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In [1]: import requests
from mpl_toolkits.basemap import Basemap
import matplotlib.pyplot as plt
import time

# Set up the basemap
map = Basemap(projection='merc', resolution='l', area_thresh=1000.0,
              llcrnrlon=-180, llcrnrlat=-80, urcrnrlon=180, urcrnrlat=80)

# Set up the figure
fig = plt.figure(figsize=(10, 8))
ax = fig.add_subplot(111)

# Initialize the coordinates list
lons, lats = [], []

# Set up the API endpoint
url = 'http://api.open-notify.org/iss-now.json'

# Set the start time
start_time = time.time()

# Run the producer for an hour
while time.time() - start_time < 3600:
    # Fetch the data
    response = requests.get(url).json()
    timestamp = response['timestamp']
    longitude = float(response['iss_position']['longitude'])
    latitude = float(response['iss_position']['latitude'])

    # Add the coordinates to the list
    lons.append(longitude)
    lats.append(latitude)

    # Plot the current location of the satellite
    x, y = map(longitude, latitude)
    ax.plot(x, y, 'ro', markersize=8)

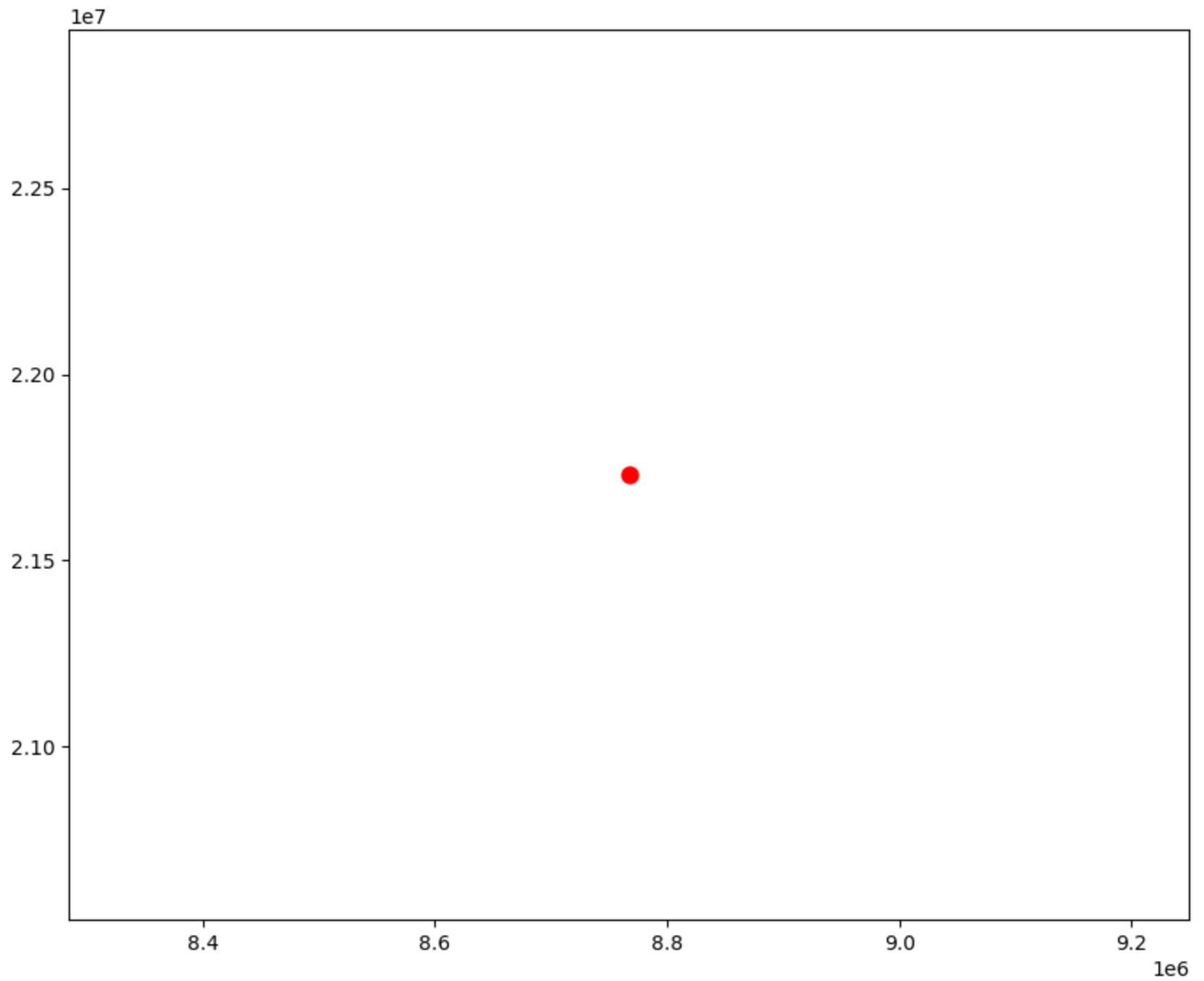
    # Refresh the plot
    plt.draw()
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plt.pause(0.001)

# Wait for 5 seconds
time.sleep(5)

# Plot the satellite track on the world map
map.drawcoastlines()
map.drawcountries()
map.drawmapboundary(fill_color='aqua')
map.fillcontinents(color='coral', lake_color='aqua')
map.drawmeridians(range(-180, 180, 60), labels=[False, False, False, True])
map.drawparallels(range(-90, 90, 30), labels=[True, False, False, False])
x, y = map(lons, lats)
ax.plot(x, y, 'b-', linewidth=2)

# Show the plot
plt.show()
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