

# *NOAA Phytoplankton Monitoring Network*

## Downloading Phytoplankton Data

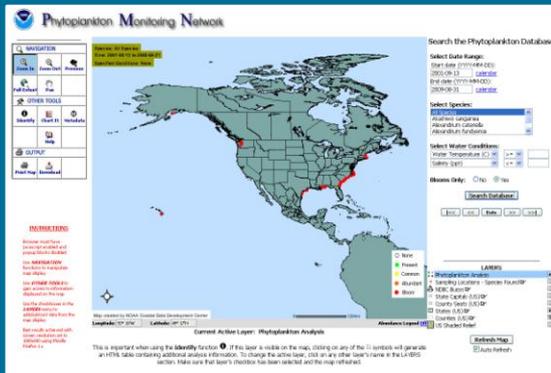
Phytoplankton Monitoring Network (PMN)

<http://www.chbr.noaa.gov/pmn/>

PMN On-line Mapping Analysis

<http://www.ncddc.noaa.gov/website/SEPMN/viewer.htm>

# Downloading Phytoplankton Data



Access over 8 years of volunteer data from the NOAA Phytoplankton Monitoring Network, the NH Great Bay Coast Watch Volunteer Program and the WA SoundToxins HAB Program.

The on-line Geographic Information System (GIS) mapping interface allows users to analyze phytoplankton abundances

from around the network. Views can be refined by inputting specific timeframes, specific species, and/or specific water conditions such as water temperature or salinity. Data can be downloaded by individual sampling site or for the entire network for further investigation.

A special thanks goes to the NOAA Coastal Data Development Center (NCDDC) for developing , managing and trouble shooting the PMN database and on-line mapping interface.

If you have questions about downloading data, please contact the PMN at (843) 762-8657.

# Downloading Phytoplankton Data

**Phytoplankton Monitoring Network**

Search the Phytoplankton Database

**#1 – Enter the date range of interest**

Species: All Species  
Time: 2001-09-13 - 2009-08-31  
Specified Conditions: None

**#2 – Select the species of interest**

Select Date Range:  
Start date (YYYY-MM-DD): 2001-09-13 [calendar](#)  
End date (YYYY-MM-DD): 2009-08-31 [calendar](#)

Select Species:  
All Species  
Akashiwo sanguinea  
Alexandrium catenella  
Alexandrium fundyense

Select Water Conditions:  
Water Temperature (C) >= <>  
Salinity (ppt) <= <>

Blooms Only:  No  Yes

[Search Database](#)

[|<<](#) [<<](#) [Date](#) [>>](#) [>>|](#)

Map created by NOAA Coastal Data Development Center  
Longitude: 93° 10'W Latitude: 77° 27'N

Abundance Legend [off](#)

Current Active Layer: Phytoplankton Analysis

[Refresh Map](#)  
 Auto Refresh

**INSTRUCTIONS**

Browser must have javascript enabled and popup blocks disabled

Use **NAVIGATION** functions to manipulate map display

Use **OTHER TOOLS** to gain access to information displayed on the map

Use the checkboxes in the **LAYERS** menu to add/subtract data from the map display

Best results achieved with screen resolution set to 1000x800 using Mozilla Firefox 1.x

This is important when using the **Identify** function . If this layer is visible on the map, clicking on any of the symbols will generate an HTML table containing additional analysis information. To change the active layer, click on any other layer's name in the LAYERS section. Make sure that layer's checkbox has been selected and the map refreshed.

# Downloading Phytoplankton Data

**Phytoplankton Monitoring Network**

Species: All Species  
Time: 2001-09-13 - 2009-08-31  
Specified Conditions: None

**Search the Phytoplankton Database**

Select Date Range:  
Start date (YYYY-MM-DD): 2001-09-13 [calendar](#)  
End date (YYYY-MM-DD): 2009-08-31 [calendar](#)

Select Species:  
All Species  
Akashiwo sanguinea  
Alexandrium catenella  
Alexandrium fundyense

Select Water Conditions:  
Water Temperature (C) >= <>  
Salinity (ppt) <= <>

Blooms Only:  No  Yes

[Search Database](#)

Navigation: Zoom In, Zoom Out, Previous, Full Extent, Pan  
Other Tools: Identify, Chart It, Metadata, Help  
Output: Print Map, Download

**INSTRUCTIONS**  
Browser must have javascript enabled and popup blocks disabled  
Use **NAVIGATION** functions to manipulate map display  
Use **OTHER TOOLS** to gain access to information displayed on the map  
Use the checkboxes in the **LAYERS** menu to add/subtract data from the map display  
Best results achieved with screen resolution set to 1000x800 using Mozilla Firefox 1.x

Map created by NOAA Coastal Data Development Center  
Longitude: 93° 10'W Latitude: 77° 27'N  
Abundance Legend: None, Present, Common, Abundant, Bloom  
Current Active Layer: Phytoplankton Analysis  
LAYERS: Phytoplankton Analysis, Sampling Locations - Species Found, NDBC Buoys, State Capitals (US), County Seats (US), States (US), Counties (US), US Shaded Relief

[Refresh Map](#)  
 Auto Refresh

#3 – Enter any water conditions  
#4 – Select 'Blooms Only' or not  
#5 – Select 'Search' to redraw the map

This is important when using the **Identify** function. If this layer is visible on the map, clicking on any of the symbols will generate an HTML table containing additional analysis information. To change the active layer, click on any other layer's name in the **LAYERS** section. Make sure that layer's checkbox has been selected and the map refreshed.

# Downloading Phytoplankton Data

**Phytoplankton Monitoring Network**

Search the Phytoplankton Database

Species: All Species  
Time: 2001-01-01

**# 6 – Use 'Zoom In' tool to select sampling site area of interest (for example: Texas)**

**NAVIGATION**

- Zoom In
- Zoom Out
- Previous
- Full Extent
- Pan

**OTHER TOOLS**

- Identify
- Chart It
- Metadata
- Help

**OUTPUT**

- Print Map
- Download

**INSTRUCTIONS**

Browser must have javascript enabled and popup blocks disabled

Use **NAVIGATION** functions to manipulate map display

Use **OTHER TOOLS** to gain access to information displayed on the map

Use the checkboxes in the **LAYERS** menu to add/subtract data from the map display

Best results achieved with screen resolution set to 1000x800 using Mozilla Firefox 1.x

Map created by NOAA Coastal Data Development Center

Longitude: 93° 10'W    Latitude: 77° 27'N

Abundance Legend

- None
- Present
- Common
- Abundant
- Bloom

**Search Date Range:**

Start date (YYYY-MM-DD): 2001-09-13 [calendar](#)

End date (YYYY-MM-DD): 2009-08-31 [calendar](#)

**Select Species:**

- All Species
- Akashiwo sanguinea
- Alexandrium catenella
- Alexandrium fundyense

**Select Water Conditions:**

Water Temperature (C) >=

Salinity (ppt) <=

**Blooms Only:**  No  Yes

**Search Database**

|<< << Date >> >>|

**LAYERS**

- Phytoplankton Analysis
- Sampling Locations - Species Found
- NDBC Buoys
- State Capitals (US)
- County Seats (US)
- States (US)
- Counties (US)
- US Shaded Relief

**Refresh Map**

Auto Refresh

**Current Active Layer: Phytoplankton Analysis**

This is important when using the **Identify** function. If this layer is visible on the map, clicking on any of the symbols will generate an HTML table containing additional analysis information. To change the active layer, click on any other layer's name in the **LAYERS** section. Make sure that layer's checkbox has been selected and the map refreshed.

# Downloading Phytoplankton Data

**NAVIGATION**

Zoom In Zoom Out Previous Next

Full Extent Pan

**OTHER TOOLS**

Identify Chart It Metadata

Help

**OUTPUT**

Print Map Download

**INSTRUCTIONS**

Browser must have javascript enabled and popup blocks disabled

Use **NAVIGATION** functions to manipulate map display

Use **OTHER TOOLS** to gain access to information displayed on the map

Use the checkboxes in the **LAYERS** menu to add/subtract data from the map display

Best results achieved with screen resolution set to 1000x800 using Mozilla Firefox 1.x

Species: All Time: 200

Search the Phytoplankton Database

# 7 – Continue to ‘Zoom In’ on the sampling site(s) you want to download data (for example: Galveston Bay area – Pine Gully Pier sampling site)

Akashiwo sanguinea  
Alexandrium catenella  
Alexandrium fundyense

Select Water Conditions:

Water Temperature (C) >= <> <> <>  
Salinity (ppt) <= <> <> <> <>

Blooms Only:  No  Yes

Search Database

|<< << Date >> >>|

○ None  
● Present  
● Common  
● Abundant  
● Bloom

**LAYERS**

Phytoplankton Analysis   
+ Sampling Locations - Species Found   
NDBC Buoys   
State Capitals (US)   
County Seats (US)   
States (US)   
Counties (US)   
US Shaded Relief

Map created by NOAA Coastal Data Development Center

Longitude: 96° 20'W Latitude: 28° 53'N

Abundance Legend Off

Current Active Layer: Phytoplankton Analysis

Refresh Map  Auto Refresh

This is important when using the **Identify** function **I**. If this layer is visible on the map, clicking on any of the **+** symbols will generate an HTML table containing additional analysis information. To change the active layer, click on any other layer's name in the **LAYERS** section. Make sure that layer's checkbox has been selected and the map refreshed.

# Downloading Phytoplankton Data

NOAA Phytoplankton Monitoring Network

Search the Phytoplankton Database

Species: All Sp...  
Time: 2001-09

**# 8 – Continue to ‘Zoom In’ on the sampling site(s) you want to download data (for example: Pine Gully Pier)**

**You download data for ALL ‘DOTS’ appearing on the screen. *Make sure you have “zoomed in” so only the ‘dot’ of the site(s) you want data for are showing!***

This is important when using the **Identify** function **i**. If this layer is visible on the map, clicking on any of the **•••** symbols will generate an HTML table containing additional analysis information. To change the active layer, click on any other layer's name in the **LAYERS** section. Make sure that layer's checkbox has been selected and the map refreshed.

**INSTRUCTIONS**

Browser must have javascript enabled and popup blocks disabled

Use **NAVIGATION** functions to manipulate map display

Use **OTHER TOOLS** gain access to information displayed on the map

Use the checkboxes in **LAYERS** menu to add/subtract data from map display

Best results achieved screen resolution set to 1000x800 using Mozilla Firefox 1.x

**NAVIGATION**

Zoom In Zoom Out Previous

Full Extent Pan

**OTHER TOOLS**

Identify Chart It Metadata

Help

**OUTPUT**

Print Map Download

Select Water Conditions:

Water Temperature (C) >= << >> >= << >>

Salinity (ppt) <= << >> <= << >>

Blooms Only:  No  Yes

Search Database

|<< << Date >> >>|

**LAYERS**

Phytoplankton Analysis

Sampling Locations - Species Found

Buoys

Capitals (US)

County Seats (US)

Cities (US)

Cities (US)

Shaded Relief

Refresh Map

Auto Refresh

# Downloading Phytoplankton Data

Use the 'Identify' tool to determine the names of sampling sites and/or to view data. Make sure to remember to switch back to the "Zoom In" tool.

Phytoplankton Monitoring Network

Species: All Species  
Time: 2001-09-13 - 2009-08-31  
Specified Conditions: None

NAVIGATION  
Zoom In Zoom Out Previous  
Full Extent Pan  
OTHER TOOLS  
Identify Chart It Metadata  
Help  
OUTPUT  
Print Map Download

Phytoplankton Analysis  
Results: 123 Records

Attribute	Value
Record #	1
Collection ID	
Sampling Site	TX - Pine Gully Pier
Latitude	29.58933
Longitude	-94.99033
Date Collected	Sun, 05 Apr 2009 08:00:00
Water Temp. (C)	20
Dissolved Oxygen	6
Barometric Pressure	
Air Temp. (C)	23
Weather	Cloudy
Tide	High
Water Salinity	18
Wind Direction	West
Secchi Disk (cm)	75
pH	8.2
Wind Speed	0-5
Comments	
Species Name	Rhizosolenia morphotype
Abundance	Present
Count	2
Link to Microscope Image	<a href="#">Click to see Phytoplankton</a>
Shape	[point]
Object ID	6041

Select Date Range:  
Start date (YYYY-MM-DD): 2001-09-13 [calendar](#)  
End date (YYYY-MM-DD): 2009-08-31 [calendar](#)

Select Species:  
All Species  
Akashiwo sanguinea  
Alexandrium catenella  
Alexandrium fundyense

Select Water Conditions:  
Water Temperature (C) >= < > < < <  
Salinity (ppt) >= < > < < <

Blooms Only:  No  Yes

Search Database

Phytoplankton Analysis  
+ Sampling Locations - Species Found  
NDBC Buoys  
State Capitals (US)  
County Seats (US)  
States (US)  
Counties (US)  
US Shaded Relief

Refresh Map  
 Auto Refresh

Map created by NOAA Coastal Data Development Center  
Longitude: 94° 59'W Latitude: 29° 35'N  
Current Active Layer: Phytoplankton Analysis

INSTRUCTION: Browser must have javascript enabled a popup. Use A functi map. Use d gain - displa. Use the checkboxes in the LAYERS menu to add/subtract data from the map display. Best results achieved with screen resolution set to 1000x800 using Mozilla Firefox 1.x

#9 – Select 'Download'

This is important when using the Identify function. If this layer is visible on the map, clicking on any of the symbols will generate an HTML table containing additional analysis information. To change the active layer, click on any other layer's name in the LAYERS section. Make sure that layer's checkbox has been selected and the map refreshed.

# Downloading Phytoplankton Data

The screenshot shows a web browser window with the address bar containing <http://www.ncddc.noaa.gov/website/SEPMN/toolbar.htm>. The page title is "Clip & Ship".

Any layers that can be viewed from the current map extent are available for download. Use the checkboxes to define which layers you want to download. Each layer that is checked will be clipped to the current map extent and packaged into a zip file for you to download.

To access a layer's metadata record, click on the appropriate metadata icon. After clicking the icon, to save the metadata record, go to the "File" menu, choose "Save As", and navigate to where you would like to save the record.

The interface features a list of layers with checkboxes and metadata icons (M):

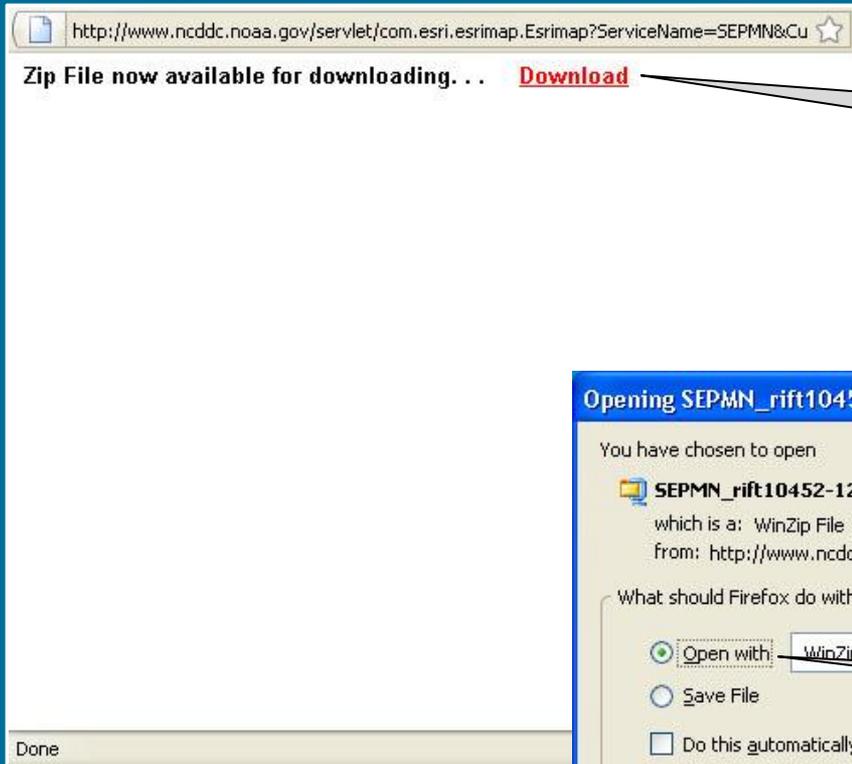
- M** Phytoplankton Analysis
- M** Sampling Locations
- M** NDBC Buoys
- M** State Capitals (US)
- M** County Seats (US)
- M** States (US)
- M** Counties

Buttons for "Check All", "Clear All", and "Clip & Ship" are located to the right of the list. A "Done" button is at the bottom left of the page.

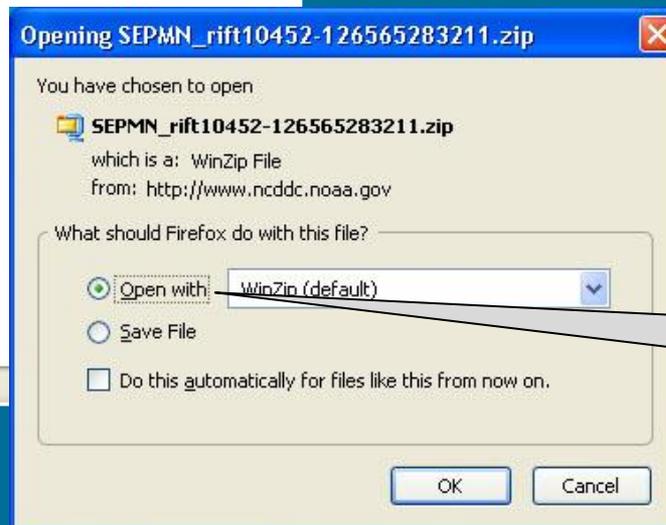
Select 'layers' of interest

#10 – Select 'Clip & Ship'

# Downloading Phytoplankton Data



#11 – Select 'Download' to save the Zip file



#12 – Select 'Open with'

# Downloading Phytoplankton Data

WinZip - SEPMN\_rift10452-126565283211.zip

File Actions View Jobs Options Help

New Open Favorites Add Extract Mail Encrypt View CheckOut Wizard View Style

Name	Type	Modified	Size	Ratio	Packed	Path
sepmn_data.shp	SHP File	8/31/2009 12:25 PM	3,172	89%	362	
sepmn_data.shx	SHX File	8/31/2009 12:25 PM	484	65%	167	
sepmn_data.dbf	DBF File	8/31/2009 12:25 PM	50,001	95%	2,630	
sepmn_data.prj	PRJ File	8/31/2009 12:25 PM	168	18%	138	

Selected 1 file, 49KB Total 4 files, 53KB

#13 – Select 'dbf' data file, open in Excel or other spreadsheet

# Downloading Phytoplankton Data

The screenshot shows a Microsoft Excel spreadsheet titled 'sepmn\_data'. The spreadsheet contains a table with 14 columns (A-M) and 48 rows of data. The data includes station names, coordinates, dates, and various measurements. A speech bubble overlay on the right side of the spreadsheet contains the text 'Opened in Excel... SUCCESS!'.

	A	B	C	D	E	F	G	H	I	J	K	L	M
10	TX - Pine Gully Pier	29.58933	-94.99033	8/10/2008	31.00000	6.70000	0.00000	29.00000	Sunny	Incoming	17.00000	South	40.00000
11	TX - Pine Gully Pier	29.58933	-94.99033	8/10/2008	31.00000	6.70000	0.00000	29.00000	Sunny	Incoming	17.00000	South	40.00000
12	TX - Pine Gully Pier	29.58933	-94.99033	8/10/2008	31.00000	6.70000	0.00000	29.00000	Sunny	Incoming	17.00000	South	40.00000
13	TX - Pine Gully Pier	29.58933	-94.99033	7/27/2008	28.50000	5.50000	0.00000	28.00000	Sunny	Incoming	17.00000	South East	50.00000
14	TX - Pine Gully Pier	29.58933	-94.99033	7/27/2008	28.50000	5.50000	0.00000	28.00000	Sunny	Incoming	17.00000	South East	50.00000
15	TX - Pine Gully Pier	29.58933	-94.99033	7/27/2008	28.50000	5.50000	0.00000	28.00000	Sunny	Incoming	17.00000	South East	50.00000
16	TX - Pine Gully Pier	29.58933	-94.99033	7/13/2008	29.00000	6.00000	0.00000	26.00000	Sunny	Incoming	16.00000	Sp	
17	TX - Pine Gully Pier	29.58933	-94.99033	7/13/2008	29.00000	6.00000	0.00000	26.00000	Sunny				
18	TX - Pine Gully Pier	29.58933	-94.99033	6/1/2008	28.00000	6.50000	0.00000	28.00000	Sunny				
19	TX - Pine Gully Pier	29.58933	-94.99033	4/6/2008	20.00000	8.00000	0.00000	17.00000	Sunny				
20	TX - Pine Gully Pier	29.58933	-94.99033	3/9/2008	14.50000	8.00000	0.00000	12.50000	Partly C				
21	TX - Pine Gully Pier	29.58933	-94.99033	3/9/2008	14.50000	8.00000	0.00000	12.50000					
22	TX - Pine Gully Pier	29.58933	-94.99033	3/9/2008	14.50000	8.00000	0.00000	12.50000					
23	TX - Pine Gully Pier	29.58933	-94.99033	3/9/2008	14.50000	8.00000	0.00000	12.50000					
24	TX - Pine Gully Pier	29.58933	-94.99033	3/9/2008	14.50000	8.00000	0.00000	12.50000					
25	TX - Pine Gully Pier	29.58933	-94.99033	3/9/2008	14.50000	8.00000	0.00000	12.50000					
26	TX - Pine Gully Pier	29.58933	-94.99033	2/25/2008	15.50000	8.00000	0.00000	17.00000					
27	TX - Pine Gully Pier	29.58933	-94.99033	2/25/2008	15.50000	8.00000	0.00000	17.00000					
28	TX - Pine Gully Pier	29.58933	-94.99033	2/25/2008	15.50000	8.00000	0.00000	17.00000					
29	TX - Pine Gully Pier	29.58933	-94.99033	2/25/2008	15.50000	8.00000	0.00000	17.00000	Cloudy				
30	TX - Pine Gully Pier	29.58933	-94.99033	2/25/2008	15.50000	8.00000	0.00000	17.00000	Cloudy				
31	TX - Pine Gully Pier	29.58933	-94.99033	2/25/2008	15.50000	8.00000	0.00000	17.00000	Cloudy	High		South West	
32	TX - Pine Gully Pier	29.58933	-94.99033	2/25/2008	15.50000	8.00000	0.00000	17.00000	Cloudy	High	10.00000	South West	
33	TX - Pine Gully Pier	29.58933	-94.99033	2/25/2008	15.50000	8.00000	0.00000	17.00000	Cloudy	High	10.00000	South West	25.00000
34	TX - Pine Gully Pier	29.58933	-94.99033	2/25/2008	15.50000	8.00000	0.00000	17.00000	Cloudy	High	10.00000	South West	25.00000
35	TX - Pine Gully Pier	29.58933	-94.99033	2/10/2008	14.50000	11.00000	0.00000	15.00000	Sunny	Low	15.00000	North East	50.00000
36	TX - Pine Gully Pier	29.58933	-94.99033	2/10/2008	14.50000	11.00000	0.00000	15.00000	Sunny	Low	15.00000	North East	50.00000
37	TX - Pine Gully Pier	29.58933	-94.99033	2/10/2008	14.50000	11.00000	0.00000	15.00000	Sunny	Low	15.00000	North East	50.00000
38	TX - Pine Gully Pier	29.58933	-94.99033	2/10/2008	14.50000	11.00000	0.00000	15.00000	Sunny	Low	15.00000	North East	50.00000
39	TX - Pine Gully Pier	29.58933	-94.99033	2/10/2008	14.50000	11.00000	0.00000	15.00000	Sunny	Low	15.00000	North East	50.00000
40	TX - Pine Gully Pier	29.58933	-94.99033	2/10/2008	14.50000	11.00000	0.00000	15.00000	Sunny	Low	15.00000	North East	50.00000
41	TX - Pine Gully Pier	29.58933	-94.99033	2/10/2008	14.50000	11.00000	0.00000	15.00000	Sunny	Low	15.00000	North East	50.00000
42	TX - Pine Gully Pier	29.58933	-94.99033	1/27/2008	9.00000	10.00000	0.00000	11.00000	Mostly Cloudy		13.00000	North West	25.00000
43	TX - Pine Gully Pier	29.58933	-94.99033	1/27/2008	9.00000	10.00000	0.00000	11.00000	Mostly Cloudy		13.00000	North West	25.00000
44	TX - Pine Gully Pier	29.58933	-94.99033	1/27/2008	9.00000	10.00000	0.00000	11.00000	Mostly Cloudy		13.00000	North West	25.00000
45	TX - Pine Gully Pier	29.58933	-94.99033	1/27/2008	9.00000	10.00000	0.00000	11.00000	Mostly Cloudy		13.00000	North West	25.00000
46	TX - Pine Gully Pier	29.58933	-94.99033	1/27/2008	9.00000	10.00000	0.00000	11.00000	Mostly Cloudy		13.00000	North West	25.00000
47	TX - Pine Gully Pier	29.58933	-94.99033	1/27/2008	9.00000	10.00000	0.00000	11.00000	Mostly Cloudy		13.00000	North West	25.00000

Opened in Excel...  
**SUCCESS!**



National Oceanic and Atmospheric Administration

*PMN Database and GIS Maps developed by:*  
**NOAA Coastal Data Development Center  
(NCDDC)**

<http://www.ncddc.noaa.gov>

NCDDC's mission is to support ecosystem stewardship by providing access to the Nation's coastal data resources.