# IHO Data Center for Digital Bathymetry report to the GEBCO Guiding Committee

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# IHO DCDB Topics

- GEBCO Gazetteer Enhancement Project
- GEBCO Data Store
- Issues/Needs

# IHO 2013 Work Program

- Element 3.8.2: Ensure effective operation of the IHO DCDB
- Element 3.8.8: Update and enhance the GEBCO Gazetteer (B-8) for internet access. A) provide the GEBCO Gazetteer as a web service via a geospatially enabled database. B) Develop and make available public and management on-line interfaces to the Gazetteer.

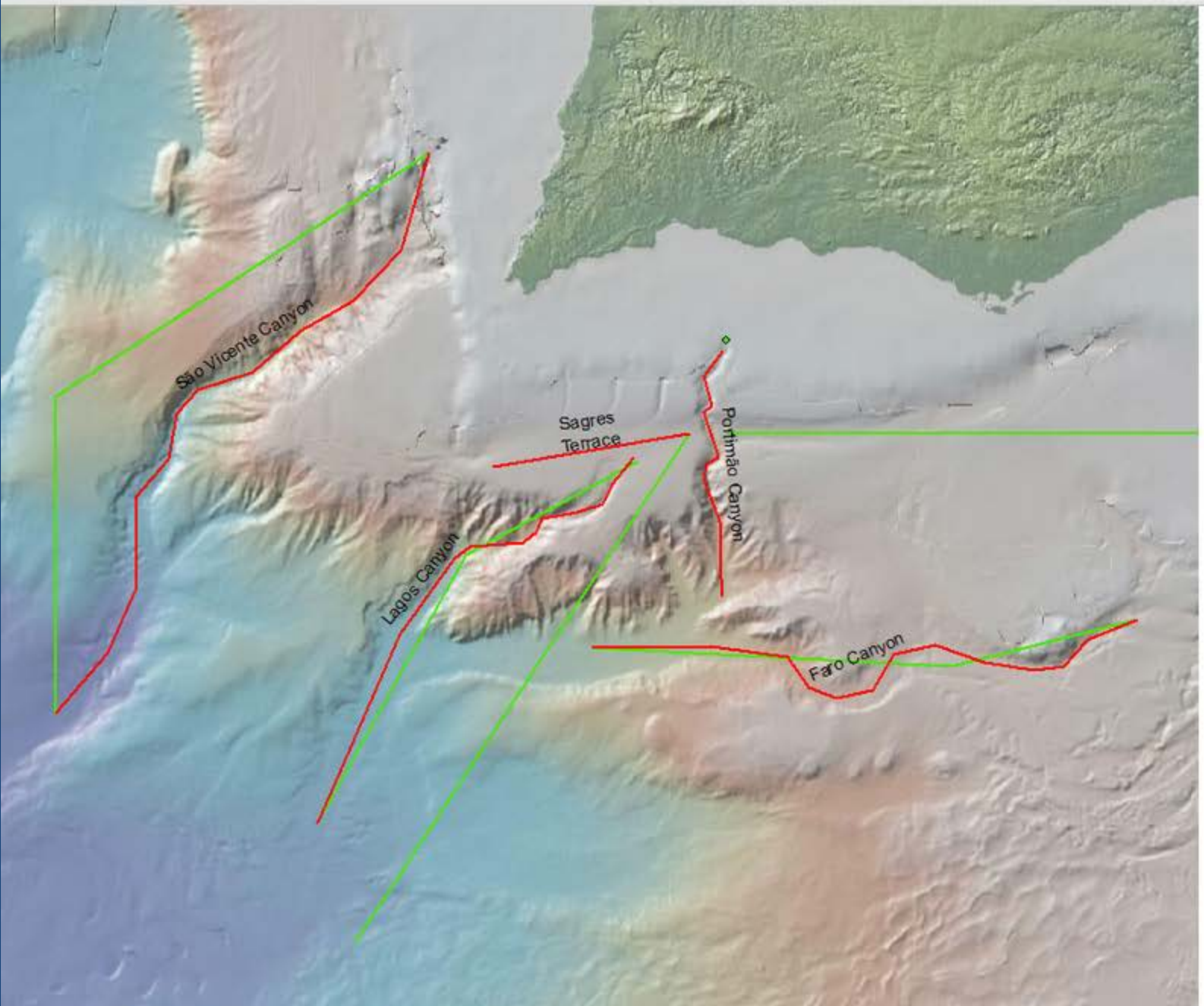
# GEBCO Gazetteer Enhancement, Part II

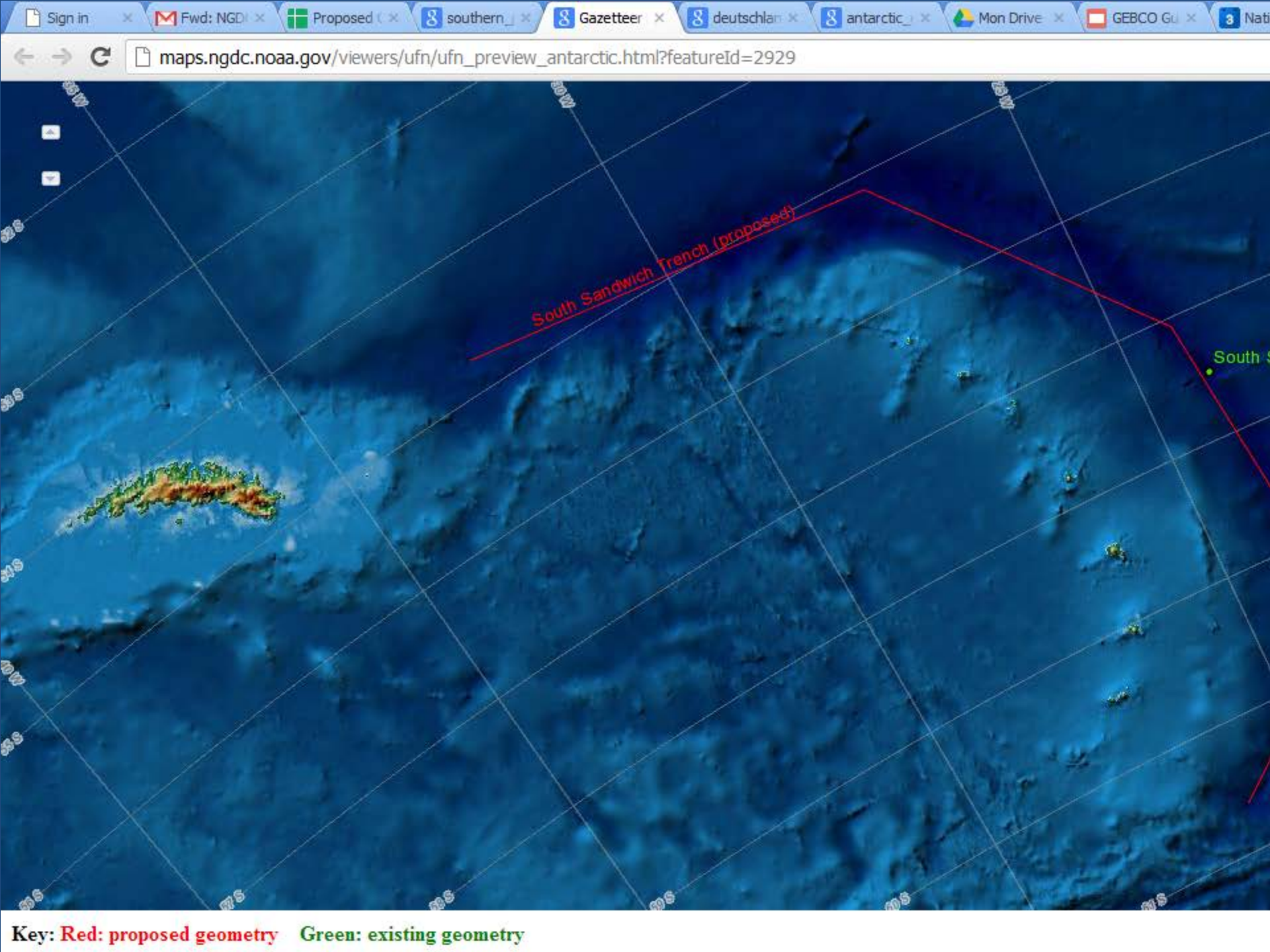
- Deliverables:
  - Quality control and update a geospatially enabled 'IHO-IOC GEBCO Gazetteer of Undersea Feature Names' and provide access to the Gazetteer as a web service to the public and Google.
  - Provide the ability to download the entire Gazetteer or to limit that download to undersea features modified after a specified date.

# GEBCO Gazetteer Enhancement, Part II

- Progress to date:
  - Phase I: Identification of attribute and positional errors and specific geometry enhancement needs
  - Phase II:
    - Created and populated a geospatially-enabled relational database from the August 2011 version of Gazetteer
    - Quality controlled geospatial database to enhance the accuracy of the Gazetteer
    - Developed web-based tools to visualize proposed changes to feature geometries
    - Over 130 proposed geometry enhancements under review by full SCUFN members
    - Correction of attribute data for features with obvious clerical errors (e.g., incorrect longitude/latitude sign)

Sign in | Inbox - lisa | Proposed | southern_ | Gazetteer | deutschlan | antarctic_ | Mon Drive | GEBCO Gu | Nati
maps.ngdc.noaa.gov/viewers/ufn/screenshots/southern_portugal_features.jpg

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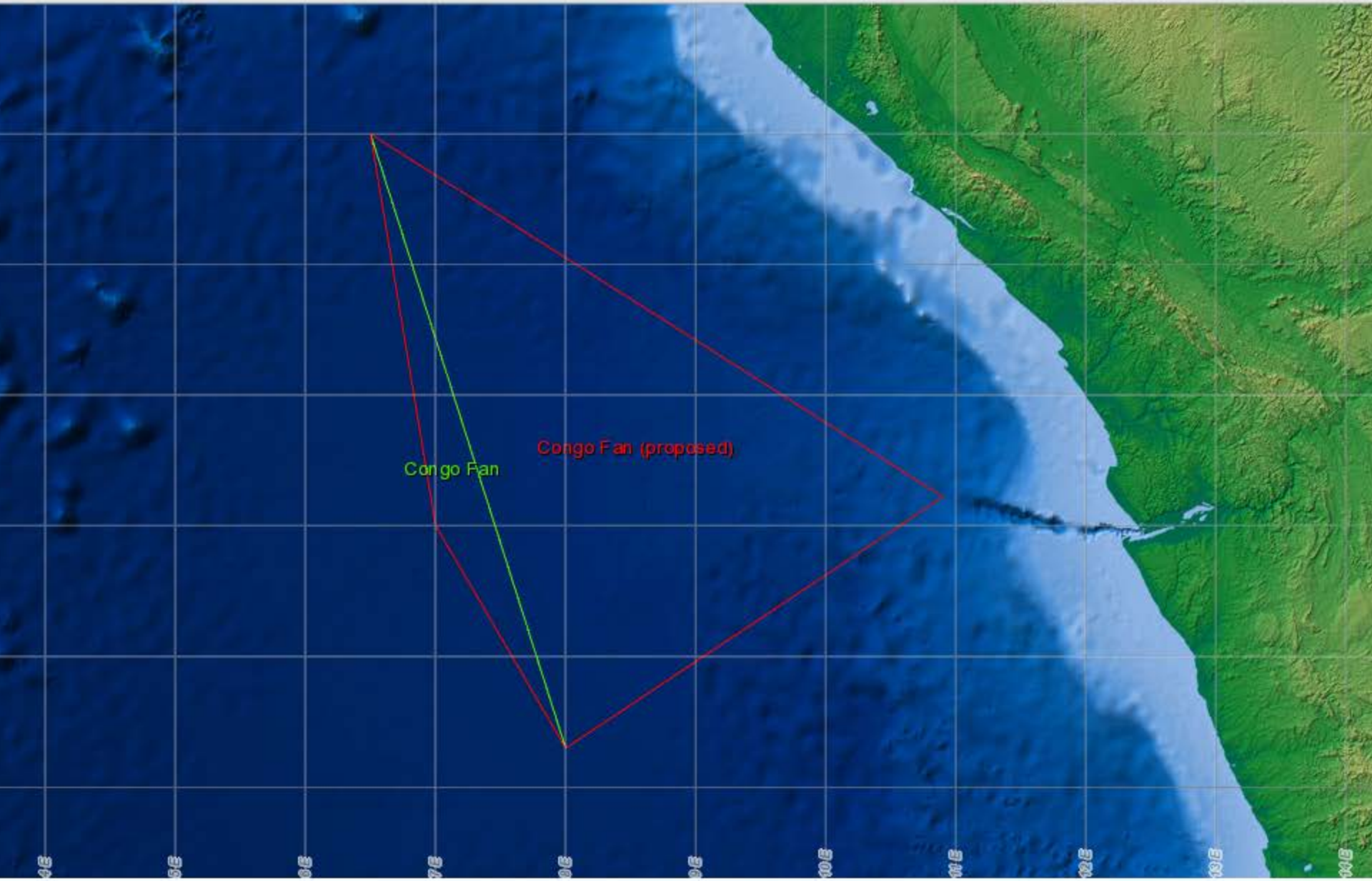
South Sandwich Trench (proposed)
South
Key: Red: proposed geometry Green: existing geometry

Proposed Geometry Changes | Proposed Geometry Changes | Gazetteer Feature Preview | yelcho_and_san_martin_can

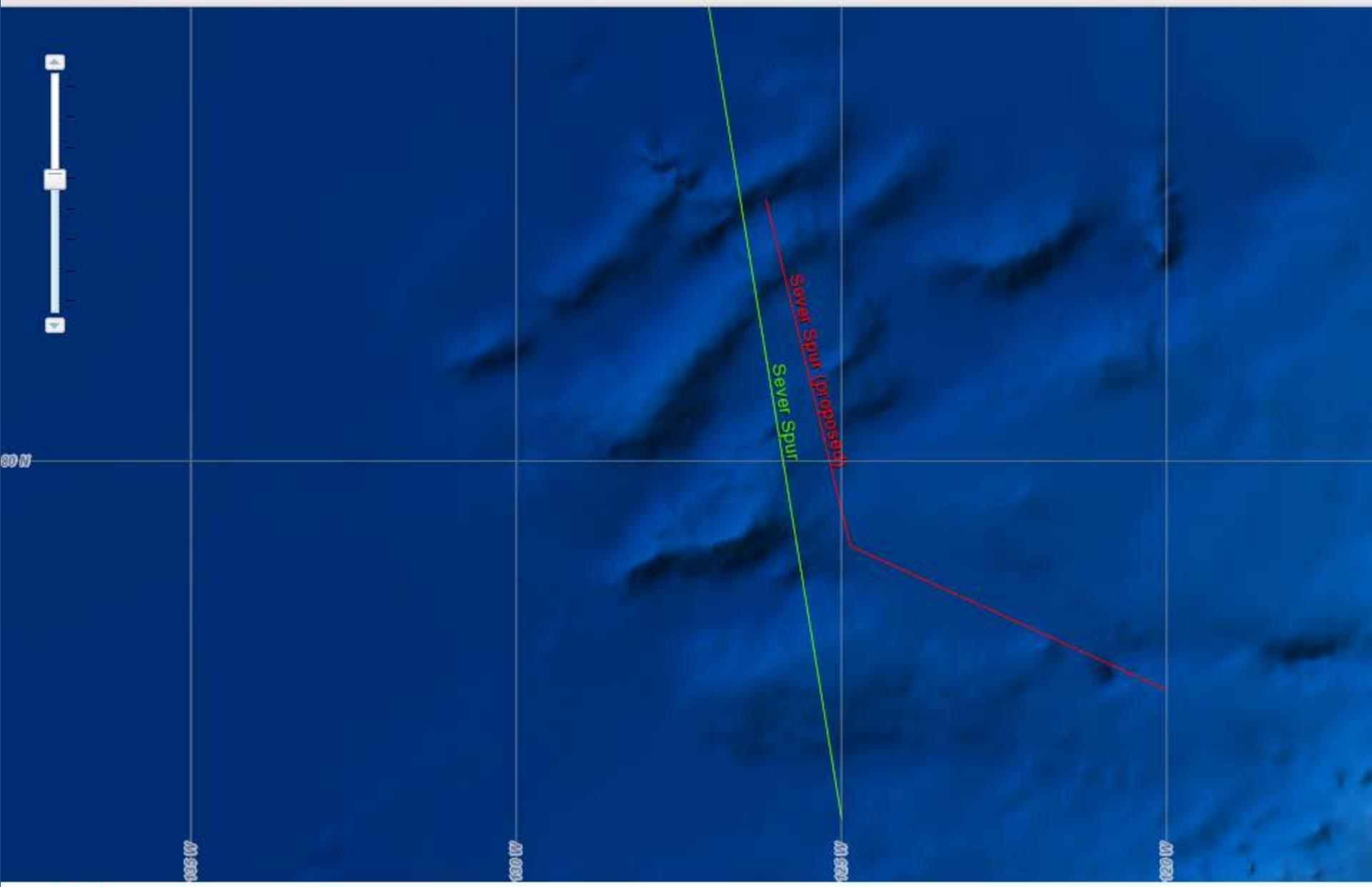
a.gov/viewers/ufn/ufn_preview.html?featureId=652




**Green: existing geometry**

Sign in | Proposed Geometry Changes | Proposed Geometry Changes | Gazetteer Feature Preview | Gazetteer Feature Preview

maps.ngdc.noaa.gov/viewers/ufn/ufn_preview.html?featureId=2806

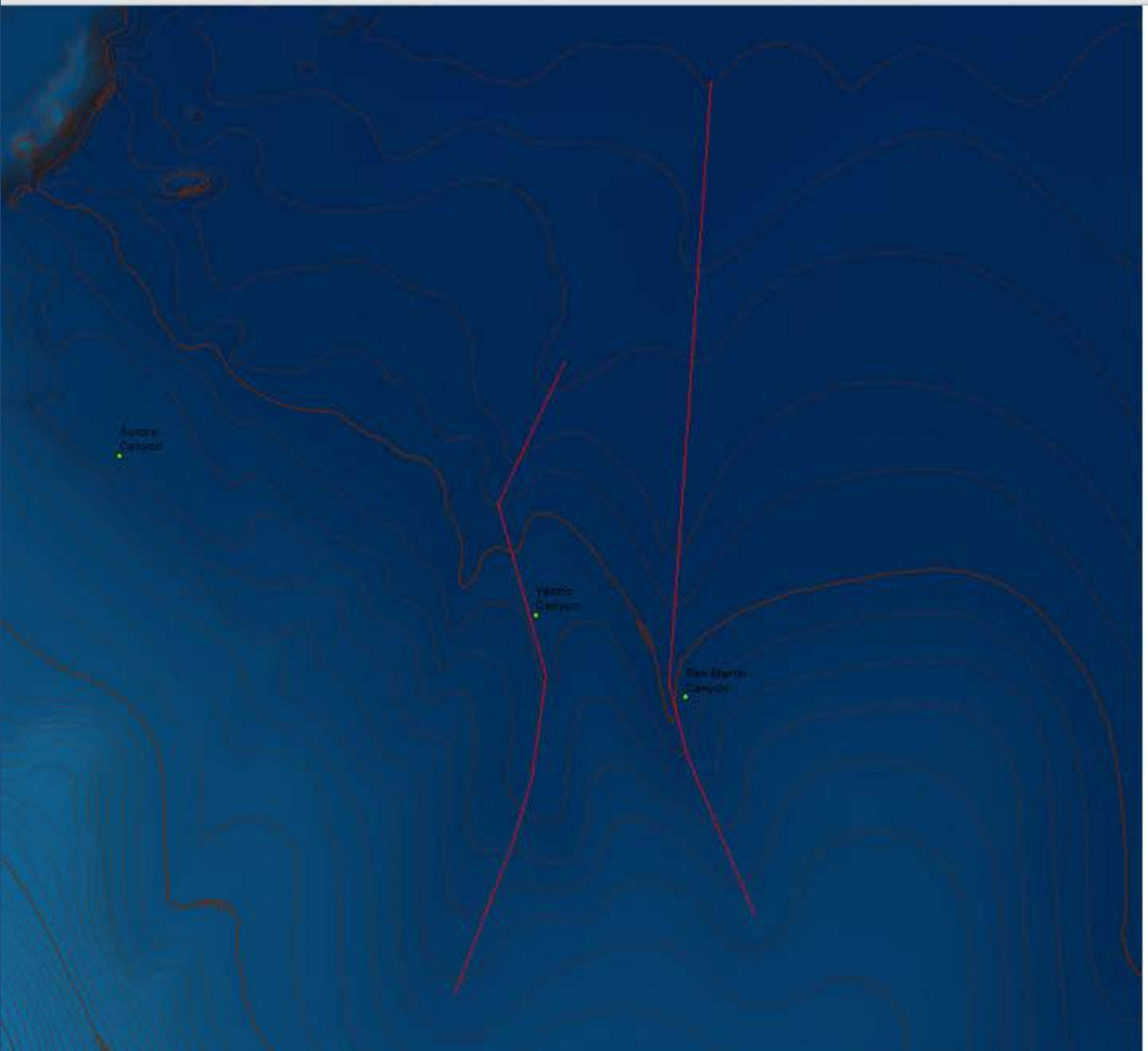



**Key:** **Red: proposed geometry** **Green: existing geometry**

Longitude: -126.631, Latitude: 79.248

Sign in | Proposed Geometry Changes | Proposed Geometry Changes | yelcho_and_san_martin_can

maps.ngdc.noaa.gov/viewers/ufn/screenshots/yelcho_and_san_martin_canyons.jpg



# GEBCO Gazetteer Enhancement, Part II

- Remaining work:
  - Incorporate changes and additions approved by SCUFN
  - Continue to evaluate and improve feature geometries
  - Complete development of Gazetteer public and management interfaces
  - Deploy Gazetteer database as the authoritative source for undersea feature names as a map service and interface with web map viewer

# GEBCO Data Store

- IHO DCDB worked with BODC and Scripps to set up two-way rsync read-only connectivity
- Resolved security concerns by constraining access through IP address
- Structure = flat files
- Next Steps:
  - Draft one-pager describing Data Store objectives and data flow and metadata requirements
  - Set up rsync connections with all partners
  - Automatically update/notify partners of new data and changes to data

# Issues/Needs

- IHO DCDB leverages National Geophysical Data Center resources and infrastructure
- With additional resources the IHO DCDB could:
  - Improve IHO DCDB web presence to enhance data contributions and access to international bathymetric data