

Google Earth Engine built in code executor. JavaScript code

Google Earth Engine

Search places and datasets...

Scripts Docs Assets

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NEW

Owner

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Writer

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Reader

COPERNICUS_S2_SR_HARMONIZED *

Get Link

Save

Run

Reset

Apps

Settings

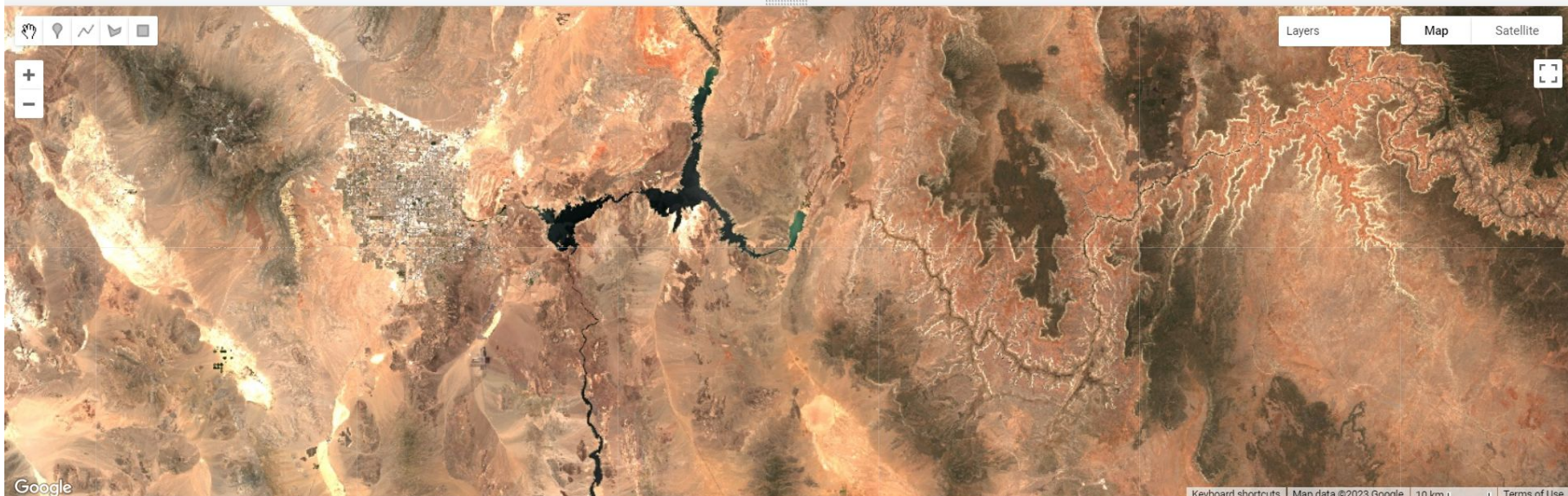
Inspector

Console

Tasks

```
17 return image.updateMask(mask).divide(10000);
18 }
19
20 var dataset = ee.ImageCollection('COPERNICUS/S2_SR_HARMONIZED')
21   .filterDate('2021-05-01', '2021-05-17')
22   // Pre-filter to get less cloudy granules.
23   .filter(ee.Filter.lt('CLOUDY_PIXEL_PERCENTAGE', 20))
24   .map(maskS2clouds);
25
26 var visualization = {
27   min: 0.0,
```

Use print(...) to write to this console.



Google

Keyboard shortcuts Map data ©2023 Google 10 km Terms of Use

Scripts Docs Assets

Filter scripts... NEW

Owner
No accessible repositories. Click Refresh to check again.

Writer
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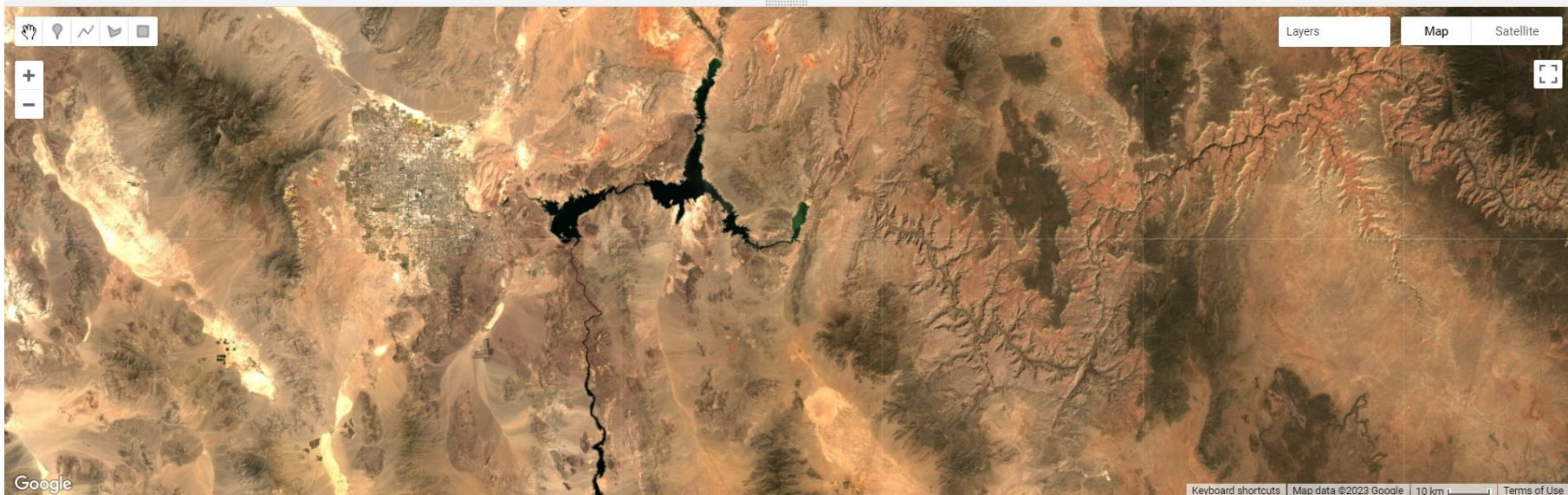
Reader
No accessible repositories. Click Refresh to check again.

New Script *

```
1 var dataset = ee.ImageCollection('LANDSAT/LC08/C02/T1_L2')
2   .filterDate('2021-05-01', '2021-05-17');
3
4 // Applies scaling factors.
5 function applyScaleFactors(image) {
6   var opticalBands = image.select('SR_B.*').multiply(0.0000275).add(-0.2);
7   var thermalBands = image.select('ST_B.*').multiply(0.00341802).add(149.0);
8   return image.addBands(opticalBands, null, true)
9     .addBands(thermalBands, null, true);
10 }
11
12 dataset = dataset.map(applyScaleFactors);
```

Inspector Console Tasks

Use print(...) to write to this console.



Surface water mapping tutorial

+ Code + Text



1s completed at 10:50 AM

+ Code + Text

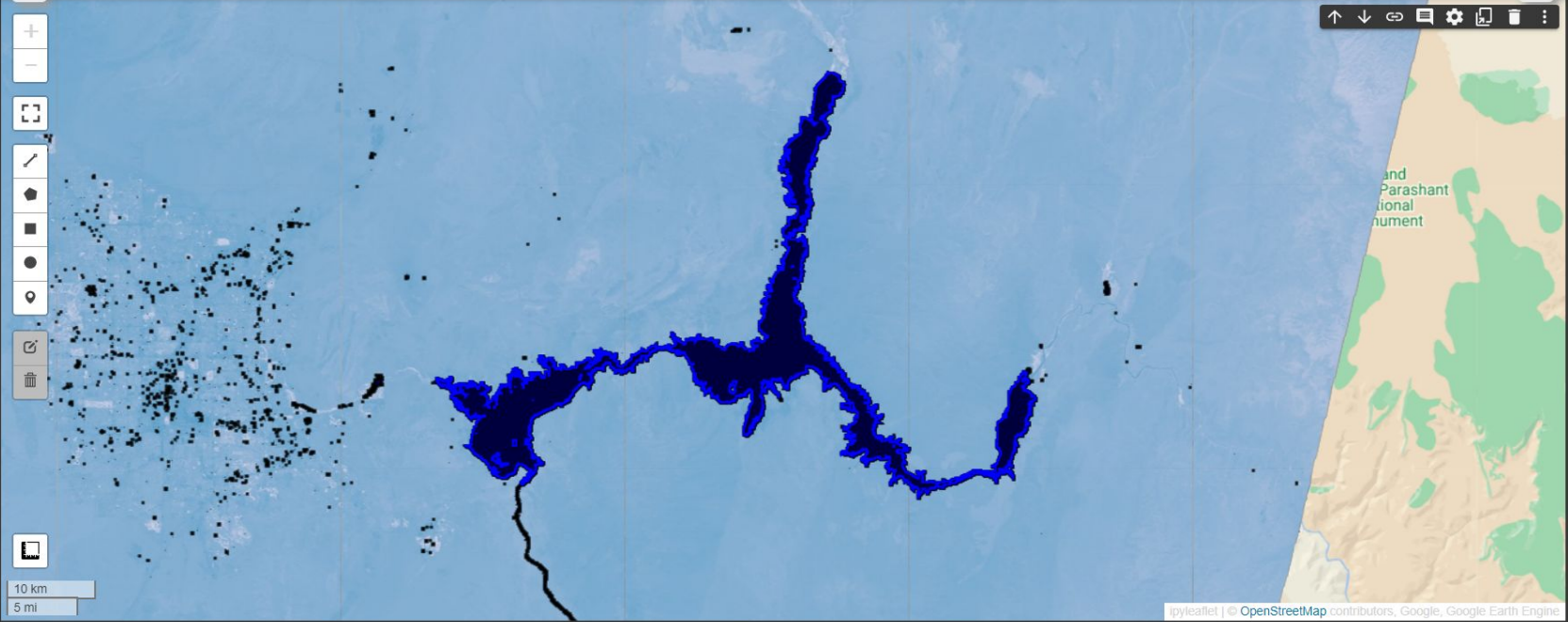


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+ Code + Text

RAM 100% Disk 100%

Map navigation controls: pan, zoom, full screen, etc.



```
[25] image = ee.Image('LANDSAT/LC08/C01/T1_SR/LC08_039035_20150724')
vis params = {
```

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```
Map = geemap.Map()  
Map
```





Copy of surface_water_mapping.ipynb

File Edit View Insert Runtime Tools Help All changes saved

Comment

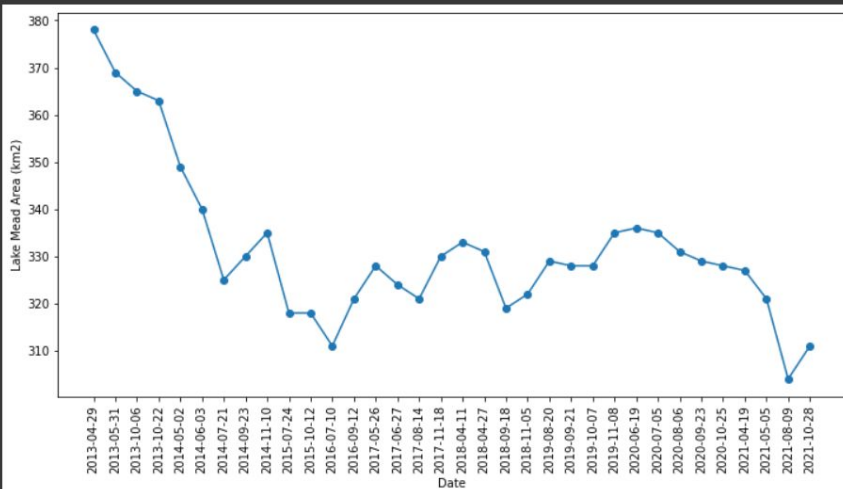
Share



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✓ RAM
Disk

```
plt.xticks(rotation=90)  
plt.xlabel('Date')  
plt.ylabel('Lake Mead Area (km2)')  
plt.show()
```



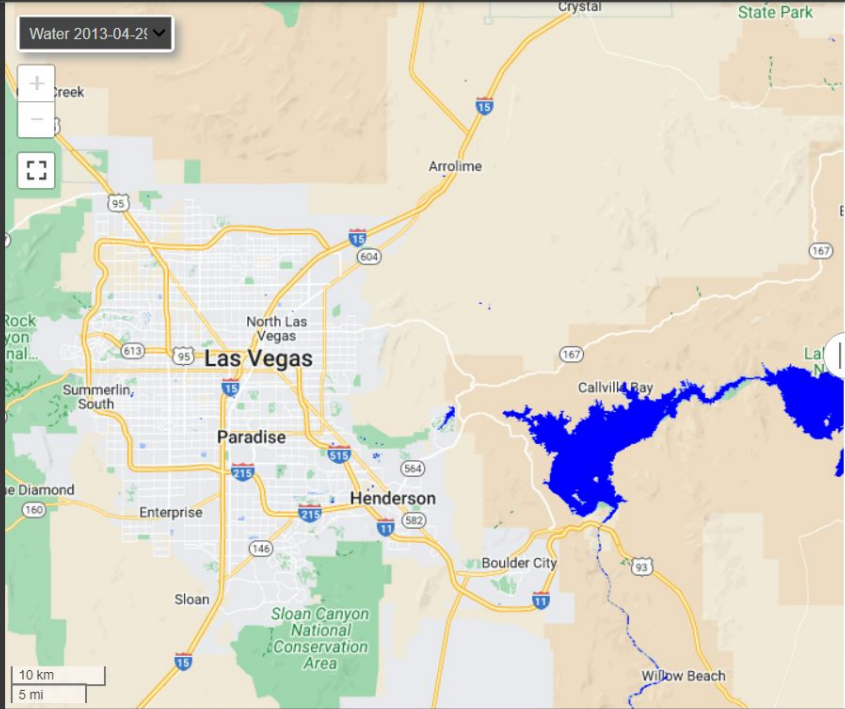
Create a split-panel map to visualize results

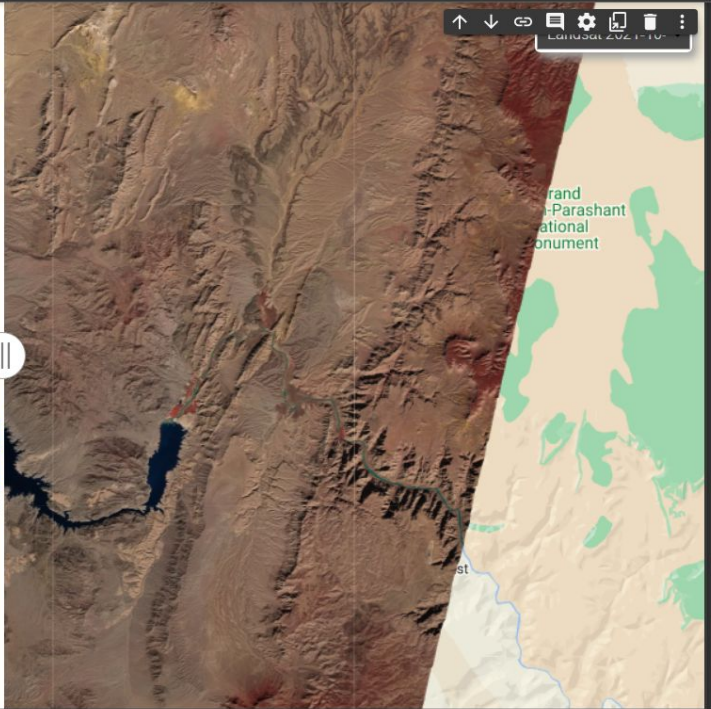
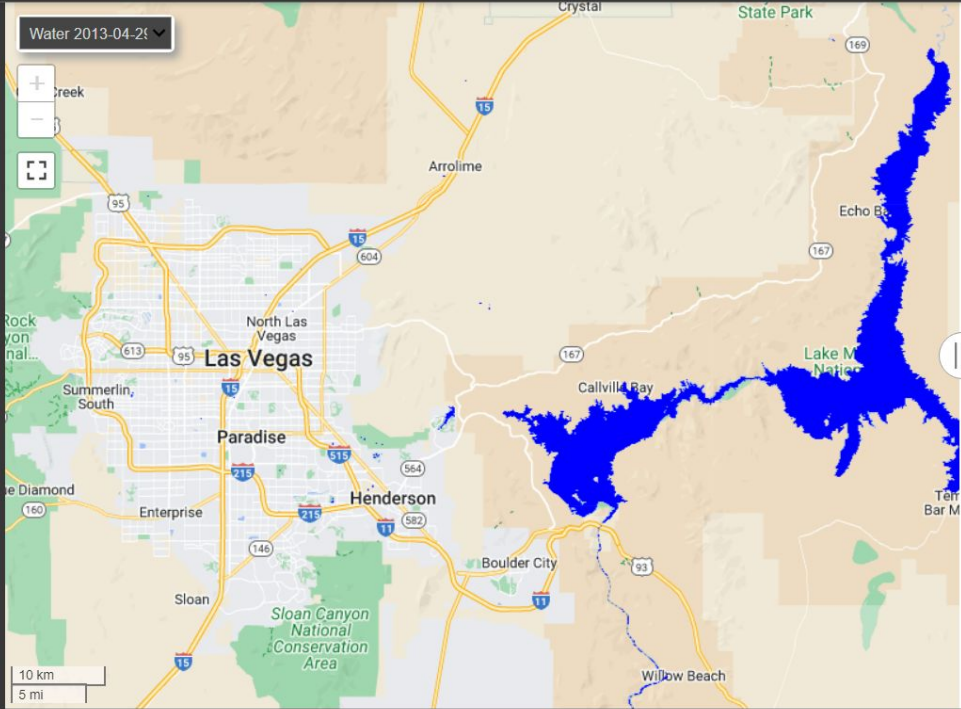
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11:09 AM
3/26/2023





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colab.research.google.com/drive/1phseM05Bm5ApZbbihzKcPAmNPi0aapAE#scrollTo=d4CC0siB7zrl

colab

Copy of surface_water_mapping.ipynb

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RAM Disk

Map

Water 2013-04-21

Water 2013-04-29

Water 2013-05-31

Water 2013-10-06

Water 2013-10-22

Water 2014-05-02

Water 2014-06-03

Water 2014-07-21

Water 2014-09-23

Water 2014-11-10

Water 2015-07-24

Water 2015-10-12

Water 2016-07-10

Water 2016-09-12

Water 2017-05-26

Water 2017-06-27

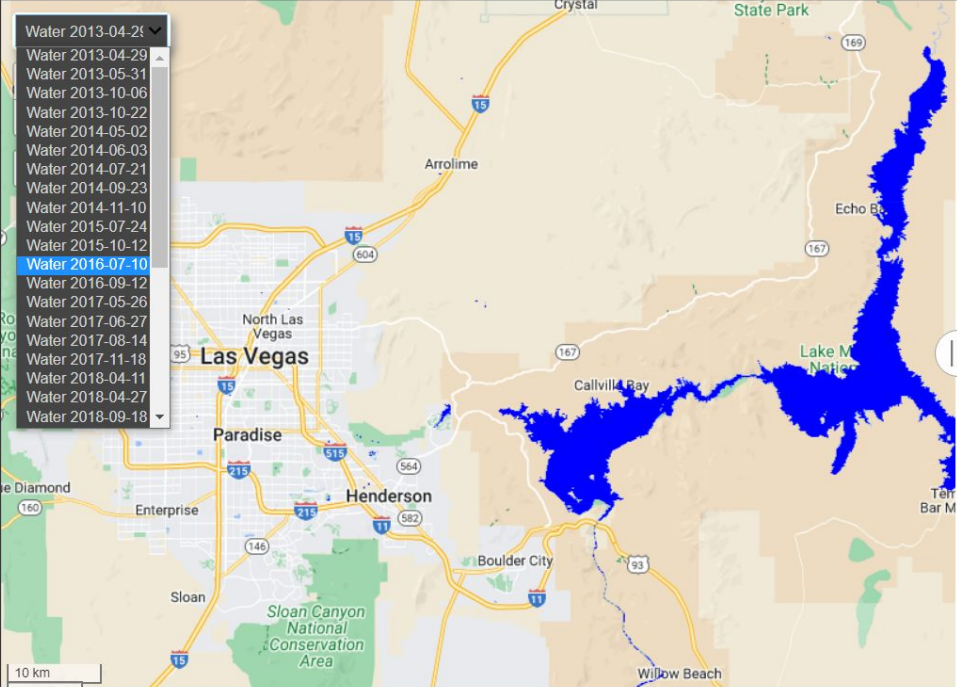
Water 2017-08-14

Water 2017-11-18


Water 2018-04-11

Water 2018-04-27

Water 2018-09-18



Landsat 2021-10-



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My work on saving image data for future models



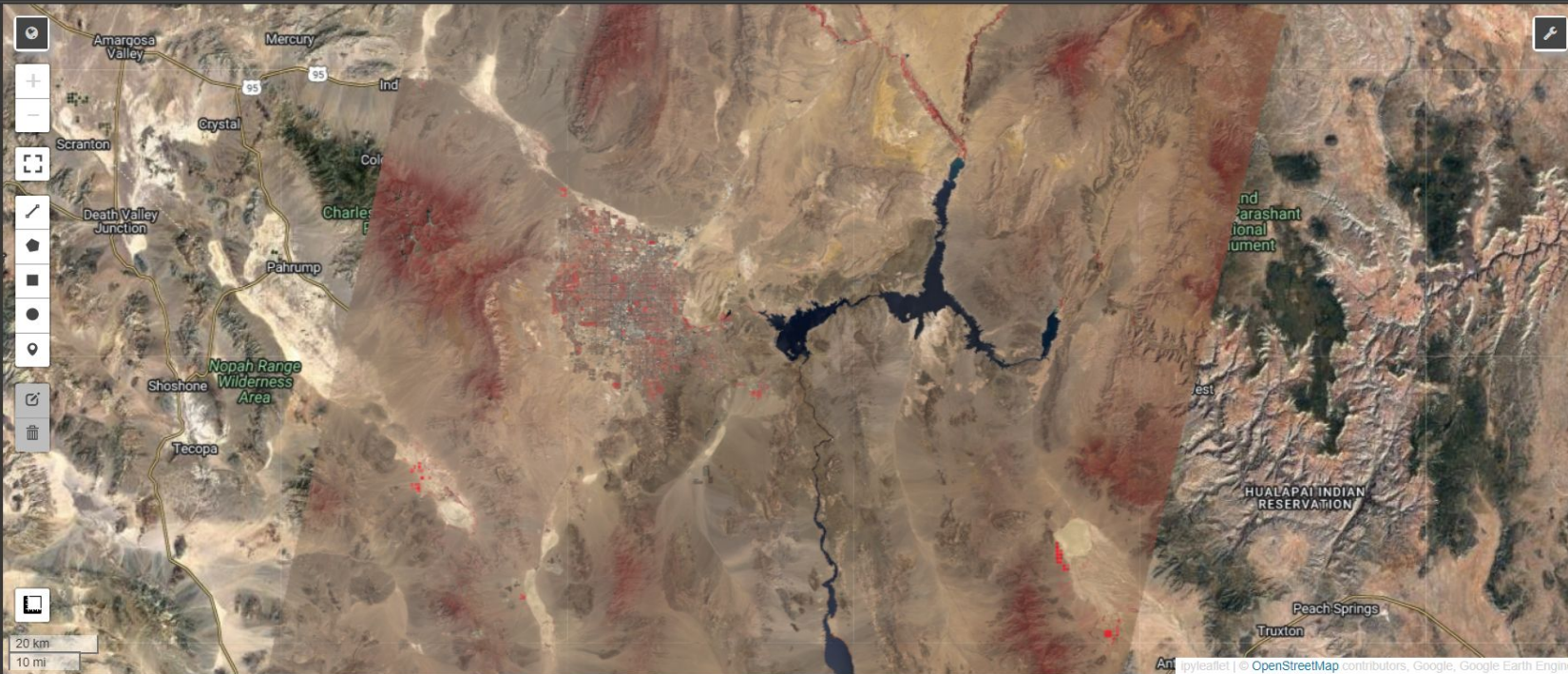
Lake Mead Clean.ipynb

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RAM 720 Disk



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Temps drop

11:18 AM
3/26/2023



Lake Mead Clean.ipynb ☆

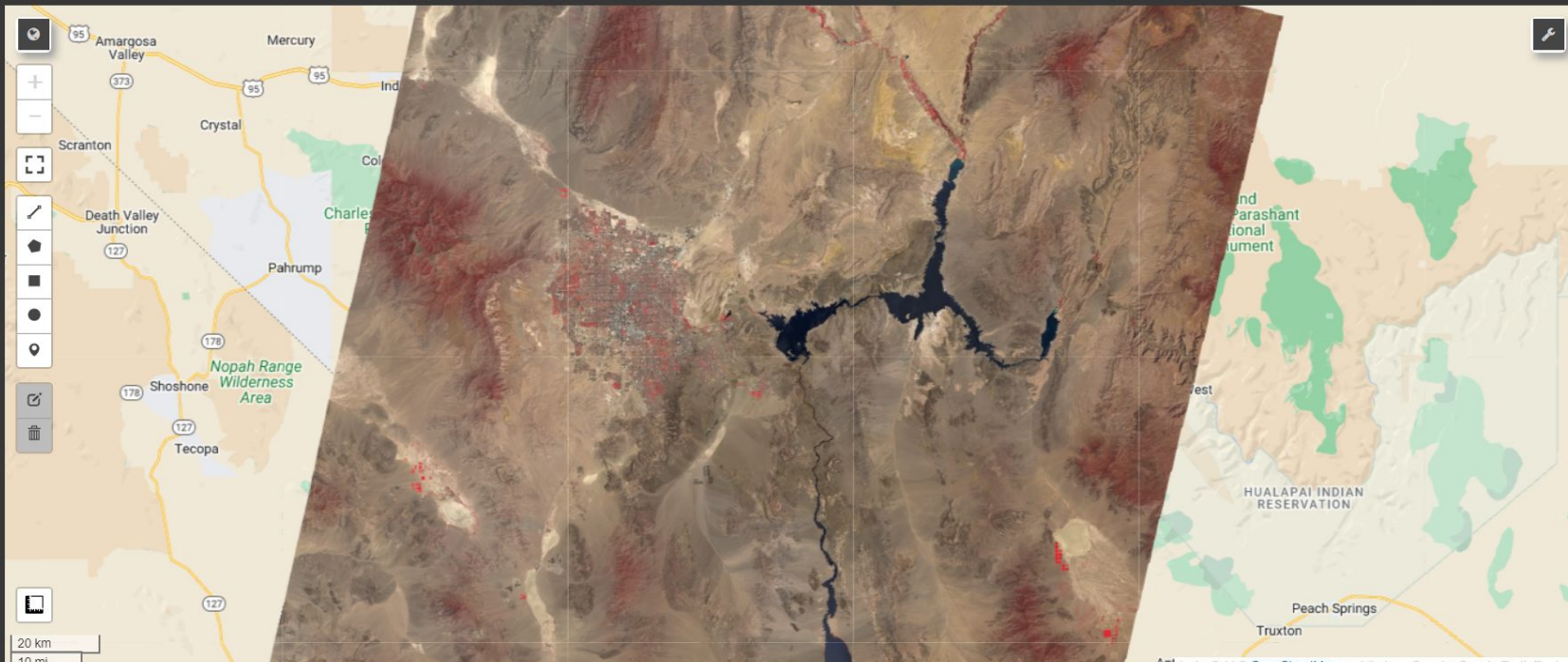
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RAM 100% Disk 100%

[17] Map



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RAM 852 MB Disk 1.2 GB



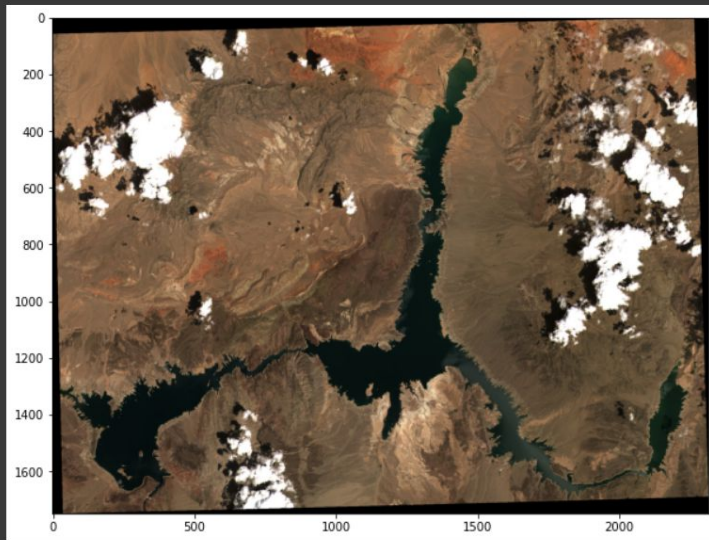
result.shape

(1749, 2317, 3)

+ Code + Text



```
[30] plt.figure(figsize = (10,10))  
plt.imshow(result)  
plt.show()
```



2s completed at 11:27 AM



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✓ RAM 919 MB Disk 1.2 GB

✓ 2s

```
[33] data = np.array(data.tolist())
```

{x} ✓ 2s

```
[34] plt.figure(figsize = (10,10))  
plt.imshow(data)  
plt.show()
```



✓ 2s completed at 11:32 AM



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