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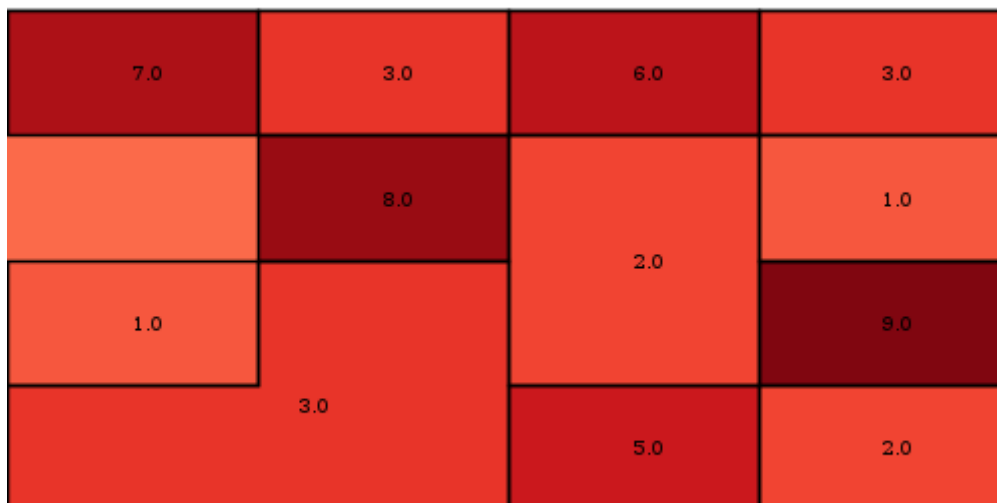
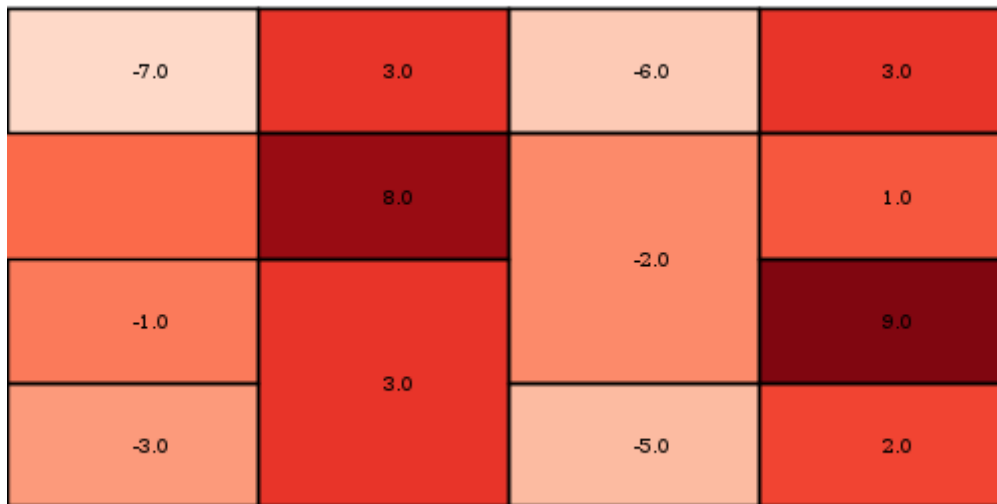
Raster Commands

Absolute

Calculate the absolute value of the values of a Raster.

Short Name	Long Name	Description
-o	--output-raster	The output raster
-f	--output-raster-format	The output raster format
-i	--input-raster	The input raster
-l	--input-raster-name	The input raster name
-p	--input-projection	The input projection
	--help	Print the help message
	--web-help	Open help in a browser

```
geoc raster abs -i src/test/resources/absolute.tif -o target/absolute_abs.tif
```



Add Constant

Add a constant value to a Raster.

Short Name	Long Name	Description
-v	--value	The value
-o	--output-raster	The output raster
-f	--output-raster-format	The output raster format
-i	--input-raster	The input raster
-l	--input-raster-name	The input raster name
-p	--input-projection	The input projection
	--help	Print the help message
	--web-help	Open help in a browser

Get original value

```
geoc raster get value -i src/test/resources/pc.tif -x -121.799927 -y 46.867703
```

3069.0

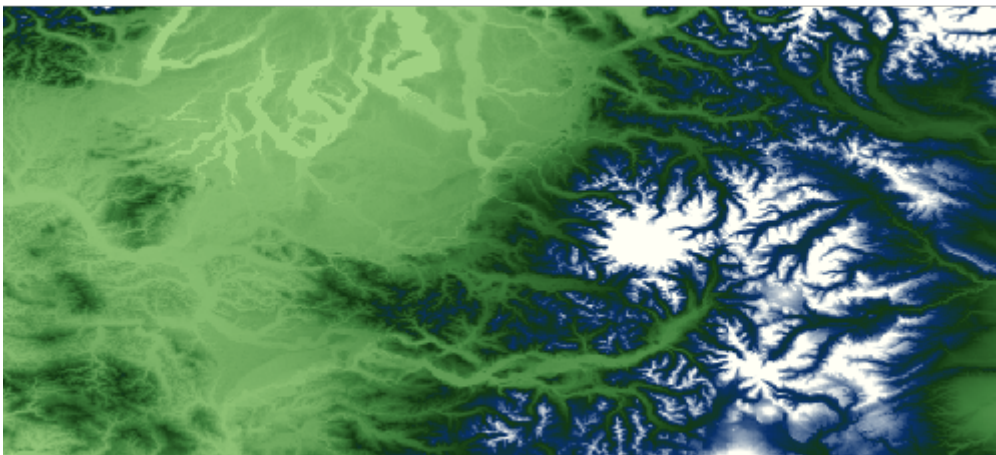
Add 100 to all cells

```
geoc raster add constant -i src/test/resources/pc.tif -v 100 -o target/pc_add.tif
```

Get new value

```
geoc raster get value -i target/pc_add.tif -x -121.799927 -y 46.867703
```

3169.0



Add

Add two Raster together.

Short Name	Long Name	Description
-k	--other-raster	The other raster
-y	--other-raster-name	The other raster name
-j	--other-projection	The other projection
-o	--output-raster	The output raster

Short Name	Long Name	Description
-f	--output-raster-format	The output raster format
-i	--input-raster	The input raster
-l	--input-raster-name	The input raster name
-p	--input-projection	The input projection
	--help	Print the help message
	--web-help	Open help in a browser

```
geoc raster add -i src/test/resources/low.tif -k src/test/resources/high.tif -o
target/lowPlusHigh.tif
```

Low

13.0	14.0	15.0	16.0
9.0	10.0	11.0	12.0
5.0	6.0	7.0	8.0
1.0	2.0	3.0	4.0

High

17.0	18.0	19.0	20.0
13.0	14.0	15.0	16.0
9.0	10.0	11.0	12.0
5.0	6.0	7.0	8.0

Low + High

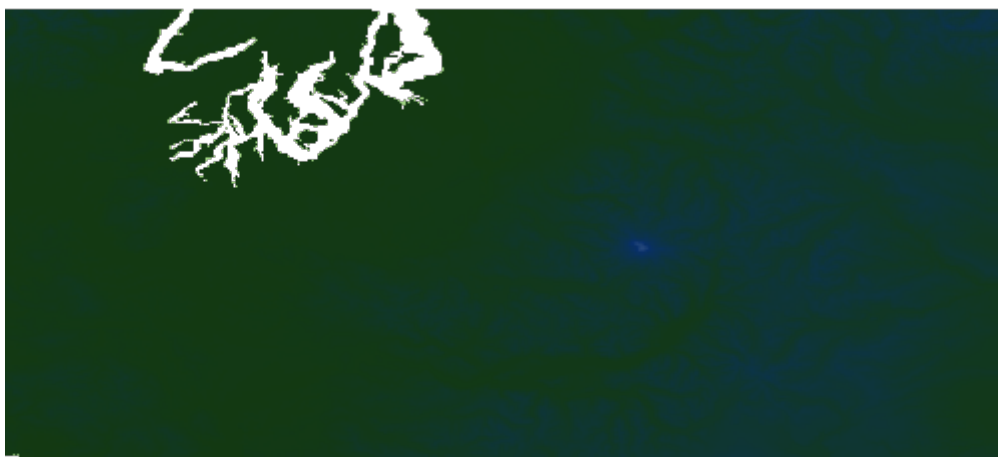
30.0	32.0	34.0	36.0
22.0	24.0	26.0	28.0
14.0	16.0	18.0	20.0
6.0	8.0	10.0	12.0

Convolve

Convolve the values of a Raster.

Short Name	Long Name	Description
-w	--width	The kernel width
-h	--height	The kernel height
-o	--output-raster	The output raster
-f	--output-raster-format	The output raster format
-i	--input-raster	The input raster
-l	--input-raster-name	The input raster name
-p	--input-projection	The input projection
	--help	Print the help message
	--web-help	Open help in a browser

```
geoc raster convolve -i src/test/resources/pc.tif -o target/pc_convolve.tif -w 2 -h 2
```



Original

```
geoc raster info -i src/test/resources/pc.tif
```

```
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: -123.55291606131708, 46.25375026634816, -120.73958272798374,
47.522916933014834
Pixel Size: 0.0035166666666666658, 0.0031729166666666763
Block Size: 800, 5
Bands:
  GRAY_INDEX
  Min Value: -23.0 Max Value: 4370.0
```

Convolved

```
geoc raster info -i target/pc_convolve.tif
```

```

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: -123.55291606131708, 46.25375026634816, -120.73958272798374,
47.522916933014834
Pixel Size: 0.0035166666666666658, 0.0031729166666666673
Block Size: 800, 10
Bands:
  GRAY_INDEX
  Min Value: -32767.0 Max Value: 17278.0

```

Contour

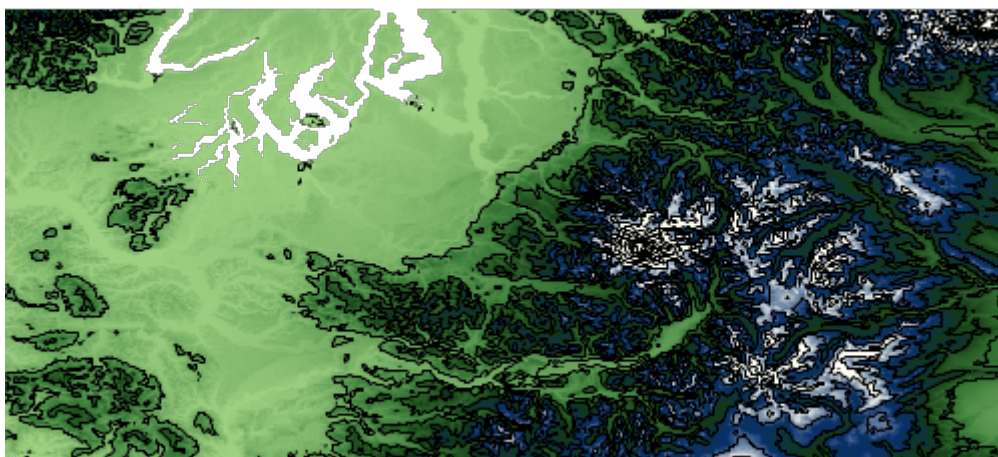
Create contours from a Raster.

Short Name	Long Name	Description
-b	--band	The band
-v	--level	A level or interval
-s	--simplify	Whether to simplify
-m	--smooth	Whether to smooth
-n	--bounds	The bounds
-o	--output-workspace	The output workspace
-r	--output-layer	The output layer
-i	--input-raster	The input raster
-l	--input-raster-name	The input raster name
-p	--input-projection	The input projection
	--help	Print the help message
	--web-help	Open help in a browser

```

geoc raster contour -i src/test/resources/pc.tif -b 0 -v 300 -s -m -o
target/contours.shp

```

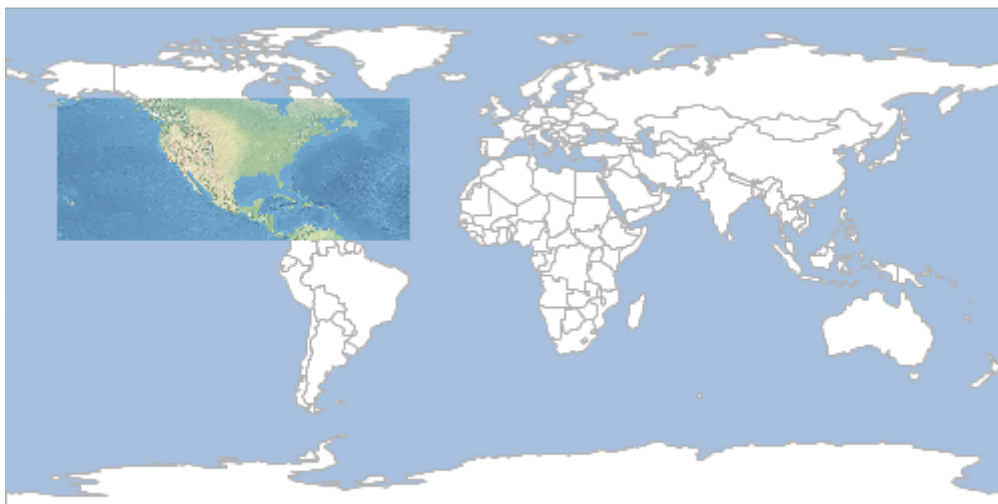


Crop

Crop a Raster.

Short Name	Long Name	Description
-b	--bound	The Bounds
-x	--pixel	Whether the Bounds is pixel or geographic
-o	--output-raster	The output raster
-f	--output-raster-format	The output raster format
-i	--input-raster	The input raster
-l	--input-raster-name	The input raster name
-p	--input-projection	The input projection
	--help	Print the help message
	--web-help	Open help in a browser

```
geoc raster crop -i src/test/resources/earth.tif -b -160.927734,6.751896,  
-34.716797,57.279043 -o target/earth_cropped.tif
```

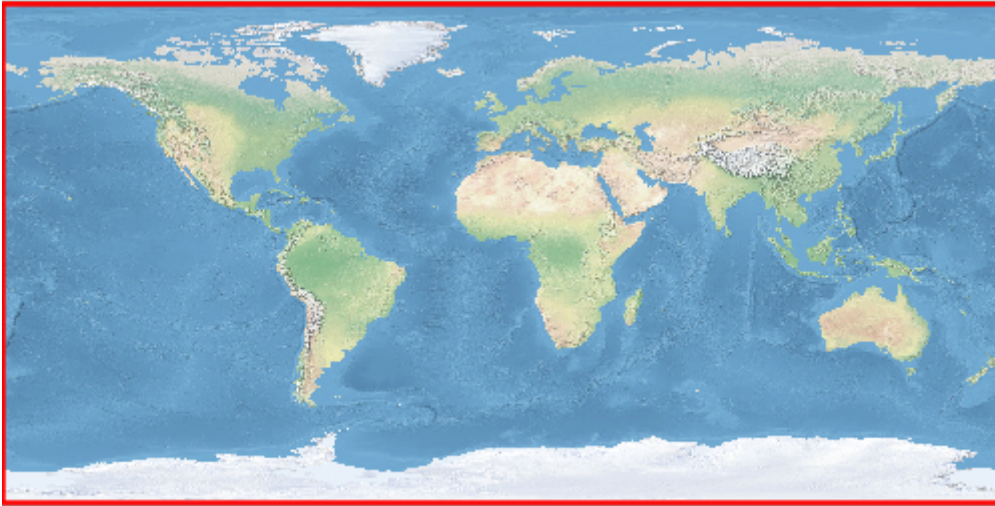



Envelope

Get the Envelope of a Raster as a Vector Layer.

Short Name	Long Name	Description
-o	--output-workspace	The output workspace
-r	--output-layer	The output layer
-i	--input-raster	The input raster
-l	--input-raster-name	The input raster name
-p	--input-projection	The input projection
	--help	Print the help message
	--web-help	Open help in a browser

```
geoc raster envelope -i src/test/resources/earth.tif -o target/earth_envelope.shp
```



Info

Get information about a Raster.

Short Name	Long Name	Description
-i	--input-raster	The input raster
-l	--input-raster-name	The input raster name
-p	--input-projection	The input projection
	--help	Print the help message
	--web-help	Open help in a browser

```
geoc raster info -i src/test/resources/earth.tif
```

```

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

```

Get Projection

Get the Raster Projection.

Short Name	Long Name	Description
-t	--type	The output type (epsg, id, srs, wkt)
-i	--input-raster	The input raster
-l	--input-raster-name	The input raster name
-p	--input-projection	The input projection
	--help	Print the help message
	--web-help	Open help in a browser

```
geoc raster projection -i src/test/resources/earth.tif
```

```
EPSG:4326
```

Get Size

Get the Raster size (width,height).

Short Name	Long Name	Description
-i	--input-raster	The input raster
-l	--input-raster-name	The input raster name
-p	--input-projection	The input projection
	--help	Print the help message
	--web-help	Open help in a browser

```
geoc raster size -i src/test/resources/earth.tif
```

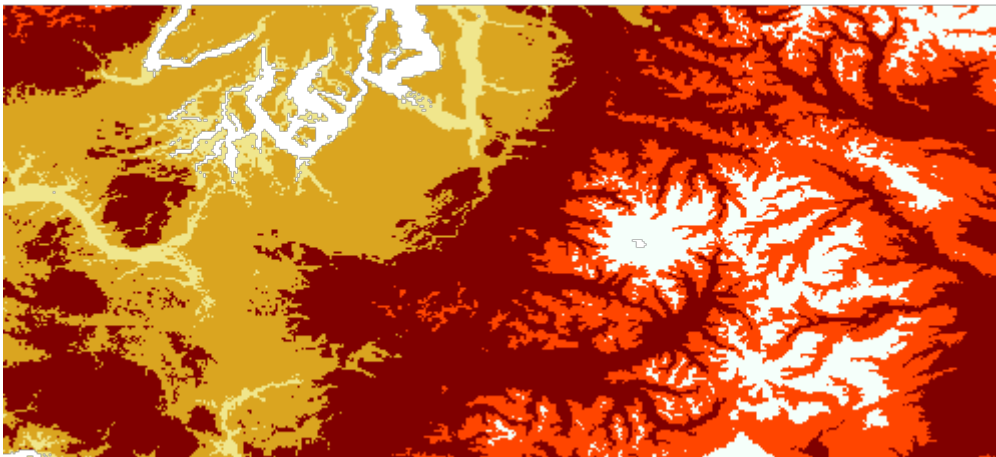
```
800,400
```

Reclassify

Reclassify a Raster.

Short Name	Long Name	Description
-b	--band	The band
-n	--nodata	The NODATA value
-r	--range	A range: from-to=value or 1-10=5
-o	--output-raster	The output raster
-f	--output-raster-format	The output raster format
-i	--input-raster	The input raster
-l	--input-raster-name	The input raster name
-p	--input-projection	The input projection
	--help	Print the help message
	--web-help	Open help in a browser

```
geoc raster reclassify -i src/test/resources/pc.tif -o target/pc_reclass.tif -r 0-0=1  
-r 0-50=2 -r 50-200=3 -r 200-1000=5 -r 1000-1500=4 -r 1500-4000=6
```



World File

Create a Raster world file

Short Name	Long Name	Description
-b	--bounds	The bounds
-s	--size	The size
-f	--file	The world file
	--help	Print the help message
	--web-help	Open help in a browser

```
geoc raster worldfile -b 10,11,20,21 -s 800,751
```

```
0.0125
0.0
0.0
-0.013315579227696404
10.00625
20.993342210386153
```