

Creating 100 Mile Offshore Shapefiles for SST Data

1. Import "World Countries Generalized" Feature Layer from ArcGIS Online
2. Create a Pairwise Buffer in Analysis Tools where the input feature is World_Countries_Generalized with a distance of 100 US Survey Nautical Miles
3. Create a blank feature class for each country
 - a. In Edit, click Create in the Features tab
 - b. For each country, trace the land borders, and the boundary created by the 100 Mile buffer zone to complete the feature class
 - c. Each feature class should include the land area of the country, the area of ocean included in the 100 mile buffer zone, and no other land masses. The feature class is made for only the main land mass, excluding islands that do not fall within the 100 mile buffer
 - d. Only ocean that *directly* touches the coastline of the country is included. Any ocean that is within 100 miles, but if there is another country between the selected country and that buffer, it is excluded.
4. Add Multidimensional Data, ersst.v5.185401 (1).nc
5. From SST Layer: Create Chart -> Temporal Profile
 - a. Define an area of interest using the Feature Selector
 - b. Select each feature one by one, relabeling the feature to the Country Name
 - c. For aggregation options, choose no time aggregation, and Mean for spatial aggregation
 - d. Export chart to table
 - e. Transform table from wide to long
 - f. This provides the monthly mean SST for each country-month-year. This data is used to calculate the Yearly SST deviations

Creating 200 Miles Onshore Shapefiles for Political Unrest within 200 Miles Onshore

1. Import "World_Continents" Feature Layer from ArcGIS Online
2. Create a Pairwise Buffer in Analysis Tools where the input feature is World_Continents with a distance of -200 US Survey Miles. This Buffer is called "World_Continen_PariwiseBuffe1"
3. Conduct a Pairwise Erase where the input feature is the World_Continents and the Erase Feature(s) is the Pairwise Buffer created in Step 2. The output of this is called World_Continent_PairwiseErase
4. Conduct a Pairwise Intersect where the input features are World_Continent_PairwiseErase, and then the feature class including all GTD and ACLED points. The output is a feature class of the GTD and ACLED events that occurred within 200 miles of the coast of each country.