123   CODED DATA FIELD:
CARTOGRAPHIC ~~MATERIALS~~ RESOURCES – SCALE AND CO-ORDINATES

Field Definition

This field contains the scale and co-ordinate data as entered in field 206 but in coded form. It was designed prior to the release of the *Functional Requirements for Bibliographic Records* (FRBR) and of the cataloguing rules that conform to them.

According to the *Functional Requirements for Bibliographic Records* (FRBR), the information that is carried in this field pertain to FRBR entities other than the Manifestation. Such data should preferably be carried in linked authority records describing the relevant related entity rather than in the record describing the Manifestation (see field 123 in the UNIMARC Authorities Format).

However those data can still be carried in bibliographic records describing manifestations under certain conditions, especially when the records are/were created in a pre-FRBR or a non-FRBR context.

Occurrence

Mandatory for cartographic material. Repeatable when an item contains material in different scales and with different co-ordinates.

Indicators

Indicator 1: Type of Scale Code Indicator

> This indicator shows whether single or multiple scales are recorded:

> 0   Scale indeterminable

> 1   Single scale

> 2   Multiple scales

> 3   Range of scales

> 4   Approximate scale

Indicator 2: blank (not defined)

Subfields

$a   Type of Scale (Mandatory)

> A one-character code indicating the type of scale with the following values:

> a = linear scale

> b = angular scale

> z = other type of scale (e.g., time scale, quantitative statistical scale)

> Not repeatable.

$b   Constant Ratio Linear Horizontal Scale

> The horizontal scale in the form of the denominator of a representative fraction. Used for planetary as well as terrestrial cartographic items. Repeatable.

$c   Constant Ratio Linear Vertical Scale

> The vertical scale in the form of the denominator of a representative fraction. Used for planetary as well as terrestrial items. Repeatable.

$d   Co-ordinates – Westernmost Longitude

$e   Co-ordinates – Easternmost Longitude

$f   Co-ordinates – Northernmost Latitude

$g   Co-ordinates – Southernmost Latitude

Co-ordinates for planetary or terrestrial items. Each subfield is fixed at 8 characters and is not repeatable. Each contains the following data:

Character position 0

Hemisphere: one-character code:

     w = west

     e = east

     n = north

     s = south

Character positions 1 to 3

Degree: 3 numeric characters, right justified, filled with zeros

Character positions 4 to 5

Minute: 2 numeric characters, right justified, filled with zeros

Character positions 6 to 7

Second: 2 numeric characters, right justified, filled with zeros

$h   Angular Scale

The angular scale of celestial maps in the form of a 4 character number right justified and filled with zeros, giving the scale in terms of millimetres to a degree. Repeatable.

$i   Declination – Northern Limit

$j   Declination – Southern Limit

$k   Right ascension – Eastern Limits

$m   Right ascension – Western Limits

Co-ordinates for celestial cartographic items. Subfields are not repeatable. Subfields $i and $j are each 8 characters long and contain the same components as subfields $f and $g (see above) except that character position 0 contains a plus sign (for the northern celestial hemisphere) or a minus sign (for the southern celestial hemisphere). Subfields $k and $m are each 6 characters long and contain the following data:

Character positions 0 to 1

Hour: 2 numeric characters, right justified, filled with zeros

Character positions 2 to 3

Minute: 2 numeric characters, right justified, filled with zeros

Character positions 4 to 5

Second: 2 numeric characters right justified, filled with zeros

$n   Equinox

The equinox for celestial cartographic items with the year entered according to the Gregorian calendar as a four character date right justified with zeros. Not repeatable.

$o   Epoch

The epoch for celestial cartographic items with the year entered according to the Gregorian calendar as a four character date right justified with zeros. Not repeatable.

$p   Planet to which the field applies.

This subfield indicates whether the co-ordinates recorded in subfields $d-$g apply to the Earth or to another planet, or to a satellite of these bodies. The planet is expressed in position 0-1, while position 2 indicates whether the body is a satellite of the planet coded on pos. 0-1.

Character positions 0-1: Planet: two-character code:

ea = Earth
ju = Jupiter
ma = Mars
me = Mercury
ne = Neptune
pl = Pluto
sa = Saturn
ur = Uranus
ve = Venus
zz = other

Character position 2: Satellite: one-character code:

s The body whose co-ordinates are recorded in subfields $d-$g is a satellite of the planet coded on pos. 0-1.

y Not applicable: the body whose co-ordinates are recorded in subfields $d-$g is the planet itself, as coded on pos. 0-1.

This subfield is mandatory, except for cartographic materials relating to the earth and celestial charts. Not repeatable.

Notes on Field Contents

When the scale is indeterminable, the field contains only subfield $a and co-ordinates if they are present.

When the item is multipart and has multiple horizontal and/or vertical scales, all of the scales are given in repeating subfields. However, for three or more scales, the range of scales can be given in subfields $b or $c; the smaller denominator is recorded in the first occurrence of the particular subfield and the larger in the second occurrence.

When the co-ordinates for a map or plan are given in terms of a centre point rather than outside limits, the longitude and latitude that form the central axes are each recorded twice, in subfields $d and $e (longitude) and subfields $f and $g (latitude). Similarly, when the declination and right ascension for celestial charts are given relative to the centre of the chart rather than to its limits, they are each recorded twice, in subfields $i and $j (declination) and subfields $k and $m (ascension).

Related Fields

Unimarc Authorities Format

123   CODED DATA FIELD: CARTOGRAPHIC RESOURCES – SCALE AND CO-ORDINATES

This field contains the scale and co-ordinate data in coded form.

Unimarc Bibliographic Format

206   CARTOGRAPHIC ~~MATERIALS~~ RESOURCES – MATHEMATICAL DATA

Scale and co-ordinates are recorded in field 206 in the form prescribed by ISBD.

Examples

Flat maps and globes:

EX 1:   123 l#aab253440$de0790000$ee0860000$fn0200000$gn0120000$peay

A map covering part of India which is 4 inches to the mile (1:253440) longitude 79°E to 86°E, latitude 20°N to 12°N.

EX 2:   123 2#aabl50000$b25000$de0150000$ee0173045$fn0013012$gs0023035$peay

A map of part of Zaire of linear scale of 1:150000 and 1:25000, longitude 15°E to 17°30'45 E; latitude

1°30'12 N to 2°30'35 S.

Relief models:

EX 3: 123 2#aab744080$c96000$de1193000$eel220000$fn0250000$gn0220000$peay

A relief map of Taiwan with horizontal scale of 1:744080 and vertical scale of 1:96000; longitude 119°30'E to 122°E, latitude 25°N to 22°N.

EX 4: 123 2#aab90000$cl0000$dwll20000$ewl090000$fn0600000$gn0490000$peay

A relief map of part of Alberta and Saskatchewan in Canada with a horizontal scale of 1:90000 and a vertical scale of 1:10000; longitude 109°W to 112°W; latitude 60°N to 49°N.

Celestial chart:

EX 5: 123 0#abi-0160000$j-0490000$k163000$m193000$n1950$o1948

A celestial chart with an angular scale, with declination -16° to -49°, right ascension from 16 hr 30 min to 19 hr 30 min, equinox 1950, epoch 1948.

Map of a planet:

EX 6: 123 1#aab2000000$dw1500000$ew1350000$fn0350000$gn0250000$pmay
200 1#$aPlanet Mars, Olympus Mons$bDocument cartographique$eNordwestlicher Teil mit Aureole$ePlanetenbildkarte$fDeutsche Forschungsanstalt für Luft- und Raumfahrt ; Institut für angewandte Geodäsie

A map of a region of Planet Mars (as indicated in subfield $p)