

Computing Distances between Locations

Computing Distances

The geocoding GUI allows you to compute distances between locations. Distances can also be computed from a fixed location (e.g., the distance from Paris of all locations listed in a csv file).

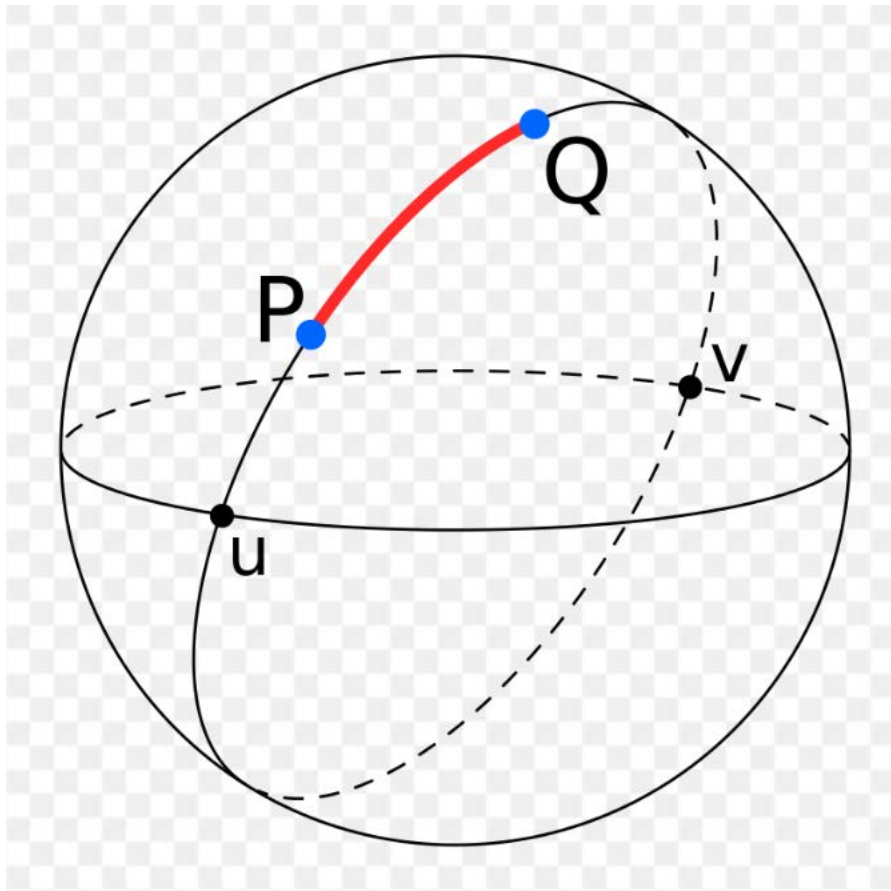
The NLP Suite uses the Python geopy library for computing distances (<https://geopy.readthedocs.io/en/stable/#module-geopy.distance>).

Distances are computed in kilometers and miles along the surface of the earth, by either *geodesic* distance or by *great circle distance*.

The two types of distances – geodesic and great circle – are typically used as synonyms, but geopy keeps them separate.

Geodesic distance provides the shortest path along the surface of an ellipsoid between two points on the surface.

Great-circle distance uses a spherical model of the earth, using the mean earth radius as defined by the International Union of Geodesy and Geophysics.



Great-circle distance between point P and Q (illustration taken from https://en.wikipedia.org/wiki/Great-circle_distance).