

Great Circle Distance

In Geospatial Analysis, requirement to compute distance between two points using latitude and longitude is quite prevalent. Haversine formula is used to calculate distance between two points on earth using latitudes and longitudes. Haversine formula computes great circle distance (distance as measured along the surface of earth/sphere rather than the distance through the sphere/earth).

The custom Python script for calculating Great Circle Distance accepts five columns namely Latitude1, Longitude1, Latitude2, Longitude2 and recordid (primary key) as inputs. The distance between the lat and long is computed and sent as the output column.

Attached is a Data Visualization project **Distance+from+SF+Airport.dva (Password: Admin123)**

Importing this project on to your DV will result in creation of the following files.

- **SF Airport Distance** project under the **Projects** tab.
- **DF_DIST_FROM_SF_AIRPORT** dataflow under the **Dataflow** tab.
- **SF POI Distance from Airport** dataset **Data Sets** tab.
- **Great Circle Distance (py)** under **Machine Learning** -> **Scripts** tab.