High Frequency Radar Locations



Tags

climatologyMeteorologyAtmosphere, environment, oceans, structure, utilitiesCommunication, frequency, HF, high res, long range, radar, standard range, transmit

Summary

To support coastal and ocean planning and other activities pursuant to the Energy Policy Act, Coastal Zone Management Act, Magnuson-Stevens Fishery Conservation and Management Act, National Environmental Policy Act, Rivers and Harbors Act and the Submerged Lands Act.

Description

This dataset show the point locations of High Frequency (HF) radar systems across the US. HF radars measure the speed and direction of ocean surface currents in near real time. These radars can measure currents over a large region of the coastal ocean, from a few kilometers offshore up to 200 km, and can operate under any weather conditions. They are located near the water's edge, and need not be situated atop a high point of land. Dozens of institutions own and operate HF radars within the United States, and many are coordinated through the US Integrated Ocean Observing System. Ocean surface current data from these radars are shared on national servers by the National Data Buoy Center and Scripps Institution of Oceanography. If specific information regarding a local radar system is needed, please contact Dr. Jack Harlan, Project Manager for the HF Radar Ocean Remote Sensing, US IOOS Program Office.

Credits

There are no credits for this item.

Use limitations

These data are intended for coastal and ocean use planning. Not for navigation. http://www.marinecadastre.gov/about/disclaimer.html

Extent

 West
 -161.928900
 East
 -62.887617

 North
 71.378900
 South
 -64.918300

Scale Range

Maximum (zoomed in) 1:5,000 Minimum (zoomed out) 1:150,000,000

ArcGIS Metadata

Topics and Keywords * CONTENT TYPE Downloadable Data

Citation

TITLEHigh FrequencyRadar LocationsPRESENTATION FORMATS* digital map

Resource Details

DATASET LANGUAGES * English (UNITED STATES) SPATIAL REPRESENTATION TYPE * vector * PROCESSING ENVIRONMENT Microsoft Windows 7 Version 6.1 (Build 7601) Service Pack 1; Esri ArcGIS 10.3.0.4322

Extents

EXTENT GEOGRAPHIC EXTENT BOUNDING RECTANGLE EXTENT TYPE Extent used for searching * WEST LONGITUDE -161.928900

* EAST LONGITUDE -62.887617

- * NORTH LATITUDE 71.378900
- * SOUTH LATITUDE -64.918300

* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

- * WEST LONGITUDE -18025842.692715
- * EAST LONGITUDE -7000617.501642 * SOUTH LATITUDE -9586884.203397 * NORTH LATITUDE 11533088.301819

- * EXTENT CONTAINS THE RESOURCE Yes

Resource Constraints

CONSTRAINTS

LIMITATIONS OF USE

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Spatial Reference

ARCGIS COORDINATE SYSTEM

- * TYPE Projected
- * GEOGRAPHIC COORDINATE REFERENCE GCS_WGS_1984
- * PROJECTION WGS_1984_Web_Mercator_Auxiliary_Sphere
- * COORDINATE REFERENCE DETAILS
- PROJECTED COORDINATE SYSTEM

Well-known identifier 102100 X ORIGIN -22041545.367140558 Y ORIGIN -33272760.666300893 XY SCALE 135368852.55357128 Z ORIGIN -100000 Z SCALE 10000 M ORIGIN -100000 M SCALE 10000 XY TOLERANCE 0.001 Z TOLERANCE 0.001 M TOLERANCE 0.001 HIGH PRECISION true LATEST WELL-KNOWN IDENTIFIER 3857 WELL-KNOWN TEXT PROJCS["WGS_1984_Web_Mercator_Auxiliary_Sphere",GEOGCS ["GCS WGS 1984", DATUM ["D WGS 1984", SPHEROID ["WGS 1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT ["Degree",0.0174532925199433]],PROJECTION["Mercator_Auxiliary_Sphere"],PARAMETER ["False_Easting",0.0],PARAMETER["False_Northing",0.0],PARAMETER ["Central_Meridian",0.0],PARAMETER["Standard_Parallel_1",0.0],PARAMETER ["Auxiliary_Sphere_Type",0.0],UNIT["Meter",1.0],AUTHORITY["EPSG",3857]]

REFERENCE SYSTEM IDENTIFIER

- * VALUE 3857
- * CODESPACE EPSG
- * VERSION 8.2.6

Spatial Data Properties

VECTOR

geometry only * LEVEL OF TOPOLOGY FOR THIS DATASET GEOMETRIC OBJECTS

- FEATURE CLASS NAME high_frequency_radar
- * OBJECT TYPE point
- * OBJECT COUNT 171
- ARCGIS FEATURE CLASS PROPERTIES

FEATURE CLASS NAME high_frequency_radar

- * FEATURE TYPE Simple
- * GEOMETRY TYPE Point
- * HAS TOPOLOGY FALSE
- * FEATURE COUNT 171
- * SPATIAL INDEX TRUE
- * LINEAR REFERENCING FALSE

Distribution

DISTRIBUTION FORMAT

* NAME File Geodatabase Feature Class

Fields

DETAILS FOR OBJECT high_frequency_radar

- * TYPE Feature Class
- * Row COUNT 171

DEFINITION

Locations of High Frequency (HF) radar systems across the US.

DEFINITION SOURCE

NOAA Office for Coastal Management

FIELD OBJECTID

- * ALIAS OBJECTID
- * DATA TYPE OID
- * WIDTH 4
- * PRECISION 0 * SCALE 0
- FIELD DESCRIPTION
- Internal feature number.
- DESCRIPTION SOURCE
- Esri
- DESCRIPTION OF VALUES

Sequential unique whole numbers that are automatically generated.

FIELD SHAPE

- * ALIAS SHAPE
- * DATA TYPE Geometry
- * WIDTH 0
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION
- Feature geometry.
- DESCRIPTION SOURCE
- Esri
- DESCRIPTION OF VALUES

Coordinates defining the features.

FIELD station

- * ALIAS Station
- * DATA TYPE String
- * WIDTH 50
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION
 - Name of radar station.
- DESCRIPTION SOURCE

NOAA Office for Coastal Management

DESCRIPTION OF VALUES

Free text defining the feature.

FIELD network

- * ALIAS Network
- * DATA TYPE String
- * WIDTH 50
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION
 - Name of network.
- DESCRIPTION SOURCE

NOAA Office for Coastal Management DESCRIPTION OF VALUES

Free text defining the feature.

FIELD manufacturer

- * ALIAS Manufacturer
- * DATA TYPE String
- * WIDTH 50
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION
- Name of manufacturer.
- DESCRIPTION SOURCE

NOAA Office for Coastal Management

- DESCRIPTION OF VALUES
 - Free text defining the feature.

FIELD type

- * ALIAS Type
- * DATA TYPE String
- * WIDTH 50
- * PRECISION 0

* SCALE 0 FIELD DESCRIPTION Type of radar. DESCRIPTION SOURCE NOAA Office for Coastal Management DESCRIPTION OF VALUES Free text defining the feature.

FIELD frequency

- * ALIAS Frequency (MHz)
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION
- Frequency measured in MHz.
- DESCRIPTION SOURCE
- NOAA Office for Coastal Management DESCRIPTION OF VALUES
- Free text defining the feature.

FIELD bandwidth

- * ALIAS Bandwidth
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION
- Bandwidth of radar.
- DESCRIPTION SOURCE
- NOAA Office for Coastal Management DESCRIPTION OF VALUES
- Free text defining the feature.

FIELD dateAdded

- * ALIAS Date Added
- * DATA TYPE Date
- * WIDTH 8
- * PRECISION 0
- * SCALE 0
- FIELD DESCRIPTION Date radar was added.
- DESCRIPTION SOURCE
- NOAA Office for Coastal Management
- DESCRIPTION OF VALUES
- Free text defining the feature.

Metadata Details

* METADATA LANGUAGE English (UNITED STATES) SCOPE OF THE DATA DESCRIBED BY THE METADATA * dataset SCOPE NAME * dataset * LAST UPDATE 2017-01-03 ARCGIS METADATA PROPERTIES METADATA FORMAT ArCGIS 1.0 METADATA STYLE FGDC CSDGM Metadata STANDARD OR PROFILE USED TO EDIT METADATA FGDC CREATED IN ARCGIS FOR THE ITEM 2016-12-19 10:56:49 LAST MODIFIED IN ARCGIS FOR THE ITEM 2017-01-03 12:11:03 AUTOMATIC UPDATES HAVE BEEN PERFORMED YES LAST UPDATE 2017-01-03 11:56:47