Cartographic materials

What are cartographic materials?

Cartographic materials are maps, atlases, and other graphical presentations of geospatial data. While these resources are largely produced by government and intergovernmental agencies as part of their public mandate, private publication is also fairly common through a fairly limited number of private agencies, such as Gousha, National Geographic, Rand McNally, and Sanborn, and through professional organizations such as the Geological Society of America (GSA).

Except for some special cases, such as some print atlases and computer files, most cartographic materials fall under the MARC21 "Maps" format. This format includes some tags that are unique to cartographic materials, specifically numerical data relating to scale and coordinates, base or reference information, and location. Obviously, location is of prime importance on maps, and other elements, such as topical subject, are considered as secondary to this.

Classification

Maps and atlases are generally classified within two sequences in the G: Geography, Maps, Anthropology, Recreation classification, namely G1000-3122 for atlases and G3180-9980 for maps. Application of class numbers follows the pattern:

Place (1st order in hierarchy). Place (2nd \[3rd, etc.\] order). \{Scale (for maps in series)\}. \{Subject\}. Date of data. Book cutter. Date of publication.

Special instructions and tables for cartographic materials from the Library of Congress

Geographic area portion of class number

The general rule is to classify for the most concise area represented on the map, so a map of the NCSU campus would get classified G3904 .R2:2N6 (North Carolina State University), not in the more general G3904 .R2 (Raleigh). Where there are two maps on one sheet, classify according to the map chosen as the main one. Where there are three or more maps on a sheet or in an atlas, classify with the area that is hierarchically at the next level up for the majority of maps within the publication. Thus, a map of Chicago with an inset for Evanston would be classified under Chicago in G4104 .C6. A sheet with maps of North and South Carolina with Virginia would be classified under Southeast Atlantic States in G3870-3872.

Subject portion

Except for general ("political") maps, most will have a subject focus, such as geology, population distribution, land use, roads, or commerce. The subject subdivisions are governed by Table G1 in the G schedule:

<table>
<thead>
<tr>
<th>.A</th>
<th>Special category maps &amp; atlases</th>
<th>.K</th>
<th>Forests &amp; forestry</th>
</tr>
</thead>
<tbody>
<tr>
<td>.B</td>
<td>Mathematical geography</td>
<td>.L</td>
<td>Aquatic biological resources</td>
</tr>
<tr>
<td>.H</td>
<td>Mines &amp; mineral resources</td>
<td>.S</td>
<td>Historical geography</td>
</tr>
<tr>
<td>.J</td>
<td>Agriculture</td>
<td></td>
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</tbody>
</table>

Note that the sequence above can turn out class numbers that look odd when compared to other LC numbers. There are often two dates, the date of the data (esp. for historical maps), and the date of the publication. You will often see class numbers that have the first date immediately following the class number, with no intervening Cutter number, e.g. G3400 1999. This is fine! You will also sometimes see long strings of class Cutters instead of the usual one or two, especially when dealing with particular areas within a city that also have a subject focus. Thus, G37565 .B2 E635 1992 .S8 is for a tourist map of Bangalore, India from the Survey of India.

You may also notice that there is a direct correlation between the number in 052 and the numeric portion of the LC classification in 050 or 090. There is a good reason for this--they are the same, although 050 is a single parking spot in the shelflist, while 052 is repeatable. You will often see an 052 for each map on a sheet.

Descriptive cataloging of cartographic materials

Chief source of information

The chief source of information for cartographic materials is the map, globe, or atlas itself. If there is a container (envelope, tube, cover, etc.) use these only if there is no suitable chief source on the map itself. If the resource includes several parts, treat all of the parts as though they were one for purposes of ascertaining the chief source.

Mathematical data (034 and 255)
Some of the more unique information provided on maps is mathematical data, in the form of scale and coordinate information. Scale compares distances on the map to those on the ground. This is usually represented as a fraction/ratio (1:24,000) or as a linear comparison (1 in. = 4 miles). Scale is presented twice: once in 034 as a searchable number (that which follows “1:” in the scale), and a display statement provided in 255. Both fields are repeatable and should be present, so long as the information has been provided or can be estimated.

Coordinates are used to represent the location and coverage of a map, relative to a fixed location or marker on the surface of the Earth or other celestial body. On the Earth, this is usually recorded based on the Equator and on the meridian which passes through the observatory at Greenwich, England (the “Prime” meridian = 0°deg); though on older maps this could be Paris, Rome, or various other points. If not stated otherwise in a note, assume that the east-west (latitude) coordinates are based on Greenwich while north-south (longitude) coordinates are relative to the Equator.

Besides scale and coordinates, 255 may also show the projection of a map in a verbal statement, e.g. "Mercator proj.", "Lambert conformal conic proj.", etc. The following example shows most of the elements mentioned above:

255 Scale 1:24,000 ; b polyconic projection c (W 78°52'30"--W 78°45'00"/N 43°00'00"--N 42°52'30").

Subjects

Subject headings for map records will usually have both a geographic heading or subdivision and the genre heading "Maps". For general, historical, and certain topical maps, the subject will be a 651 for the locale of the map:

651 -0 |aWake County (N.C.)|vMaps.
651 -0 |aMars (Planet)|vMaps
651 -0 |aChugach National Forest (Alaska)|vMaps, Topographic.
651 -0 |aPalestine|xHistory|y1948- |vMaps.
651 -0 |aUnited States|xCensus, 1990|vMaps.

For topical maps, use 650, with geographic and genre subdivisions:

650 -0 |aBiological diversity conservation|zBrazil|vMaps.
650 -0 |aGeology|zAlaska|zChugach National Forest|zMaps.
650 -0 |aAeronautical charts|zBering Sea.

Choice of access points

RDA allows for corporate bodies to be used as primary access points (RDA 19.2.1.1.1 f). Add the appropriate relationship designator when easily determined (the most common one for cartographic resources will be “cartographer” though “author” might be used for an atlas, depending on how much text there is ; the list for designators for 1XX fields is at Appendix I.2.1)

Thus, you are likely to see main entry under "United States. Central Intelligence Agency", "National Geographic (Firm)", or "Geological Survey (U.S.)". Other prominently named agencies should be entered in 710s.

Other useful cartographic materials cataloging manuals

- Guidelines for Cataloging Cartographic Resources Using RDA. Prepared by the Map and Geospatial Information Round Table Cataloging and Classification Committee’s Task Force on Best Practices, 2017
- Yale Cartographic Cataloging
- Map cataloger's toolbox
- Western Association of Map Librarianship
- Map & Geospatial Information Round Table (MAGIRT)