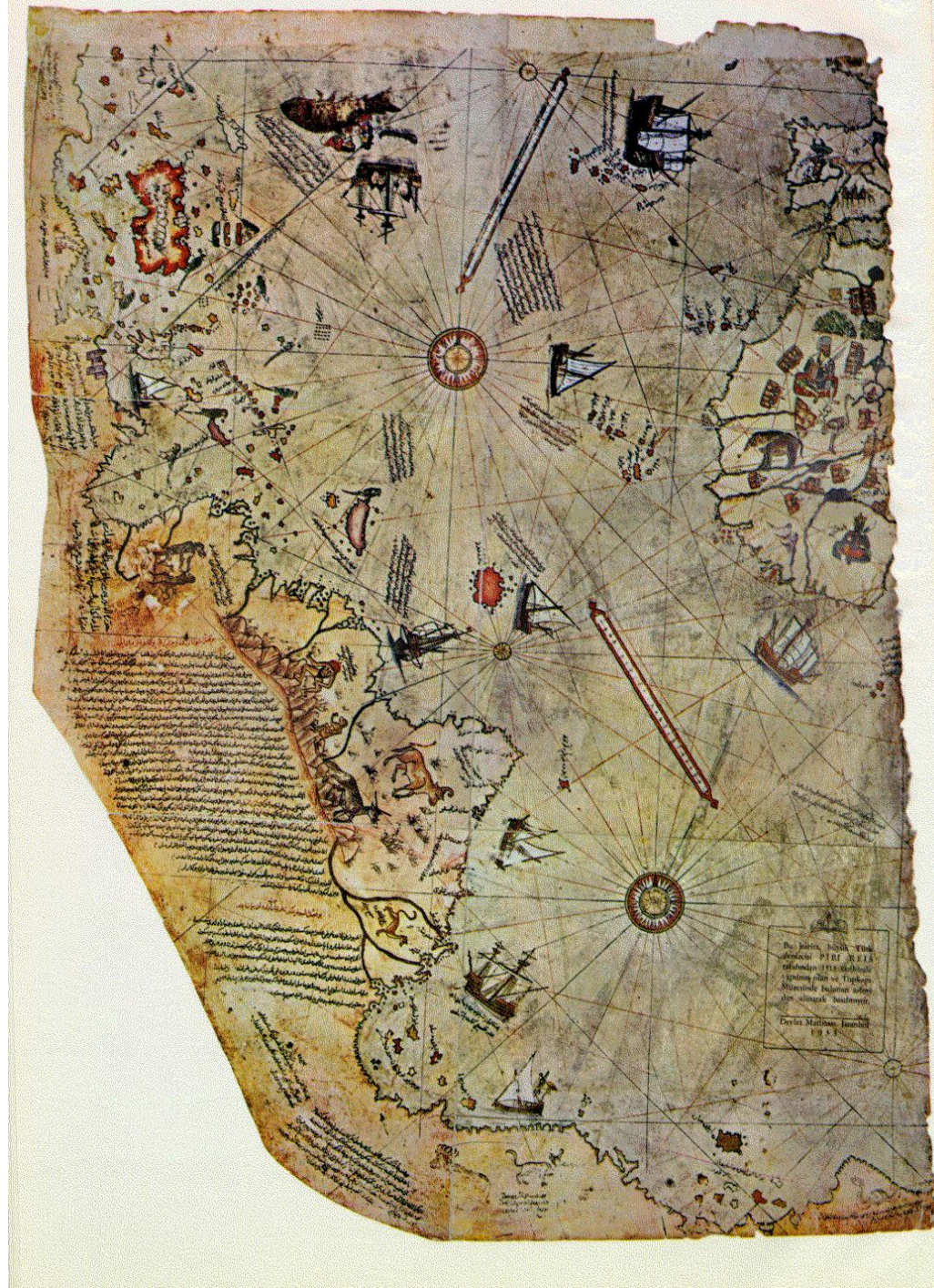


The Piri Reis Map

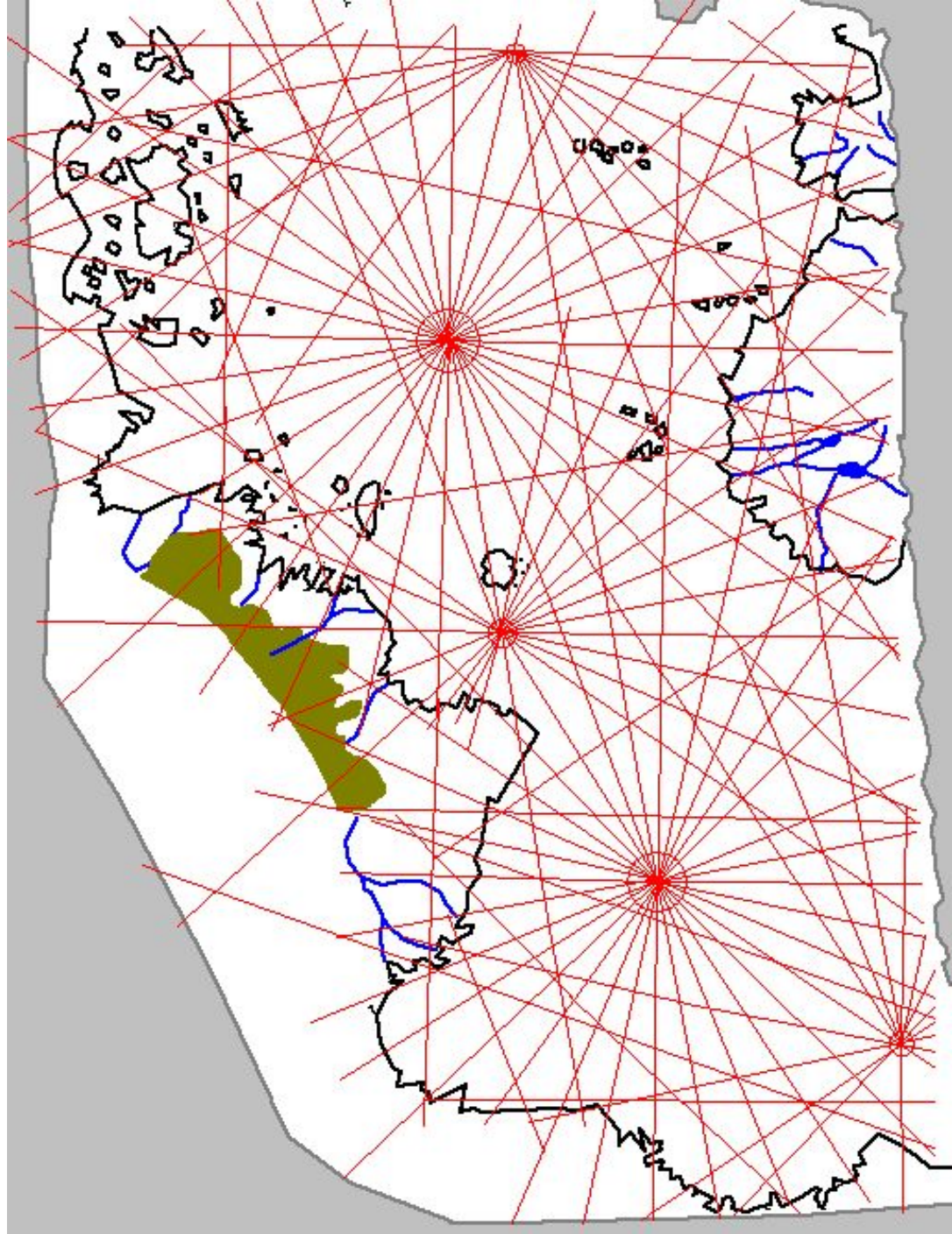
Steven Dutch

University of Wisconsin-Green Bay

The Piri Reis Map

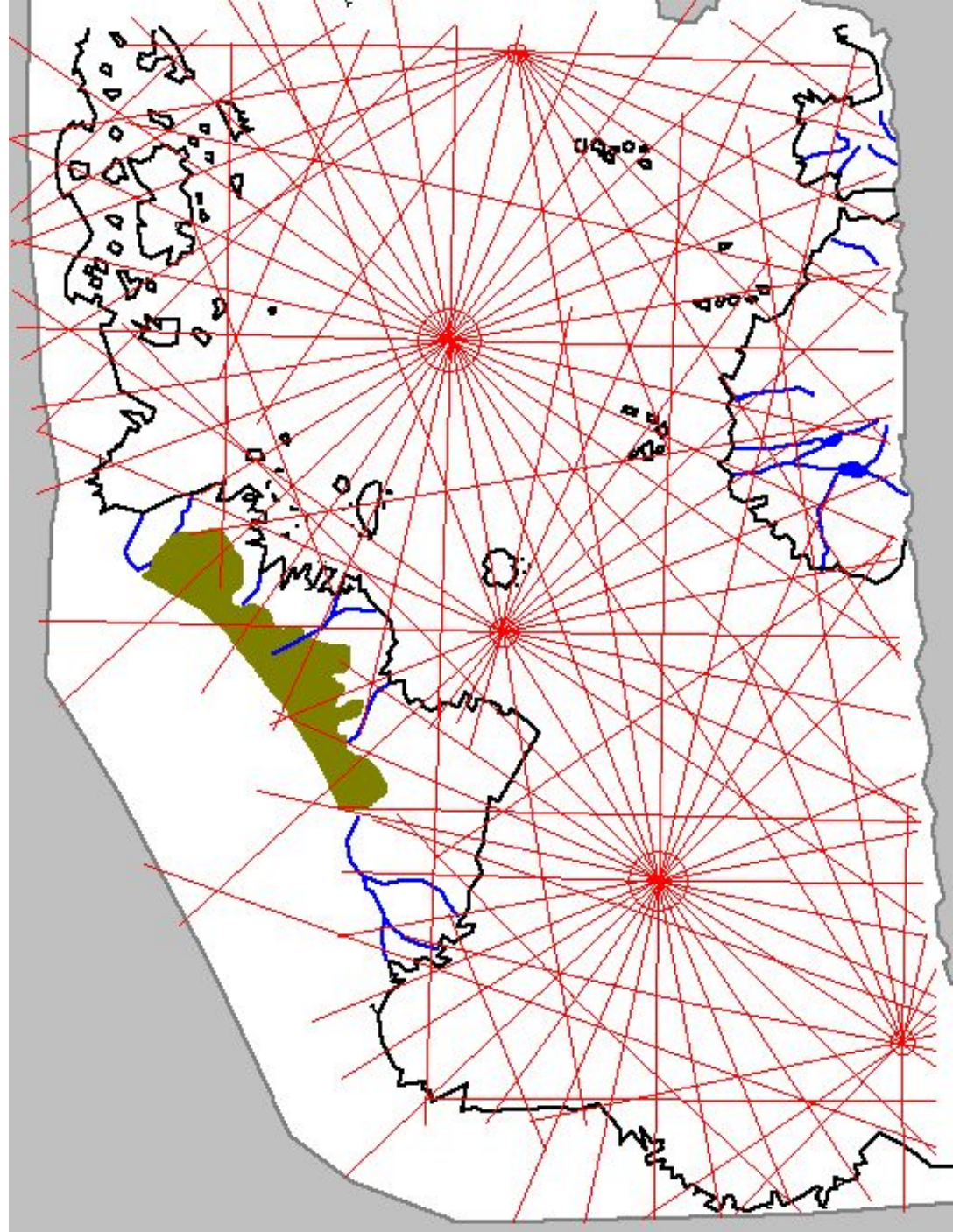


A Portolan Chart



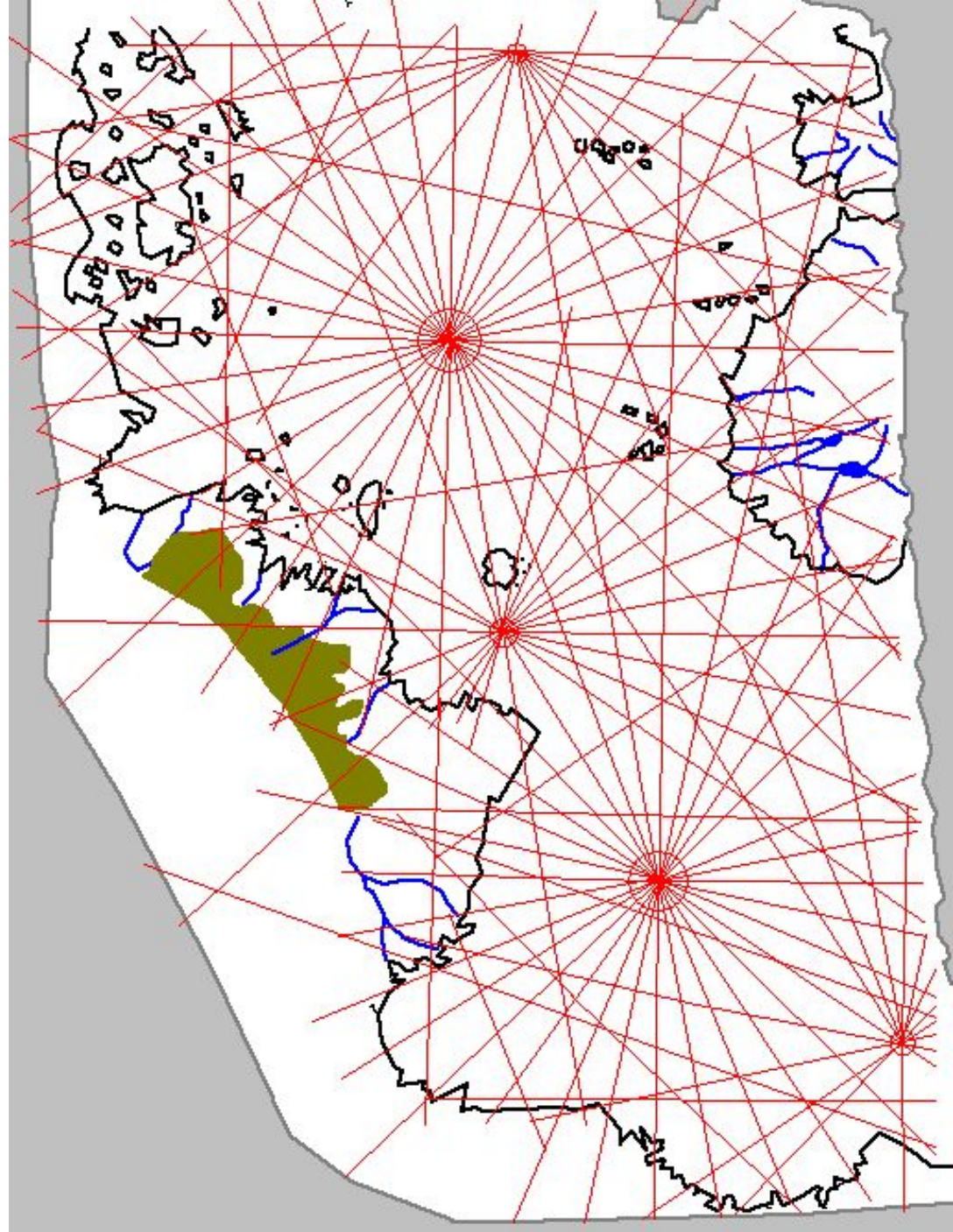
The Portolan Grid

- Equator and 45N are quite accurate
- Map ends just below 45S
- Intermediate Roses Might Represent Tropics (23.5 N or S) or 1/8 of a Hemisphere (22.5 N or S)



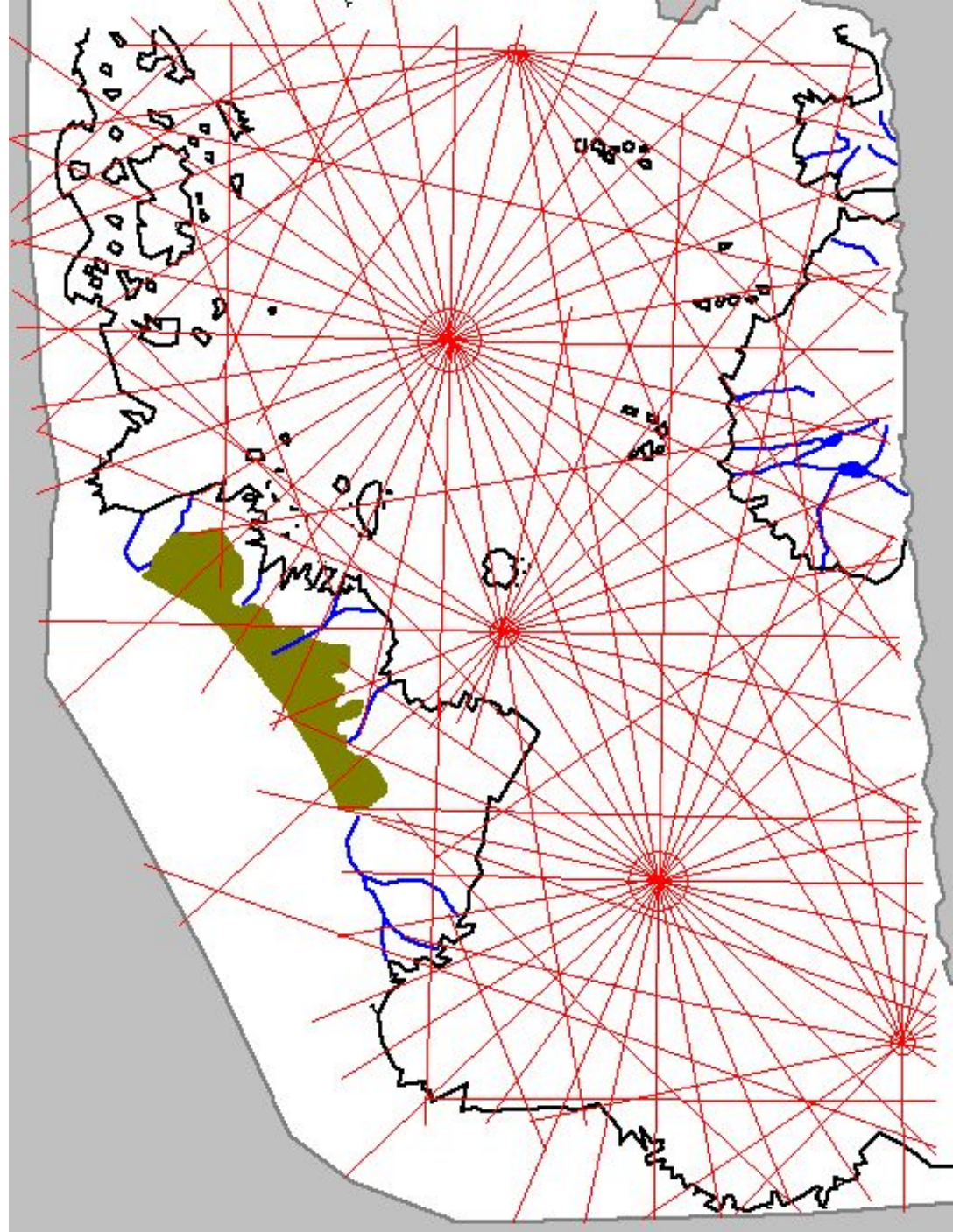
The Portolan Grid

- Radiating Lines are Compass Bearings
- Meridians and Parallels are perpendicular
- This is a Cylindrical Map Projection



Quality of Cartography

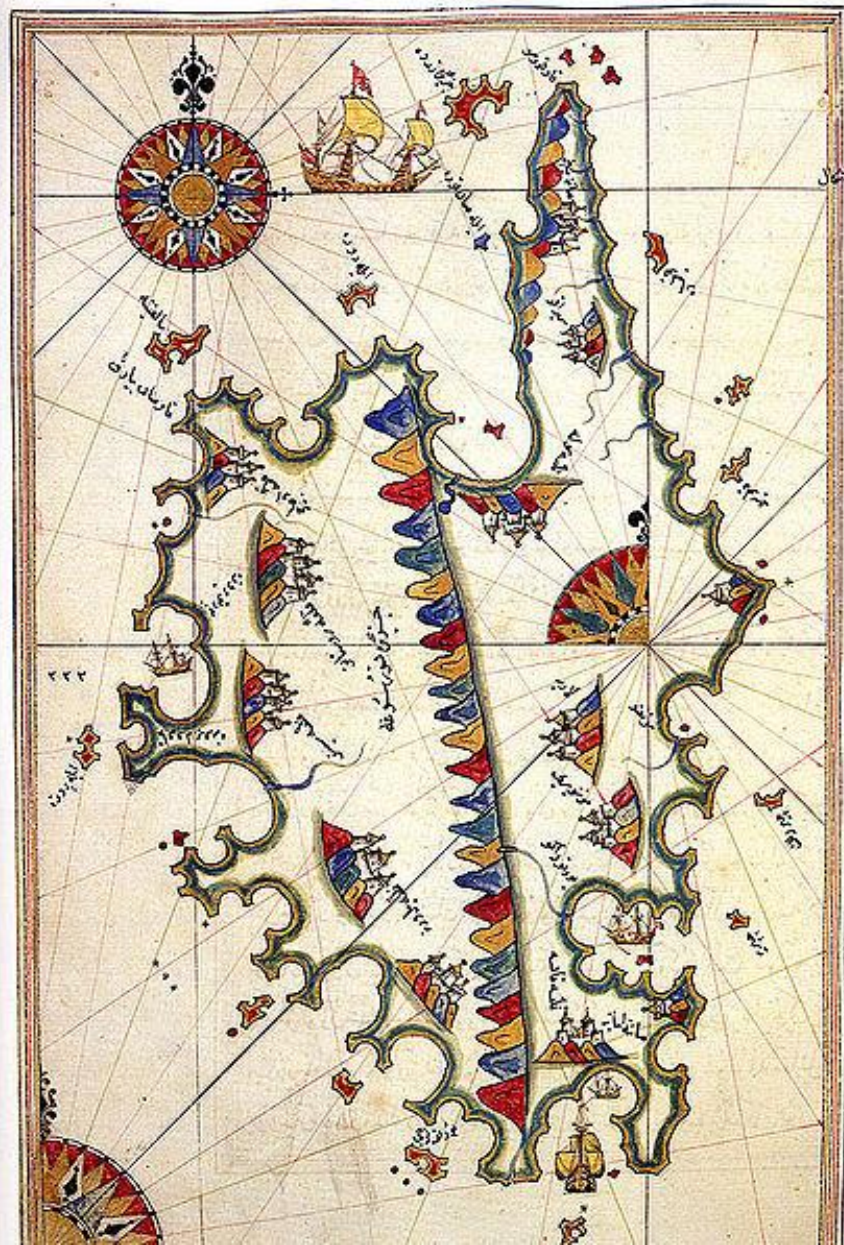
- Europe and Africa
 - Coasts Pretty Good
 - Rivers Inaccurate
- Brazil:
Recognizable
- North America and South of Brazil:
Very Poor



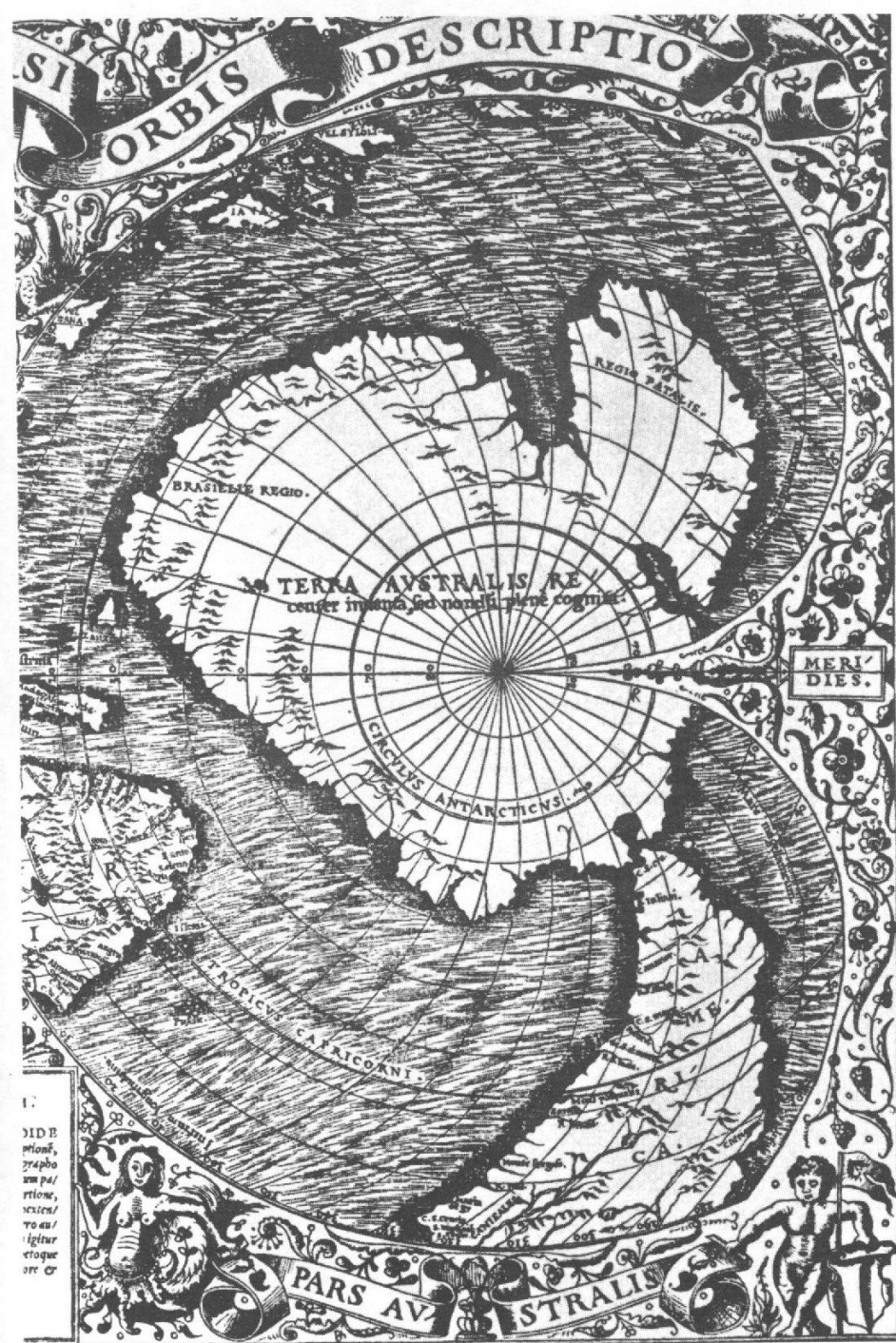
Interpreting Ancient Maps

- Any Ancient Map is Only as Good as Its Depiction of Well Explored Areas
- Things of Practical Use to Mariners (Capes and Islands) Often Exaggerated
- Latitude is the Most Likely Parameter to be Accurate; Longitude Largely Guesswork
- Imaginary Features Often Incorporated and Gaps Filled In

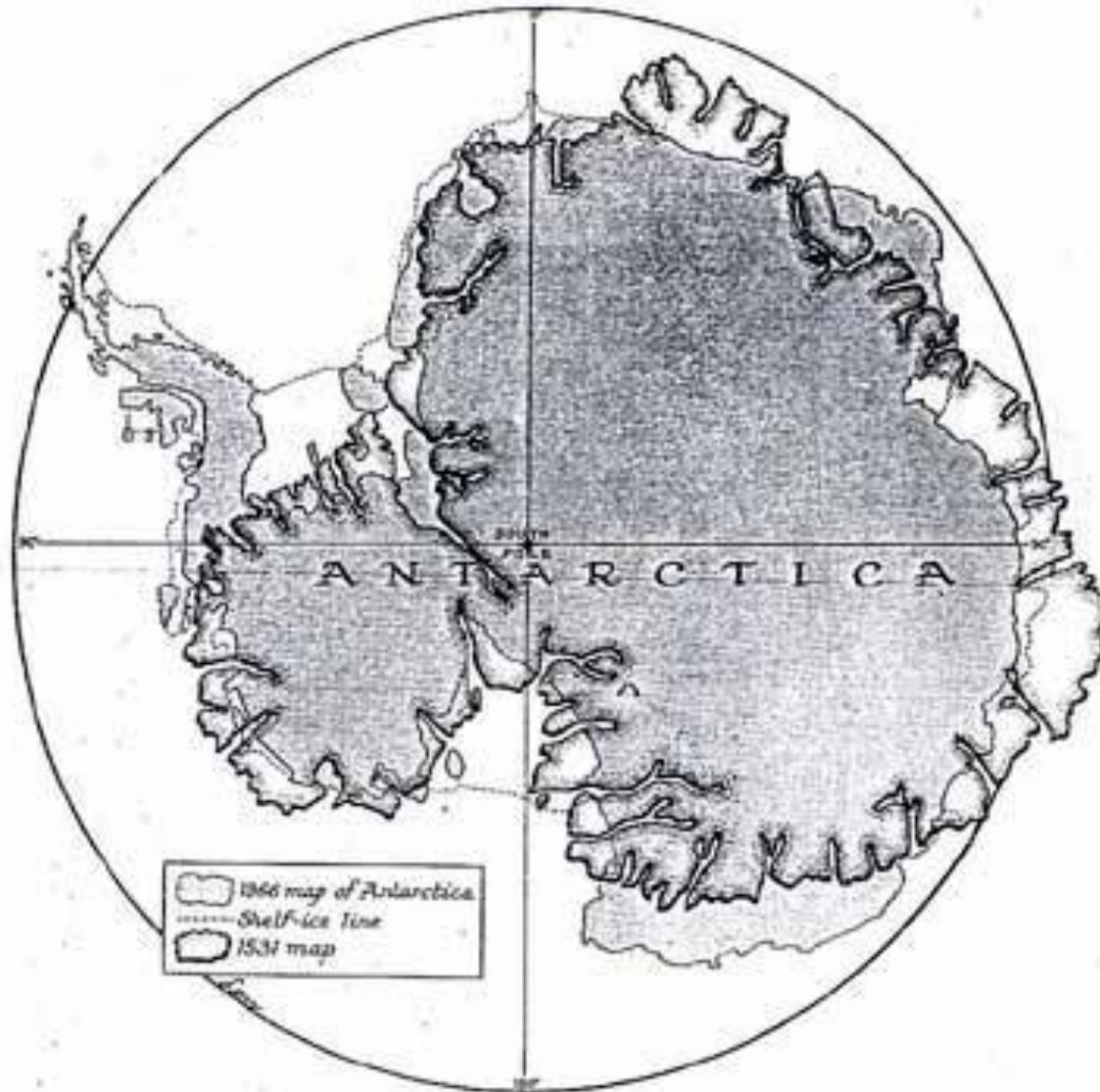
Corsica by Piri Reis



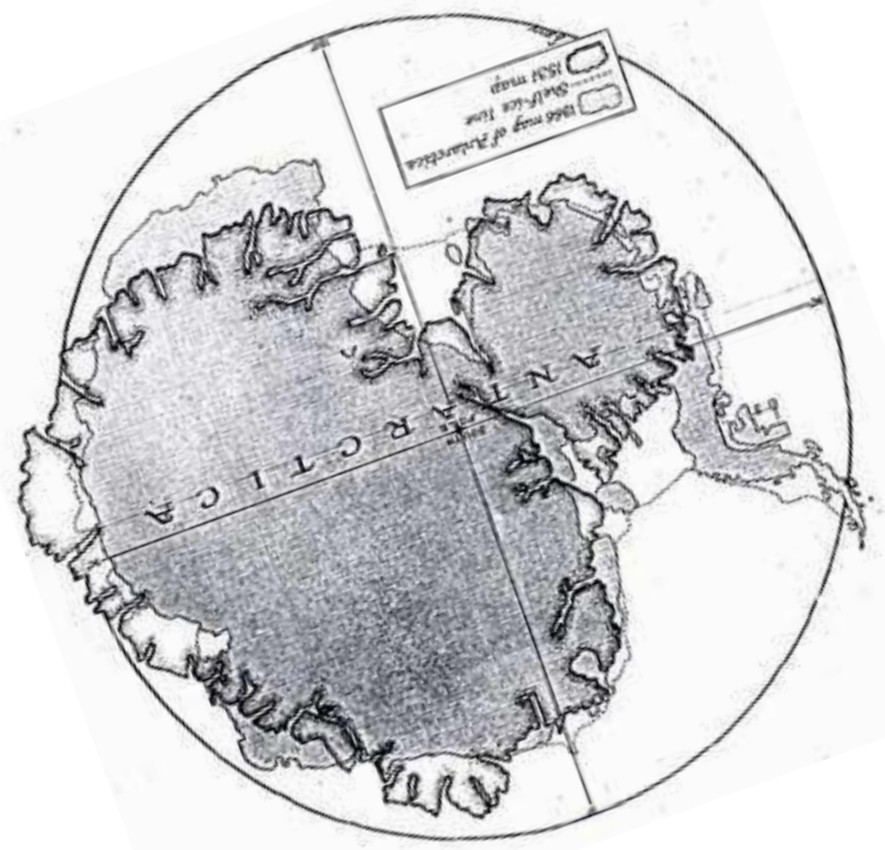
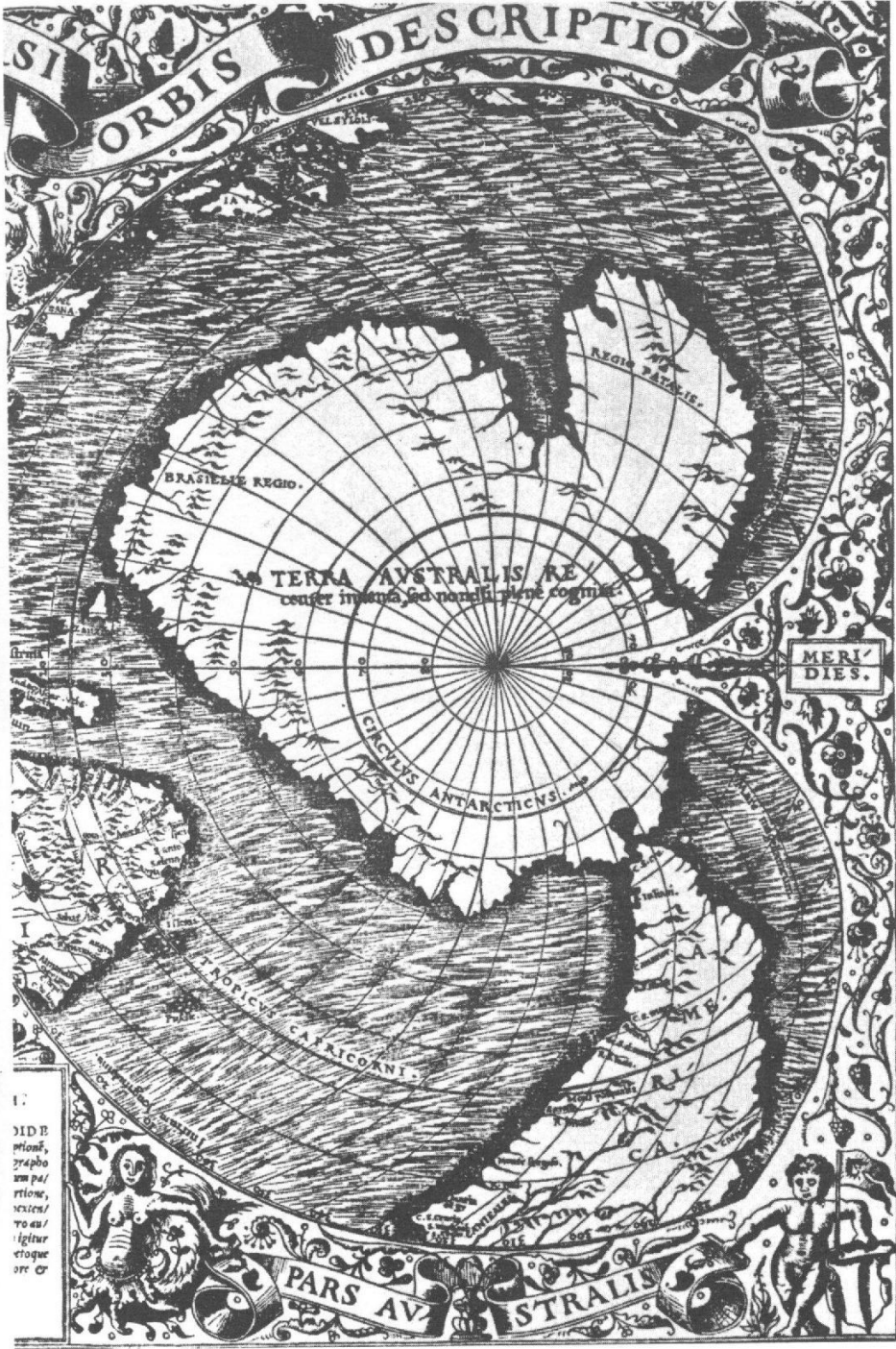
The Orontius Finaeus Map, 1531

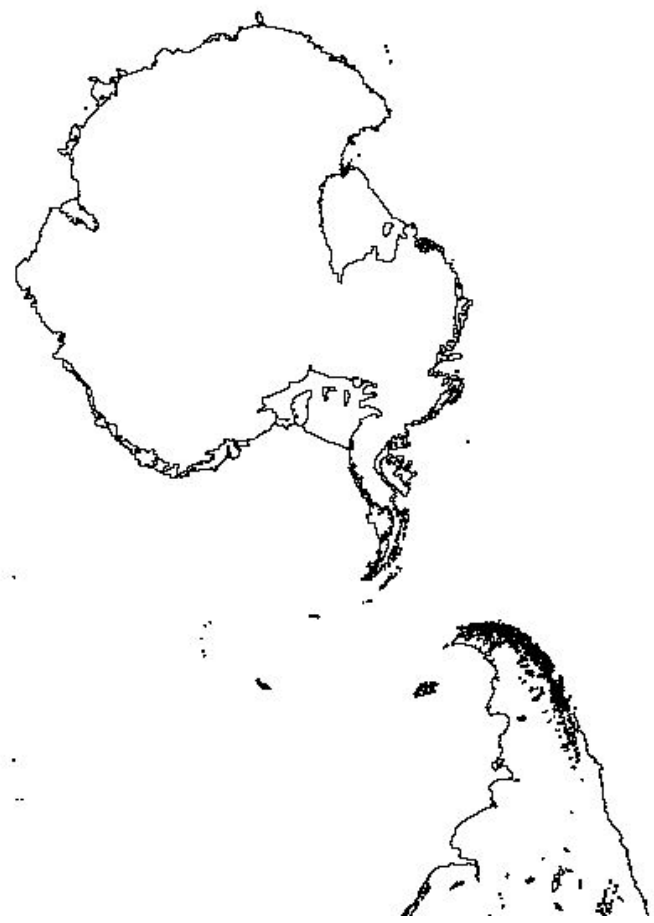
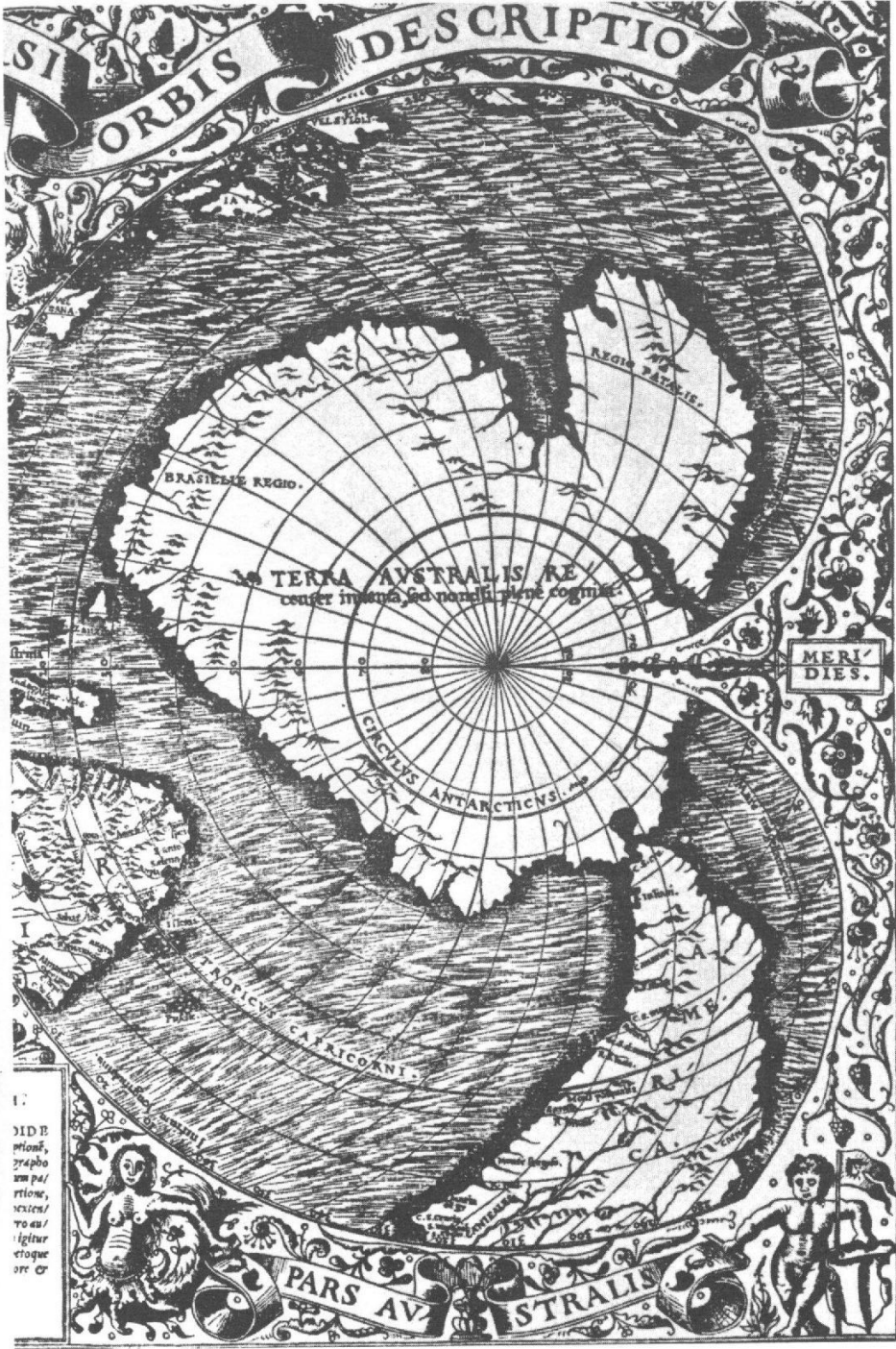


Antarctica?

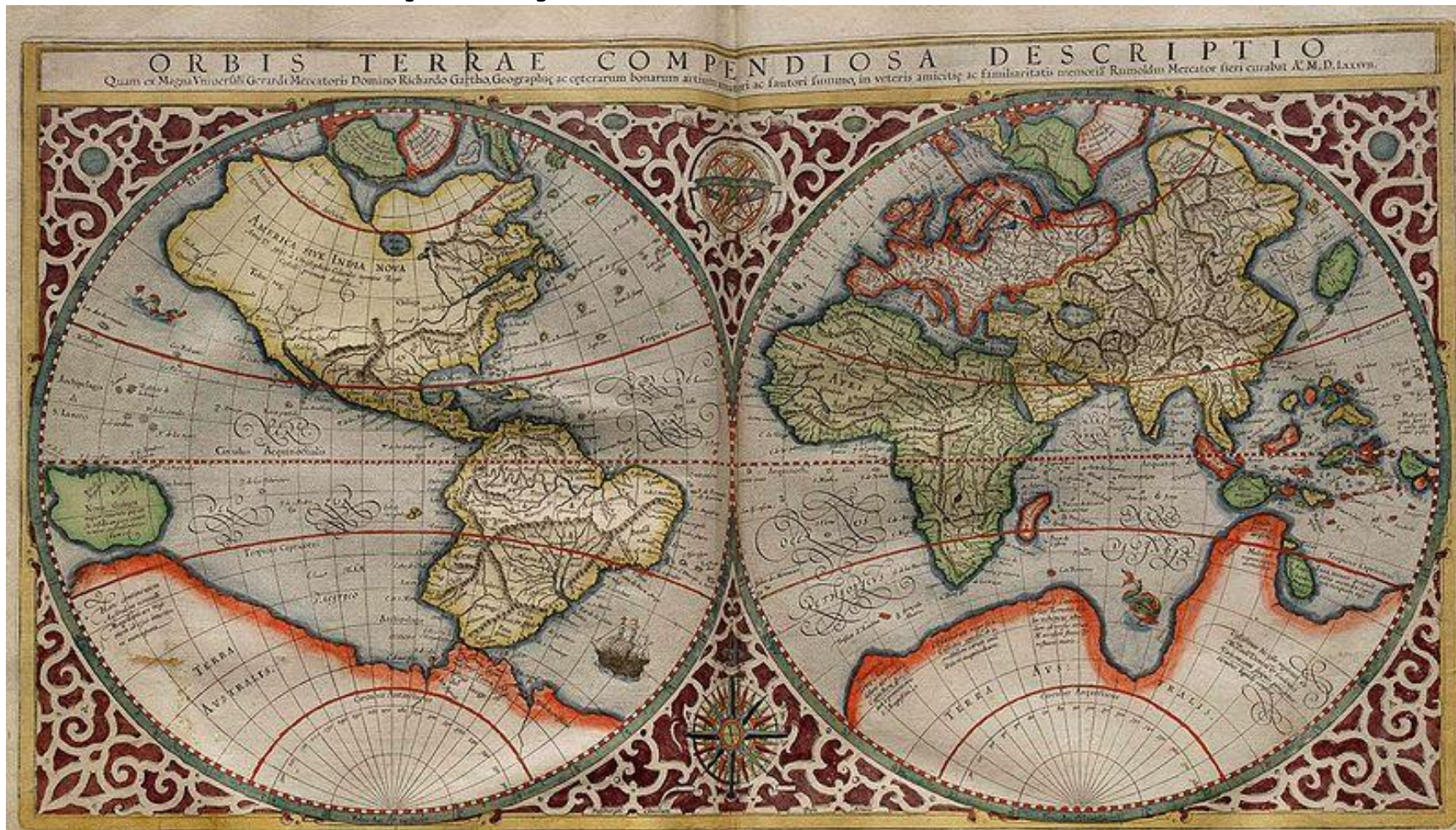


- <http://www.goldenageproject.org.uk/112antarctica.php>





Map by Mercator, 1587

DE MYNOCREATIONE *agrostoides* *perovskiae* *calceolae*[illegible][illegible][illegible][illegible]

Hendrik Hondius Map, 1630

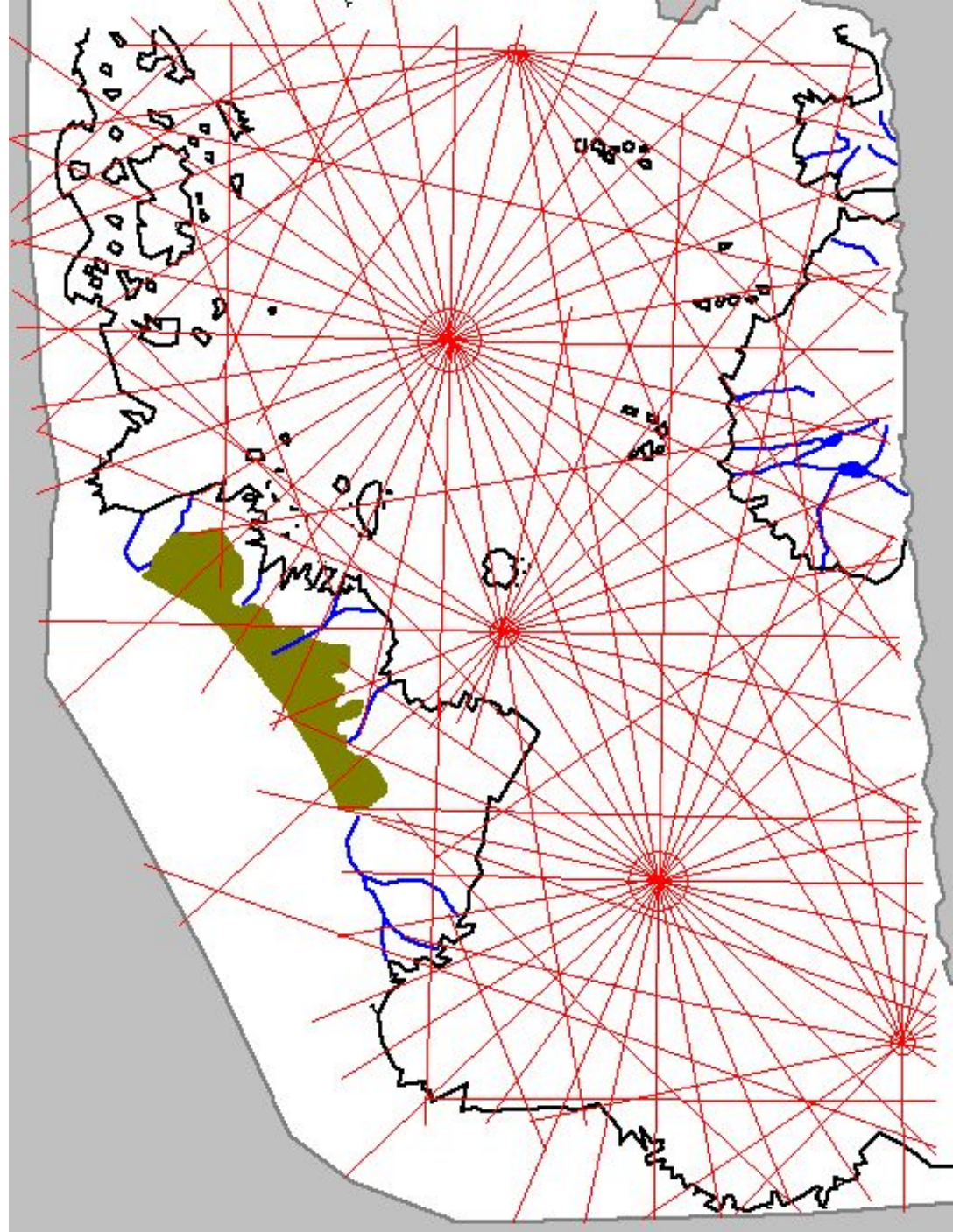


A Vicious Circle

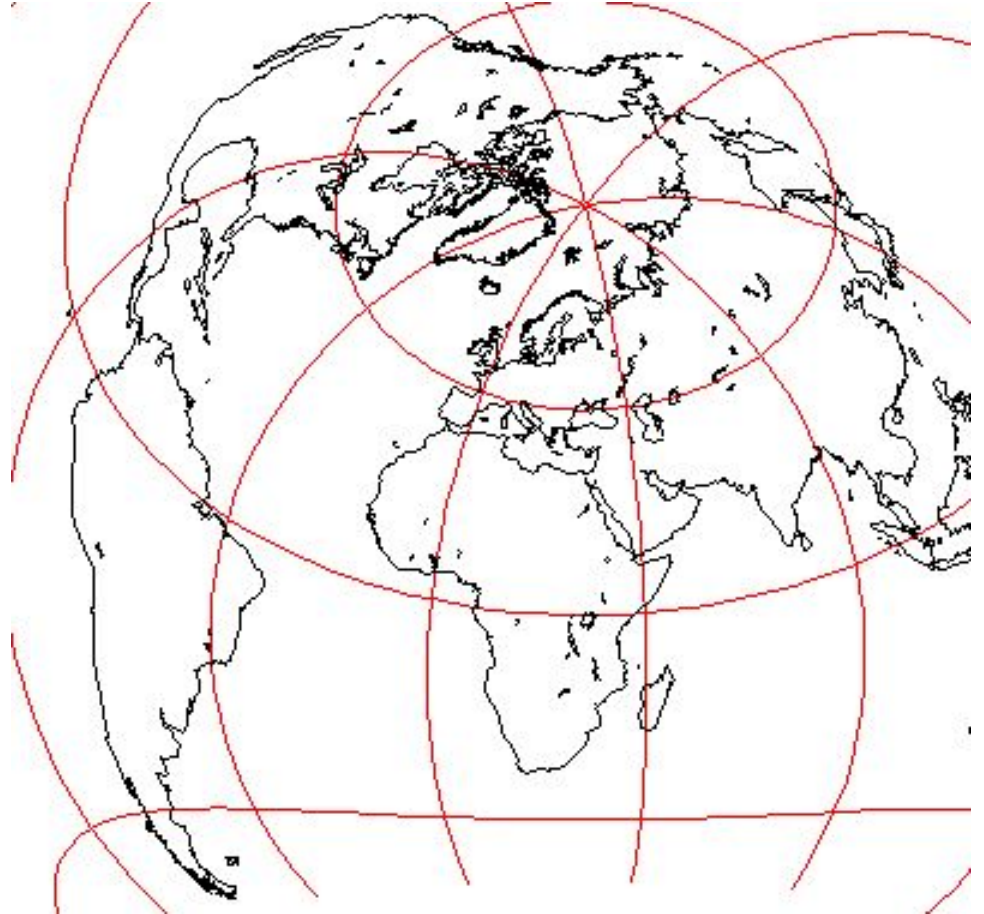
- Without Accurate Navigation, Accurate Maps Weren't Necessary
 - Maps Were Largely Schematic
- Without Accurate Maps, there was no Point in Trying to Navigate Precisely
- Coastal Charts, on the Other Hand, Were Valuable
- Even Into Modern Times, Many Questioned the Need for Accurate Mapping

What's Missing?

- The Pacific Ocean
- Isthmus of Panama
- Drake Passage
 - Deep Water: Was Never Dry Land
 - No Evidence of Antarctic Ice Connection
- *Any* Indisputable Feature of Antarctica

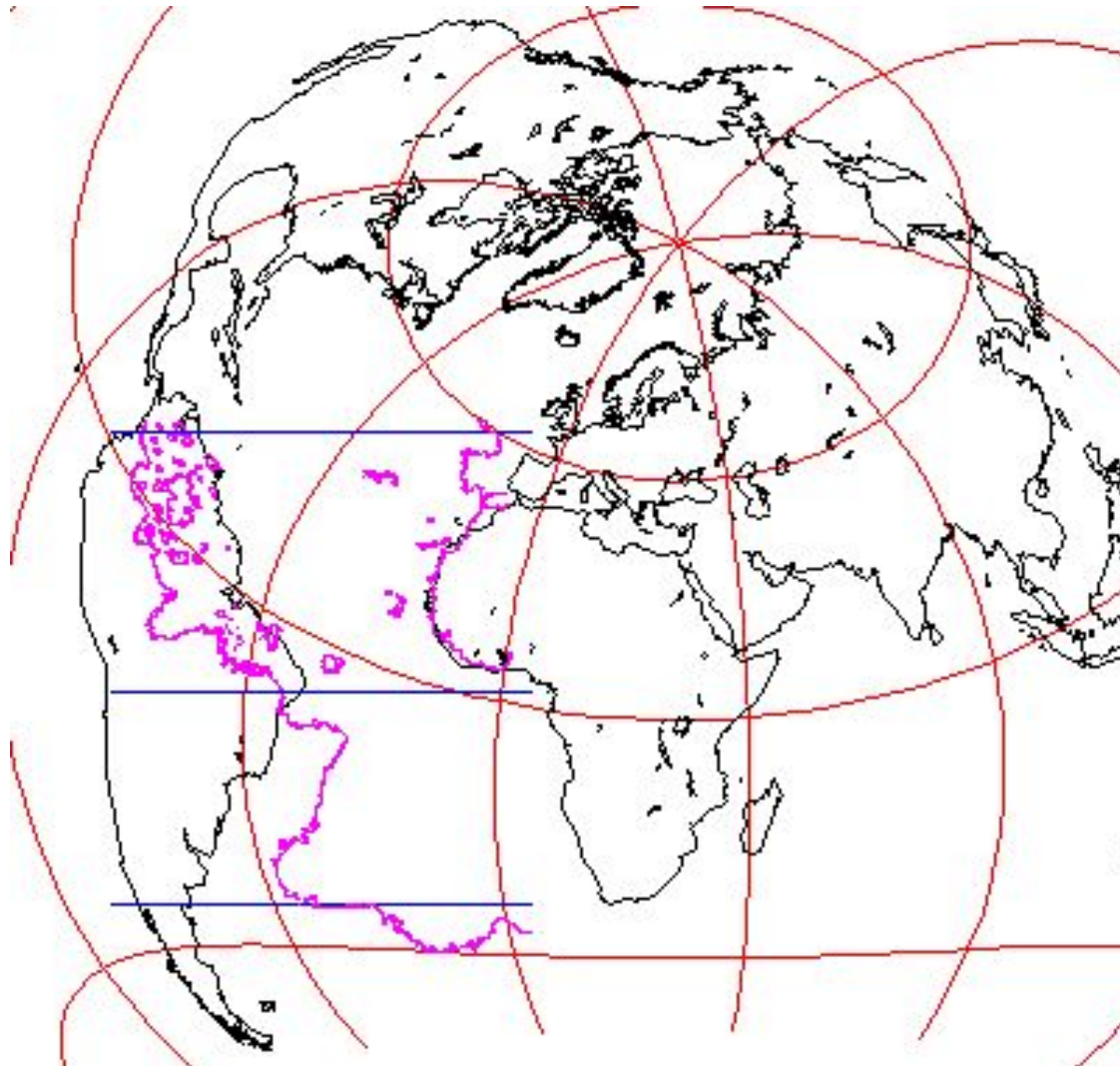


Arm-Waving Looks Persuasive

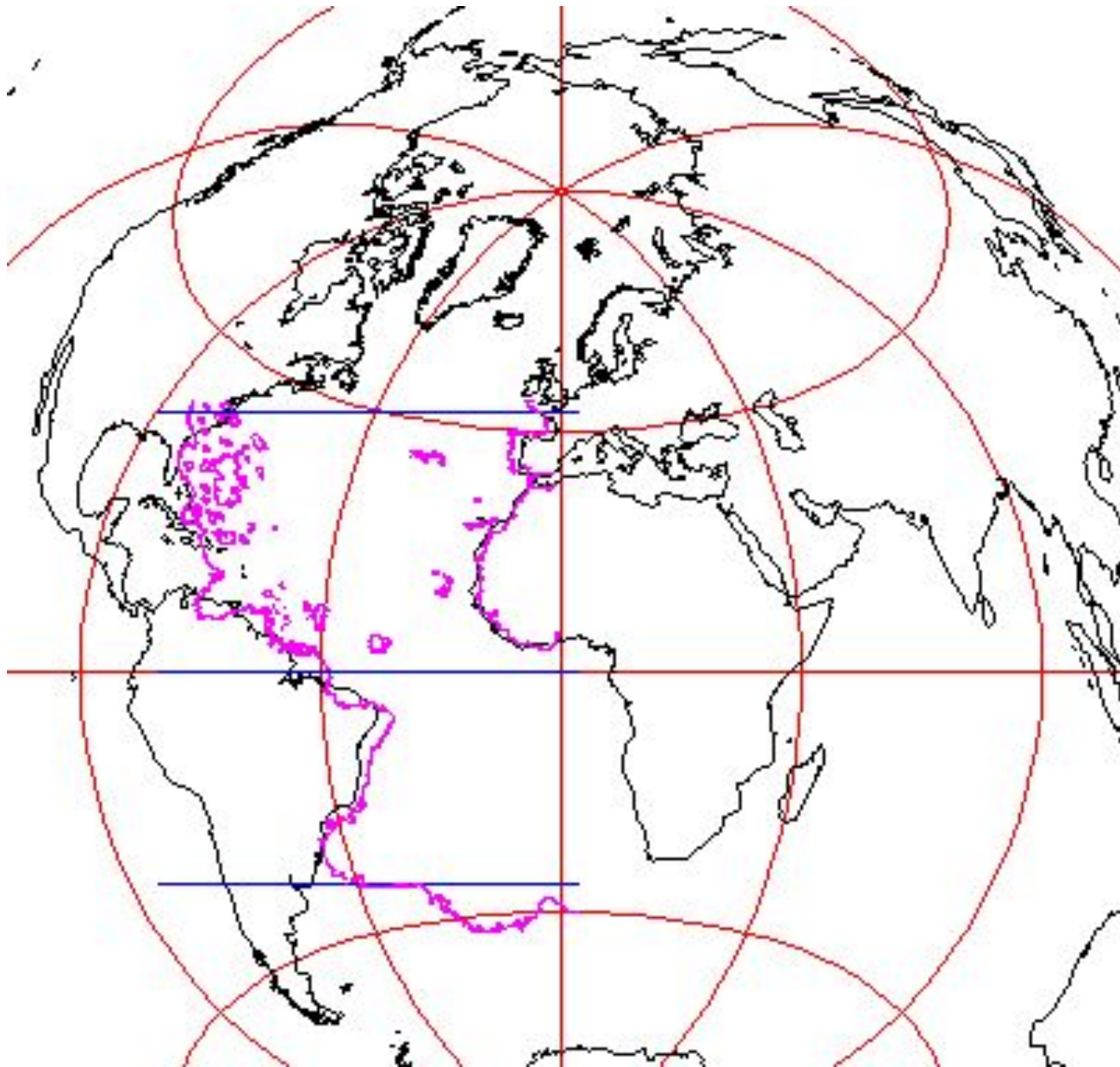


Azimuthal Equidistant Projection
Centered on Cairo

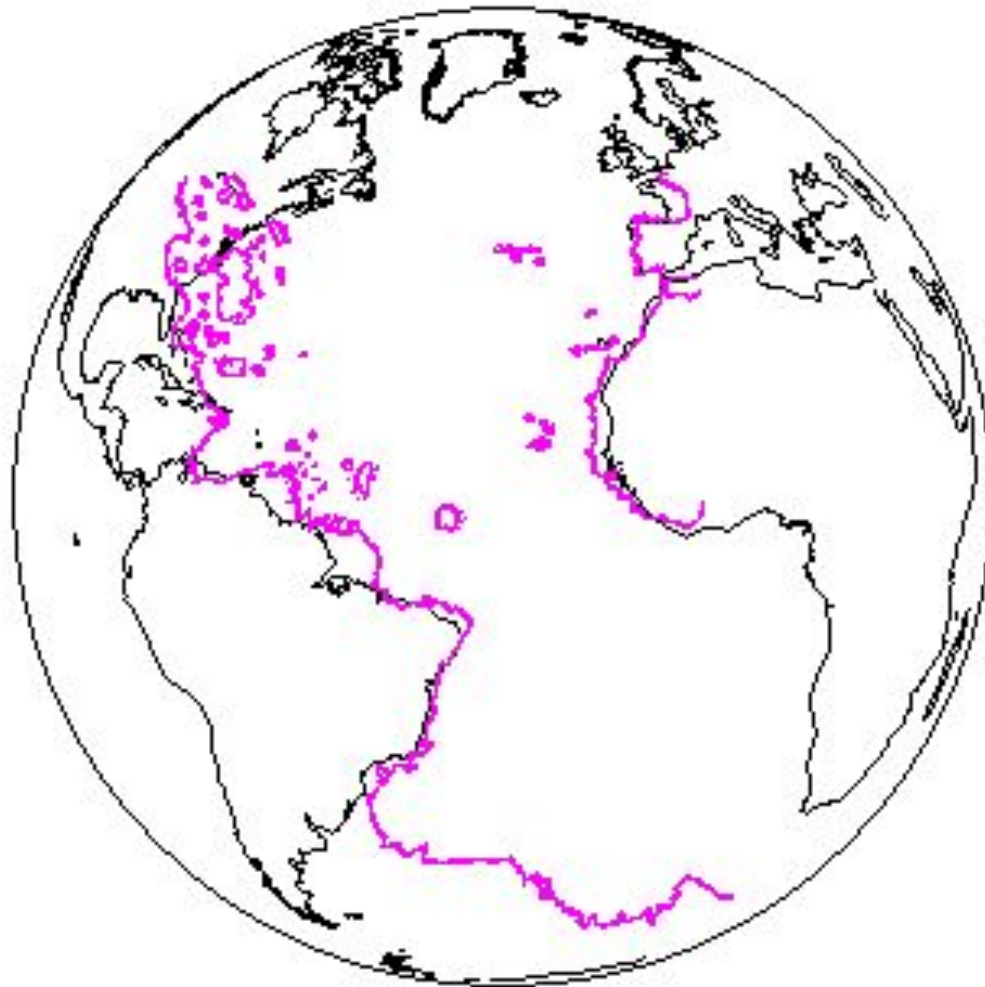
Detailed Comparison Doesn't



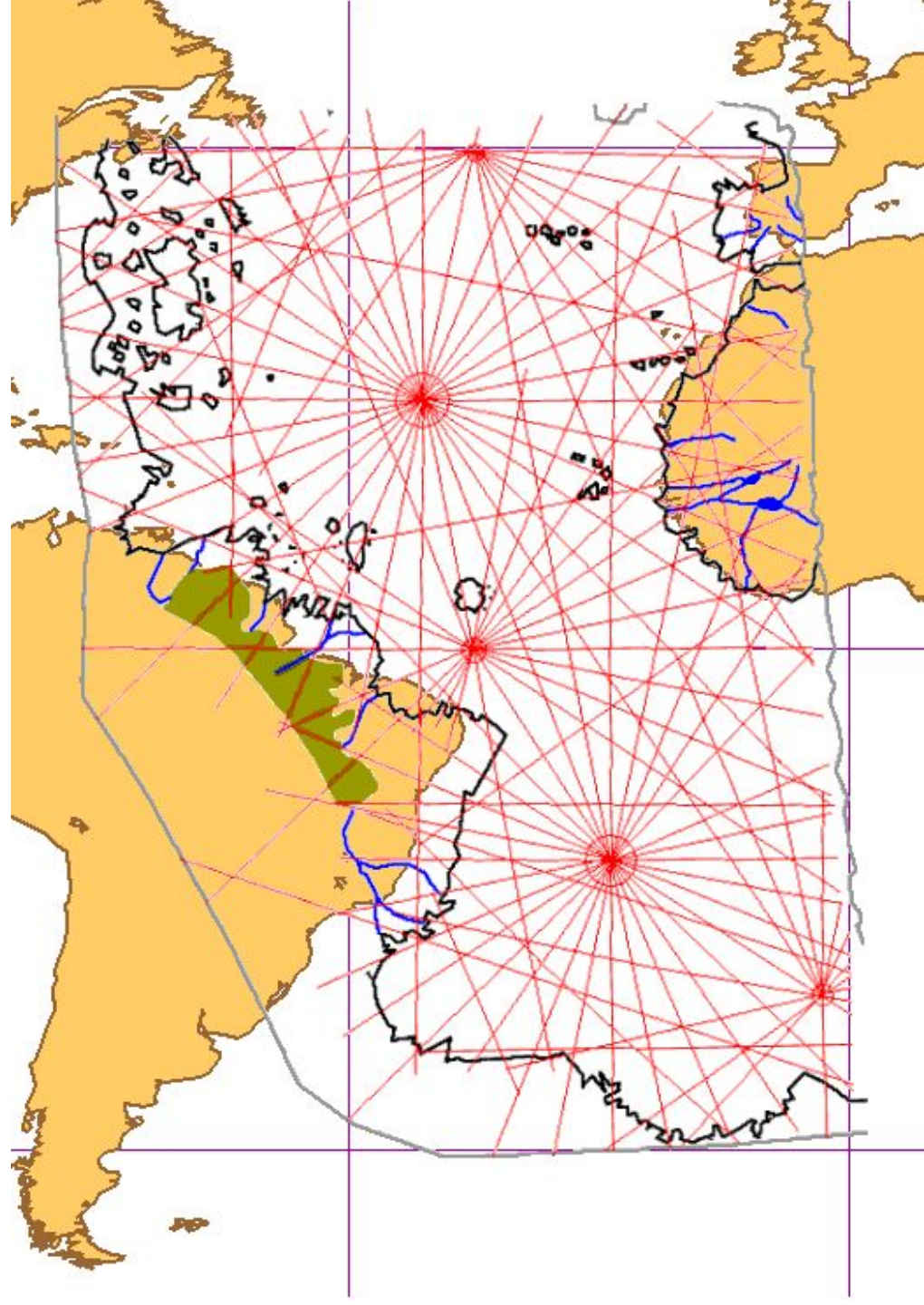
Azimuthal Equidistant Projection Centered on 0,0



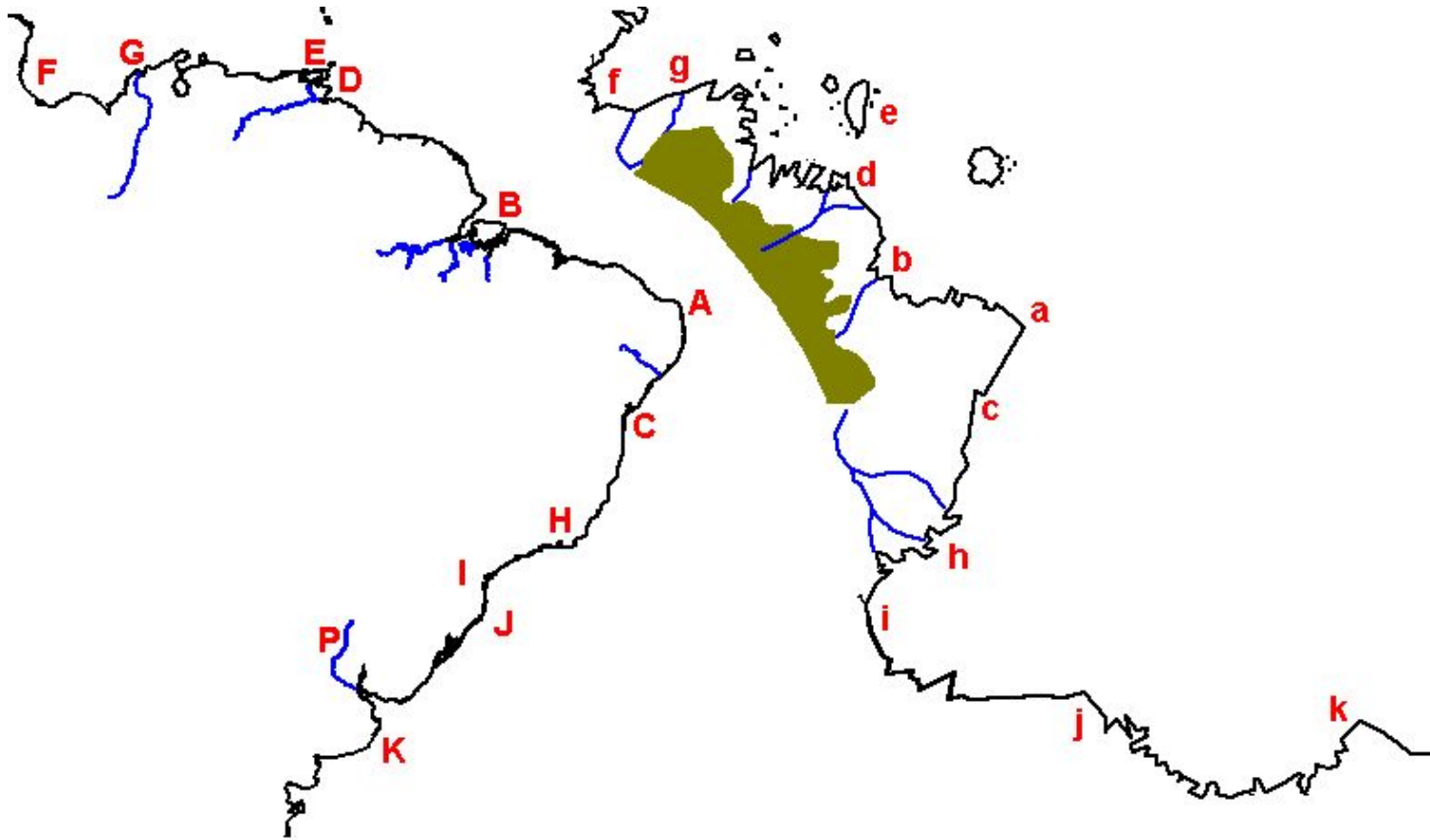
Orthographic Projection



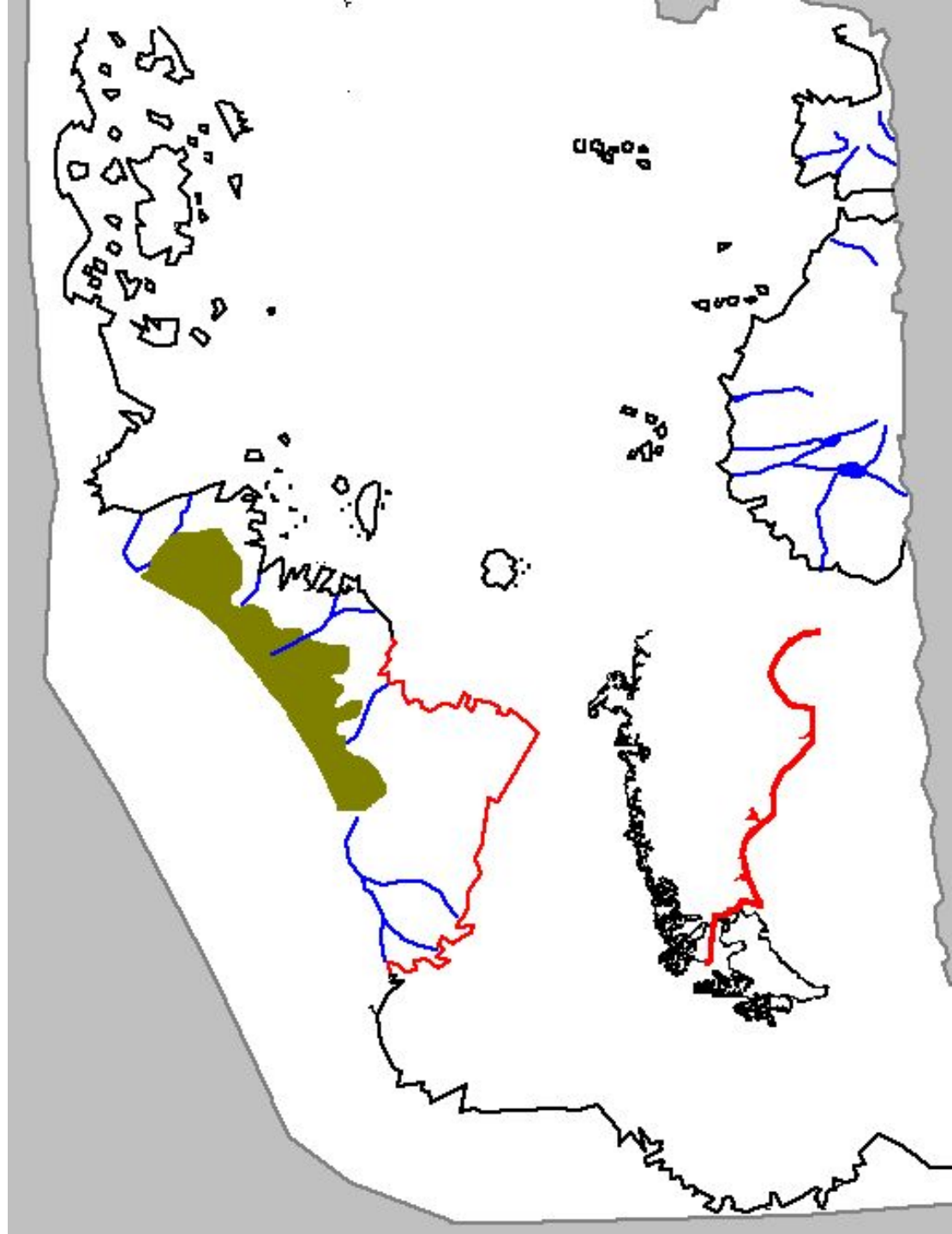
Cylindrical Equidistant Projection



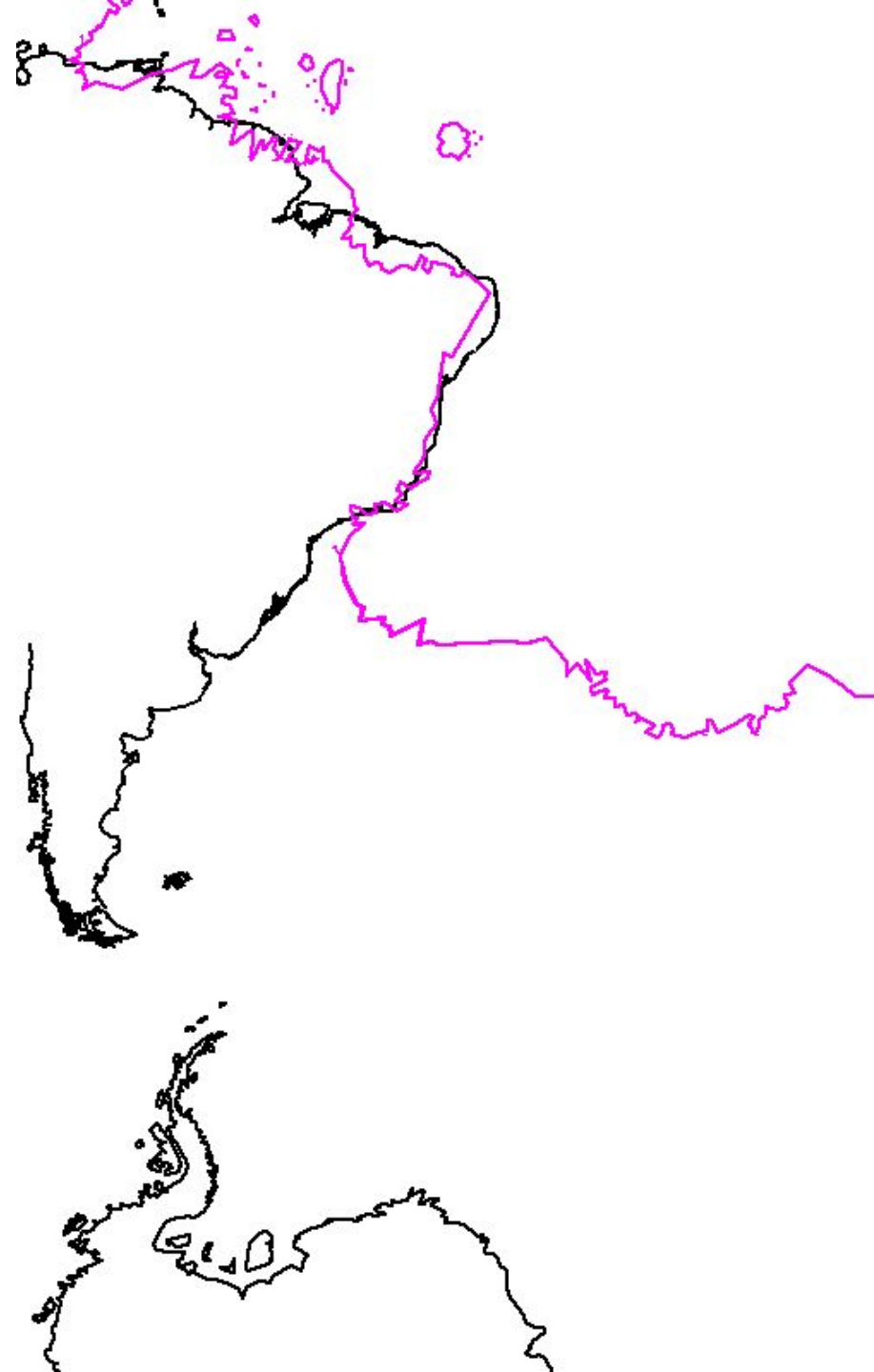
Likely Identification



Alternative Identification



Not
Antarctica



Conclusions

- All Identifications of Antarctica Fail
- By Modern Standards, Not a Very Accurate Map
- Has Exactly the Inaccuracies Expected for a 1513 Map
- For 1513, A First-Rate Work of Naval Intelligence
 - Turkey Was Not Involved in Atlantic Exploration
 - Synthesis of Captured Documents
 - Remarkable Level of Detail for 1513