

## 123 CARTOGRAPHIC MATERIALS – SCALE AND COORDINATES

This field contains the scale and coordinate data as entered in field 206 but in coded form. Repeatable when an item contains material in different scales and with different coordinates.

### Subfields & repeatability

FIELD/SUBFIELD		REPEATABILITY
123	Cartographic materials – scale and coordinates	r
<b>a</b>	<i>Type of scale</i>	nr
<b>b</b>	<i>Constant ratio linear horizontal scale</i>	r
<b>c</b>	<i>Constant ratio linear vertical scale</i>	r
<b>d</b>	<i>Coordinates – westernmost longitude</i>	nr
<b>e</b>	<i>Coordinates – easternmost longitude</i>	nr
<b>f</b>	<i>Coordinates – northernmost latitude</i>	nr
<b>g</b>	<i>Coordinates – southernmost latitude</i>	nr
<b>h</b>	<i>Angular scale</i>	r
<b>i</b>	<i>Declination – northern limit</i>	nr
<b>j</b>	<i>Declination – southern limit</i>	nr
<b>k</b>	<i>Right ascension – eastern limits</i>	nr
<b>m</b>	<i>Right ascension – western limits</i>	nr
<b>n</b>	<i>Equinox</i>	nr
<b>o</b>	<i>Epoch</i>	nr

### Indicators

INDICATOR	VALUE	MEANING
1		<b><i>Type of scale indicator</i></b>
	0	<i>Scale indeterminable</i> (see example 5)
	1	<i>Single scale</i> (see example 1)
	2	<i>Multiple scales</i> (see examples 2, 3, 4, 6)
	3	<i>Range of scales</i>
	4	<i>Approximate scale</i>
2		<b><i>Not defined</i></b>

Indicator 1 shows whether single or multiple scales recorded.

## SUBFIELDS

---

### 123a Type of scale

A code indicates the type of scale.

<b>a</b>	<i>linear scale</i> Numerical scale, graphical and descriptive scale.
<b>b</b>	<i>angular scale</i> See example 5.
<b>z</b>	<i>other type of scale</i> E.g. time scale, quantitative statistical scale.

---

### 123b 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.

---

### 123c 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 cartographic items.

---

### 123d Coordinates – westernmost longitude

### 123e Coordinates – easternmost longitude

### 123f Coordinates – northernmost latitude

### 123g Coordinates – southernmost latitude

Coordinates for planetary or terrestrial items are entered in subfields d, e, f and g. Each subfield is fixed at 8 characters. Each contains the following data:

- hemisphere – one-character code ("w" = west, "e" = east, "n" = north, "s" = south)
- degree (3 numeric characters)
- minute (2 numeric characters)
- second (2 numeric characters)

The numbers are right justified, unused positions are filled with zeros.

---

### **123h Angular scale**

Angular scale of celestial maps in the form of a 4 character number right justified and unused positions filled with zeroes, giving the scale in terms of millimetres to a degree.

---

### **123i Declination – northern limit**

### **123j Declination – southern limit**

### **123k Right ascension – eastern limits**

### **123m Right ascension – western limits**

Coordinates for celestial cartographic items are entered in subfields i, j, k and m. Subfields i and j are each 8 characters long and contain the same components as subfields f and g, except that character position 0 contains plus sign "+" (for 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: hour, minute, second (2 numeric characters each). Numbers are right justified, unused positions are filled with zeroes (see example 5).

---

### **123n Equinox**

The equinox for celestial cartographic items with the year entered according to the Gregorian calendar as a four character date right justified; unused positions are filled with zeroes (see example 5).

---

### **123o Epoch**

The epoch for celestial cartographic items with the year entered according to the Gregorian calendar as a four character date right justified; unused positions are filled with zeroes (see example 5).

## **NOTES ON FIELD CONTENTS**

When the scale is indeterminable, the field contains only subfield a and coordinates 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 (see examples 2, 6). However, for three or more scales, the range of the 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 coordinates 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

### 206 CARTOGRAPHIC MATERIALS – MATHEMATICAL DATA

Scales and coordinates are recorded in field 206 in the form prescribed by ISBD (CM).

## EXAMPLES

### Flat maps and globes:

1.

123	1□	<b>aa b253440 de0790000 ee0860000 fn0200000 gn0120000</b> (A map covering part of India which is 4 inches to the mile (1 : 253440) longitude 79° E to 86°; latitude 20° E to 12° N.)
-----	----	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

2.

123	2□	<b>aa b150000 b25000 de0150000 ee0173045 fn0013012 gs0023035</b> (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:

3.

123	2□	<b>aa b744080 c96000 de1193000 ee1220000 fn0250000 gn0220000</b> (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.)
-----	----	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

4.

123	2□	<b>aa b90000 c10000 dw1120000 ew1090000 fn0600000 gn0490000</b> (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:

5.

123	0□	<b>ab i-0160000 j-0490000 k163000 m193000 n1950 o1948</b> (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.)
-----	----	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

6. \*

123	2□	<b>aa b400000 b500000 b4000000</b> (An atlas containing maps in three different horizontal scales.)
-----	----	--------------------------------------------------------------------------------------------------------