

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

Field Definition and Scope

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 FRBR and IFLA LRM as well as of the cataloguing rules that conform to them. According to the FRBR/IFLA LRM, some of the information carried in this field pertains to FRBR/IFLA LRM 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. 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/IFLA LRM or a non-FRBR/IFLA LRM context.

Repeatable when the resource contains material in different scales and with different co-ordinates.

Mandatory for cartographic resources.

Subfields & Occurrence

Field/Subfield	Field/Subfield Name	Repeatability	Occurrence
123	CODED DATA FIELD: CARTOGRAPHIC RESOURCES – SCALE AND CO-ORDINATES	R	MA
a	Type of Scale	NR	MA
b	Constant Ratio Linear Horizontal Scale	R	O
c	Constant Ratio Linear Vertical Scale	R	O
d	Co-ordinates – Westernmost Longitude	NR	O
e	Co-ordinates – Easternmost Longitude	NR	O
f	Co-ordinates – Northernmost Latitude	NR	O
g	Co-ordinates – Southernmost Latitude	NR	O
h	Angular Scale	R	O
i	Declination – Northern Limit	NR	O
j	Declination – Southern Limit	NR	O
k	Right ascension – Eastern Limits	NR	O
m	Right ascension – Western Limits	NR	O
n	Equinox	NR	O
o	Epoch	NR	O
p	Planet to which the Field Applies	NR	MA

Indicators

Indicator	Value	Description
1		Type of Scale Code Indicator
	0	Scale indeterminable
	1	Single scale
	2	Multiple scales
	3	Range of scales
	4	Approximate scale
2	#	blank (not defined)

Subfields Description

\$a Type of Scale

Mandatory. Not repeatable.

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)

\$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 resources. 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 resources. 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 resources. 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 resources. 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 resources 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 resources 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. Mandatory except for cartographic resources relating to the earth and celestial charts.

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 resources 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 resource 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: TERRITORIAL OR GEOGRAPHICAL NAME	This field contains the scale and co-ordinate data in coded form.
UNIMARC/Bibliographic format	
206 MATERIAL SPECIFIC AREA: CARTOGRAPHIC 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 1#\$aa\$b253440\$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#\$aa\$b150000\$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#\$aa\$b744080\$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#\$aa\$b90000\$cl0000\$dwl20000\$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#\$ab\$i-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#\$aa\$b2000000\$dw1500000\$ew1350000\$fn0350000\$gn0250000\$pmay
200 1#\$aPlanet Mars, Olympus Mons\$bDocument cartographique\$cNordwestlicher Teil mit Aureole\$dPlanetenbildkarte\$fDeutsche Forschungsanstalt für Luft- und Raumfahrt ; Institut für angewandte Geodäsie
A map of a region of Planet Mars (as indicated in subfield \$p).

History

2005	Field issued/re-issued with corrections/additions.
2012	Align with FRBR.