



THEE

Pandas^e

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Color: Black, White & Green

Theme Song: Kung Fu Fighting



Location:
Latitude: -32.532102923113854
Longitude: -76.74755199384902

Altitude: 426.0182306455496 km

Geo:
no data - perhaps over ocean

Location:
Latitude: -21.39792117296098
Longitude: -65.59357794449687
Altitude: 421.1254471108798 km

Geo:
city: Tupiza
county: Sur Chichas
state: Potosí
ISO3166-2-1v14: BO-P
country: Bolivia
country_code: bo

ACCOMPLISHEMTS

- Read the data in from a file and parsed it into a dictionary
- Extract data and find the latitude, longitude and altitude
- Print the locations based on the coordinates

```
def print_all_epochs(state_vector):
    """
    Print epochs along with location and speed information for each epoch in the state vector.
    """
    for sv in state_vector:
        epoch = sv['EPOCH']
        location = compute_location_astropy(sv)
        speed = compute_speed(sv)

        print(epoch)
        print_location(location)
        print_speed(speed)
        print()
```

```
# Read XML data from the file
file_path = '/content/ISS.OEM_J2K_EPH.xml'
with open(file_path, 'r') as file:
    data = xmltodict.parse(file.read())

# Extract state vector information from the data
state_vector = extract_state_vector(data)

# Call the compute_location_astropy function for each state vector in the data
for sv in state_vector:
    location = compute_location_astropy(sv)
    # print("Location data:", location)
    print_location(location)
```

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Location:

Latitude: -32.532102923113854

Longitude: -76.74755199384902

Altitude: 426.0182306455496 km

Geo:

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Speed: 7.6562769664919434 km/s



CHALLENGES

