



## FS GLOBAL REAL WEATHER

### Data Exchange Description

Version 1.7 Build #015

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[FS Global Real Weather](#)

# TABLE OF CONTENTS

INTRODUCTION.....	3
FILE FORMAT DESCRIPTION.....	3
CONTACT & TROUBLE SHOOTING.....	4

# INTRODUCTION

This document contains a description of the file format FS Global Real Weather uses to allow other tools to get information about the weather that it feeds the simulator with. Since this file may be used by various tools, developers have to consider a few things when working with the file:

- FS Global Real Weather writes three files (*current\_weather.txt*, *current\_weathercomplete.txt* and *current\_weatherbylatlon.txt*) into the *data\exchange\common* subfolder of the installation folder of FS Global Real Weather. However, it does so only if the option is checked in the settings dialog of FS Global Real Weather (**Tools** → **Settings** → **General** → **Enable Data Exchange**).
- FS Global Real Weather may update these files after new weather was downloaded from our weather servers. All files must not be locked by any third party tool, because this will result in an error when FS Global Real Weather tries to write the files.
- Third party tool developers should be aware of the fact, that the files may not be readable whenever FS Global Real Weather writes to the disk. Developers should handle this situation and retry reading the file a few seconds later.

## FILE FORMAT DESCRIPTION

The file contains one line for each weather station in the following format (< and > signs are not actually contained in the file and only specify place holders for actual data):

**current\_weather.txt:**

<METAR>~<UPPER AIR DATA RECORDS>

**current\_weatherbylatlon.txt:**

<latitude \* 1000000>;<longitude \* 1000000>~<UPPER AIR DATA RECORDS>

**current\_weathercomplete.txt:**

<METAR>;<latitude \* 1000000>;<longitude \* 1000000>~<UPPER AIR DATA RECORDS>

The upper air data records section contains an array of records separated by a pipe (|). Each record contains an array of values for the specific upper air data layer, separated by a semicolon (;):

<layer\_altitude>;<winddirection>;<windspeed>;<temp>;<turbulence>

Here's a short description of each value:

**Layer Altitude**

The MSL altitude of the given upper air layer in feet.

<b>Wind Direction</b>	The wind direction of the given upper air layer.
<b>Wind Speed</b>	The wind speed of the given upper air layer in knots.
<b>Temperature</b>	The temperature of the given upper air layer in °C.
<b>Turbulence</b>	1 = Turbulence, 0 = No Turbulence

Here's an example excerpt of a line with actual data:

**current\_weather.txt:**

LOWW 302122Z 35004KT 9999 BKN060 15/08 Q1021~2694;337;22;13;0|5018;323;23;6;1

**current\_weatherbylatlon.txt:**

48110300;16569700~2694;337;22;13;0|5018;323;23;6;1

**current\_weathercomplete.txt:**

LOWW 302122Z 35004KT CAVOK 15/08 Q1021;48110300;16569700~2694;337;22;13;0|5018;323;23;6;1

The green text represents either the METAR string for the given weather station (LOWW in this example) or the latitude and longitude of the station, or both, depending on which file you read. The red section contains two upper air layers (the actual file contains more of them). The first upper air record describes a layer in 2.694 ft. MSL with wind 337° with 22 knots, 13 °C and no turbulence. The second one describes a layer in 5.018 ft. MSL with wind from 323° with 23 knots, a temperature of 6 °C and light to severe turbulence.

## CONTACT & TROUBLE SHOOTING

If you experience some troubles, please contact support at [fsgrw@fly2pilots.com](mailto:fsgrw@fly2pilots.com) and be sure to provide a detailed explanation of the problems that occurred.