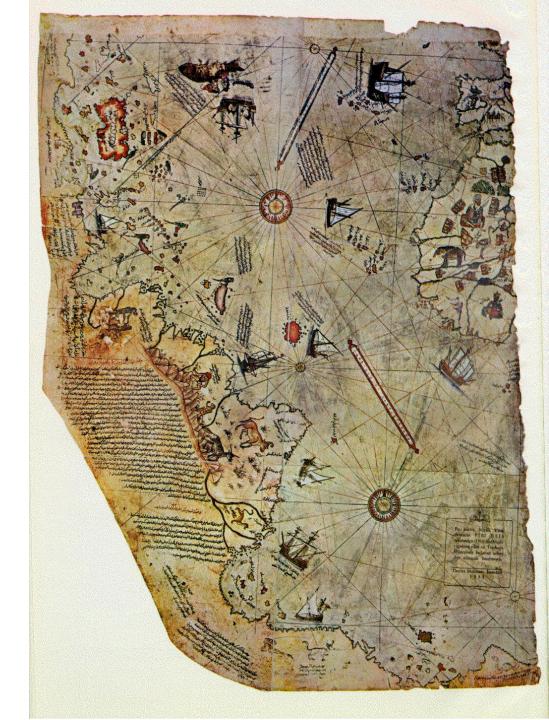
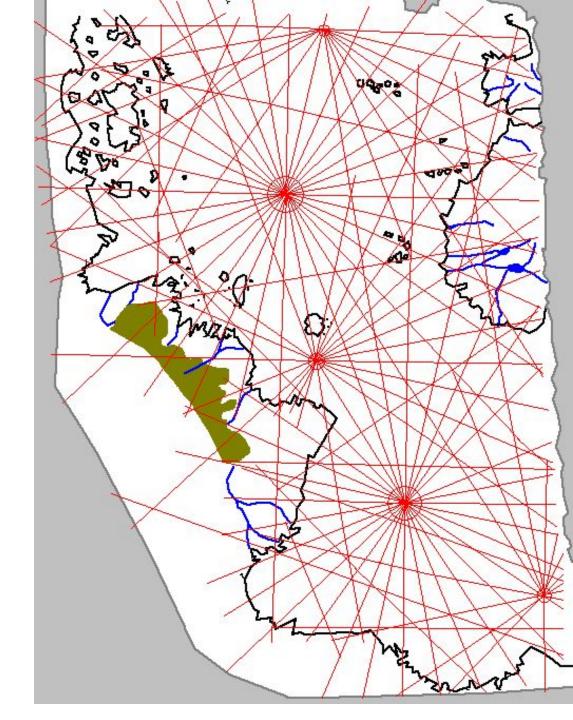
The Piri Reis Map

Steven Dutch
University of Wisconsin-Green Bay

The Piri Reis Map

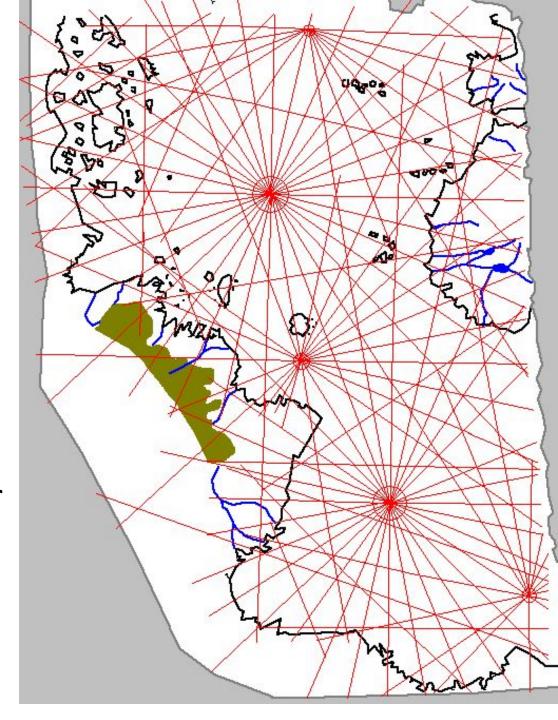


A Portolan Chart



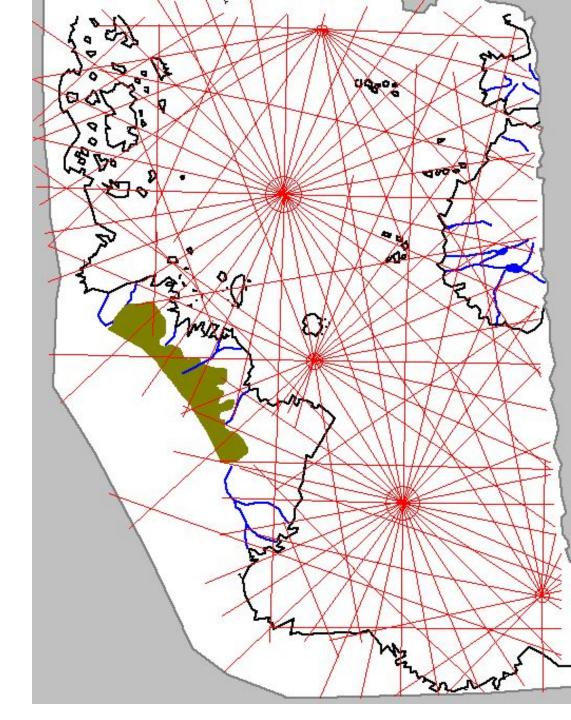
The Portolan Grid

- 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)



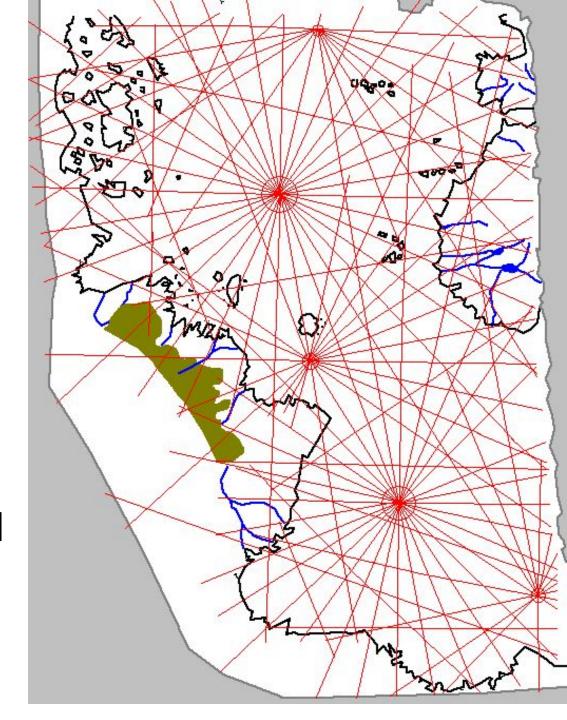
The Portolan Grid

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



Quality of Cartography

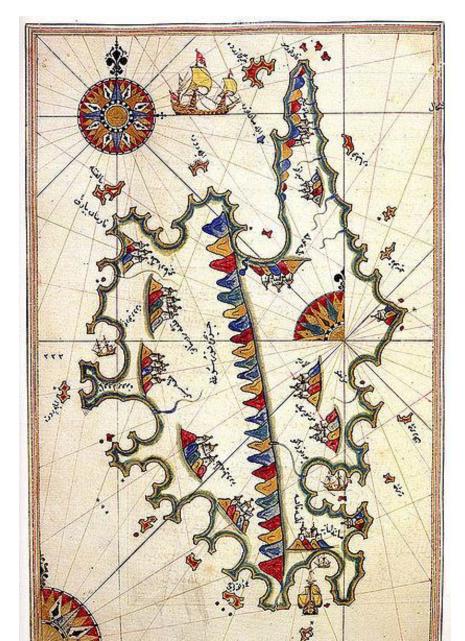
- Europe and Africa
 - Coasts PrettyGood
 - Rivers Inaccurate
- Brazil: Recognizable
- North America and South of Brazil: Very Poor



Interpreting Ancient Maps

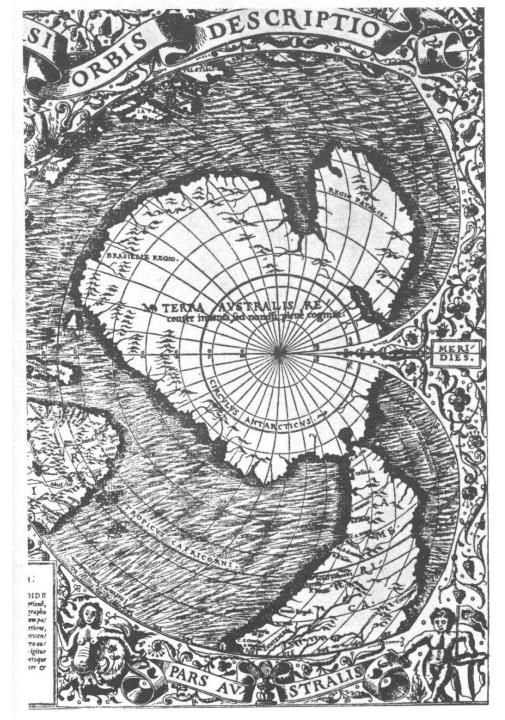
- Any Ancient Map is Only as Good as Its Depiction of Well Explored Areas
- Things of Practical Use to Mariners (Capes and Islands) Often Exaggerated
- Latitude is the Most Likely Parameter to be Accurate; Longitude Largely Guesswork
- Imaginary Features Often Incorporated and Gaps Filled In

Corsica by Piri Reis

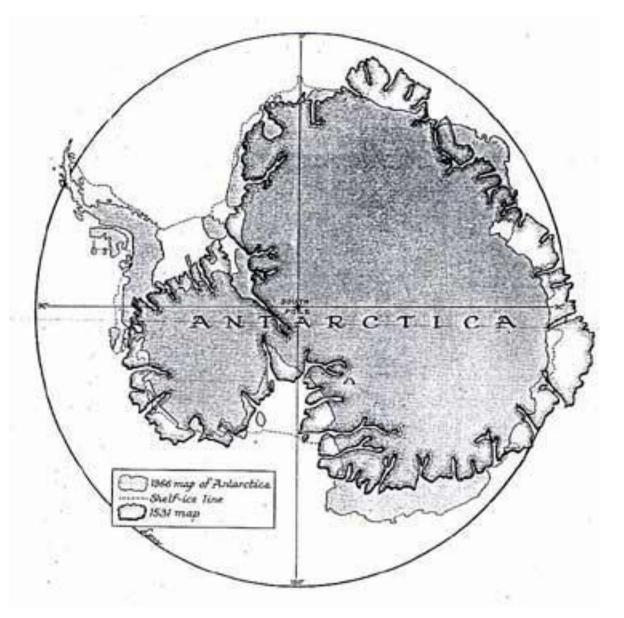




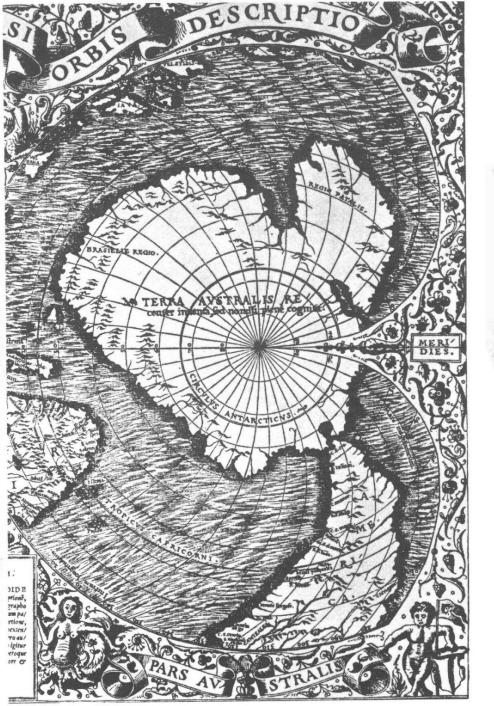
The Orontius Finaeus Map, 1531

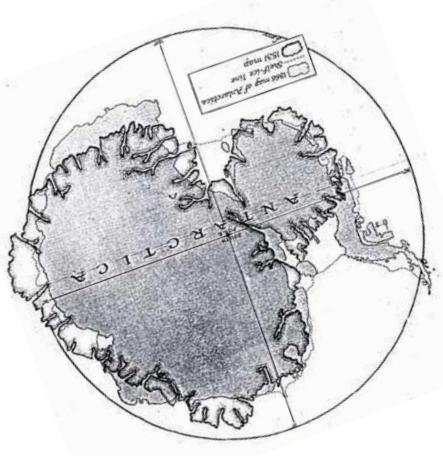


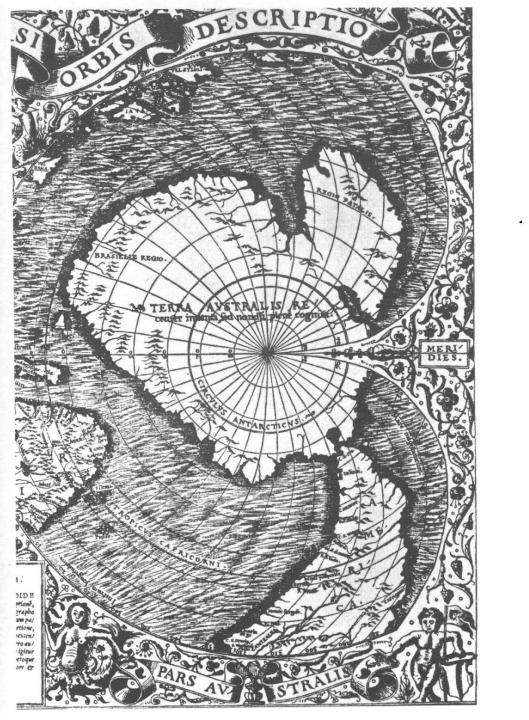
Antarctica?

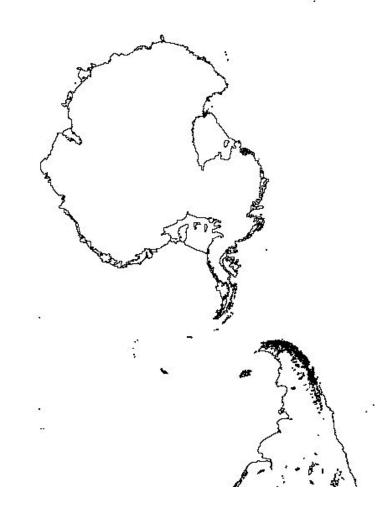


http://www.goldenageproject.org.uk/112antarctica.php

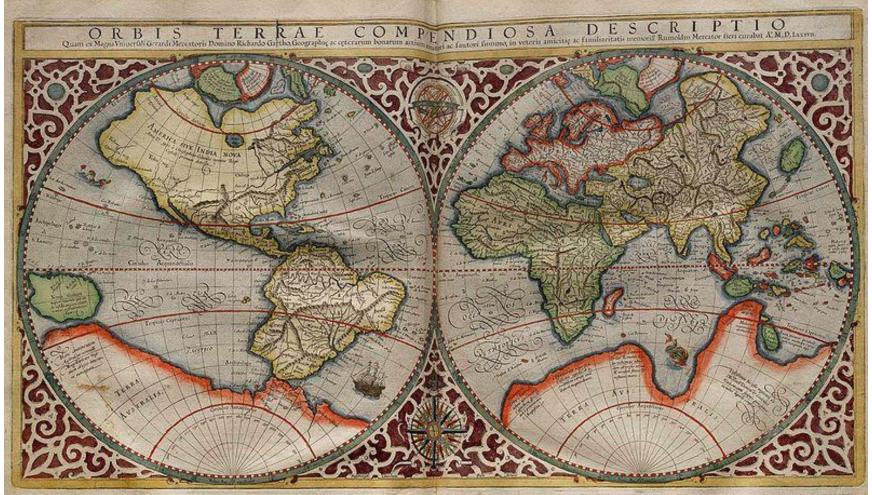








Map by Mercator, 1587



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In Figure 2 in the control of the co

Hendrik Hondius Map, 1630

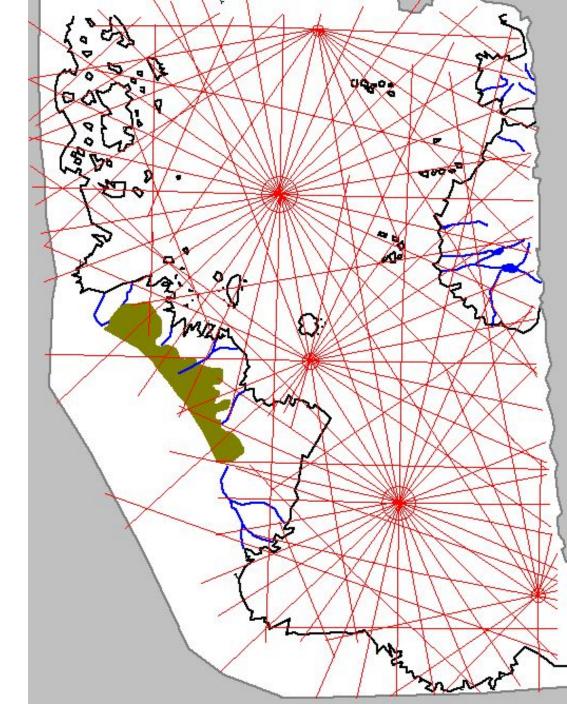


A Vicious Circle

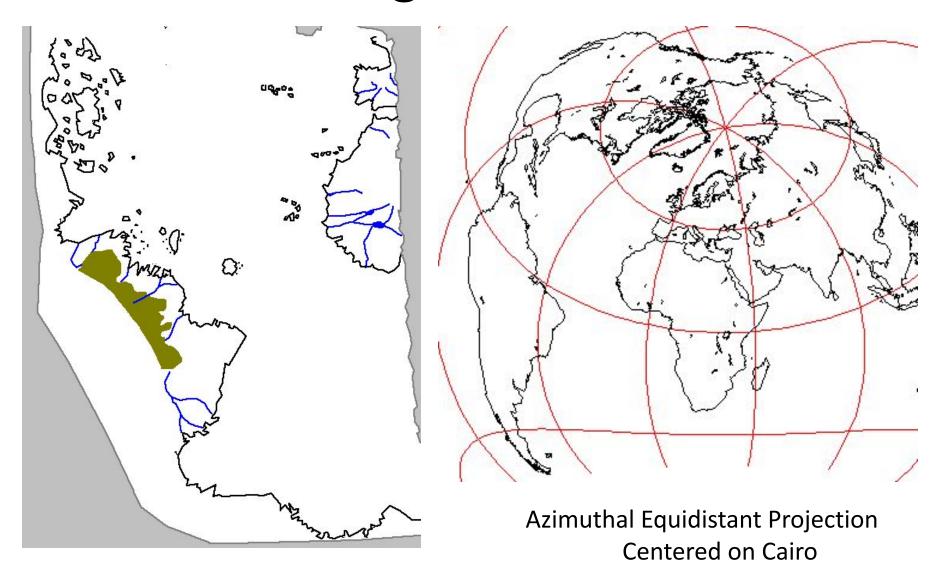
- Without Accurate Navigation, Accurate Maps Weren't Necessary
 - Maps Were Largely Schematic
- Without Accurate Maps, there was no Point in Trying to Navigate Precisely
- Coastal Charts, on the Other Hand, Were Valuable
- Even Into Modern Times, Many Questioned the Need for Accurate Mapping

What's Missing?

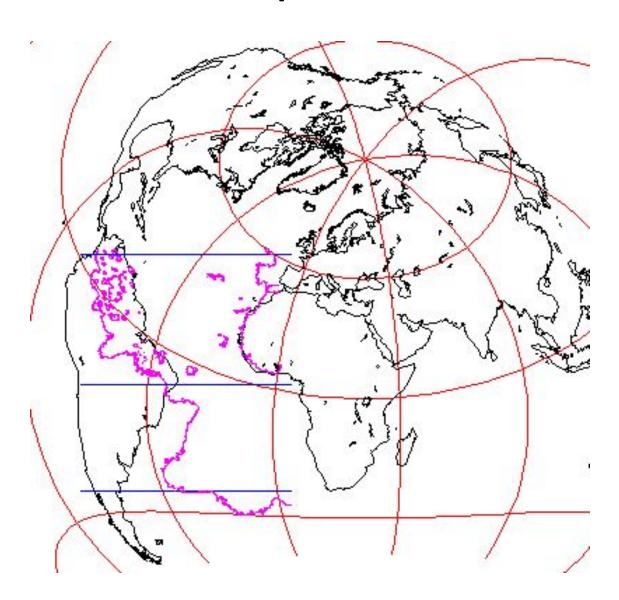
- The Pacific Ocean
- Isthmus of Panama
- Drake Passage
 - Deep Water: WasNever Dry Land
 - No Evidence of Antarctic IceConnection
- Any Indisputable
 Feature of
 Antarctica



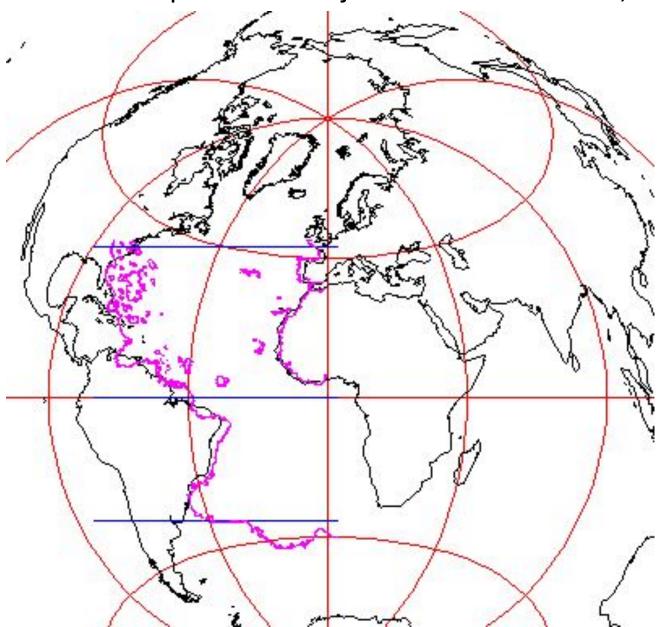
Arm-Waving Looks Persuasive



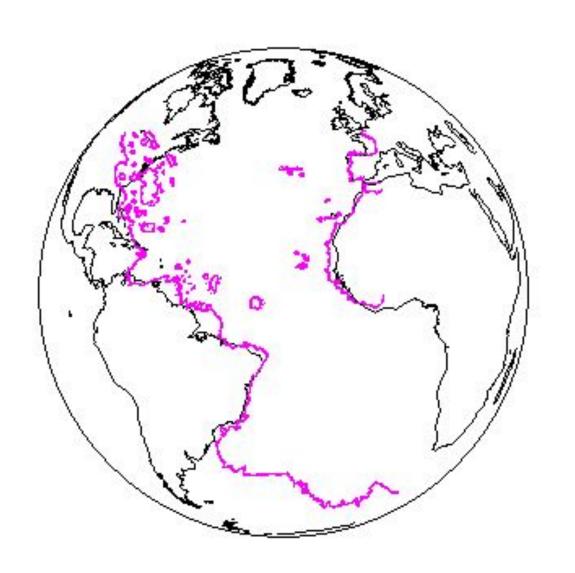
Detailed Comparison Doesn't



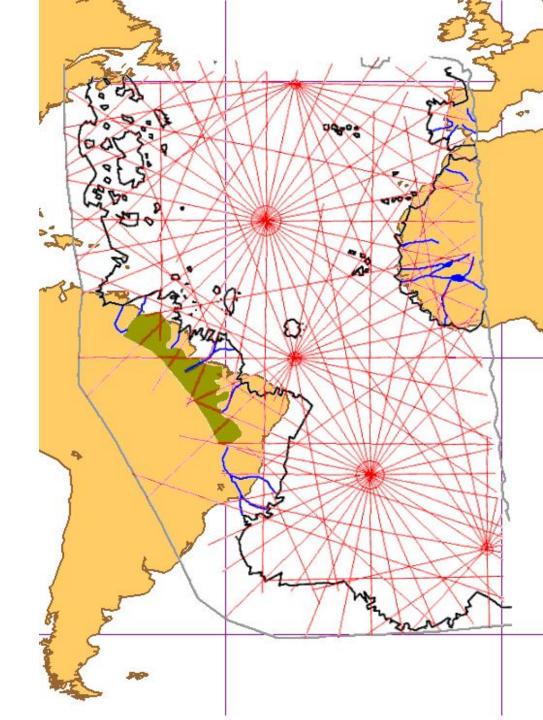
Azimuthal Equidistant Projection Centered on 0,0



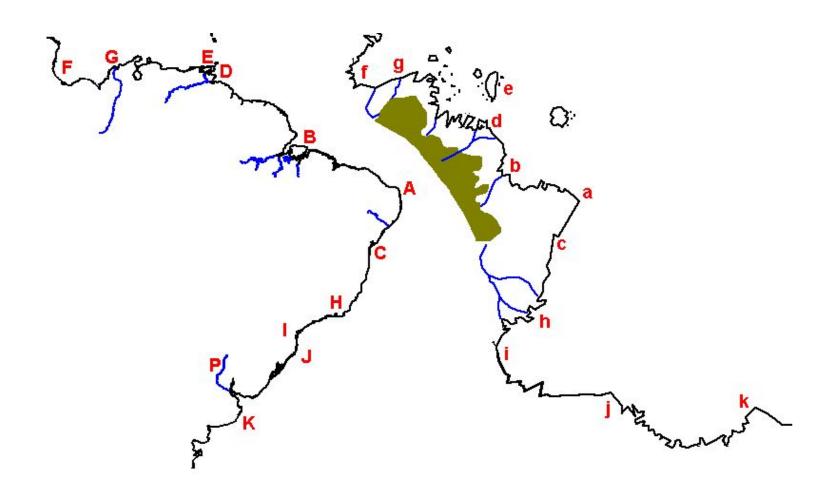
Orthographic Projection



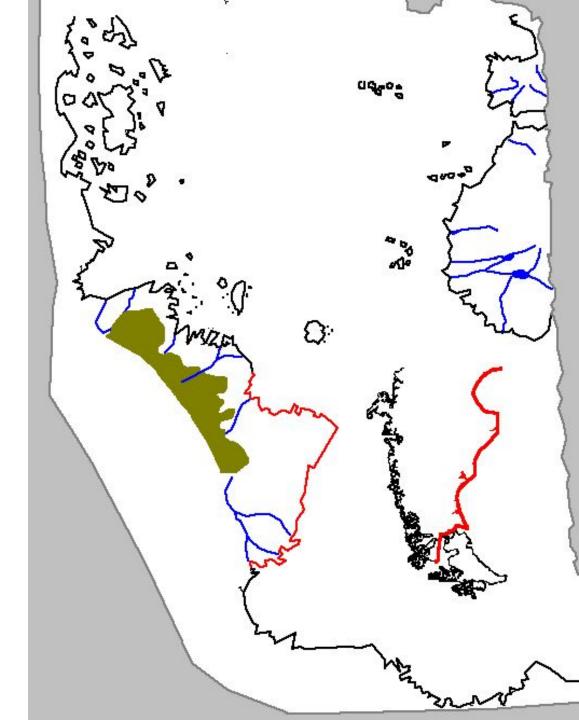
Cylindrical Equidistant Projection



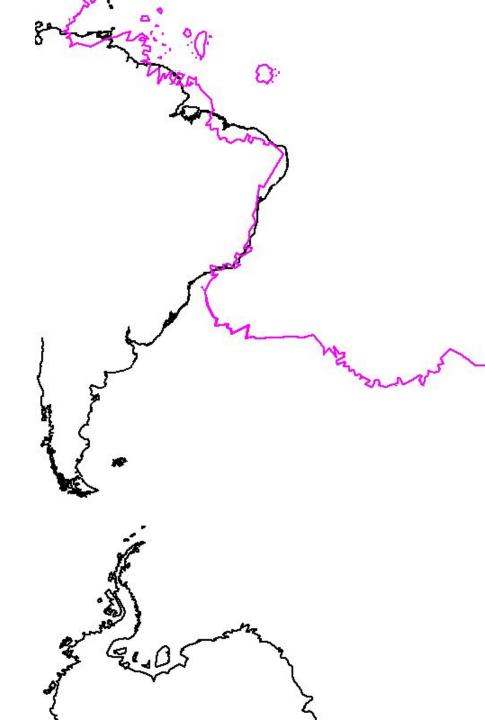
Likely Identification



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