



PROJFINDER.COM

ProjFinder Yo

projfinder.com

X: 862343.6230 Y: 318064.4545

Find My Projection

Map Center: -93.210926, 44.958509

Rank	Info	Distance
0	EPSG:26993 Name:NAD83 / Minnesota South	Distance:171.420183
1	EPSG:2812 Name:NAD83(HARN) / Minnesota South	Distance:171.420183
2	EPSG:3596 Name:NAD83(NSRS2007) / Minnesota South	Distance:171.420183
3	EPSG:26821 Name:NAD83 / Minnesota South (ftUS) (deprecated)	Distance:171.420186
4	EPSG:26832 Name:NAD83(HARN) / Minnesota South (ftUS) (deprecated)	Distance:171.420186
5	EPSG:26843 Name:NAD83(NSRS2007) / Minnesota South (ftUS) (deprecated)	Distance:171.420186
6	EPSG:2163 Name:unnamed	Distance:445404.239079
7	EPSG:4267 Name:NAD27	Distance:919202.748086
8	EPSG:4269 Name:NAD83	Distance:919202.748307
9	EPSG:4760 Name:WGS 66	Distance:919202.748307



CUGOS.ORG

Data Point
Unknown Projection

Reference Location

The screenshot shows the ProjFinder Yo web application. The browser address bar displays 'projfinder.com'. The input fields show coordinates X: 862343.6230 and Y: 318064.4545. A 'Find My Projection' button is visible. Below the input fields, a table lists potential projections and their distances from the input point. The table has three columns: Rank, Info, and Distance. The first five entries are all NAD83-based Minnesota South projections with a distance of 171.420183. The next three entries are unnamed or NAD27 projections with distances of 445404.239079, 919202.748086, and 919202.748307. The final entry is WGS 66 with a distance of 919202.748307. To the right of the table is a map of the reference location, showing a river and surrounding streets. A red dot on the map indicates the reference location, and a black arrow points from the 'Reference Location' text to it. The map also shows the data point location, indicated by a black arrow from the 'Data Point Unknown Projection' text.

Rank	Info	Distance
0	EPSG:26993 Name:NAD83 / Minnesota South	Distance:171.420183
1	EPSG:2812 Name:NAD83(HARN) / Minnesota South	Distance:171.420183
2	EPSG:3596 Name:NAD83(NSRS2007) / Minnesota South	Distance:171.420183
3	EPSG:26821 Name:NAD83 / Minnesota South (ftUS) (deprecated)	Distance:171.420186
4	EPSG:26832 Name:NAD83(HARN) / Minnesota South (ftUS) (deprecated)	Distance:171.420186
5	EPSG:26843 Name:NAD83(NSRS2007) / Minnesota South (ftUS) (deprecated)	Distance:171.420186
6	EPSG:2163 Name:unnamed	Distance:445404.239079
7	EPSG:4267 Name:NAD27	Distance:919202.748086
8	EPSG:4269 Name:NAD83	Distance:919202.748307
9	EPSG:4760 Name:WGS 66	Distance:919202.748307

Common Problem

projection - How would I convert this point to WKID 4326? - Geographic Information Systems Stack Exchange

gis.stackexchange.com/questions/13132/how-would-i-convert-this-point-to-wkid-4326/

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Geographic Information Systems

Questions Tags Tour Users Ask Question

How would I convert this point to WKID 4326?

This is a point in Brewster, MA, USA. How would it be converted to WKID 4326?

324299.3348436486, 832511.5939650714

projection

share improve this question edited Aug 5 '11 at 18:28 asked Aug 5 '11 at 18:05

Terrapin 103 3

1 WGS84 is a datum, not a coordinate system. Your question needs clarification since it doesn't inherently make sense. What is the source of these coordinates? They appear to be easting and northings (presumably in meters), but they don't represent any known location. - Radar Aug 5 '11 at 18:16

Is there no projection assigned to the data? Your question needs more clarity / detail (as Radar stated). You should just be able to right mouse on it and check this under the coordinate system tab (assuming your using ArcMap, which you've not stated either). If not, look in the metadata for info, and if that doesn't work, try Googling the name of the shapefile (including the extension [.shp]). - Dano Aug 5 '11 at 18:22

See this thread for more information: gis.stackexchange.com/questions/664/... - Radar Aug 5 '11 at 18:23

Thank you for your comment. Is the question clarified if I edit it to request a conversion to WKID 4326? - Terrapin Aug 5 '11 at 18:23

Where did you get the point coordinates from? - Sasa Ivetic Aug 5 '11 at 18:37

show 1 more comment

Tagged projection x 478

Asked 1 Year Ago
Viewed 520 Times
Active 1 Year Ago

Related Jobs

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Tucson Embedded... - Aberdeen
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Simple Solution

ProjFinder Yo

projfinder.com

X: 324299.3348 Y: 832511.59396

Find My Projection

Map Center: -70.083504 , 41.756616

Rank	Info	Distance
0	EPSG:26986 Name:NAD83 / Massachusetts Mainland	Distance:6966.837374
1	EPSG:2805 Name:NAD83(HARN) / Massachusetts Mainland	Distance:6966.837374
2	EPSG:3585 Name:NAD83(NSRS2007) / Massachusetts Mainland	Distance:6966.837374
3	EPSG:26786 Name:NAD27 / Massachusetts Mainland	Distance:863025.034920
5	EPSG:4269 Name:NAD83	Distance:893432.453885
6	EPSG:4760 Name:WGS 66	Distance:893432.453885
7	EPSG:4326 Name:WGS 84	Distance:893432.453885
8	EPSG:4276 Name:NSWC 9Z-2	Distance:893432.453885
9	EPSG:4152 Name:NAD83(HARN)	Distance:893432.453885

Map showing the Harwich area in Massachusetts, including roads (SR 6A, SR 124, SR 134, SR 137, SR 28, US 6), locations (Brewster, Harwich, Great Island, East Harwich Airport), and geographical features (Long Pond, Scapline River). The map is centered on the coordinates -70.083504, 41.756616. The bottom right corner of the map displays the coordinates -70.10118, 41.73817 and the text 'Data CC-BY-SA by OpenStreetMap' and 'Kolb Rock'.

Boom... looks good!

projection - How would I convert this point to WKID 4326? - Geographic Information Systems Stack Exchange

projection - How would I conve... +

gis.stackexchange.com/questions/13132/how-would-i-convert-this-point-to-wkid-4326/

☆ ↕ ↻ Google 🔍 ⬇️ 🏠 ⭐ ↕ 🗺️ ↕

2 Answers

active oldest votes

⬆️

5

⬇️

✓

I think you're looking for [EPSG:26986](http://www.mass.gov/mgis/dd-over.htm). Source: <http://www.mass.gov/mgis/dd-over.htm>

Projecting your point from 26986 -> 4326 you end up in Brewster, MA: [26986->4326](http://spatialreference.org) using spatialreference.org

Results in -70.005868000000007, 41.733080999999999 -> Google Maps

share improve this answer

answered Aug 5 '11 at 18:54



Sasa Ivetic

3,807 ⬇️ 6 ⬆️ 12

Thanks. I can confirm that this is correct based on the address that I have for this point. - Terrapin Aug 5 '11 at 19:02

• Important announcements

• Unanswered questions

Sign up for the newsletter

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Linked

89 What's the difference between a projection and a datum?

18 Best practices for identifying the unknown coordinate system of a Shapefile

Spatial Reference

epsg projection 26986 - nad83 / massachusetts mainland

[Home](#) | [Upload Your Own](#) | [List user-contributed references](#) | [List all references](#) SearchPrevious: [EPSG:26985: NAD83 / Maryland](#) | Next: [EPSG:26987: NAD83 / Massachusetts Island](#)[Link to this Page](#)Input Coordinates: -71.685, 42.12 Output Coordinates:
184701.979362, 874414.376528

EPSG:26986

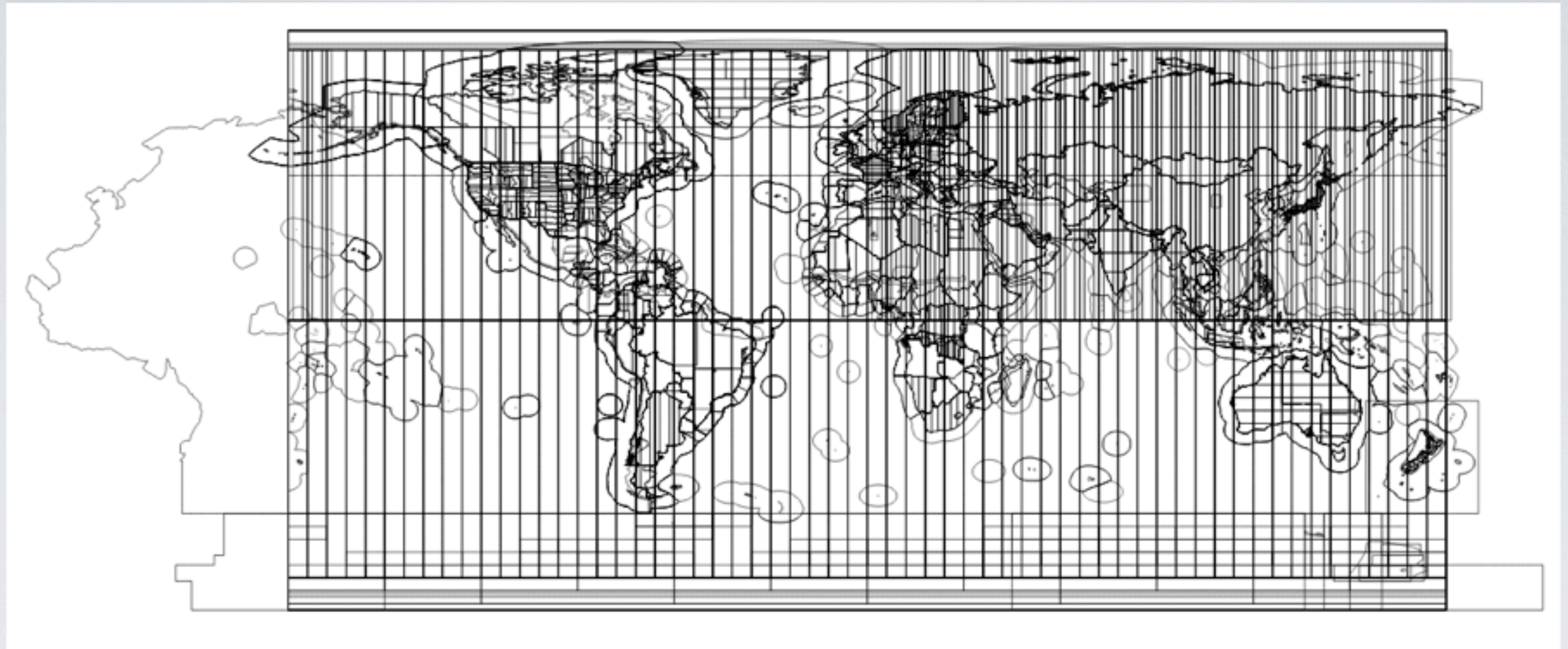
NAD83 / Massachusetts Mainland ([Google it](#))

- **WGS84 Bounds:** -73.5100, 41.3500, -69.8600, 42.8900
- **Projected Bounds:** 31789.1658, 790194.4183, 337250.8970, 961865.1338
- **Scope:** Large and medium scale topographic mapping and engineering survey.
- **Last Revised:** 1995-06-02
- **Area:** USA - Massachusetts - SPCS - mainland

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- [GeoServer](#)
- [PostGIS spatial_ref_sys INSERT statement](#)
- [Proj4js format](#)



EPSG Bounding Polygons



PostGIS Query

```
select sp.srid, split_part(sp.srtext, ' ', 2),  
st_distance(st_transform(st_geometryfromtext('POINT(%s %s)', 4326), sp.srid),  
st_geometryfromtext('POINT(%s %s)', sp.srid))  
from spatial_ref_sys as sp,  
epsg_coodinaterferencesystem as cs,  
epsg_poly_bb as bb  
where st_contains(bb.geom, st_geometryfromtext('POINT(%s %s)', 4326)) is true  
and cs.area_of_use_code=bb.area_code and  
exists(select 1 from spatial_ref_sys where srid=cs.coord_ref_sys_code)  
and srid=cs.coord_ref_sys_code  
group by sp.srid, sp.auth_name order by st_distance, char_length(split_part(sp.srtext, ' ', 2)) limit 10;
```

Iterate over candidate projections, assume unknown point is in that projection and “reproject” reference point (map center) to the candidate, order by minimum distance.

Flask API

```
app.add_url_rule('/api/projfinder',  
'projfinder', projfinder, methods=[ 'GET' ])
```

```
http://api.projfinder.com/api/projfinder?  
ref_lon=-70.083504&ref_lat=41.756616&  
unknown_x=324299.3348436486&unknown_y=832511.5939650714&  
limit=10&  
callback=jQuery19104639749394159336_1369018734714&_=1369018734716
```

```
app.add_url_rule('/api/reproject',  
'reproject', reproject, methods=[ 'GET' ])
```

```
http://api.projfinder.com/api/reproject?  
x=-70.0835036672357&y=41.75661559956768&  
epsg=4326&  
callback=jQuery19104639749394159336_1369018734714&_=1369018734717
```


Response

```
jQuery19102936860822861904_1368834040208({
  "type": "projfinder",
  "request": {
    "unknown": {
      "type": "Point",
      "coordinates": [
        862343.62307,
        318064.45455
      ]
    },
    "type": "projrequest",
    "reference": {
      "crs": {
        "type": "name",
        "properties": {
          "name": "urn:ogc:def:crs:EPSG::4326"
        }
      },
      "type": "Point",
      "coordinates": [
        -93.211269,
        44.956565
      ]
    }
  },
  "response": [
    {
      "distance": 380.926463965649,
      "name": "NAD83 / Minnesota South",
      "point": {
        "crs": {
          "type": "name",
          "properties": {
            "name": "urn:ogc:def:crs:EPSG::4326"
          }
        },
        "type": "Point",
        "coordinates": [
          -93.20981044926083,
          44.95983271350028
        ]
      },
      "rank": 0,
      "srid": 26993,
      "type": "projresponse"
    }
  ]
},
```


Client

ProjFinder Yo

aaronr.github.io/projfinder.com/

X: 862343.6230 Y: 318064.4545!

Find My Projection

Map Cent

Rank	Info
0	EPSG:26993 Name:NAD83 / Mir
1	EPSG:2812 Name:NAD83(HARN
2	EPSG:3596 Name:NAD83(NSRS
3	EPSG:26821 Name:NAD83 / Mir (deprecated)
4	EPSG:26832 Name:NAD83(HAR (deprecated)
5	EPSG:26843 Name:NAD83(NSR (ftUS) (deprecated)
6	EPSG:2163 Name:unnamed
7	EPSG:4267 Name:NAD27
8	EPSG:4269 Name:NAD83
9	EPSG:4760 Name:WGS 66

ProjFinder Yo

aaronr.github.io/projfinder.com/

X: 862343.6230 Y: 318064.4545!

Find My Projection

Map Cent

Rank	Info
0	EPSG:26993 Name:NAD83 / Mir
1	EPSG:2812 Name:NAD83(HARN
2	EPSG:3596 Name:NAD83(NSRS
3	EPSG:26821 Name:NAD83 / Mir (deprecated)
4	EPSG:26832 Name:NAD83(HAR (deprecated)
5	EPSG:26843 Name:NAD83(NSR (ftUS) (deprecated)
6	EPSG:2163 Name:unnamed
7	EPSG:4267 Name:NAD27
8	EPSG:4269 Name:NAD83
9	EPSG:4760 Name:WGS 66

aaronr/projfinder.com · GitHub

GitHub, Inc. (US)

https://github.com/aaronr/projfinder.com

This repository

Search or type a command

Explore Gist Blog Help

aaronr

Pull Request

Unwatch

Star 4

Fork 1

Code

Network

Pull Requests 0

Issues 0

Wiki

Graphs

Settings

Projection Guessing ... you get what you get and you dont throw a fit — Read more

Clone in Mac

ZIP

HTTP

SSH

Git Read-Only

git@github.com:aaronr/projfinder.com.git

Read+Write access

branch: gh-pages

Files

Commits

Branches 2

Tags

projfinder.com

43 commits

crosshairs ftw

aaronr authored 2 days ago

latest commit 9a2a04042d

OpenLayers-2.12

6 days ago

changes [aaronr]

img

2 days ago

crosshairs ftw [aaronr]

.gitignore

6 months ago

Some stuff got missed with a .gitignore that was a bit to strict [aaronr]

CNAME

6 months ago

Adding in CNAME to get projfinder.com hooked up [aaronr]

README.md

6 months ago

Adding the initial client side files... including Openlayers and some... [aaronr]

index.html

3 days ago

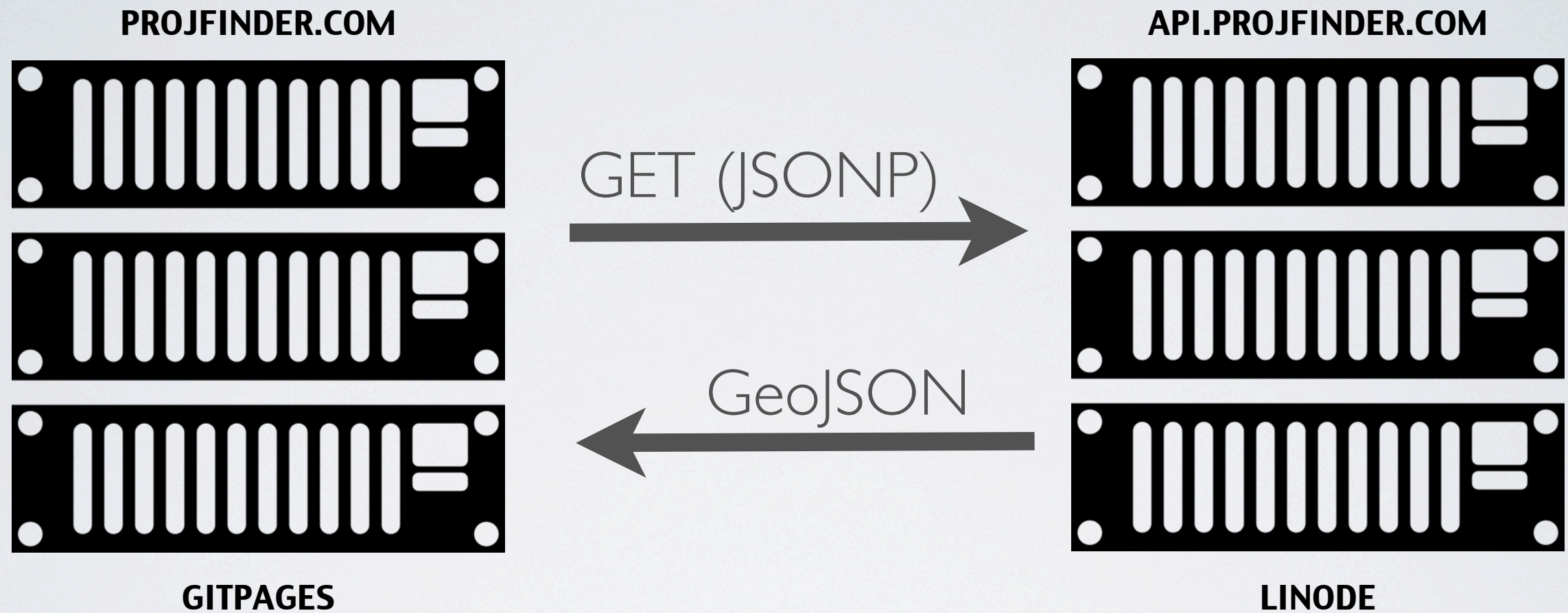
Make the table hover and condensed, and have the vector layer select ... [aaronr]

projFinder.js

2 days ago

crosshairs ftw [aaronr]

Hosting



Real World Example

One of the humanitarian projects that the Bainbridge Island Rotary club sponsors involves drilling wells to obtain potable water in Uganda. To date, the project has provided over 100 wells ... but where are they? The contractor provides an Easting and Northing but that's insufficient:

Well	Name	Village	Parish	Sub	County	County	District	East	North	Yield-m3/h	Well No
9	Adyangmit		Agikdak	Aputi	Kioga	Amolatar		491603	187137		3H-60565-2
10	Okwor		Etam	Awelo	Kioga	Amolatar		466747	181484		3H-60565-2
11	Acapa		Agikdak	Aputi	Kioga	Amolatar		492906	185684		3H-60565-2
12	Alidowapiny		Otira	Aputi	Kioga	Amolatar		491803	190191		3H-60565-2
13	Okwor		Abeja	Awelo	Kioga	Amolatar		480103	196267		3H-60565-2
14	Ojem		Arwotcek	Awelo	Kioga	Amolatar		479375	190741		3H-60565-2

ProjFinder helps us fix this to UTM Zone 36N on one of several different datum making it easy to reproject and map using Google Earth.

Uganda

ProjFinder Yo

projfinder.com

X: 491603 Y: 187137

Find My Projection

Map Center: 32.280407, 1.880423

Rank	Info	Distance
0	EPSG:32636 Name:WGS 84 / UTM zone 36N	Distance:74572.321239
1	EPSG:32236 Name:WGS 72 / UTM zone 36N	Distance:74587.475798
2	EPSG:32436 Name:WGS 72BE / UTM zone 36N	Distance:74595.913787
3	EPSG:21096 Name:Arc 1960 / UTM zone 36N	Distance:74734.833108
5	EPSG:4760 Name:WGS 66	Distance:525986.050519
6	EPSG:4326 Name:WGS 84	Distance:525986.050519
7	EPSG:4276 Name:NSWC 9Z-2	Distance:525986.050519
8	EPSG:4152 Name:NAD83(HARN)	Distance:525986.050519

The map displays East Africa, with Uganda highlighted in the center. Neighboring countries include South Sudan to the west, the Democratic Republic of the Congo to the south, and Kenya to the east. Major cities like Kampala (Uganda), Nairobi (Kenya), and Addis Ababa (Ethiopia) are visible. The map includes a coordinate crosshair and a blue dot indicating the location corresponding to the input coordinates (491603, 187137). The map data is attributed to OpenStreetMap.

Data CC-BY-SA by OpenStreetMap

Dodoma 29.83046, 2.80249

Real World Example

```
c:\dev\main>lasinfo c:\images\lidar\PAR\points_a1_fredricksburg6000_tile2.las
```

```
reporting all LAS header entries:
```

```
file signature:      'LASF'
file source ID:      0
global_encoding:     0
project ID GUID data 1-4: 0 0 0 ''
version major.minor: 1.2
system identifier:   ''
generating software: 'TerraScan'
file creation day/year: 0/0
header size:         227
offset to point data: 229
number var. length records: 0
point data format:    1
point data record length: 28
number of point records: 82734572
number of points by return: 82734572 0 0 0 0
scale factor x y z:   0.01 0.01 0.01
offset x y z:         0 0 0
min x y z:            283635.01 4242633.00 -33.84
max x y z:            289622.00 4247866.99 209.54
```

Look carefully. Where is this? You totally can't tell. The filename is a clue: somewhere around fredricksburg VA.

projfinder helped us nail this projection down to

```
SRID:26918 Name:NAD83 / UTM zone 18N
```

Now we can reproject the extent and place it correctly.

Fredericksburg

ProjFinder Yo

projfinder.com

X: 283635.01 Y: 4242633.00

Find My Projection

Map Center: -77.481937, 38.295356

Rank	Info	Distance
0	EPSG:32618 Name:WGS 84 / UTM zone 18N	Distance:1321.716769
1	EPSG:26918 Name:NAD83 / UTM zone 18N	Distance:1321.716865
2	EPSG:3748 Name:NAD83(HARN) / UTM zone 18N	Distance:1321.716865
3	EPSG:3725 Name:NAD83(NSRS2007) / UTM zone 18N	Distance:1321.716865
4	EPSG:32218 Name:WGS 72 / UTM zone 18N	Distance:1332.545364
5	EPSG:32418 Name:WGS 72BE / UTM zone 18N	Distance:1333.952434
6	EPSG:26718 Name:NAD27 / UTM zone 18N	Distance:1528.766689
7	EPSG:32146 Name:NAD83 / Virginia North	Distance:3955366.815685
8	EPSG:2853 Name:NAD83(HARN) / Virginia North	Distance:3955366.815685
9	EPSG:3685 Name:NAD83(NSRS2007) / Virginia North	Distance:3955366.815685

Fredericksburg

Stafford Regional Airport

Flying F Farm Airport

Dogwood Airpark

Shannon Airport

US 1

US 17

I 95

VA 3

VA 208

SR 208

VA 2

Data CC-BY-SA by OpenStreetMap

-77.58596, 38.32876

Datum Shifts

ProjFinder Yo

projfinder.com

X: -93.210926 Y: 44.958509

Find My Projection

Map Center: -93.211350 , 44.958285

Rank	Info	Distance
0	EPSG:4267 Name:NAD27	Distance:0.000406
1	EPSG:4326 Name:WGS 84	Distance:0.000628
2	EPSG:4269 Name:NAD83	Distance:0.000628
3	EPSG:4760 Name:WGS 66	Distance:0.000628
4	EPSG:4608 Name:NAD27(76)	Distance:0.000628
5	EPSG:4276 Name:NSWC 9Z-2	Distance:0.000628
6	EPSG:4617 Name:NAD83(CSRS)	Distance:0.000628
7	EPSG:4152 Name:NAD83(HARN)	Distance:0.000628
8	EPSG:4759 Name:NAD83(NSRS2007)	Distance:0.000628
9	EPSG:4740 Name:PZ-90	Distance:0.000651

Map Center: -93.211350 , 44.958285

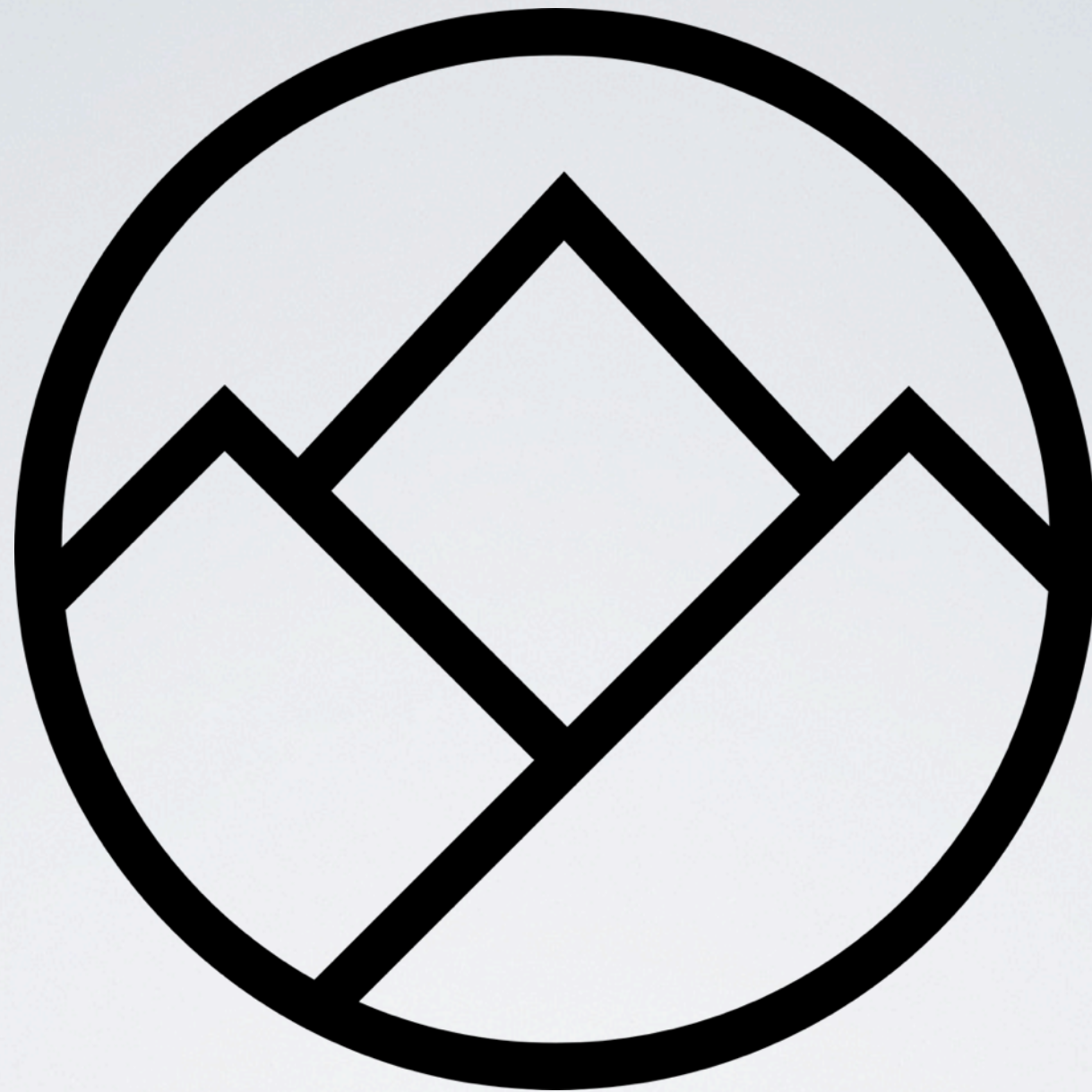
Shriners Hospitals for Children - Twin Cities

Minneapolis, MN

Map data CC-BY-SA by OpenStreetMap

St. Anthony Avenue

Map Center: -93.21259, 44.95952



CUGOS.ORG



No Meeting In May 2013... hope to see you at FOSS4G-NA!

Next CUGOS meeting: June 19th 2013 - LizardTech

CUGOS in Action

Upcoming Events

[Foss4g NA 2013](#)

22 May 2013

Great Foss4g NA event for 2013

Latest Blogs

[Migrating to Jekyll](#)

14 Feb 2013

Decided to bite the bullet and migrate to Jekyll

Latest Projects

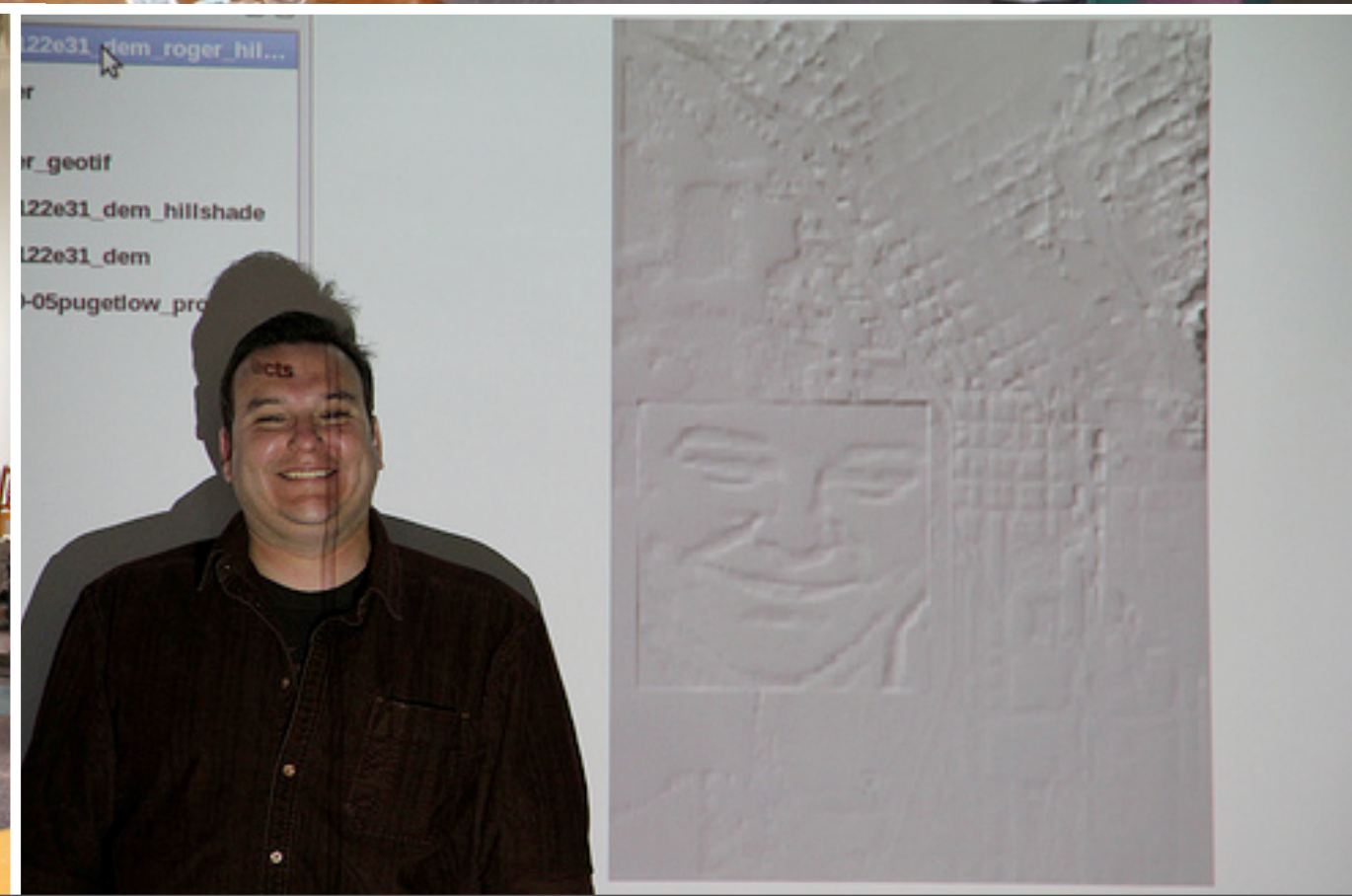
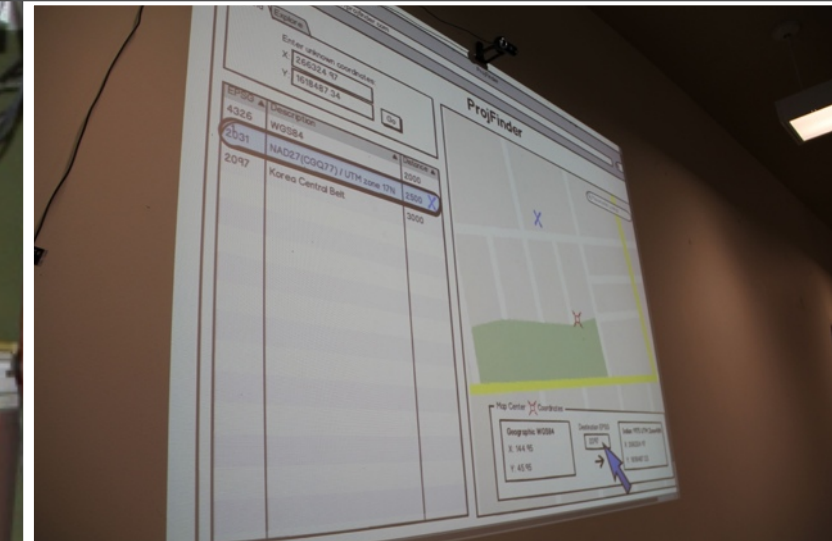
[Migrate CUGOS website to Jekyll on GitPages](#)

Migrating the CUGOS website to GitPages on GitHub with Jekyll

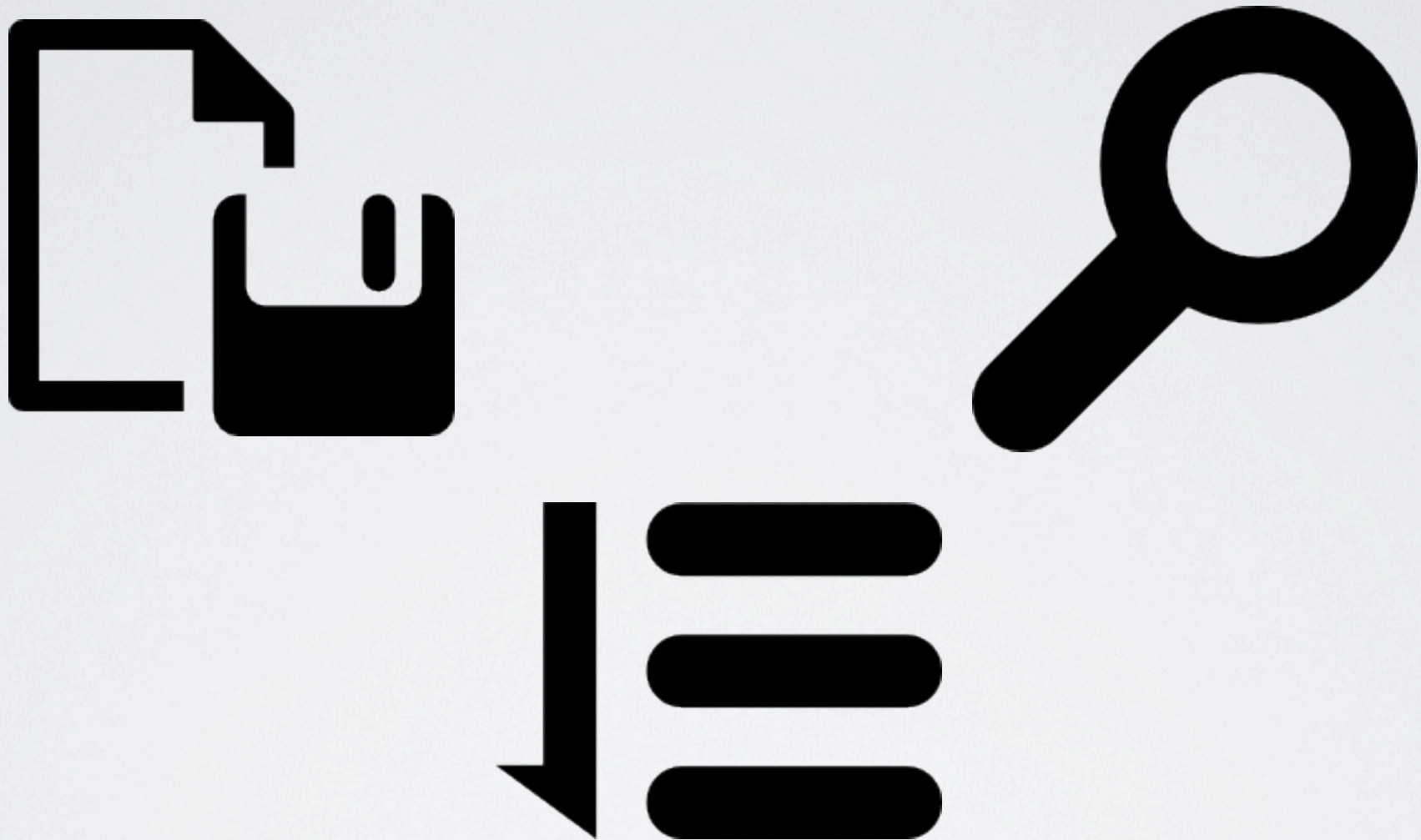
[ProjFinder](#)

Projection Finder project used for code sprints with CUGOS

Sign up for the CUGOS email list (Google Group)



NEXT ?

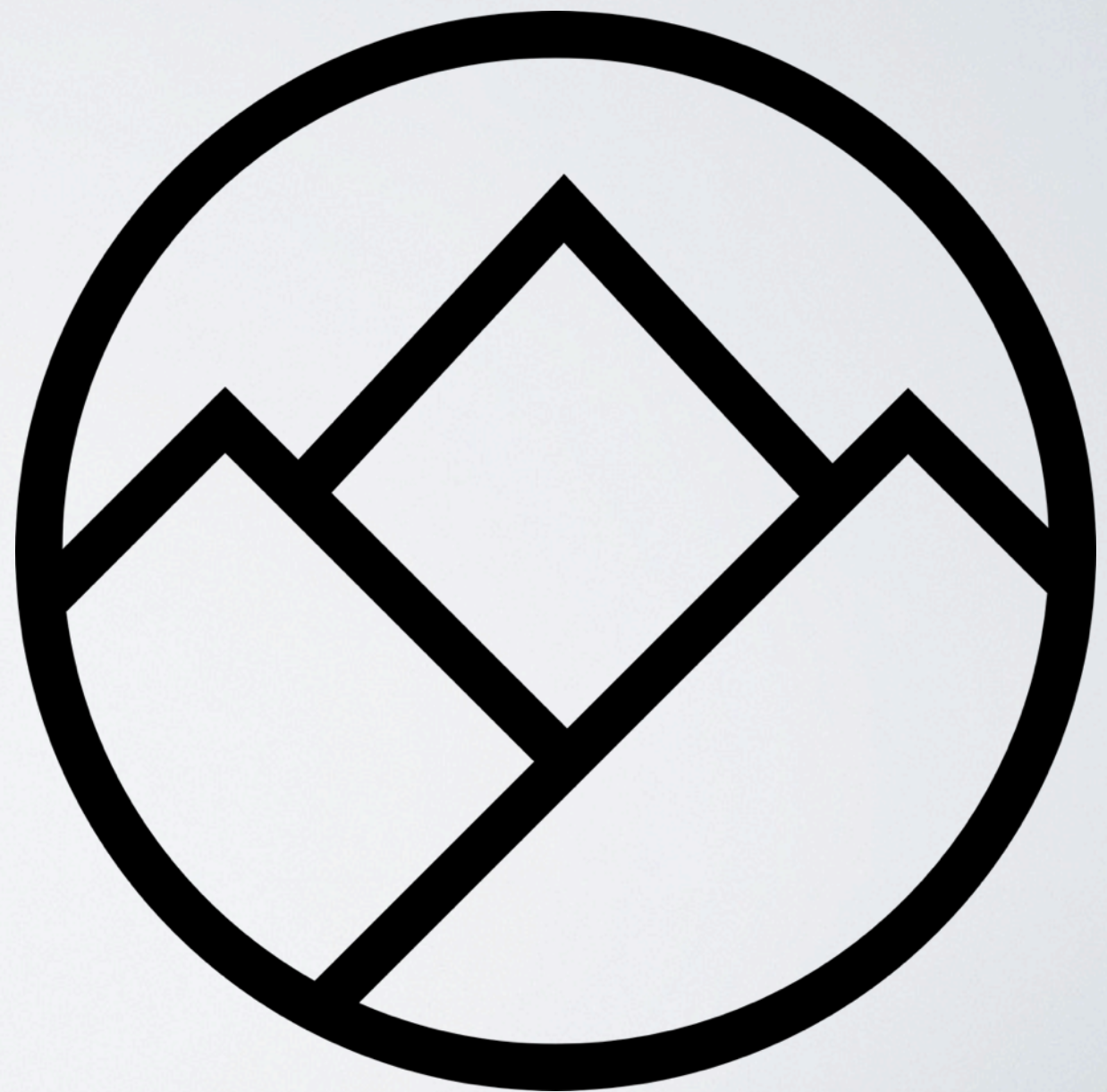


**INTEGRATION WITH
SPATIALREFERENCE.ORG?**

@REPROJECTED



Z-PULLEY



CUGOS