



NAMSS - A National Archive of Marine Seismic Surveys

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Pacific Coastal and Marine Science Center
U. S. Geological Survey



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National Archive of Marine Seismic Surveys

- Introduction – what is NAMSS
- History and development
- NAMSS web-site tour
- Future plans



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National Archive of Marine Seismic Surveys

■ Introduction – what is NAMSS

- NAMSS is an on-line map-based data archive providing unrestricted public access to marine seismic reflection data.

- The NAMSS web-site has been developed and maintained by the USGS; other agencies and institutions that have been involved in this project include:

- American Geological Institute (AGI)

- NSF (Earthscope)

- The Institute for Crustal Studies at UC Santa Barbara

- IRIS Data Management Center

- Minerals Management Service (now BOEMRE)

- During the 1970s and 1980s several hundred thousand km of 2D marine seismic reflection data were collected in the US EEZ by the hydrocarbon exploration industry.

Geospatial Data Life Cycle

- Define
- Inventory/Evaluate
- Obtain
- Access
- Maintain
- Use/Evaluate
- Archive

Data Types

- Marine seismic-reflection profile
 - includes shotpoint navigation and
 - relevant metadata (cruise report)
 - limited on-shore seismic-reflection data in coastal areas (particularly Alaska)
 - standard format (SEG-Y)

Sources of Data

- Must be in Public Domain, including
 - a) USGS
 - b) BOERME (MMS) 25-year release
 - c) Industry-released data (Chevron, WesternGeco, BP)
 - d) Other Public Domain not otherwise archived (NSF)

Other Programs and Projects

- NGDC
- Lamont-Doherty
- UTIG
- Proprietary Industry Databases



■ History and development

- 2004: WesternGeco and Chevron agreements
- 2005: NAMSS Web-site created
- 2011: Approximately 229,000 km (~93 gigabytes) of 2D data are currently available for down-load.

- Finding NAMSS:
<http://walrus.wr.usgs.gov/NAMSS/>



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The National Archive of Marine Seismic Surveys (NAMSS) is a marine seismic reflection profile data archive. The USGS is committed to safekeeping this data on behalf of the academic community and the nation. These data are provided with free and open access. For more information, visit our [About](#) page.

Search and Download Data

Search and download data in NAMSS using an interactive Google™ Map, a KMZ file with Google™ Earth or HTML data tables by region, contributor or year. Click the link above for more details.

Trackline Maps of Surveys in NAMSS

[Trackline Maps](#) - View trackline maps of surveys in NAMSS by region.

Related Geophysical Archives

[Marine Seismic Data Center - UT Austin Jackson School of Geoscience](#)

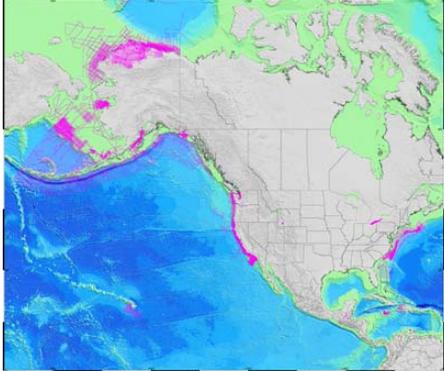
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Overview map of surveys in NAMSS.

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URL: <http://walrus.wr.usgs.gov/NAMSS/index.html>
Page Contact Information: [WCMG Web Team](#)
Page Last Modified: 4 December 2009 (lzt)



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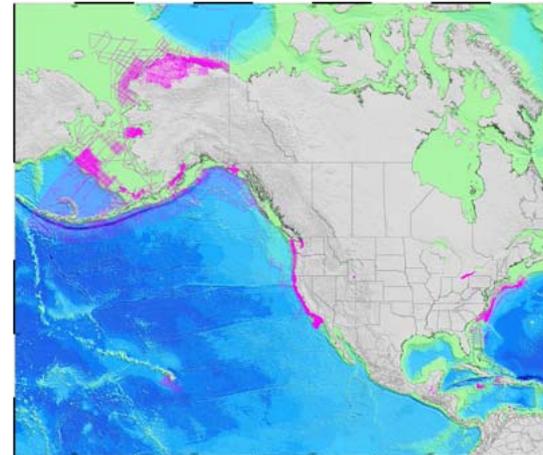
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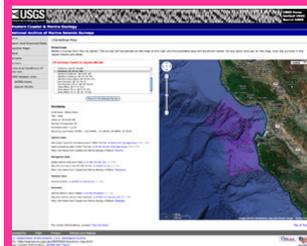
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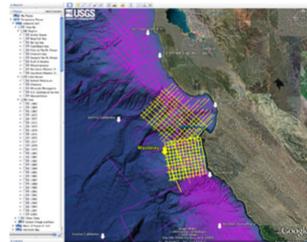
Search And Download Data



Data Access Using Google™ Maps

Click on the following link to use Google™ maps to search and download data in NAMSS.

[Search and download data in NAMSS](#)



Data Access Using Google™ Earth

The NAMSS KMZ file is a network link which will always be updated automatically with new seismic surveys as they become available. In addition to seismic data, offshore U.S. West Coast well locations are included in the NAMSS KMZ file and can be plotted as a layer in Google™ Earth.

To search and download data in NAMSS using Google™ Earth, follow these steps:

Step 1: Download the NAMSS KMZ file by clicking on the following link:

[namss.kmz](#).

Step 2: Open the NAMSS KMZ file in Google™ Earth.

Note: If you do not have Google™ Earth, you can download it for **free** from the

[Google™ Earth website](#).



Data Access Using Tables

Click on one of the following links to search and download data in NAMSS by region, contributor or year.

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Interactive Map

Directions

Select a survey from the list below. The survey will be plotted on the map to the right and the available data will be shown below. As you zoom and pan on the map, only the surveys in the region shown are listed.

159 surveys found in region shown

- British Petroleum**
 - Harrison Bay (B-P-70-AR)
 - Harrison Bay to Prudhoe Bay (B-P-71-AR)
 - NE NPR-A, Colville Delta, Prudhoe Bay (B-PC-71-AK)
 - Southwest portion of Prudhoe Bay Field (B-PW-71-AK)
 - West of Kuparuk Unit (B-P-66-AK)
- Chevron**
 - Cortes Basin (H-18-79-SC)
 - San Diego, San Pedro (H-17-79-SC)
 - Santa Maria Basin (H-14-79-SC)

Zoom In To Selected Survey



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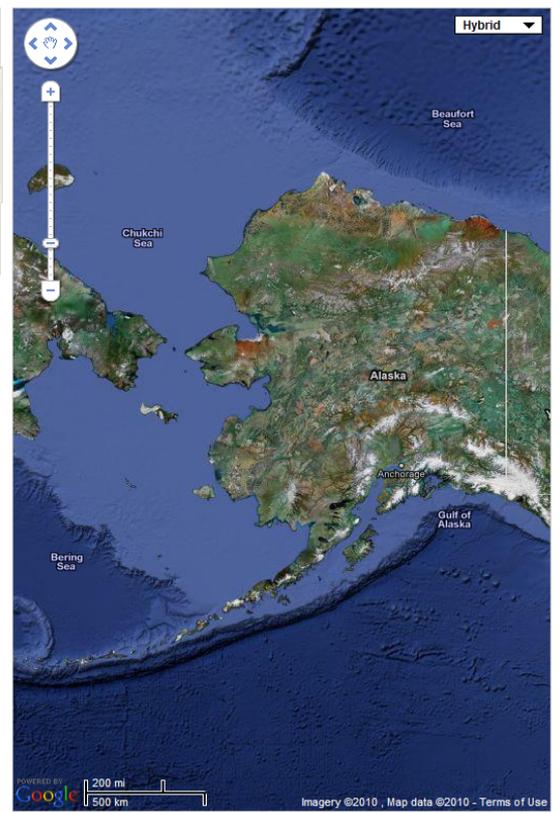
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80 surveys found in region shown
Arctic Ocean Icebreaker (P-188-AR)
Beaufort Sea (L-9-77-AR)
Beaufort Sea (L-9-82-DC)
Bering Sea (F-3-86-BS)
Bering Sea (L-9-80-BS)
Bering Sea (F-2-86-BS)
Bering Sea (L-5-78-BS)
Bering Sea (F-4-85-BS)
Bering Sea (L-4-83-BS)
Zoom In To Selected Survey



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80 surveys found in region shown

- Arctic Ocean Icebreaker (P-1-88-AR)
- Arctic Ocean Icebreaker (P-1-93-AR)
- Beaufort Sea (L-9-77-AR)
- Bering Sea (L-9-82-BS)
- Bering Sea (F-3-86-BS)
- Bering Sea (L-9-80-BS)
- Bering Sea (F-2-85-BS)
- Bering Sea (L-5-79-BS)
- Bering Sea (F-4-86-BS)
- Bering Sea (L-4-83-BS)

Zoom In To Selected Survey

Beaufort Sea

Information

Contributor: U.S. Geological Survey
 Year: 1977
 USGS ID: L-9-77-AR
 Number of tracklines: 71
 Kilometers shot ~ 5,441
 Bounding coordinates (WESN): -168.05461, -140.96004, 66.62498, 72.74130

Seismic Data

Stack processing data in SEG-Y format: [l-9-77-ar.stk.sgy.tar](#) (1241.9 MB)
 More information from Coastal and Marine Geology InfoBank: [Seismic](#)

Navigation Data

Edited seismic shot point data: [l-9-77-ar.420_011](#) (0.4 MB)
 Best file with nav in ArcInfo E00 format: [l-9-77-ar.zip](#) (0.8 MB)
 More information from Coastal and Marine Geology InfoBank: [Navigation](#)

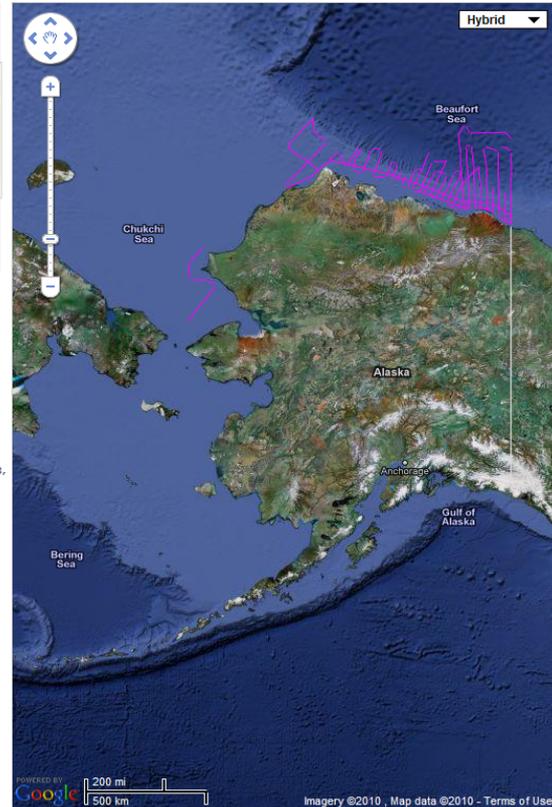
Velocity Data

No velocity data available to download for this survey.

Metadata

No metadata available to download for this survey.
 More information from Coastal and Marine Geology InfoBank: [Metadata](#)

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17 surveys found in region shown

- WesternGeco**
- CA/OR-WA (COW) Mini Cable (W-18-75-NP)
 - California (W-22-79-NC)
 - Mendocino (W-17-79-NC)
 - Monterey (W-34-82-MB)
 - Northern California (W-35-82-NC)
 - Northern California (W-4-82-NC)
 - Northern Santa Maria (W-32-82-CC)
 - San Francisco (W-14-76-SF)
 - San Francisco Fill-In (W-16-76-SF)

Zoom In To Selected Survey

San Francisco Fill-In

Information

Contributor: WesternGeco
 Year: 1976
 USGS ID: W-16-76-SF
 Number of tracklines: 14
 Kilometers shot ~ 790
 Bounding coordinates (WESN): -123.58373, -122.46101, 37.12836, 38.40027

Seismic Data

Post-stack migration processing data in SEG-Y format: [w-16-76-sf.mig.segy.tar.gz](#) (69.3 MB)
 Stack processing data in SEG-Y format: [w-16-76-sf.stk-mute.segy.tar.gz](#) (82.5 MB)
 More information from Coastal and Marine Geology InfoBank: [Seismic](#)

Navigation Data

Edited seismic shot point data: [w-16-76-sf.420_051](#) (2.3 MB)
 Best file with nav in ArcInfo E00 format: [w-16-76-sf.zip](#) (0.2 MB)
 More information from Coastal and Marine Geology InfoBank: [Navigation](#)

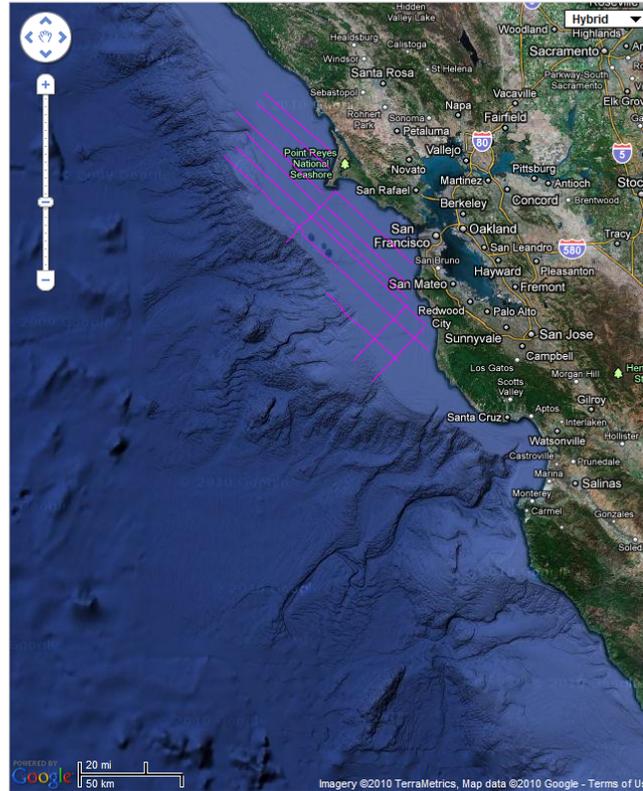
Velocity Data

Velocity profiles: [w-16-76-sf.velocity.zip](#) (0.1 MB)

Metadata

Sample location map: [w-16-76-sf.locations.pdf](#) (10.8 MB)
 Migration seismic section scan example: [w-16-76-sf.mig.scan.pdf](#) (10.8 MB)
 More information from Coastal and Marine Geology InfoBank: [Metadata](#)

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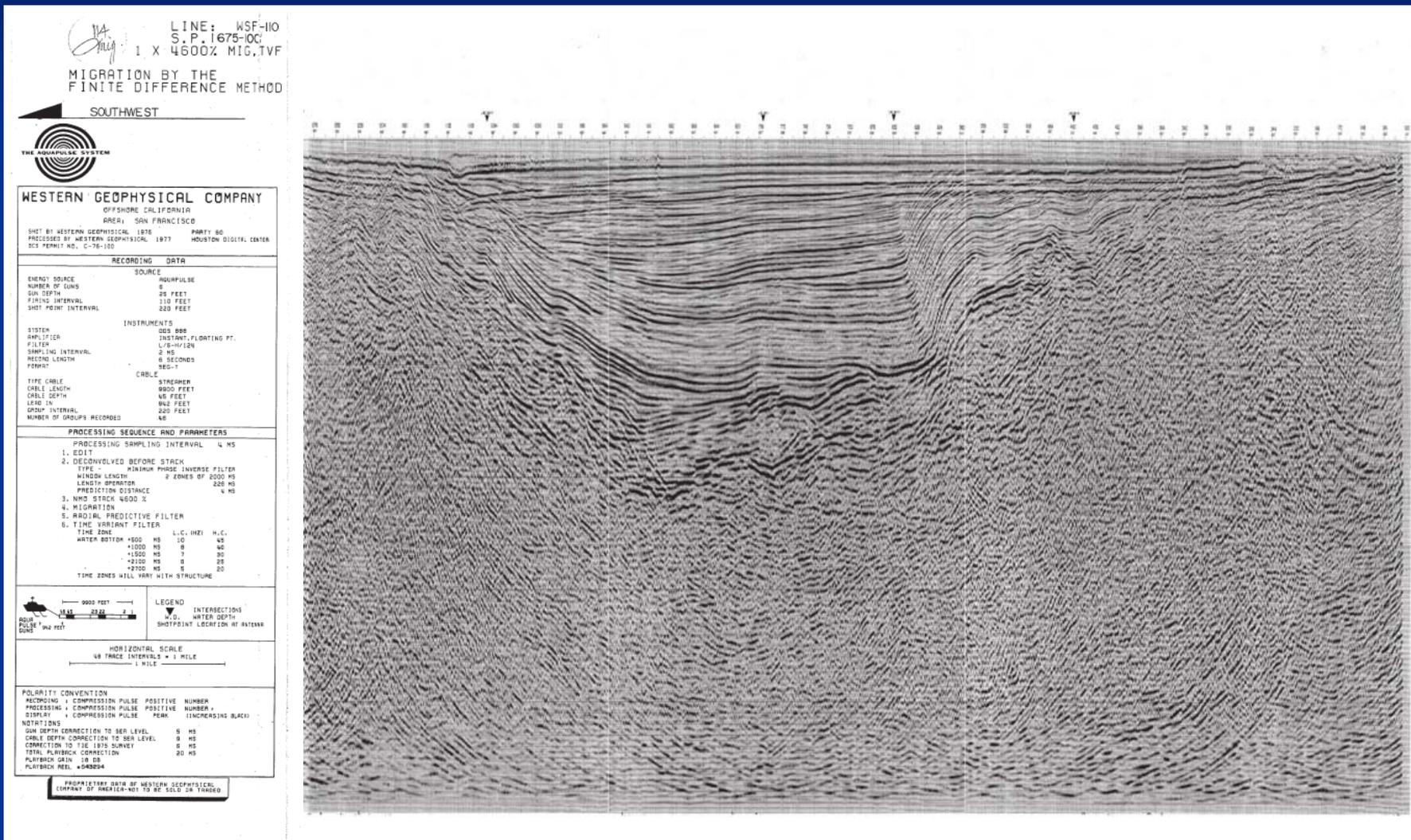


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Scanned image of seismic profile hardcopy



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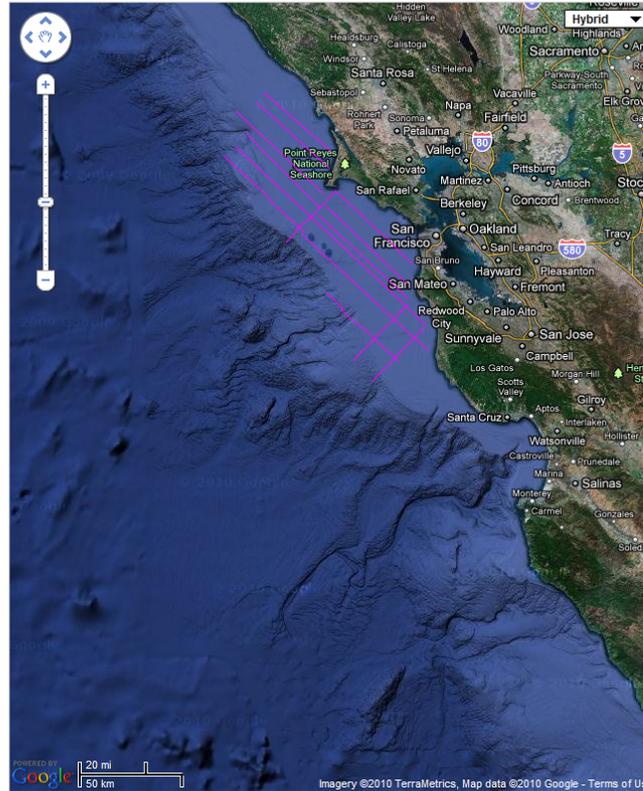
Velocity Data

Velocity profiles: [w-16-76-sf.velocity.zip](#) (0.1 MB)

Metadata

Sample EBCDIC ASCII header: [w-16-76-sf.ebcdic](#) (0.1 MB)
 Migration seismic section scan example: [w-16-76-sf.mig.scan.pdf](#) (10.8 MB)
 More information from Coastal and Marine Geology InfoBank: [Metadata](#)

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USGS CMG W-16-76-SF Metadata

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Activity First Letter: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#) [0](#) [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#)

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ID	W-16-76-SF
Also Known As	116
Abstract	WesternGeco. Geophysical data (navigation, seismic) of field activity W-16-76-SF in SAN FRANCISCO FILL-IN 1976 from 00/00/1976 to 00/00/1976
Organization	WesternGeco
Activity Type	Geophysical
Area of Operation	SAN FRANCISCO FILL-IN 1976, San Francisco Bay, CA
Bounding Coordinates	38.40027 -123.58373 -122.46101 37.12836
Dates	00/00/1976 (JD 000) to 00/00/1976 (JD 000)
Analog Materials	list
Information Specialist	Jon Childs
Equipment Used	navigation seismic
Notes	<p>DESCRIPTION OF SURVEY AREA 116: SAN FRANCISCO FILL-IN 1976</p> <p>DATE OF SURVEY SEP/OCT 1976</p> <p>TAPE VERSION IDENTIFIER 800-PL</p> <p>CLIENT NAME WESTERNGECO MULTIClient</p> <p>COORDINATE LOCATION ANTENNA LOCATIONS</p> <p>SHEARWID DEFINITION - SURVEYCLASS (1066) 4978206.400 244.9764905</p> <p>SHEARWID DEF. - POINT PLOT CLARKE (1066) 4978206.400 244.9764905</p> <p>GEODETIC DATUM - SURVEY NAD 1987</p> <p>GEODETIC DATUM - POINT PLOT NAD 1987</p> <p>DATUM SHIFT</p> <p>PROJECTION TYPE LAMBERT</p> <p>GRID SYSTEM CALIFORNIA ZONE 2</p> <p>GRID UNITS U.S. SURVEY FEET</p> <p>STANDARD PARALLELS 3620 0.0000 3980 0.0000</p> <p>CENTRAL MERIDIAN 12200 0.0000</p> <p>GRID ORIGIN 9720 0.0000 2200 0.0000</p> <p>GRID COORDINATES AT ORIGIN 0000000.000 0.000</p>

Type	Data	KMZ	Shape	Def	Metadata
Metadata	html			def	txt html FAQ xml
Navigation	html	nav		def	
Seismic	html	sis		def	
Times		051.times		def	



Got Help? For W-16-76-SF, we would appreciate any information on -- chief scientist, contract, crew, days at sea, dive count, funding, information to be derived, kms of navigation, national plan, NGDC Info, owner, platform, ports, project, project number, publications, purpose, scanned materials, seismic description, station count, station description, submersible, summary, tabulated info.

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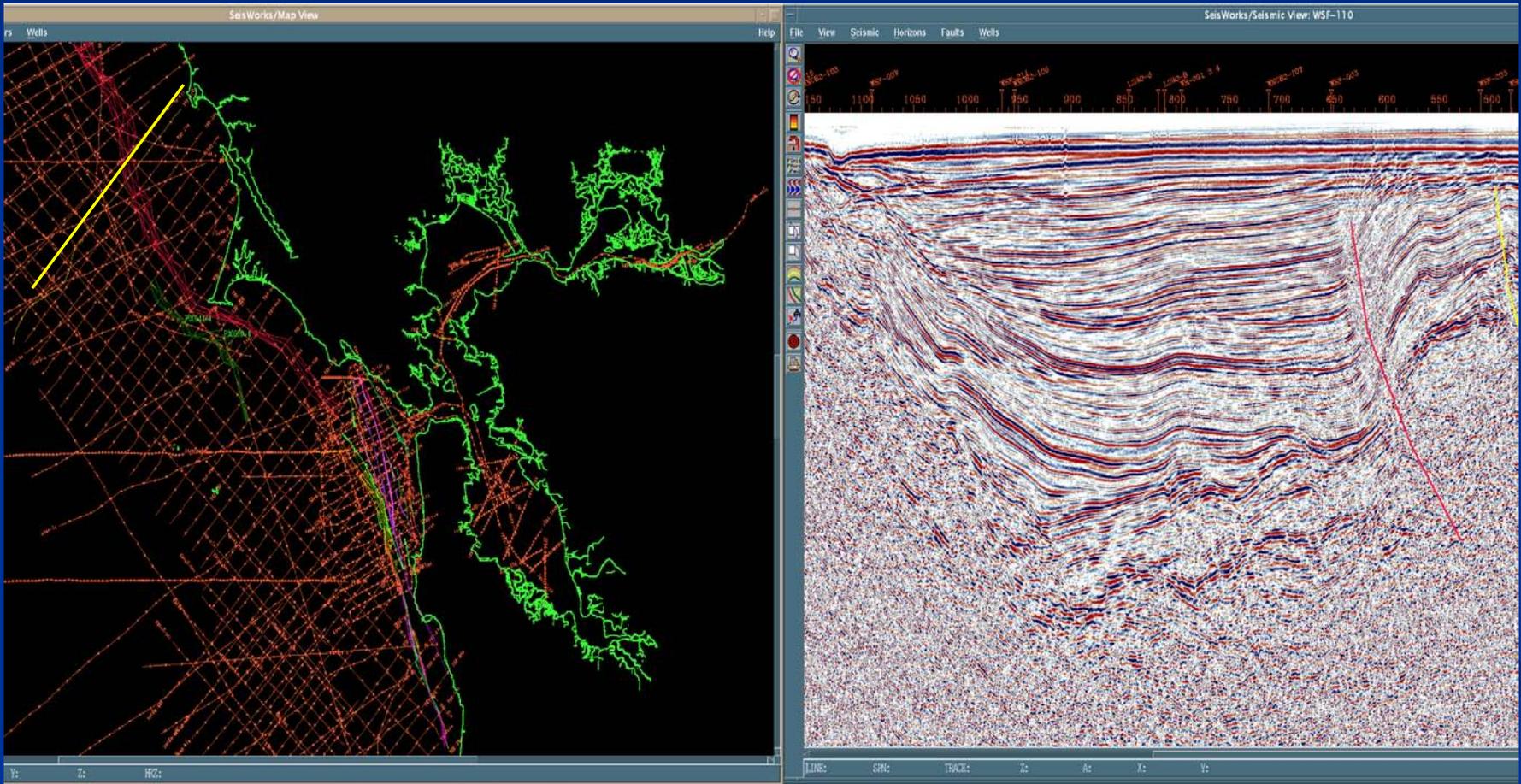
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Interpretation workstation display



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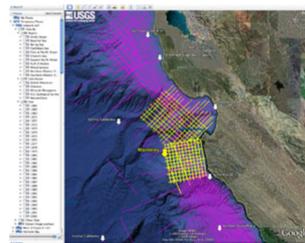
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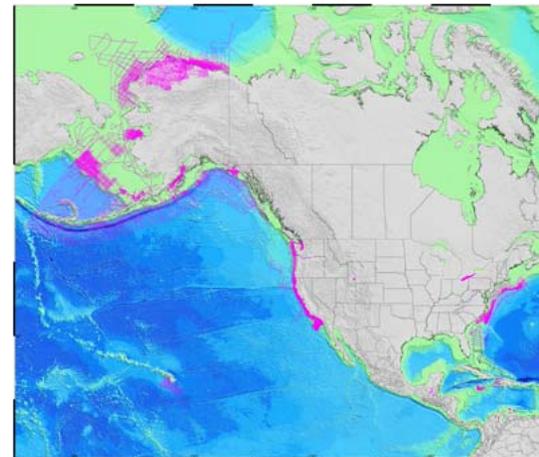
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■ Future plans

- Possible agreement with Minerals Management Service to distribute their seismic data releases, including extensive Gulf of Mexico coverage.
- Include additional data types for surveys, such as scans of film copies, stacking velocities, and pre-stack data.
- Include data sets that have been or will be contributed by Ogle & Heck Petroleum, BP Alaska, and Pacific Gas & Electric; and find additional industry partners for more data sets including 3D surveys.
- Process data sets that are only available as pre-stack and put the post-stack results on-line.
- Add a user feedback utility to allow problems discovered with individual surveys to be posted.