

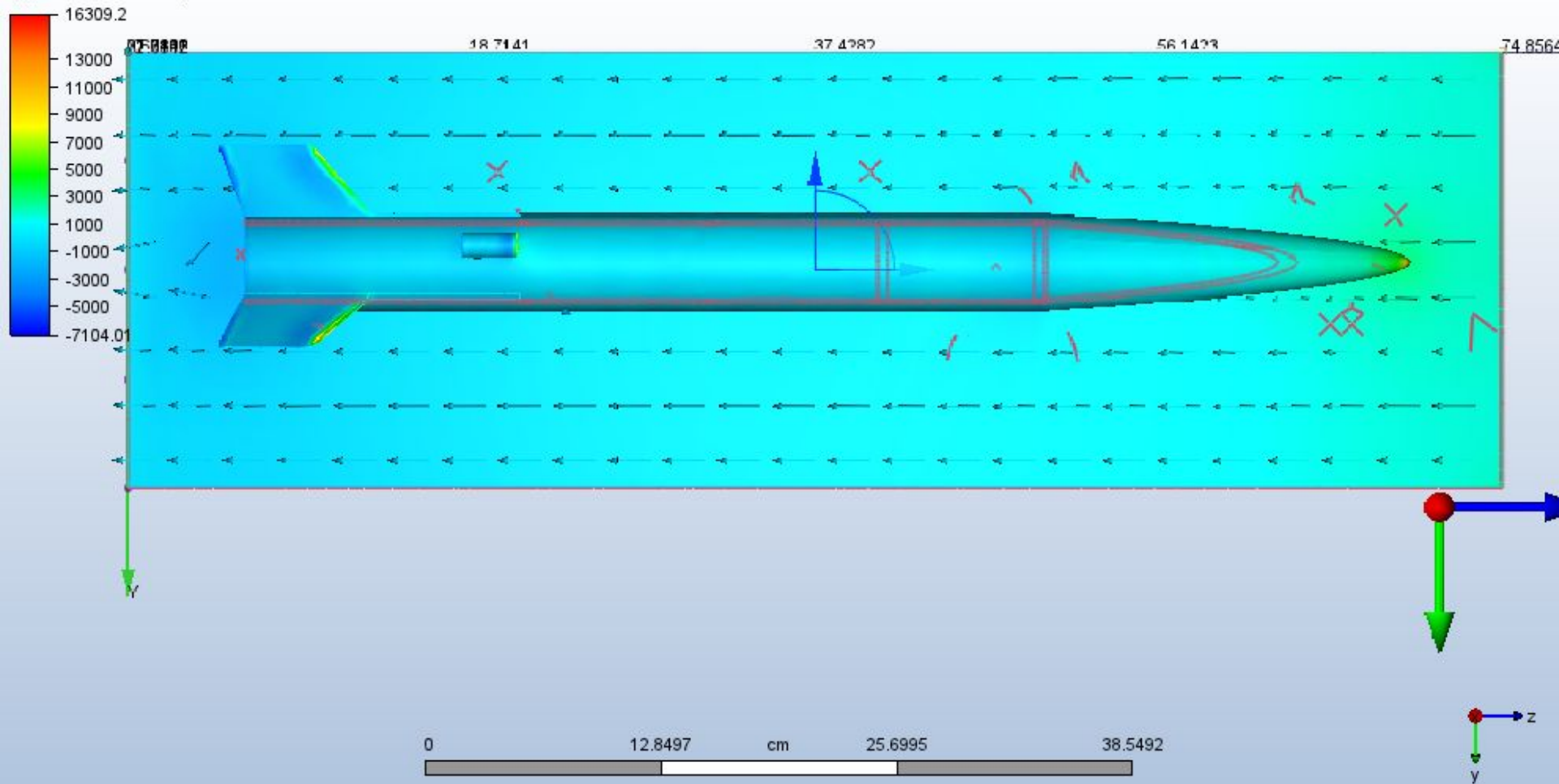
Nakuja internship
Rodney

Progress report format

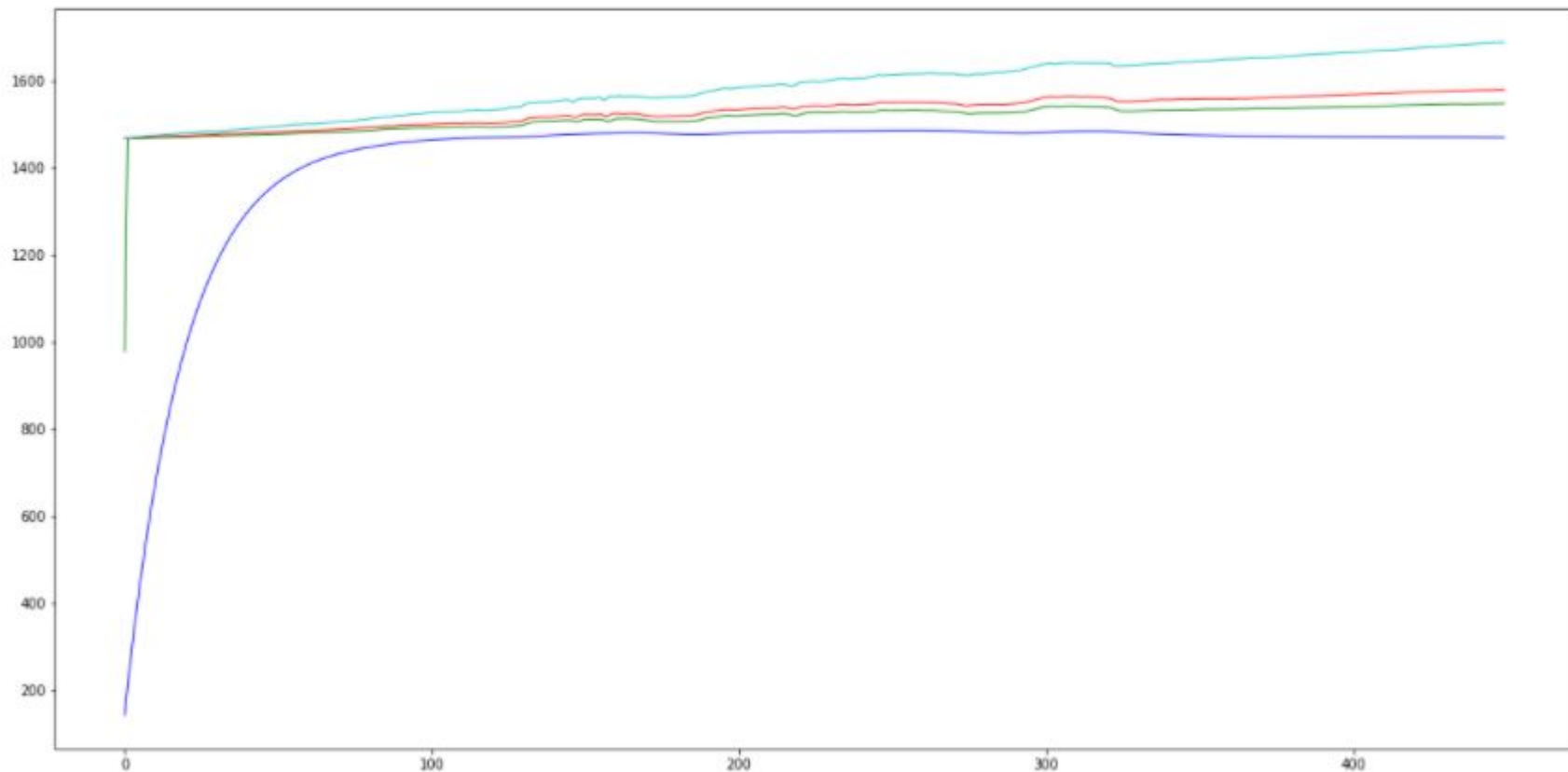
Tasks completed last week

- Test ejection mechanism
- Integrate the avionics bay
- Research and work on CFD
- Correlate data between the filters
- Stress analysis for the latch mechanism
- Work on collecting data from different filters

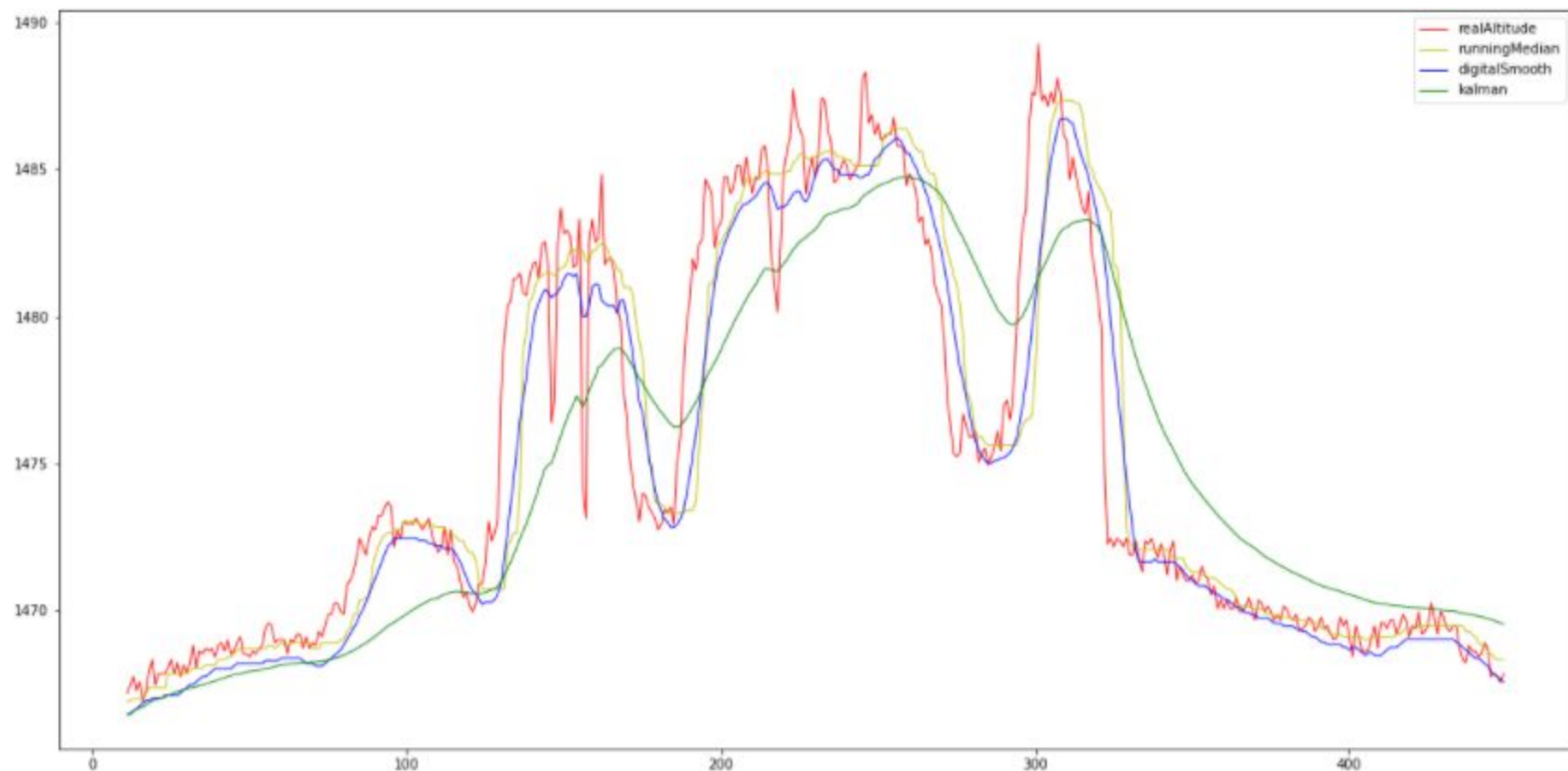
(5) Static Pressure - dyne/cm²



```
In [9]: plt.figure(figsize=(20, 10))
plt.plot(df.index, df['exponentialFilter'], linewidth=1, color="b")
plt.plot(df.index, df['movingAveragew3'], linewidth=1, color="g")
plt.plot(df.index, df['movingAveragew2'], linewidth=1, color="r")
plt.plot(df.index, df['movingAveragew1'], linewidth=1, color="c")
plt.show()
```



```
In [12]: plt.figure(figsize=(20, 10))
plt.plot(df.index, df['realAltitude'], linewidth=1, color="r", label="realAltitude")
plt.plot(df.index, df['runningMedian'], linewidth=1, color="y", label="runningMedian")
plt.plot(df.index, df['digitalSmooth'], linewidth=1, color="b", label="digitalSmooth")
plt.plot(df.index, df['kalman'], linewidth=1, color="g", label="kalman")
plt.legend()
plt.show()
```



Tasks in this week

- Test different parachute sizes from calculations
- Continue testing ejection mechanism
- Documentation
- Design the motor bracket
- Finalize on airframe subgroup for N1
-

Timeline

Month	Week	Tasks
Mar	Week 1	Research on parachute and ejection mechanism
	Week 2	Parachute and avionics testing
	Week 3	Design of new model rocket
	Week 4	Testing new model rocket on the motor
Apr	Week 1	
	Week 2	
	Week 3	
	Week 4	