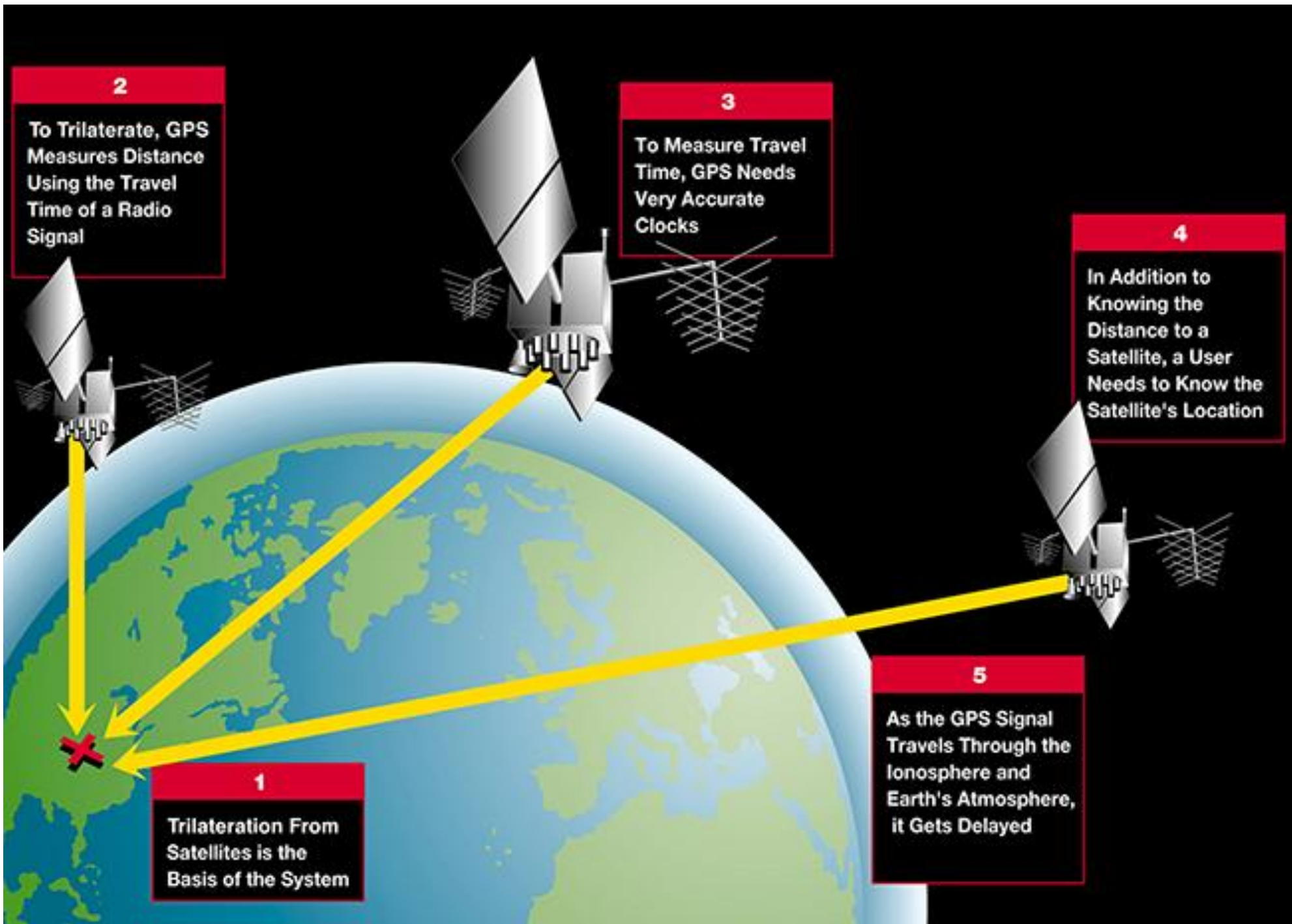


Where Am I?

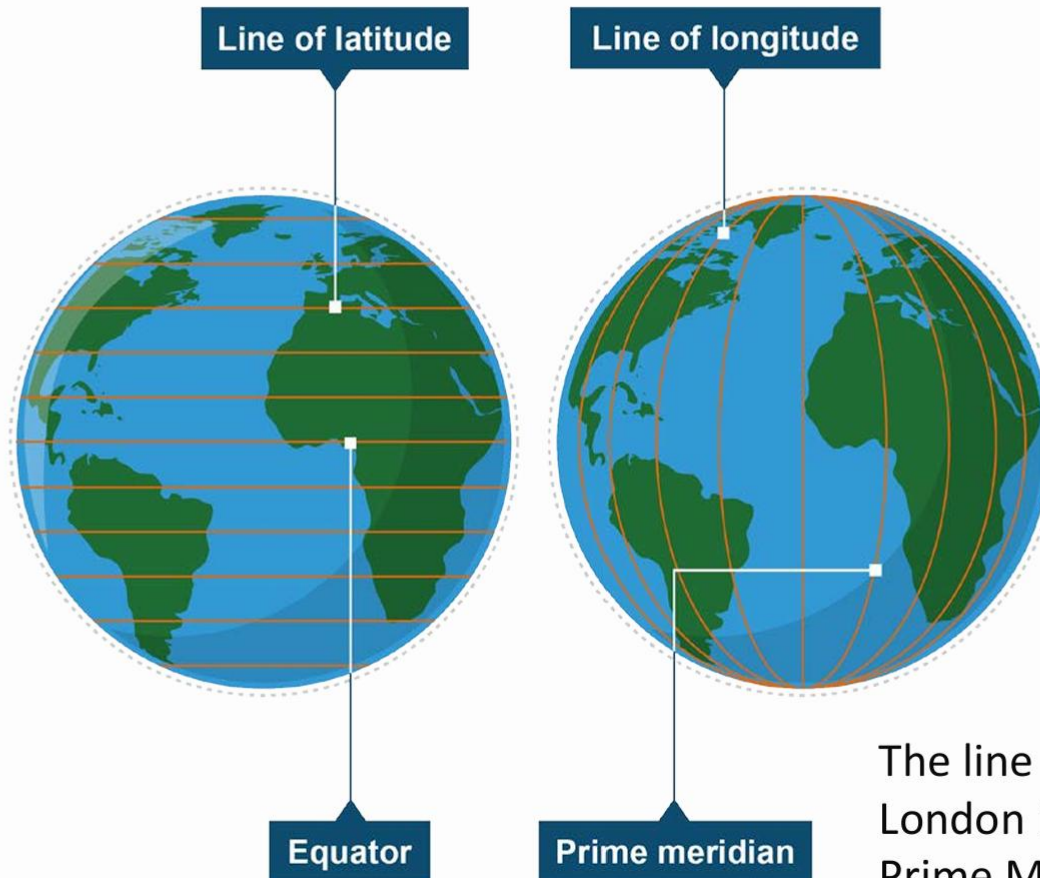
Who can name ways to say  
where we are right now?

# Global Positioning System

NAVSTAR in US uses Trilateration



# Latitude and Longitude



The equator (0°)

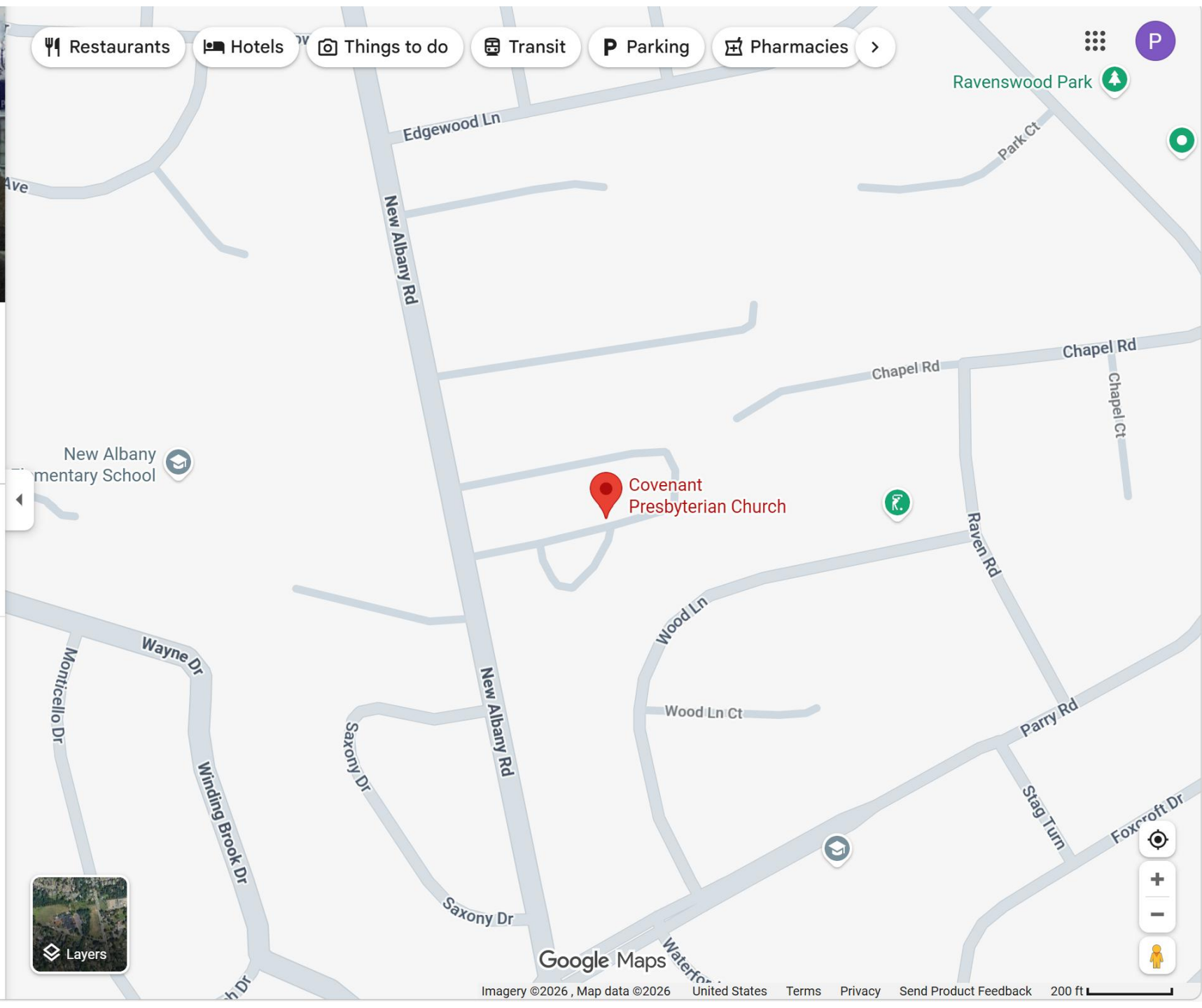
The line which runs through Greenwich in London is called the Greenwich Meridian or Prime Meridian. The Prime Meridian is 0° longitude.

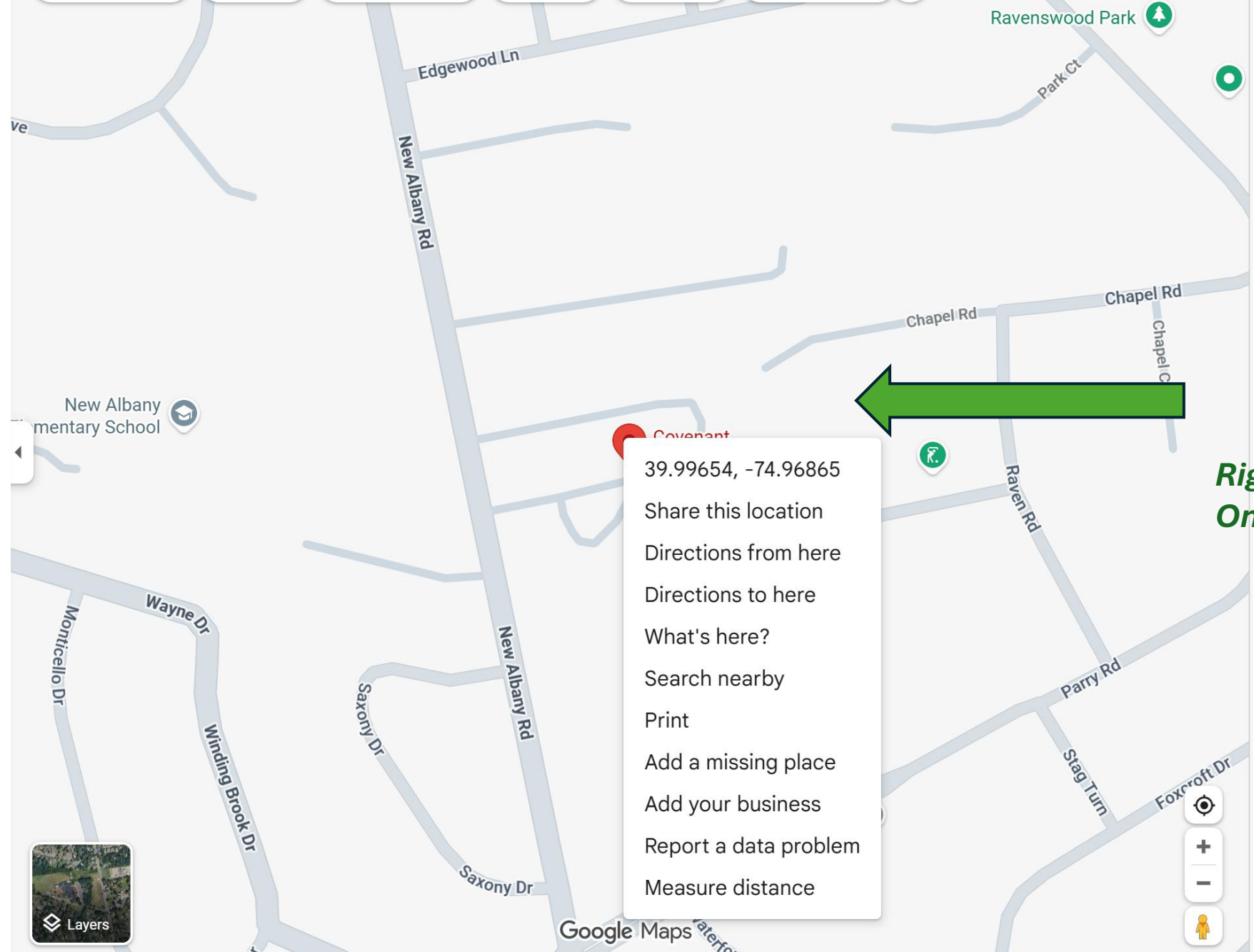


**Covenant Presbyterian Church**  
 4.9 ★★★★★ (12)  
 Presbyterian church · ♿

- Overview
- Reviews
- About

- Directions
  - Save
  - Nearby
  - Send to phone
  - Share
- 2618 New Albany Rd, Cinnaminson, NJ 08077
- covenantpreschurch.org
- (856) 829-7522
- X2WJ+HG Cinnaminson, New Jersey
- Claim this business
- Your Maps history
- Add a label





- 39.99654, -74.96865
- Share this location
- Directions from here
- Directions to here
- What's here?
- Search nearby
- Print
- Add a missing place
- Add your business
- Report a data problem
- Measure distance

**Right Click  
On Point**



## **Decimal (DD)**

39.99656034011439, -74.9685326437599

## **Degrees, Minutes, Seconds (DMS)**

39° 59' 47" N by 74° 58' 6" W

## **Degrees Decimal Minutes (DMM)**

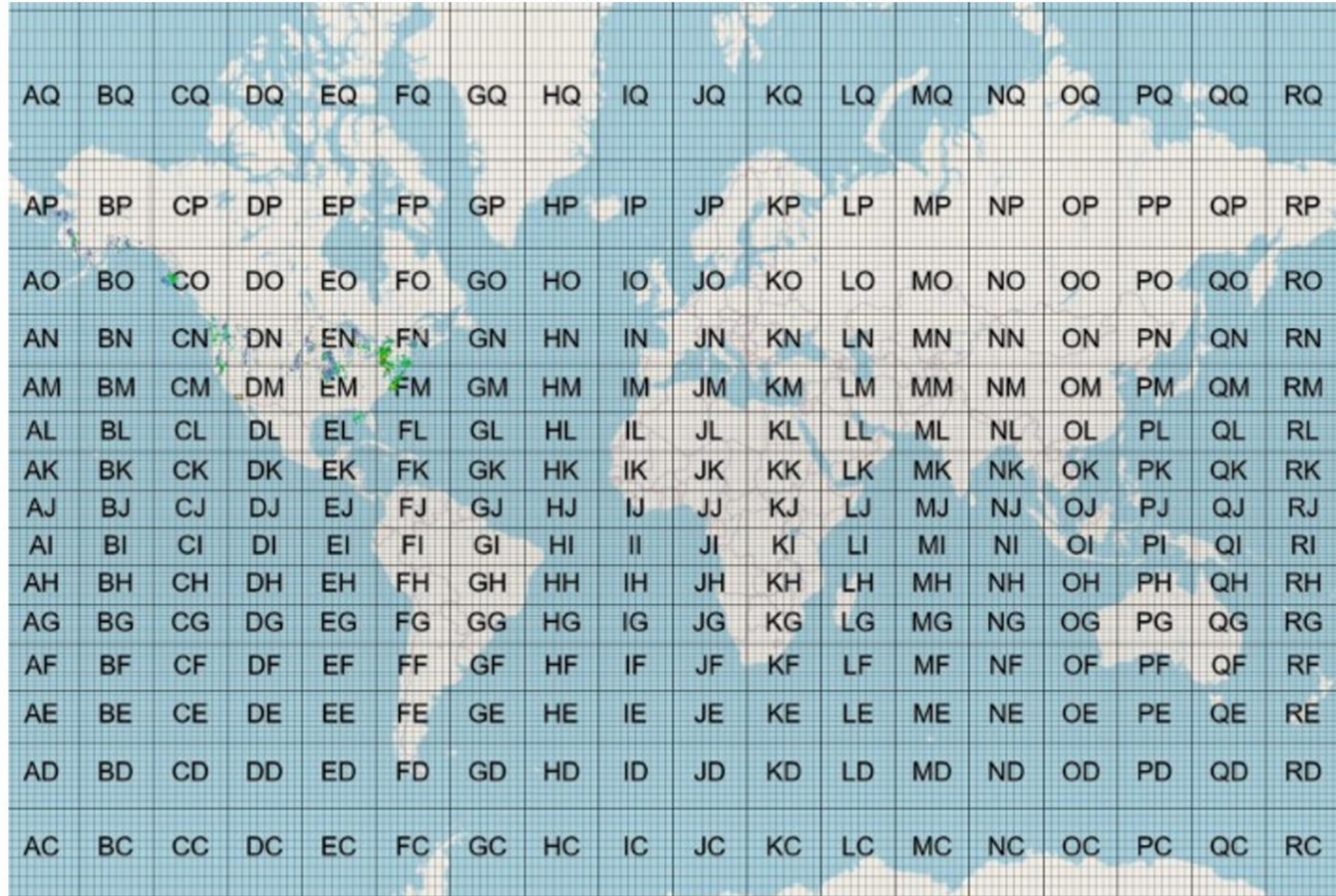
39° 59.794' N by 74° 58.112' W

Any other formats?

# HAM Radio Uses Grid Squares

- Called “Maidenhead” Gridsquares
- Really cool because it gets you close idea to where someone is without being exact
- Imagine the Earth as a giant checkerboard. The grid system starts by dividing this checkerboard into 324 large squares.
- Each of these squares is labeled with a pair of letters: the first letter represents a 20-degree slice from east to west, much like a row in the game checkers, and the second letter accounts for a 10-degree section from north to south, akin to a column.
- So, just like picking a square in checkers, these letters pinpoint a specific area on our global board

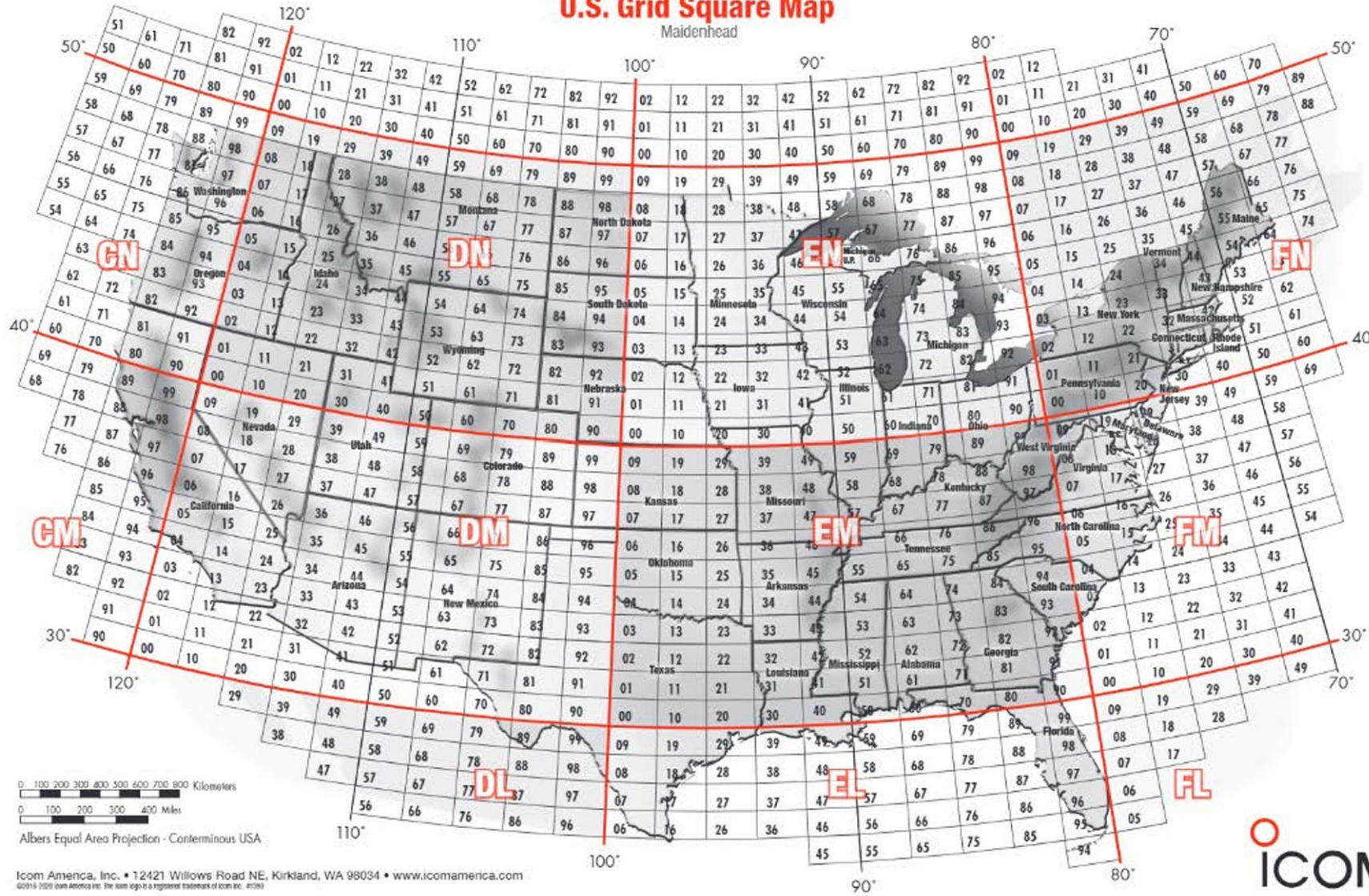
# The globe is divided into latitudinal and longitudinal grid squares



The precision of the location increases with each additional set of characters. For instance, a four-character grid identifies a location within about 100 kilometers(62m), while a six-character grid narrows it down to approximately 5 kilometers or roughly corresponding to 3 × 4 miles in the continental US.

# U.S. Grid Square Map

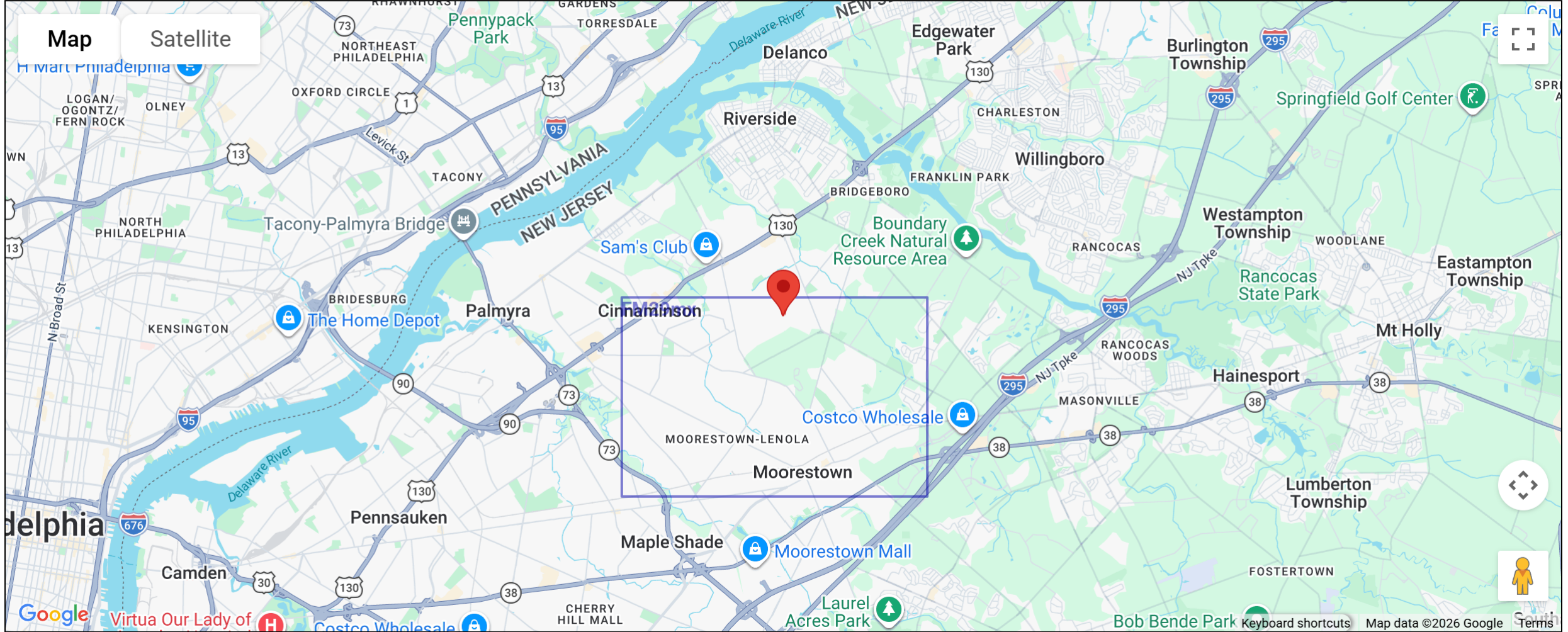
Maidenhead



# GridMapper - Grid and Station Locator - V.3

Click on the map to select a grid square, or, enter desired location.

Lat  Lon  Grid



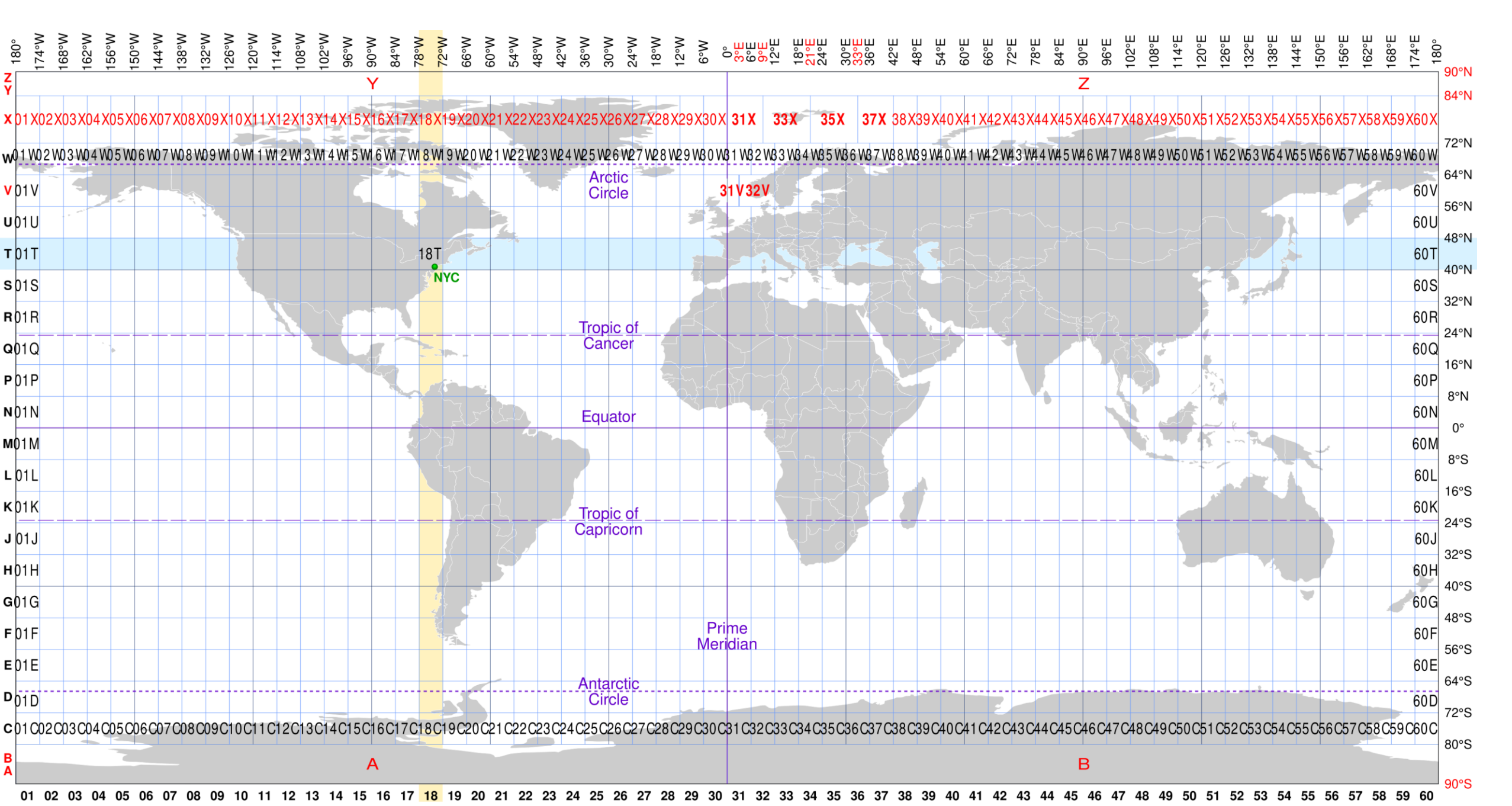
Show Hams  Auto Center  Sub-squares  Hams 280

Marker: 39° 59' 46" N -74° 57' 21" W FM29mx (92 hams)

# Military uses something similar

MGRS

Military Grid Reference System



18S WK 02680 27372

**Now Your Mission**

# Your Mission as Partners:

- **Build walk about plan:**

- **Walk Location:** Palmyra Cove Nature Park
- **Walk Distance:** Approx 2 miles (keep reading)
- **Gathering Place:** Find the GPS location of the parking lot
- **Gathering Time:** 4pm 4/19/26
- **Walk Start Time:** ?
- **Walk Finish Time:** ?
- **Places to Stop:** ?
- **Bathrooms:** ?

- **Build a route**

- Using the Gaia GPS, build a hiking route through Palmyra Cove Nature Park that is approximately 2 miles. Ask an adult for assistance if needed. Call a Leader over when complete.

- **Identify Weather**

- Once the route is complete, under supervision of an adult, use a weather app or wunderground.com to check the weather for the hike time and write it down on the back of the worksheet