GEOGRAPHIC COORDINATES – MANNER OF RECORDING THEM

Instructions relating to geographic coordinates are found at RDA **7.4**.

Bounding Box Coordinates

Most often we provide a set of coordinates that define what is known as a "bounding box" by the use of a latitude and longitude grid system (see **7.4.2.1**). The instruction for recording latitude and longitude coordinates is found at **7.4.2.3** and is summarized below.

Geographic coordinates are specified to delimit the greatest extent of the area covered. Record the coordinates in the following order:

1. Westernmost extent of the item (longitude)
2. Easternmost extent of the item (longitude)
3. Northernmost extent of the item (latitude)
4. Southernmost extent of the item (latitude)

Latitude and longitude are expressed in degrees (°), minutes (′), and seconds (″) on the sexagesimal system (360° circle). The degree of precision required for entry of coordinates is determined by the scale and accuracy of the map. Coordinates of longitude should always be taken from the Greenwich prime meridian. Other base meridians, most often indicated on historical maps/atlases, should be "translated" to the Greenwich meridian, either mathematically or by comparison with "reference" maps.

EXAMPLES:

       (W 105°22′30″--W 104°37′30″/N 40°00′00″--N 39°22′30″)
NOT   (W 105°22′30″--W 104°37′30″/N 40°--N 39°22′30″)

       (E 119°30′--E 122°00′/N 25°00′--N 22°00′)
NOT   (E 119°30′--E 122°/N 25°--N 22°)

An *Alternative* to the above recording method is also given at **7.4.2.3** in which one may record coordinates in the form of decimal degrees.

Polygon Coordinate Strings

Instead of aiming to form a box around a geographic area using sets of coordinates, one may choose to follow exactly the greatest extent of the geographic area no matter its shape. What is formed is known as a polygon, and what is recorded are "strings of coordinate pairs". This is defined at **7.4.3.1** as "a system for identifying the precise area covered by the cartographic content of a resource using coordinates for each vertex of a polygon." Additionally, "Use strings of coordinate pairs for an indication of geographic coverage that is more precise than longitude and latitude coordinates." Specifics about recording coordinate strings is found at instruction **7.4.3.3**.