

# Tahm – 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[1]:= GeoDistance[New York City CITY, London CITY]
Out[1]= 3453.71 mi

In[2]:= GeoDistance[New York City CITY, London CITY]/GeoDistance[New York City CITY, San Francisco CITY]
Out[2]= 1.35109

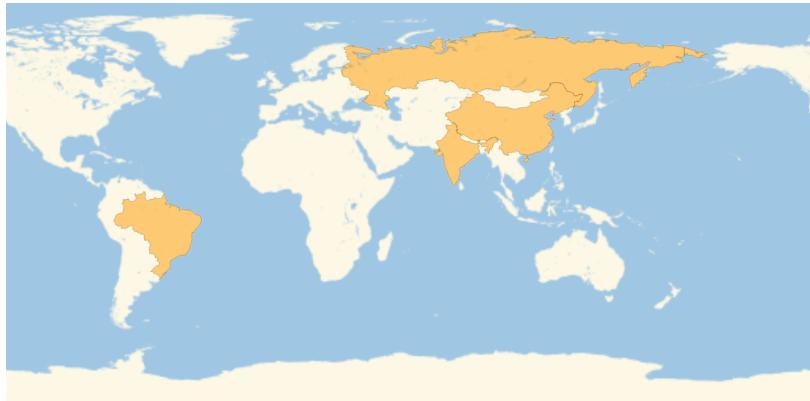
In[3]:= UnitConvert[GeoDistance[New York City CITY, London CITY], km]
Out[3]= 5558.2 km

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



```
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[•]=
```

In[1]:= **GeoGraphics**[**GeoDisk**[**GeoPosition**[{Egyptian Pyramids of Giza BUILDINGS}], 10 mi]]

GeoDisk: GeoPosition[ Number of points: 8 Dimensions: {1, 8}] is not a valid center location.

Out[1]=



In[2]:= **GeoGraphics**[**GeoDisk**[New York City CITY, **GeoDistance**[New York City CITY, San Francisco CITY]]]

GeoServer: Unable to download one or more vector tiles.

Out[2]=

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

Out[•]=



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

In[•]:= {Greenland COUNTRY, Canada COUNTRY, Russia COUNTRY, Svalbard COUNTRY, United States COUNTRY}

Out[•]=

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

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

Out[•]=



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

Out[1]=



```
In[2]:= GeoPosition[New York City CITY][[1, 1]] - GeoPosition[Los Angeles CITY][[1, 1]]
```

Out[2]=

6.64488

# Chapter 19

```
In[1]:= Length[DayRange[Mon 1 Jan 1900, Now]]
```

Out[1]=

45 698

```
In[2]:= DayName[Mon 1 Jan 1900]
```

Out[2]=

Monday

```
In[3]:= Today - 100 000 yr
```

Out[3]=

Tue 11 Feb 97976 BC

In[•]:= LocalTime[Delhi CITY]

Out[•]=

Tue 11 Feb 2025 20:59:46 GMT+5.5

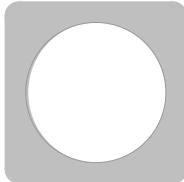
In[•]:= Sunset[Minneapolis CITY, Today] - Sunrise[Minneapolis CITY, Today]

Out[•]=

10.2741 h

In[•]:= MoonPhase[Today, "Icon"]

Out[•]=



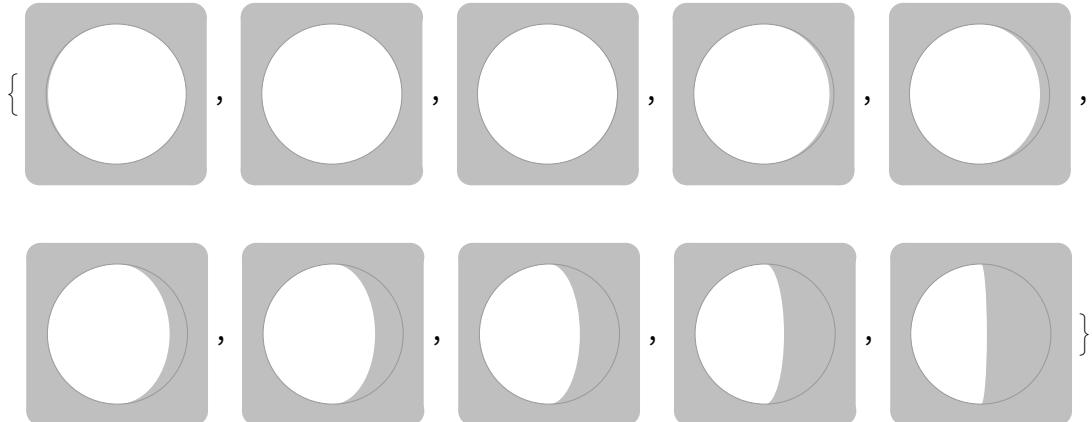
In[•]:= Table[MoonPhase[Today + x days], {x, 0, 9, 1}]

Out[•]=

{0.982229, 0.998567, 0.994059, 0.970017,  
0.928388, 0.871492, 0.801795, 0.721766, 0.633831, 0.540416}

In[•]:= Table[MoonPhase[Today + x days, "Icon"], {x, 0, 9, 1}]

Out[•]=



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

Out[•]=

4.55435 h

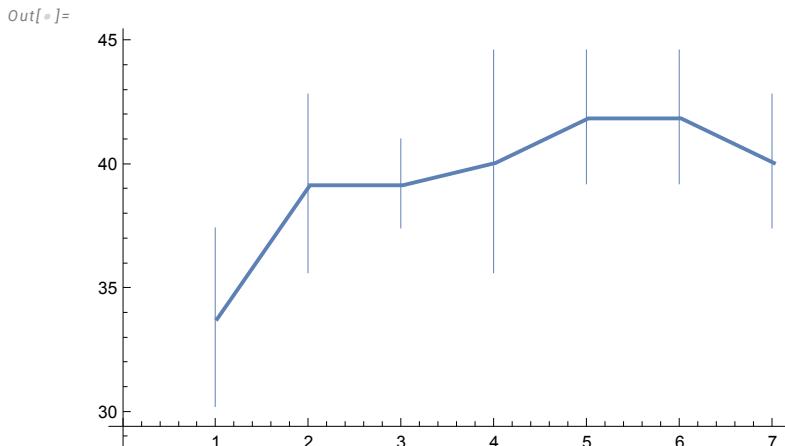
In[•]:= UnitConvert[Now - DateObject[Apollo 11 MANNED SPACE MISSION [lunar landing date]], "Years"]

Out[•]=

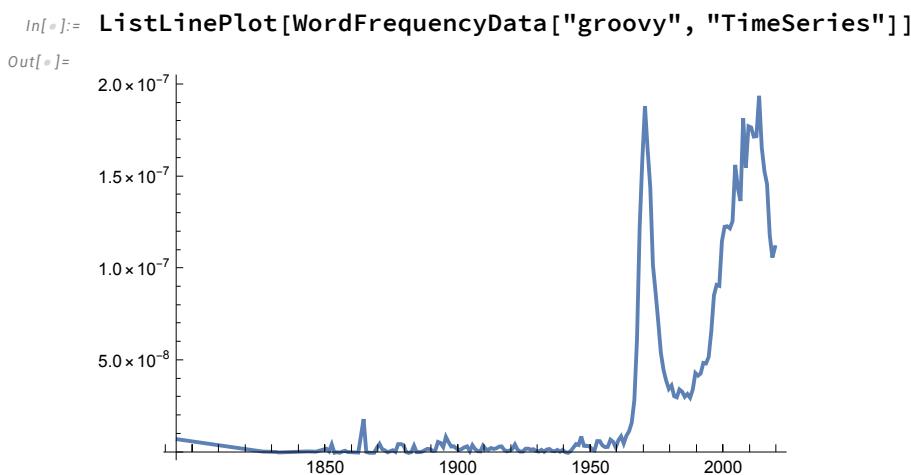
55.6022 yr

```
In[1]:= AirTemperatureData[Paris CITY, Mon 10 Feb 2025 12:00:00 GMT-7]
Out[1]= 41. °F

In[2]:= ListLinePlot[
  Table[AirTemperatureData[Eiffel Tower BUILDING, Tue 4 Feb 2025 + x days], {x, 0, 6}]]
```



```
In[3]:= AirTemperatureData[New York City CITY] - AirTemperatureData[Los Angeles CITY]
Out[3]= -20.2 ° F
```



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

