Project Pieces: Data Exploration and Visualization

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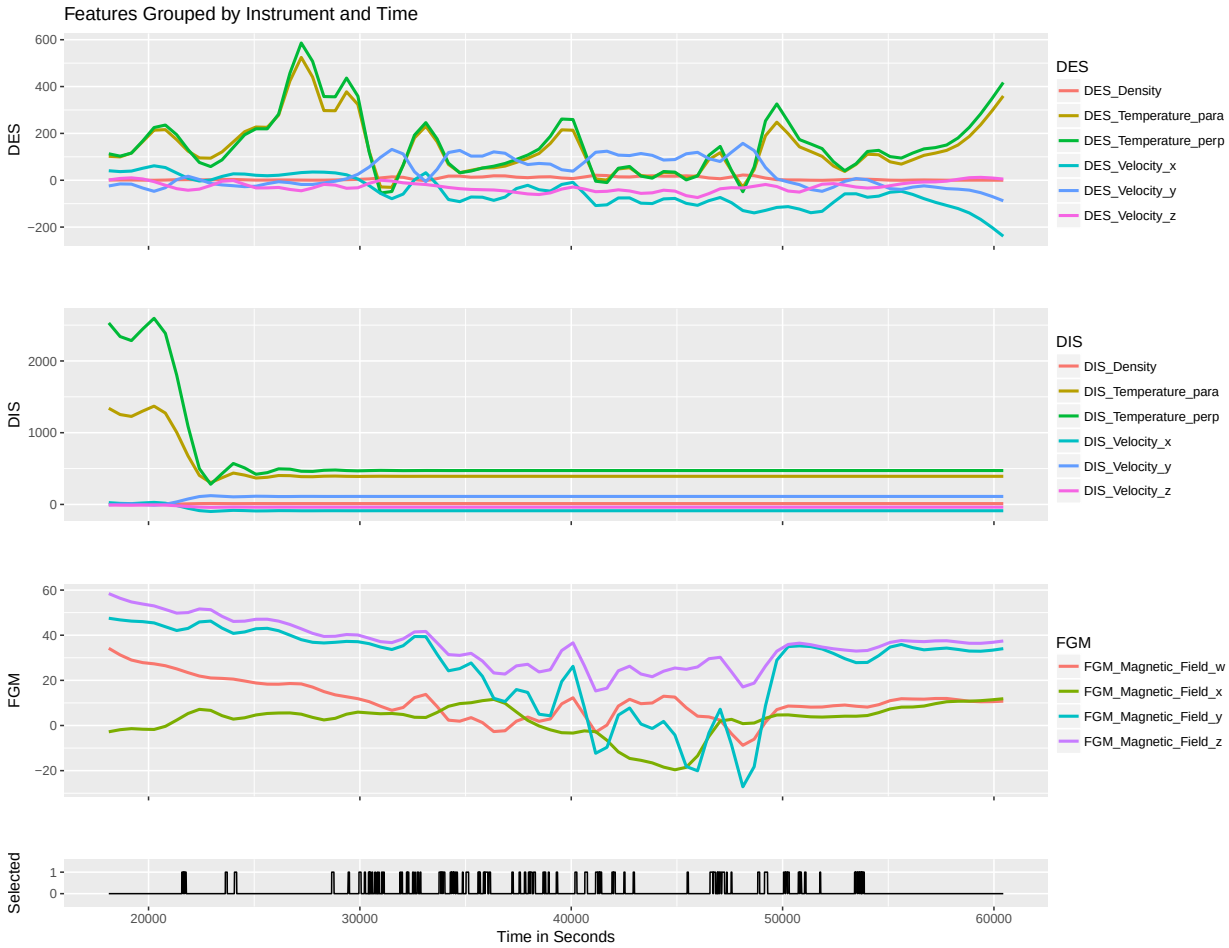
Data Exploration and Visualization

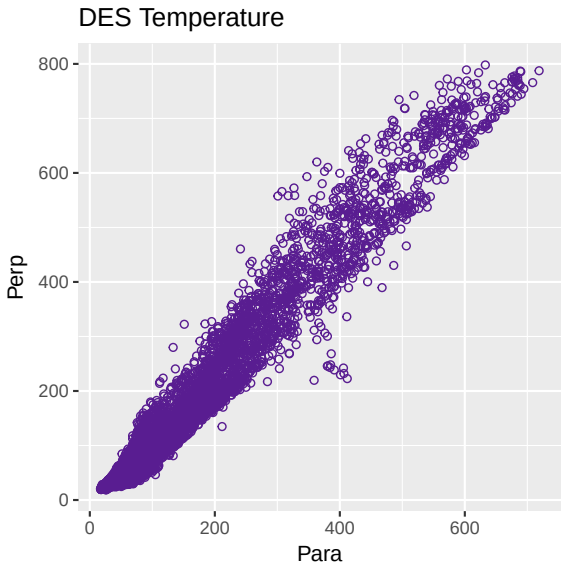


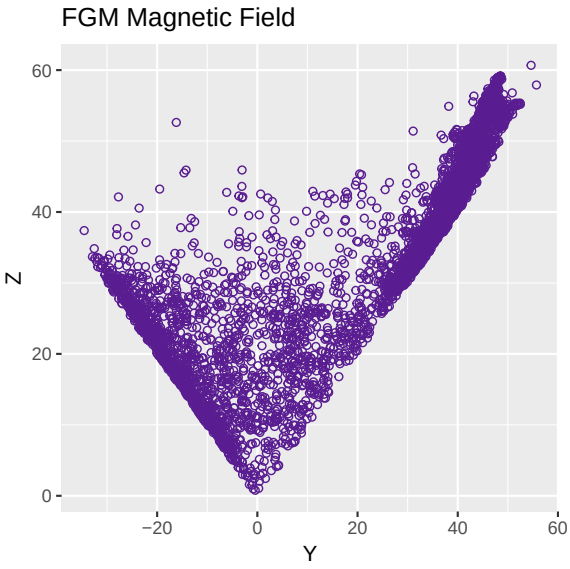
Looking at these plots, the DIS values don't seem to influence whether or not the SITL selected that time point. So we can likely leave it out, or it will get excluded in reduction automatically.

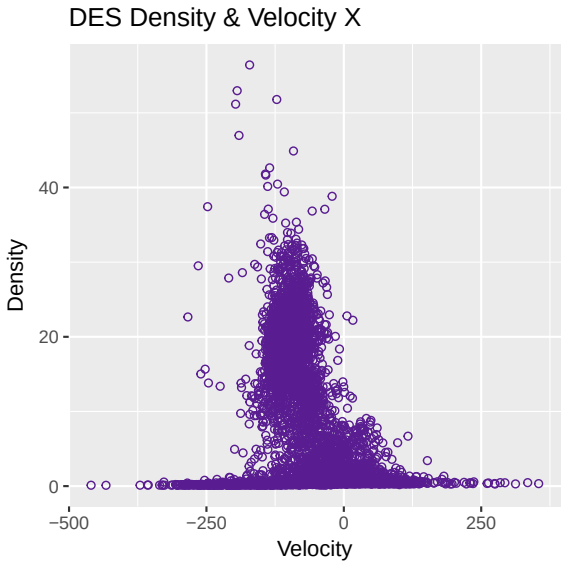
Another note, DES_Temperature para & perp seems to have a linear relationship.

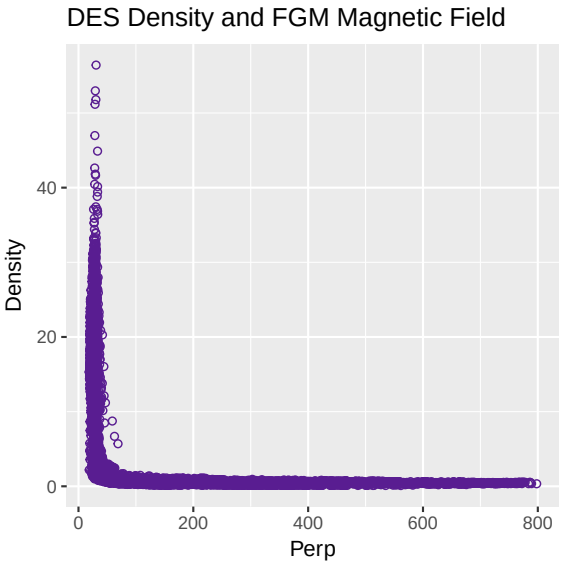
It also looks like FGM_Magnetic_Field positional variables (like x, y, z) seem to have a relationship of sorts, which makes sense, but the relationship is not clear (to me).

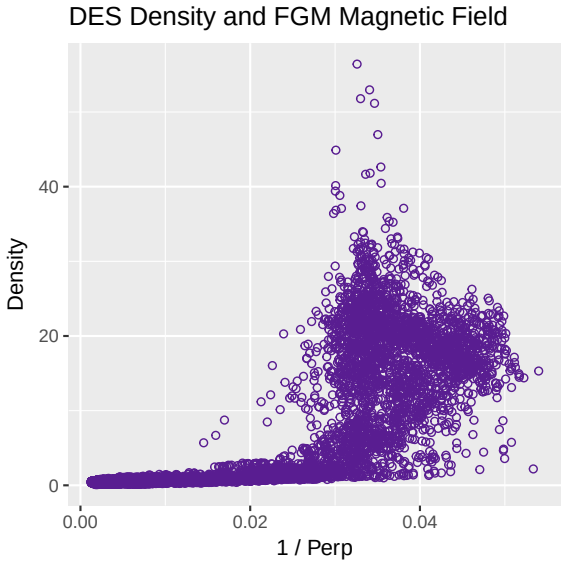
DES Density and FGM Mag. Field para/perp have a relationship that looks similar to 1/x..

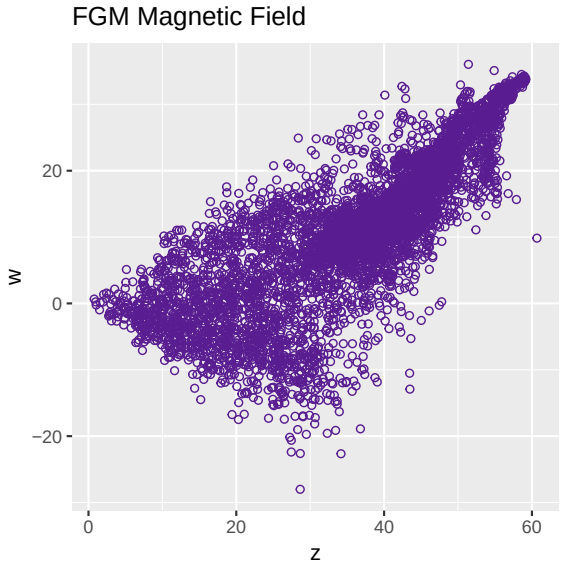

DES Temperature
Perp
Para
0
200
400
600
800


FGM Magnetic Field
Z
Y
0
20
40
60
−20


DES Density & Velocity X
Density
Velocity
0
20
40
−500
−250
250

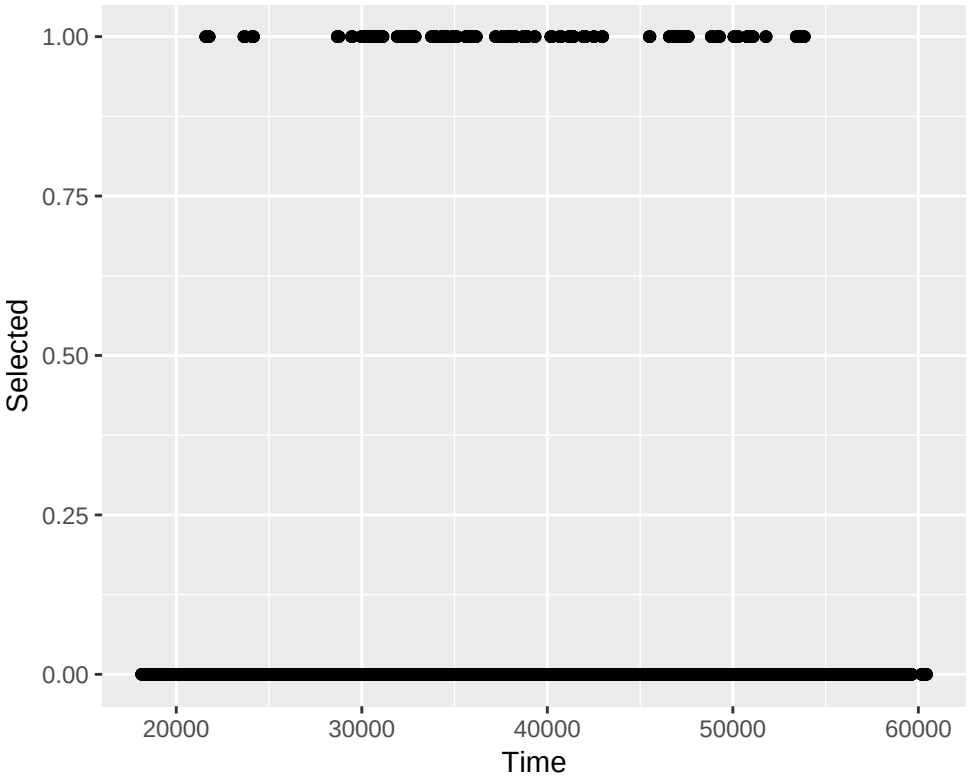

DES Density and FGM Magnetic Field
Density
Perp
0
20
40
200
400
600
800


DES Density and FGM Magnetic Field
Density
1 / Perp
0
20
40
0.00
0.02
0.04

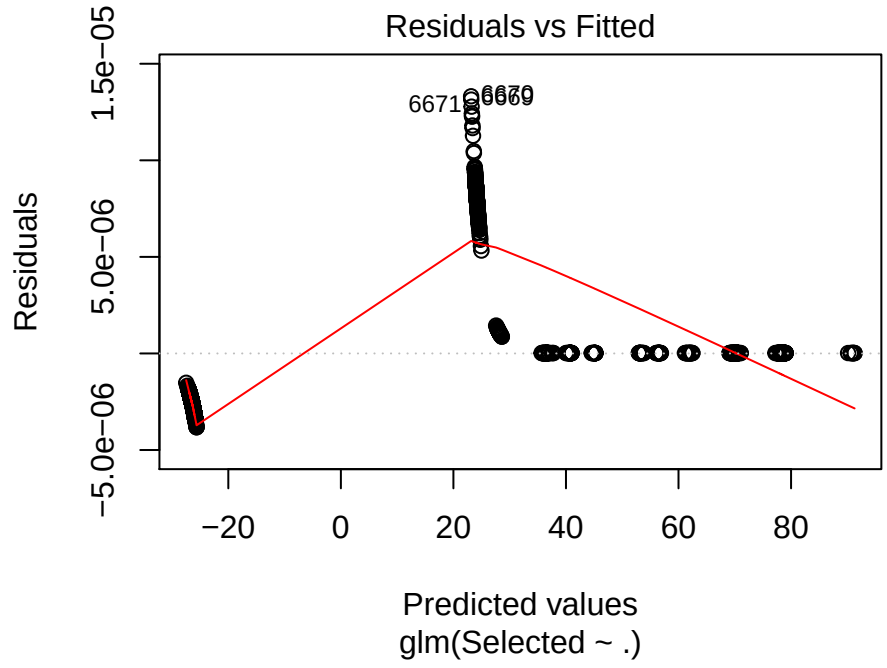

FGM Magnetic Field
w
z
0
20
−20
40
60

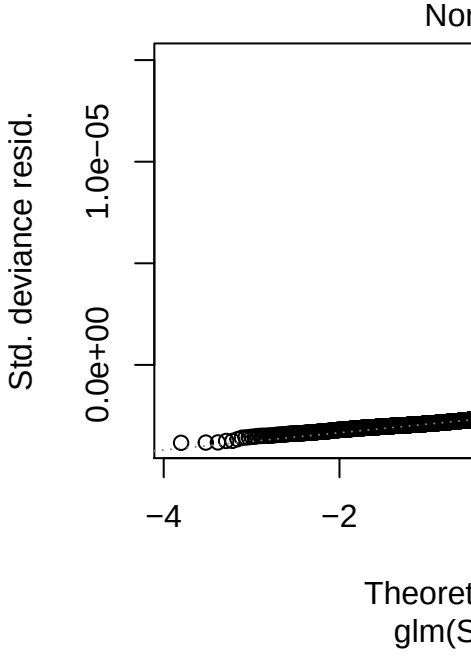
Time Series Exploration

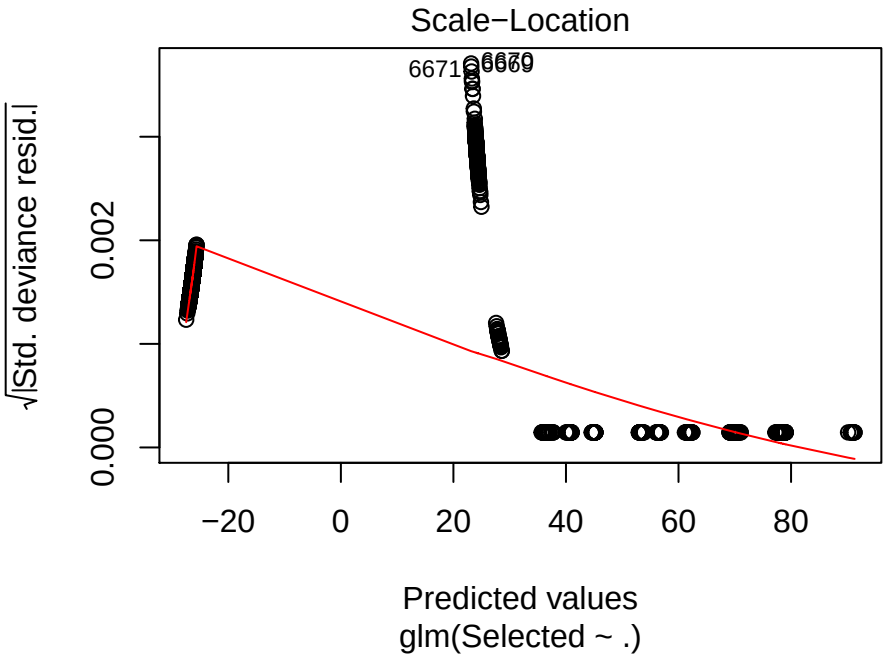
```
## Warning: Computation failed in `stat_smooth()`:
## object 'PANEL' not found
```

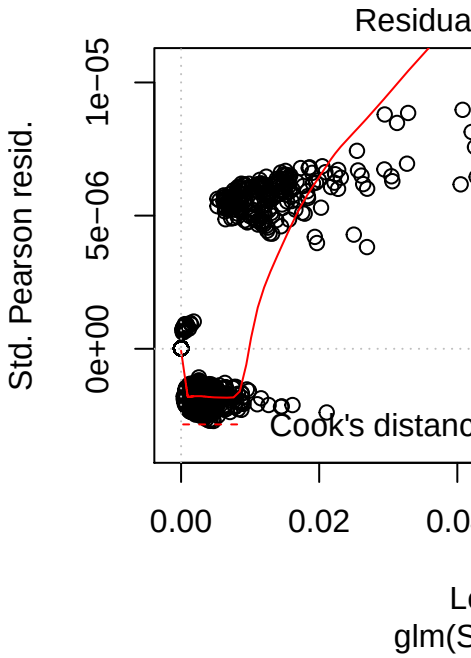



```
## Warning: glm.fit: algorithm did not converge
## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred
```


Residuals vs Fitted
Residuals
Predicted values
glm(Selected ~ .)


Std. deviance resid.


Scale−Location
√|Std. deviance resid.|
Predicted values
glm(Selected ~ .)


Std. Pearson resid.
Cook's distanc