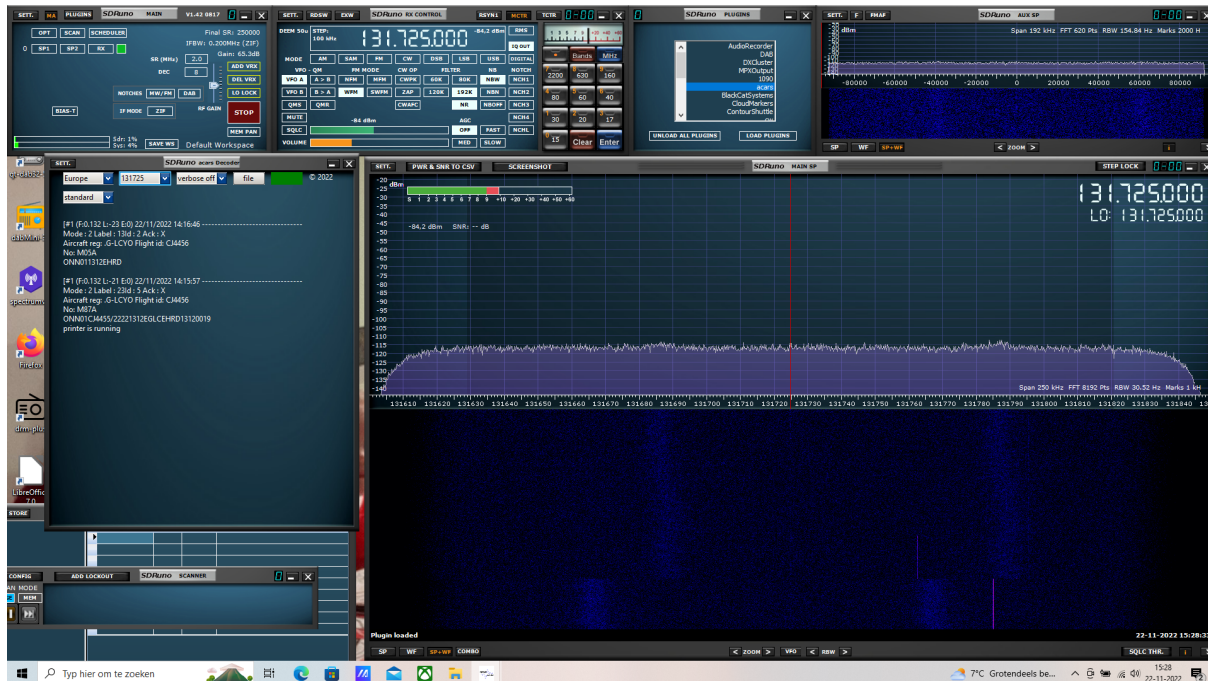


# An experimental plugin for decoding Acars small user's guide \*

## Revised edition of the plugin

Jan van Katwijk  
Lazy Chair Computing  
The Netherlands  
[J.vanKatwijk@gmail.com](mailto:J.vanKatwijk@gmail.com)

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## 1 The Plugin

Acars stands for *Aircraft Communications Addressing and Reporting System*, a digital datalink for transmitting short messages between aircraft and ground stations. The plugin decodes Acars transmission in the VHF band (around 130 Mhz).

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The software is heavily based on the acars decoder in C, written by *Thierry Leconte*. His version supported decoding of more than one channels simultaneously, as long as the channels fitted in a bandwidth supported by the input device. A few years back, I added support for SDRplay RSP's (using the "old" version 2 of the support library), and somewhat later I rewrote the decoder software in C++.

It should be emphasized that the SDRuno plugin for acars decoding uses both the implementation of the Msk decoding and the printer functions are (almost) taken literally from Thierry's work and fall under his copyright's terms.

## 2 Disclaimer

The title reads *experimental*. In my environment there is a small regional airfield where the number of flights is - since corona - extremely limited so testing the plugin is not to the level I am used to. The software may contain errors or other strange effects. Feedback is of course welcome.

## 3 Overview of the plugin

Transmission frequencies for Acars differ from continent to continent, Usually there is a main frequency and possibly annumber of laternative frequencies per continent.

Other than the original code the plugin decodes a single channel, the channel can be selected by the channel selecgtor. To support use in different continents, the plugin has a continent selector. On selecting a continent, thw channel selector will be set to contain the relevant frequencies for that continent, with the main frequencie as first option.

The setting for the continent will be maintained between invocations of the plugin.

Other selectors are

- dump selector. If activated a file menu shows where a filename can be given. All output will be saved in the file, until the file is closed by either touching the dump selector again, or - obviously - if the plugin is halted. If dumping is selected, a small label will change color from green to red.
- output selector. With this selector one may choose differe styles of output.

Since the size of widget is limited, only the most recent 30 to 35 lines are displayed.

## 4 Copyright

As mentioned, parts of the software are copyrighted to Thierry Lecomte, Other parts I do have copy-rights.

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