

ASSIGNMENT

TEMPERATURE TIME SERIES CHART GOOGLE EARTH ENGINE

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Temperature Time Series Code Screen Shot

```
Digital Earth Class 1 *  Get Link  Save  Run  Reset  Apps  ⚙️
▶ var Islamabad: Feature 0 (Point, 1 property) ⚙️
▶ var Lahore: Feature 0 (Point, 1 property) ⚙️
▶ var Swat: Feature 0 (Point, 1 property) ⚙️
1
2 //FeatureCollection different regions of Pakistan.
3 var regions = ee.FeatureCollection([
4   Islamabad,
5   Lahore,
6   Swat
7 ]);
8
9 // Landsat 8 brightness temperature data for 3 year.
10 var temperature_5years = ee.ImageCollection('LANDSAT/LC08/C01/T1_32DAY_TOA')
11   .filterDate('2019-12-25', '2022-12-01')
12   .select('B11');
13 // Converting Kelvin Temperature to Celcius
14 var tempcelcius = temperature_5years.map(function(img) {
15   return img
16     .subtract(273.15)
17     .copyProperties(img, ['system:time_start']);
18 });
19
20 // Create a time series chart.
21 var tempTimeSeries = ui.Chart.image.seriesByRegion(
22   tempcelcius, regions, ee.Reducer.mean(), 'B11', 200, 'system:time_start', 'label')
23   .setChartType('ScatterChart')
24   .setOptions({
25     title: 'Temperature over time in different cities of Pakistan',
26     vAxis: {title: 'Temperature (Celsius)'},
27     hAxis: {title: 'Year-Month'},
28     lineWidth: 2,
29     pointSize: 4,
30     series: {
31       0: {color: 'EA0D68'}, // Pink
32       1: {color: '0DF3B1'}, // light green
33       2: {color: '053ADE'} // Dark blue
34     }
35   });
36 // Display.
37 print(tempTimeSeries);
```

Temperature Time Series Code

```
//FeatureCollection different regions of Pakistan.
```

```
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```

```
  Islamabad,
```

```
  Lahore,
```

```
  Swat
```

```
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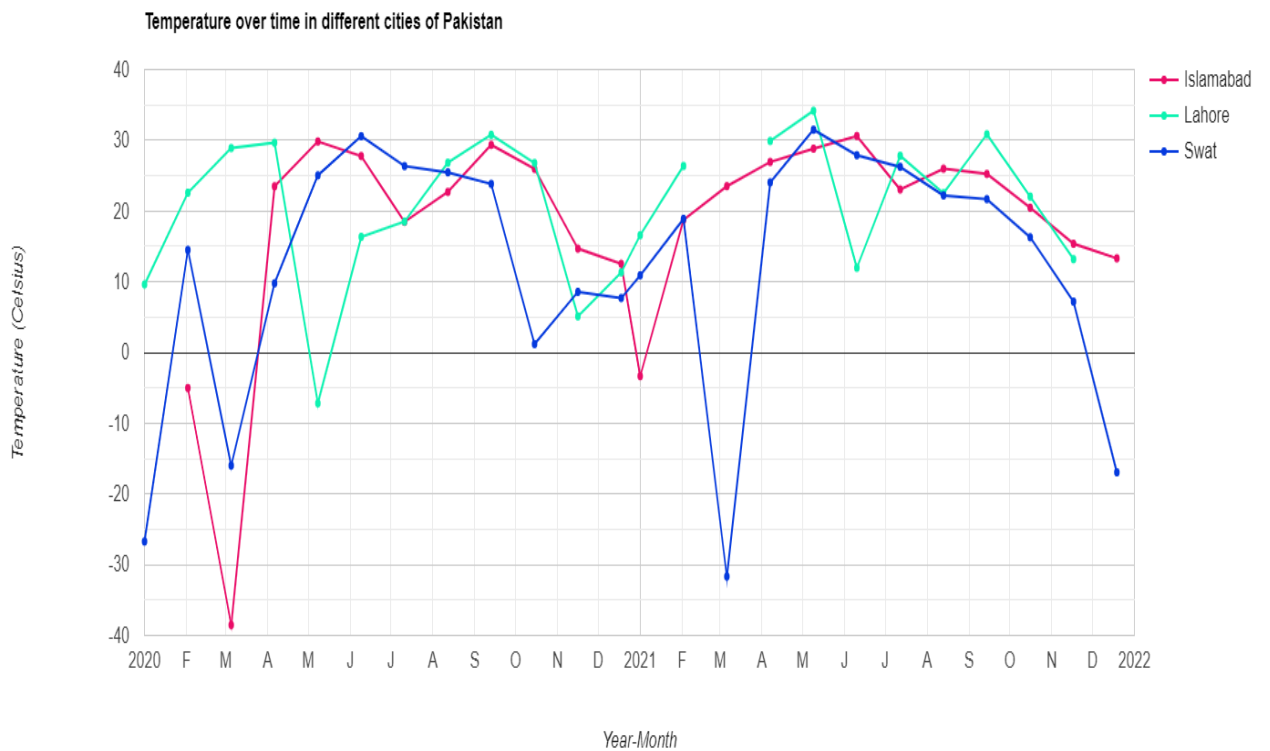
```
});
```

```
// Display Chart .
```

```
print(tempTimeSeries);
```

Time Series Chart

Chart Shows Temperature in different region of Pakistan over the past three years



CODE Link

<https://code.earthengine.google.com/691c8fb6ece4178ac63ed9f365ede137>