

## 206 MATERIAL SPECIFIC AREA: CARTOGRAPHIC RESOURCES – MATHEMATICAL DATA

### Field Definition and Scope

The statements of scale, projections, coordinates and equinox of a cartographic resource.

It is equivalent to the ISBD Material or Type of Resource Specific Area – Mathematical Data.

Mandatory for cartographic resources.

### Subfields & Occurrence

| Field/Subfield | Field/Subfield Name                                                | Repeatability | Occurrence |
|----------------|--------------------------------------------------------------------|---------------|------------|
| 206            | MATERIAL SPECIFIC AREA: CARTOGRAPHIC RESOURCES – MATHEMATICAL DATA | R             | MA         |
| a              | Mathematical Data Statement                                        | NR            | O          |
| b              | Statement of Scale                                                 | R             | O          |
| c              | Statement of Projection                                            | NR            | O          |
| d              | Statement of Coordinates                                           | NR            | O          |
| e              | Right Ascension and Declination                                    | NR            | O          |
| f              | Statement of Equinox                                               | NR            | O          |

### Indicators

| Indicator | Value | Description          |
|-----------|-------|----------------------|
| 1         |       | Formatting Indicator |
|           | #     | Unstructured         |
|           | 0     | Structured           |
| 2         | #     | blank (not defined)  |

### Subfields Description

#### **\$a Mathematical Data Statement**

The text of the statements of scale, projection, coordinates, equinoxes and epochs including ISBD punctuation. Not repeatable.

#### **\$b Statement of Scale**

Includes any equivalency statements, vertical scales or vertical exaggeration statements for relief models and other three-dimensional resources. Repeatable.

#### **\$c Statement of Projection**

Not repeatable.

#### **\$d Statement of Coordinates**

Not repeatable.

#### **\$e Right Ascension and Declination**

Used for celestial charts. Not repeatable.

#### **\$f Statement of Equinox**

Not repeatable.

### Notes on Field Contents

The text of the area may use:

either one subfield \$a for the data in unstructured format; in this situation the field is not divided into other subfields and so therefore the specifications for format and punctuation of the data in this field are as contained in the ISBD and all ISBD specified punctuation is carried in the field

or subfields \$b, \$c, \$d, \$e, \$f as required for the structured data.

The correspondence between this field (structured version) and ISBD Consolidated Edition (2011) specification is illustrated below.

| UNIMARC subfield | Element name                                              | ISBD (2011) | Preceding punctuation |
|------------------|-----------------------------------------------------------|-------------|-----------------------|
| \$b              | Statement of scale                                        | 3.1.1       | New area              |
| \$b              | Statement of scale                                        | 3.1.1       | ,                     |
| \$c              | Statement of projection                                   | 3.1.2       | ;                     |
| \$d              | Statement of coordinates                                  | 3.1.3.1     | ( )                   |
| \$e              | Right ascension and declination used for celestial charts | 3.1.3.3     | ( )                   |
| \$f              | Statement of equinox                                      | 3.1.3.4     | (*;*)                 |

The statement of zone used for celestial charts and the statement of equinox are transcribed into the same pair of parentheses.

### Related Fields

|                                                                                                 |                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 120 CODED DATA FIELD:<br>CARTOGRAPHIC RESOURCES – GENERAL                                       | This field contains a code for map projection.                                                                                                                                     |
| 122 CODED DATA FIELD: TIME PERIOD<br>OF RESOURCE CONTENT                                        | This field contains in coded form the date to which the resource applies, it includes the data which is found in the statement of equinox in records relating to celestial charts. |
| 123 CODED DATA FIELD:<br>CARTOGRAPHIC RESOURCES – SCALE<br>AND COORDINATES                      |                                                                                                                                                                                    |
| 131 CODED DATA FIELD:<br>CARTOGRAPHIC RESOURCES –<br>GEODETIC, GRID AND VERTICAL<br>MEASUREMENT |                                                                                                                                                                                    |

### Examples

|                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------|
| EX 1                                                                                                                  |
| Unstructured information                                                                                              |
| 206 ##\$aScale 1:6 336 000 (W 170°-W 50°/N 80° -N 40°)                                                                |
| Structured information                                                                                                |
| 206 0#\$bScale 1:6 336 000\$dW 170°-W 50°/N 80°-N 40°                                                                 |
| EX 2                                                                                                                  |
| Unstructured information                                                                                              |
| 206 ##\$aScale 1:250 000. Vertical scale 1:125 000 ; Universal Transverse Mercator proj. (W 124°- W 122°/N 58°-N57°)  |
| The record was created prior to ISBD Consolidated Edition (2011).                                                     |
| Structured information                                                                                                |
| 206 0#\$bScale 1:250 000\$bVertical scale 1:125 000\$cUniversal Transverse Mercator proj.\$dW 124°- W 122°/N 58°-N57° |

|                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EX 3                                                                                                                                                              |
| Unstructured information                                                                                                                                          |
| 206 ##\$a(RA 16 hr. 30 min. to 19 hr. 30min./Decl. -16° to -49°; eq. 1950, epoch 1948)                                                                            |
| Structured information                                                                                                                                            |
| 206 0#\$eRA 16 hr. 30 min. to 19 hr. 30min./Decl. -16° to -49°\$feq. 1950, epoch 1948                                                                             |
| Example of a celestial chart.                                                                                                                                     |
| EX 4                                                                                                                                                              |
| Unstructured information                                                                                                                                          |
| 206 ##\$aScale [ca. 1:770.000]                                                                                                                                    |
| Includes in field 315, note: Scale given with the calculated value 14.50 cm for the latitude degree.                                                              |
| Structured information                                                                                                                                            |
| 206 0#\$bScale [ca. 1:770.000]                                                                                                                                    |
| Includes in field 315, note: Scale given with the calculated value 14.50 cm for the latitude degree.                                                              |
| EX 5                                                                                                                                                              |
| Unstructured information                                                                                                                                          |
| 206 ##\$aScale [ca. 1:500.000]. Vertical scale [ca. 1:100.000]                                                                                                    |
| The record was created prior to ISBD Consolidated Edition (2011).                                                                                                 |
| Structured information                                                                                                                                            |
| 206 0#\$bScale [ca. 1:500.000]\$bVertical scale [ca. 1:100.000]                                                                                                   |
| EX 6                                                                                                                                                              |
| Unstructured information                                                                                                                                          |
| 206 ##\$aScale 1:25.000 ; Gauss-Kruger projection (W 8° 42' 37" W 8° 42' 34" W 8° 31' 03" W 8° 31' 01" / N 41° 55' 01" N 41° 54' 58" N 41° 49' 37" N 41° 49' 34") |
| Structured information                                                                                                                                            |
| 206 0#\$bScale 1:25.000\$cGauss-Kruger projection\$dW 8° 42' 37" W 8° 42' 34" W 8° 31' 03" W 8° 31' 01" / N 41° 55' 01" N 41° 54' 58" N 41° 49' 37" N 41° 49' 34" |
| EX 7                                                                                                                                                              |
| Unstructured information                                                                                                                                          |
| 206 ##\$aScale not given (RA 16 hr. 30 min. to 19 hr. 30 min. / Decl. -16° to -49° eq. 1950, epoch 1948).                                                         |
| Structured information                                                                                                                                            |
| 206 0#\$bScale not given\$eRA 16 hr. 30 min. to 19 hr. 30 min. / Decl. -16° to -49°\$feq. 1950, epoch 1948                                                        |
| Example of a celestial chart.                                                                                                                                     |

## History

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