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Raster

Open

Open a Raster.

```
geo-shell> raster open --format earth --raster earth --name earth
```

Name	Description	Mandatory	Specified Default	Unspecified Default
format	The Format name	true		
raster	The Raster name	true		
name	The name	false		

```
geo-shell> format open --name earth --input src/test/resources/earth.tif  
Format earth opened!
```

```
geo-shell> raster open --format earth --raster earth --name earth  
Opened Format earth Raster earth as earth
```

```
geo-shell> raster close --name earth  
Raster earth closed!
```

```
geo-shell> format close --name earth  
Format earth closed!
```

Close

Close a Raster.

```
geo-shell> raster close --name earth
```

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Raster name	true		

```
geo-shell> format open --name earth --input src/test/resources/earth.tif  
Format earth opened!
```

```
geo-shell> raster open --format earth --raster earth --name earth  
Opened Format earth Raster earth as earth
```

```
geo-shell> raster close --name earth  
Raster earth closed!
```

```
geo-shell> format close --name earth  
Format earth closed!
```

List

List open Rasters.

geo-shell> **raster list**



No parameters

geo-shell> **format open** --name earth --input src/test/resources/earth.tif
Format earth opened!

geo-shell> **raster open** --format earth --raster earth --name earth
Opened Format earth Raster earth as earth

geo-shell> **raster list**
earth = GeoTIFF

geo-shell> **raster close** --name earth
Raster earth closed!

geo-shell> **format close** --name earth
Format earth closed!

Info

Get information about a Raster.

geo-shell> **raster info** --name earth

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Raster name	true		

geo-shell> **format open** --name earth --input src/test/resources/earth.tif
Format earth opened!

geo-shell> **raster open** --format earth --raster earth --name earth
Opened Format earth Raster earth as earth

geo-shell> **raster info** --name earth
Format: GeoTIFF
Size: 800, 400
Projection ID: EPSG:4326
Projection WKT: GEOGCS["WGS 84",
DATUM["World Geodetic System 1984",
SPHEROID["WGS 84", 6378137.0, 298.257223563, AUTHORITY["EPSG","7030"]],
AUTHORITY["EPSG","6326"]],
PRIMEM["Greenwich", 0.0, AUTHORITY["EPSG","8901"]],
UNIT["degree", 0.017453292519943295],

```

AXIS["Geodetic longitude", EAST],
AXIS["Geodetic latitude", NORTH],
AUTHORITY["EPSG","4326"]
Extent: -179.9999999999997, -89.99999999998205, 179.99999999996405, 90.0
Pixel Size: 0.4499999999995505, 0.449999999999551
Block Size: 800, 8
Bands:
RED_BAND
Min Value: 56.0 Max Value: 255.0
GREEN_BAND
Min Value: 84.0 Max Value: 255.0
BLUE_BAND
Min Value: 91.0 Max Value: 255.0

```

```

geo-shell> raster close --name earth
Raster earth closed!

```

```

geo-shell> format close --name earth
Format earth closed!

```

Value

Get a value from the Raster.

```

geo-shell> raster value --name earth --x 60 --y 45

```

```

geo-shell> raster value --name earth --x 10 --y 15 --type pixel

```

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Raster name	true		
band	The x coordinate	false	0	0
x	The x coordinate	true		
y	The y coordinate	true		
type	The y coordinate	false	geometry	geometry

```

geo-shell> format open --name earth --input src/test/resources/earth.tif
Format earth opened!

```

```

geo-shell> raster open --format earth --raster earth --name earth
Opened Format earth Raster earth as earth

```

```

geo-shell> raster value --name earth --x 60 --y 45
235.0

```

```

geo-shell> raster value --name earth --x 10 --y 15 --type pixel
109.0

```

```
geo-shell> raster close --name earth  
Raster earth closed!
```

```
geo-shell> format close --name earth  
Format earth closed!
```

Envelope

Create a Vector Layer from the envelope of a Raster.

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Raster name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		

Get Style

Get the Raster's style.

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Raster name	true		
style	The SLD File	false		

Set Style

Set a Raster's style

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Raster name	true		
style	The SLD or CSS File	true		

Add Raster

Add two Rasters together

Name	Description	Mandatory	Specified Default	Unspecified Default
name1	The Raster name	true		
name2	The Raster name	true		

output-format	The output Format Workspace	true		
output-name	The output Raster name	false		

Add Constant

Add constant values to a Raster

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Raster name	true		
output-format	The output Format Workspace	true		
output-name	The output Raster name	false		
values	The values	true		

Subtract Raster

Subtract one Raster from another

Name	Description	Mandatory	Specified Default	Unspecified Default
name1	The Raster name	true		
name2	The Raster name	true		
output-format	The output Format Workspace	true		
output-name	The output Raster name	false		

Subtract Constant

Subtract constant values from a Raster

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Raster name	true		
output-format	The output Format Workspace	true		
output-name	The output Raster name	false		
values	The values	true		

from	Whether to subtract the Raster from the constant or vice verse	false	false	false
------	--	-------	-------	-------

Multiply Raster

Multiply two Raster together

Name	Description	Mandatory	Specified Default	Unspecified Default
name1	The Raster name	true		
name2	The Raster name	true		
output-format	The output Format Workspace	true		
output-name	The output Raster name	false		

Multiply Constant

Multiply constant values to a Raster

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Raster name	true		
output-format	The output Format Workspace	true		
output-name	The output Raster name	false		
values	The values	true		

Divide Raster

Divide one Raster by another Raster

Name	Description	Mandatory	Specified Default	Unspecified Default
name1	The Raster name	true		
name2	The Raster name	true		
output-format	The output Format Workspace	true		
output-name	The output Raster name	false		

Divide Constant

Divide constant values against a Raster

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Raster name	true		
output-format	The output Format Workspace	true		
output-name	The output Raster name	false		
values	The values	true		

Contours

Create contours.

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Raster name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
band	The Raster band to contour	false	0	0
levels	The contour level or interval	true		
simplify	Whether to simplify	false	false	false
smooth	Whether to smooth	false	false	false
bounds	The Bounds	false		

Crop

Crop a Raster.

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Raster name	true		
output-format	The output Format Workspace	true		

output-name	The output Raster name	false		
geometry	The geometry	true		

Mosaic

Mosaic two Rasters together

Name	Description	Mandatory	Specified Default	Unspecified Default
name1	The Raster name	true		
name2	The Raster name	true		
output-format	The output Format Workspace	true		
output-name	The output Raster name	false		

Reclassify

Reclassify a Raster.

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Raster name	true		
output-format	The output Format Workspace	true		
output-name	The output Raster name	false		
ranges	The comma delimited reclassification ranges (from-to=value)	true		
band	The Raster band to contour	false	0	0
nodata	The NODATA value	false	0	0

Reproject

Project a Raster.

Name	Description	Mandatory	Specified Default	Unspecified Default
------	-------------	-----------	-------------------	---------------------

name	The Raster name	true		
output-format	The output Format Workspace	true		
output-name	The output Raster name	false		
projection	The projection	true		

Scale

Scale a Raster.

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Raster name	true		
output-format	The output Format Workspace	true		
output-name	The output Raster name	false		
x	The scale factor along the x axis	true		
y	The scale factor along the y axis	true		
x-trans	The x translation	false	0	0
y-trans	The y translation	false	0	0
interpolation	The interpolation method (bicubic, bicubic2, bilinear, nearest)	false	nearest	nearest

Shaded Relief

Create a shaded relief raster

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Raster name	true		
output-format	The output Format Workspace	true		
output-name	The output Raster name	false		
scale	The scale	true		
altitude	The altitude	true		
azimuth	The azimuth	true		

resx	The x resolution	false	0.5	0.5
resy	The y resolution	false	0.5	0.5
zetafactory	The zeta factory	false	1.0	1.0
algorithm	The x resolution	false	DEFAULT	DEFAULT

Stylize

Create a new Raster by baking the style into an existing Raster

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Raster name	true		
output-format	The output Format Workspace	true		
output-name	The output Raster name	false		