

121 CARTOGRAPHIC MATERIALS – PHYSICAL ATTRIBUTES

This field contains coded data relating to the physical attributes of cartographic materials.

Subfields & repeatability

| FIELD/SUBFIELD | | REPEATABILITY |
|----------------|--|---------------|
| 121 | Cartographic materials – physical attributes | nr |
| a | <i>Physical dimension</i> | nr |
| b | <i>Primary cartographic image</i> | r |
| c | <i>Physical medium</i> | nr |
| d | <i>Creation technique</i> | nr |
| e | <i>Form of reproduction</i> | nr |
| f | <i>Geodetic adjustment</i> | nr |
| g | <i>Physical form of publication</i> | nr |
| h | <i>Altitude of sensor</i> | nr |
| i | <i>Attitude of sensor</i> | nr |
| j | <i>Spectral bands</i> | nr |
| k | <i>Quality of image</i> | nr |
| l | <i>Cloud cover</i> | nr |
| m | <i>Mean value of ground resolution</i> | nr |

Subfields from a to g are designed for entering general data, and subfields from h to m for entering data for aerial photography and remote sensing images.

Indicators

Indicator values are not defined.

SUBFIELDS

121a Physical dimension

A code indicates the physical dimension of the item.

| | |
|----------|----------------------|
| a | <i>2-dimensional</i> |
| b | <i>3-dimensional</i> |

121b Primary cartographic image

A code indicates the technique used for the creation of the primary cartographic image.

| | |
|----------|--|
| a | <i>manually and plotted</i> E.g. maps produced by plotting instruments such as stereo plotters with or without computer assistance; maps drawn or painted by hand. |
| b | <i>photographically</i> E.g. cartographic items produced by conventional (visible spectrum) aerial photographic techniques such as aerial photography, photo maps, orthophotos. |
| c | <i>by computer</i> E.g. maps produced by a computer line printer. |
| d | <i>by active remote sensing techniques</i> E.g. radar remote sensing image. Excludes techniques covered by codes "a", "b" or "c". |
| e | <i>by passive remote sensing techniques</i> E.g. MSS satellite remote sensing image. Excludes techniques covered by codes "a", "b" or "c". |

Repeatable if e.g. photo map enhanced with line map features is coded by "b" and "a".

121c Physical medium

A two-character code indicates the physical medium of the cartographic item. The first character of the code indicates the general type of the physical medium. The second character gives the specific type. This code is used to show that the cartographic item is made of the material indicated, e.g. when the cartographic item is a metal plate, a lithographic stone, a scribed plate on a plastic base, etc.

| NON-PHOTOGRAPHIC MEDIUM | |
|-------------------------|--|
| aa | <i>paper</i> |
| ab | <i>wood</i> |
| ac | <i>stone</i> |
| ad | <i>metal</i> |
| ae | <i>synthetics (e.g. plastics, vinyl)</i> |
| af | <i>skin (e.g. parchment, vellum)</i> |
| ag | <i>textile including man-made fibre textiles (e.g. silk, cloth, nylon)</i> |
| ah | <i>magnetic storage medium - computer compatible</i> |
| ai | <i>magnetic storage medium - not computer compatible</i> |
| aj | <i>tracing paper</i> |
| ak | <i>cardboard</i> |
| ap | <i>plaster</i> |
| au | <i>unknown</i> |
| az | <i>other non-photographic medium</i> |

| PHOTOGRAPHIC MEDIUM | |
|---------------------|---|
| ba | <i>transparent or opaque flexible base positive</i> |
| bb | <i>transparent or opaque flexible base negative</i> |
| bc | <i>transparent or opaque non-flexible base positive</i> |
| bd | <i>transparent or opaque non-flexible base negative</i> |
| bz | <i>other photographic medium</i> |

121d Creation technique

A code indicates the final step creation technique of the original cartographic item.

| | |
|----------|---|
| a | <i>manuscript</i> Hand drawn, including constructions of unique items as stone carvings, models, etc. |
| b | <i>printing</i> Offset, engraving, wood block print, lithographed, stamped, Braille, relief, etc. (e.g. printed photomap enhanced with line map feature). |
| c | <i>photocopying</i> A macroform hard copy produced directly on opaque material by radiant energy through contact or projection (e.g. photomap on photographic paper). |
| d | <i>microphotography</i> A microform copy on transparent material produced either by filming or by computer output. |
| u | <i>unknown</i> |
| y | <i>the cartographic item is not a final product</i> An item is not a final product but is on pre-production medium as specified in subfield <i>121c</i> – <i>Physical medium</i> . |
| z | <i>other</i> |

121e Form of reproduction

A code indicates the form of reproduction of the item.

| | |
|----------|---|
| a | <i>by hand</i> |
| b | <i>printed</i> |
| c | <i>photography</i> |
| d | <i>transfer line print (e.g. Xerox, blueprints, ozalid)</i> |
| y | <i>not a reproduction</i> |

121f Geodetic adjustment

A code indicates the geodetic adjustment of the item.

| | |
|----------|---|
| a | <i>no adjustment</i> |
| b | <i>adjusted but without grid system</i> |
| c | <i>adjusted with grid system</i> |

121g Physical form of publication

A code indicates the physical form of publication of the item.

| | |
|----------|-----------------|
| a | <i>single</i> |
| b | <i>in parts</i> |

| | |
|----------|---|
| | Published as a series, published as a serial, published in sections. |
| c | <i>atlas including loose-leaf published atlas</i> Also a loose-leaf published atlas. |
| d | <i>as a separate supplement to a journal, monograph, etc.</i> A cartographic item is a supplement of a serial, monograph, etc. |
| e | <i>bound into a journal, monograph, etc.</i> A cartographic item bound into a serial, monograph, etc. |
| z | <i>other</i> |

121h Altitude of sensor

A code indicates the altitude of the sensor's platform for cartographic item.

| | |
|----------|--------------------|
| a | <i>terrestrial</i> |
| b | <i>aerial</i> |
| c | <i>space</i> |

121i Attitude of sensor

A code indicates the attitude of the sensed image resulting from the angle of the sensor when recording the image for cartographic item.

| | |
|----------|---------------------|
| a | <i>low oblique</i> |
| b | <i>high oblique</i> |
| c | <i>vertical</i> |

121j Spectral bands

A subfield is applicable only to remote sensing. Two numeric characters indicate the number of spectral bands involved (01 to 99). The number is right justified, unused positions contain zeros.

121k Quality of image

A code indicates the quality of the image.

| | |
|----------|------------------|
| a | <i>poor</i> |
| b | <i>fair</i> |
| c | <i>good</i> |
| d | <i>very good</i> |

121l Cloud cover

A numeric character indicates the cloud cover in eighths.

| | |
|----------|-------------------------------------|
| 1 | <i>1/8 cover</i> |
| 2 | <i>2/8 cover</i> |
| 3 | <i>3/8 cover</i> |
| 4 | <i>4/8 cover</i> |
| 5 | <i>5/8 cover</i> |
| 6 | <i>6/8 cover</i> |
| 7 | <i>7/8 cover</i> |
| 8 | <i>completely covered by clouds</i> |

121m Mean value of ground resolution

A subfield is applicable only to remote sensing. A two-character code indicates the mean value of the ground resolution. The first character may contain a numeric value or an indication that the ground resolution is less than 1 cm or greater than 9 km.

| | |
|------------|--------------------------|
| - | <i>less than 1 cm</i> |
| 1–9 | <i>numeric value</i> |
| + | <i>greater than 9 km</i> |

The other character may contain a code for the metric unit used.

| | |
|----------|--------------------|
| c | <i>centimetres</i> |
| i | <i>decimetres</i> |
| m | <i>metres</i> |
| d | <i>decametres</i> |
| h | <i>hectometres</i> |
| k | <i>kilometres</i> |

Examples: Mean ground resolution of 5 cm: "5c"; 80 m: "8d"; 10 km: "+k".

RELATED FIELDS

120 *CARTOGRAPHIC MATERIALS – GENERAL*

EXAMPLES

1. *

| | | |
|-----|----|---|
| 121 | □□ | aa caa db ga <i>(A map is printed on paper and it is issued as a separate publication.)</i> |
|-----|----|---|

2. *

| | | |
|-----|----|--|
| 121 | □□ | aa caa da ga <i>(A hand drawn map on paper.)</i> |
|-----|----|--|