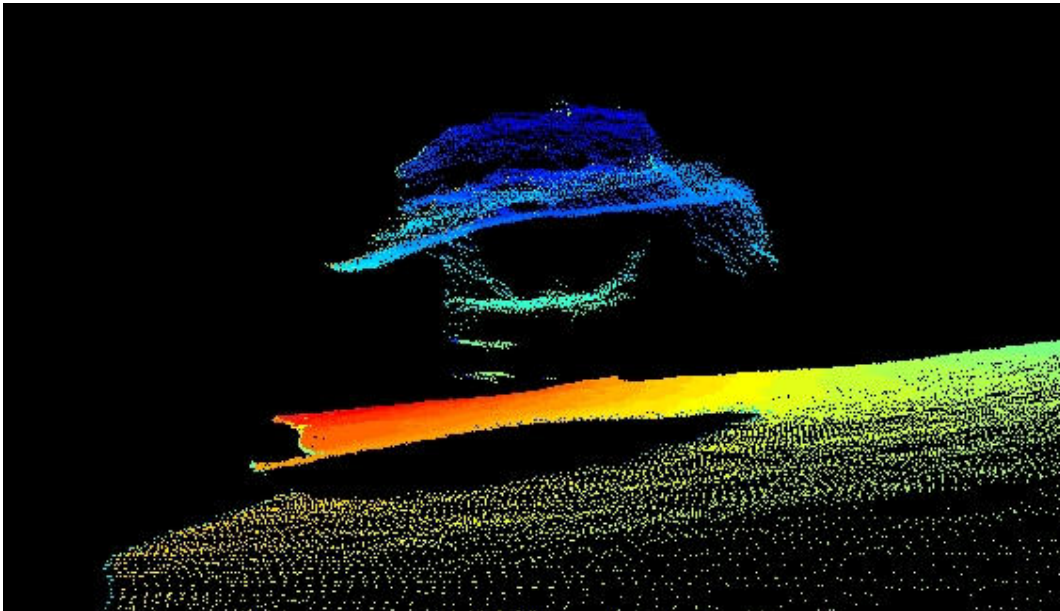


Figure 6: View looking from the stern towards the bow of the sailing yacht

The Sonic 2024 was operated at 400 kHz; pulse length was 20µsecs, opening angle 30°. Wreck was surveyed on 15 April 2009, Balls Head Bay, Sydney Harbour.

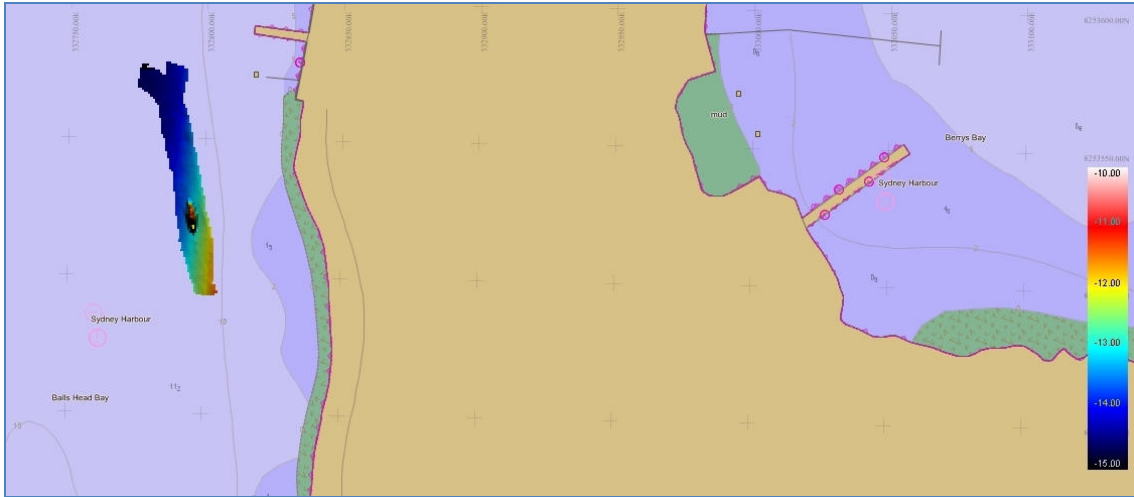


Figure 7: Position of wreck