Elevation Ranges (Sea Level Rise Predictions - 2010)



Tags

DEM, National Climate Assessment, Sea Level Rise, Elevation, USGS, United States Geological Survey

Summary

This layer categorizes elevation ranges based on sea level rise predictions in the 2014 National Climate Assessment.

Description

This layer was developed using a digital elevation model (DEM) is from the United States Geological Survey (USGS) resampled from 10m to 250m. Elevation values in ranges predicted in the 2014 National Climate Assessment (page 45) for sea level rise were extracted and mapped as polygons.

Credits

United States Geological Survey, Argonne National Laboratory, 2014 U.S. National Climate Assessment

Use limitations

There are no access and use limitations for this item.

Extent

West -116.037800 East -66.001639
North 50.000903 South 24.000198

Scale Range

Maximum (zoomed in) 1:50,000
Minimum (zoomed out) 1:50,000,000

ArcGIS Metadata ►

Topics and Keywords ►

THEMES OR CATEGORIES OF THE RESOURCE elevation, environment, oceans

* CONTENT TYPE Downloadable Data
EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION No

Citation ►

TITLE Elevation Ranges (Sea Level Rise Predictions - 2010)
CREATION DATE 2011-11-01 00:00:00
PUBLICATION DATE 2009-01-01 00:00:00

PRESENTATION FORMATS * digital map

Hide Citation ▲

Citation Contacts ►

RESPONSIBLE PARTY
INDIVIDUAL'S NAME Jim Kuiper
ORGANIZATION'S NAME Argonne National Laboratory
CONTACT'S ROLE processor

CONTACT INFORMATION ►
PHONE
VOICE 630-252-6206

ADDRESS
TYPE physical
DELIVERY POINT 9700 S. Cass Ave.
CITY Darien
ADMINISTRATIVE AREA IL
POSTAL CODE 60439
E-MAIL ADDRESS jkuiper@anl.gov

Hide Contact information ▲

Hide Citation Contacts ▲

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 7 Version 6.1 (Build 7601) Service Pack 1; Esri ArcGIS 10.3.0.4322

CREDITS
United States Geological Survey, Argonne National Laboratory, 2014 U.S. National Climate Assessment

ARCGIS ITEM PROPERTIES
* NAME elevation_ranges
* LOCATION file://\\spatial\gis1\EISPC_Energy_Zones_Study\Data\Web_Mercator\Vector\Landform\Landform_Elevation.gdb
* ACCESS PROTOCOL Local Area Network

Extents ►
EXTENT
GEOGRAPHIC EXTENT
BOUNDING RECTANGLE
EXTENT TYPE Extent used for searching
* WEST LONGITUDE -116.037800
* EAST LONGITUDE -66.001639
* NORTH LATITUDE 50.000903
* SOUTH LATITUDE 24.000198
* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM
* WEST LONGITUDE -12917268.808913
* EAST LONGITUDE -7347268.808913
* SOUTH LATITUDE 2753432.265259
* NORTH LATITUDE 6446432.265317
* EXTENT CONTAINS THE RESOURCE Yes

Resource Points of Contact ►

POINT OF CONTACT
INDIVIDUAL'S NAME Jim Kuiper
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CONTACT'S ROLE processor

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Resource Maintenance ►

RESOURCE MAINTENANCE
UPDATE FREQUENCY not planned

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 -22041259.177065704
Y ORIGIN -30241100
XY SCALE 144148032.66160724

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 ▶

GEORECTIFIED GRID ▶
AXIS DIMENSIONS PROPERTIES
DIMENSION TYPE column (x-axis)

AXIS DIMENSIONS PROPERTIES
DIMENSION TYPE row (y-axis)

VECTOR ▶
* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS
FEATURE CLASS NAME elevation_ranges
* OBJECT TYPE composite
* OBJECT COUNT 24793

ARCGIS FEATURE CLASS PROPERTIES

FEATURE CLASS NAME elevation_ranges
* FEATURE TYPE Simple
* GEOMETRY TYPE Polygon
* HAS TOPOLOGY FALSE
* FEATURE COUNT 24793
* SPATIAL INDEX TRUE
* LINEAR REFERENCING FALSE

Spatial Data Content ▶

IMAGE DESCRIPTION
TYPE OF INFORMATION physical measurement
ATTRIBUTE DESCRIBED BY CELL VALUES N/A

BAND INFORMATION
TRIANGULATION HAS BEEN PERFORMED
No RADIOMETRIC CALIBRATION IS
AVAILABLE No CAMERA CALIBRATION IS

AVAILABLE No
FILM DISTORTION INFORMATION IS AVAILABLE No
LENS DISTORTION INFORMATION IS AVAILABLE No

Lineage ►

LINEAGE STATEMENT
Elevation ranges above specific sea level rise predictions (feet converted to meters) were isolated as binary images, then converted to polygons with no interpolation of the boundaries. The set of polygon layers were intersected and a "range" field was added. The range field was coded with the highest elevation range it covered. Elevation range categories (based on the 2014 National Climate Assessment) are 'Sea level', '0.00ft to 0.66ft', 0.66ft to 1ft', '1ft to 4ft', '4ft to 6.6ft', and 'Above 6.6ft'.

Distribution ►

DISTRIBUTION FORMAT
* NAME File Geodatabase Feature Class

Fields ►

DETAILS FOR OBJECT elevation_ranges ►
* TYPE Feature Class
* ROW COUNT 24793
DEFINITION
Ranges of elevation related to sea level rise predictions.

DEFINITION SOURCE
Argonne

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 FID_elevation_ranges ►
* ALIAS FID_elevation_ranges
* DATA TYPE Integer
* WIDTH 4
* PRECISION 0
* SCALE 0

FIELD Range ►
* ALIAS Range
* DATA TYPE String
* WIDTH 20
* PRECISION 0
* SCALE 0

FIELD DESCRIPTION
Predicted sea level rise category for 2100 based on the 2014 National Climate Assessment.

DESCRIPTION SOURCE
2014 National Climate Assessment, p. 45

FIELD FID_Grid2 ►
* ALIAS FID_Grid2
* DATA TYPE Integer
* WIDTH 4
* PRECISION 0
* SCALE 0

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 2015-06-29

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 2015-05-29 13:55:57
LAST MODIFIED IN ARCGIS FOR THE ITEM 2015-06-29 15:47:55

AUTOMATIC UPDATES
HAVE BEEN PERFORMED Yes
LAST UPDATE 2015-06-29 15:40:12

Metadata Contacts ►

METADATA CONTACT
INDIVIDUAL'S NAME Jim Kuiper
ORGANIZATION'S NAME Argonne National Laboratory
CONTACT'S ROLE processor

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Metadata Maintenance ►

MAINTENANCE
UPDATE FREQUENCY not planned

Thumbnail and Enclosures ►

THUMBNAIL
THUMBNAIL TYPE JPG