**Hurricane Florence Coastal Georgia, 1851 to 2020 Topobathymetric Digital Elevation Model (TBDEM)  
Spatial Metadata**

## Data Delivery Overview**:**

The geospatial data delivery consists of both an Esri File Geodatabase and OGC Geopackage of Georgia (GA) with file extension \***.gdb** and \***.gpkg** respectively. The database(s) “Topobathymetric\_Model\_of\_Coastal\_Georgia\_1851\_to\_2020\_Spatial\_Metadata.\*” are geospatial polygon (*Figure 1*) feature datasets that contain spatial footprints for each input source dataset (*Table 1*). The attributes for each footprint polygon describe the characteristics of each input dataset used to generate the TBDEM. Detailed descriptions of the coordinate system, survey accuracy, and geodatabase attribute fields are contained in following sections of this document.

**Table 1: Polygon Geodatabase Datasets Summary**

|  |  |  |
| --- | --- | --- |
| **Geodatabase** | **Layer Type** | **Number of Polygons[[1]](#footnote-1)+** |
| Topobathymetric\_Model\_of\_Coastal\_Georgia\_1851\_to\_2020\_Spatial\_Metadata.\* | Multipart Polygon | 16 |

## Horizontal Coordinate System:

Transverse Mercator

NAD 1983 (2011) UTM Zone 17N

Horizontal coordinates are provided in UTM northing/easting.

## Attribute Field Data Dictionary (Esri Geodatabase):

*Title* = Source dataset name

*Source\_Project* = Organization major project or activity

*Source\_Organization* = Source dataset organization

*Date\_Acquired* = Date data were acquired

*Source\_Publication\_Date* = Date source data were published

*Data\_Type* = Input elevation type

*Source\_Projection* = Input source projection

*Source\_Resolution* = Input source horizontal resolution

*Source\_Horizontal\_Datum* = Input source horizontal datum

*Source\_Vertical\_Units* = Input source vertical units

*Source\_Vertical\_Datum* = Input source vertical datum

*Geoid* = Input source geoid

*Coverage\_Area* = General spatial extent description of input source dataset

*Source\_Publication* = Online web link to input source dataset

*Shape\_Length**[[2]](#footnote-2)\** = Perimeter length of spatial polygon feature in meters

*Shape\_Area*\* = Area of spatial polygon feature in square meters

## Example attributes from spatial metadata Esri Geodatabase:

*Title* = 2018 USACE NCMP Post-Florence Topobathy Lidar (NC, SC, VA)

*Source\_Project* = USACE NCMP

*Source\_Organization* = USACE JALBTCX

*Date\_Acquired* = 2018

*Source\_Publication\_Date* = 20190809 (*Date format YYYYMMDD*)

*Data\_Type* = Topobathy Lidar

*Source\_Projection* = Geographic

*Source\_Resolution* = 1/27 arc-second (~1-m)

*Source\_Horizontal\_Datum* = WGS84

*Source\_Vertical\_Units* = Meters

*Source\_Vertical\_Datum* = NAVD88

*Geoid* = GEOID12B

*Coverage\_Area* = Southern Coast (VA, NC, SC)

*Source\_Publication* = https://coast.noaa.gov/htdata/lidar1\_z/geoid12b/data/

*Shape\_Length*\* = 1345963.036692

*Shape\_Area*\* = 46842673.186489

Map

Description automatically generated

Figure 1: Spatial Metadata (SMD) extent of Hurricane Florence Coastal Georgia, 1851 to 2022 Topoathymetric Digital Elevation Model (TBDEM).

1. + There were 36 data sources used to create this TBDEM but the sum of the “Number of Polygons” is greater than that because some individual datasets were used in two or all states [↑](#footnote-ref-1)
2. \* *Inherent Esri Geodatabase geometry attribute* [↑](#footnote-ref-2)