



Atlas of Neogene Paleogeographic Maps

CR Scotese, PALEOMAP Project

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This Atlas of Neogene Paleogeographic Maps shows the changing paleogeography from the Early Miocene (Aquitanian & Burdigalian, 19.5 Ma) to the Present-day. The maps are from volume 1 of the PALEOMAP PaleoAtlas for ArcGIS (Scotese, 2014). Absolute age assignments are from Ogg, Ogg & Gradstein (2008).

For Maps 3, 5 and 7, there are two versions of the paleogeography. One map shows the maximum highstand sea level (maximum flooding surface). The other map shows the minimum lowstand sea level (supersequence boundary). For each paleogeography there is an estimate of sea level change, in meters, relative to the present-day sea level.

The following maps are included in the Atlas of Neogene Paleogeographic Maps:

Map 01 Modern World (Holocene, 0.0 Ma) Transgressive Systems Tract
Map 02 Last Glacial Maximum (Pleistocene, 21,000 years ago) Anthropocene Supersequence Boundary
Map 03 Plio-Pleistocene, (Gelasian & Piacenzian, 2.588 Ma) Lowstand Systems Tract
Map 04 Latest Miocene (Messinian Event, 6.3 Ma) Maximum Flooding Surface
Map 05 Middle/Late Miocene, (Serravallian and Tortonian, 10.5 Ma) Messinian Supersequence Boundary & Tortonian Maximum Flooding Surface
Map 06 Middle Miocene (Langhian, 14.9 Ma) Maximum Flooding Surface
Map 07 Early Miocene (Aquitanian & Burdigalian, 19.5 Ma) Serravallian Supersequence Boundary, Aquitanian Maximum Flooding Surface

This Atlas should be cited as:

Scotese, C.R., 2014. Atlas of Neogene Paleogeographic Maps (Mollweide Projection), Maps 1-7, Volumes 1, The Cenozoic, PALEOMAP Atlas for ArcGIS, PALEOMAP Project, Evanston, IL.

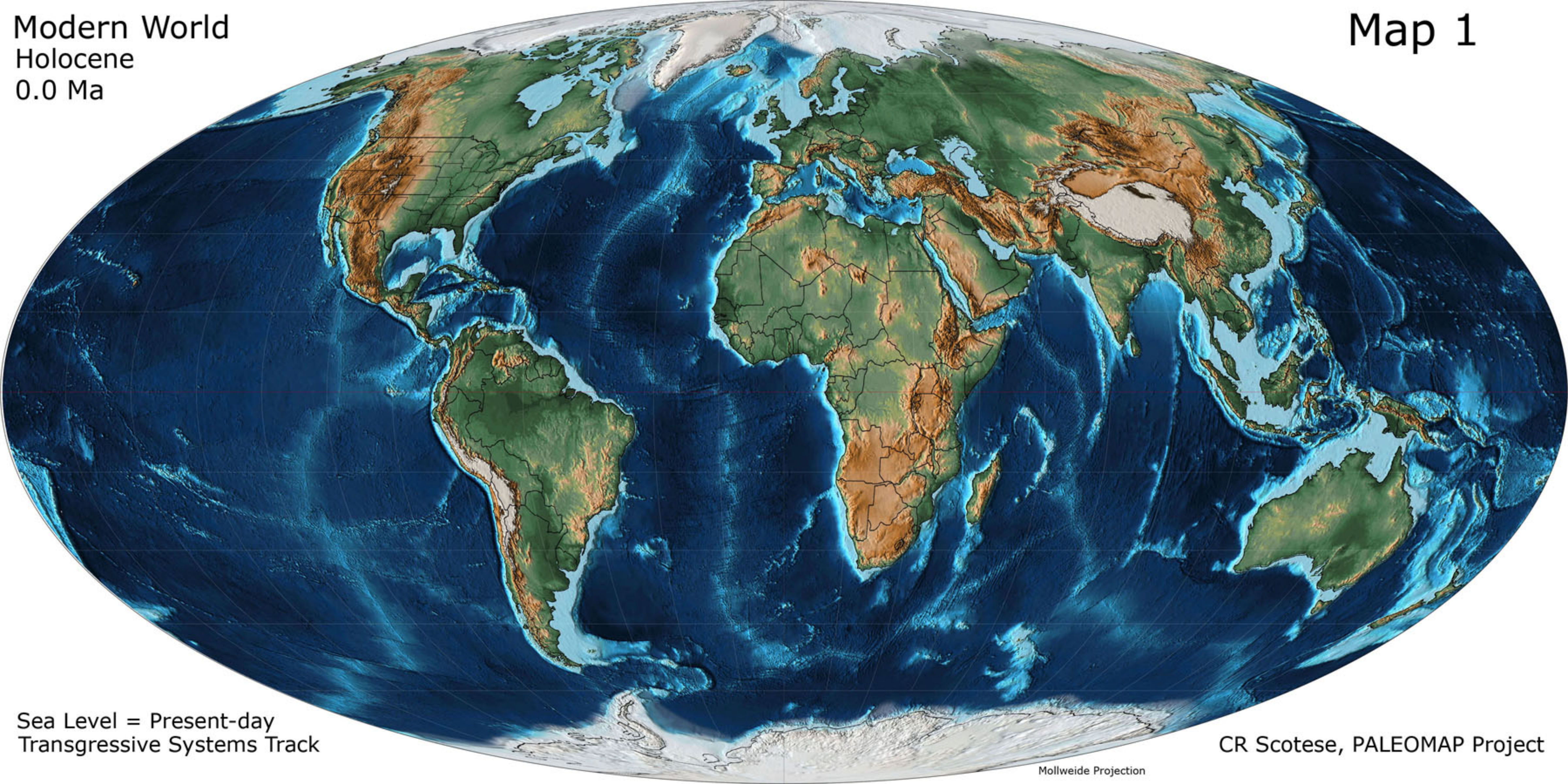
References Cited

Ogg, J.G., Ogg, G., Gradstein, F.M., 2008. The Concise Geologic Time Scale, Cambridge University Press, Cambridge, UK, 177 pp.

Scotese, C.R., 2014, *The PALEOMAP Project PaleoAtlas for ArcGIS*, version 2, Volume 1, Cenozoic Plate Tectonic, Paleogeographic, and Paleoclimatic Reconstructions, Maps 1-15, PALEOMAP Project, Evanston, IL.

Modern World
Holocene
0.0 Ma

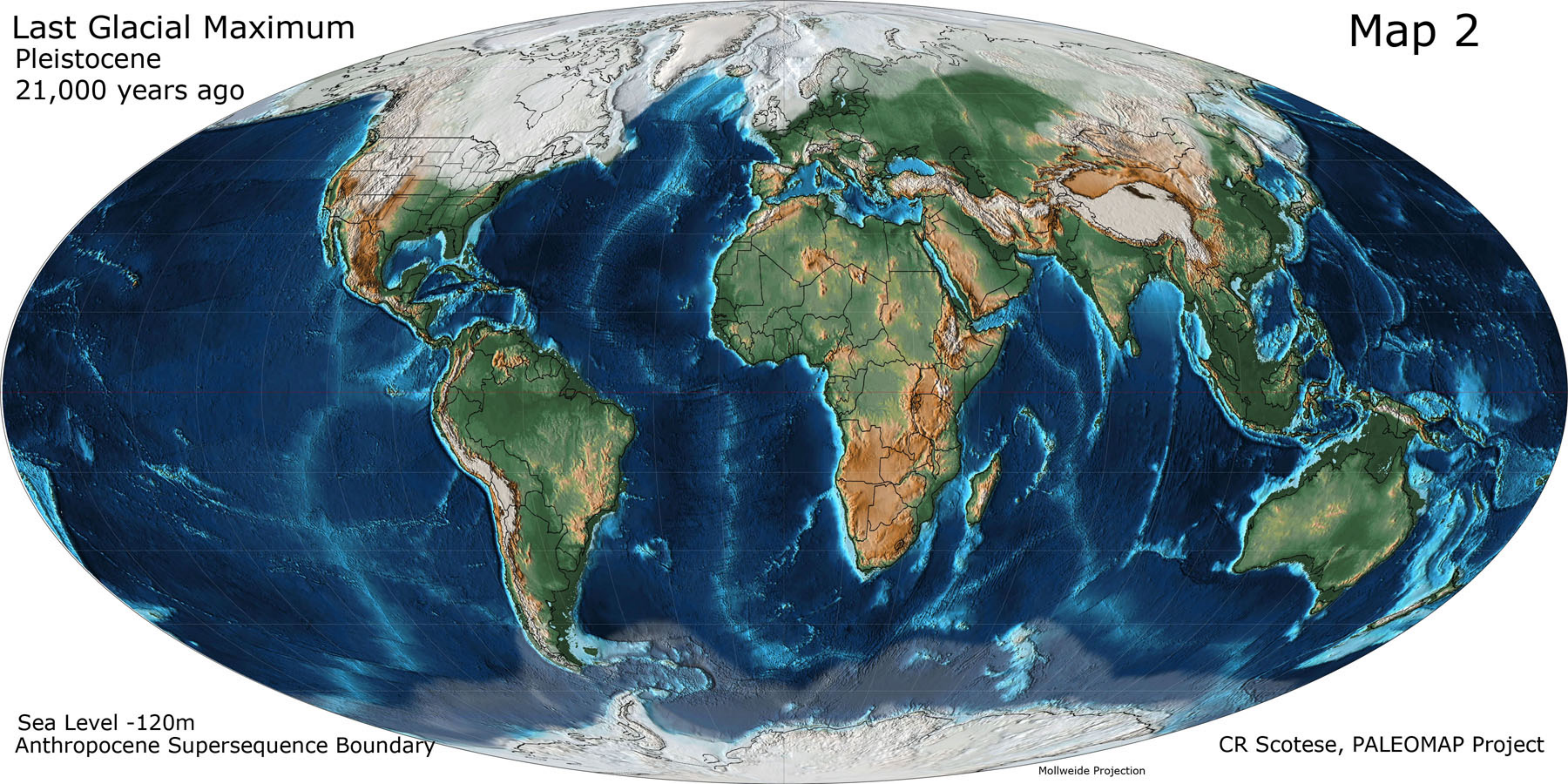
Map 1



Sea Level = Present-day
Transgressive Systems Track

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Mollweide Projection



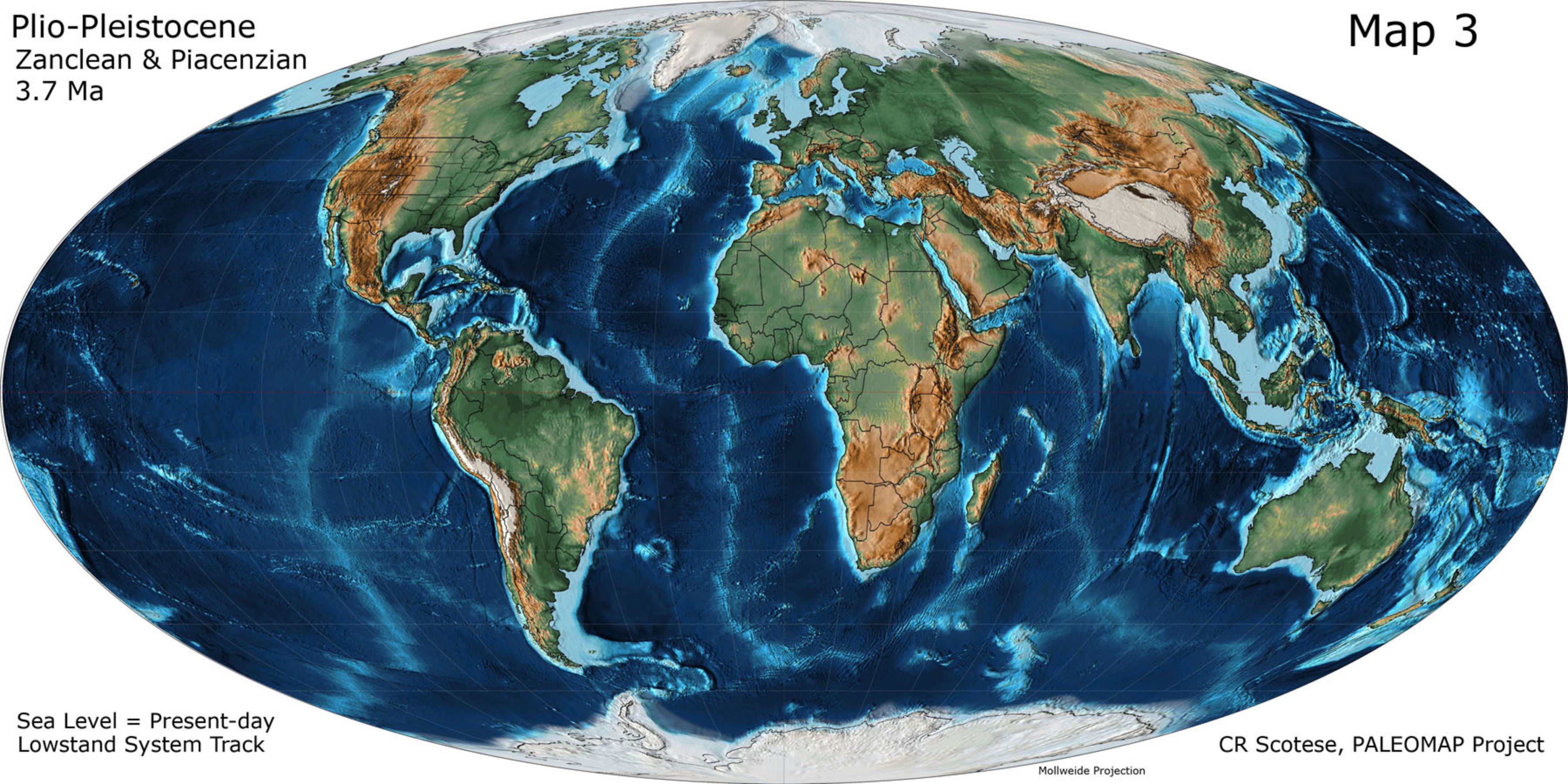
Last Glacial Maximum
Pleistocene
21,000 years ago

Map 2

Sea Level -120m
Anthropocene Supersequence Boundary

CR Scotese, PALEOMAP Project

Mollweide Projection



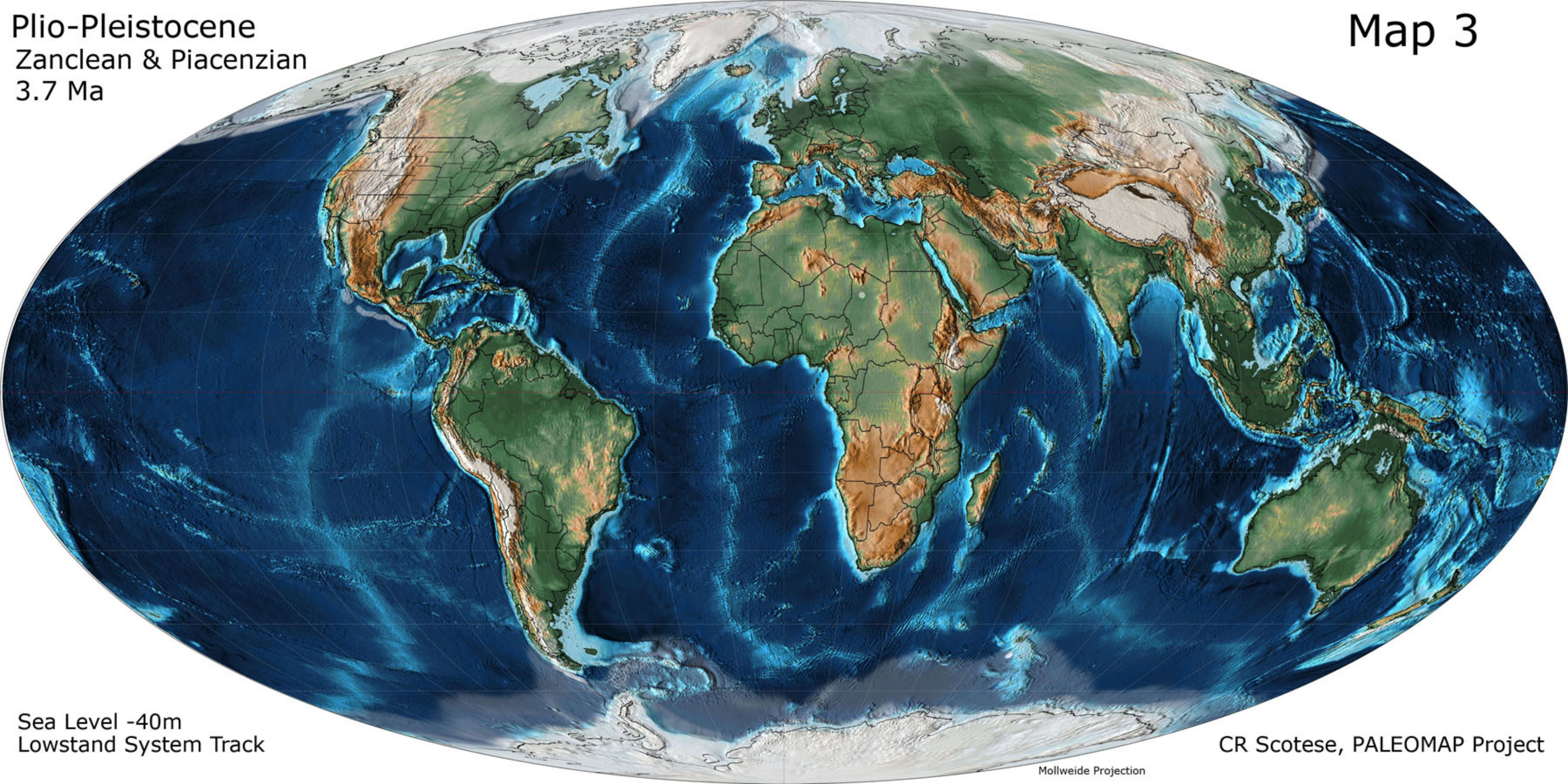
Plio-Pleistocene
Zanclean & Piacenzian
3.7 Ma

Map 3

Sea Level = Present-day
Lowstand System Track

CR Scotese, PALEOMAP Project

Mollweide Projection



Plio-Pleistocene
Zanclean & Piacenzian
3.7 Ma

Map 3

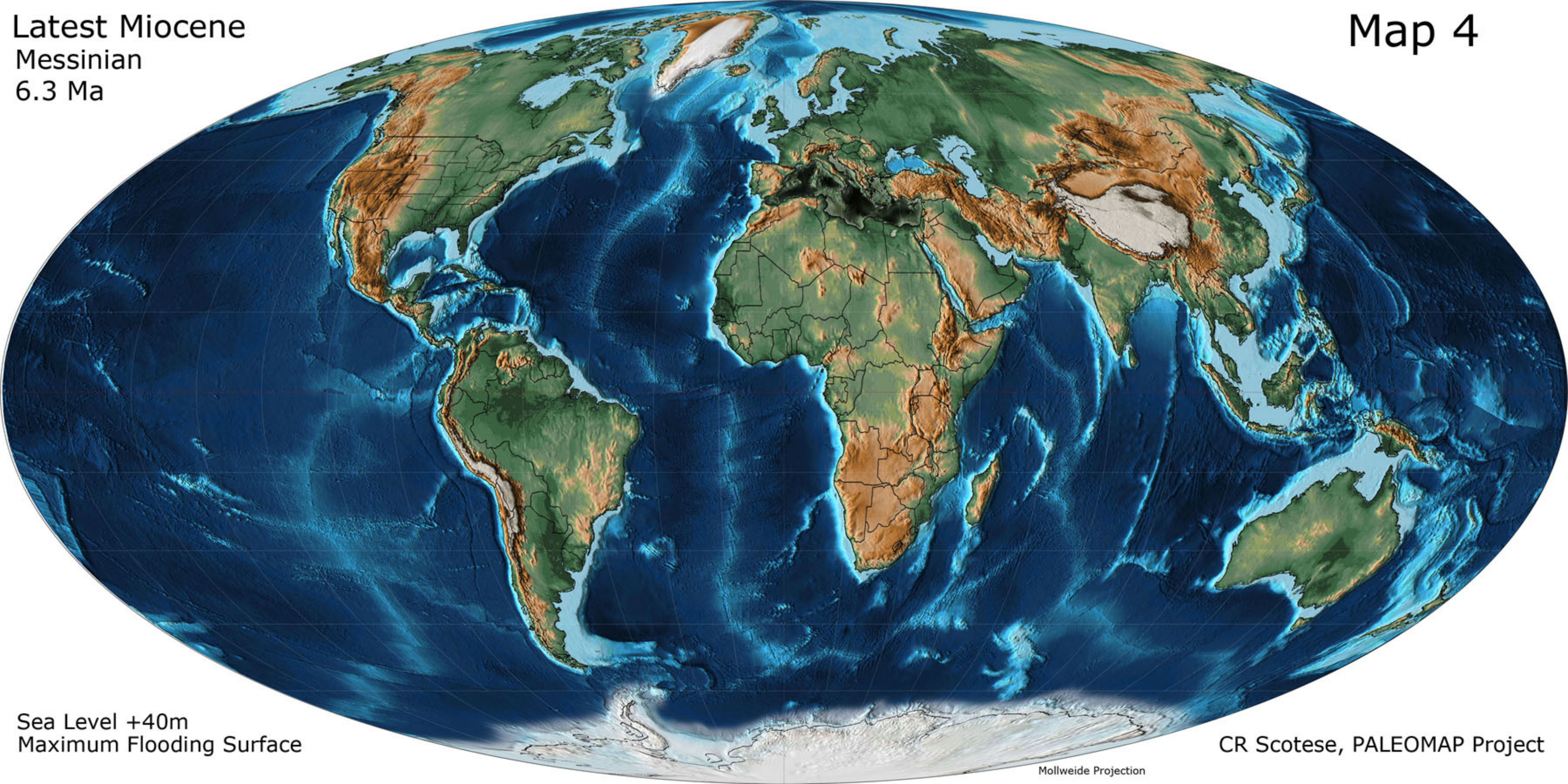
Sea Level -40m
Lowstand System Track

CR Scotese, PALEOMAP Project

Mollweide Projection

Latest Miocene
Messinian
6.3 Ma

Map 4



Sea Level +40m
Maximum Flooding Surface

CR Scotese, PALEOMAP Project

Mollweide Projection

Middle/Late Miocene
Serravallian & Tortonian
10.5 Ma

Map 5



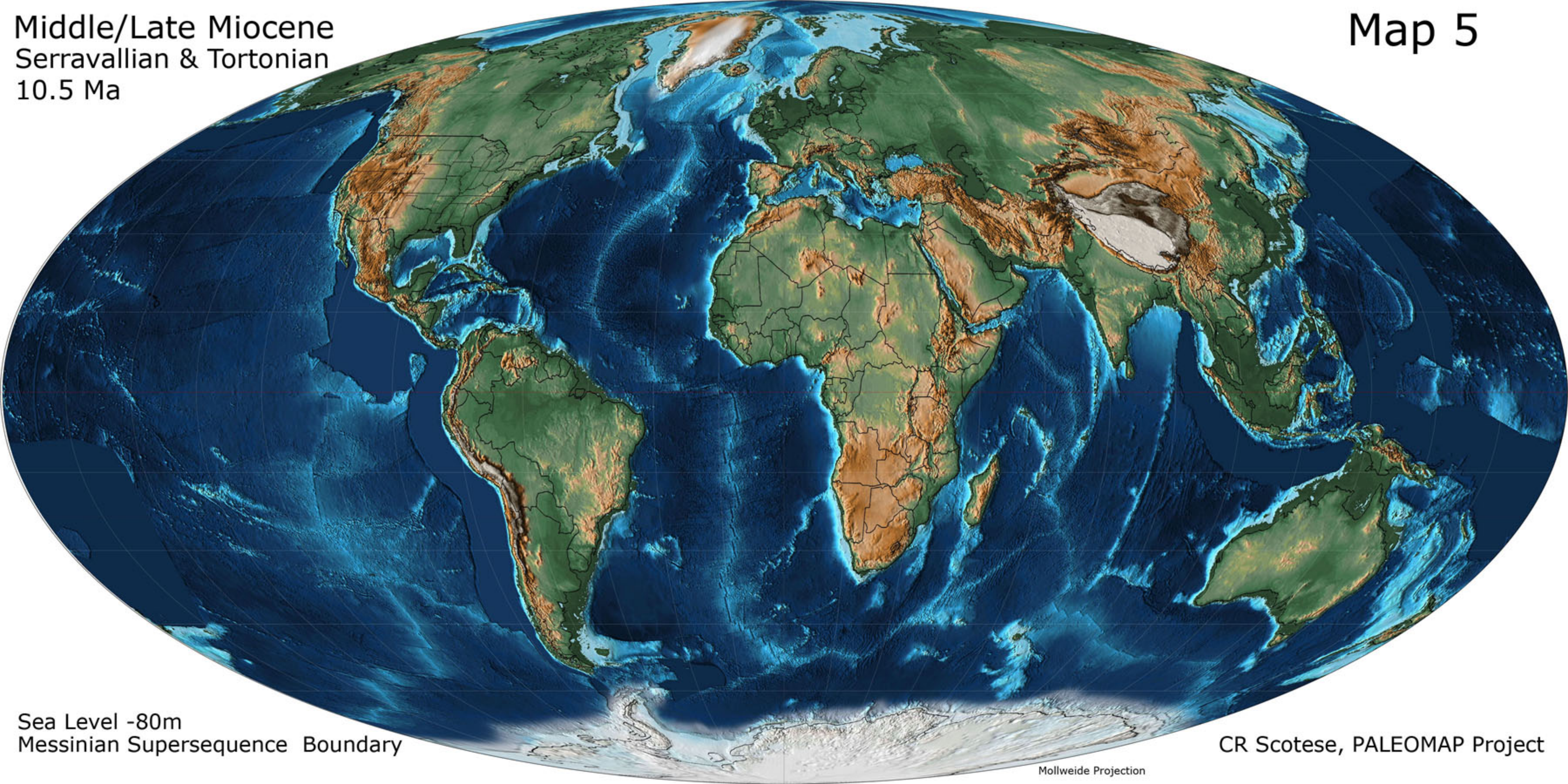
Sea Level +80m
Maximum Flooding Surface

CR Scotese, PALEOMAP Project

Mollweide Projection

Middle/Late Miocene
Serravallian & Tortonian
10.5 Ma

Map 5



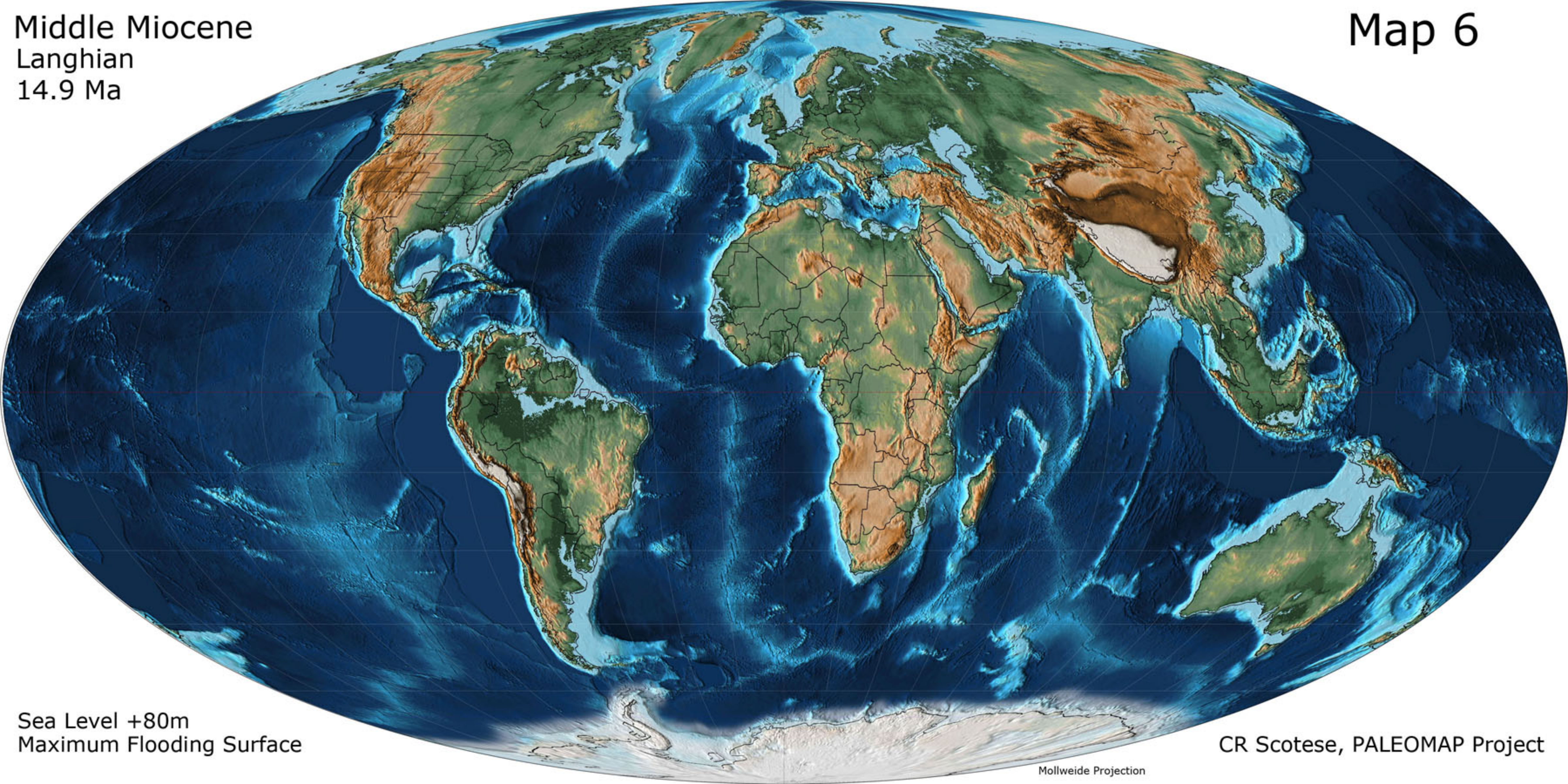
Sea Level -80m
Messinian Supersequence Boundary

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Mollweide Projection

Middle Miocene
Langhian
14.9 Ma

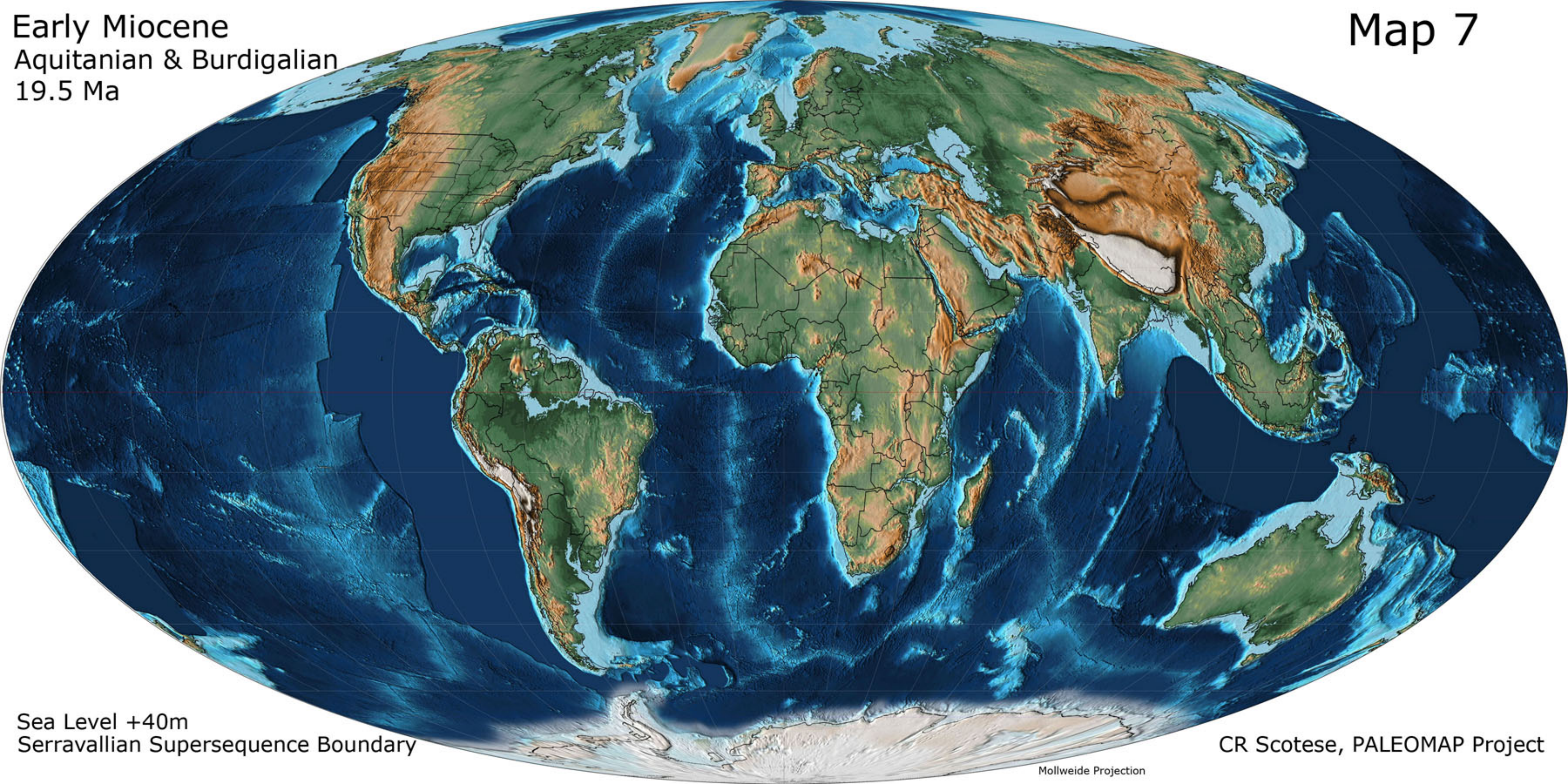
Map 6



Sea Level +80m
Maximum Flooding Surface

CR Scotese, PALEOMAP Project

Mollweide Projection



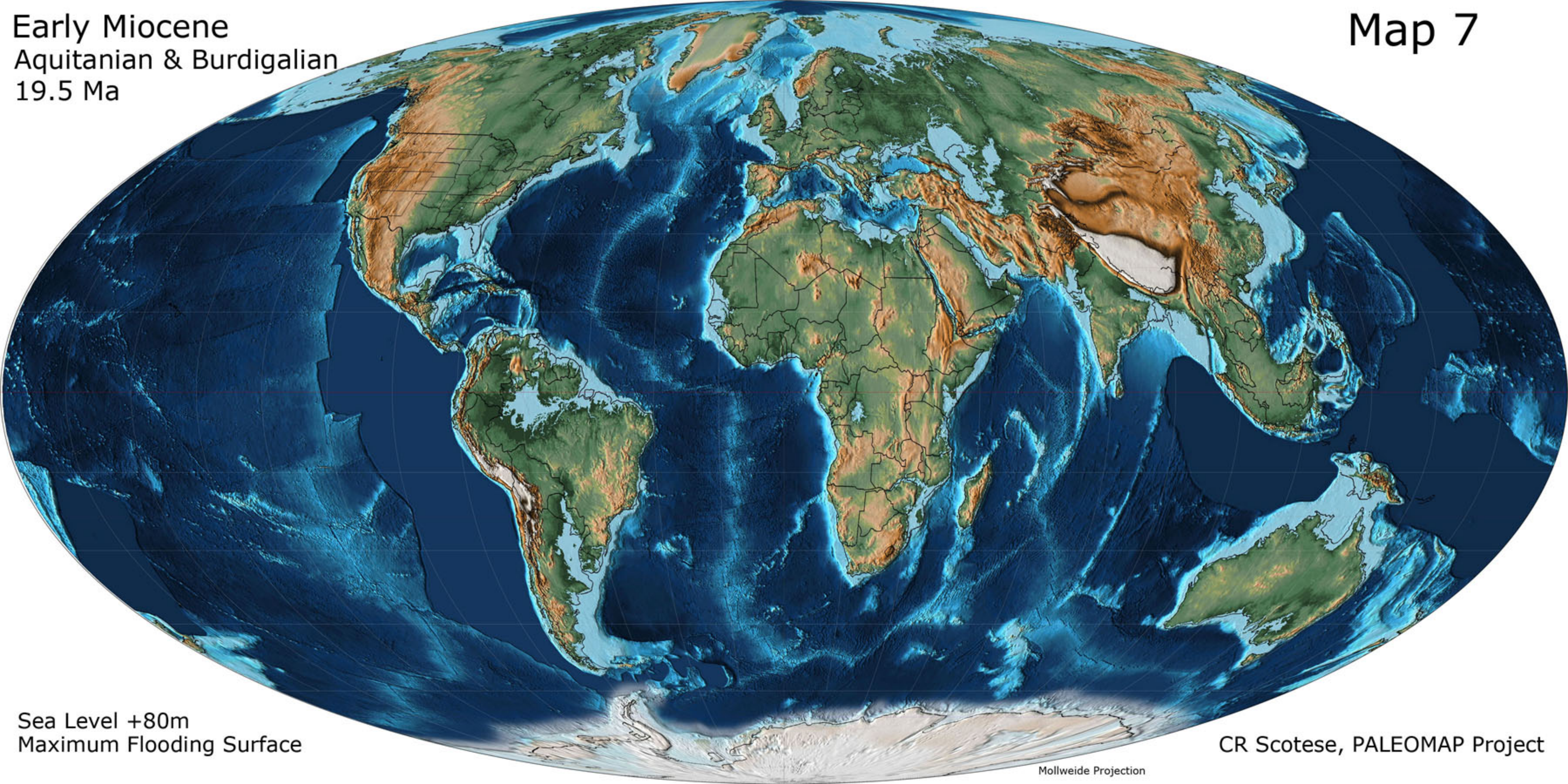
Early Miocene
Aquitanian & Burdigalian
19.5 Ma

Map 7

Sea Level +40m
Serravallian Supersequence Boundary

CR Scotese, PALEOMAP Project

Mollweide Projection



Early Miocene
Aquitanian & Burdigalian
19.5 Ma

Map 7

Sea Level +80m
Maximum Flooding Surface

CR Scotese, PALEOMAP Project

Mollweide Projection