

# ShowAnafiLog



Dank an alle Tester. Guten Flug!

Programm auf Wunsch aus dem **Parrot Pilots Drone Forum**

h-elsner 10/2024

## Übersicht

"ShowAnafiLog" ist ein Programm zum Anzeigen der JSON Logdateien und Black-Box-Daten von Parrot's "Anafi" in besser lesbarem Format, das zeigen von Diagrammen ausgewählter Datenspalten und Konvertierung in KML oder GPS Flugpfaden. Außerdem ist ein Export der Daten als CSV-Datei möglich.

## Installation

Keine Installation. Dies ist eine portable Anwendung, man braucht nur Schreibzugriff auf das Verzeichnis, wo sich das Programm befindet, da es dort in einer XML-Datei die Einstellungen speichert.

## Benutzung

Kopiere die flight logs (\*.json) oder BlackBox Logs vom Mobiltelefon in einen Ordner auf dem PC. BlackBox Logs müssen erst ausgepackt und in \*.JSON umbenannt werden. Öffne dieses Verzeichnis zum Beispiel per Drag&Drop auf das Programm. Eine Liste der JSON Logdateien wird in der Übersicht angelegt. Und die letzte Datei in der Liste wird zur Anzeige ausgewählt. Man kann dann jede Datei auswählen und die detaillierten Daten in den verschiedenen Reitern anzeigen.

# Übersicht

Select the directory where all the JSON log files are located. Double-click opens the file manager with this directory. The converted files will be saved there.

Convert the file in use to the output format defined in Settings.

Take screenshot for documentation.

Select log dir: D:\FlightLog\_data\Anafi\_Logs\Logs\_Frz

Buttons: Convert, Screenshot, Close

Navigation: Overview, Log data, Charts, Details, Settings

Files: 3	Date	from	to	Run time	Ceiling	Distance	Top speed	Max battery level	Min battery level
0914_2018-09-01T152809+0200_5583AA_0003	2018-09-01	15:28:09	15:32:17	00:04:06	30.1m	24.4m	28.94km/h	71%	54%
0914_2018-09-01T202625+0200_B1B3D1_0001	2018-09-01	20:26:25	20:33:06	00:06:39	30.6m	7.2m	0.00km/h	96%	70%
0914_2018-09-02T161001+0200_OD11E9_000E	2018-09-02	16:10:01	16:23:50	00:13:47				76%	19%

Files: 3 | 2026 | .kml | D:\FlightLog\_data\Anafi\_Logs\Logs\_Frz\0914\_2018-09-01T152809+0200\_5583AA\_0003.json

Position of selection = position of cursor

List of JSON files. Click on a row to select the file in use. File will be loaded and displayed. Table will be updated in the background.

Number of JSON log files

Number of data sets file in use contains

Output format for conversion

Status or error messages, i.e. file name of file in use.

# Log data

Cursor shows which row in the data table is selected. You can move forward by mouse wheel.

Hold the mouse pointer over a cell to get more information (a cell related hint).

Right mouse button opens a context menu to open coordinates in Google Maps or Open Street Map.

Selected cell means also selected data set.

Line number of selected data set = position of the red cursor in the second chart above.

Chart for WiFi Signal Strength

WiFi Signal Strength (dBm)

26:40 27:00 28:00 29:00 30:00 31:00 32:00 33:00

File Tools Help

Select log dir D:\FlightLog\_data\Anafi\_Logs\Logs\_Frz

Overview Log data Charts Details Settings

Date/Time	time	battery_level	controller_gps_latitude	controller_gps_longitude	flying_state	alert_state	wifi_signal	product_gps_a
2018-09-01 20:26:26.222	1222	96	42.11947133	10.06607633	7	0	-44	True
2018-09-01 20:26:26.407	1407	96	42.11947133	10.06607633	7	0	-44	True
2018-09-01 20:26:26.592	1592	96	42.11947133	10.06607633	7	0	-44	True
2018-09-01 20:26:26.807	1807	96	42.11947133	10.06607633	7	0	-44	True
2018-09-01 20:26:26.873	1873	96	42.11947133	10.06607633	1	0	-44	True
2018-09-01 20:26:27.007	2007	96	42.11947133	10.06607633	7	0	-44	True
2018-09-01 20:26:27.207	2207	96	42.11947133	10.06607633	7	0	-44	True
2018-09-01 20:26:27.222	2222	96	42.11947133	10.06607633	7	0	-44	True
2018-09-01 20:26:27.407	2407	96	42.11947133	10.06607633	7	0	-44	True
2018-09-01 20:26:27.593	2593	96	42.11947133	10.06607633	7	0	-44	True
2018-09-01 20:26:27.593	2593	96	42.11947133	10.06607633	7	0	-44	True
2018-09-01 20:26:27.607	2607	96	42.11947133	10.06607633	1	0	-40	True
2018-09-01 20:26:27.793	2793	96	42.11947133	10.06607633	1	0	-40	True
2018-09-01 20:26:27.793	2793	96	42.11947133	10.06607633	1	0	-40	True
2018-09-01 20:26:27.810	2810	96	42.11947133	10.06607633	1	0	-40	True

Files: 3 3025 24 .kml D:\FlightLog\_data\Anafi\_Logs\Logs\_Frz\0914\_2018-09-01T202625+0200\_B1B3D1\_0001.json

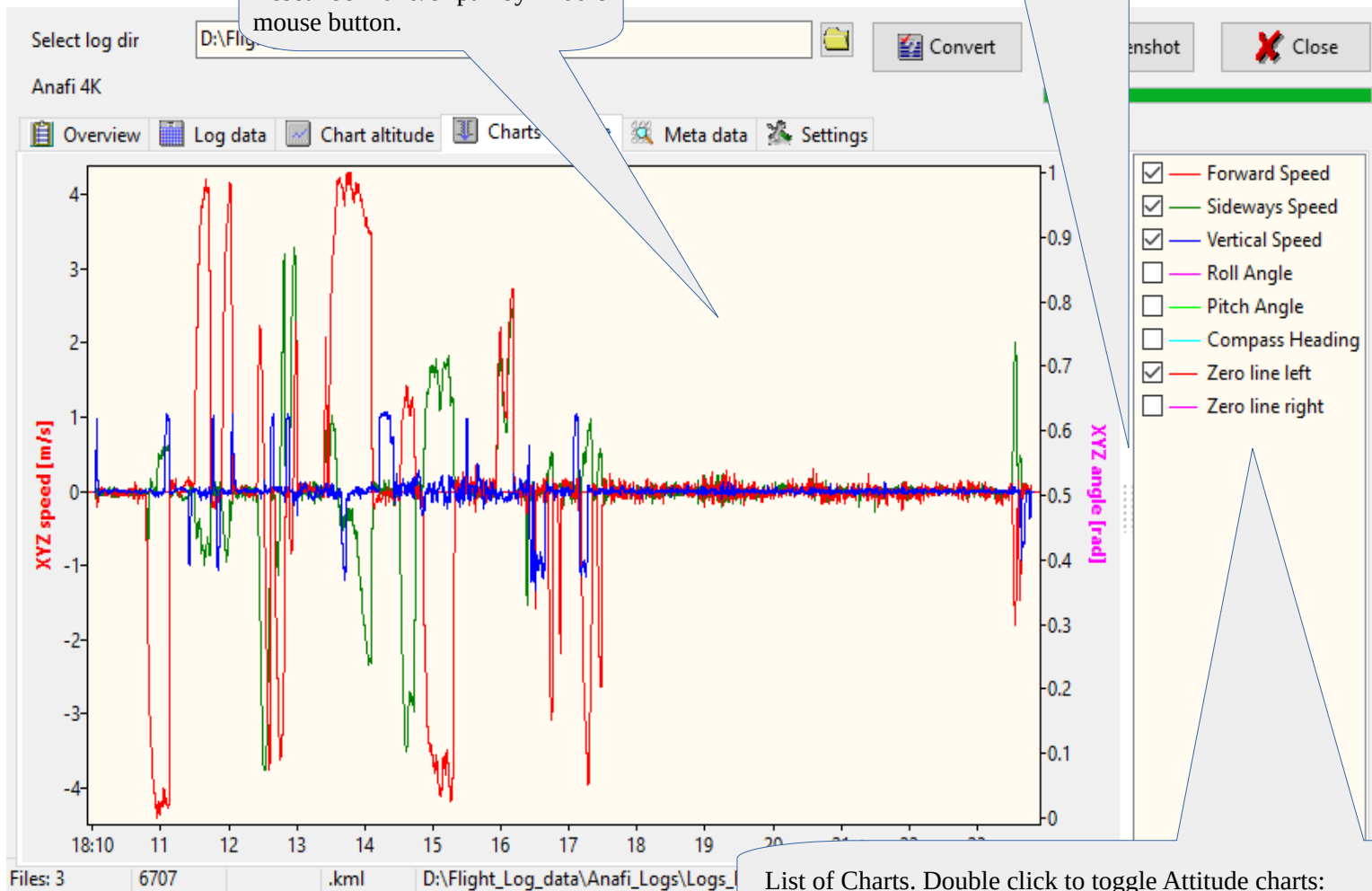
Second chart or value counter table called by click on the related column header.

- Save as...
- Copy to clipboard
- Show in Google Maps
- Show in Open Street Map

# Charts attitude

Zoom chart by mouse wheel, pan with left mouse button hold. Reset zoom and/or pan by middle mouse button.

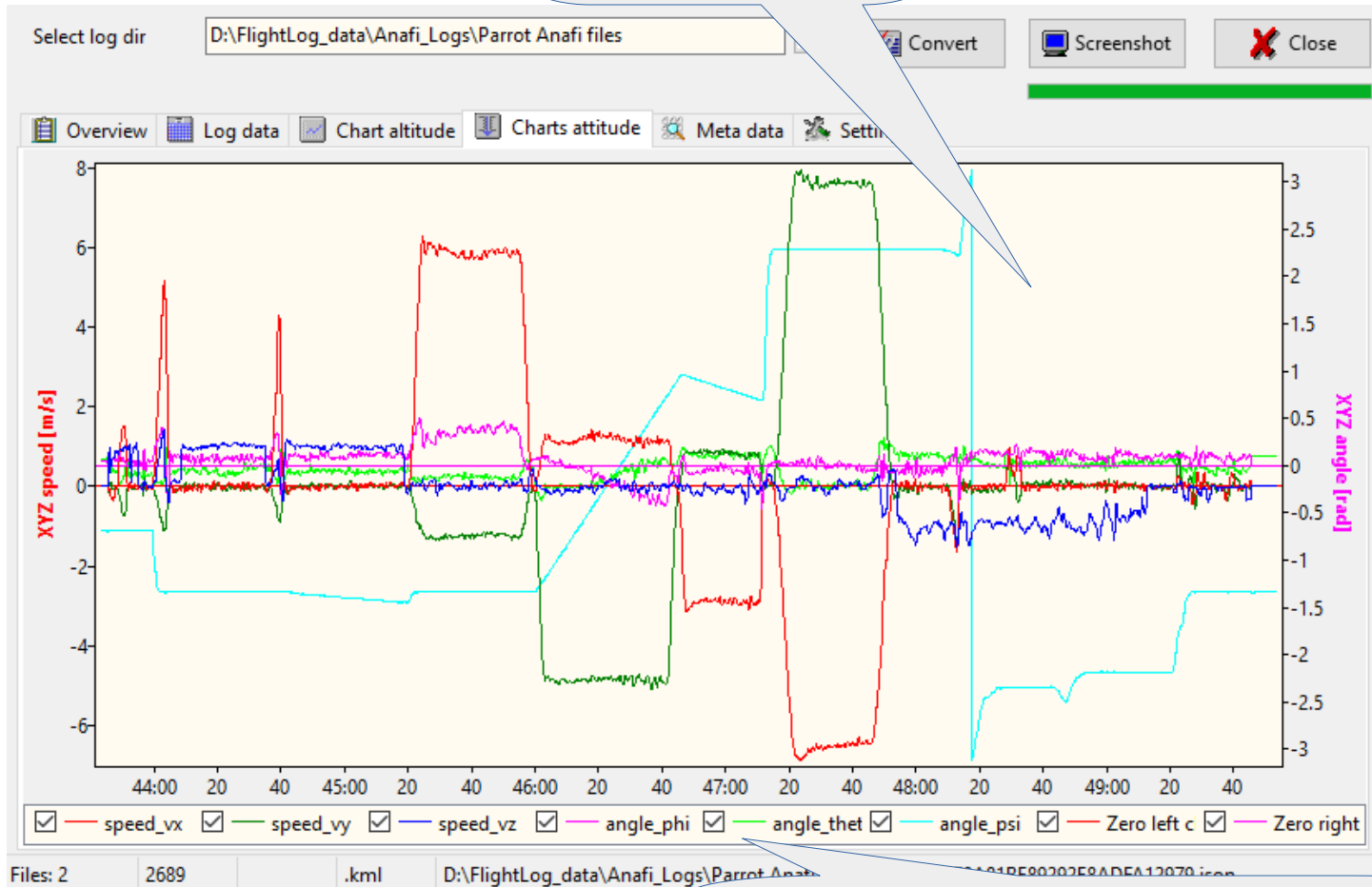
Slider to shift or hide the list of charts.



List of Charts. Double click to toggle Attitude charts:  
All → only speed → only angle → only nick/roll → all

# Charts attitude

Zoom chart by mouse wheel,  
pan with left mouse button hold.  
Reset zoom and/or pan by middle mouse button.



Double click to toggle Attitude charts:  
All → only speed → only angle → only nick/roll → all

# Meta data from JSON log file

File Tools Help

- Settings
- Screenshot
- Recompute air speed
- Create Pilot log book
- Rename JSON files with date/time stamp
- Show meta data from FDR log

Logs\Test

Convert Screenshot Close

Charts attitude Meta data Settings

Details	Value
Product name	Anafi
Product id	2324: Anafi 4K-HDR
Version	1.2
Serial number	PI040416AA8F021037
Date of manufacture	No 021037 from Juni 2018
Hardware version	HW_03
Software version	1.0.1
Total run time	00:08:59
Crash	0
Controller model	RC,Skycontroller 3
Controller application	PI040443AA8F023327,1.0.7
UUID	4667CD89-52C1-C2AB-FB8C-B7311FF
GPS available	True
GPS latitude	
GPS longitude	

Statistics	Min/max values	Occurred first time
Ceiling	5.520124m	22:52:42.003
Distance	6.926618m	22:44:05.004
Top speed	1.455777m/s	22:44:24.403
Max battery level	46%	22:44:05.004
Min battery level	9%	22:52:50.872

FDR log director

4667CD8952C1C2ABFB8CB7311FF7A501

File list with matching UUID

Files: 17 5290 .kml D:\Flight\_Logs\20200405+0200\_4667CD\_0002.json

I think this is the home point. Double-click on the table opens this point in Google Maps.

Meta data taken from the file in use. Ctrl+C copies the whole table to clipboard.

Some min/max values found during file load with time stamp when it first occurred. Ctrl+C copies the whole table to clipboard.

## Metadata from FDR log files

Log files in the FDR folder contains more detailed data compared to JSON log files but it is an undocumented binary format. Thus, the files keep their secrets. But some of the meta data at the beginning of the files are readable such as battery serial number or firmware versions.

The screenshot shows the 'ShowAnafiLogs V1.6 11/2019' application. The 'Tools' menu is open, highlighting 'Show meta data from FDR log'. A 'Meta data' window is open, displaying a table of metadata for an FDR log file. A 'Statistics' window is also open, showing flight data. A search window is open, showing the path 'D:\Flight\_Log\_data\Anafi\_Logs\FDR\' and a search for the UUID '384CBC80CA7FBC9AA791FEA6D55ED016'. A 'Find UUID' button is visible, and a 'File list with matching UUID' window is partially shown.

**Main menu > Tools:**  
Open FDR log file (\*.bin) to read the meta data. Result will be shown in the Details table.

**Meta data taken from the open FDR log file.**  
Ctrl+C copies the whole table to clipboard.

**FDR directory for recursive search for matching FDR log files.**

**The UUID we are looking for.**

**Find FDR log files matchin the UUID from JSON log files.**

**Result list. Click on a file name to get matching meta data from FDR log files.**

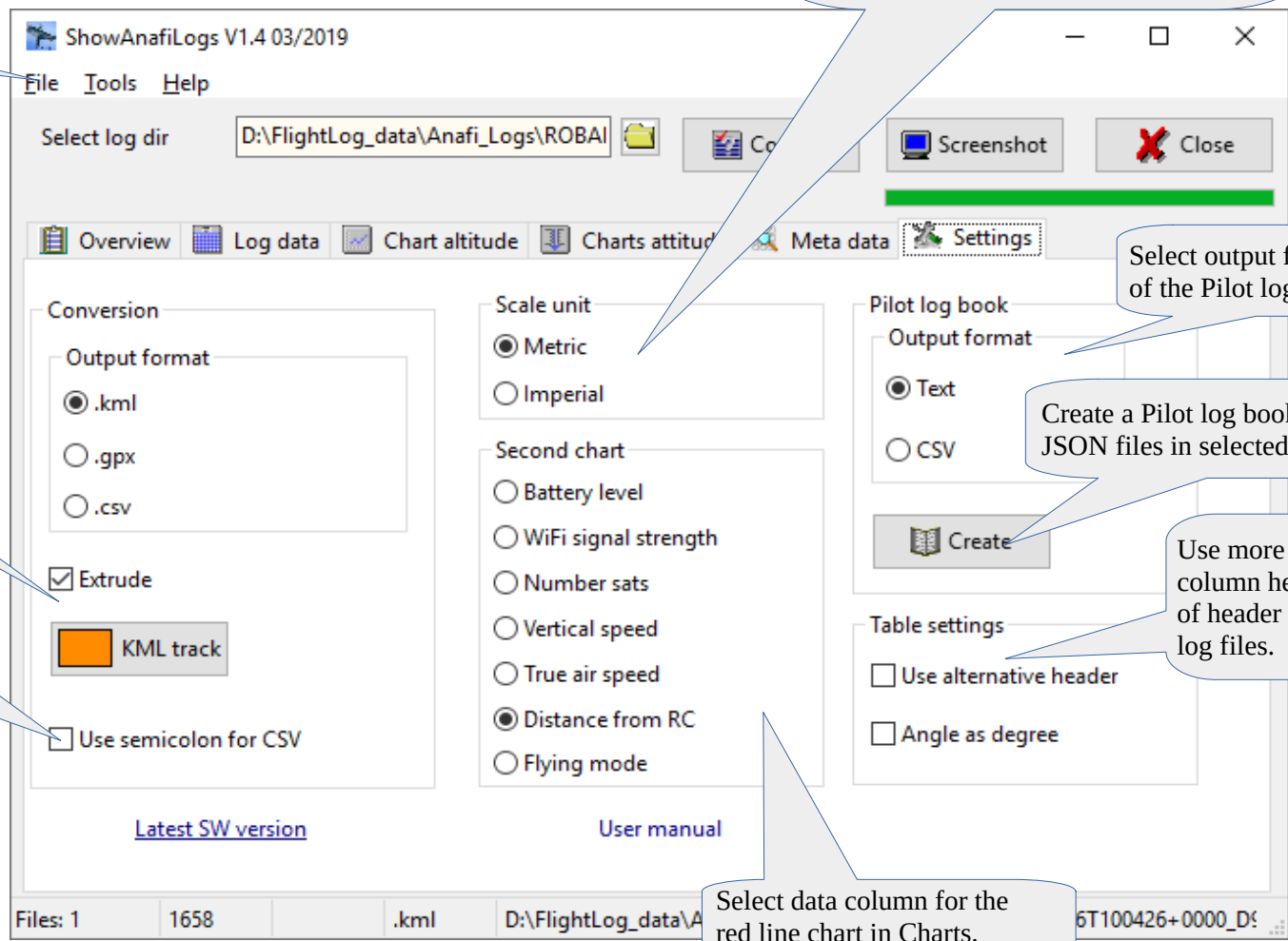
Statist	Min/max v	
Ceilin	5.520124m	003
Distar	6.926618m	004
Top s	1.455777m/s	403
Max battery level	46%	004
Min battery level	9%	872

build.date	Thu Oct 3 16:38:39 UTC 2019
parrot.build.group	drones
parrot.build.product	anafi
parrot.build.project	anafi
parrot.build.uid	anafi-4k-1.6.1
parrot.build.variant	4k
parrot.build.version	1.6.1

smartbattery.usb_version	0.10
smartbattery.version	1.0.9.0

Files: 17 | 5290 | .kml

# Settings



Main menu

Measurement units for data presentation. Currently I think the input from JSON log files is always metric, no matter what you have set on your device. But this is only an assumption.

Select output format of the Pilot log book

Settings for KML tracks.

Create a Pilot log book from all JSON files in selected directory.

Use semicolon instead of comma as data separator in CSV files.

Use more descriptive column header instead of header from JSON log files.

Select data column for the red line chart in Charts.



# Internes

Siehe auch: [https://developer.parrot.com/docs/olympere/arsdkng\\_ardrone3\\_piloting.html](https://developer.parrot.com/docs/olympere/arsdkng_ardrone3_piloting.html)

flying_state	Meaning	Remarks, internal naming
0	Landed	Landed
1	Taking Off	Taking Off
2	Hovering	Hovering
3	Flying	Flying
4	Landing	Landing
5	Emergency	Emergency
6	User take off	Waiting for user action to take off
7	Motor ramping	Motor ramping
8	Emergency landing	Drone autopilot has detected defective sensor(s)

alert_state	Meaning	Remarks, internal naming
0	None	none
1	Normal flight	user
2	Anafi shut down	cut out, if something hit the propeller
3	Battery level crucial	critical battery
4	Battery level low	low battery
5	Flight angle exceeded	too much angle (>70°)

Output format CSV Pilot log book:

product_gps_position_error	Meaning	Remarks, internal naming
0	No error	Seems to be always 0
1	Not in outdoor mode	Possibly not used
2	GPS not fixed	Possibly not used
3	Compass not calibrated	Possibly not used

flip_type	Meaning	Remarks, internal naming
0	None	Seems to be always 0
1	Front	Not used
2	Back	Not used
3	Right	Not used
4	Left	Not used

Battery level	Color
>50%	green
50% to 25 %	orange
<25%	red

Number of sats	Color
>10	green
11 to 5	orange
<5	red

Index	Header
0	Serial number
1	Date
2	From
3	To
4	Duration
5	Ceiling
6	Distance
7	Route
8	Top speed
9	Max battery level
10	Min battery level
11	Location
12	GPS fix at start

Index	Header	Description	Unit	Metric/Imperial	Conversion
0	Date/Time	Computed from Date/Time in Meta data plus Time since boot	date/time		
1	time	Time since boot in ms	ms		
2	battery_level	Battery charge level	%		
3	controller_gps_latitude	Controller latitude	lat		
4	controller_gps_longitude	Controller longitude	lon		
5	flying_state	Flying mode	enum		
6	alert_state	Alert state	enum		
7	wifi_signal	WiFi signal strength	dBm		
8	product_gps_available	Anafi GPS lock	bool		
9	product_gps_longitude	Anafi Longitude	lon		
10	product_gps_latitude	Anafi Latitude	lat		
11	product_gps_position_error	Anafi GPS error	enum		
12	product_gps_sv_number	Number of sats	#		
13	speed_vx	Foreward speed	m/s	m/s – ft/s	
14	speed_vy	Sideways speed	m/s	m/s – ft/s	
15	speed_vz	Vertical speed	m/s	m/s – ft/s	
16	angle_phi	Attitude – Roll Angle	rad		rad - ° +/-180
17	angle_theta	Attitude – Pitch Angle	rad		rad - ° +/-180
18	angle_psi	Attitude – Compass Heading	rad		rad - ° 0..360
19	altitude	Altitude relative to take off	m ft	m – ft	
20	flip_type	Flip type	enum		
21	speed	True air speed	m/s	m/s – ft/s	m/s – km/h / ft/s – mph
22	DIST	Distance Anafi to RC,computed from coordinates	m	m – ft	m – km / ft – mi

## Disclaimer

This software is freeware. You can use this software royalty-free for private and commercial purposes.

**Use this application on your own risk.**

**There is no guaranty for correctness and/or completeness of the results of the evaluation of flight log data or interpretation of the values in the flight logs.**

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