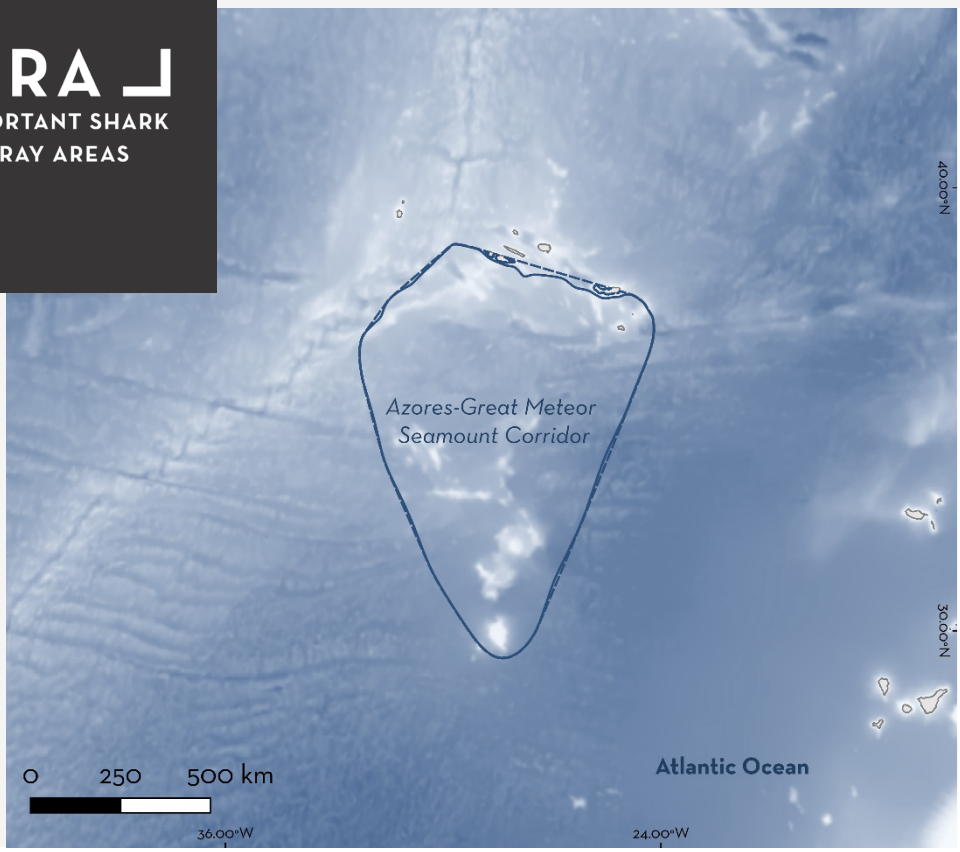
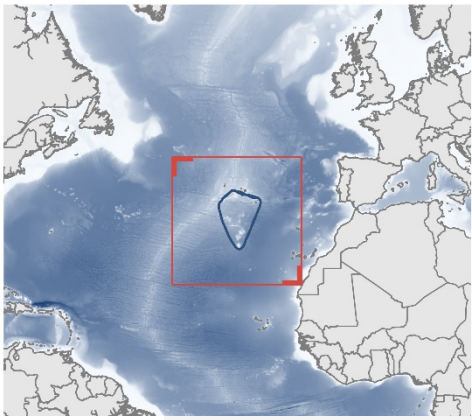
ISRA
IMPORTANT SHARK AND RAY AREAS





Blue lines indicate the area meeting the ISRA Criteria; dashed lines indicate the suggested buffer for use in the development of appropriate place-based conservation measures

AZORES-GREAT METEOR SEAMOUNT CORRIDOR ISRA

European Atlantic Region

ABNJ PORTUGAL

0–1,928 metres

474,903 km²

SUMMARY

Azores-Great Meteor Seamount Corridor is located in the middle of the North Atlantic Ocean. It spans pelagic waters from the Azores Archipelago, Portugal, and areas beyond national jurisdiction (ABNJ) south of the Azores and around the Great Meteor Seamount. The area expands from the Azores slope and is characterised by the presence of multiple banks, seamounts of various summit depths, flat summit plateaus, terraces, and ridges. It overlaps with two Ecologically or Biologically Significant Marine Areas, two Key Biodiversity Areas, and three protected areas. Within this area there are: **threatened species** (e.g., Sicklefin Devil Ray *Mobula tarapacana*) and areas important for **movement** (e.g., Blue Shark *Prionace glauca*).

CRITERIA

Criterion A – Vulnerability; Sub-criterion C4 – Movement

DESCRIPTION OF HABITAT

Azores-Great Meteor Seamount Corridor is located in the middle of the North Atlantic Ocean, in the Macaronesia region. It spans waters from the Azores Archipelago, an autonomous region of Portugal and areas beyond national jurisdiction (ABNJ) south of the Azores and around the Great Meteor Seamount. The area expands from the slope around the central and southern Azores islands and is characterised by the presence of multiple banks, seamounts of various summit depths, flat summit plateaus, terraces, and ridges (Morato et al. 2008, 2020; CBD 2025a).

The Great Meteor Seamount is one of the largest seamounts worldwide and is part of a volcanic chain found ~700 km south of the Azores (CBD 2025a). It rises from ~4,000 m depth up to a summit at ~350 m depth (Tojeira et al. 2025). It is characterised by terraces, steep slopes, and corals (Tojeira et al. 2025). Seamounts are considered hotspots for biodiversity due to an increase in productivity as eddies around them bring nutrient from deep waters (Coelho & Santos 2003; Mendonça et al. 2012; Afonso et al. 2020).

Dynamic features associated with the complex seabed topography of the Azores are typical of the region, such as seamount-related circulation patterns but also eddies and filaments generating from the southern branch of the Gulf Stream passing about 100 nm south of the area and traveling north (Caldeira & Reis 2017). The Azores represents an ecotone; its otherwise temperate geographic location is also influenced by subtropical waters from the North Atlantic subtropical gyre via the southeastern branch of the Gulf Stream (Afonso et al. 2020).

The area overlaps with the Ridge South of the Azores and Atlantis Meteor Seamount Complex Ecologically or Biologically Significant Marine Areas (EBSA; CBD 2025a, 2025b), Faial and Santa Maria Key Biodiversity Areas (KBA 2025a, 2025b), and three protected areas: Reserva Natural Marinha do Banco Condor, Reserva Natural Marinha do Banco Princesa Alice, and the Reserva Natural Marinha dos Ilhéus das Formigas (UNEP-WCMC & IUCN 2025).

This Important Shark and Ray Area is pelagic and is delineated from surface waters (0 m) to 1,928 m based on the depth range of Qualifying Species globally.

ISRA CRITERIA

CRITERION A – VULNERABILITY

Two Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occur in the area. These are the Endangered Whale Shark (Pierce & Norman 2016) and Sicklefin Devil Ray (Marshall et al. 2022).

SUB-CRITERION C4 – MOVEMENT

Azores-Great Meteor Seamount Corridor is an important area for movement of two shark and one ray species.

Telemetry of sharks tagged with satellite transmitters between 2009–2024 revealed that Blue Shark, Whale Shark, and Sicklefin Devil Ray regularly move between the Azores Exclusive Economic Zone (EEZ) and the Great Meteor Seamount (Thorrold et al. 2014; Vandeperre et al. 2014; Afonso et al. 2020; Braun et al. 2023; B Macena et al. unpubl. data 2025).

Of 34 Blue Sharks tagged with satellite transmitters (SPOT and PSAT) between 2009–2010, ten animals (29.4%) made movements to the Great Meteor Seamount before making movements to the south Atlantic and to the Newfoundland Basin suggesting that the Great Meteor Seamount may be a stopover for this species during larger migrations (Vandeperre et al. 2014). Individuals making these movements included juveniles and adults and two of the tagged Blue Sharks returned to the Azores (Vandeperre et al. 2014). In addition, of 17 Blue Sharks tagged (with PAT tags) in the Azores between 2010–2024, three made regular movements to the Great Meteor Seamount in multiple years (B Macena unpubl. data 2025). Blue Sharks are regularly caught in the Azores EEZ, with young-of-the-year (YOY) animals caught year-round and pregnant females caught during the boreal spring (Vandeperre 2013). The Azores EEZ has been identified as a hotspot for YOY and adult females in the Northeast Atlantic suggesting this may be an important reproductive area (Coelho et al. 2018).

Of nine Whale Sharks tagged between 2009–2024, five (55.5%) made movements to the Great Meteor Seamount in different years (B Macena unpubl. data 2025). Whale Sharks are known to regularly occur in the Azores EEZ during summer especially around seamounts of the southernmost islands (e.g., Pico Island, Santa María Island) where they feed regularly and predictably at several sites in aggregations (Afonso et al. 2014; Fontes et al. 2020). The Great Meteor Seamount seems to be a stopover for the species during migrations to the south Atlantic in a south-westerly direction (B Macena unpubl. data 2025).

Of 18 Sicklefin Devil Rays tagged between 2009–2024, seven (38.8%) made regular movements to the Great Meteor Seamount in multiple years (Thorrold et al. 2014; B Macena unpubl. data 2025). Sicklefin Devil Rays regularly occur during summer around seamounts inside the Azores EEZ (e.g., Princess Alice, Formigas, Ambrósio) where they aggregate (Sobral 2013; Sobral & Afonso 2014; Thorrold et al. 2014). Tracks of individuals tagged have shown that Great Meteor Seamount may be a stopover for larger movements to the south Atlantic (Thorrold et al. 2014; B. Macena unpubl. data 2025).

All three species appear to leave the Azores EEZ and move southwards at the end of summer and early autumn, before returning through the Great Meteor Seamount around spring/summer each year (B Macena unpubl. data 2025).

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QUALIFYING SPECIES

Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met								
				A	B	C1	C2	C3	C4	C5	D1	D2
SHARKS												
Prionace glauca	Blue Shark	NT	0–1,792						X			
Rhincodon typus	Whale Shark	EN	0–1,928	X					X			
RAYS												
Mobula tarapacana	Sicklefin Devil Ray	EN	0–1,896	X					X			

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
Galeorhinus galeus	Tope	CR
Hexanchus griseus	Bluntnose Sixgill Shark	NT

IUCN Red List of Threatened Species Categories are available by searching species names at www.iucnredlist.org Abbreviations refer to: CR, Critically Endangered; EN, Endangered; VU, Vulnerable; NT, Near Threatened; LC, Least Concern; DD, Data Deficient.

SUPPORTING INFORMATION

There are additional indications that this area is important for movement of two shark species.

Satellite telemetry of five Tope and two Bluntnose Sixgill Sharks tagged between 2017–2019 around the oceanic islands of the Azores revealed movements to the Great Meteor Seamount (Arostegui et al. 2024). Two Tope made these movements while the other three remained resident within the Azores EEZ (Arostegui et al. 2024). In addition, one Bluntnose Sixgill Shark moved to this seamount. Tope are known to regularly occur on shelf habitats around the oceanic islands of the Azores that are used as reproductive and aggregation sites of early life stage animals while Bluntnose Sixgill Sharks regularly occur in the area (Das & Afonso 2017; Soares 2021; Das et al. 2022, 2025; Priester et al. 2024). Additional information is required to understand the regularity of these movements and the importance of the area for these shark species.

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