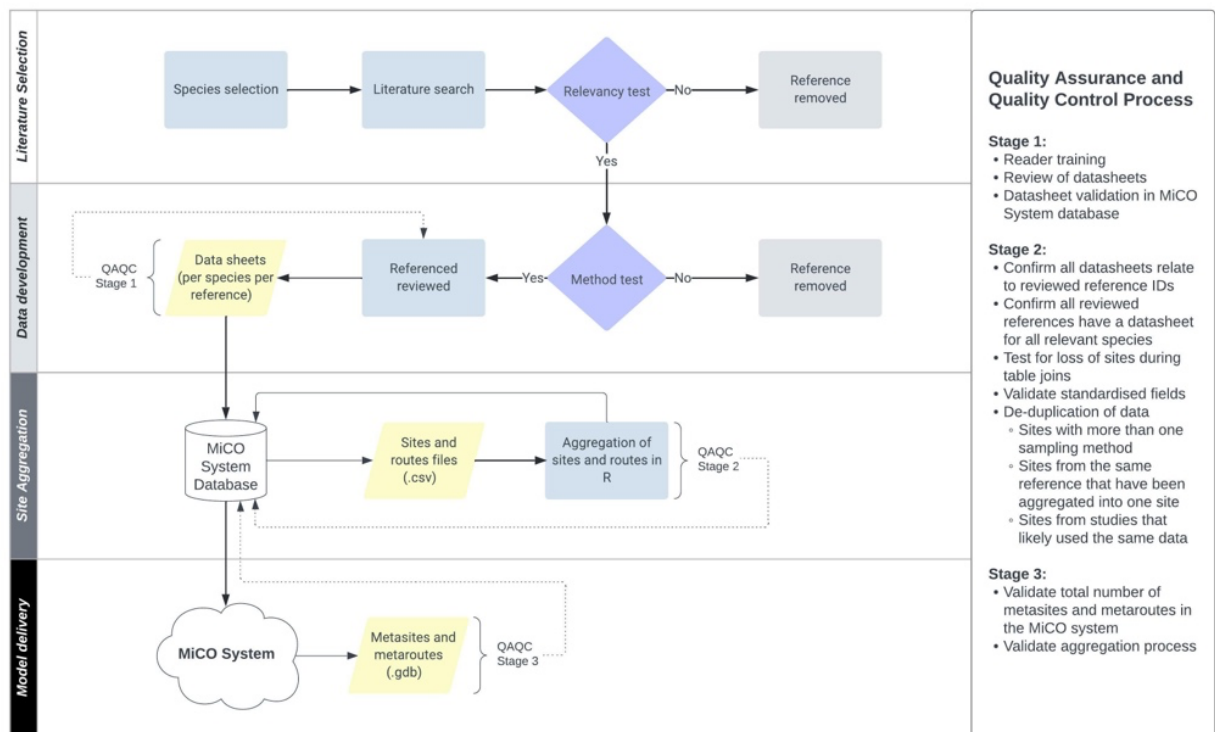


Supplementary Information:

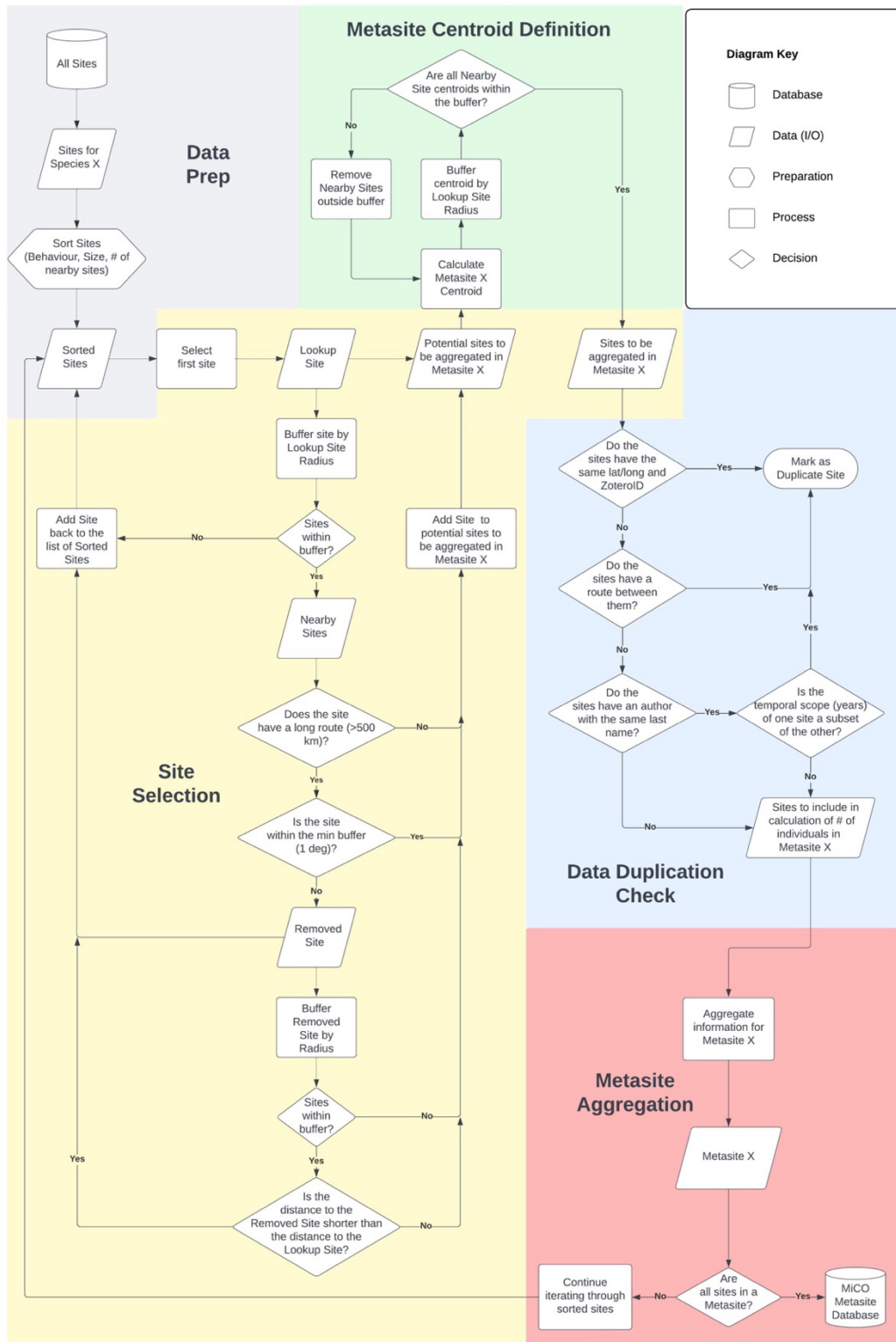
Marine megavertebrate migrations connect the global ocean

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Supplementary Fig. 1

Quality assurance and quality control processes from literature selection to delivery of models within the MiCO database. (Diagram created using Lucid (www.lucidchart.com).)



Supplementary Fig. 2

Flowchart illustrating the site aggregation process used to generate metasites. (Diagram created using Lucid (www.lucidchart.com).)



Supplementary Fig. 3

Diagram illustrating the process of iterative site-selection with reference to the lookup site, nearby sites, and long routes. (Diagram created using Lucid (www.lucidchart.com).)

Supplementary Table 1

Taxon	species_code	Common Name
Fishes	ACSO	Wahoo
Fishes	ALSU	Bigeye Thresher Shark
Fishes	ALVU	Common Thresher Shark
Fishes	ANAN	European Eel
Fishes	CACA	Great White Shark
Fishes	CAFA	Silky Shark
Fishes	CEMA	Basking Shark
Fishes	COHI	Common Dolphinfin
Fishes	ISIN	Black Marlin
Fishes	ISOX	Shortfin Mako
Fishes	ISPA	Longfin Mako
Fishes	ISPL	Sailfish
Fishes	KAAL	White Marlin
Fishes	KAAU	Striped Marlin
Fishes	KAPE	Skipjack Tuna
Fishes	LANA	Porbeagle
Fishes	MAAL	Reef Manta Ray
Fishes	MANI	Blue Marlin
Fishes	MOBI	Giant Manta Ray
Fishes	MOJA	Spinetail Devil Ray
Fishes	MOTA	Chilean Devil Ray
Fishes	RHTY	Whale Shark
Fishes	SPLE	Scalloped Hammerhead
Fishes	SPMO	Great Hammerhead
Fishes	SQAC	Spiny Dogfish
Fishes	TEPF	Longbill Spearfish
Fishes	THAB	Yellowfin Tuna
Fishes	THAL	Albacore Tuna
Fishes	THAT	Blackfin Tuna
Fishes	THMAC	Southern Bluefin Tuna
Fishes	THOB	Bigeye Tuna
Fishes	THOR	Pacific Bluefin Tuna
Fishes	THTH	Atlantic Bluefin Tuna
Fishes	XIGL	Swordfish
Marine Mammals	ARAU	South American Fur Seal
Marine Mammals	BABR	Sei Whale
Marine Mammals	BAED	Bryde's Whale

Marine Mammals	BAMU	Blue Whale
Marine Mammals	BAMY	Bowhead Whale
Marine Mammals	BAPH	Fin Whale
Marine Mammals	CEHE	Heaviside's Dolphin
Marine Mammals	DEDE	Short-beaked Common Dolphin
Marine Mammals	DELE	Beluga
Marine Mammals	DUDU	Dugong
Marine Mammals	EUAU	Southern Right Whale
Marine Mammals	EUGL	North Atlantic Right Whale
Marine Mammals	EUJA	North Pacific Right Whale
Marine Mammals	GLME	Long-finned Pilot Whale
Marine Mammals	GRGR	Risso's Dolphin
Marine Mammals	HYAM	North Atlantic Bottlenose Whale
Marine Mammals	LAAC	Atlantic White-sided Dolphin
Marine Mammals	LAAL	White-beaked Dolphin
Marine Mammals	MENO	Humpback Whale
Marine Mammals	MOMO	Narwhal
Marine Mammals	OROR	Killer Whale
Marine Mammals	PHMA	Sperm Whale
Marine Mammals	STAT	Pantropical Spotted Dolphin
Marine Mammals	TRIN	South American Manatee
Marine Mammals	TRMA	American Manatee
Marine Mammals	ZICA	Cuvier's Beaked Whale
Sea Turtles	CACAR	Loggerhead
Sea Turtles	CHMY	Green
Sea Turtles	DECO	Leatherback
Sea Turtles	ERIM	Hawksbill
Sea Turtles	LEKE	Kemp's Ridley
Sea Turtles	LEOL	Olive Ridley
Sea Turtles	NADE	Flatback
Seabirds	CHNI	Black Tern
Seabirds	DIAM	Amsterdam Albatross
Seabirds	DIAN	Antipodean Albatross
Seabirds	DIDA	Tristan Albatross
Seabirds	DIEP	Southern Royal Albatross
Seabirds	DIEX	Wandering Albatross
Seabirds	DISA	Northern Royal Albatross
Seabirds	GAAD	Yellow-billed Loon
Seabirds	LAAT	Olog's Gull

Seabirds	LAAU	Audouin's Gull
Seabirds	MAGI	Southern Giant Petrel
Seabirds	MAHA	Northern Giant Petrel
Seabirds	PHAL	Short-tailed Albatross
Seabirds	PHFU	Sooty Albatross
Seabirds	PHIM	Laysan Albatross
Seabirds	PHIR	Waved Albatross
Seabirds	PHNI	Black-footed Albatross
Seabirds	PHPA	Light-mantled Albatross
Seabirds	PRAE	White-chinned Petrel
Seabirds	PRCI	Grey Petrel
Seabirds	PRCO	Spectacled Petrel
Seabirds	PRPA	Black Petrel
Seabirds	PRWE	Westland Petrel
Seabirds	PTSA	Hawaiian Petrel
Seabirds	PUMA	Balearic Shearwater
Seabirds	STAL	Little Tern
Seabirds	STDO	Roseate Tern
Seabirds	STHI	Common Tern
Seabirds	STPA	Arctic Tern
Seabirds	SYWU	Japanese Murrelet
Seabirds	THBU	Buller's Albatross
Seabirds	THCA	Indian Yellow-nosed Albatross
Seabirds	THCH	Atlantic Yellow-nosed Albatross
Seabirds	THCR	Grey-headed Albatross
Seabirds	THCU	Shy Albatross
Seabirds	THER	Chatham Albatross
Seabirds	THME	Black-browed Albatross
Seabirds	THSA	Sandwich Tern
Seabirds	THST	White-capped Albatross

List of species (including codes) included in the summary Figure 4. Because their ecology (and therefore reporting of populations and movements in the literature) are distinct compared to the other marine mammals reviewed, polar bears *Ursus maritimus* and grey seals *Halichoerus grypus* are not included in Figure 4.