geo-shell

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Version 0.7-SNAPSHOT

Table of Contents

Introduction

geo-shell is an interactive shell for geospatial analysis.

geo-shell has modules for dealing with **vectors**, **rasters**, **tiles**, **maps**, and **styles**.

For **vector** layers, you can use **workspace** commands access layers of spatial data in datasets like shapefiles, geopackages, or postgis databases. With **layer** commands you can perform geoprocessing functions like calculating centroids or buffer features.

For **raster** layers, you can use **format** commands access individual rasters from geotifs or world images. With **raster** commands you can perform mosaic, raster algebra, or crop functions.

The **tile** commands let you create tile layers, get tiles, and get rasters from tiles.

The **style** commands let you create styles for vector layers and raster.

The **map** commands allow you to visualize vector, raster, and tile layers.

Workspace

Workspaces hold vector layers. A Workspace can be a GeoPackage database, a directory of Shapefiles, or a PostGIS database.

Basics

You can open, close, and list Workspaces. The eariest Workspace to open is an in memory Workspace.

Open

Open a Workspace.

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Workspace name	true		
params	The connection parameters	true		

geo-shell> **workspace open** --name mem --params memory
Workspace mem opened!

You can open a Workspace with --params or connection parameters. You can give it a name with --name flag.

List

List open Workspaces. NOTE: No parameters

geo-shell> **workspace list**
mem = Memory

Listing open Workspaces give you the name and the type Workspace.

Close

Close a Workspace.

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

geo-shell> **workspace close** --name mem
Workspace mem closed!

Once you close a Workspace by name it will no longer appear with the list command.

Layers

List the Layer in a Workspaces.

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

In this example, we will open a GeoPackage database filled with data from Natural Earth.

Open a Workspace

geo-shell> **workspace open** --name naturalearth --params src/test/resources/naturalearth.gpkg
Workspace naturalearth opened!

List open Workspaces

geo-shell> **workspace layers** --name naturalearth
countries
ocean
places
states

Close a Workspace

geo-shell> **workspace close** --name naturalearth
Workspace naturalearth closed!

Layer

Basics

Open

Open a Layer.

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries

Name	Description	Mandatory	Specified Default	Unspecified Default
workspace	The Workspace name	true		
layer	The Layer name	true		
name	The name	false		

geo-shell> **workspace open** --name naturalearth --params src/test/resources/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **workspace close** --name naturalearth
Workspace naturalearth closed!

Close

Close a Layer.

geo-shell> **layer close** --name countries

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

geo-shell> **workspace open** --name naturalearth --params src/test/resources/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer close** --name countries
Layer countries closed!

geo-shell> **workspace close** --name naturalearth
Workspace naturalearth closed!

List

List open Layers.

geo-shell> **layer list**

No parameters

geo-shell> **workspace open** --name naturalearth --params src/test/resources/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer open** --workspace naturalearth --layer states --name states
Opened Workspace naturalearth Layer states as states

geo-shell> **layer list**
countries = GeoPackage
ocean = GeoPackage
states = GeoPackage

geo-shell> **workspace close** --name naturalearth
Workspace naturalearth closed!

Schema

Inspect a Layer's Schema.

geo-shell> **layer schema** --name countries

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

geo-shell> **workspace open** --name naturalearth --params src/test/resources/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer schema** --name countries
Name Type
---------- ----------
the_geom MultiPolygon
ScaleRank Integer
FeatureCla String

SOVEREIGNT String
SOVISO String
SOV_A3 String
LEVEL Double
TYPE String
NAME String
SORTNAME String
ADM0_A3 String
NAME_SM String
NAME_LNG String
TERR_ String
PARENTHETI String
NAME_ALT String
LOCAL_LNG String
LOCAL_SM String
FORMER String
ABBREV_ String
MAP_COLOR Double
PEOPLE Double
GDP_USDM Double
FIPS_10 String
ISO_A2 String
ISO_A3 String
ISO_N3 Double
ITU String
IOC String
FIFA String
DS String
WMO String
GAUL Double
MARC String
STANAG1059 String
GW_ID Double
DIAL Double
INTERNET_ String
COG String
ACTUAL String
CAPAY String
CRPAY String
ANI String
LIBENR String
ANCNOM String
PAYS_R_GIO String
COMMENT String

geo-shell> **workspace close** --name naturalearth
Workspace naturalearth closed!

Count

Count the Feature in a Layer.

geo-shell> **layer count** --name countries

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

geo-shell> **workspace open** --name naturalearth --params src/test/resources/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer count** --name countries
177

geo-shell> **workspace close** --name naturalearth
Workspace naturalearth closed!

Projection

Get the Projection of a Layer.

geo-shell> **layer projection** --name countries

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

geo-shell> **workspace open** --name naturalearth --params src/test/resources/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer projection** --name countries
EPSG:4326

geo-shell> **workspace close** --name naturalearth
Workspace naturalearth closed!

Features

Display the Features of a Layer.

Name	Description	Mandatory	Specified Default	Unspecified Default

name	The Layer name	true		
filter	The CQL Filter	false		
sort	A Sort parameter (fld dir)	false		
start	The start index	false		-1
max	The maximum number of records	false		-1
field	A subfield to include	false		

Get Style

Get the Layer's style.

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

Set Style

Set a Layer's style

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

Copy

Copy one Layer to another Workspace.

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
filter	The CQL Filter	false		
sort	A Sort parameter (fld dir)	false		
start	The start index	false		-1

max	The maximum number of records	false		-1
field	A subfield to include	false		

Add

Add a new Feature to a Layer.

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Layer name	true		
values	The pipe delimited list of values (field=value)	true		

Remove

Remove a Layer from a Workspace.

Name	Description	Mandatory	Specified Default	Unspecified Default
workspace	The Workspace name	true		
layer	The Layer name	true		

Create

Create a new Layer.

Name	Description	Mandatory	Specified Default	Unspecified Default
workspace	The Workspace name	true		
name	The new Layer name	true		
fields	The pipe delimited list of fields (name=type)	true		

Delete

Delete features from the Layer

Name	Description	Mandatory	Specified Default	Unspecified Default

name	The Layer name	true		
filter	The CQL Filter	true		

Update

Calculate the update between a Layer with another Layer

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

Update Field

Delete features from the Layer

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Layer name	true		
field	The field name	true		
value	The value	true		
filter	The CQL Filter	false	INCLUDE	INCLUDE
script	Whether the value is a script or not	false	false	false

Add Fields

Add Fields to the input Layer and save the result to the output Layer

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
fields	The Fields (name=type proj)	true		

Add Area Field

Add area Field to the input Layer and save the result to the output Layer

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
area-fieldname	The area field name	true	area	area

Add ID Field

Add area ID to the input Layer and save the result to the output Layer

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
id-fieldname	The id field name	true	id	id
start-value	The value to start at	true	1	1

Add XY Fields

Add x and y coordinate Fields to the input Layer and save the result to the output Layer

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
x-fieldname	The x field name	true	x	x
y-fieldname	The y field name	true	y	y

Validity

Check for invalid geometries in the Layer.

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Layer name	true		
fields	A comma delimited list of Fields to include	false		

Geoprocessing

Clip

Clip the input Layer by the other Layer to produce the output Layer

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

Convex Hull

Calculate the convexhull of the input Layer and save it to the output Layer.

geo-shell> **layer convexhull** --input-name countries --output-workspace layers --output-name convexhull

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
geometry-field	The geometry field name	false	the_geom	the_geom

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **layer convexhull** --input-name countries --output-workspace layers --output-name convexhull
Done!

geo-shell> **style vector default** --layer convexhull --color #1E90FF --opacity 0.25 --file examples/convexhull.sld
Default Vector Style for convexhull written to /home/travis/build/jericks/geo-shell/examples/convexhull.sld!

geo-shell> **layer style set** --name convexhull --style examples/convexhull.sld
Style /home/travis/build/jericks/geo-shell/examples/convexhull.sld set on convexhull

geo-shell> **map open** --name map
Map map opened!

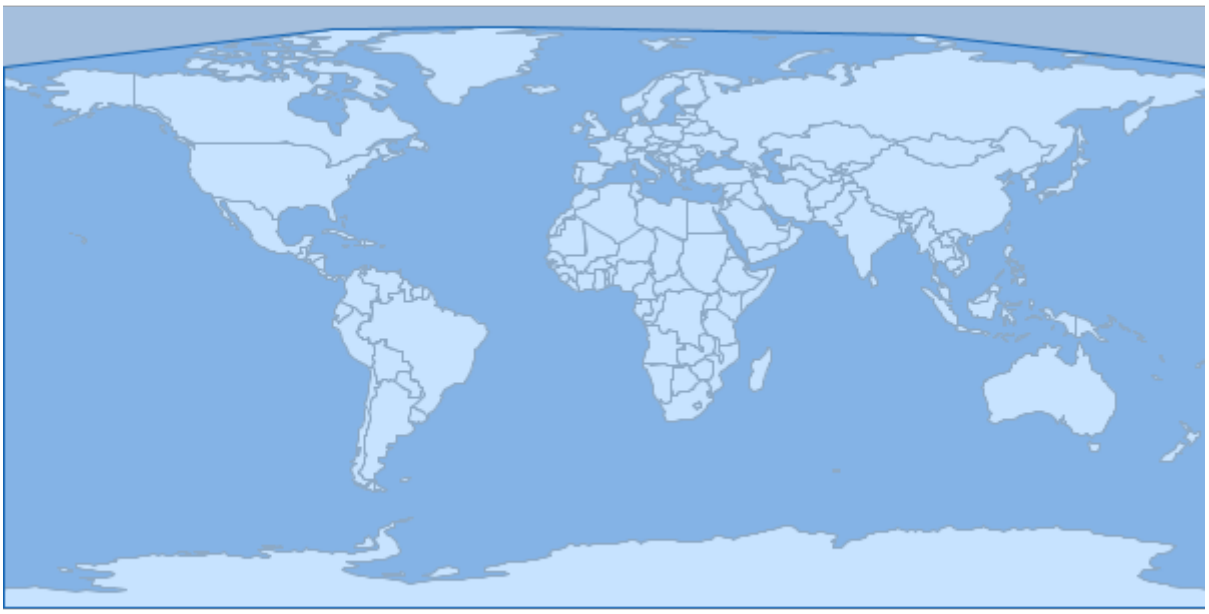
geo-shell> **map add layer** --name map --layer ocean
Added ocean layer to map map

geo-shell> **map add layer** --name map --layer countries
Added countries layer to map map

geo-shell> **map add layer** --name map --layer convexhull
Added convexhull layer to map map

geo-shell> **map draw** --name map --file examples/layer_convexhull.png
Done drawing /home/travis/build/jericks/geo-shell/examples/layer_convexhull.png!

geo-shell> **map close** --name map
Map map closed!



Convex Hulls

Calculate the convexhull of each Feature in the input Layer and save them to the output Layer.

geo-shell> **layer convexhulls** --input-name countries --output-workspace layers --output-name convexhulls

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

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **layer convexhulls** --input-name countries --output-workspace layers --output-name convexhulls
Done!

geo-shell> **style vector default** --layer convexhulls --color #1E90FF --opacity 0.25 --file examples/convexhulls.sld
Default Vector Style for convexhulls written to /home/travis/build/jericks/geo-shell/examples/convexhulls.sld!

geo-shell> **layer style set** --name convexhulls --style examples/convexhulls.sld
Style /home/travis/build/jericks/geo-shell/examples/convexhulls.sld set on convexhulls

geo-shell> **map open** --name map
Map map opened!

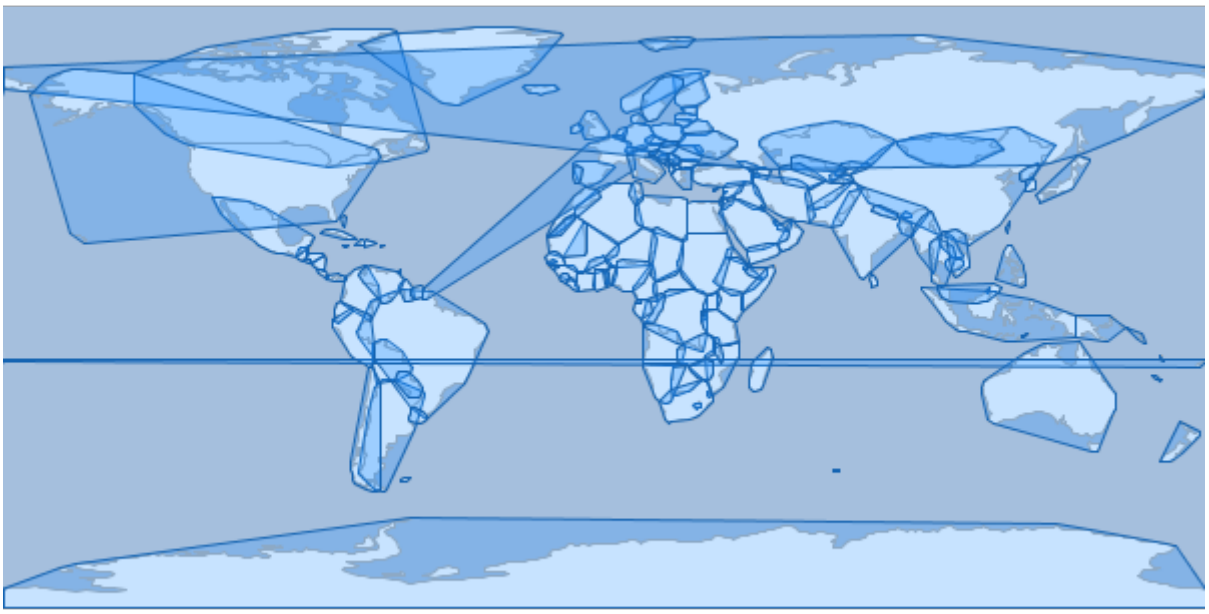
geo-shell> **map add layer** --name map --layer ocean
Added ocean layer to map map

geo-shell> **map add layer** --name map --layer countries
Added countries layer to map map

geo-shell> **map add layer** --name map --layer convexhulls
Added convexhulls layer to map map

geo-shell> **map draw** --name map --file examples/layer_convexhulls.png
Done drawing /home/travis/build/jericks/geo-shell/examples/layer_convexhulls.png!

geo-shell> **map close** --name map
Map map closed!



Coordinates

Extract the coordinates each Feature in the input Layer and save them to the output Layer.

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

Delaunay

Calculate a delaunay diagram of the input Layer and save it to the output Layer.

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
geometry-field	The geometry field name	false	the_geom	the_geom

Densify

Densify the features of the input Layer and save them to the output Layer

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
distance	The distance tolerance	true		

Dissolve

Dissolve the Features of a Layer by a Field.

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
field	The field to use to dissolve features	true		
idField	The name of the id field	false	id	id
countField	The name of the count field	false	count	count

Erase

Erase one Layer from another Layer

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

Grid Row / Column

Create a grid Layer with rows and columns

Name	Description	Mandatory	Specified Default	Unspecified Default
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
rows	The number of rows	true		
columns	The number of columns	true		
geometry	The constraining geometry	true		
type	The geometry type (point or polygon	false	polygon	polygon
projection	The projection	false	EPSG:4326	EPSG:4326
geometry-field	The geometry field name	false	the_geom	the_geom

Grid Width / Height

Create a grid Layer with cell width and height

Name	Description	Mandatory	Specified Default	Unspecified Default
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
cell-width	The width of each cell	true		
cell-height	The height of each cell	true		
geometry	The constraining geometry	true		
type	The geometry type (point or polygon	false	polygon	polygon
projection	The projection	false	EPSG:4326	EPSG:4326
geometry-field	The geometry field name	false	the_geom	the_geom

Identity

Calculate the intersection between a Layer with another Layer

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
other-name	The other Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
postfix-all	Whether to postfix all field names when combining schemas	false	false	false
include-duplicates	Whether to include duplicate field names	false	true	true

Intersection

Calculate the intersection between a Layer with another Layer

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
other-name	The other Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
postfix-all	Whether to postfix all field names when combining schemas	false	false	false
include-duplicates	Whether to include duplicate field names	false	true	true

Minimum Circle

Calculate the mininmum bounding circle of the input Layer and save it to the output Layer.

geo-shell> **layer mincircle** --input-name countries --output-workspace layers --output-name mincircle

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
geometry-field	The geometry field name	false	the_geom	the_geom

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **layer mincircle** --input-name countries --output-workspace layers --output-name mincircle
Done!

geo-shell> **style vector default** --layer mincircle --color #1E90FF --opacity 0.25 --file examples/mincircle.sld
Default Vector Style for mincircle written to /home/travis/build/jericks/geo-shell/examples/mincircle.sld!

geo-shell> **layer style set** --name mincircle --style examples/mincircle.sld
Style /home/travis/build/jericks/geo-shell/examples/mincircle.sld set on mincircle

geo-shell> **map open** --name map
Map map opened!

geo-shell> **map add layer** --name map --layer ocean
Added ocean layer to map map

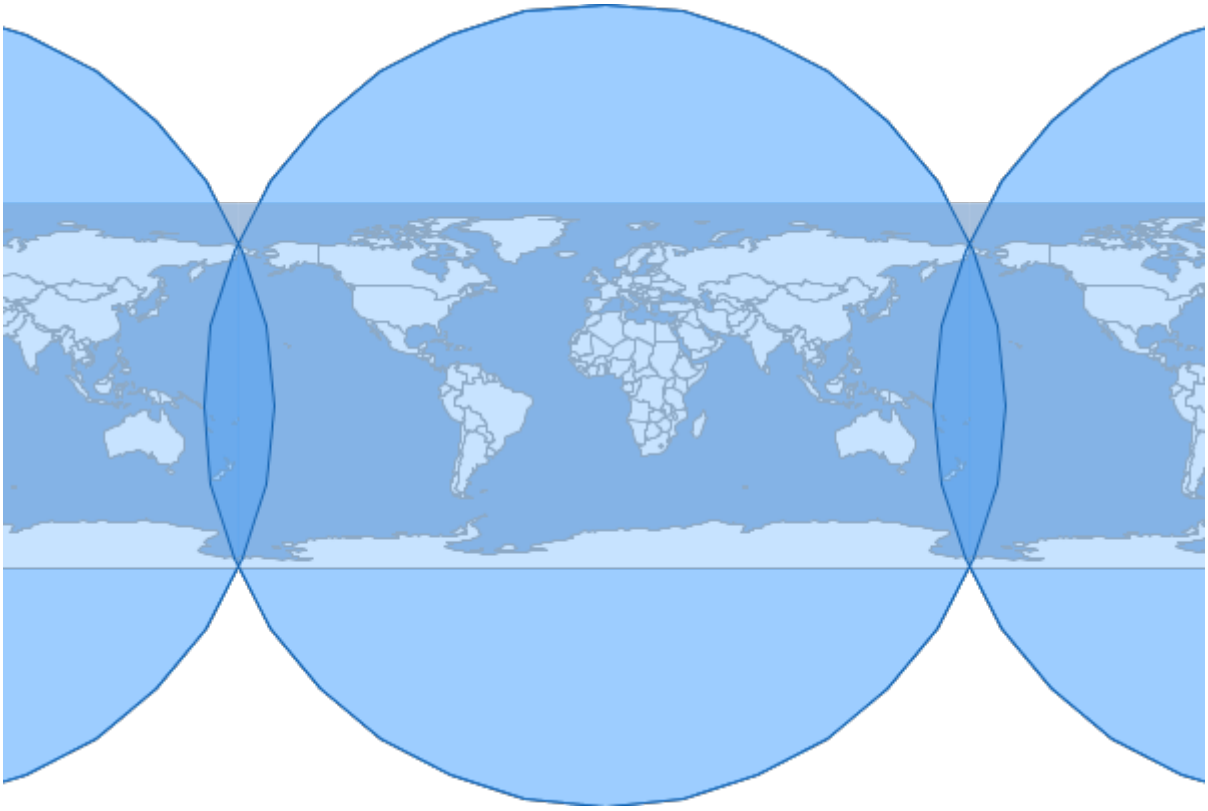
geo-shell> **map add layer** --name map --layer countries

Added countries layer to map map

geo-shell> **map add layer** --name map --layer mincircle
Added mincircle layer to map map

geo-shell> **map draw** --name map --file examples/layer_mincircle.png
Done drawing /home/travis/build/jericks/geo-shell/examples/layer_mincircle.png!

geo-shell> **map close** --name map
Map map closed!



Minimum Circles

Calculate the minimum bounding circle of each Feature in the input Layer and save them to the output Layer.

geo-shell> **layer mincircles** --input-name countries --output-workspace layers --output-name mincircles

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

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
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geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **layer mincircles** --input-name countries --output-workspace layers --output-name mincircles
Done!

geo-shell> **style vector default** --layer mincircles --color #1E90FF --opacity 0.25 --file examples/mincircles.sld
Default Vector Style for mincircles written to /home/travis/build/jericks/geo-shell/examples/mincircles.sld!

geo-shell> **layer style set** --name mincircles --style examples/mincircles.sld
Style /home/travis/build/jericks/geo-shell/examples/mincircles.sld set on mincircles

geo-shell> **map open** --name map
Map map opened!

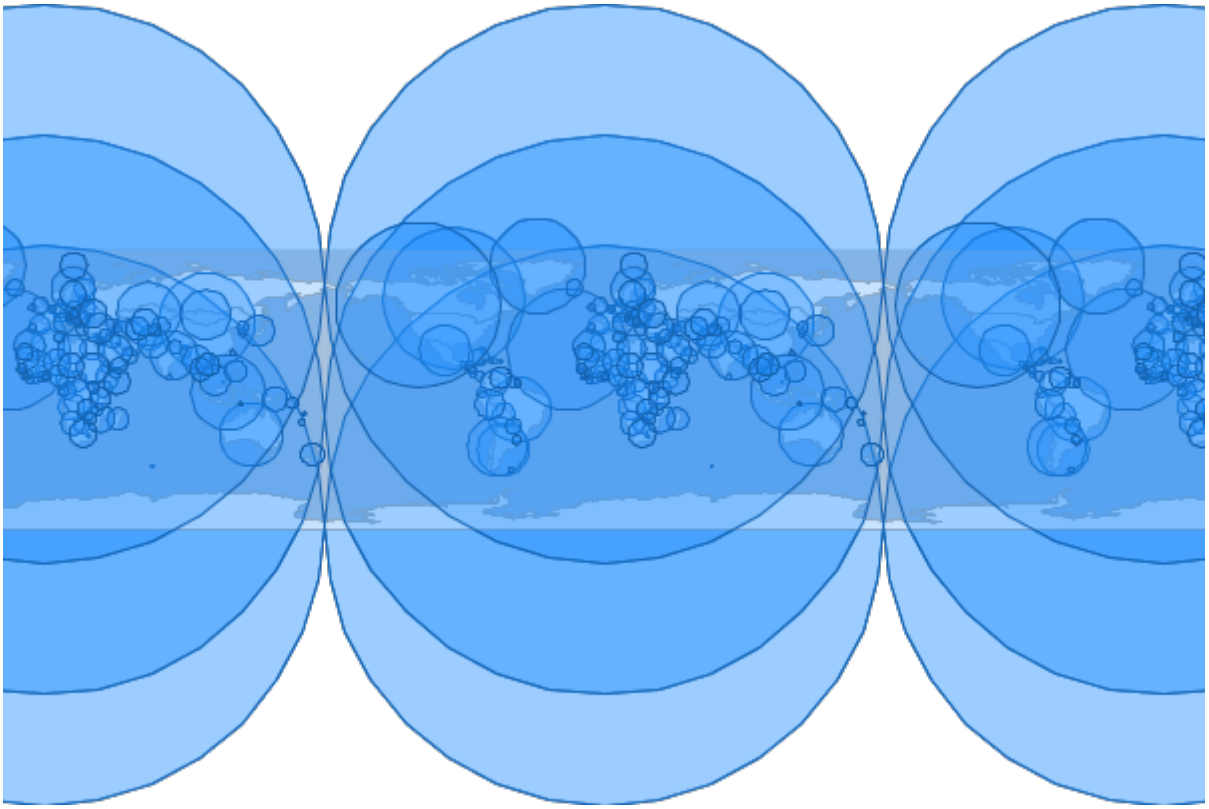
geo-shell> **map add layer** --name map --layer ocean
Added ocean layer to map map

geo-shell> **map add layer** --name map --layer countries
Added countries layer to map map

geo-shell> **map add layer** --name map --layer mincircles
Added mincircles layer to map map

geo-shell> **map draw** --name map --file examples/layer_mincircles.png
Done drawing /home/travis/build/jericks/geo-shell/examples/layer_mincircles.png!

geo-shell> **map close** --name map
Map map closed!



Minimum Rectangle

Calculate the mininmum rectangle of the input Layer and save it to the output Layer.

geo-shell> **layer minrect** --input-name countries --output-workspace layers --output-name minrect

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
geometry-field	The geometry field name	false	the_geom	the_geom

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **layer minrect** --input-name countries --output-workspace layers --output-name minrect
Done!

geo-shell> **style vector default** --layer minrect --color #1E90FF --opacity 0.25 --file examples/minrect.sld
Default Vector Style for minrect written to /home/travis/build/jericks/geo-shell/examples/minrect.sld!

geo-shell> **layer style set** --name minrect --style examples/minrect.sld
Style /home/travis/build/jericks/geo-shell/examples/minrect.sld set on minrect

geo-shell> **map open** --name map
Map map opened!

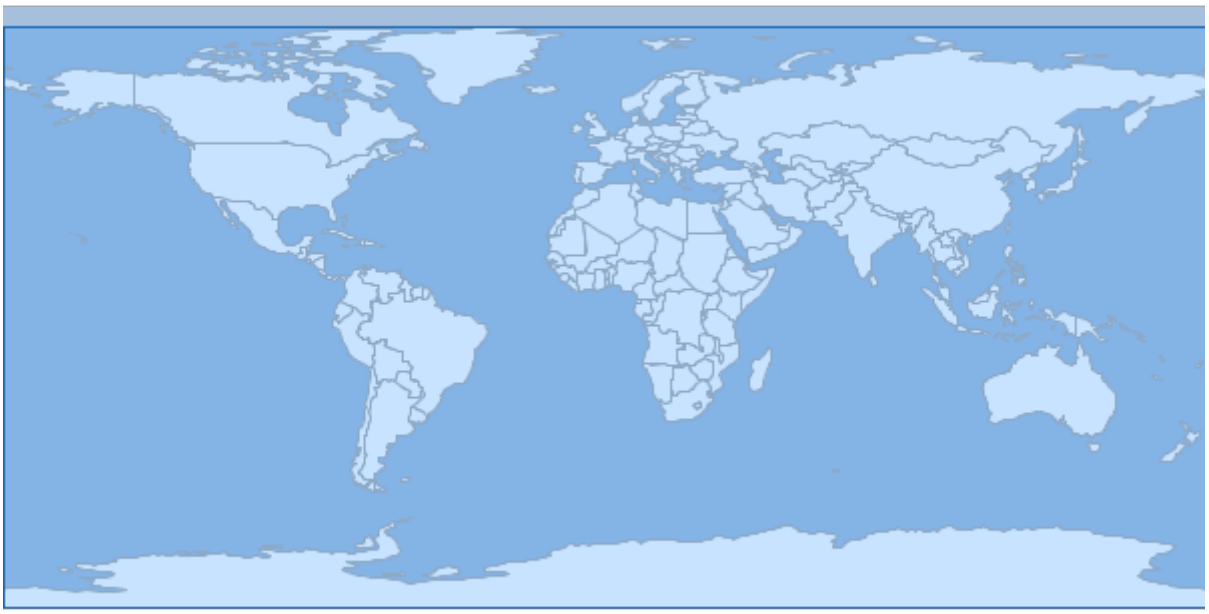
geo-shell> **map add layer** --name map --layer ocean
Added ocean layer to map map

geo-shell> **map add layer** --name map --layer countries
Added countries layer to map map

geo-shell> **map add layer** --name map --layer minrect
Added minrect layer to map map

geo-shell> **map draw** --name map --file examples/layer_minrect.png
Done drawing /home/travis/build/jericks/geo-shell/examples/layer_minrect.png!

geo-shell> **map close** --name map
Map map closed!



Minimum Rectangles

Calculate the minimum rectangle of each Feature in the input Layer and save them to the output Layer.

geo-shell> **layer minrects** --input-name countries --output-workspace layers --output-name minrects

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

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean

Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **layer minrects** --input-name countries --output-workspace layers --output-name minrects
Done!

geo-shell> **style vector default** --layer minrects --color #1E90FF --opacity 0.25 --file examples/minrects.sld
Default Vector Style for minrects written to /home/travis/build/jericks/geo-shell/examples/minrects.sld!

geo-shell> **layer style set** --name minrects --style examples/minrects.sld
Style /home/travis/build/jericks/geo-shell/examples/minrects.sld set on minrects

geo-shell> **map open** --name map
Map map opened!

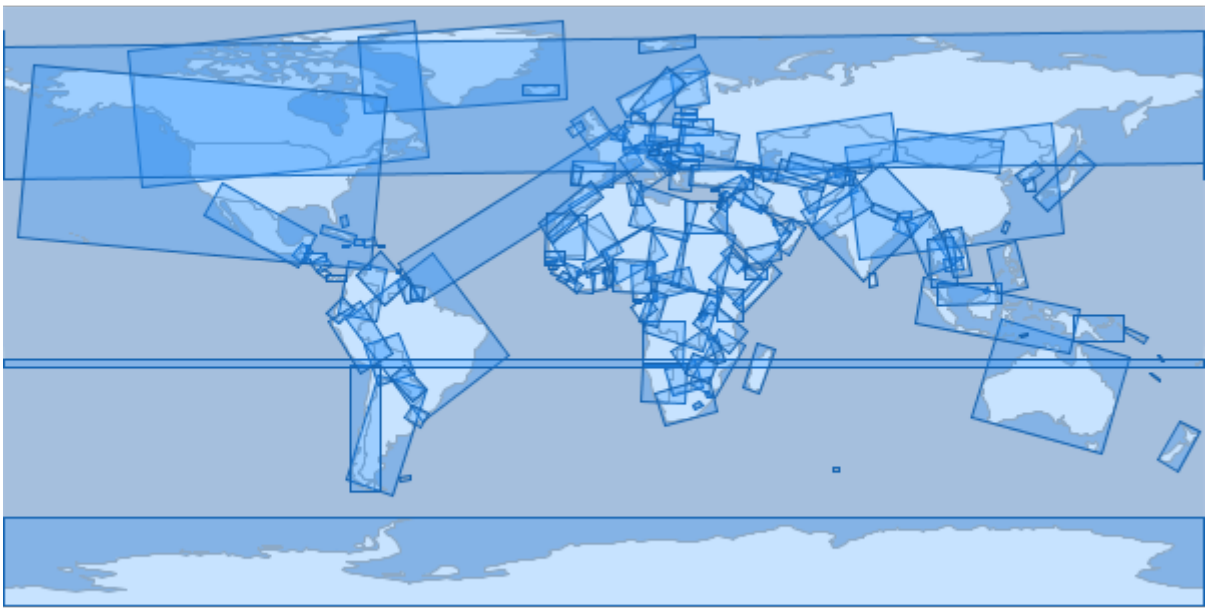
geo-shell> **map add layer** --name map --layer ocean
Added ocean layer to map map

geo-shell> **map add layer** --name map --layer countries
Added countries layer to map map

geo-shell> **map add layer** --name map --layer minrects
Added minrects layer to map map

geo-shell> **map draw** --name map --file examples/layer_minrects.png
Done drawing /home/travis/build/jericks/geo-shell/examples/layer_minrects.png!

geo-shell> **map close** --name map
Map map closed!



Octangle Envelope

Calculate the octagonal envelope of the input Layer and save it to the output Layer.

geo-shell> **layer octagonalenvelope** --input-name countries --output-workspace layers --output -name octagonalenvelope

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
geometry-field	The geometry field name	false	the_geom	the_geom

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **layer octagonalenvelope** --input-name countries --output-workspace layers --output-name octagonalenvelope
Done!

geo-shell> **style vector default** --layer octagonalenvelope --color #1E90FF --opacity 0.25 --file examples/octagonalenvelope.sld
Default Vector Style for octagonalenvelope written to /home/travis/build/jericks/geo-shell/examples/octagonalenvelope.sld!

geo-shell> **layer style set** --name octagonalenvelope --style examples/octagonalenvelope.sld
Style /home/travis/build/jericks/geo-shell/examples/octagonalenvelope.sld set on octagonalenvelope

geo-shell> **map open** --name map
Map map opened!

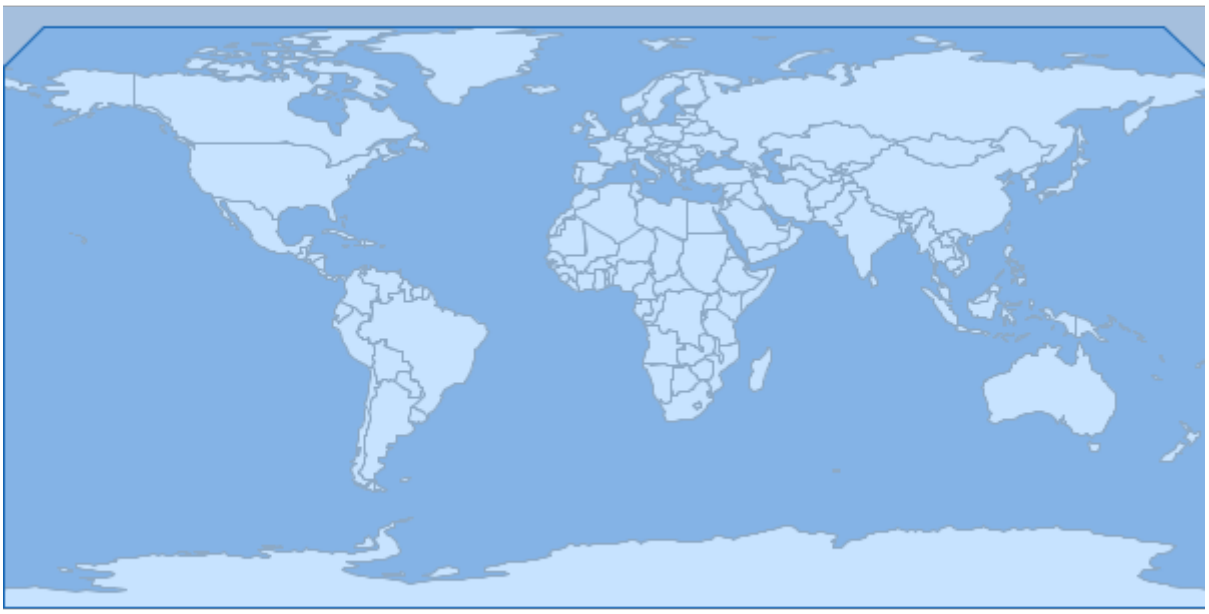
geo-shell> **map add layer** --name map --layer ocean
Added ocean layer to map map

geo-shell> **map add layer** --name map --layer countries
Added countries layer to map map

geo-shell> **map add layer** --name map --layer octagonalenvelope
Added octagonalenvelope layer to map map

geo-shell> **map draw** --name map --file examples/layer_octagonalenvelope.png
Done drawing /home/travis/build/jericks/geo-shell/examples/layer_octagonalenvelope.png!

geo-shell> **map close** --name map
Map map closed!



Octangle Envelopes

Calculate the octagonal envelope of each Feature in the input Layer and save them to the output Layer.

geo-shell> **layer octagonalenvelopes** --input-name countries --output-workspace layers --output -name octagonalenvelopes

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

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean

Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **layer octagonalenvelopes** --input-name countries --output-workspace layers --output -name octagonalenvelopes
Done!

geo-shell> **style vector default** --layer octagonalenvelopes --color #1E90FF --opacity 0.25 --file examples/octagonalenvelopes.sld
Default Vector Style for octagonalenvelopes written to /home/travis/build/jericks/geo-shell/examples/octagonalenvelopes.sld!

geo-shell> **layer style set** --name octagonalenvelopes --style examples/octagonalenvelopes.sld
Style /home/travis/build/jericks/geo-shell/examples/octagonalenvelopes.sld set on octagonalenvelopes

geo-shell> **map open** --name map
Map map opened!

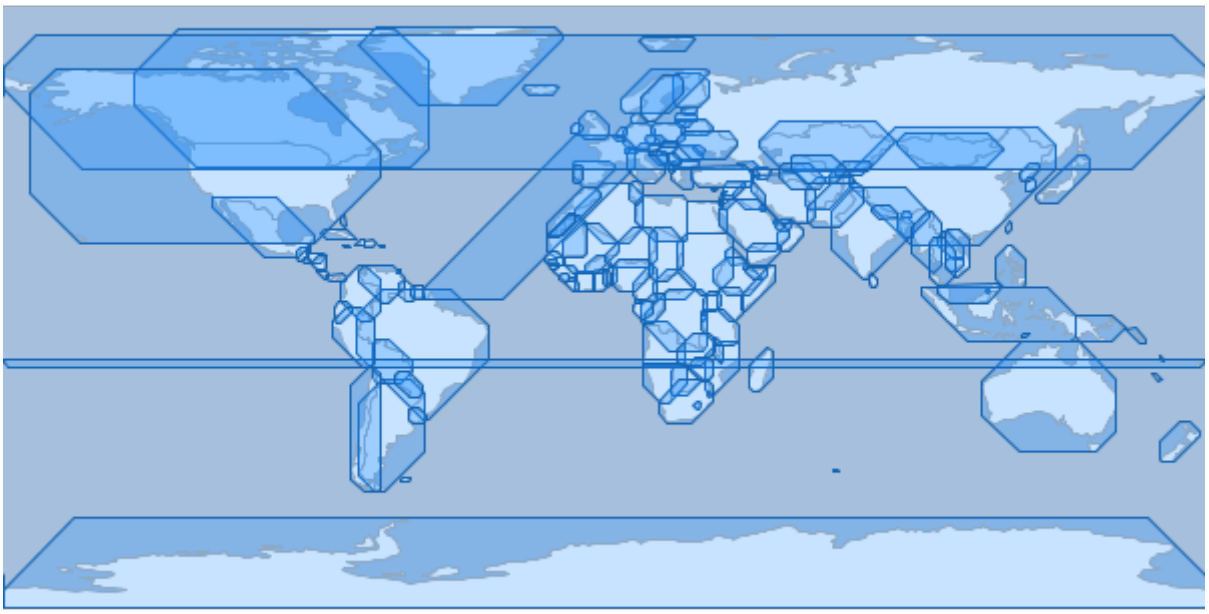
geo-shell> **map add layer** --name map --layer ocean
Added ocean layer to map map

geo-shell> **map add layer** --name map --layer countries
Added countries layer to map map

geo-shell> **map add layer** --name map --layer octagonalenvelopes
Added octagonalenvelopes layer to map map

geo-shell> **map draw** --name map --file examples/layer_octagonalenvelopes.png
Done drawing /home/travis/build/jericks/geo-shell/examples/layer_octagonalenvelopes.png!

geo-shell> **map close** --name map
Map map closed!



Points Along Lines

Create points along lines

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
distance	The distance between points	true		

Simplify

Simplify the features of the input Layer and save them to the output Layer

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

algorithm	The simplify algorithm (DouglasPeucker - dp or TopologyPreserving - tp)	false	tp	tp
distance	The distance tolerance	true		

Symmetric Difference

Calculate the symmetric difference between a Layer and another Layer.

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
other-name	The other Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
postfix-all	Whether to postfix all field names when combining schemas	false	false	false
include-duplicates	Whether to include duplicate field names	false	true	true

Transform

Transform the features of the input Layer and save them to the output Layer

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
transforms	The pipe delimited list of transforms (field=expression or function)	true		

Union

Union a Layer with another Layer

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
other-name	The other Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
postfix-all	Whether to postfix all field names when combining schemas	false	false	false
include-duplicates	Whether to include duplicate field names	false	true	true

Voronoi

Calculate a voronoi diagram of the input Layer and save it to the output Layer.

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
geometry-field	The geometry field name	false	the_geom	the_geom

Random Points

Create a Layer with a number of randomly located points

geo-shell> **layer random** --output-workspace layers --output-name points --geometry -180,-90,180,90 --number 100 --projection EPSG:4326

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

output-name	The output Layer name	true		
number	The number of points	true		
geometry	The geometry or bounds in which to create the points	true		
projection	The projection	true		
id-field	The id field name	false	id	id
geometry-field	The geometry field name	false	the_geom	the_geom
grid	Whether to create points in a grid	false	false	false
constrained-to-circle	Whether points should be constrained to a circle	false	false	false
gutter-fraction	The size of gutter between cells	false	0	0

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **layer random** --output-workspace layers --output-name points --geometry -180,-90,180,90 --number 100 --projection EPSG:4326
Done!

geo-shell> **style vector default** --layer points --color #1E90FF --file examples/points.sld
Default Vector Style for points written to /home/travis/build/jericks/geo-shell/examples/points.sld!

geo-shell> **layer style set** --name points --style examples/points.sld
Style /home/travis/build/jericks/geo-shell/examples/points.sld set on points

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **map open** --name randomMap
Map randomMap opened!

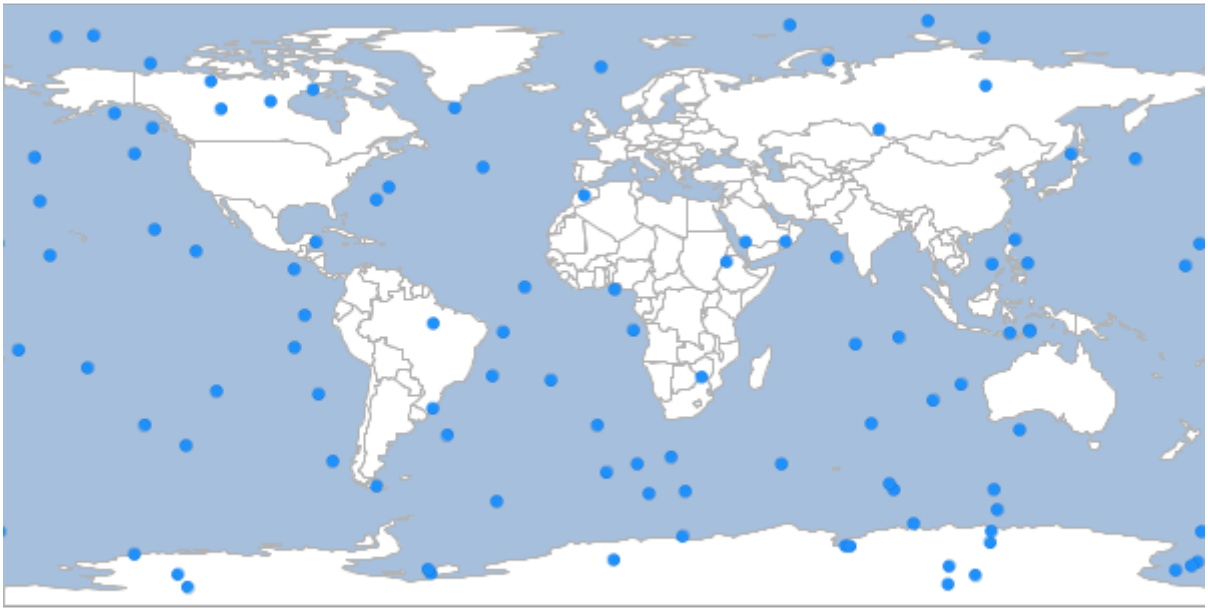
geo-shell> **map add layer** --name randomMap --layer ocean
Added ocean layer to map randomMap

geo-shell> **map add layer** --name randomMap --layer countries
Added countries layer to map randomMap

geo-shell> **map add layer** --name randomMap --layer points
Added points layer to map randomMap

geo-shell> **map draw** --name randomMap --file examples/random_points.png
Done drawing /home/travis/build/jericks/geo-shell/examples/random_points.png!

geo-shell> **map close** --name randomMap
Map randomMap closed!



Buffer

Buffer the input Layer to the output Layer.

geo-shell> **layer buffer** --input-name points --output-workspace layers --output-name buffers --distance 10

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		

output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
distance	The buffer distance	true		

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **layer random** --output-workspace layers --output-name points --geometry -180,-90,180,90 --number 100 --projection EPSG:4326
Done!

geo-shell> **layer buffer** --input-name points --output-workspace layers --output-name buffers --distance 10
Done!

geo-shell> **style vector default** --layer points --color #1E90FF --file examples/points.sld
Default Vector Style for points written to /home/travis/build/jericks/geo-shell/examples/points.sld!

geo-shell> **style vector default** --layer buffers --color #1E90FF --opacity 0.25 --file examples/buffers.sld
Default Vector Style for buffers written to /home/travis/build/jericks/geo-shell/examples/buffers.sld!

geo-shell> **layer style set** --name points --style examples/points.sld
Style /home/travis/build/jericks/geo-shell/examples/points.sld set on points

geo-shell> **layer style set** --name buffers --style examples/buffers.sld
Style /home/travis/build/jericks/geo-shell/examples/buffers.sld set on buffers

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **map open** --name map
Map map opened!

geo-shell> **map add layer** --name map --layer ocean

Added ocean layer to map map

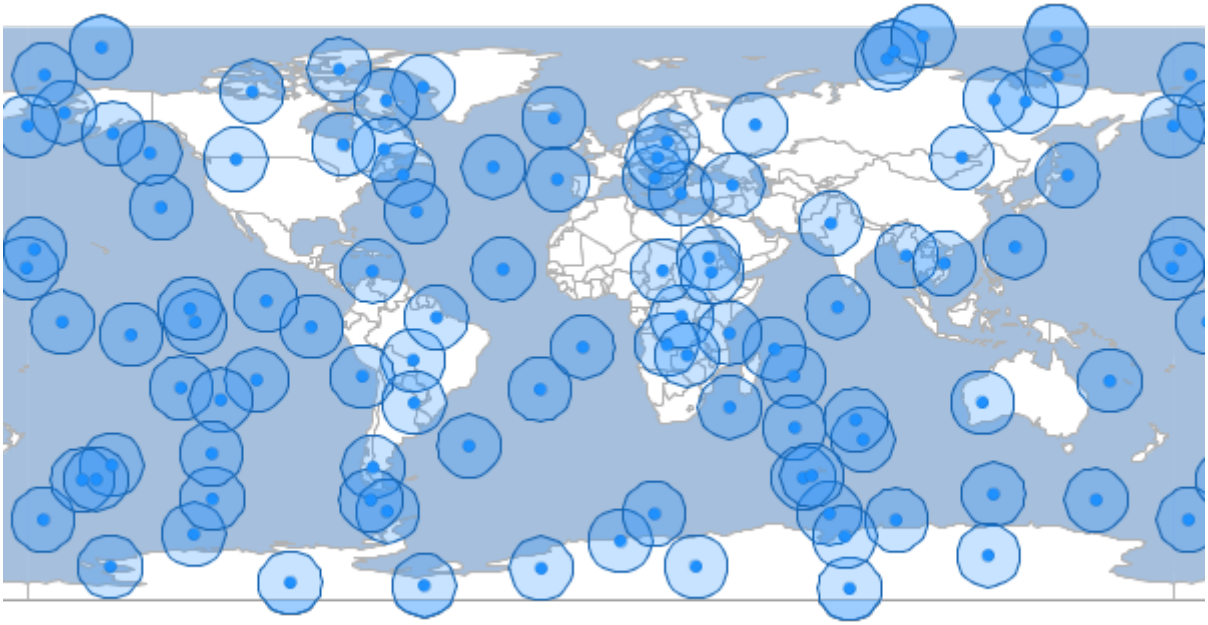
geo-shell> **map add layer** --name map --layer countries
Added countries layer to map map

geo-shell> **map add layer** --name map --layer buffers
Added buffers layer to map map

geo-shell> **map add layer** --name map --layer points
Added points layer to map map

geo-shell> **map draw** --name map --file examples/layer_buffer.png
Done drawing /home/travis/build/jericks/geo-shell/examples/layer_buffer.png!

geo-shell> **map close** --name map
Map map closed!



Centroid

Calculate the centroids of the input Layer to the output Layer.

geo-shell> **layer centroid** --input-name countries --output-name centroids --output-workspace layers

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

output-name	The output Layer name	true		

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer centroid** --input-name countries --output-name centroids --output-workspace layers
Done!

geo-shell> **style vector default** --layer centroids --color #1E90FF --file examples/centroids.sld
Default Vector Style for centroids written to /home/travis/build/jericks/geo-shell/examples/centroids.sld!

geo-shell> **layer style set** --name centroids --style examples/centroids.sld
Style /home/travis/build/jericks/geo-shell/examples/centroids.sld set on centroids

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **map open** --name map
Map map opened!

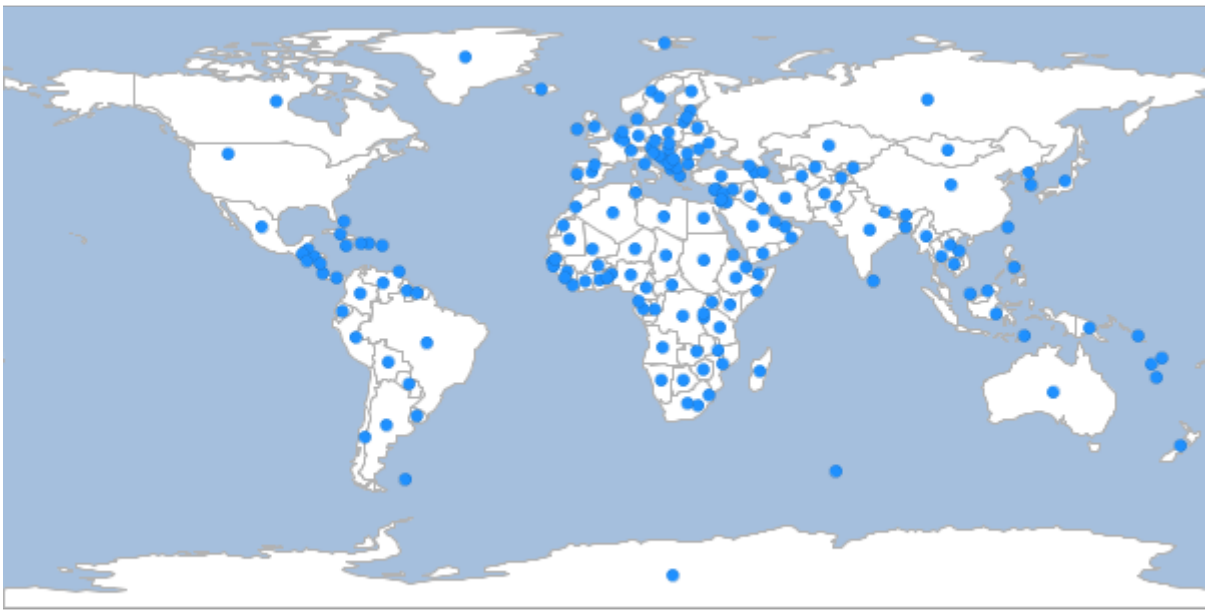
geo-shell> **map add layer** --name map --layer ocean
Added ocean layer to map map

geo-shell> **map add layer** --name map --layer countries
Added countries layer to map map

geo-shell> **map add layer** --name map --layer centroids
Added centroids layer to map map

geo-shell> **map draw** --name map --file examples/layer_centroid.png
Done drawing /home/travis/build/jericks/geo-shell/examples/layer_centroid.png!

geo-shell> **map close** --name map
Map map closed!



Interior Point

Calculate the interior points of the input Layer to the output Layer.

geo-shell> **layer interiorpoint** --input-name countries --output-name interiorpoints --output -workspace layers

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

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer interiorpoint** --input-name countries --output-name interiorpoints --output -workspace layers

Done!

geo-shell> **style vector default** --layer interiorpoints --color #1E90FF --file examples/interiorpoints.sld
Default Vector Style for interiorpoints written to /home/travis/build/jericks/geo-shell/examples/interiorpoints.sld!

geo-shell> **layer style set** --name interiorpoints --style examples/interiorpoints.sld
Style /home/travis/build/jericks/geo-shell/examples/interiorpoints.sld set on interiorpoints

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **map open** --name map
Map map opened!

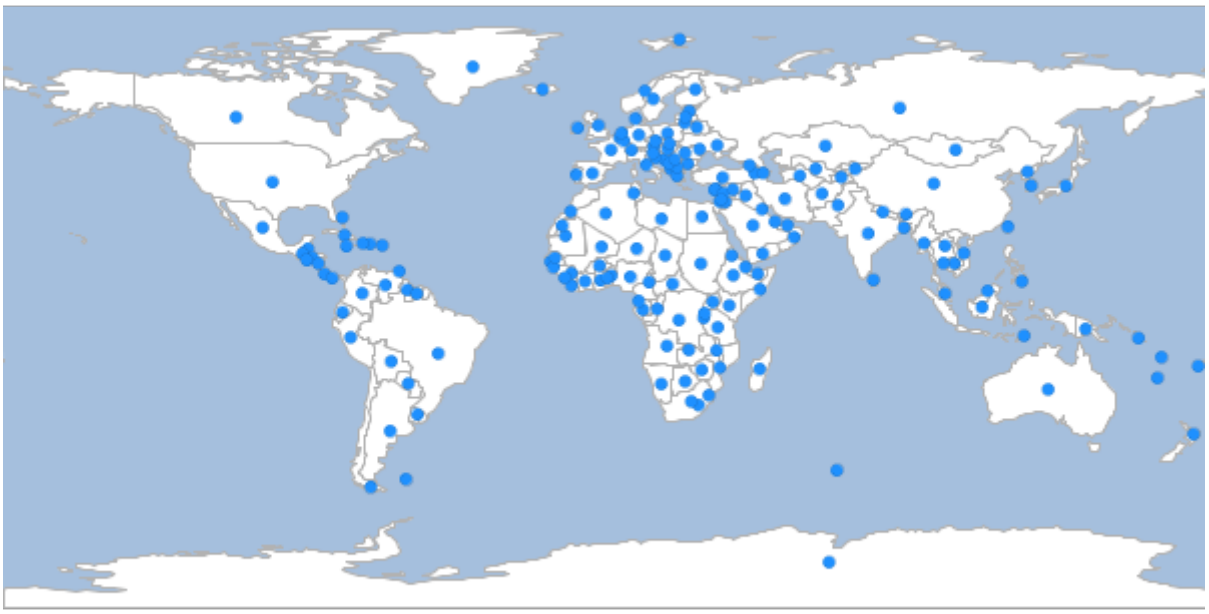
geo-shell> **map add layer** --name map --layer ocean
Added ocean layer to map map

geo-shell> **map add layer** --name map --layer countries
Added countries layer to map map

geo-shell> **map add layer** --name map --layer interiorpoints
Added interiorpoints layer to map map

geo-shell> **map draw** --name map --file examples/layer_interiorpoint.png
Done drawing /home/travis/build/jericks/geo-shell/examples/layer_interiorpoint.png!

geo-shell> **map close** --name map
Map map closed!



Extent

Calculate the extent of the input Layer and save it to the output Layer.

geo-shell> **layer extent** --input-name states --output-workspace layers --output-name usa

Name	Description	Mandatory	Specified Default	Unspecified Default
input-name	The Layer name	true		
output-workspace	The output Layer Workspace	true		
output-name	The output Layer name	true		
geometry-field	The geometry field name	false	the_geom	the_geom

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer style set** --name states --style examples/states.sld
Unable to find Layer states

geo-shell> **layer open** --workspace naturalearth --layer states --name states
Opened Workspace naturalearth Layer states as states

geo-shell> **layer extent** --input-name states --output-workspace layers --output-name usa
Done!

geo-shell> **style vector default** --layer usa --color #1E90FF --opacity 0.25 --file examples/extent.sld
Default Vector Style for usa written to /home/travis/build/jericks/geo-shell/examples/extent.sld!

geo-shell> **layer style set** --name usa --style examples/extent.sld
Style /home/travis/build/jericks/geo-shell/examples/extent.sld set on usa

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **map open** --name map
Map map opened!

geo-shell> **map add layer** --name map --layer ocean
Added ocean layer to map map

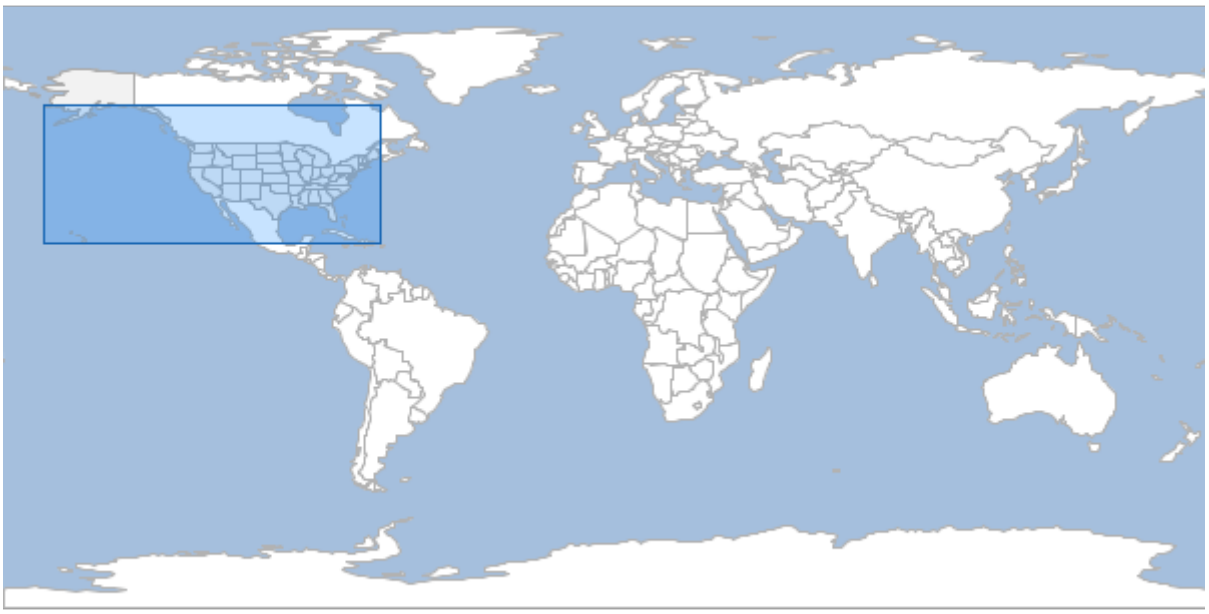
geo-shell> **map add layer** --name map --layer countries
Added countries layer to map map

geo-shell> **map add layer** --name map --layer states
Added states layer to map map

geo-shell> **map add layer** --name map --layer usa
Added usa layer to map map

geo-shell> **map draw** --name map --file examples/layer_extent.png
Done drawing /home/travis/build/jericks/geo-shell/examples/layer_extent.png!

geo-shell> **map close** --name map
Map map closed!



Extents

Calculate the extents of each Feature in the input Layer and save them to the output Layer.

geo-shell> **layer extents** --input-name states --output-workspace layers --output-name state_extents

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

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer style set** --name states --style examples/states.sld
Unable to find Layer states

geo-shell> **layer open** --workspace naturalearth --layer states --name states
Opened Workspace naturalearth Layer states as states

geo-shell> **layer extents** --input-name states --output-workspace layers --output-name state_extents
Done!

geo-shell> **style vector default** --layer state_extents --color #1E90FF --opacity 0.25 --file examples/extent.sld
Default Vector Style for state_extents written to /home/travis/build/jericks/geo-shell/examples/extent.sld!

geo-shell> **layer style set** --name state_extents --style examples/extent.sld
Style /home/travis/build/jericks/geo-shell/examples/extent.sld set on state_extents

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **map open** --name map
Map map opened!

geo-shell> **map add layer** --name map --layer ocean
Added ocean layer to map map

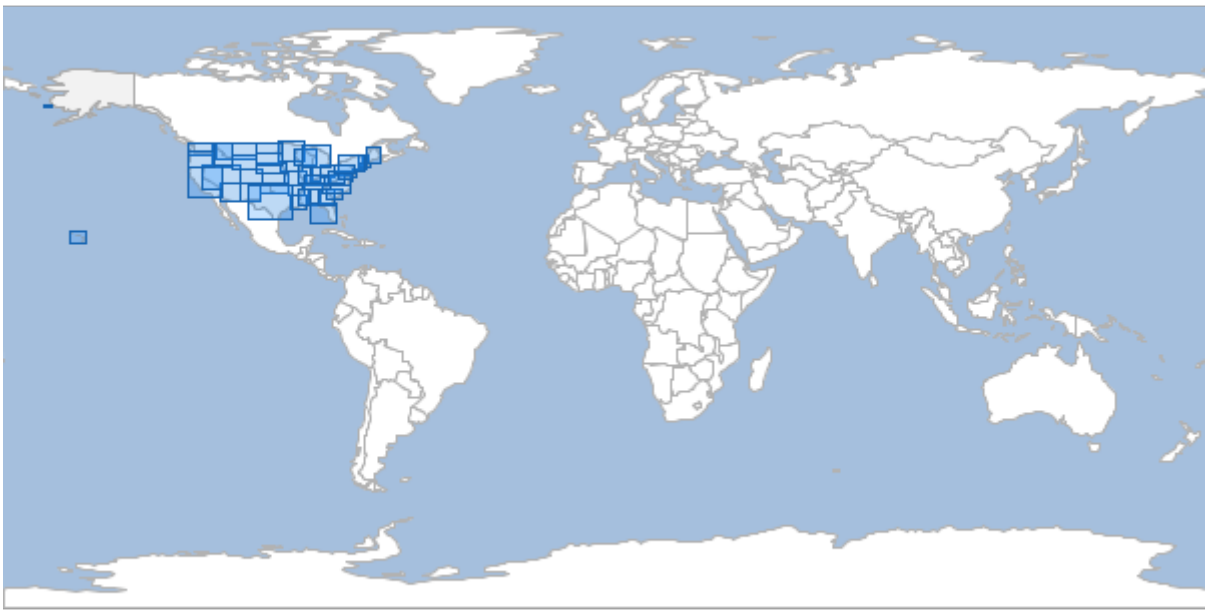
geo-shell> **map add layer** --name map --layer countries
Added countries layer to map map

geo-shell> **map add layer** --name map --layer states
Added states layer to map map

geo-shell> **map add layer** --name map --layer state_extents
Added state_extents layer to map map

geo-shell> **map draw** --name map --file examples/layer_extents.png
Done drawing /home/travis/build/jericks/geo-shell/examples/layer_extents.png!

geo-shell> **map close** --name map
Map map closed!



Graticule

Square

Create a square graticule.

geo-shell> **layer graticule square** --workspace layers --name squares --bounds -180,-90,180,90 --length 20

Name	Description	Mandatory	Specified Default	Unspecified Default
workspace	The Workspace name	true		
name	The new Layer name	true		
bounds	The bounds	true		
length	The length	true		
spacing	The spacing	false	-1	-1

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **layer graticule square** --workspace layers --name squares --bounds -180,-90,180,90 --length 20
Created Square Graticule Layer squares!

geo-shell> **style vector default** --layer squares --color #1E90FF --opacity 0.30 --file

examples/squares.sld
Default Vector Style for squares written to /home/travis/build/jericks/geo-shell/examples/squares.sld!

geo-shell> **layer style set** --name squares --style examples/squares.sld
Style /home/travis/build/jericks/geo-shell/examples/squares.sld set on squares

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **map open** --name graticule
Map graticule opened!

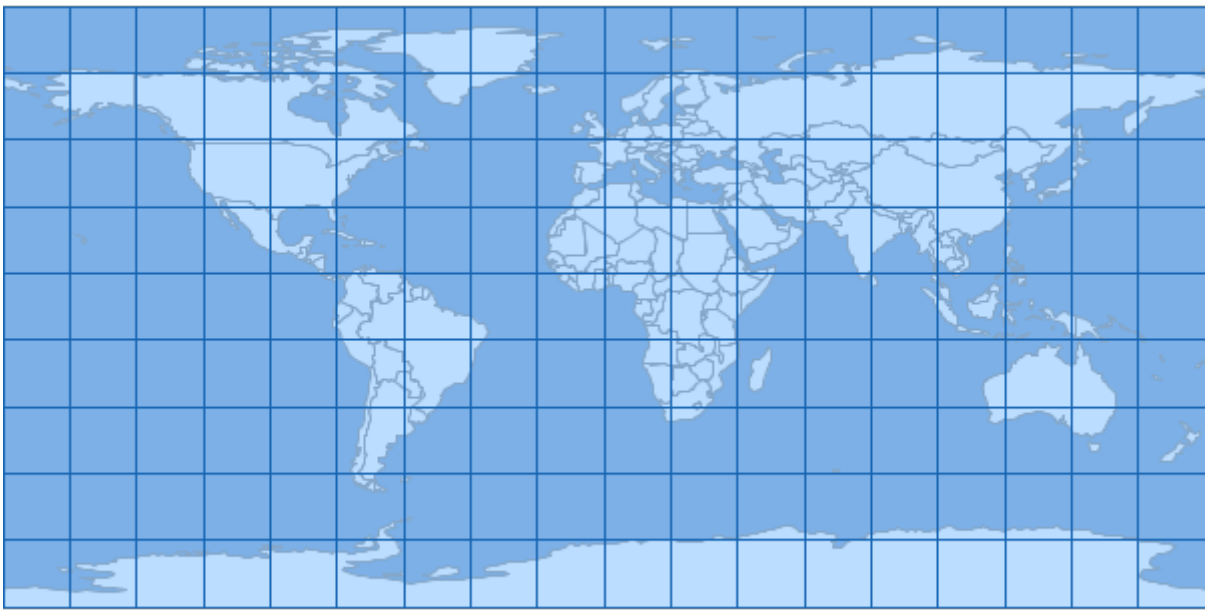
geo-shell> **map add layer** --name graticule --layer ocean
Added ocean layer to map graticule

geo-shell> **map add layer** --name graticule --layer countries
Added countries layer to map graticule

geo-shell> **map add layer** --name graticule --layer squares
Added squares layer to map graticule

geo-shell> **map draw** --name graticule --file examples/square_graticules.png
Done drawing /home/travis/build/jericks/geo-shell/examples/square_graticules.png!

geo-shell> **map close** --name graticule
Map graticule closed!



Rectangle

Create a rectangle graticule.

geo-shell> **layer graticule rectangle** --workspace layers --name rectangles --bounds -180,-90,180,90 --width 20 --height 10

Name	Description	Mandatory	Specified Default	Unspecified Default
workspace	The Workspace name	true		
name	The new Layer name	true		
bounds	The bounds	true		
width	The width	true		
height	The height	true		
spacing	The spacing	false	-1	-1

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **layer graticule rectangle** --workspace layers --name rectangles --bounds -180,-90,180,90 --width 20 --height 10
Created Rectangle Graticule Layer rectangles!

geo-shell> **style vector default** --layer rectangles --color #1E90FF --opacity 0.30 --file examples/rectangles.sld

Default Vector Style for rectangles written to /home/travis/build/jericks/geo-shell/examples/rectangles.sld!

geo-shell> **layer style set** --name rectangles --style examples/rectangles.sld
Style /home/travis/build/jericks/geo-shell/examples/rectangles.sld set on rectangles

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **map open** --name graticule
Map graticule opened!

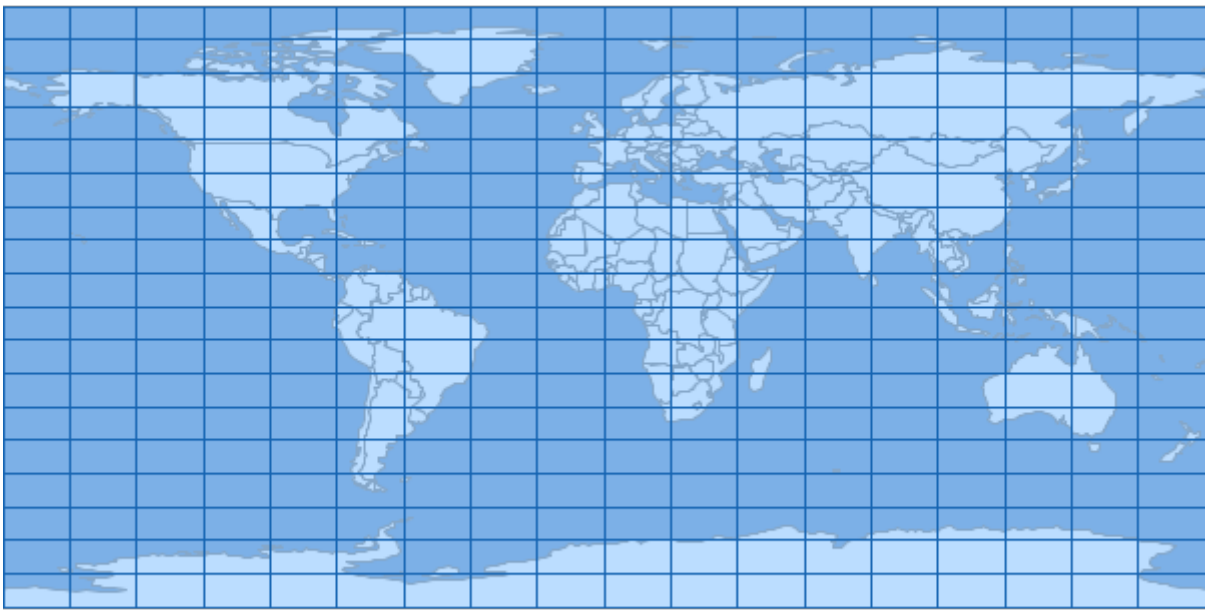
geo-shell> **map add layer** --name graticule --layer ocean
Added ocean layer to map graticule

geo-shell> **map add layer** --name graticule --layer countries
Added countries layer to map graticule

geo-shell> **map add layer** --name graticule --layer rectangles
Added rectangles layer to map graticule

geo-shell> **map draw** --name graticule --file examples/rectangle_graticules.png
Done drawing /home/travis/build/jericks/geo-shell/examples/rectangle_graticules.png!

geo-shell> **map close** --name graticule
Map graticule closed!



Oval

Create a oval graticule.

geo-shell> **layer graticule oval** --workspace layers --name ovals --bounds -180,-90,180,90 --size 20

Name	Description	Mandatory	Specified Default	Unspecified Default
workspace	The Workspace name	true		
name	The new Layer name	true		
bounds	The bounds	true		
size	The size	true		

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **layer graticule oval** --workspace layers --name ovals --bounds -180,-90,180,90 --size 20
Created Oval Graticule Layer ovals!

geo-shell> **style vector default** --layer ovals --color #1E90FF --opacity 0.30 --file examples/ovals.sld
Default Vector Style for ovals written to /home/travis/build/jericks/geo-shell/examples/ovals.sld!

geo-shell> **layer style set** --name ovals --style examples/ovals.sld
Style /home/travis/build/jericks/geo-shell/examples/ovals.sld set on ovals

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg

Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **map open** --name graticule
Map graticule opened!

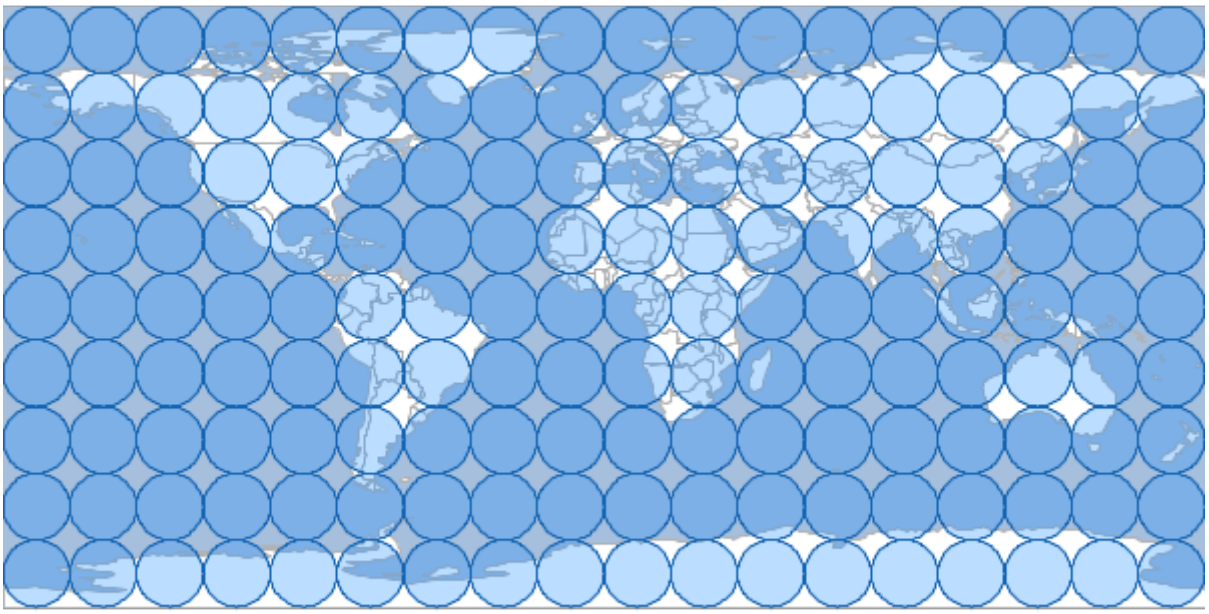
geo-shell> **map add layer** --name graticule --layer ocean
Added ocean layer to map graticule

geo-shell> **map add layer** --name graticule --layer countries
Added countries layer to map graticule

geo-shell> **map add layer** --name graticule --layer ovals
Added ovals layer to map graticule

geo-shell> **map draw** --name graticule --file examples/oval_graticules.png
Done drawing /home/travis/build/jericks/geo-shell/examples/oval_graticules.png!

geo-shell> **map close** --name graticule
Map graticule closed!



Hexagon

Create a hexagon graticule.

geo-shell> **layer graticule hexagon** --workspace layers --name hexagons --bounds -180,-90,180,90 --length 10

Name	Description	Mandatory	Specified Default	Unspecified Default
workspace	The Workspace name	true		
name	The new Layer name	true		
bounds	The bounds	true		
length	The length	true		
spacing	The spacing	false	5	5
orientation	The orientation (flat or angled)	false	flat	flat

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **layer graticule hexagon** --workspace layers --name hexagons --bounds -180,-90,180,90 --length 10
Created Hexagon Graticule Layer hexagons!

geo-shell> **style vector default** --layer hexagons --color #1E90FF --opacity 0.30 --file

examples/hexagons.sld
Default Vector Style for hexagons written to /home/travis/build/jericks/geo-shell/examples/hexagons.sld!

geo-shell> **layer style set** --name hexagons --style examples/hexagons.sld
Style /home/travis/build/jericks/geo-shell/examples/hexagons.sld set on hexagons

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **map open** --name graticule
Map graticule opened!

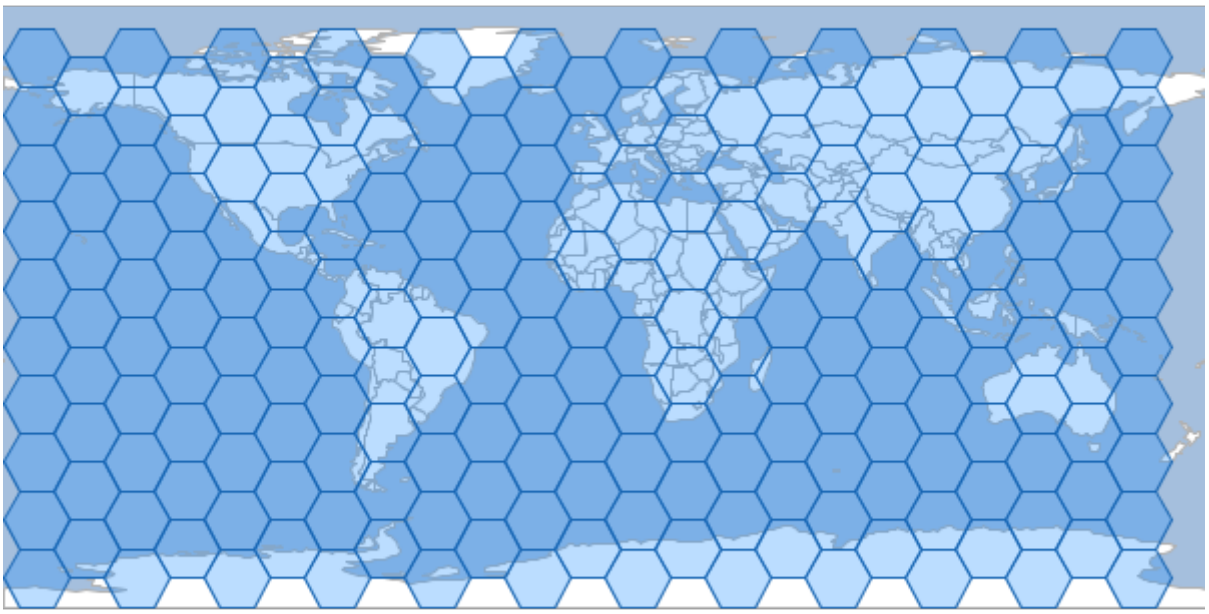
geo-shell> **map add layer** --name graticule --layer ocean
Added ocean layer to map graticule

geo-shell> **map add layer** --name graticule --layer countries
Added countries layer to map graticule

geo-shell> **map add layer** --name graticule --layer hexagons
Added hexagons layer to map graticule

geo-shell> **map draw** --name graticule --file examples/hexagon_graticules.png
Done drawing /home/travis/build/jericks/geo-shell/examples/hexagon_graticules.png!

geo-shell> **map close** --name graticule
Map graticule closed!



Format

Open

Open a Raster Format.

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

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The Format name	false		
input	The input string	true		

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

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

List

List open Raster Formats.

geo-shell> **format list**

No parameters

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

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

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

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

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

Close

Close a Raster Format.

geo-shell> **format close** --name earth

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

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

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

Rasters

List the Rasters in a Format.

geo-shell> **format rasters** --name earth

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

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

geo-shell> **format rasters** --name earth
earth

geo-shell> **format close** --name earth

Format earth closed!

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: -179.99999999999997, -89.99999999998205, 179.99999999996405, 90.0
Pixel Size: 0.44999999999995505, 0.4499999999999551
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		

Tile

Open

Open a Tile Layer.

geo-shell> **tile open** --name countries --params src/test/resources/countries.mbtiles

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The tile name	true		
params	The connection parameters	true		

geo-shell> **tile open** --name countries --params src/test/resources/countries.mbtiles
Tile Layer countries opened!

geo-shell> **tile close** --name countries
Tile Layer countries closed!

Close

Close a Tile Layer.

geo-shell> **tile close** --name countries

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

geo-shell> **tile open** --name countries --params src/test/resources/countries.mbtiles
Tile Layer countries opened!

geo-shell> **tile close** --name countries
Tile Layer countries closed!

List

List open Tile Layers.

geo-shell> **tile list**

No parameters

geo-shell> **tile open** --name countries --params src/test/resources/countries.mbtiles
Tile Layer countries opened!

geo-shell> **tile list**
countries = MBTiles

geo-shell> **tile close** --name countries
Tile Layer countries closed!

Info

Get information about a Tile Layer.

geo-shell> **tile info** --name countries

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

geo-shell> **tile open** --name countries --params src/test/resources/countries.mbtiles
Tile Layer countries opened!

geo-shell> **tile info** --name countries
countries

EPSG:3857
-2.0036395147881314E7,
-2.0037471205137067E7,2.0036395147881314E7,2.003747120513706E7,EPSG:3857
BOTTOM_LEFT
256,256
0,1,1,156412.0,156412.0
1,2,2,78206.0,78206.0
2,4,4,39103.0,39103.0
3,8,8,19551.5,19551.5
4,16,16,9775.75,9775.75
5,32,32,4887.875,4887.875
6,64,64,2443.9375,2443.9375
7,128,128,1221.96875,1221.96875
8,256,256,610.984375,610.984375
9,512,512,305.4921875,305.4921875
10,1024,1024,152.74609375,152.74609375
11,2048,2048,76.373046875,76.373046875
12,4096,4096,38.1865234375,38.1865234375
13,8192,8192,19.09326171875,19.09326171875
14,16384,16384,9.546630859375,9.546630859375
15,32768,32768,4.7733154296875,4.7733154296875
16,65536,65536,2.38665771484375,2.38665771484375
17,131072,131072,1.193328857421875,1.193328857421875
18,262144,262144,0.5966644287109375,0.5966644287109375
19,524288,524288,0.29833221435546875,0.29833221435546875

geo-shell> **tile close** --name countries
Tile Layer countries closed!

Delete

Delete tiles from a Tile Layer.

geo-shell> **tile delete** --name tiles --z 3

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The tile name	true		
tile	The tile z/x/y	false		
bounds	The bounds	false		
width	The width	false	400	400
height	The height	false	400	400
z	The zoom level	false	0	-1
minx	The min x or column	false		-1
miny	The min y or row	false		-1

maxx	The max x or column	false		-1
maxy	The max y or row	false		-1

geo-shell> **tile open** --name tiles --params target/tiles.mbtiles
Tile Layer tiles opened!

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **map open** --name world
Map world opened!

geo-shell> **map add layer** --name world --layer ocean
Added ocean layer to map world

geo-shell> **map add layer** --name world --layer countries
Added countries layer to map world

geo-shell> **tile generate** --name tiles --map world --start 0 --end 3
Tiles generated!

geo-shell> **tile delete** --name tiles --z 3
Deleting tiles at z level 3

geo-shell> **map close** --name world
Map world closed!

Generate

Generate tiles for a Tile Layer.

geo-shell> **tile generate** --name tiles --map world --start 0 --end 3

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

map	The map name	true		
start	The map name	true		
end	The map name	true		
bounds	The map name	false		
metatile	The metatile width,height	false		
missingOnly	The map name	false	false	false
verbose	The map name	false	false	false

geo-shell> **tile open** --name tiles --params target/tiles.mbtiles
Tile Layer tiles opened!

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **map open** --name world
Map world opened!

geo-shell> **map add layer** --name world --layer ocean
Added ocean layer to map world

geo-shell> **map add layer** --name world --layer countries
Added countries layer to map world

geo-shell> **tile generate** --name tiles --map world --start 0 --end 3
Tiles generated!

geo-shell> **format open** --name world_level2 --input examples/tile_generate.png
Format world_level2 opened!

geo-shell> **tile stitch raster** --name tiles --format world_level2 --raster world_level2 --z 2
Done stitching Raster world_level2 from tiles!

geo-shell> **map close** --name world
Map world closed!

Stitch Raster

Create a Raster from a Tile Layer.

geo-shell> **tile stitch raster** --name countries --format states --raster states --bounds -18217695.5734,1222992.4526,-4207094.0368,7924991.0926

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The tile name	true		
format	The raster format name	true		
raster	The raster name	true		
bounds	The bounds	false		

width	The raster width	false	400	400
height	The raster height	false	400	400
z	The zoom level	false	0	-1
minx	The min x or column	false		-1
miny	The min y or row	false		-1
maxx	The max x or column	false		-1
maxy	The max y or row	false		-1

Create a Raster from a Tile Layer with a geographic bounds.

geo-shell> **tile open** --name countries --params src/test/resources/countries.mbtiles
Tile Layer countries opened!

geo-shell> **format open** --name states --input examples/tile_stitch_bounds.png
Format states opened!

geo-shell> **tile stitch raster** --name countries --format states --raster states --bounds -18217695.5734,1222992.4526,-4207094.0368,7924991.0926
Done stitching Raster states from countries!

Tiles

List tiles within a given bounds.

geo-shell> **tile tiles** --name countries --z 8 --bounds -13787405.4140,5872198.2610,-13349574.1159,6081635.7185

Name	Description	Mandatory	Specified Default	Unspecified Default

name	The tile name	true		
bounds	The bounds	true		
z	The zoom level	true		

geo-shell> **tile open** --name countries --params src/test/resources/countries.mbtiles
Tile Layer countries opened!

geo-shell> **tile tiles** --name countries --z 8 --bounds -13787405.4140,5872198.2610, -13349574.1159,6081635.7185
8/39/165
8/40/165
8/41/165
8/42/165
8/39/166
8/40/166
8/41/166
8/42/166

geo-shell> **tile close** --name countries
Tile Layer countries closed!

Vector Grid

Create a Vector Grid Layer from the pyramid of a Tile Layer.

geo-shell> **tile vector grid** --name countries --workspace layers --layer level3 --z 3

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The tile name	true		
workspace	The workspace name	true		
layer	The layer name	true		
bounds	The bounds	false		
width	The raster width	false	400	400
height	The raster height	false	400	400
z	The zoom level	false	0	-1
minx	The min x or column	false		-1
miny	The min y or row	false		-1
maxx	The max x or column	false		-1
maxy	The max y or row	false		-1

geo-shell> **tile open** --name countries --params src/test/resources/countries.mbtiles

Tile Layer countries opened!

geo-shell> **workspace open** --name layers --params memory
Workspace layers opened!

geo-shell> **tile vector grid** --name countries --workspace layers --layer level3 --z 3
Done generating the vector grid level3 from countries!

geo-shell> **style vector default** --layer level3 --color #ffffff --opacity 0.25 --file examples/level3.sld
Default Vector Style for level3 written to /home/travis/build/jericks/geo-shell/examples/level3.sld!

geo-shell> **layer style set** --name level3 --style examples/level3.sld
Style /home/travis/build/jericks/geo-shell/examples/level3.sld set on level3

geo-shell> **workspace open** --name naturalearth --params examples/naturalearth.gpkg
Workspace naturalearth opened!

geo-shell> **layer open** --workspace naturalearth --layer countries --name countries
Opened Workspace naturalearth Layer countries as countries

geo-shell> **layer style set** --name countries --style examples/countries.sld
Style /home/travis/build/jericks/geo-shell/examples/countries.sld set on countries

geo-shell> **layer open** --workspace naturalearth --layer ocean --name ocean
Opened Workspace naturalearth Layer ocean as ocean

geo-shell> **layer style set** --name ocean --style examples/ocean.sld
Style /home/travis/build/jericks/geo-shell/examples/ocean.sld set on ocean

geo-shell> **map open** --name vectorGridMap
Map vectorGridMap opened!

geo-shell> **map add layer** --name vectorGridMap --layer ocean
Added ocean layer to map vectorGridMap

geo-shell> **map add layer** --name vectorGridMap --layer countries
Added countries layer to map vectorGridMap

geo-shell> **map add layer** --name vectorGridMap --layer level3
Added level3 layer to map vectorGridMap

geo-shell> **map draw** --name vectorGridMap --file examples/tile_vector_grid.png --projection EPSG:3857 --width 400 --height 400 --bounds -20026376.39,-20048966.10,20026376.39,20048966.10
Done drawing /home/travis/build/jericks/geo-shell/examples/tile_vector_grid.png!

geo-shell> **map close** --name vectorGridMap
Map vectorGridMap closed!

Style

Create

Create a simple style.

Name	Description	Mandatory	Specified Default	Unspecified Default
params	The style parameters	true		
file	The output file	true		

Vector Default

Create a default vector style.

Name	Description	Mandatory	Specified Default	Unspecified Default
layer	The Layer	true		
color	The color	false	#f2f2f2	#f2f2f2
opacity	The opacity	false	1.0	1.0
file	The output file	true		

Vector Gradient

Create a gradient vector style.

Name	Description	Mandatory	Specified Default	Unspecified Default
layer	The Layer	true		
field	The field	true		
number	The number of categories	true		
colors	The colors	true		
method	The classification method (Quantile or EqualInterval)	false	Quantile	Quantile
elsemode	The else mode (ignore, min, max)	false	ignore	ignore
file	The output file	true		

Vector Unique Values

Create a unique values vector style.

Name	Description	Mandatory	Specified Default	Unspecified Default
layer	The Layer	true		
field	The field	true		
colors	The colors	true		
file	The output file	true		

Vector Unique Values From Text File

Create a unique values vector style from a text file

Name	Description	Mandatory	Specified Default	Unspecified Default
field	The field name	true		
geometryType	The geometry type	true		
textFile	The input text file	true		
styleFile	The output sld or ysld file	true		

Raster Default

Create a default raster style.

Name	Description	Mandatory	Specified Default	Unspecified Default
raster	The Raster	true		
opacity	The opacity	false	1.0	1.0
file	The output file	true		

Raster Color Map

Create a color map raster style.

Name	Description	Mandatory	Specified Default	Unspecified Default
raster	The Raster	true		
opacity	The opacity	false	1.0	1.0
values	The comma delimited list of values (key=value)	true		
type	The type (intervals, values, ramp)	false	ramp	ramp
extended	Whether to use extended colors or not	false	false	false
file	The output file	true		

Map

Open

Open a new Map.

geo-shell> **map open** --name earth

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

geo-shell> **map open** --name earth
Map earth opened!

geo-shell> **map close** --name earth
Map earth closed!

Close

Close a Tile Layer.

geo-shell> **map close** --name earth

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

geo-shell> **map open** --name earth
Map earth opened!

geo-shell> **map close** --name earth
Map earth closed!

List

List open Maps.

geo-shell> **map list**

No parameters

geo-shell> **map open** --name earth
Map earth opened!

geo-shell> **map open** --name us
Map us opened!

geo-shell> **map list**
earth
us

geo-shell> **map close** --name earth
Map earth closed!

geo-shell> **map close** --name us
Map us closed!

Add Layer

Add a Layer.

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The map name	true		
layer	The layer	true		
mapLayerName	The map layer name	false		

Add Raster

Add a Raster.

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The map name	true		
raster	The raster	true		
mapLayerName	The map layer name	false		

Add Tle

Add a Tile.

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The map name	true		
tile	The tile	true		
mapLayerName	The map layer name	false		

Remove Layer

Remove a Layer.

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The map name	true		
layer	The layer name	true		

Reorder

Reorder a Layer in the Map.

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The map name	true		
layer	The layer name	true		
order	The order parameters	true		

Layers

List the Map's Layers.

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

Draw

Draw a map.

Name	Description	Mandatory	Specified Default	Unspecified Default
name	The map name	true		
bounds	The Bounds	false		
projection	The Projection	false		
width	The width	false	600	600
height	The height	false	400	400
type	The type	false	png	png
file	The file	false		
background-color	The background color	false		

Other

Unzip

Unzip a file

Name	Description	Mandatory	Specified Default	Unspecified Default
file	The zip file	true		
directory	The directory	true		

Open

Open a File.

Name	Description	Mandatory	Specified Default	Unspecified Default
file	The File	true		