Guide to use this web site in parallel to the regular SkyView GUI from FlightAware

20190908/BM

Login to your RasPi.

You may be now in /home/pi or the like

Stop the http daemon

```
$ sudo service lighttpd stop
```

Preparing files

Create a staging folder:

```
$ mkdir stage
```

Copy all of the content of site-data into this folder (use WinSCP or a similar handy tool to transfer files or get it via RasPi Browser directly).

You should now have something like

stage/app/
stage/html_2/
stage/sqldb/
stage/vendor/
stage/composer.json

Change to the fa share folder

```
$ cd /usr/share/dump1090-fa/
```

Note: if you are updating from a previous version may be remove the html_2 folder to have a clean install.

```
$ sudo rm -r ./html_2
```

Copy all of the stage content into this directory

```
$ sudo cp -r /home/<whatever>/stage/* .
```

Note: this should not interfere with any FA provided content…

Double check:

```
$ ls -l
```

Should look like this…

```
pi@rpi-adsb1:/usr/share/dump1090-fa $ ls -l
total 32
drwxr-xr-x 2 root root 4096 Aug 10 18:04 app
drwxr-xr-x 2 root root 4096 May 25 14:22 bladerf
-rw-r--r-- 1 root root   92 Sep 20  2018 composer.json
drwxr-xr-x 8 root root 4096 Aug 17 22:28 html
drwxr-xr-x 9 root root 4096 Aug 17 22:29 html_2
drwxr-xr-x 2 root root 4096 Aug 10 18:04 sqldb
-rwxr-xr-x 1 root root  748 May  6 02:35 start-dump1090-fa
drwxr-xr-x 3 root root 4096 Aug 10 02:08 vendor
pi@rpi-adsb1:/usr/share/dump1090-fa $
```

Enable PHP for the web server

In order to use PHP for data access one has to enable PHP7 for the used web server

Ref: PHP 7.0 ON RASP https://pimylifeup.com/raspberry-pi-lighttpd/

```
$ sudo apt-get update
$ sudo apt-get install php7.0-fpm
$ sudo lighttpd-enable-mod fastcgi
$ sudo lighttpd-enable-mod fastcgi-php
```

Edit the config file:

```
$ sudo nano /etc/lighttpd/conf-available/15-fastcgi-php.conf
```

Type/Copy Paste/Edit

```
fastcgi.server += ( ".php" =>
        ((
                "bin-path" => "/usr/bin/php-cgi",                ---REMOVE CGI
                "socket" => "/var/run/lighttpd/php.socket",      ---REMOVE V5
                "socket" => "/var/run/php/php7.0-fpm.sock",      ---ENABLE V 7
                "max-procs" => 1,                                ---REMOVE max
                "bin-environment" => (                           ---REMOVE stuff
                        "PHP_FCGI_CHILDREN" => "4",
                        "PHP_FCGI_MAX_REQUESTS" => "10000"
                ),
                "bin-copy-environment" => (                      ---REMOVE exec env
                        "PATH", "SHELL", "USER"
                ),
                "broken-scriptfilename" => "enable"
        ))
)
```

Ctrl-X to exit and save with Y

Finally it looks like this

```
# -*- depends: fastcgi -*-
# /usr/share/doc/lighttpd/fastcgi.txt.gz
# http://redmine.lighttpd.net/projects/lighttpd/wiki/Docs:ConfigurationOptions#mod_fastcgi-fastcgi

## Start an FastCGI server for php (needs the php5-cgi package- update to V7)
fastcgi.server += ( ".php" =>
        ((
                "socket" => "/var/run/php/php7.0-fpm.sock",
                "broken-scriptfilename" => "enable"
        ))
)
```

Note: if PHP V7 is already used then you may omit this step – it relates to native installations of FA

In order to access the new website we edit the lighttpd config for dump1090 to add another site

```
$ sudo nano /etc/lighttpd/conf-available/89-dump1090-fa.conf
```

Type/Copy Paste/Edit – add red parts

```
# Allows access to the static files that provide the dump1090 map view,
# and also to the dynamically-generated json parts that contain aircraft
# data and are periodically written by the dump1090 daemon.

alias.url += (
  "/dump1090-fa/data/" => "/run/dump1090-fa/",
  "/dump1090-fa/" => "/usr/share/dump1090-fa/html/",
  "/dump1090-fa2/data/" => "/run/dump1090-fa/",
  "/dump1090-fa2/" => "/usr/share/dump1090-fa/html_2/"
)

# redirect the slash-less URL
url.redirect += (
  "^/dump1090-fa$" => "/dump1090-fa/",
  "^/dump1090-fa2$" => "/dump1090-fa2/"
)

# Listen on port 8080 and serve the map there, too.
$SERVER["socket"] == ":8080" {
  alias.url += (
    "/data/" => "/run/dump1090-fa/",
    "/" => "/usr/share/dump1090-fa/html/"
  )
}
$SERVER["socket"] == ":8081" {
  alias.url += (
    "/data/" => "/run/dump1090-fa/",
    "/" => "/usr/share/dump1090-fa/html_2/"
  )
}

# Add CORS header
server.modules += ( "mod_setenv" )
$HTTP["url"] =~ "^/dump1090-fa/data/.*\.json$" {
  setenv.add-response-header = ( "Access-Control-Allow-Origin" => "*" )
```

Ctrl-X to exit and save with Y

Finally start the http daemon:

```
$ sudo service lighttpd force-reload
```

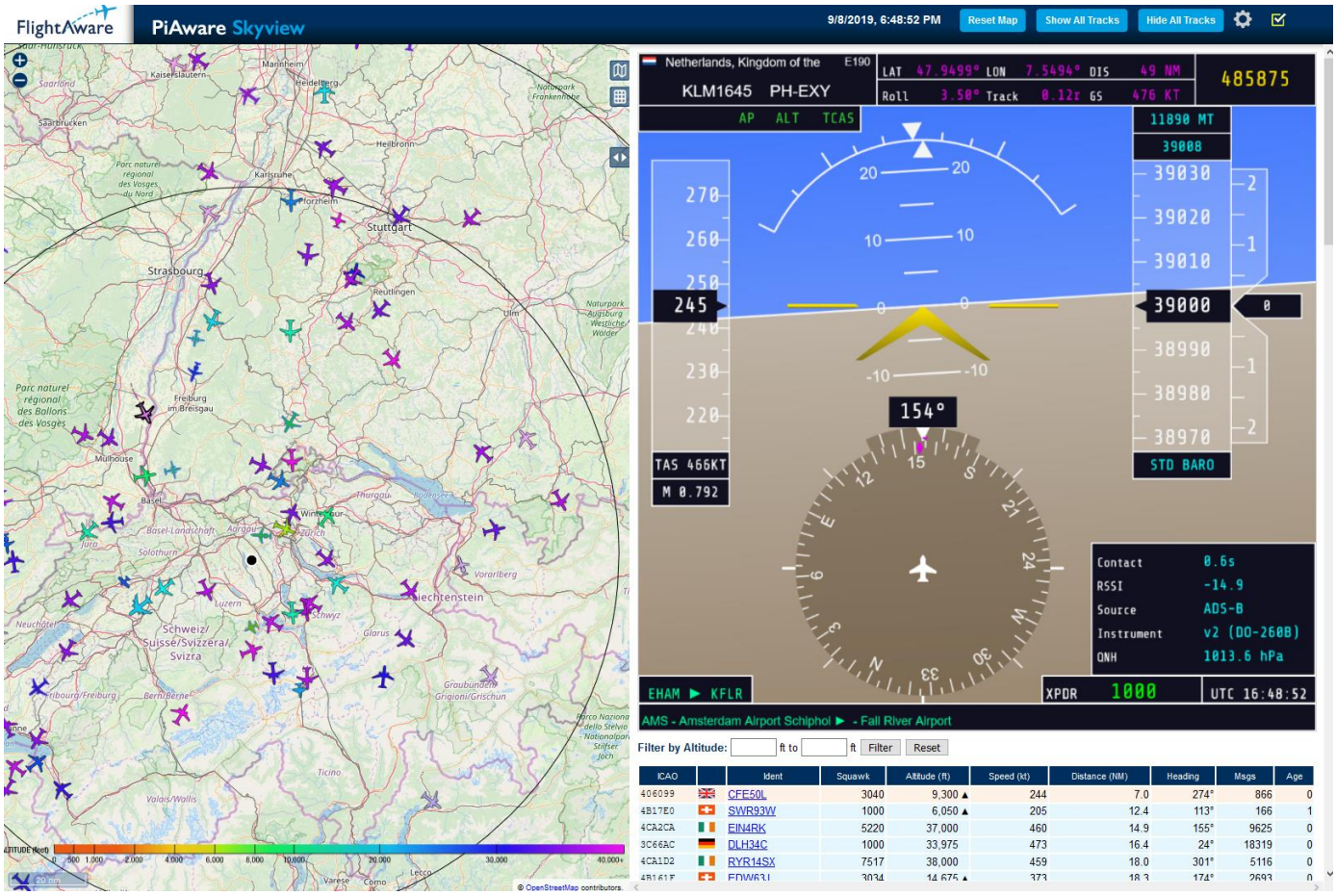
Access SkyView with Glass Panel with your browser

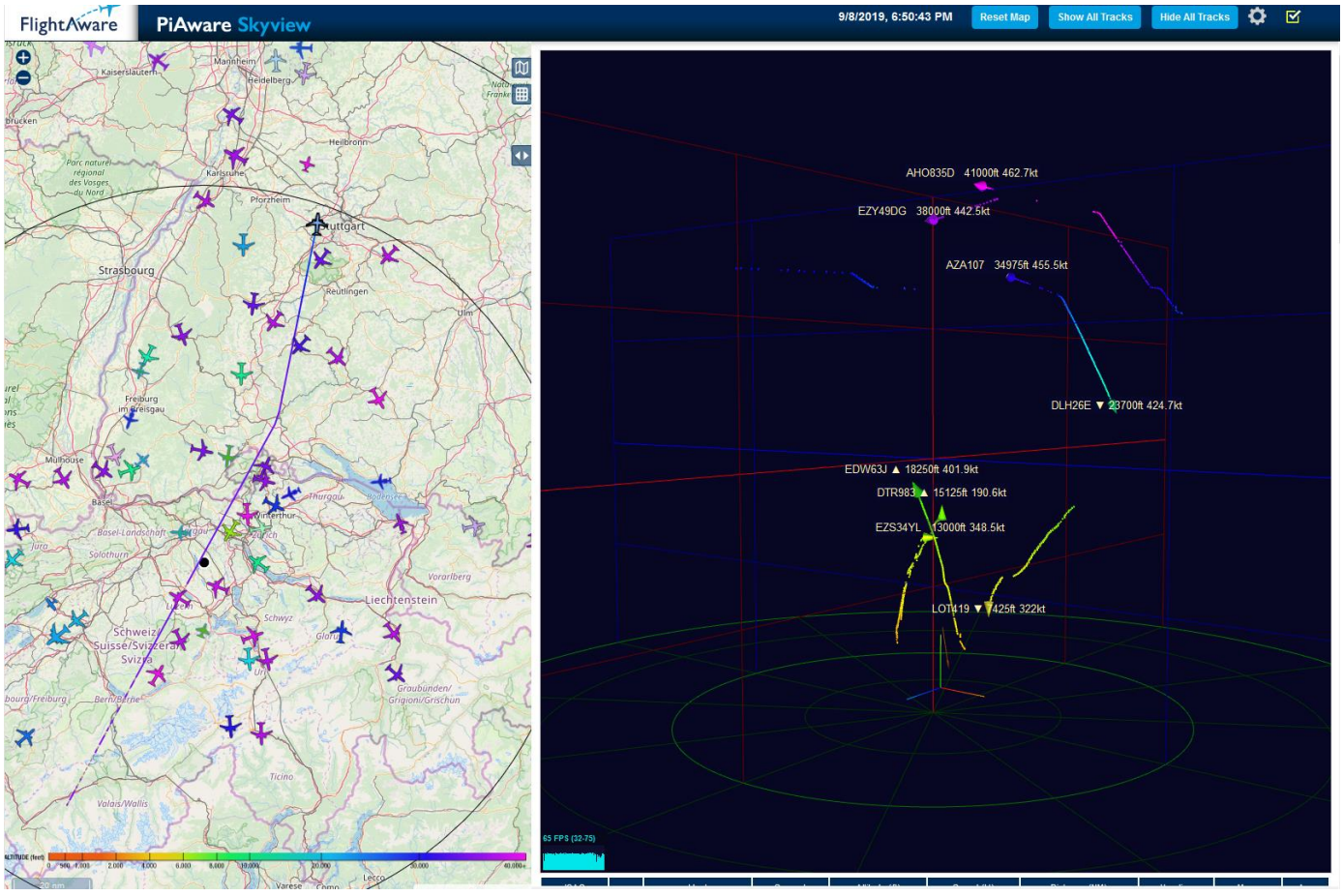
http://<pihost>:8081/

or

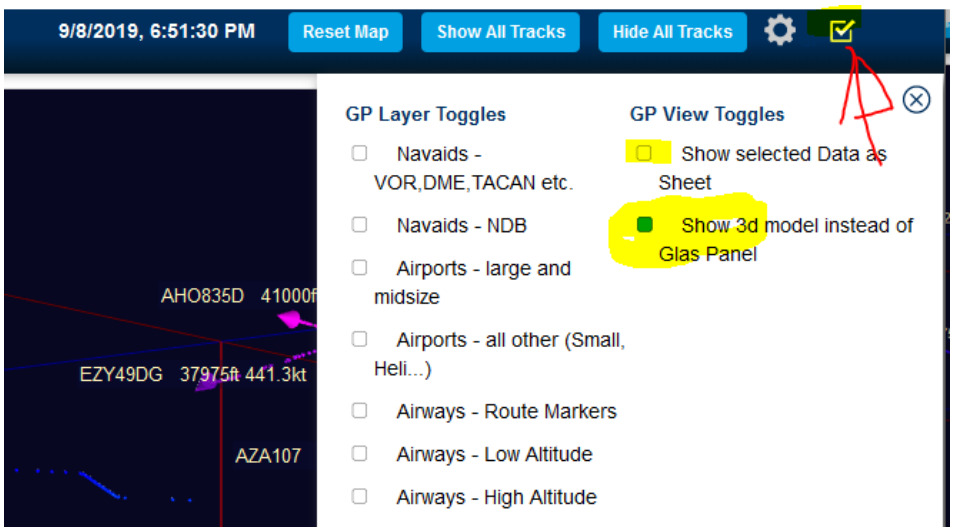
http://<pihost>/dump1090-fa2

Current Screens





Switching Panels



Use the checkmark right of Settings to open the toggle sheet.

Then either Show as Sheet (no Instrument or 3D Panel)

Uncheck 'Show as Sheet' and use the one below to switch between Instrument Panel and 3D View

3D View

In 3D View use the 'C' key to clear all aircrafts and track only the currently selected one.

Add more by selecting other aircrafts in the Map.

Pan (right mouse button), Orbit (left mouse button) and Zoom (middle mouse button or mouse wheel)

Orientation see below: this is North Up (the small coord system is then in the lower right quadrant i.e. SE of center)

Center is receiver location from dump1090, red grid is NS, blue is EW direction,

Alt is 10'000 ft per height division, Lat,Lon is 50nm per circle division (range is 200nm).