

# The Search for the USS *Indianapolis*

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## INTRODUCTION

At 00:14 on July 30, the USS *Indianapolis* was struck by three torpedoes on the starboard bow, resulting in her sinking in 12 minutes. The ship had been sunk by the Imperial Japanese submarine *I-58*. Only 317 sailors survived the ordeal.

Today, the shipwreck of the USS *Indianapolis* remains undiscovered in the Pacific Ocean. Potential sinking sites can be determined from the drift of bodies across the ocean in the days following the sinking and from a sighting of the cruiser by an American tank landing ship 11 hours before her sinking.

From this information, two potential search areas for the shipwreck of the USS *Indianapolis* will be determined.



Figure 1. Photograph of USS *Indianapolis*, 1945, Bureau of Ships Collection

## MATERIALS AND METHODS

All plotting of coordinates was done with the GIS program MICRODEM.

The first sources of information utilized to create search areas were the historical records from the US and Japanese navies of the sinking location, and the US Navy's routing instructions to the USS *Indianapolis* for her voyage to the Philippines from Guam (PDG 1849, 1945).

Another source of information was the positions of floating corpses recovered by US naval vessels from August 3 to August 7, and global ocean currents from 1979-2013 that would have affected the rate and direction that the bodies would have traveled from the original sinking site (Johnson and Lumpkin, 2013).

The final source of information utilized was the log of LST 779 (LST 779, 1945), and accounts of the USS *Indianapolis*'s crew about the LST's sighting midday, July 29, 1945.

## HISTORICAL DATA

Table 1: Historical Sinking Locations of USS *Indianapolis*

Letter	Location	Description	Source
A	12° 02' N, 134° 48' E	Indianapolis's sinking at 0015, July 30, 1945	McVay, 1945
B	11° 43' 06" N 134° 12' 35" E	I-58's position at 2305, July 29, 1945	Hashimoto, 1945
C	12° 31' N, 134° 16' E	Indianapolis sinking at 0015, July 30, 1945	Hashimoto, 1945

## RESULTS

Figure 3 depicts the overall plotted course and waypoints of the USS *Indianapolis* from the original routing instructions:

- The *Indianapolis* track stops at the same longitude as Captain McVay's reported position of sinking (McVay, 1945).
- The two positions have a 10 minute (11.5 mile) difference in latitude.

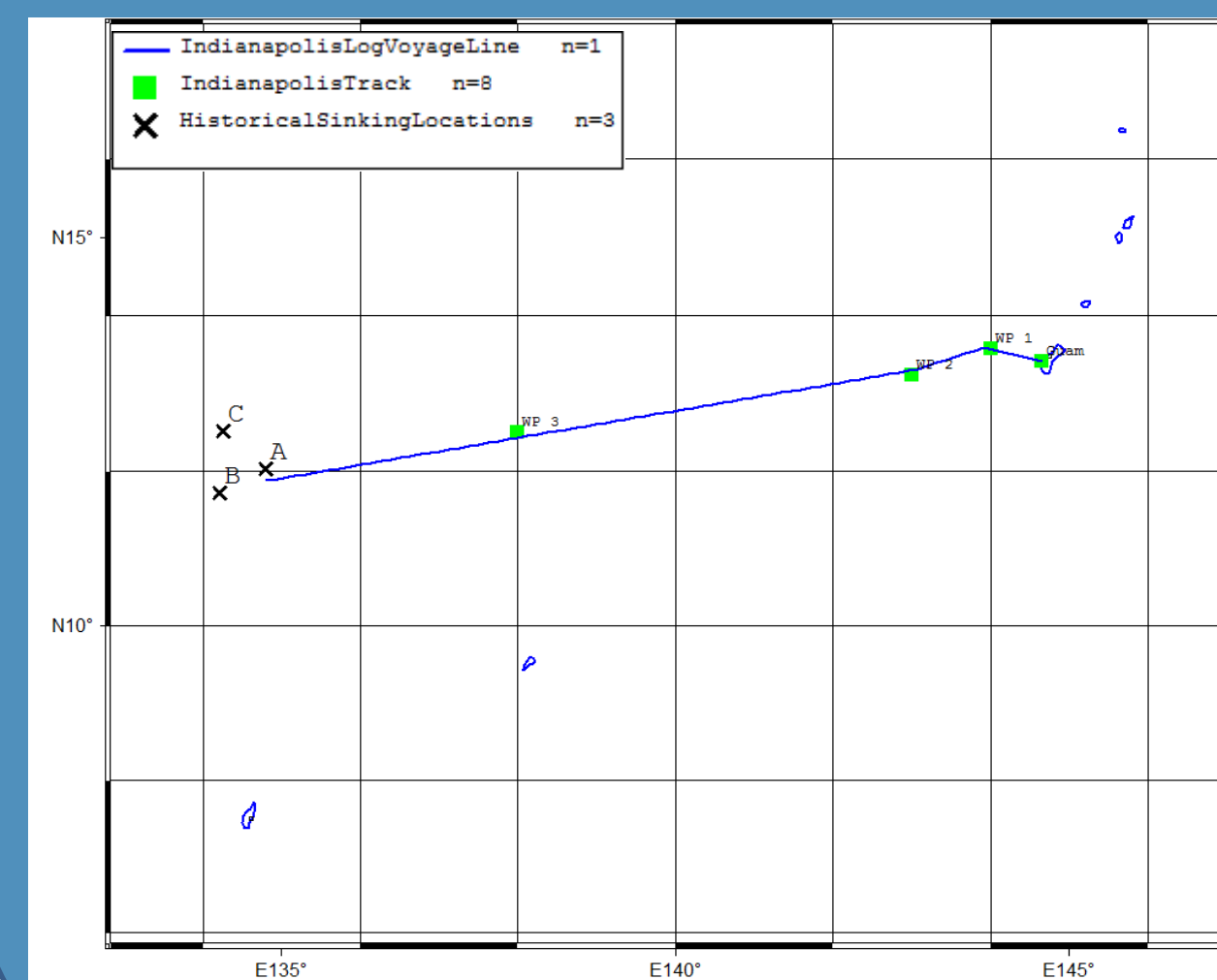


Figure 2. Projected Route and Routing Waypoints

Figure 4 plots the mean current data for the month of August from 1979-2013 with the locations of the corpse recoveries:

- The average currents match the general direction of the corpses with a course of 265°T.
- With an average speed of 0.2 knots, the corpses would have covered 4.8 nautical miles, or 5.5 miles, a day.

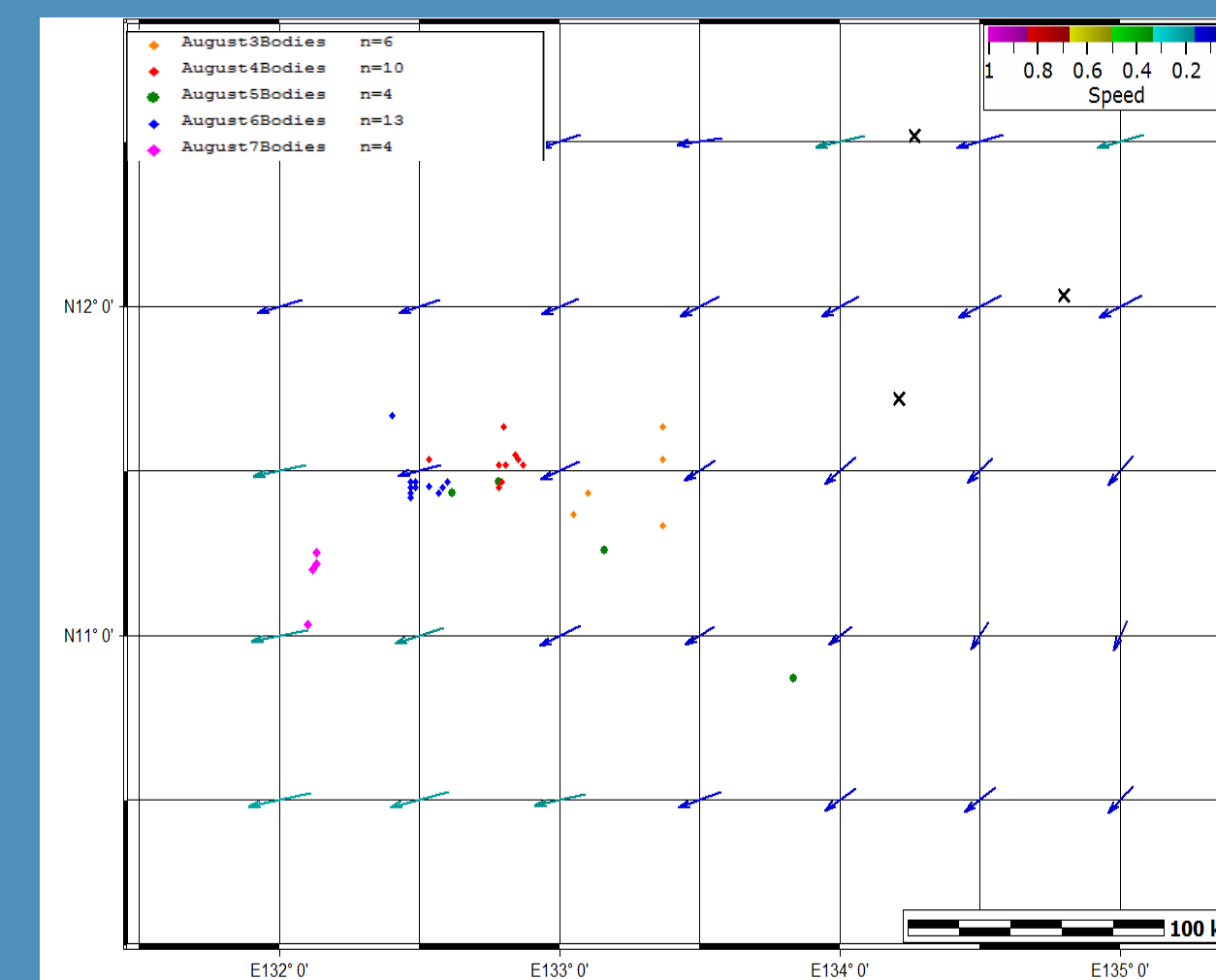


Figure 3. Plotted Mean Current Vectors for August, 1979-2013, with Body Positions

Finally, Figure 5 extrapolates the course and distance of the USS *Indianapolis* from her noon sighting of LST 779 on July 29, 1945.

- A final sinking position for the USS *Indianapolis* was determined to be at 11° 47' 34" N, 134° 18' 44" E.
- The plotted course of the LST and the *Indianapolis* match eyewitness accounts, which state that the *Indianapolis* overtook the transport as it traveled to the north of the cruiser (Newcomb 2001).

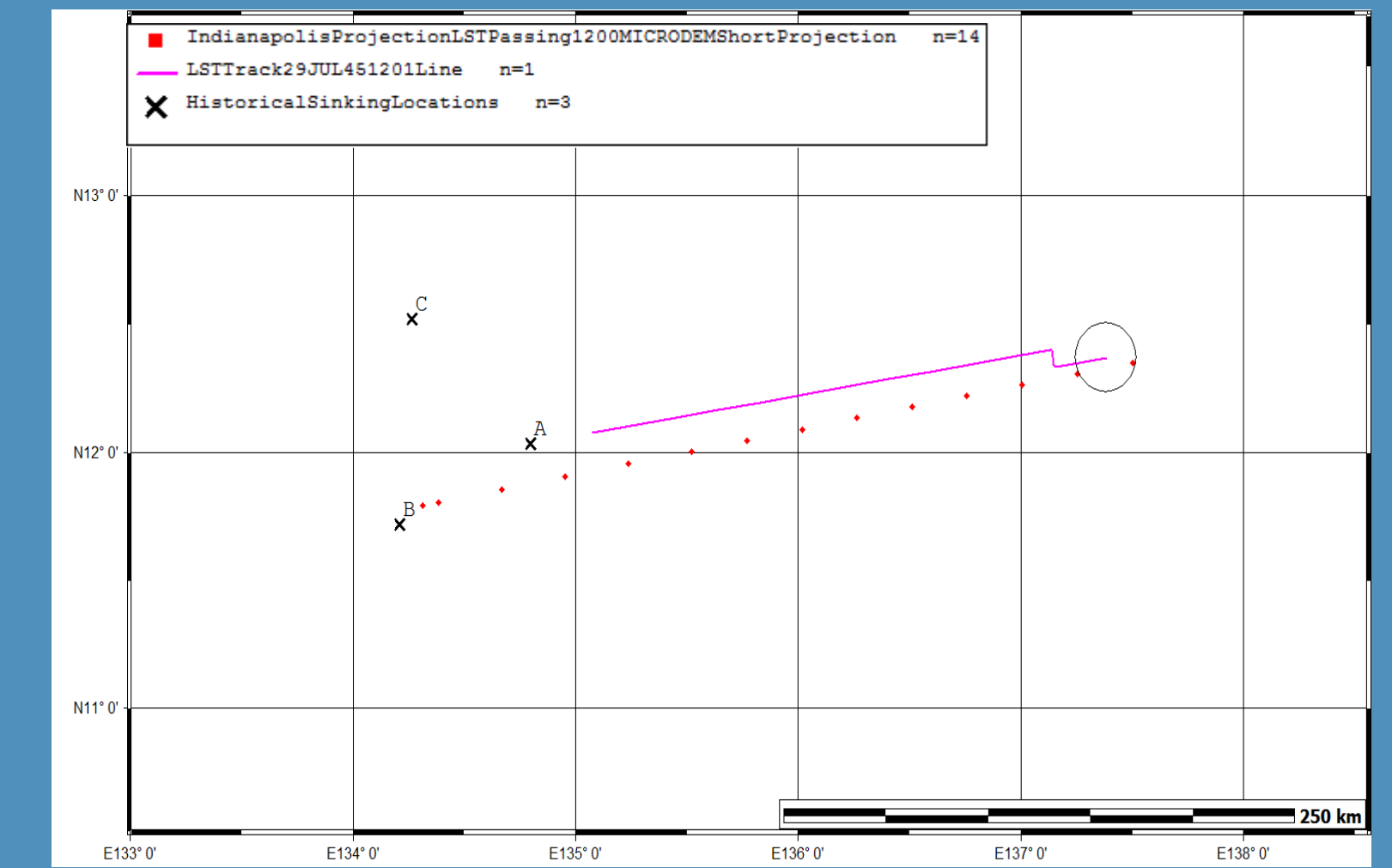


Figure 4. Projected Sinking Location from LST Sighting at 1200, July 29 1945

## CONCLUSIONS

The projection of USS *Indianapolis*'s intended route from her routing instructions provides a confirmation to Captain McVay's reported position of the sinking.

For the bodies, the projected origins of the body clusters found on August 4, August 6, and August 7, 1945 landed within the August 3 body cluster, and not near the plotted historical positions. It can be surmised that the bodies then did not travel at the speed of the currents alone.

Finally, the position of the USS *Indianapolis* determined from the LST sighting at 1200, July 29, 1945 puts the sinking position slightly to the northeast of Commander Hashimoto's testimony of the position of *I-58* at 2305, July 29, 1945 (McVay, 1945). This projected sinking site is considered to be the most accurate.

It is recommended that an expedition search in two distinct areas: a 150 nm<sup>2</sup>, primary search area, centered on 11° 45' 21" N, 134° 16' 49" E, and a 234 nm<sup>2</sup> secondary search area, centered on 11° 58' 21" N, 134° 48' 36" E.

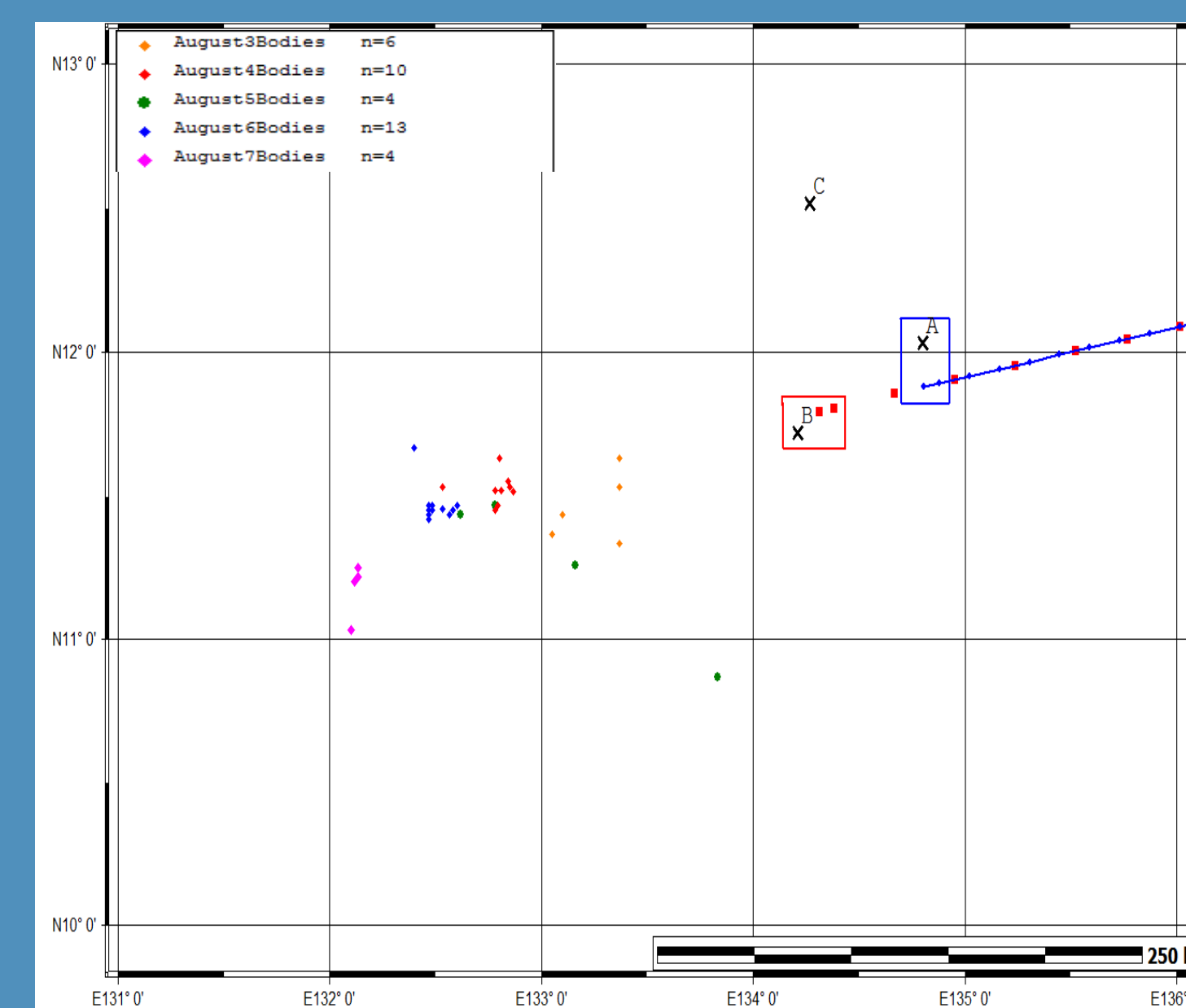


Figure 5. Primary (B) and Secondary (A) Search Areas for the Wreck of the USS *Indianapolis*

## REFERENCES

Johnson, G.C. and Lumpkin, R., 2013, Global ocean surface velocities from drifters: mean, variance, ENSO response, and seasonal cycle: Journal of Geophysical Research. Oceans, vol.118, p.2992-3006.

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