

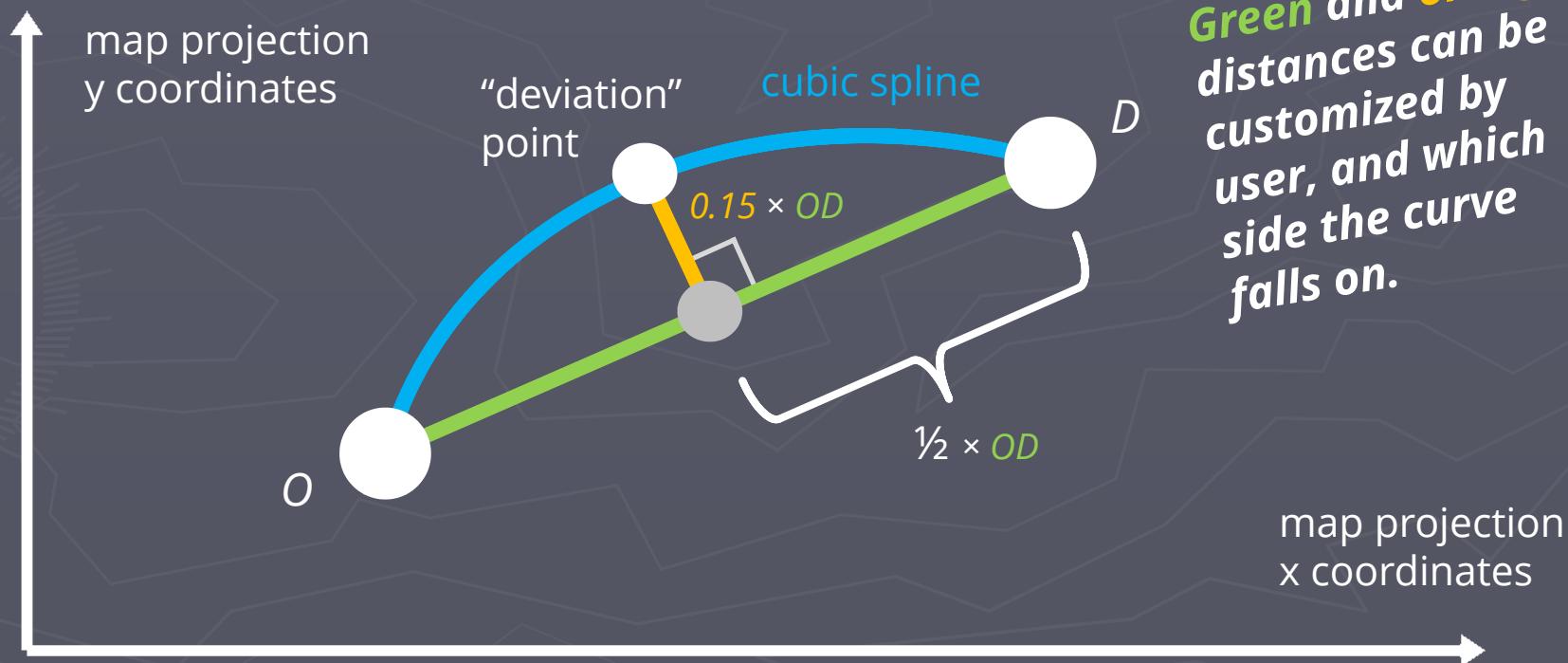
Demo of a Flow Maps Script

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GIP Research Group Meeting, ITC
2019-10-17

Cubic Splines Construction

- ▶ Origin, destination & “deviated” point to define spline



someflows.csv - LibreOffice Calc

File Edit View Insert Format Sheet Data Tools Window Help

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	A	B	C	D	E	F	G	H
1	OrigName	OrigLat	OrigLon	DestName	DestLat	DestLon	FlowMag	
2	Ponta Delgada	37.7483018179	-25.6665834976	Lisbon	38.7227228779	-9.1448663055	6013	
3	Ponta Delgada	37.7483018179	-25.6665834976	Los Angeles	33.9899782502	-118.179980511	1661	
4	Ponta Delgada	37.7483018179	-25.6665834976	Coimbra	40.2003743683	-8.41668034	2259	
5	Ponta Delgada	37.7483018179	-25.6665834976	Christchurch	-43.5350313123	172.630020711	4656	
6	Ponta Delgada	37.7483018179	-25.6665834976	Toronto	43.6999798778	-79.4200207944	584	
7	Ponta Delgada	37.7483018179	-25.6665834976	Kyoto	35.0299922882	135.749997924	282	
8	Ponta Delgada	37.7483018179	-25.6665834976	Yokohama	35.3200262645	139.58004838	6985	
9	Ponta Delgada	37.7483018179	-25.6665834976	Durban	-29.8650130017	30.9800105374	4981	
10	Ponta Delgada	37.7483018179	-25.6665834976	Knoxville	35.9700124298	-83.9200303566	1235	
11								
12								
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< > + someflows

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Sheet 1 of 1 Default Average: ; Sum: 0 100%

- ▶ Download the `InterpolatedFlowMaps.py` and `testdata.csv` files:
<https://github.com/paulojraposo/FlowMaps>
- ▶ Install `anaconda` (miniconda) if you don't have it already:
<https://docs.conda.io/en/latest/miniconda.html>
- ▶ In a terminal, create a conda environment called `tryflows` with the necessary packages:
`conda create -n tryflows python=3.5 scipy gdal shapely pyproj`
- ▶ Activate your conda environment:
`conda activate tryflows`

- ▶ Navigate to the folder where you've downloaded the .py file, e.g.,

```
cd c:\Users\MyName\Downloads
```

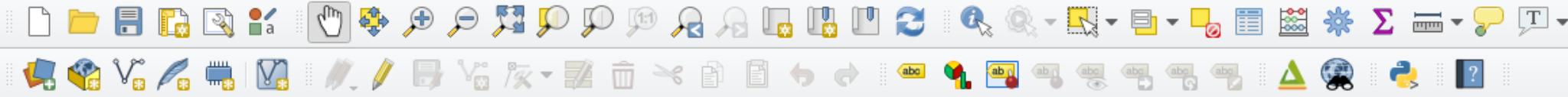
```
cd /home/MyName/Downloads
```

- ▶ Use python to run the file, asking for the help documentation:

```
python InterpolatedFlowMaps.py -h
```

- ▶ Run the script on the provided demo data:

```
python InterpolatedFlowMaps.py testdata.csv testdata01.shp
```



Browser

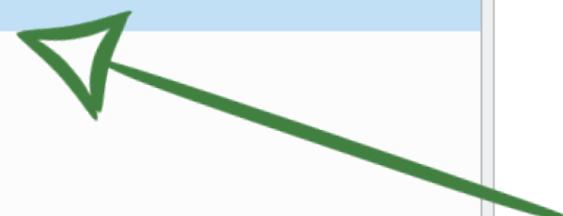


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- WCS
- WFS
- OWS
- ArcGisMapServer
- ArcGisFeatureServer

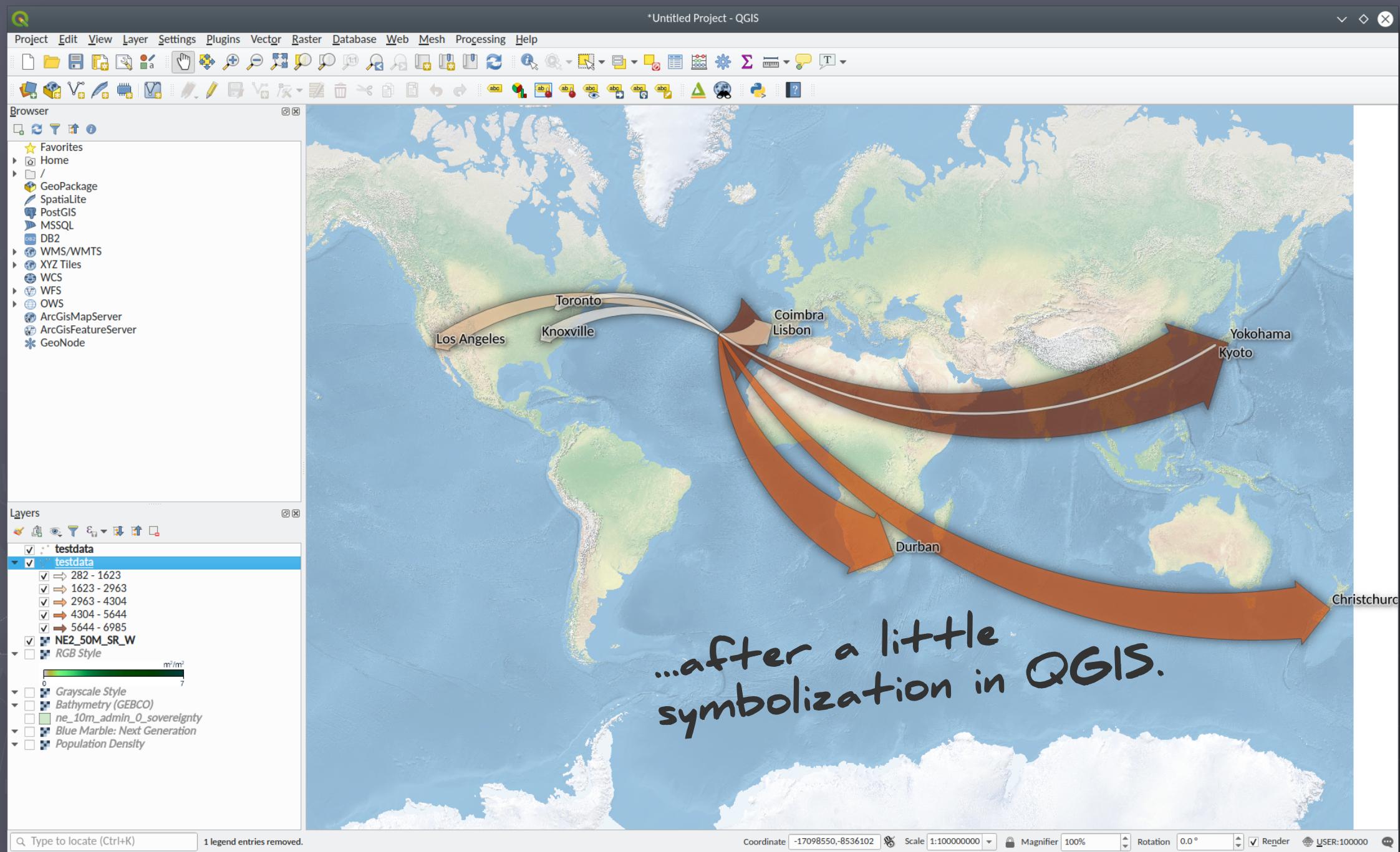
Layers



- ✓ testdata



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Thanks

