



RECOMMENDED ROUTING GUIDELINES FOR MEJILLONES

STRIKEMAPS.ORG/MAPS

July 2021

Since the early 2000s, multiple scientific reports have been made of sightings of great whales (blue - fin - humpback) in Mejillones bay.

The oceanographic phenomenon of upwelling is observed along the coast of the Mejillones peninsula. The illustration below shows the bathymetric data of the area.

G. Vargas et al. / Tectonophysics 399 (2005) 381–398

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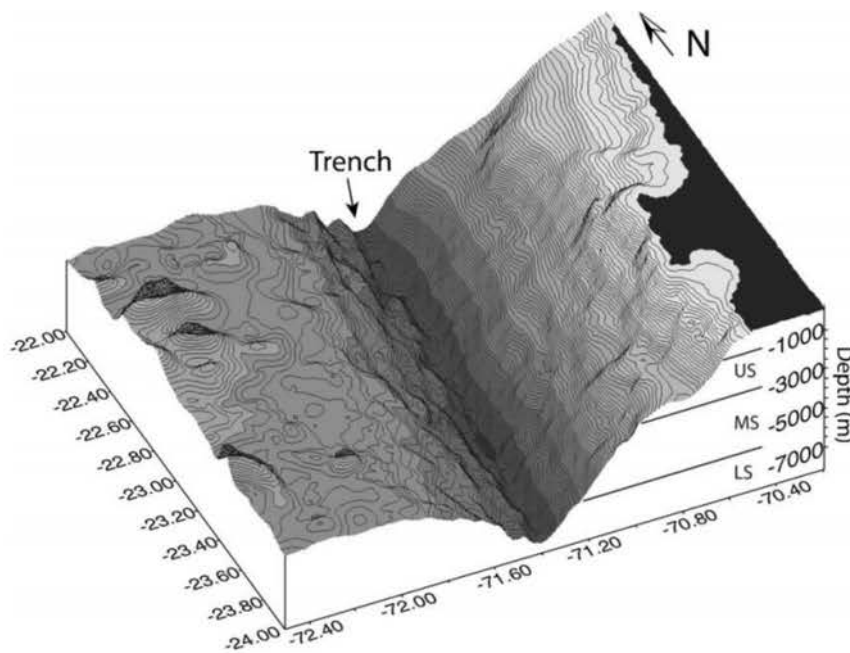
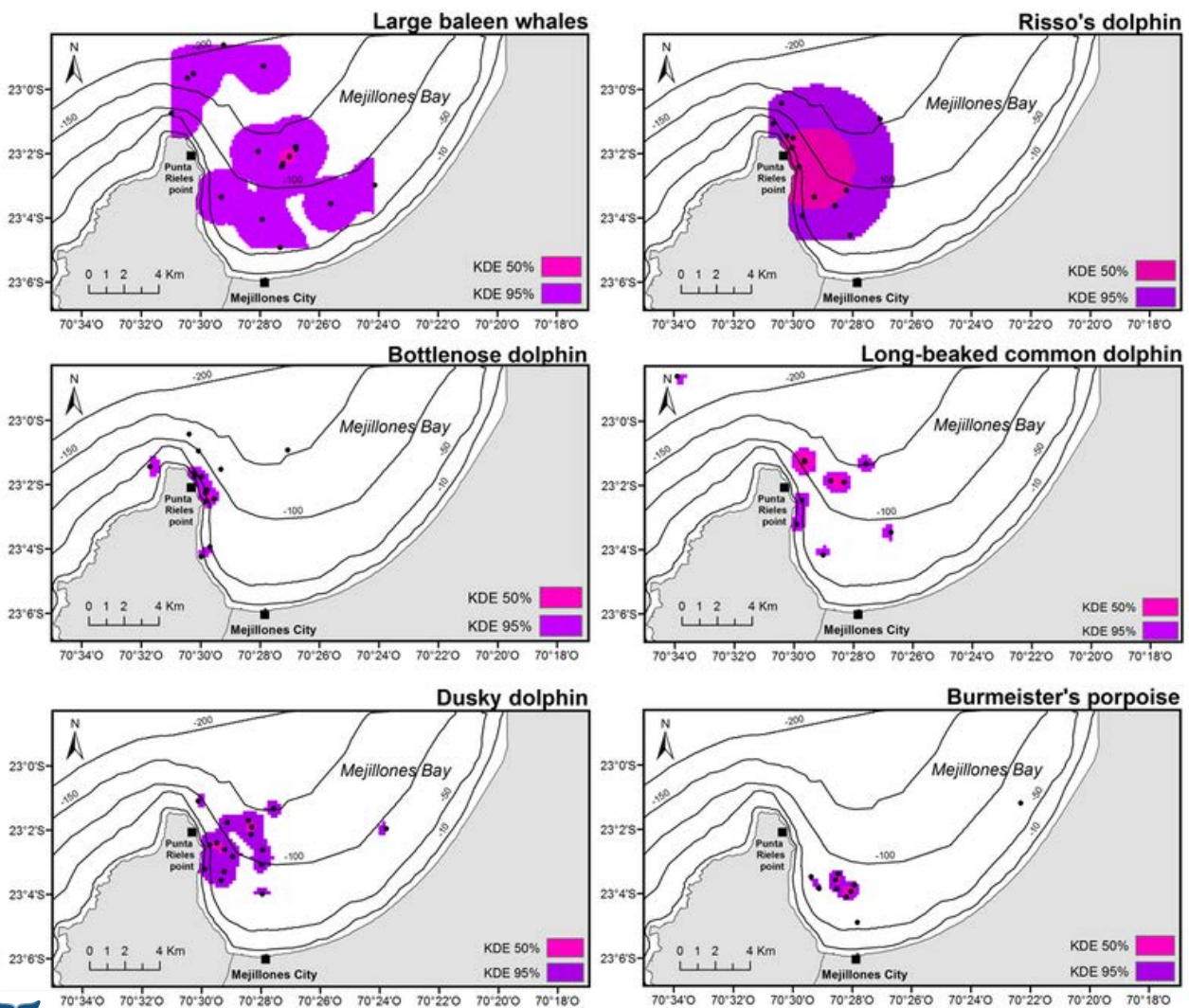


Fig. 2. 3D view of the regional bathymetry in front of the Mejillones peninsula, based on a Numerical Model of Terrain (NMT) using Kriging-method of interpolation. Original data of bathymetry from Zapata (2001). Subdivision of the continental margin in Upper Slope (US: 1000–3000 m), Middle Slope (MS: 3000–6000 m) and Lower Slope (LS:>6000 m) is indicated. The US is composed by coherent crust affected by normal faults. The MS is characterized by frequent terraces containing blocks that disintegrate, forming sediments and debris that constitutes the LS (von Huene et al., 1999).

Upwelling brings nutrient-rich water from the deep sea towards the surface and it is these nutrients that attract the cetaceans towards the waters off Mejillones.

The illustration on the next page shows the sighting of the different whale, dolphin and porpoise types within the bay area.



In order to protect these animals from ship strikes, the below routing guidelines for the approach of Mejillones have been prepared.

A) General guidelines for Mejillones

- Avoid sailing in the bay during night time. Whales are generally feeding along the surface of the water during night time. During the daytime, whales feed in deeper waters & thus the risk of ship strikes on these animals is reduced. Try to plan your arrival or departure accordingly (within the legal obligations of your charter party).
- Consider putting a lookout on the bow during hours of daylight. This person can report whale sightings to the bridge by radio.

- If the vessel is fitted with a CCTV on the bow, this equipment can be used instead of a lookout.
- Ensure maximum maneuverability of the vessel (steering gear & main engine on standby) to allow evasive maneuvering in case of sightings within short distance.
- Consider reducing the ship's speed to below 10 knots once 5NM from Punta Angamos. As a general rule, the slower the speed, the better for whale protection.
- The majority of the sightings of cetaceans is concentrated in the Southwestern part of the bay area, therefore it is highly recommended to remain well clear of this part of the bay.

In addition, specific passage plan guidelines are made for:

B) Approach from the North:

1. Choose the end waypoint of your great circle or thumb-line about 5NM NNE of Punta Angamos. Suggested coordinates: 22°56.5'S – 070°28.3'W
2. Avoid sailing along the 200m depth line.
3. Cross the area between the 200m & 100m depth line on a heading with a 90 degrees angle to these depth lines. Suggested coordinates: 23°00.8'S – 070°24.3'W
From this suggested position, proceed to your appointed pilot position.

C) Approach from the South:

1. Stay well clear of the 200m depth line along the coast of Chile. Consider a route around 10NM West of the Mejillones peninsula to avoid the upwelling area off the peninsula. We recommend sailing along the 2000m depth line along the coast.
2. Once 4NM North of the latitude of Punta Angamos, make your approach to the Mejillones bay on an Easterly heading into the bay. Suggested latitude: 22°56.5'S with an Easterly heading.
3. Avoid sailing along the 200m depth line.
4. Once you reach a longitude of 070° 28.3'W, follow the recommendations as per above.

D) Departure from Mejillones:

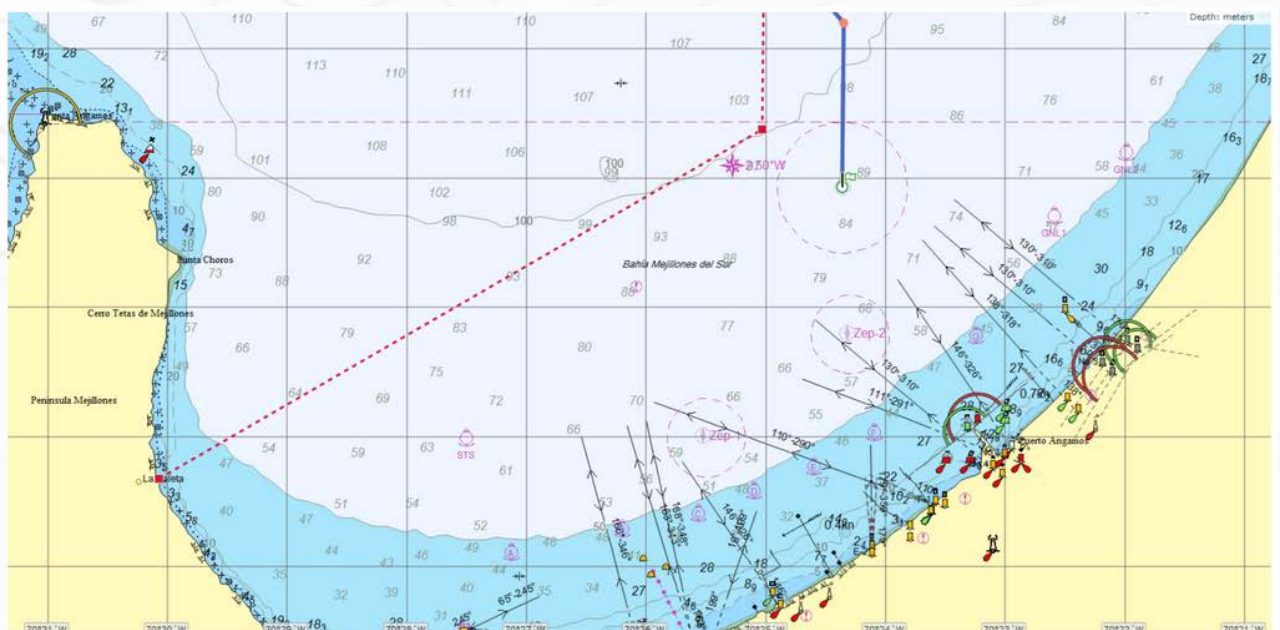
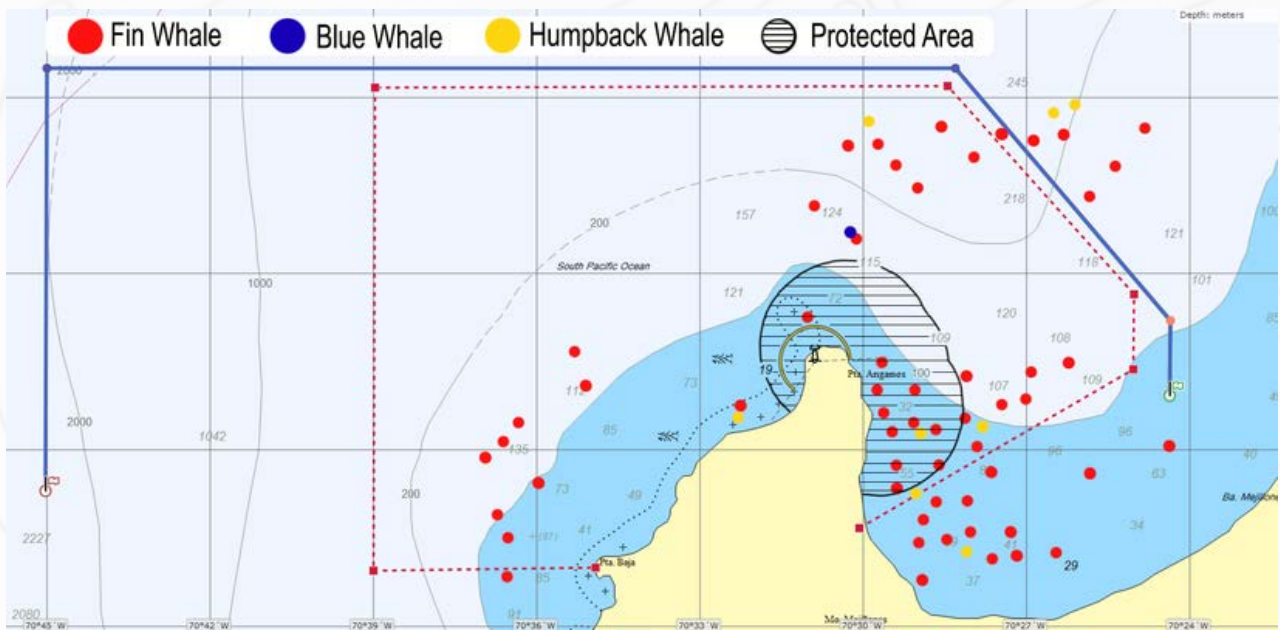
1. Once the pilot has disembarked, reverse your waypoints & follow the same guidelines as for the approach of the port, but in the opposite direction. In line with COLREG, keep all inbound traffic on your port side (red to red passing arrangement.)
2. Increase to your maximum sea speed once 5NM clear of Punta Angamos.
Avoid sailing along the 200m depth line, but cross it on a 90 degree heading.

Suggested routes are shown in the below ENC print screens. Always consider all navigational hazards specific to your type of vessel for your final passage plan.

The red area summarizes the global area of whale sightings & we recommend to remain clear of the area as much as the safe navigation of your vessel allows.

The blue line is an example of a route plan as described in the above guidelines.

The legend illustrates different whale species sightings and the mandatory no-go area of 1,5NM from Punta Angamos for ships larger than 50GT.





In Collaboration With



The Great Whale Conservancy ("GWC") is an international non-profit organization devoted to the study of and the promotion of practices that will maximize protection of cetaceans—marine mammals, mainly whales, dolphins and porpoises. In particular, GWC seeks to promote safe navigational practices that will help large ships avoid collisions with cetaceans.

Ship collisions are one of the leading causes of whale deaths around the world, and especially given the size of modern tankers and container ships, watch keeping officers are often completely unaware when a collision occurs. As modern ships continue to increase in size, this problem will only increase in severity, unless steps are taken to try to counter it. We believe that one of the most effective means of reducing the frequency of ship-whale collisions is to promote the use of shipping lanes (preferably IMO adopted TSS) that avoid areas that are thought to be most commonly frequented by these great creatures, at least during the times they are most likely to be in these areas, and that approach, along with other protective measures described herein, is the principal recommendation we are making here.

It is of utmost importance, however, to understand that the recommendations set forth on the following pages are only recommendations, to be followed only when weather, sea and traffic conditions permit, and that at all times, as you understand full well, the safety of the ship and its crew are paramount. These recommendations have been developed in consultation with a certified Master Mariner, and thus reflect what we and they agree would be a possible and workable passage plan under normal conditions for most of the commonly known ship types. However, it must be stressed that these recommendations under no circumstances relieve the Master of his/her responsibility of ensuring the safe navigation of his/her ship and at all times. The experience and judgment of the Master must be the dominant consideration in determining whether the above recommendations can be safely and prudently complied with, taking into account all factors influencing the safe navigation of the ship.

If the practices that we propose are being considered during the preparation of your passage plan, you will be playing an important role in improving the ability of these great denizens of the sea to coexist safely with modern shipping.

The Great Whale Conservancy thanks you for your efforts in complying with our guidelines.