

# Main Script For Everything

## Quiver and Scatter3 Plot

Here, you can select the range of years you want to view for the quiver and scatter3 plot. Select your range using the drop down menus below.

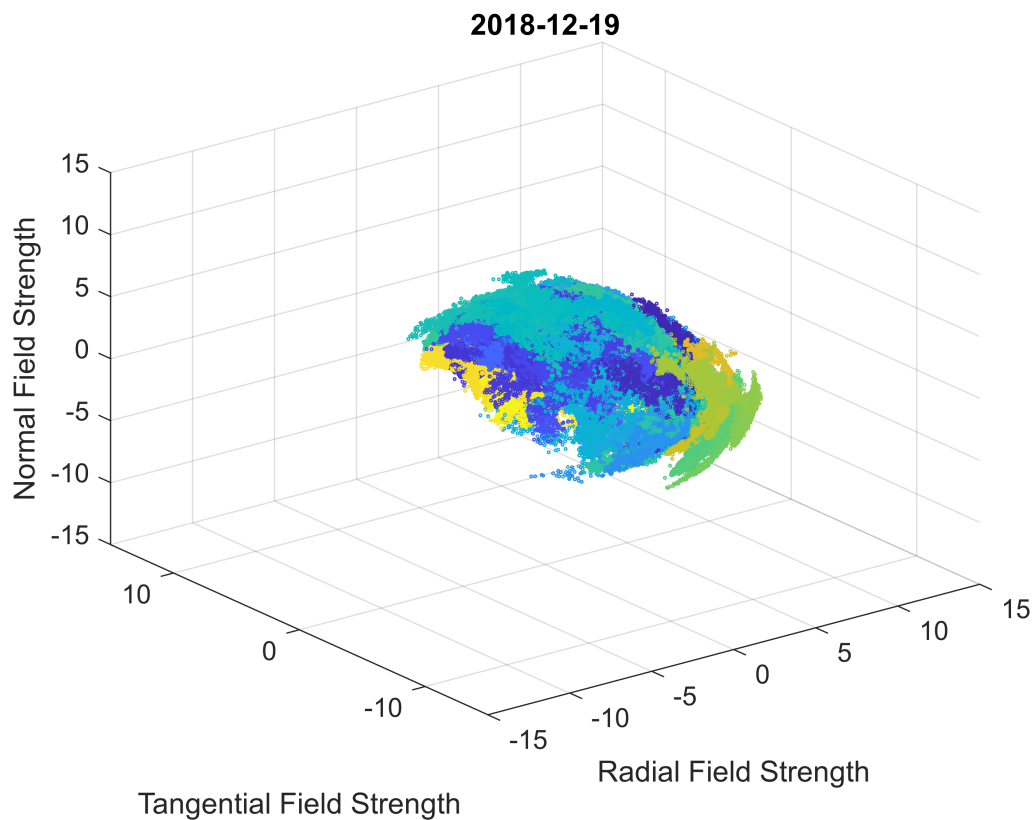
```
yearStart = "2018"
```

```
yearStart =  
"2018"
```

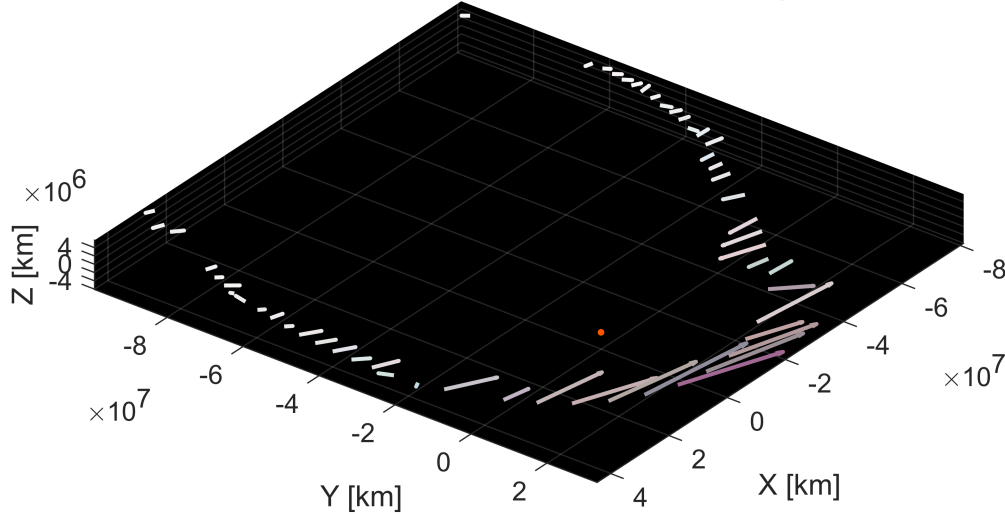
```
yearEnd = "2018"
```

```
yearEnd =  
"2018"
```

```
plotQuiver(str2double(yearStart):str2double(yearEnd))
```



**Mean Magnetic Field Strength for each Mission Day**  
color indicates measurement volatility



## Wavelet and Scalogram Plot

Here, you can select the data you want to use to plot the scalogram. These scalogram view the magnetic field data on a day by day basis.

```
prj = currentProject;
filePath = fullfile(prj().RootFolder, "\Data\Example")
```

```
filePath =
"C:\Users\tkyung\Downloads\NASA-Space-Apps-2022\Data\Example"
```

```
data = string(ls(filePath));
data = data(3:end);
input = data(1)
```

```
input =
"psp_fld_l2_mag_rtn_4_sa_per_cyc_20200607_v02.cdf"
```

```
plotWavelet(input)
```

