

Because timezone bugs can be notorious please check out my comment on p. 6. ~Brian 8/8

Walker — 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.

Chapter 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 ..., ✓], km ..., ✓]
```

```
Out[•]=  
14 387. km
```

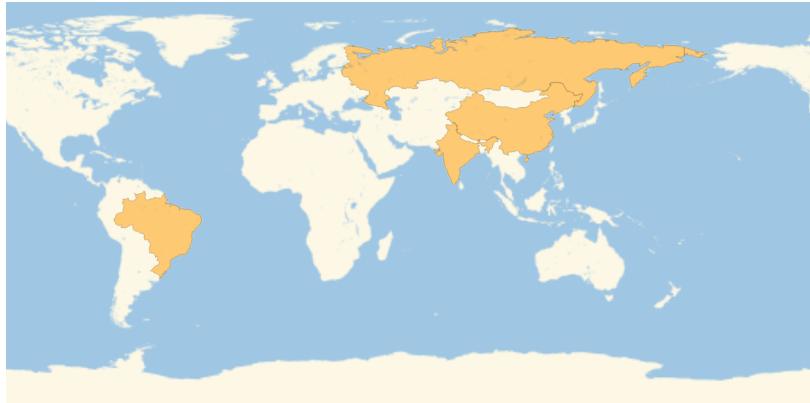
```
In[•]:= GeoGraphics[United States COUNTRY ✓]
```

```
Out[•]=
```



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

Out[•]=



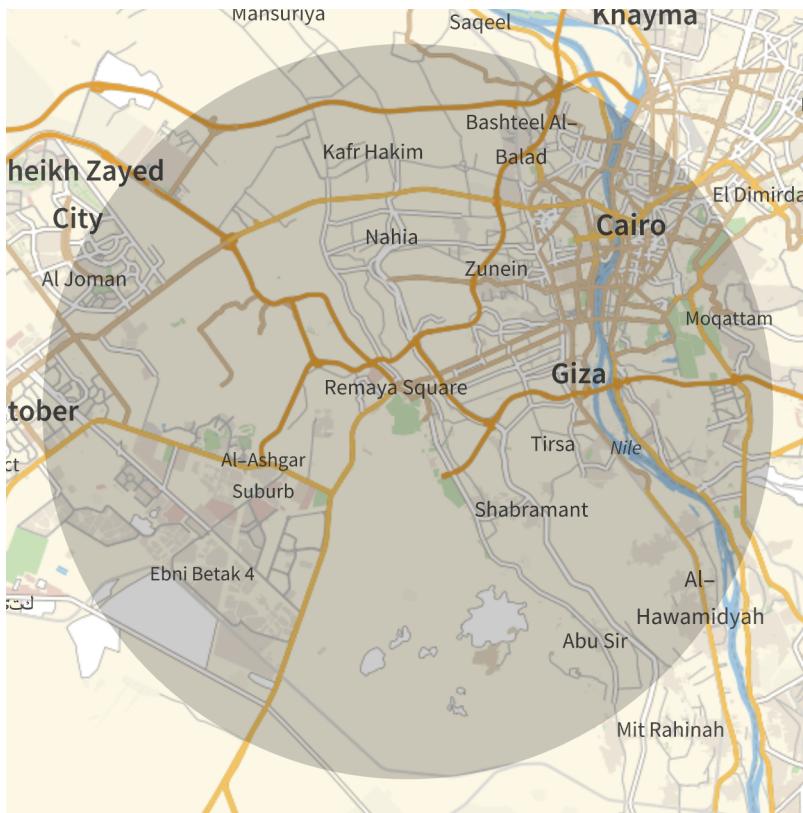
```
In[•]:= GeoGraphics[GeoPath[{New York City CITY ..., ✓, Beijing CITY ..., ✓}]]
```

Out[•]=



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

Out[•]=



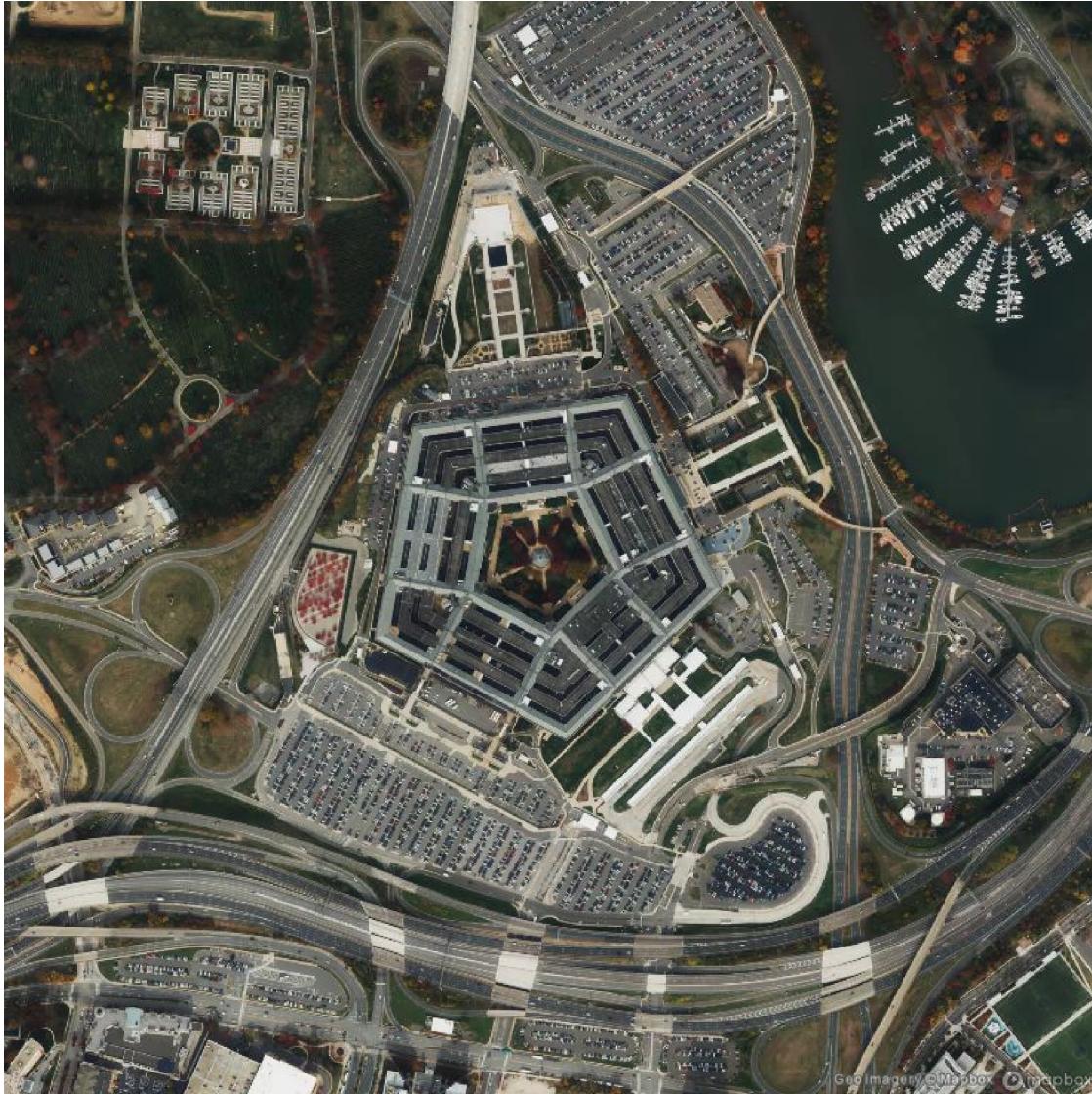
In[•]:= GeoGraphics[GeoDisk[New York City CITY ..., ..., , GeoDistance[New York City CITY ..., ..., San Francisco CITY ..., ...,]]]]

Out[•]=



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

Out[•]=



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

{, , , , }

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

Out[•]=



```
In[1]:= GeoListPlot[GeoNearest["Volcano", GeoPosition[Rome CITY], 25]]
```

Out[1]=



```
In[2]:= EntityValue[New York City CITY ..., "Latitude"] -  
EntityValue[Los Angeles CITY ..., "Latitude"]
```

Out[2]=

6.64488°

Chapter 19

```
In[1]:= UnitConvert[Now - Mon 1 Jan 1900 ..., days]
```

Out[1]=

45 696. days

```
In[2]:= DayName[Sat 1 Jan 2000 ...]
```

Out[2]=

Saturday

In[1]:= Now - 100 000 days

Out[1]=

Wed 28 Apr 1751 21:39:16 GMT-7

In[2]:= LocalTime [Delhi CITY]

Out[2]=

Tue 11 Feb 2025 10:10:17 GMT+5.5

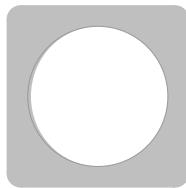
In[3]:= Sunset[Here, Today] - Sunrise[Here, Today]

Out[3]=

10.7741 h

In[4]:= MoonPhase[Now, "Icon"]

Out[4]=



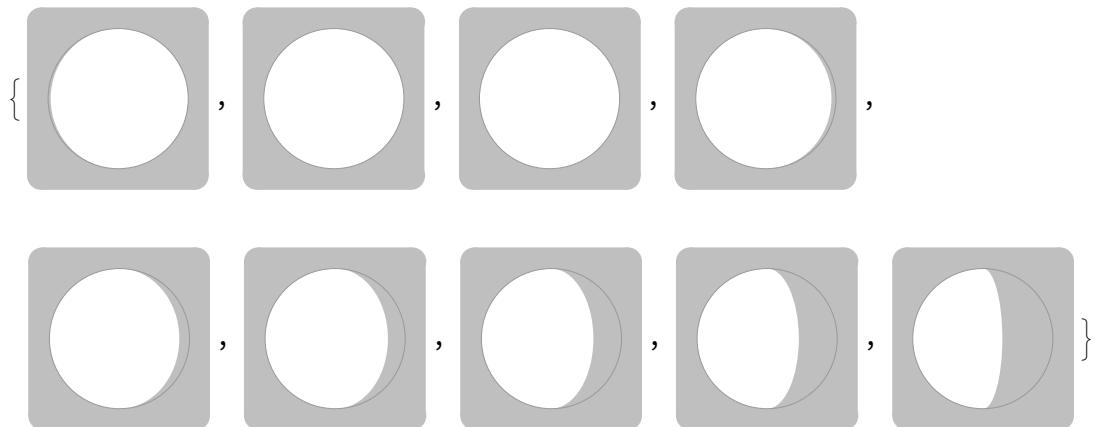
In[5]:= Table[MoonPhase[n], {n, DayRange[Today, Wed 19 Feb 2025]}]]

Out[5]=

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

In[6]:= Table[MoonPhase[n, "Icon"], {n, DayRange[Tomorrow, Wed 19 Feb 2025]}]]

Out[6]=



In[7]:= Sunrise[London CITY , Today] - Sunrise[New York City CITY , Today]

Out[7]=

-4.53767 h

Oops! You have a little bug here. See p. 8 of my solution. You want Sunrise in NYC - Sunrise in London, and you also have to be careful what day the software is picking. Since London is 7 hours ahead of Deep Springs and 8 hours ahead of California at this time of year, it may errantly pick tomorrow's sunrise in London!

```
In[1]:= UnitConvert[
Now - DateObject[ Apollo 11 MANNED SPACE MISSION [ lunar landing date ] ✓ ], yr ... ✓ ]
Out[1]= 55.601 yr
```



```
In[2]:= AirTemperatureData[ Eiffel Tower BUILDING ..., Sun 9 Feb 2025 12:00:00 GMT-7 ✓ ]
Out[2]= 42.8 °F
```



```
In[3]:= ListLinePlot[
AirTemperatureData[ Eiffel Tower BUILDING ..., { DatePlus[ Today, - 1 wk ] ✓, Today } ] ]
Out[3]=
```



```
In[4]:= AirTemperatureData[ Los Angeles CITY ..., Now ] -
AirTemperatureData[ New York City CITY ..., Now ]
Out[4]= 24. °F
```



```
In[5]:= ListLinePlot[ WordFrequencyData["groovy", "TimeSeries"] ]
Out[5]=
```

```
In[8]:= London CITY [Dated["Population", 2000]] -  
London CITY [Dated["Population", 1900]]  
Out[8]= 945 542 people
```