

Hi Harper. Some comments worth noting on pp. 7 and 8. Looks good. 8/8. ~Brian

Harper — PS 7 — 2025-02-11

EIWL3 Sections 18 and 19

I had repeated issues with timeouts when downloading GeoGraphics. Because of that, I did not re-execute your PS7 notebooks like I usually do (to check for errors upon re-execution). Instead, I just PDF'd them the way that you gave them to me.

Section 18

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

```
Out[•]=  
3453.71 mi
```

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

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

```
Out[•]=  
1.35109
```

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

```
Out[•]=  
14 387. km
```

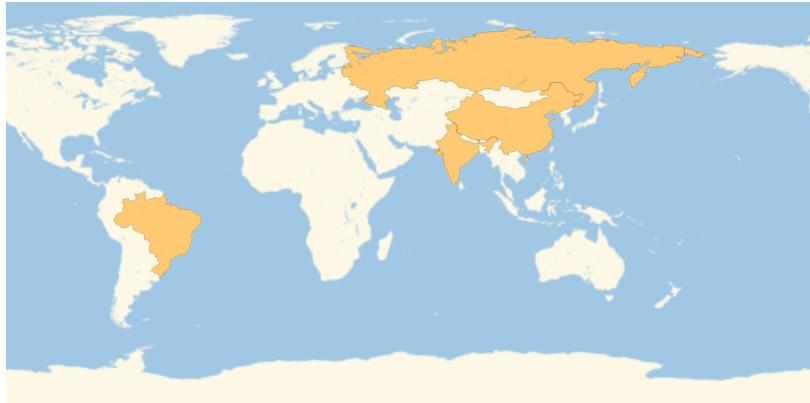
```
In[•]:= GeoGraphics[United States COUNTRY ✓]
```

```
Out[•]=
```



```
In[•]:= GeoListPlot[  
  {Brazil COUNTRY ..., ✓, Russia COUNTRY ✓, India COUNTRY ..., ✓, China COUNTRY ..., ✓}]
```

Out[•]=



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

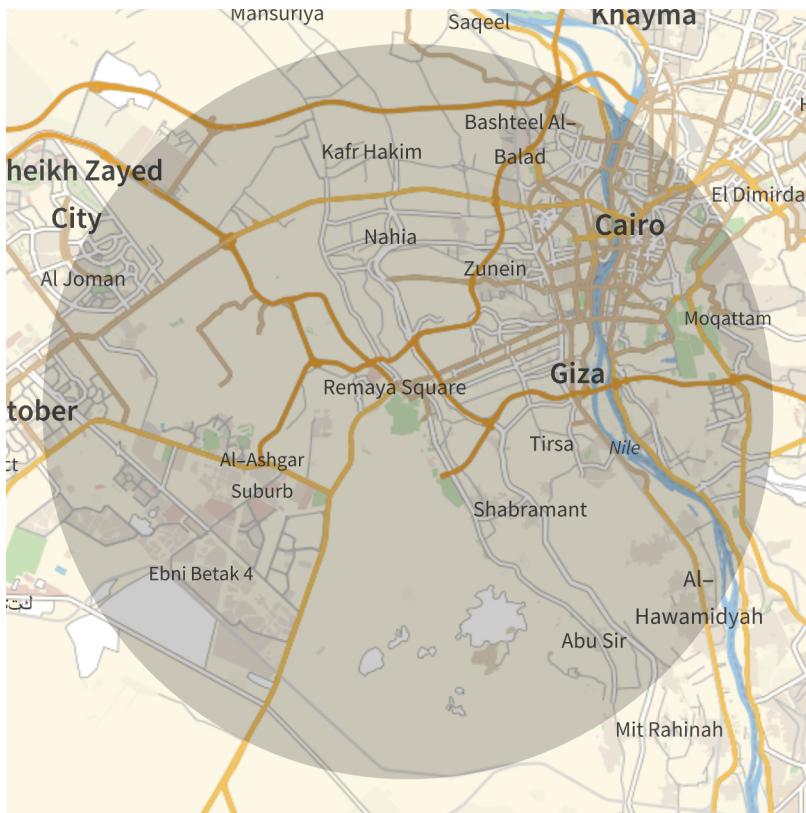
GeoServer: Unable to download one or more vector tiles.

Out[•]=

To avoid this timeout, I chose a shorter path for 18.6.

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

Out[]=



```
In[4]:= GeoGraphics[GeoDisk[New York City CITY, GeoDistance[New York City CITY, San Francisco CITY]]]
```

GeoServer: Unable to download one or more vector tiles.

```
Out[4]=
```

To avoid this timeout, I chose Amherst as the 2nd city.

In[•]:= **GeoImage[GeoDisk[The Pentagon BUILDING, 0.4 mi]]**

Out[•]=



In[•]:= **GeoNearest["Country", GeoPosition["NorthPole"], 5]**

Out[•]=

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

In[•]:= **EntityValue[GeoNearest["Country", GeoPosition[{45, 0}], 3], "Flag"]**

Out[•]=



In[6]:= GeoListPlot[GeoNearest["Volcano", Rome CITY , 25]]

Out[6]=



In[7]:= (GeoPosition[New York City CITY] [[1]] [[1]]) - (GeoPosition[Los Angeles CITY] [[1]] [[1]])

Out[7]=

6.64488

Interesting. The way you did 18.13 lost the units (degrees).
Check out how I did it in my solution.

Section 19

In[8]:= Now -

Out[8]=

45 695. days

In[9]:= DayName[]

Out[9]=

Saturday

In[10]:= Now - 100 000 days

Out[10]=

In[•]:= LocalTime[Delhi CITY]

Out[•]=

Mon 10 Feb 2025 08:25:22 GMT+5.5

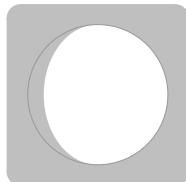
In[•]:= Sunset[Here, Today] - Sunrise[Here, Today]

Out[•]=

10.8187 h

In[•]:= MoonPhase[Sun 9 Feb 2025, "Icon"]

Out[•]=



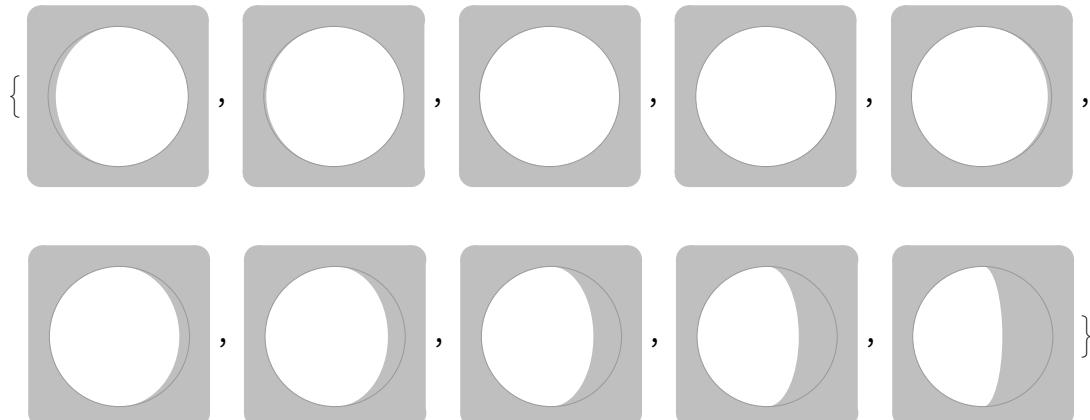
In[•]:= Table[MoonPhase[Today + x days], {x, 1, 10}]

Out[•]=

{0.943238, 0.981443, 0.998399, 0.994506,
0.971049, 0.929957, 0.87353, 0.804225, 0.7245, 0.636771}

In[•]:= Table[MoonPhase[Today + x days, "Icon"], {x, 1, 10}]

Out[•]=



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

Out[•]=

-4.52766 h

OOPS! Should get a positive number! To see what went wrong, see p. 8 of my solution.

In[•]:= UnitConvert[Now - DateObject[Apollo 11 MANNED SPACE MISSION [lunar landing date]], "Years"]

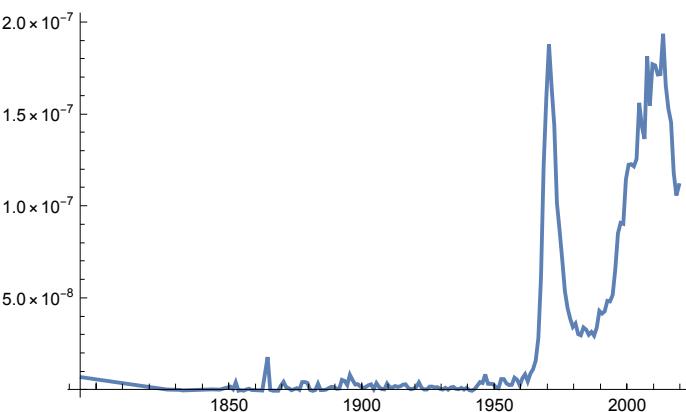
Out[•]=

55.598 yr

```
In[1]:= AirTemperatureData[Eiffel Tower BUILDING, Sat 8 Feb 2025 12:00:00 GMT-7, ✓]
Out[1]= 42.8 °F

In[2]:= Table[AirTemperatureData[Eiffel Tower BUILDING, ..., ✓, Today - x days], {x, 1, 10}]
Out[2]= {(39.2 to 44.6) °F, (35.6 to 44.6) °F, (35.6 to 41.) °F,
(33.8 to 42.8) °F, (30.2 to 37.4) °F, (28.4 to 46.4) °F,
(26.6 to 44.6) °F, (30.2 to 44.6) °F, (32. to 44.6) °F, (35.6 to 46.4) °F}

In[3]:= AirTemperatureData[Los Angeles CITY, ..., ✓, Now] -
AirTemperatureData[New York City CITY, ..., ✓, Now]
Out[3]= 21.9 °F

In[4]:= ListLinePlot[WordFrequencyData["groovy", "TimeSeries"]]
Out[4]= 
```

```
In[5]:= United Kingdom COUNTRY, ..., ✓ [Dated["Population", 2000]] -
United Kingdom COUNTRY, ..., ✓ [Dated["Population", 1900]]
Out[5]= 20 759 628 people
```