

fl2xui

Flightlog2kml GUI tool

Jonathan Hudson

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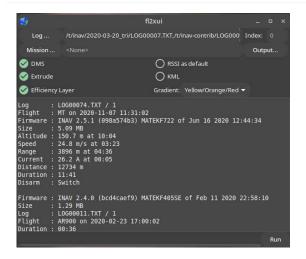
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1.1 Overview

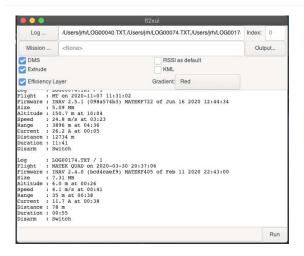
fl2xui is a cross-platform GUI for the flightlog2kml tool that converts (inav) flight logs to beautiful, annotated KML or KMZ files for visualisation in Google Earth.

fl2xui provides a consistent user interface across Linux, FreeBSD, MacOS and Windows.

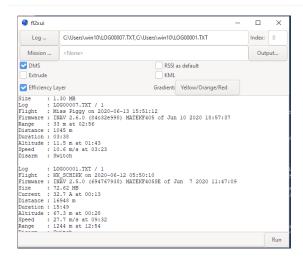
1.1.1 Linux (dark theme)



1.1.2 MacOS



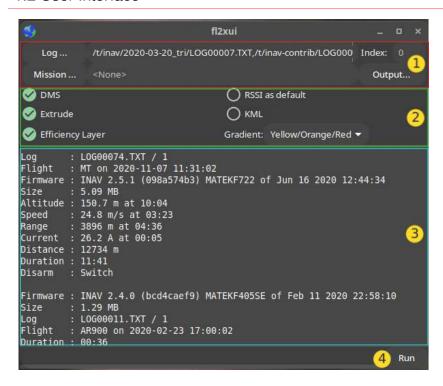
1.1.3 Windows



1.1.4 Features

- Multiple logs (Blackbox, OTX/ETX CSV)
- Summary information
- · Easy access to common visualisation options.

1.2 User Interface



1.2.1 File / index selection area (1)

• Log...: Opens a file chooser to select log files. Multiple files may be selected. The files may be a combination of Blackbox logs or OpenTX / EdgeTX CSV logs.

- Output...: Opens a file chooser to select the output directory. The defaults (no selection) are:
 - Linux, FreeBSD, MacOS: Current (working) directory, typically \$HOME when launched from a desktop environment.
 - Windows: "Documents" (e.g. C:\Users\USERNAME\Documents).
- Mission...: Optional mission file (single selection). MW XML format (e.g. from mwp or inav configurator.
- Index : If 0 (default), processes all logs in (each) file; if non zero, processes a single log at the specified index.

1.2.2 Visualisation Options (2)



Drag and drop

On Linux / FreeBSD, you can also drag and drop logs and mission files into this area, at least with the Gnome desktop environment.

- DMS: Display positions as degrees / minutes / seconds (DD:MM:SS.sss) vice decimal degress (DD.dddddd).
- Extrude: Extrude flight points the ground.
- Efficiency Layer: Include an efficiency layer in the output.
- RSSI as default : Set the RSSI layer as the default (vice Flight Mode).
- KML : Generate uncompressed KML (vice compressed KMZ).
- Gradient : Select the colour gradient for RSSI / Efficiency layer)
 - · Red shades of red
 - Green / Red Green (best) to red (worst)
 - Yellow / Orange / Red Yellow (best) to red (worst) via orange

1.2.3 Output Area (3)

• Output Area: Scrolled window showing process or error messages.

1.2.4 Progress bar and Run button (4)

- Run button is enabled when log files have been selected
- $\bullet \ \ An \ oscillating \ progress \ bar \ is \ displayed \ when \ a \ conversion \ is \ in \ process \ (after \ clicking \ "Run").$

1.3 Defaults

The defaults for run time options are taken from the flightlog2kml configuration file:

- POSIX OS : ~/.config/fl2x/config.json
- Windows : %LOCALAPPDATA%\fl2x\config.json

See also flight2kml wiki example.

1.4 Installation

1.4.1 Linux, FreeBSD

- Common GTK packages
- Debian package *.deb for Debian / Ubuntu and derivatives in fl2xui release area.
- Easily built from source

```
# Once (setup)
meson build --buildtype=release --strip --prefix=~/.local
# Build and install to ~/.local/bin (add to PATH if necessary)
```

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or specify some other PATH element (/usr/bin, /usr/local/bin, ~/bin)

1.4.2 Windows

- Win64 Installer file in the fl2xui release area, creates a desktop shortcut launcher.
- Win64 Zip file in the fl2xui release area, provided with shortcut launcher.
- Can be built from source using Msys2 (as Linux).
- It is recommended that blackbox_decode and flightlog2kml are in the fl2xui\bin directory (as in the release archive).

Look and Feel

From fl2xui 0.0.5, the default theme is set to emulate the Windows 10 look and feel. This may be changed by copying the distributed fl2xui\etc\gtk-3.0\settings.ini to %LOCALAPPDATA%\gtk-3.0\settings.ini and editing some settings as required:

- gtk-theme-name : sets the theme name
 - Windows10 : Windows 10 theme emulation
 - Adwaita : Default GTK theme
 - win32 : Ugly Windows 7 (more like Windows 95?) theme
- ullet gtk-application-prefer-dark-theme : set a dark theme
 - 0 light theme
 - 1 dark theme

If a dark theme is forced, then the Window header bar (by default drawn by the Windows window manager), is still light. This may be forced to be dark by setting the environment variable GTK_CSD=1. This may be set as a user environment variable from the Windows Control Panel.

1.4.3 MacOS

• Homebrew or similar environment is required to build from source (as Linux).

1.5 Author and Licence

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GPL v2 or later.