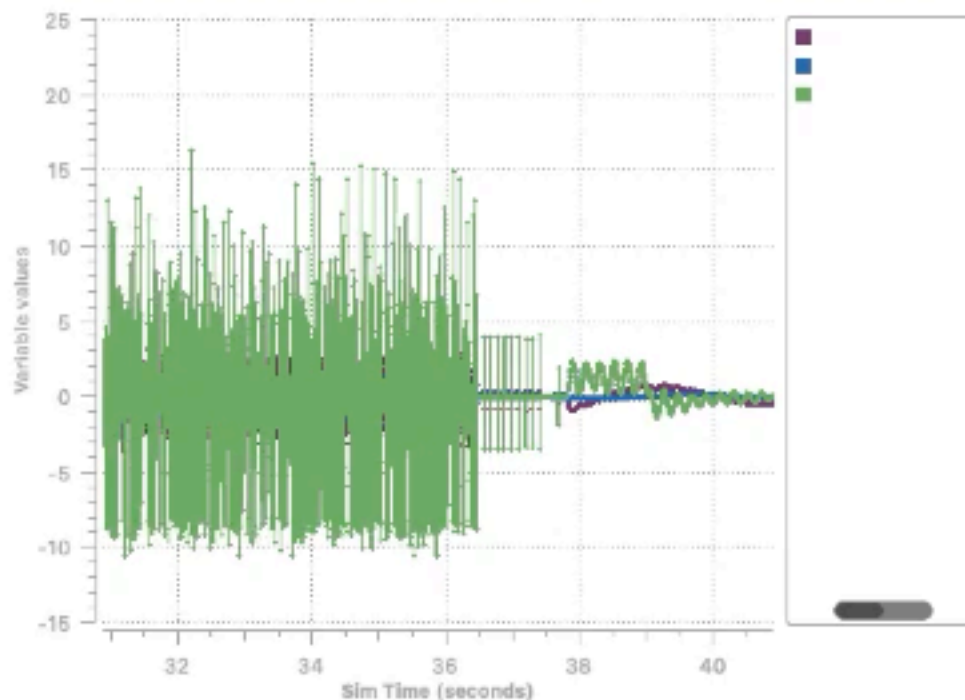


Gazebo: Plotting Utility

Plot Name

x sim_time

y Variables: tiltrotor?world_linear_accelerz tiltrotor?woi tiltrotor?woi



Export

+

Values

Alt (Rel) (m)

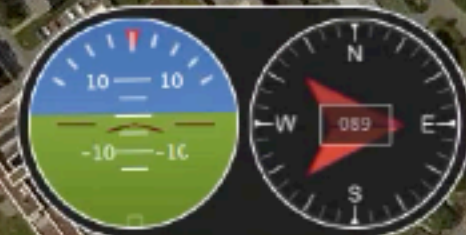
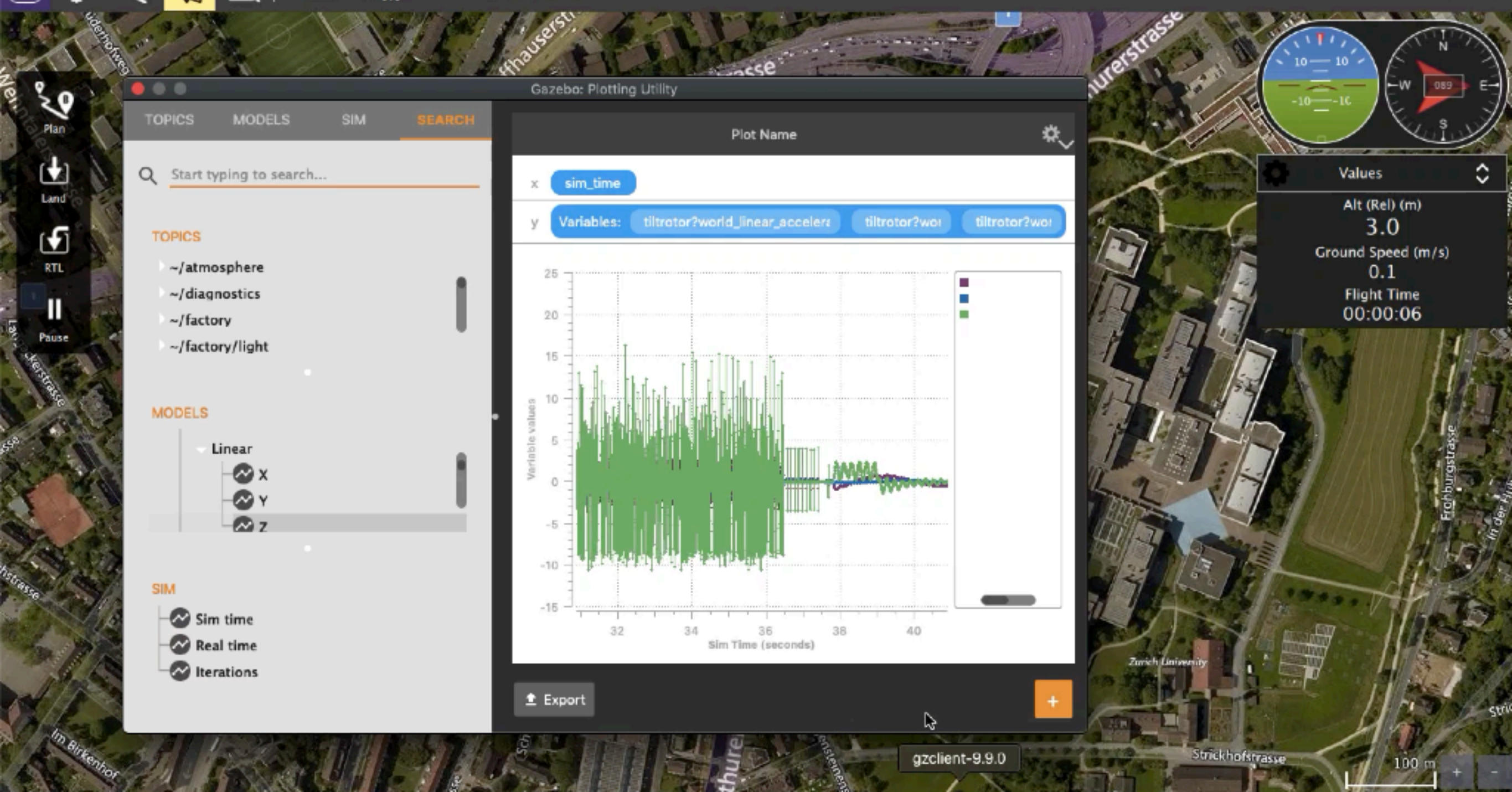
3.0

Ground Speed (m/s)

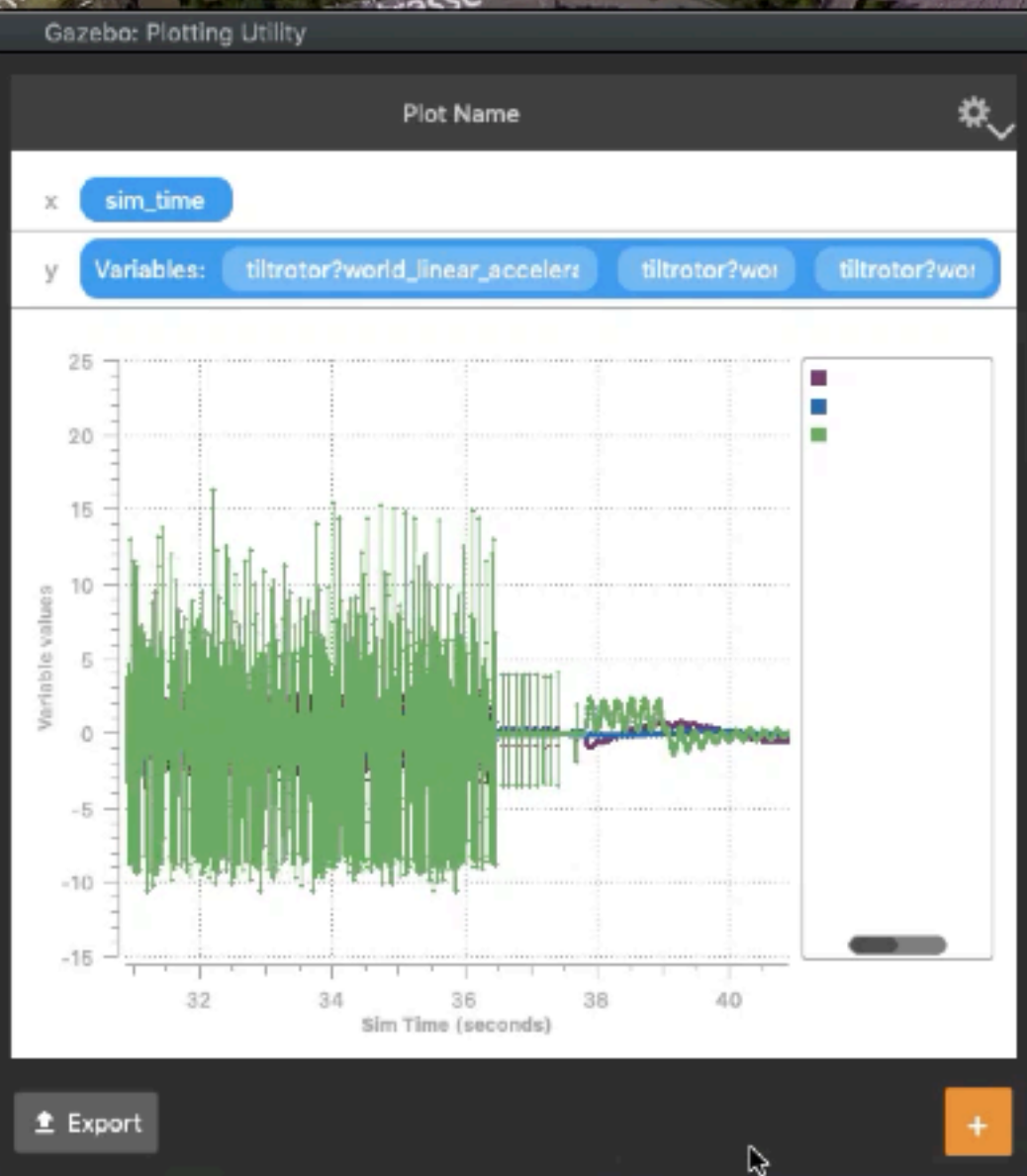
0.1

Flight Time

00:00:06



| Values |
|--------------------|
| Alt (Rel) (m) |
| 3.0 |
| Ground Speed (m/s) |
| 0.1 |
| Flight Time |
| 00:00:06 |



TOPICS MODELS SIM **SEARCH**

Start typing to search...

TOPICS

- ~/atmosphere
- ~/diagnostics
- ~/factory
- ~/factory/light

MODELS

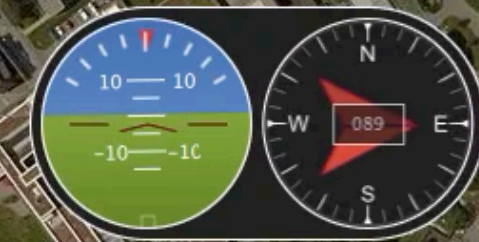
Linear

- X
- Y
- Z

SIM

- Sim time
- Real time
- Iterations

Plan
Land
RTL
Pause

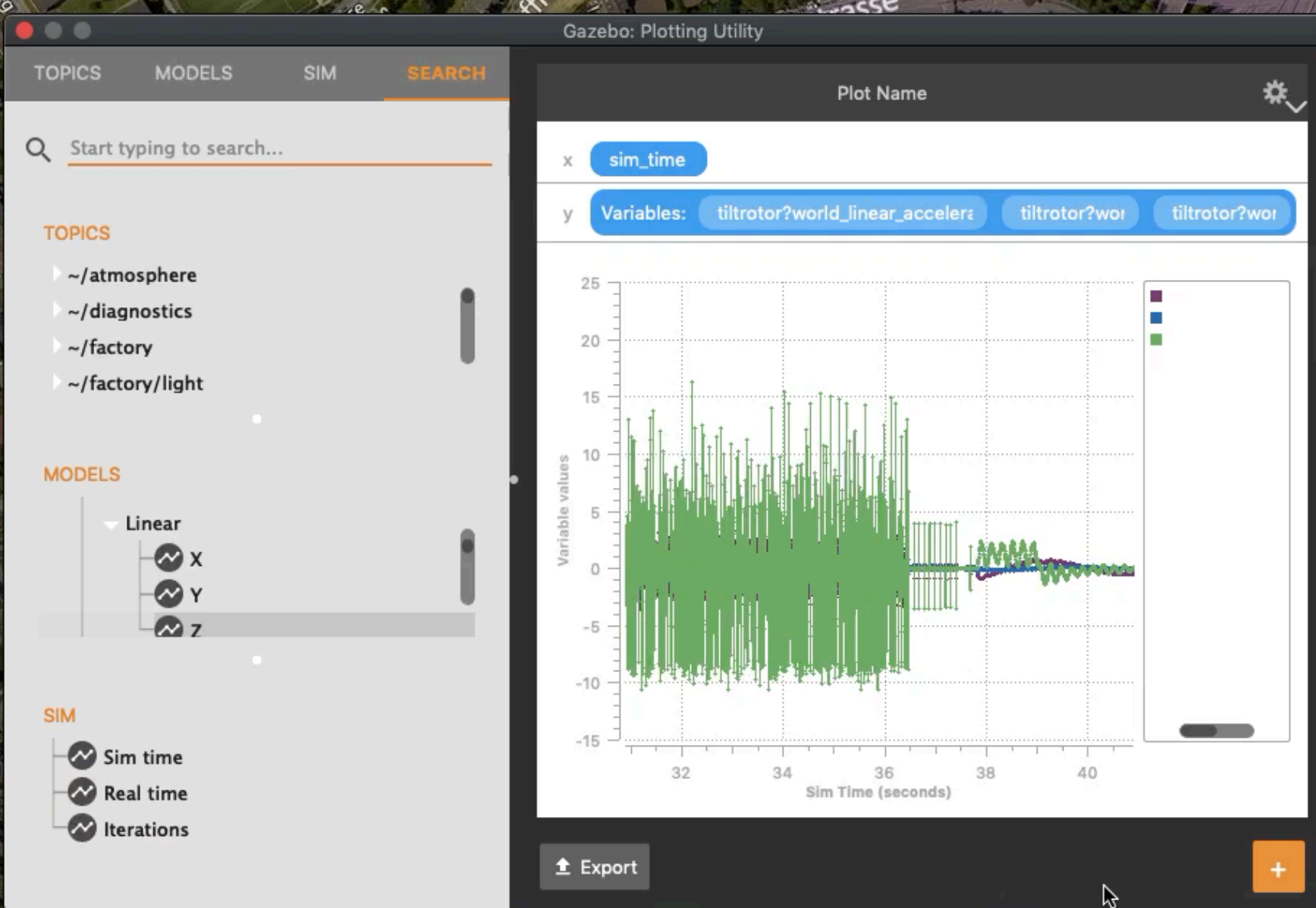


Values

Alt (Rel) (m)
3.0

Ground Speed (m/s)
0.1

Flight Time
00:00:06





- **Commodity sensors are error prone and and subject to latency many times In such case, the drone can be subject to blind flights or inaccuracies in understanding crucial information about its environment.**
 - Using OnBoard Computer Vision opens up exciting new possibilities. The drone can control its pitch and yaw even when sensor fails. This is achieved using Horizon Detection techniques in Computer Vision. Also, an onboard camera allows to gain more detailed view of the flight.
- **Optimal path planning is a challenge when considering deliveries. Depending on the nature of payload, the path need to consider factors such as weather, available power to calculate minimum cost paths in terms of power, turbulence, etc.**
 - A hybrid path panning module would allow to use different types of heuristics depending upon the type of delivery, weather conditions, turbulence limits, battery limits, number of hops, etc. Genetic Algorithm along with these heuristics would ensure quick on board path planning for each consignment.