

## Cartographic Spatial Extent (Bounding Box Coordinates)

Linked Data for Libraries Cartographic Materials Working Group

Ontology Modeling Examples -- **Draft Version 2**, May 2018

### Ontologies

```
@prefix bib: <http://bibliotek-o.org/1.1/ontology/> .
@prefix bf: <http://id.loc.gov/ontologies/bibframe/> .
@prefix gcro: <http://http://ontology.library.harvard.edu/geo/> .
@prefix geo: <http://www.opengis.net/ont/geosparql#> .
@prefix rdau: <http://rdaregistry.info/Elements/u/> .
```

### Classes

```
geo:Geometry
gcro:CartSource
```

### Object Properties

```
bib:hasSource
```

### Data Properties

```
geo:asWKT

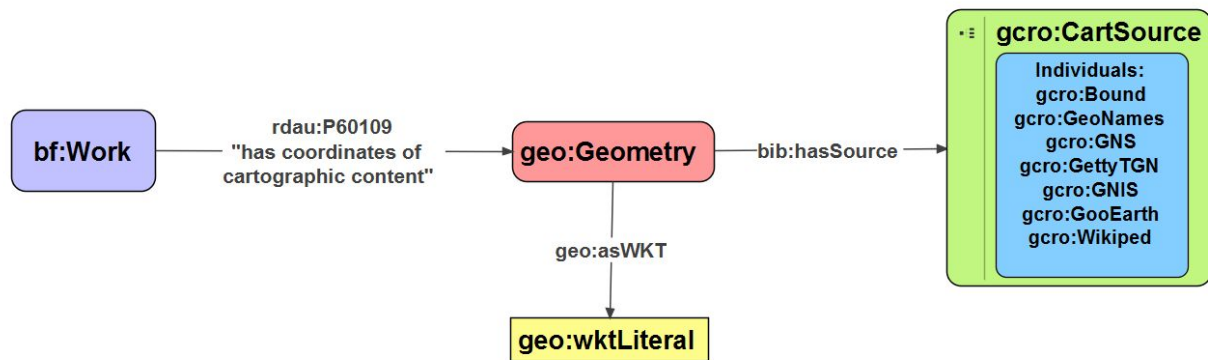
rdau:P60109 ["has coordinates of cartographic content"]
```

### Named Individuals of gcro:CartSource

Sources for coordinate data  
{based on MARC 034 \$\$2 Cartographic Data Source Code list  
<https://www.loc.gov/standards/sourcelist/cartographic-data.html>}:

gcro:Bound	Bounding Box (Klokan Technologies)
gcro:GeoNames	GeoNames.org
gcro:GNS	NGA GEOnet Names Server (GNS)
gcro:GettyTGN	Getty Thesaurus of Geographic Names Online
gcro:GNIS	Geographic Names Information System (GNIS)
gcro:GooEarth	Google Earth
gcro:Wikiped	Wikipedia

## Illustration



## Examples

*Example 1* - Map of Australia, source of coordinates the Klokan Bounding Box Tool  
E 72°14'00"--E 168°13'00"/S 9°05'00"--S 55°19'00"

```
:work1 rdau:P60109 :geometry1 .
```

```
:geometry1 a geo:Geometry ;  
    bib:hasSource gcro:Bound ;  
    geo:asWKT "POLYGON((72.2 -9.1, 168.2 -9.1, 168.2 -55.3, 72.2 -55.3,  
        72.2 -9.1))"^^geo:wktLiteral .
```

*Example 2* - Map of Prague, source of coordinates the map itself  
E 14°18'45"--E 14°29'15"/N 50°08'00"--N 50°01'30"

```
:work2 rdau:P60109 :geometry2 .
```

```
:geometry2 a geo:Geometry ;  
    bib:hasSource :work2 ;  
    geo:asWKT "POLYGON((14.3125 50.13333, 14.4875 50.13333, 14.4875  
        50.025, 14.3125 50.025, 14.3125 50.13333))"^^geo:wktLiteral .
```

