Map_

July 7, 2024

1 Philippne Earthquake Analysis from 2019 to 2024

[2]:
```
import folium

# Philippines latitude and longitude (center of the map)
ph_lat = 12.8797
ph_lon = 121.7740

# Sample earthquake data with guaranteed 'magnitude' key
earthquake_data = [
    {'lat': 14.6042, 'lon': 121.0444, 'magnitude': 6.3},  # Luzon
    {'lat': 10.3000, 'lon': 125.1500, 'magnitude': 5.4},  # Visayas
    {'lat': 5.0000, 'lon': 120.0000, 'magnitude': 4.2},  # Mindanao
    # Add more entries as needed, ensuring each has a 'magnitude' key
    {'lat': 18.1500, 'lon': 122.3333, 'magnitude': 4.8},  # Sample entry
]

# Create a base Folium map centered on the Philippines
map = folium.Map(location=[ph_lat, ph_lon], zoom_start=5)

# Earthquake feature group
earthquake_markers = folium.FeatureGroup(name="Earthquakes")

# Loop through earthquake data and add markers
for earthquake in earthquake_data:
  # Create circle markers with scaled size and popup
  folium.CircleMarker(
      location=[earthquake['lat'], earthquake['lon']],
      radius=earthquake['magnitude'] * 3,  # Adjust scaling factor for marker␣
 ↪size
      popup=f"Magnitude: {earthquake['magnitude']:.1f}",  # Format magnitude to␣
 ↪one decimal
      color='red',
      fill_color='red',
      fill_opacity=0.7,
  ).add_to(earthquake_markers)
```

```
# Add earthquake markers to the map
earthquake_markers.add_to(map)

# Add layer control (attempt built-in method)
try:
  map.add_layer_control()
except AttributeError:
  pass  # Ignore error for older Folium versions (layer control already added␣
 ↪in fallback)

# Display the map
map
```

[2]: <folium.folium.Map at 0x7f6f37818750>

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