

Hexi – 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.

Exercises from EIWL3 Section 18

```
GeoDistance[New York City CITY, London CITY]
```

Out[*]=
3453.71 mi

```
GeoDistance[New York City CITY, London CITY]/
```

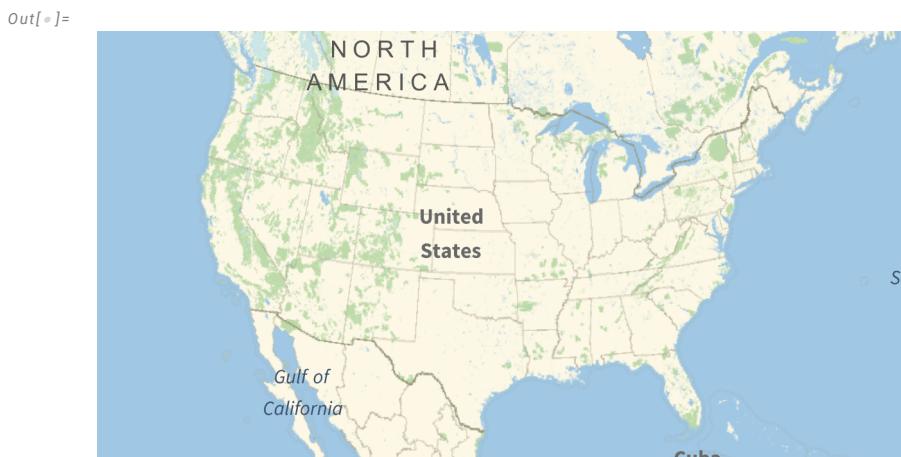
```
GeoDistance[New York City CITY, San Francisco CITY]
```

Out[*]=
1.35109

```
UnitConvert[GeoDistance[Sydney CITY, Moscow CITY], km]
```

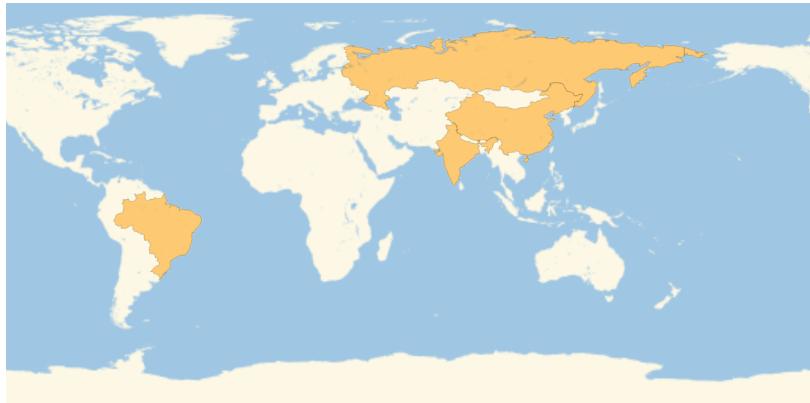
Out[*]=
14 387. km

```
GeoGraphics[United States COUNTRY]
```



```
GeoListPlot[{Brazil COUNTRY, Russia COUNTRY, India COUNTRY, China COUNTRY}]
```

Out[•]=



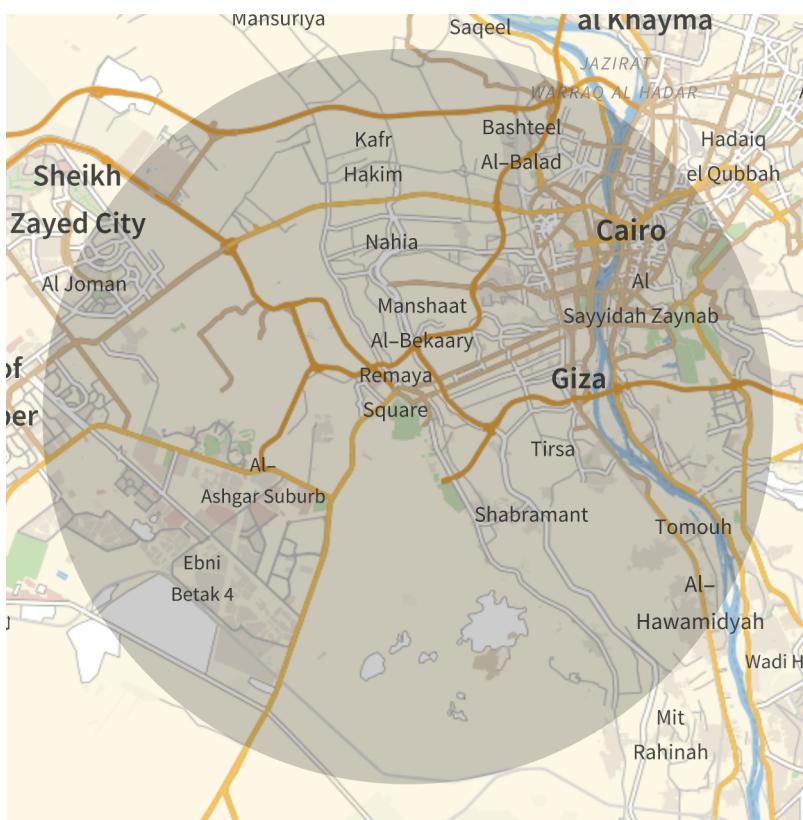
```
GEOGraphics[GeoPath[{New York City CITY, Beijing CITY}]]]
```

Out[•]=



GeoGraphics[GeoDisk[Great Pyramid of Giza BUILDING, 10 mi]]

Out[•]=



GeoGraphics[

GeoDisk[New York City CITY], GeoDistance[{New York City CITY, San Francisco CITY}]]]

Out[•]=



```
GeoImage[GeoDisk[The Pentagon BUILDING, 0.4 mi]]
```

Out[*]=



```
GeoNearest["Country", GeoPosition["NorthPole"], 5]
```

Out[*]=

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

Out[*]=

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

```
EntityValue[GeoNearest["Country", {45, 0}, 3], "Flag"]
```

Out[*]=



```
GeoListPlot[GeoNearest["Volcano", Rome CITY, 25]]
```

Out[*]=



```
Latitude[New York City CITY] - Latitude[Los Angeles CITY]
```

Out[*]=

6.64488°

Exercises from EIWL3 Section 18

Now - Mon 1 Jan 1900

Out[*]=

45 696. days

Out[*]=

45 696. days

DayName [Sat 1 Jan 2000]

Out[]=

Saturday

Out[]=

Saturday

Today - 100 000 days

Out[]=

Wed 28 Apr 1751

Out[]=

Wed 28 Apr 1751

LocalTime [Delhi CITY]

Out[]=

February 11, 2025 3:20 am GMT+5.5

Out[]=

February 11, 2025 3:20 am GMT+5.5

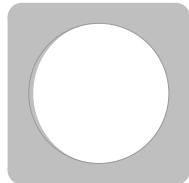
Sunset[Here, Today] - Sunrise[Here, Today]

Out[]=

10.0676 h

MoonPhase[Now, "Icon"]

Out[]=



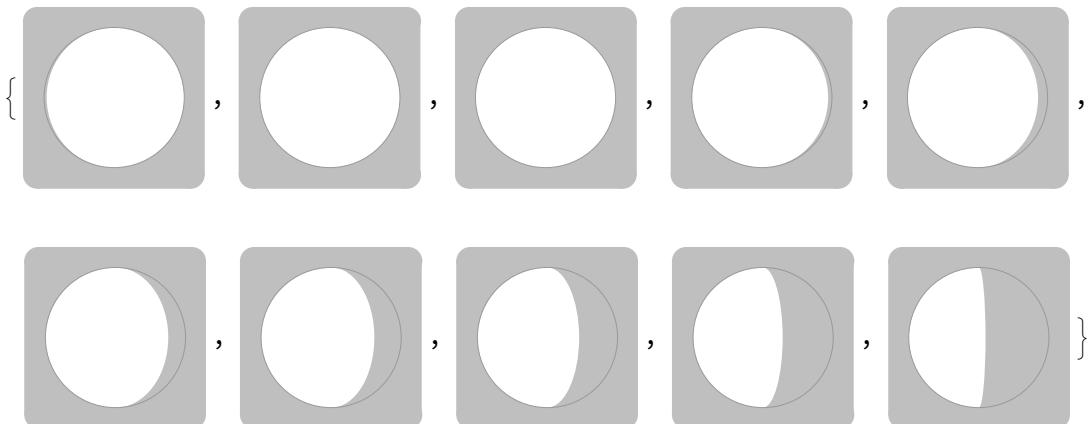
Table[MoonPhase[x], {x, Mon 10 Feb 2025, Thu 20 Feb 2025, 1 days}]

Out[]=

{0.941191, 0.980275, 0.998115, 0.99507, 0.972393,
0.931991, 0.876155, 0.807337, 0.727997, 0.640555, 0.547426}

```
Table[MoonPhase[x, "Icon"], {x, Tue 11 Feb 2025, Thu 20 Feb 2025, 1 days}]
```

Out[*#*]=



```
Sunrise[London CITY, Today] - Sunrise[New York City CITY, Today]
```

Out[*#*]=

-4.53767 h

```
UnitConvert[Today - DateObject[Apollo 11 MANNED SPACE MISSION [lunar landing date]], yr]
```

Out[*#*]=

$\frac{20\ 293}{365}$ yr

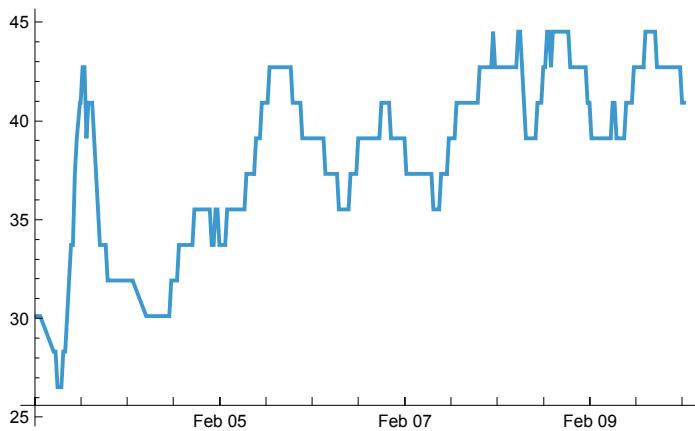
```
AirTemperatureData[Eiffel Tower BUILDING, February 9, 2025 12:00 pm GMT-6]
```

Out[*#*]=

42.8 °F

```
ListLinePlot[AirTemperatureData[Eiffel Tower BUILDING, {Mon 3 Feb 2025, Today}]]
```

Out[*#*]=



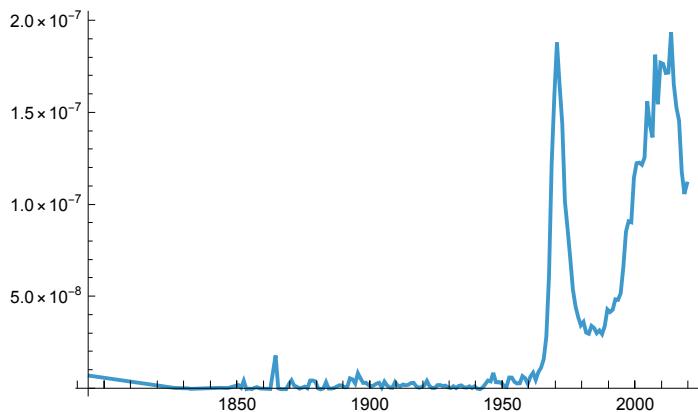
```
AirTemperatureData[New York City CITY, Now] - AirTemperatureData[Los Angeles CITY, Now]
```

Out[]=

-23.9 ° F

```
ListLinePlot[WordFrequencyData["groovy", "TimeSeries"]]
```

Out[]=



```
United Kingdom COUNTRY [Dated["Population", 2000]] -
```

```
United Kingdom COUNTRY [Dated["Population", 1900]]
```

Out[]=

20 759 628 people