The Value of a Bounding Box

Moving Historical Charts beyond the Image Browser

By

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And

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Geographer's Office

NOAA\NOS Office of Coast Survey

Historical MAP & CHART COLLECTION

Office of Coast Survey

CONTENTS AND USE

Office of Coast Survey's Historical Map & Chart Collection covers the land and waters of the United States of America, including territories and possessions (past and present). The images are free to download, and may be used for commercial or educational purposes. Although not required, we encourage users to cite "NOAA's Historical Map & Chart Collection" when using the image(s).

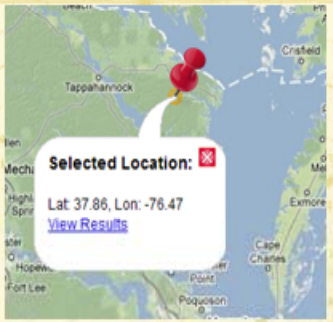
BACKGROUND

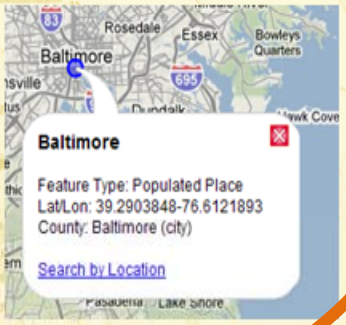
Today's Office of Coast Survey traces its charting efforts back to 1807 when President Thomas Jefferson founded the Survey of the Coast. To celebrate and preserve this long history, NOAA started assembling the collection in 1995 as a data rescue effort. NOAA continues to preserve charts and maps produced by NOAA's Coast Survey and its predecessors, especially the U.S. Coast and Geodetic Survey and the U.S. Lake Survey (previously under the Department of War).

The collection also covers many areas that most people may not realize were once a part of early Coast Survey history. As the first federal scientific agency, the U.S. Coast and Geodetic Survey (as the agency was known from 1878 to 1970) produced land sketches, Civil War battle maps, and aeronautical charting from the 1930s to the 1950s.

NOW WITH 2 SEARCH OPTIONS:

Point on Map **Geographic Name**

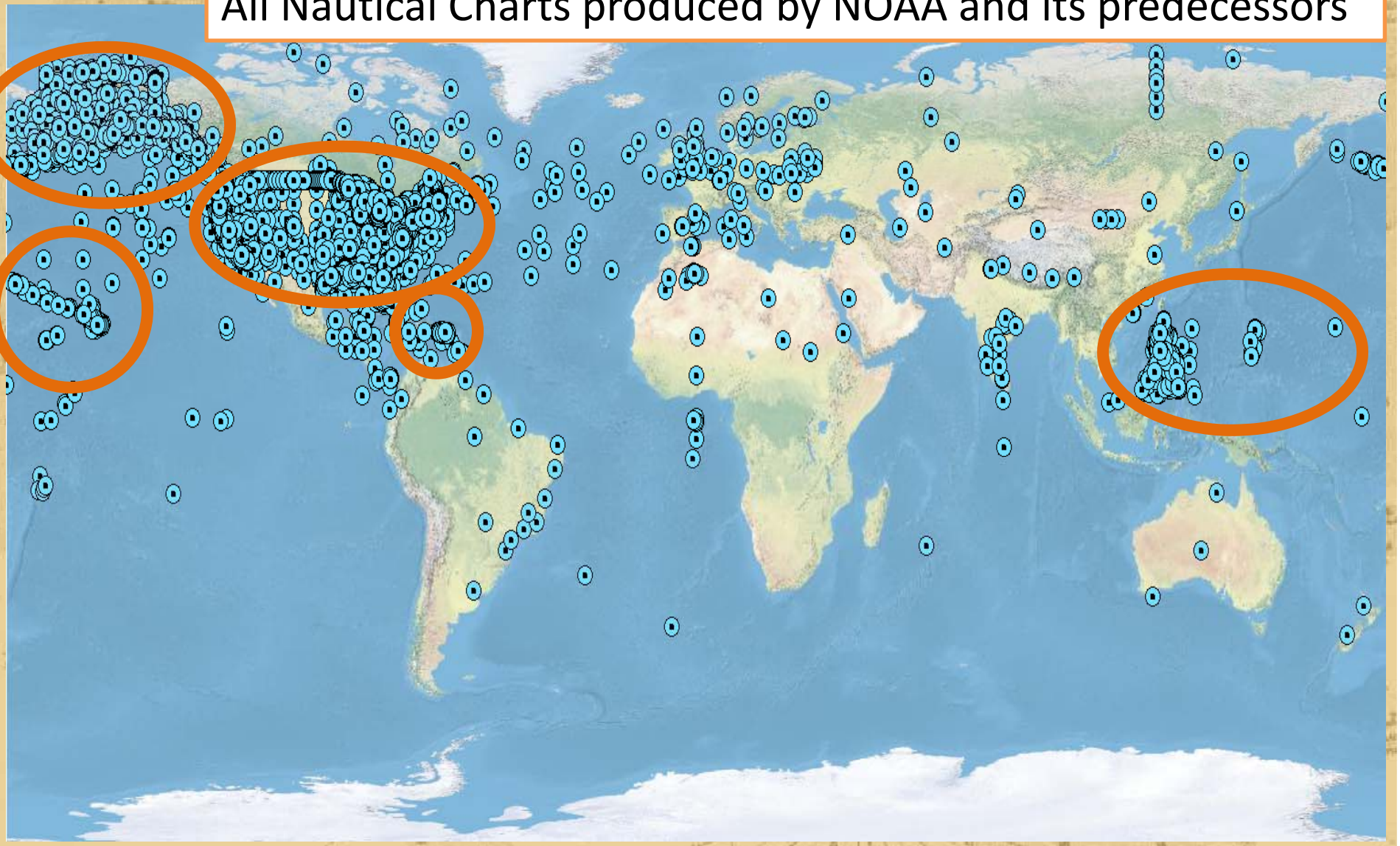




The Historical Map and Charts team is looking for your feedback. Please let us know if you have any comments, questions, or concerns by submitting an inquiry. We will get back to you as soon as possible.

Focus of the Collection

All Nautical Charts produced by NOAA and its predecessors

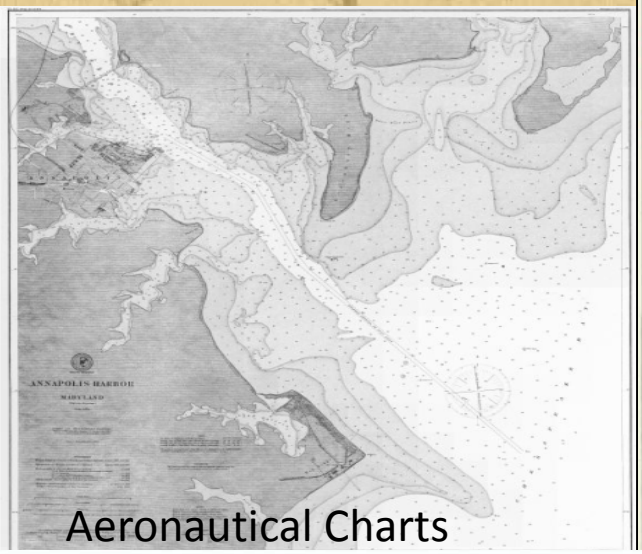


Focus of the Collection

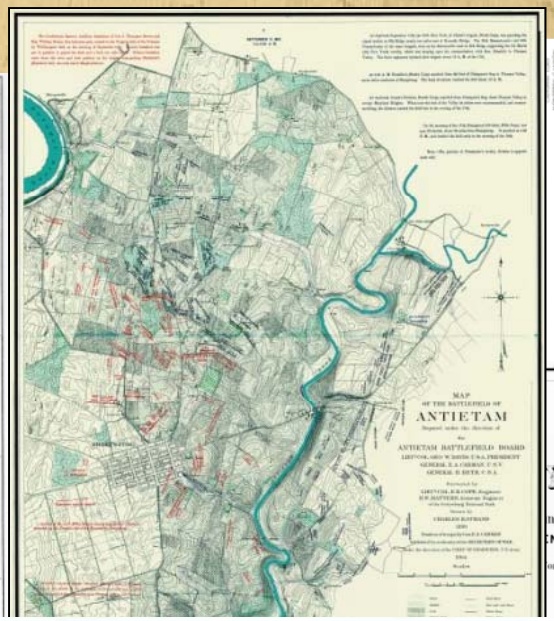
Civil War maps

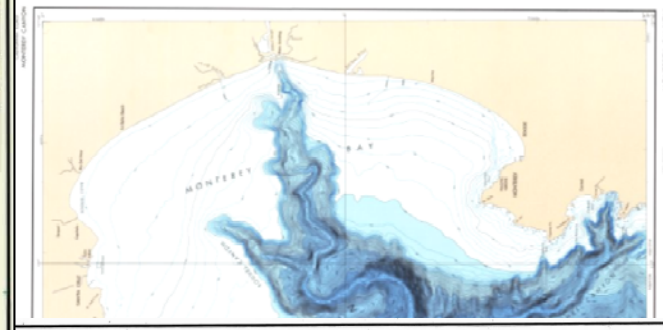
Nautical charts

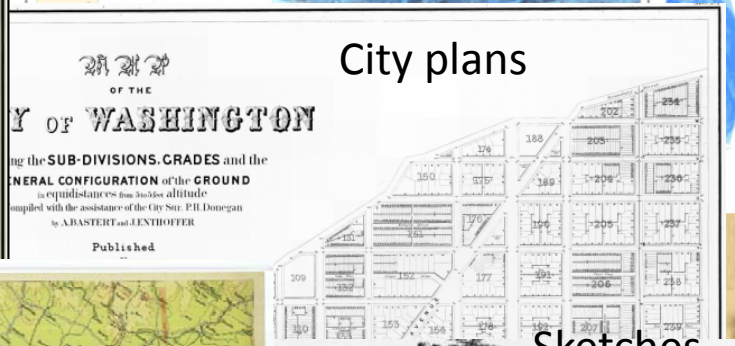
Bathymetric maps



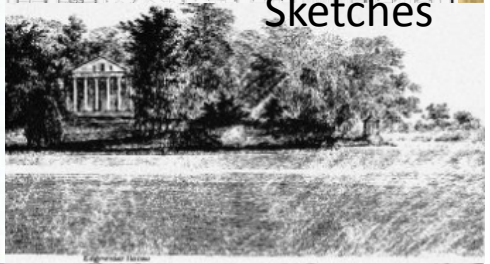
Aeronautical Charts







City plans

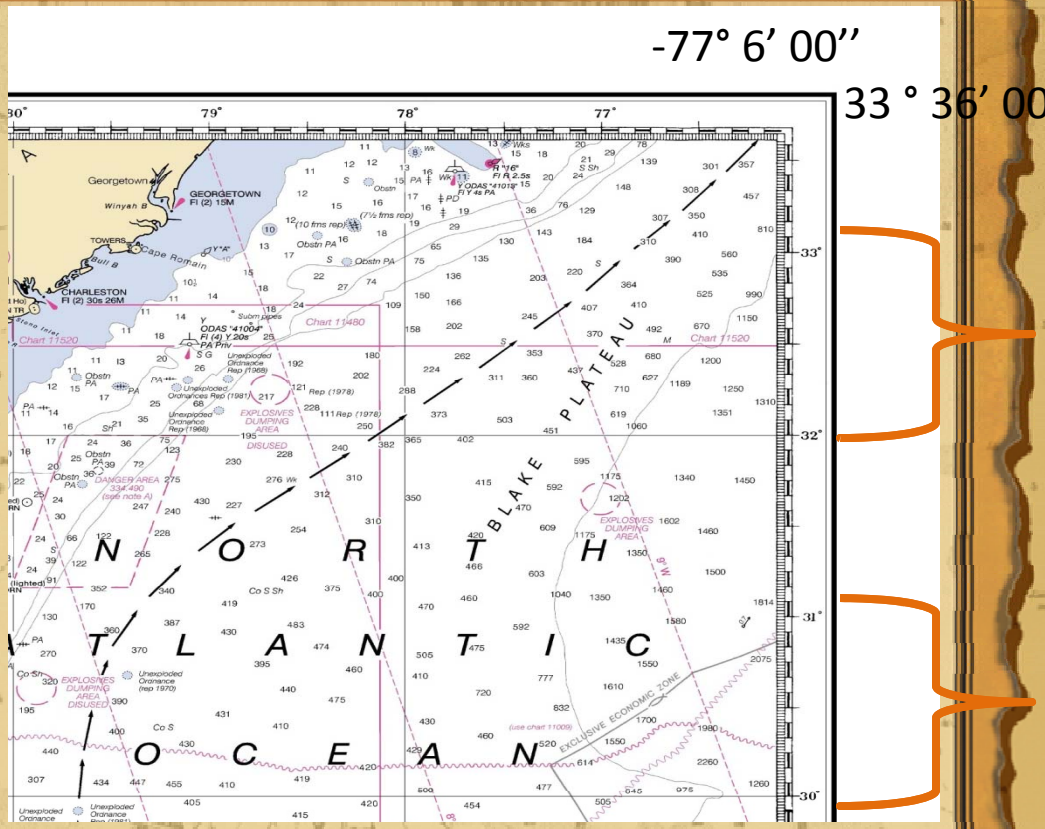


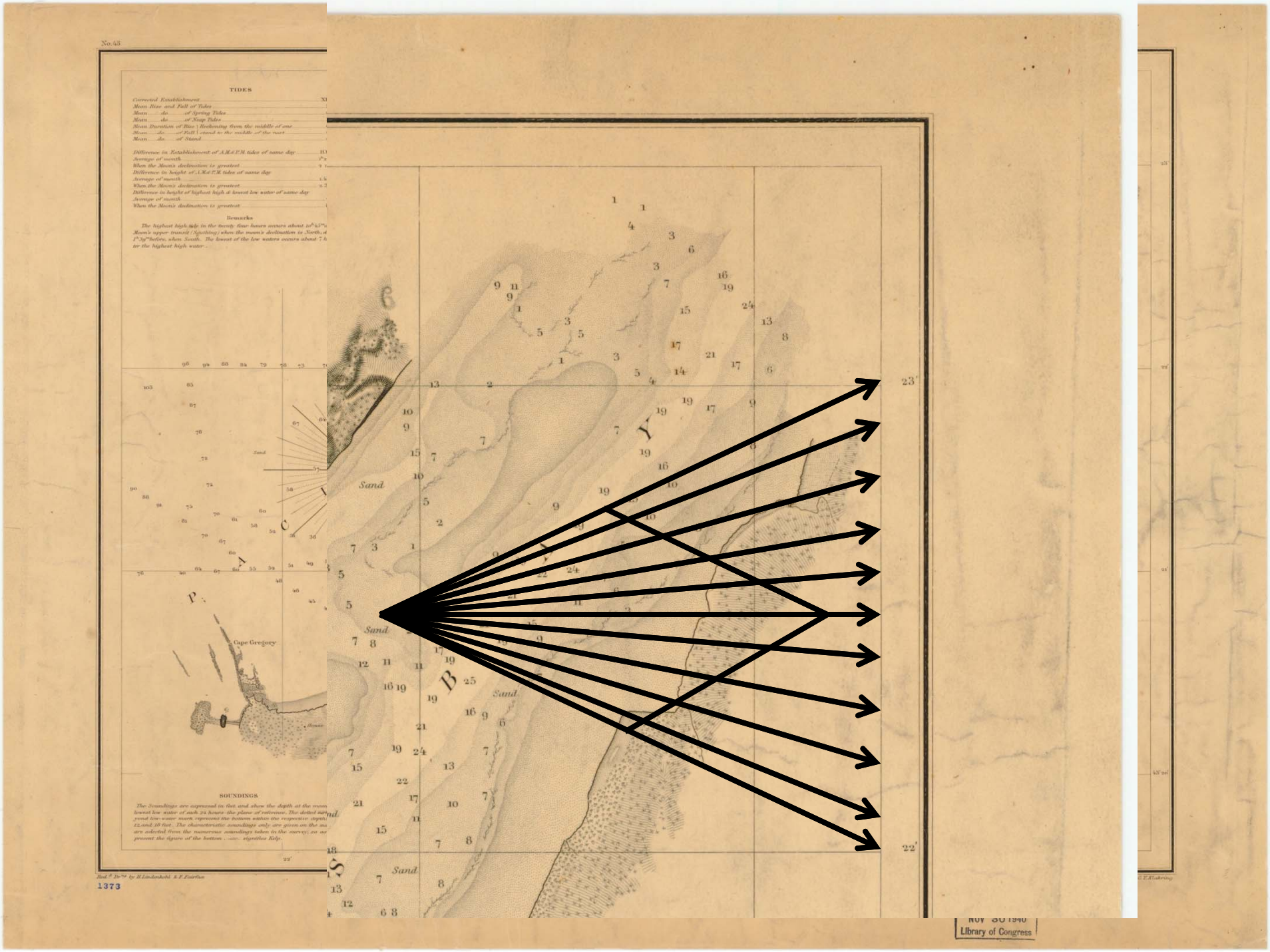
Sketches

Years: 1807 to Yesterday	**99.9% Images are Maps/Charts**
Images Available: 38,540	**79% are Nautical Charts**

Important Aspects

- Corner Points not Displayed
- Geo-Extents of a Series could Shift
- Consistency in Latitude and Longitude




No. 43
TIDES
Corrected Establishment
Mean Rise and Fall of Tides
Mean do of Spring Tides
Mean do of Neap Tides
Mean Duration of Rise
Mean do of Fall
Mean do of Stand
Difference in Establishment of A.M. & P.M. tides of same day
Average of month
When the Moon's declination is greatest
Difference in height of A.M. & P.M. tides of same day
Average of month
When the Moon's declination is greatest
Difference in height of highest high & lowest low water of same day
Average of month
When the Moon's declination is greatest
Remarks
Cape Gregory
SOUNDINGS
Sand
23'
22'
1373
Library of Congress

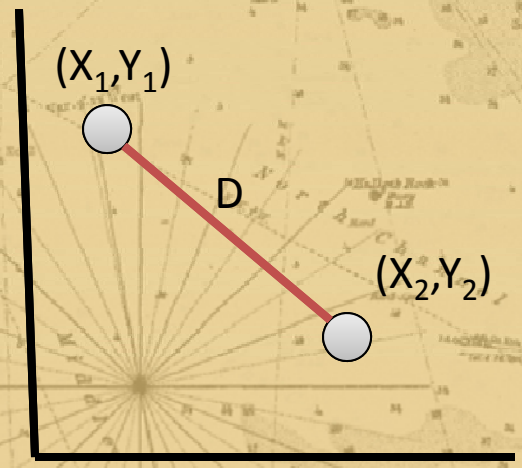
Digital Method

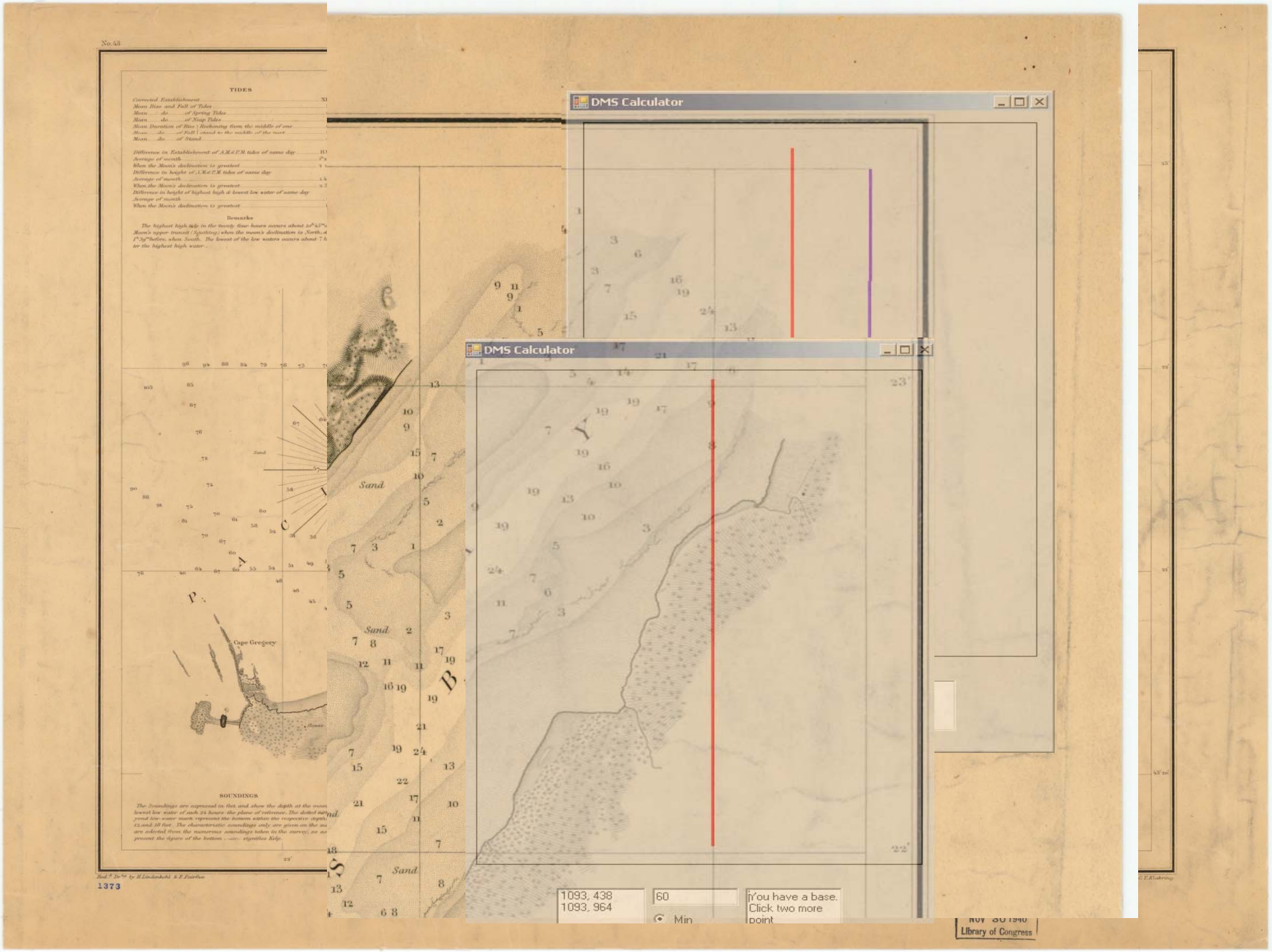
Ratio of Distances

$$\frac{\text{\# Pixels of the Whole}}{\text{\# Units of the Whole}} = \frac{\text{\# Pixels of the Part}}{\text{\# Units of the Part}}$$

The Distance Formula

$$D=\sqrt{(X_2-X_1)^2+(Y_2-Y_1)^2}$$

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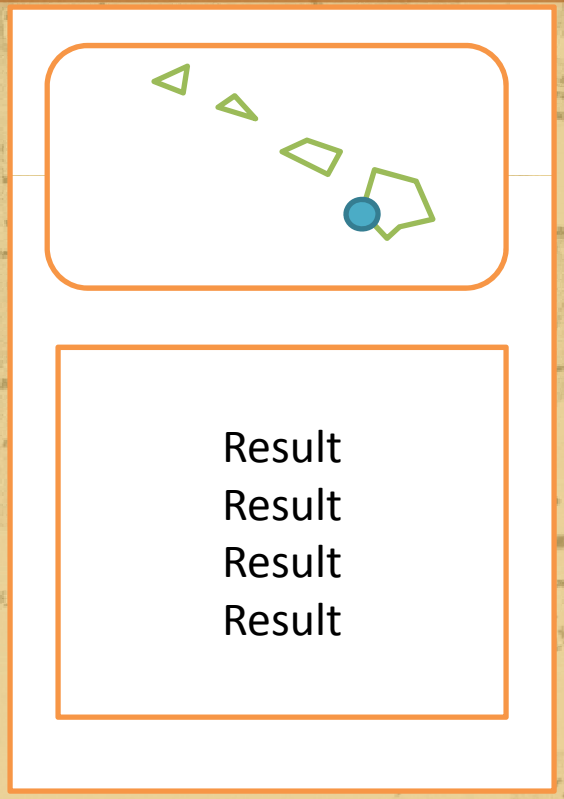
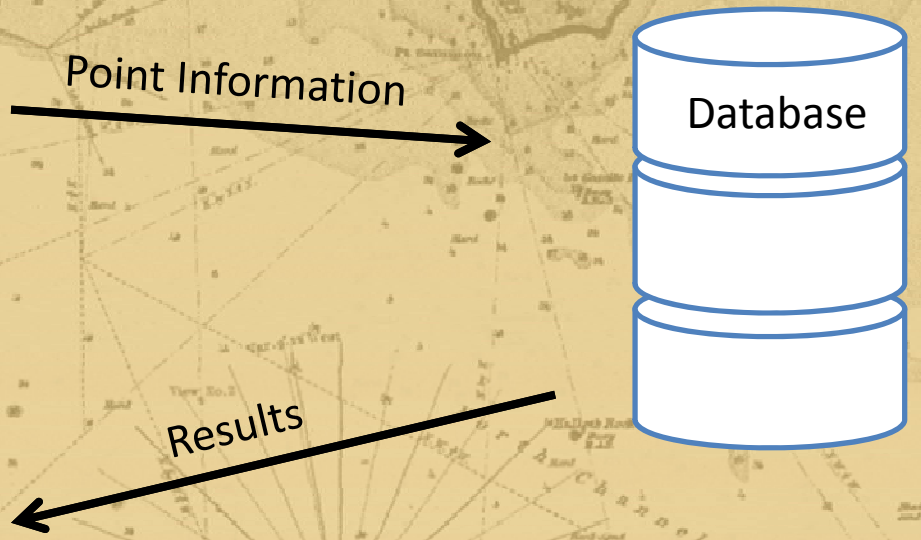
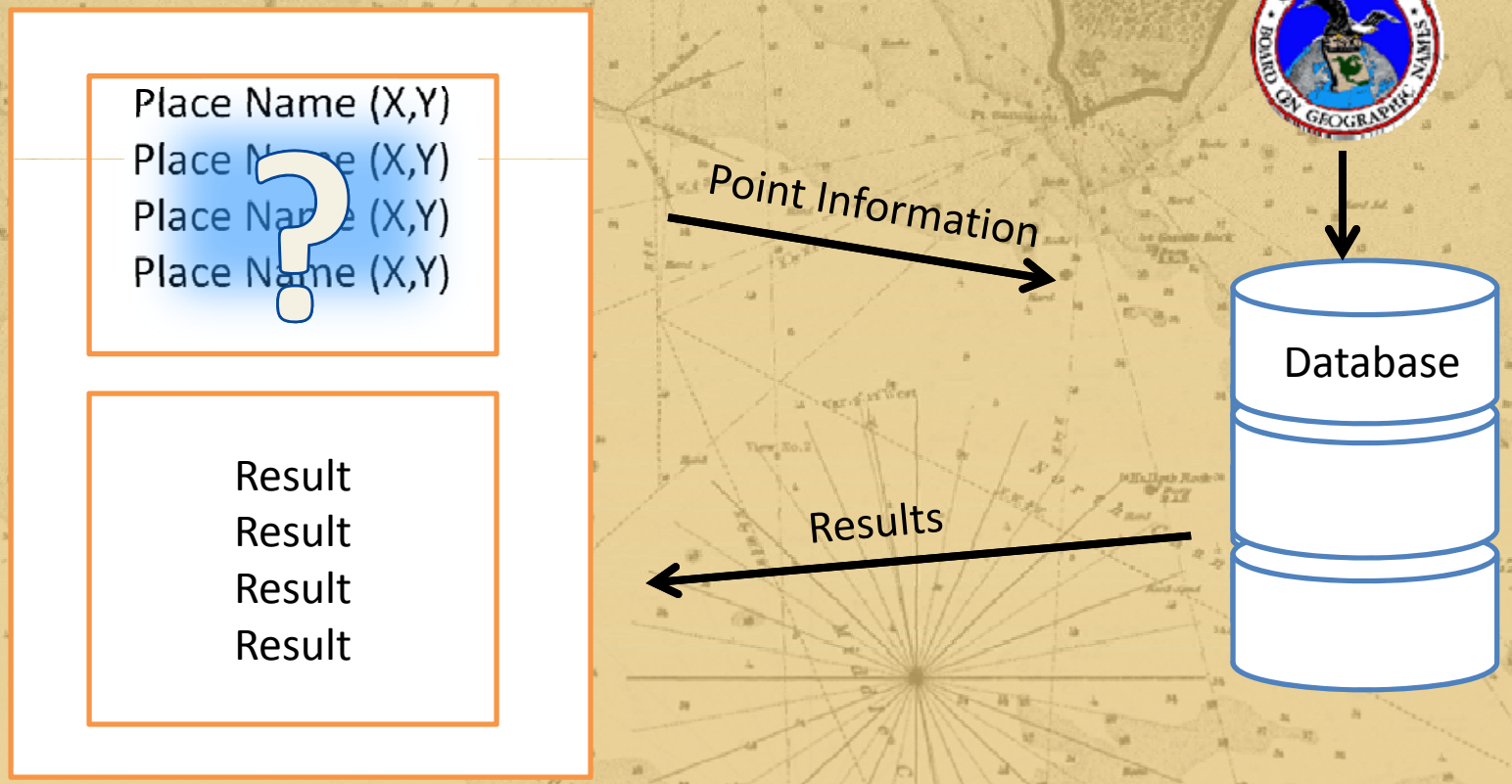
Remarks
Cape Gregory
SOUNDINGS
Sand
DMS Calculator
DMS Calculator
1093, 438
1093, 964
60
Min
You have a base.
Click two more
point
Library of Congress
1373

Searching by Point

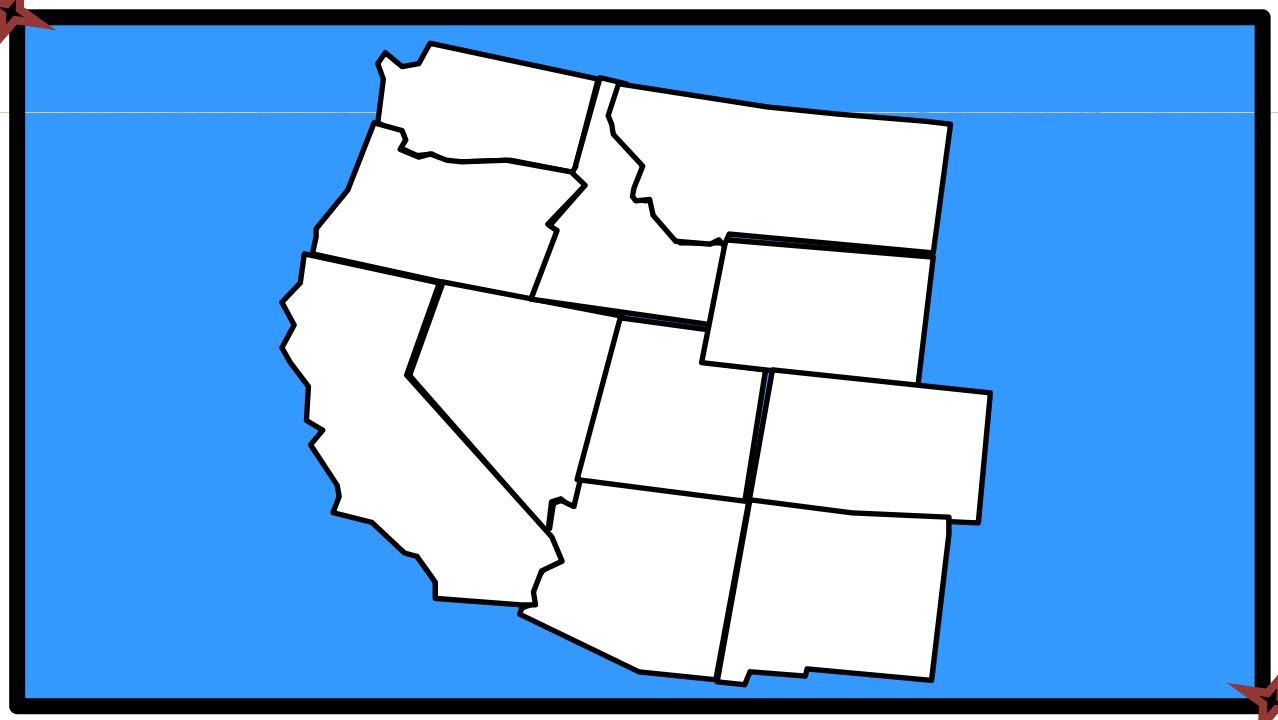




Place Name Search



Possible Future Step



Key Points

- Outline a method used to make scans into Geographic Information
- 38,000+ Historical Maps and Charts
  - Free and easily accessible
  - http://www.nauticalcharts.noaa.gov/history
  - Feedback is encouraged!
  - historicalcharts@noaa.gov

(Questions)

- Thank You

- For code questions
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