

# Jeremy — PS 7 — 2025-02-11

## EIWL3 Sections 18 and 19

I had repeated issues with timeouts when downloading GeoGraphics. So you will see some of those failures below.

```
In[1]:= GeoDistance[New York City CITY ..., ✓, London CITY ..., ✓]
```

```
Out[1]= 5558.2 km
```

```
In[2]:= GeoDistance[New York City CITY ..., ✓, London CITY ..., ✓] /
```

```
GeoDistance[New York City CITY ..., ✓, San Francisco CITY ..., ✓]
```

```
Out[2]= 1.35109
```

```
In[3]:= UnitConvert[GeoDistance[Sydney CITY ..., ✓, Moscow CITY ..., ✓], "Kilometers"]
```

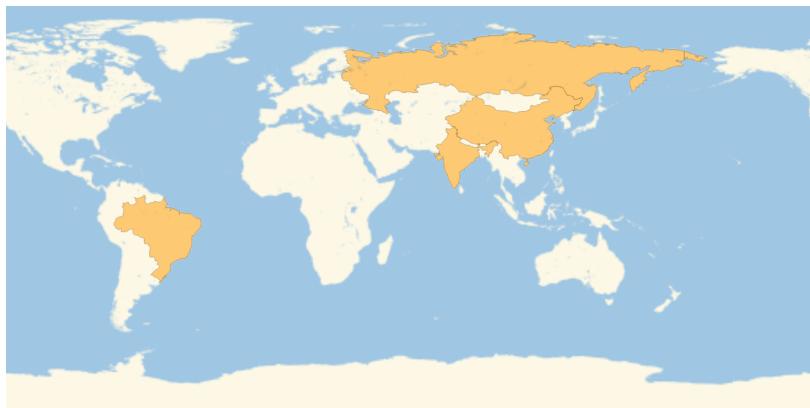
```
Out[3]= 14 387. km
```

```
In[4]:= GeoGraphics[United States COUNTRY ✓]
```



```
In[5]:= GeoListPlot[
```

```
{Brazil COUNTRY ..., ✓, Russia COUNTRY ✓, India COUNTRY ..., ✓, China COUNTRY ..., ✓}]
```



```
Out[5]=
```

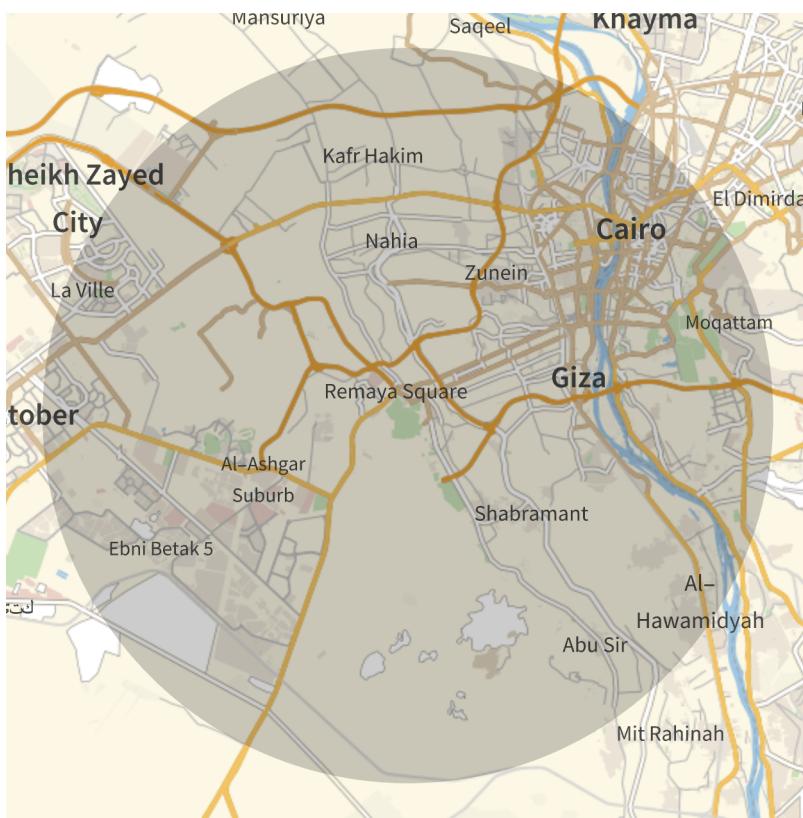
```
In[6]:= GeoGraphics[GeoPath[{New York City CITY ..., ✓, Beijing CITY ..., ✓}]]
```

GeoServer: Unable to download one or more vector tiles.

This is the timeout issue. I worked around it by doing a shorter path.

```
Out[6]=
```

In[7]:= **GeoGraphics**[**GeoDisk**[ Great Pyramid of Giza BUILDING ...,  ,  10 mi  ]]



Out[7]=

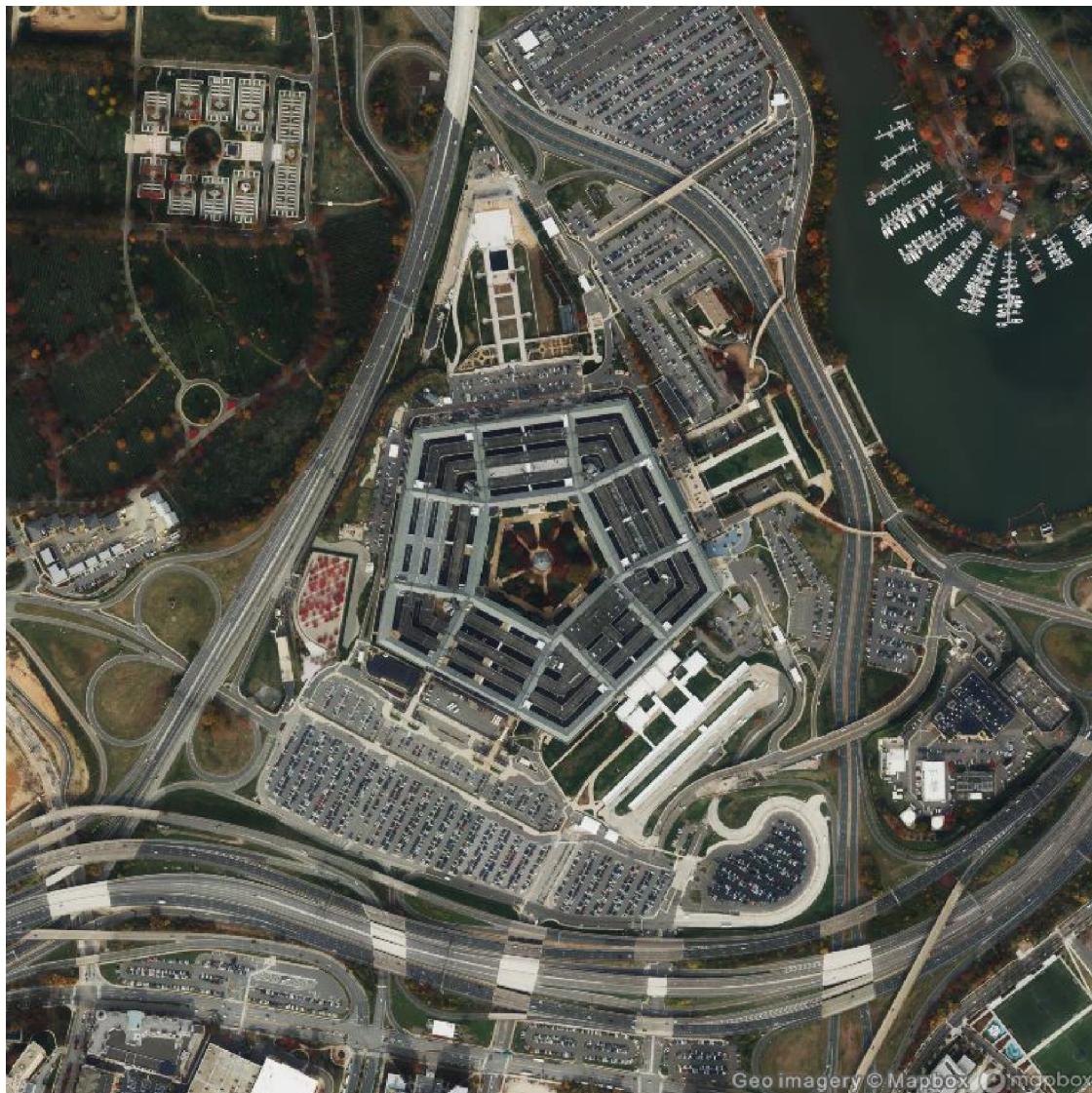
```
In[8]:= GeoGraphics[GeoDisk[New York City CITY ..., ...],  
GeoDistance[New York City CITY ..., ...], San Francisco CITY ..., ...]]]
```

 **GeoServer:** Unable to download one or more vector tiles.

Same timeout issue. I worked around it by choosing a nearer city.

```
Out[8]=
```

In[9]:= `GeoImage[GeoDisk["The Pentagon BUILDING", ..., checked, ..., 0.4 mi, checked]]`



Out[9]=

In[10]:= `GeoNearest["Country", GeoPosition[GeoPosition["NorthPole"], ..., checked], 5]`

Out[10]=

{`Greenland`, `Canada`, `Russia`, `Svalbard`, `United States`}

In[11]:= `Table[Part[GeoNearest["Country", GeoPosition[{45, 0}], 3], n]["Flag"], {n, 3}]`

Out[11]=



In[12]:= `GeoListPlot[GeoNearest["Volcano", Rome CITY ..., 25]]`

Out[12]=



In[13]:= `(GeoPosition[New York City CITY ...] [1] - GeoPosition[Los Angeles CITY ...] [1]) [1]`

Out[13]=

6.64488

## Chapter 19

In[14]:= `Now - DateObject[{1900, 1, 1}]`

Out[14]=

45 698. days

In[15]:= `DayName[DateObject[{2000, 1, 1}]]`

Out[15]=

Saturday

In[16]:= `Now - 100 000 days`

Out[16]=

Fri 30 Apr 1751 13:34:14 GMT-8

In[17]:= **LocalTime** [ **Delhi CITY** **...** **✓** ]

Out[17]=

Thu 13 Feb 2025 03:04:14 GMT+5.5

In[18]:= **Sunset[Here, Now] - Sunrise[Here, Now]**

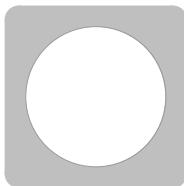
Out[18]=

-13.141 h

OOPS. Think about why this happened. Sunrise is later than sunset.

In[19]:= **MoonPhase[Now, "Icon"]**

Out[19]=



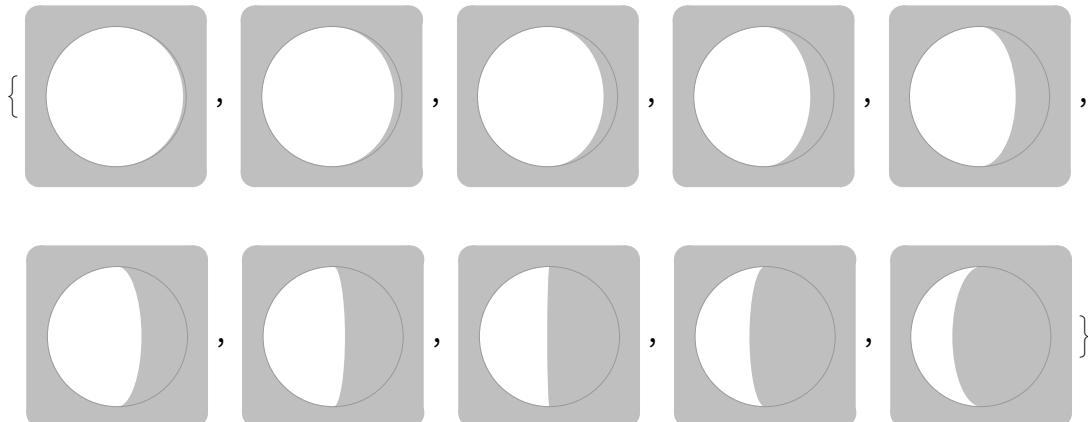
In[20]:= **Table[MoonPhase[Now + n days, "Icon"], {n, 10}]**

Out[20]=

{0.982484, 0.94806, 0.897369, 0.832827,  
0.756905, 0.672035, 0.580623, 0.485152, 0.388352, 0.293405}

In[21]:= **Table[MoonPhase[Now + n days, "Icon"], {n, 10}]**

Out[21]=



In[22]:= **Sunrise[New York City CITY, Today] - Sunrise[London CITY, Today]**

Out[22]=

-19.4111 h

OOPS again. See my solution for the explanation.

In[23]:= **UnitConvert[**

**Now - DateObject[Apollo 11 MANNED SPACE MISSION [lunar landing date], "Years"]**

Out[23]=

55.6056 yr

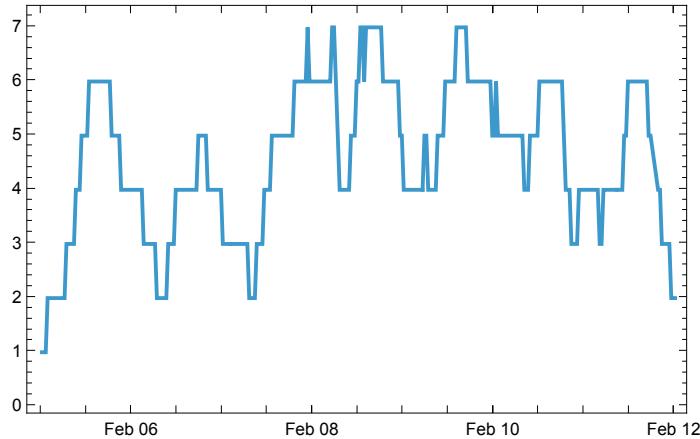
In[24]:= `AirTemperatureData[Eiffel Tower BUILDING ..., ✓, Noon Yesterday]`

Out[24]=

6. °C

In[25]:= `DateListPlot[AirTemperatureData[Eiffel Tower BUILDING ..., ✓, {Today - 1 week, Today}]]`

Out[25]=



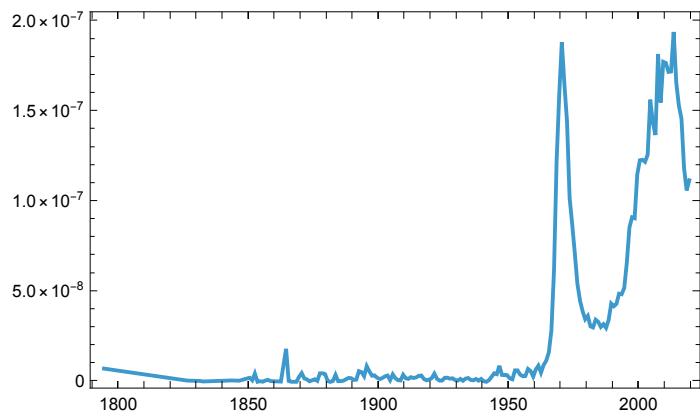
In[26]:= `AirTemperatureData[Los Angeles CITY ..., ✓, Now] - AirTemperatureData[New York City CITY ..., ✓, Now]`

Out[26]=

10.6 ° C

In[27]:= `DateListPlot[WordFrequencyData["groovy", "TimeSeries"]]`

Out[27]=



In[28]:= `United Kingdom COUNTRY ..., ✓ [Dated["Population", 2000]] - United Kingdom COUNTRY ..., ✓ [Dated["Population", 1900]]`