PAM_Grid

Type File Geodatabase Feature Class

Tags RWSC

Summary

This grid was designed to help guide PAM deployments to best cover the offshore wind energy areas across the US Atlantic Coast region.

Description

Van Parijs et al, 2021 (https://doi.org/10.3389/fmars.2021.760840) suggested a grided approach to PAM coverage of the US Atlantic Coast in order to avoid repetitive deployments and ensure efficient use of resources. This grid amends that original grid to incorporate new findings about optimum PAM design. There are 10 X 10 km grid cells over the Wind Energy Areas which are meant to concentrate the coverage in the areas of most concern, 20 X 20 km grid cells over the areas that have current Offshore Wind leases established, and 40 X 40 km grid cells over the remaining area to still promote deployments in those non-focal areas.

Credits

RWSC

Use limitations

These data will be used by RWSC and its expert Subcommittees, partners, and other participants to implement the Science Plan, including to understand the extent of ongoing and planned data collection activities, and to coordinate and plan future data collection and research activities with respect to offshore wind. The data will be displayed via online mapping platforms.

Extent

West -81.552244 East -65.402012
North 44.842391 South 25.016211

Scale Range

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

Topics and Keywords ►

Themes or categories of the resource Oceans, Planning & Cadastral

Content type ⇔ Downloadable Data
Export to FGDC CSDGM XML format as Resource Description No

Citation ►

Title ⇔ PAM_Grid
Alternate titles Passive Acoustic Monitoring Grid Cells
Creation date 2024-04-15 00:00:00
Publication date 2024-05-03 00:00:00

Presentation formats ⇔ digital map

Citation Contacts ►

Responsible party - originator
Individual's name Debbie Brill
Organization's name RWSC
Contact's position Marine Mammal Subcommittee Coordinator

Contact information ►
Phone
Voice NA
Address
Type both
City NA
Administrative area NA
Postal code NA
e-mail address deborah.brill@duke.edu

Resource Details ►

Dataset languages ⇔ English (UNITED STATES)
Dataset character set utf8 - 8 bit UCS Transfer Format

Status completed
Spatial representation type ⇔ vector

Processing environment ⇔ Microsoft Windows 10 Version 10.0 (Build 22631) ; Esri ArcGIS 13.2.2.49743

Credits
RWSC

ArcGIS item properties
Name ⇔ PAM_Grid
Size ⇔ 0.000
Location ⇔ file://\\DESKTOP-CUHUDPJ\D$\Contracting\RWSC\GIS_Work\PAM\PAM_Data\PAM_Data.gdb
Access protocol ⇔ Local Area Network

Extents ►

Extent
Description
This dataset is fixed in time, no set temporal extent.

Geographic extent
Bounding rectangle
Extent type
Extent used for searching
West longitude -81.552244
East longitude -65.402012
South latitude 25.016211
North latitude 44.842391
Extent contains the resource No

Temporal extent
Beginning date 2024-04-01 00:00:00
Ending date 2024-04-01 00:00:00

Extent in the item's coordinate system
westBL ⇔ -334867.904900
eastBL ⇔ 1053166.338700
southBL ⇔ -995640.895600
northBL ⇔ 1248315.574800
exTypeCode ⇔ Yes

Resource Points of Contact ►

Point of contact - originator
Individual's name Debbie Brill
Organization's name RWSC
Contact's position Marine Mammal Subcommittee Coordinator

Contact information ►
Phone
Voice NA
Address
Type both
City NA
Administrative area NA
Postal code NA
e-mail address deborah.brill@duke.edu

Resource Maintenance ►

Resource maintenance
Update frequency as needed

Resource Constraints ►

Constraints
Limitations of use
These data will be used by RWSC and its expert Subcommittees, partners, and other participants to implement the Science Plan, including to understand the extent of ongoing and planned data collection activities, and to coordinate and plan future data collection and research activities with respect to offshore wind. The data will be displayed via online mapping platforms.

Spatial Reference ►

ArcGIS coordinate system
Type ⇔ Projected
Geographic coordinate reference ⇔ GCS_WGS_1984
Projection ⇔ WGS_1984_Albers
Coordinate reference details ⇔
ProjectedCoordinateSystem
XOrigin -17810800
YOrigin -8345300
XYScale 10000
ZOrigin -100000
ZScale 10000
MOrigin -100000
MScale 10000
XYTolerance 0.001
ZTolerance 0.001
MTolerance 0.001
HighPrecision true
WKT
PROJCS["WGS_1984_Albers",GEOGCS["GCS_WGS_1984",DATUM["D_WGS_1984",SPHEROID["WGS_1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.01

Reference system identifier
Value ⇔ 0

Spatial Data Properties ►

Vector ►
Level of topology for this dataset ⇔ geometry only

Geometric objects
Feature class name PAM_Grid
Object type ⇔ composite
Object count ⇔ 726

ArcGIS Feature Class Properties ►
Feature class name PAM_Grid
Feature type ⇔ Simple
Geometry type ⇔ Polygon
Has topology ⇔ FALSE
Feature count ⇔ 726
Spatial index ⇔ TRUE
Linear referencing ⇔ FALSE

Data Quality ►

Data quality report - Conceptual consistency ►
Data quality measure reference
Measure description
Grid cells made up of varying sizes in kilometers

Data quality report - Completeness omission ►
Data quality measure reference
Measure description
This dataset is complete unless revisited for another review through the RWSC Marine Mammals Subcommittee.

Lineage ►

Process step ►
When the process occurred 2024-04-15 00:00:00
Description
Dataset received by Samantha Coccia-Schillo, updated with symbology and shared through the RWSC Mapping Viewer.

Process contact - processor
Individual's name Samantha Coccia-Schillo
Organization's name RWSC
Contact's position GIS Project Manager

Contact information ►
Phone
Voice NA
Address
Type postal
City NA
Administrative area NA
Postal code NA
Country US
e-mail address scoccia-schillo@outlook.com

Source data ►
Description
The original PAM grid was established by Van Parijs et al. in a 2021 paper titled “NOAA and BOEM Minimum Recommendations for Use of Passive Acoustic Listening Systems in Offshore Wind Energy Development Monitoring and Mitigation Programs” (https://doi.org/10.3389/fmars.2021.760840)

The adapted version was created using insights from a BOEM funded power analysis completed by a team from the University of St. Andrews (https://espis.boem.gov/final%20reports/BOEM_2023-041.pdf)

Distribution ►

Distribution format
Name ⇔ File Geodatabase Feature Class

Transfer options
Transfer size ⇔ 0.000

Fields ►

Details for object PAM_Grid ►
Type ⇔ Feature Class
Row count ⇔ 726
Definition
Passive Acoustic Monitoring Grid cells

Definition source
RWSC

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 type ►
Alias ⇔ type
Data type ⇔ String
Width ⇔ 254
Precision ⇔ 0
Scale ⇔ 0

Field description
1 – 40 X 40 km grid cells
2 – 20 X 20 km grid cells
3 – 10 X 10 km grid cells

Description source
RWSC

Coded values
Name of codelist Categories of size of the grid cells
Source None

Field Shape_Length ►
Alias ⇔ Shape_Length
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description ⇔
Length of feature in internal units.

Description source ⇔
Esri

Description of values ⇔
Positive real numbers that are automatically generated.

Field Shape_Area ►
Alias ⇔ Shape_Area
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description ⇔
Area of feature in internal units squared.

Description source ⇔
Esri

Description of values ⇔
Positive real numbers that are automatically generated.

Metadata Details ►

Metadata language ⇔ English (UNITED STATES)
Metadata character set ⇔ utf8 - 8 bit UCS Transfer Format

Scope of the data described by the metadata ⇔ dataset
Scope name ⇔ dataset

Last update ⇔ 2024-05-20

ArcGIS metadata properties
Metadata format ArcGIS 1.0
Standard or profile used to edit metadata FGDC

Created in ArcGIS for the item 2024-04-02 13:39:58
Last modified in ArcGIS for the item 2024-05-20 15:47:43

Automatic updates
Have been performed Yes
Last update 2024-05-16 11:39:38
Item location history
Item copied or moved 2024-04-02 13:39:58
From V:\project_wow\Data\RWSC\GIS\PAM_Grid\New_grid_all
To \\mgelnet.win.duke.edu\data\project_wow\Data\RWSC\GIS\PAM_Grid\Files_to_send\New_grid_all

Metadata Contacts ►

Metadata contact - originator
Individual's name Debbie Brill
Organization's name RWSC
Contact's position Marine Mammal Subcommittee Coordinator

Contact information ►
Phone
Voice NA
Address
Type both
City NA
Administrative area NA
Postal code NA
e-mail address deborah.brill@duke.edu

Metadata Maintenance ►

Maintenance
Update frequency as needed