Explanation of Values in the PESO FlightComputer Log

timestamp

• The time in milliseconds when the current set of values were recorded.

temperature

• The temperature measured by the IMU in degrees Celsius.

q_w, q_x, q_y, q_z

• 6-axis normalized quaternion as reported by the IMU.

aa_x, aa_y, aa_z

3-axis accelerometer data as reported by the IMU in earth gravities.

gyro_x, gyro_y, gyro_z

• 3-axis gyroscope data as reported by the IMU in degrees per second. The gyroscope auto-calibrates after ~8 seconds of no movement.

time, date

 Coordinated Universal Time as reported by the GPS. Central Daylight Time is UTC -5.

lat, lon

• The latitude and longitude as reported by the GPS. The format is 3857.47N which represents 38° 57.47′ North.

speed

• The speed over the ground as reported by the GPS in knots.

alt

• Altitude as reported by the GPS in meters above mean sea level.