

AnafiPlanToGPX



Summary

"**AnafiPlanToGPX**" is an application to convert JSON flight plan files from Parrot's "Anafi" quad-copter into GPX files for review by map services.

Installation

No installation needed, this is a portable application. But you need write access to the directory where the application located. "AnafiPlanToGPX" will store its settings in an XML file there.

Usage

Open file "savedPlan_*.json". A list of waypoints will be shown on page "Waypoints" and some meta data (such as POI) on "Info" page. The related GPX file will be created and saved in the same folder as the flight plan file is.

It is possible to create additional trackpoints between waypoints in the target GPX file.

Enjoy.

Overview

Open a flight plan file by button "Open".
A file select dialog will appear.
Select the file you need to convert.

Allow/disallow
additional trackpoints
between waypoints.

Rate [1..100] of additional trackpoints. Smaller value
means more additional trackpoints between waypoints.
Rate 1 is approximately one trackpoint per
3D-distance in meter (optimal rate: 10 to 40).

Delta altitude
(ascent/descent)
between waypoints.

List of waypoints.
Latitude, longitude and
altitude will be used
for GPX tracks.

Preview number
of additional trackpoints
between waypoints.

Distance between waypoints

AnafiPlanToGPX 1.0 (2019-11-24) savedPlan_RDC.json

Open Add. trackpoints 3 Rate of additional trkpt Close

#	latitude	longitude	altitude	speed	yaw	lastYaw	continue	followPOI	follow	actions	Distance	Delta	Add. trkpt
1	38.91156	15.0391156	29,0	6	330,99	330,99	True	False	0		###	###	###
2	38.8964221	15.08964221	107,0	5	21,32	21,32	True	False	0		201,9	78,0	25
3	38.6718542	15.06718542	280,0	5	319,94	319,94	True	False	0		297,4	173,0	56
4	38.042239	15.042239	600,0	5	359,26	359,26	True	False	0		456,0	320,0	105
5	38.85	15.085					True	True	1		496,8	109,0	35
6	38.7051525	15.07051525					True	True	1		164,2	4,0	0
7	38.6244851	15.06244851					True	True	0		175,4	5,0	0
8	38.7704978	15.07704978					True	True	1		214,2	5,0	0
9	38.9911095	15.09911095					True	True	0		216,5	-6,0	1
10	38.0978614	15.0978614	709,0	5	292,03	213,98	True	True	0		256,2	-8,0	1
11	38.3927033	15.03927033	650,0	5	268,06	268,06	True	False	0		41,3	-59,0	18
12	38.5392860	15.05392860	280,0	5	161,48	161,48	True	False	0		45,7	-370,0	122
13	38.8206162	15.08206162	120,0	7	166,05	166,05	True	False	0		33,1	-160,0	52
14	38.0252687	15.0252687	58,0	5	44,94	44,94	True	False	0		21,1	-62,0	19
15	38.0309684	15.0309684	16,0	5	53,97	53,97	True	False	0		6,3	-42,0	13
16	38.0363999	15.0363999	3,0	5	83,83	83,83	True	False	0	VideoStopCapture	5,3	3,0	3

16 .GPX D:\Lazarus\Projekte\AnafiPlanToGPX\savedPlan_RDC.gpx

$Number\ additional\ trackpoints = (\text{square root of } (distance^2 + delta^2) \text{ divided by } rate_of_additional_trkpt) - 1.$

Meta data

This is just for information and reference.

The screenshot shows the 'AnafiPlanToGPX 1.0 (2019-11-24) savedPlan_RDC.json' window. It features a toolbar with an 'Open' button, a checkbox for 'Add. trackpoints', a spinner for 'Rate of additional trkpt' set to 3, and a 'Close' button. The main area has two tabs: 'Info' and 'Waypoints'. The 'Info' tab displays two tables of meta data.

Meta Data Table 1:

Parameter	Value
title	RDC-3—3
version	1
date	2019-11-19 15:22:47
product	ANAFI_4K
uuid	RDC-3—3
zoomLevel	16,08
rotation	337,58
tilt	0,00
mapType	4
progressive_course_activated	True
dirty	False

Meta Data Table 2:

Parameter	Value
TAKEOFF 1	-----
type	VideoStartCapture
cameraId	0
resolution	2073600
fps	30
POI 1	-----
latitude	29.134444 20.07
longitude	-75.898336
altitude	690
color	-7589836

Waypoints Table:

Parameter	Value
Number of waypoints.	
Number of trackpoints	

Callouts:

- Close application:** Points to the 'Close' button in the toolbar.
- List of meta data from JSON flight plan file. CTRL+C to copy whole table to clipboard.** Points to the first meta data table.
- Different points from from JSON flight plan file. CTRL+C to copy whole table to clipboard.** Points to the second meta data table.
- Number of waypoints.** Points to the first row of the waypoints table.
- Number of trackpoints** Points to the second row of the waypoints table.
- Output file name. Double click to open file explorer.** Points to the file path in the status bar: 'D:\Lazarus\Projekte\AnafiPlanToGPX\savedPlan_RDC.gpx'.

Status Bar: Shows '16 .GPX' and the file path 'D:\Lazarus\Projekte\AnafiPlanToGPX\savedPlan_RDC.gpx'.