



**Flight Utilities**

<http://www.flightutilities.com>

# Metar Reader

**version 3.1**

by Umberto Degli Esposti



**Metar Reader** by Umberto Degli Esposti

## Description

The program allows inserting a Metar, to load it from a disk or from internet and to show his translation in human language. There is a database containing all the airports for an easy search of the ID ICAO airport code. It treats even some particular added information for the Italian airports.

To the Metar translation can be associated a visualization that offer an immediate comprehension of interesting values. You can keep under observation more than one Metar. Integrating this software with Flight Simulator you can see the Metar close to the plane. It is also possible to transfer the weather condition in Flight Simulator 2004.

## Installation

To run the program you need the Microsoft .NET 2.0 framework. This software is already installed on recent Windows and it will be even in the next version.

For all the other Windows version (98-2000-ME-XP) you need to install it.

You can download it from Microsoft website.

The component you have to download is "**Microsoft .NET Framework Version 2.0 Redistributable Package**".

The link is:

<http://www.microsoft.com/downloads/details.aspx?FamilyID=0856eacb-4362-4b0d-8edd-aab15c5e04f5&displaylang=en>

The program need also the Microsoft component for the MDAC data management in the 2.7 version or later. Usually this component is already installed on the computer. If during the use of the program appears the message telling that this component is missing, you can download it from the Microsoft website at the link:

<http://www.microsoft.com/downloads/details.aspx?FamilyID=6c050fe3-c795-4b7d-b037-185d0506396c&DisplayLang=en>

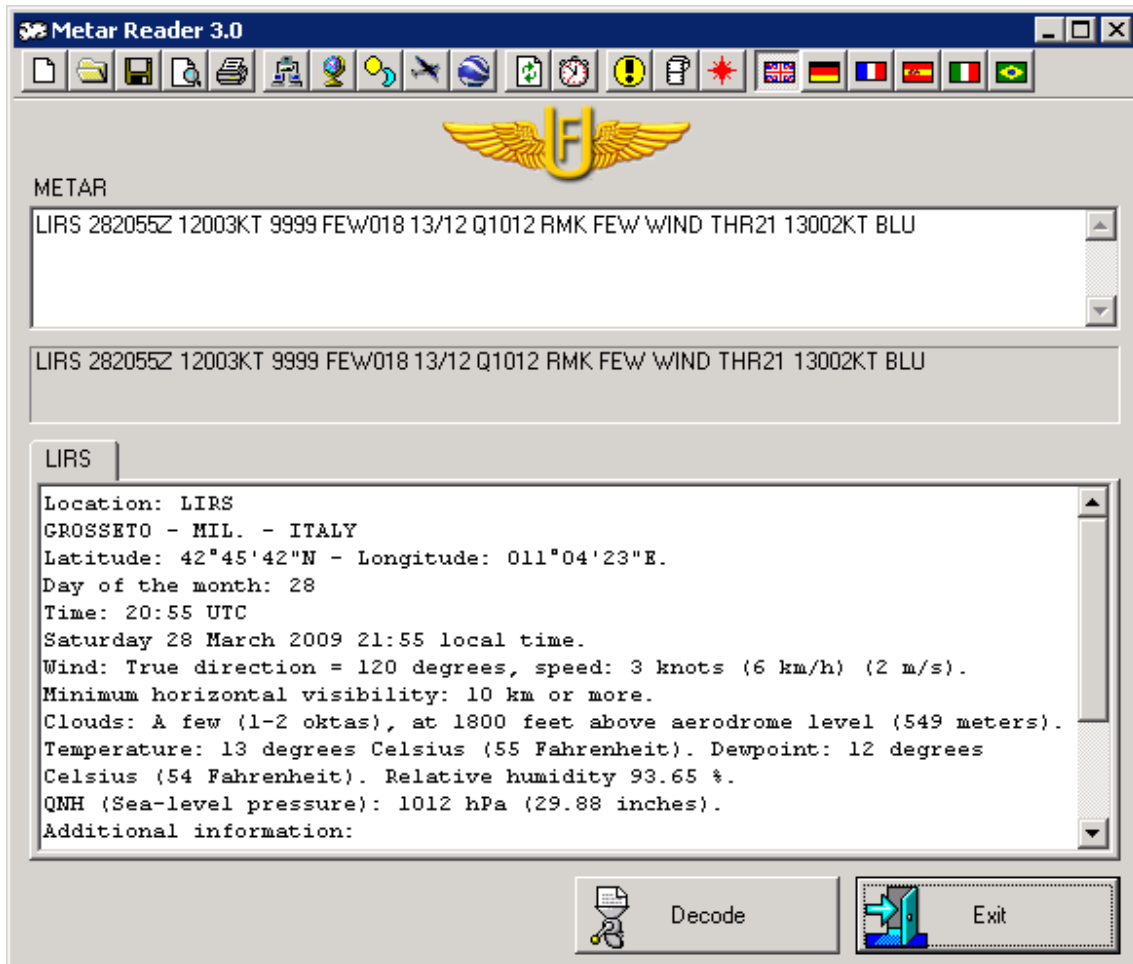
The program doesn't need to be installed, you can copy the files program in a directory on the disk and execute it.



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## Using MetarReader

Once you've started the program you'll see the main window. The initial language is the same of your operative system.



You can key the Metar in the “Metar” section, introduce it by copy/paste, read from the disk or from the net. The “Decode” button does the translation and shows it in the “Description” section. It is possible to insert more than one Metar, a folder will be created for each inserted Metar.

The toolbar has buttons for several features.



Clear the window to introduce e new Metar.



Read a Metar from the disk.



Save a Metar on the disk.



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Show the print preview. If the “View picture” button is pressed, add to the print the icons for each Metar.



Print the Metar with the relative decoding. If the “View picture” button is pressed, add to the print the icons for each Metar.



If you need to use a different proxy than Internet Explorer proxy or proxy with authentication set your parameters in the following window.

**Proxy configuration**

Internet Explorer configuration

Use a proxy server

Address: proxy.mysite.com

Port: 8080

Authentication:

User: User

Password: \*\*\*\*\*

Domain:

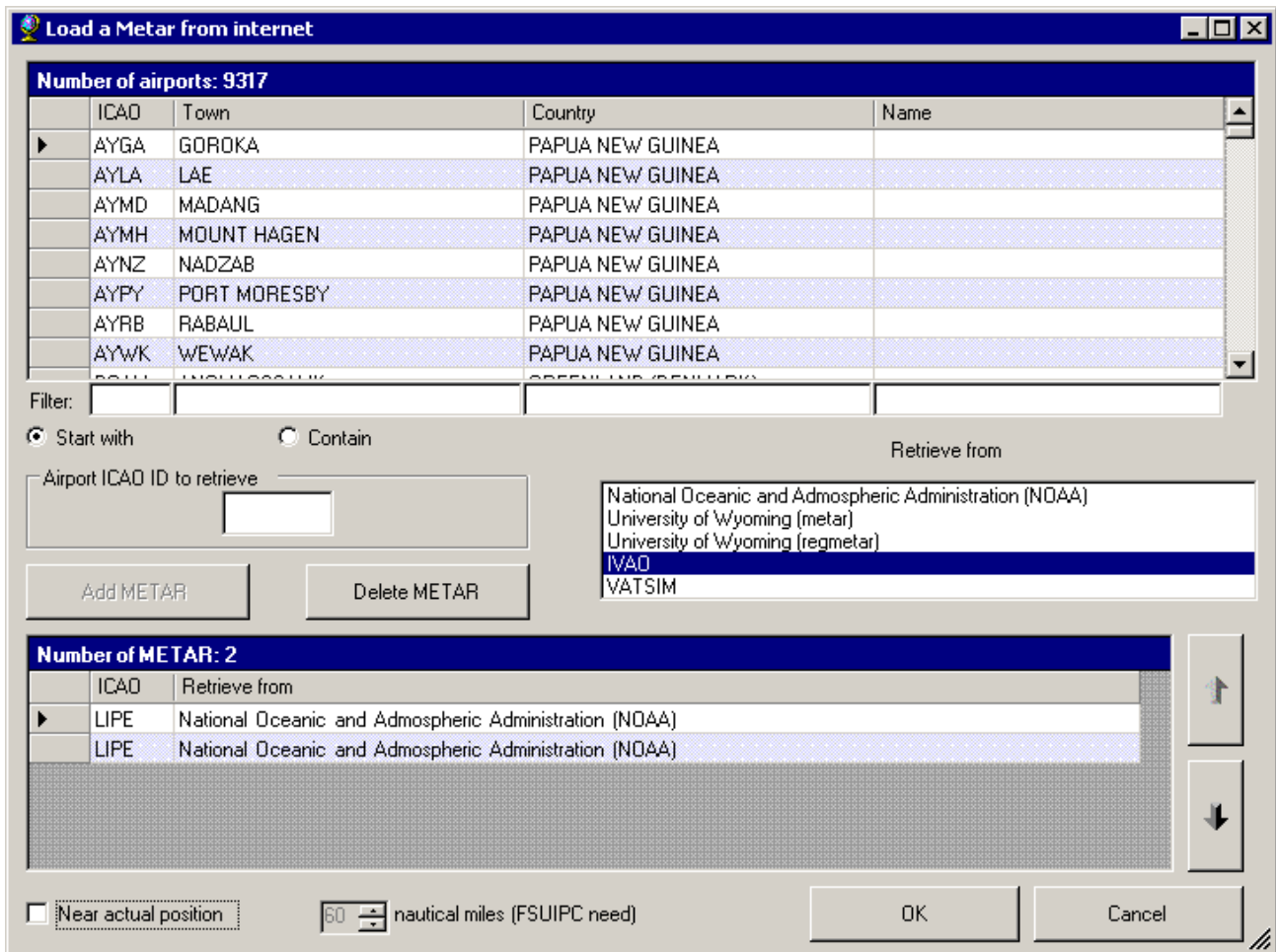
OK Cancel



Read a Metar from internet. It shows the window to search the airport.



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To read from internet you need to insert the ICAO airport code. You can find it in the database using the filter fields. Once you've found the airport, select it with a double click. Select the internet source to read the Metar and press "Add METAR". Repeat these operations for each Metar you need to recall. The software memorize the list of Metar to read for the next times. If you want to erase a Metar from the list, select it then click on "Delete Metar". It is possible to find on internet the Metar of the airport close to the plane, just selecting the radius, in nautical miles, inside which you want to do the research. For this function you need to have Flight Simulator started and FSUIPC recorded.



It shows the whole worldmap with time zone, current night/day situation and moon phase.



With this function the decoded weather conditions will be inserted in Flight Simulator. For this function you need to have Flight Simulator 2004 started without the "real-world weather" option and FSUIPC recorded.





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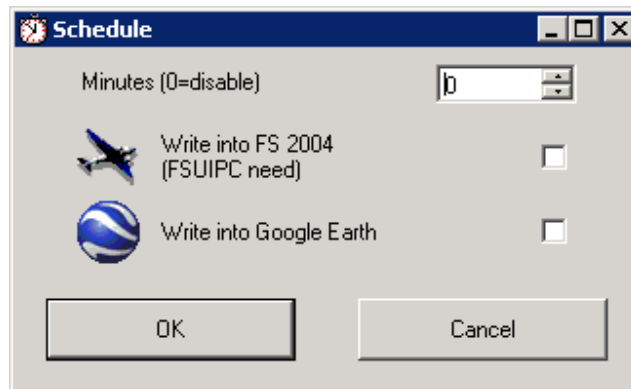
Show the Metar Stations in Google Earth with Metar decode.



This button allows to bring up-to-date the selected Metar with the option “read the Metar from internet” and decode it.



It is possible to schedule the Metar refresh from internet.



The gap is expressed in minutes. The gap can't be more of 120 minutes. With zero minutes you interrupt the current schedulation. You can select the check box to refresh automatically the weather conditions in Flight Simulator. You can write automatically the Metar in Google Earth. When the schedulation is switched on, you can see in the main window the countdown to the next refresh.

If you have activated, in Google Earth, the check to reload the update file, Google Earth will ask you to confirm any update. Press the “Always (don't ask again)” button to automatically update the Metars.



Maybe some Metar from internet are not available. The software hides the folder of those Metar. If you click on this button the software will show you those folders.



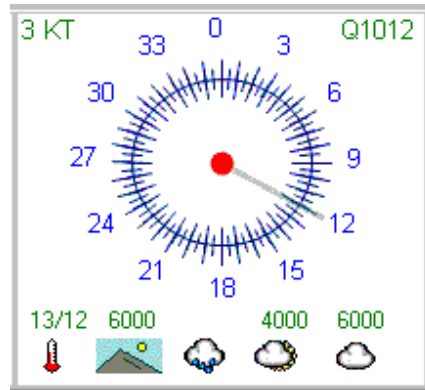
During the decoding you can separate the Metar tokens, so you can better watch the decoding of each element.



With this button you can quickly see the airport weather conditions.



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It shows:

on the high left, the wind speed;

on the high right, the atmospheric pressure;

in the center, the wind direction and his variability;

at the bottom, the conditions of temperature, visibility, cloudiness and rain.



The program can be used in several languages: English, German, French, Spanish, Italian and Portuguese. The decoding will be shown in the chosen language.

## Interface for external calls

Example: *MetarReader.exe 2 452703N 0113520E 443534N 0113920E 3 30*

The program can be also used from command line or other programs that want to have informations on the Metar in the vicinities of one coordinate.

Supplying to the call of the program a list of arguments, it starts and shows the Metar demands.

An example is the FlightPlan program that uses it for having the weather information of several points of the flight plan.

The arguments to supply are:

- Coordinates number and for each the follow items:
  - Latitude expressed with seven characters. Two for the degrees, two for minutes, two for seconds and the last (N or S) for North or South.
  - Longitude expressed with eight characters. Three for the degrees, two for minutes, two for seconds and the last (and or W) for East or West.
- Source to use in order to recover the Metar from Internet.
  - 0 = National Oceanic and Admospheric Administration (NOAA)
  - 1 = University of Wyoming (metar)
  - 2 = University of Wyoming (regmetar)
  - 3 = IVAO
  - 4 = VATSIM
- Distance in miles from the given coordinates between which to look for the Metar; the value can go between 1 and 60.



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**Warning !!! The program is no substitute for the ARO informations!**

Have a Good Flight!