

# CodesUI

The screenshot displays the CodesUI application interface. The top panel shows a list of messages with columns for index, type, sub-type, category, status, message number, level, sequence, and date. The middle panel displays a detailed view of a selected message, including its key-value pairs and various meteorological parameters such as pressure, wind speed, and temperature. The bottom panel features a world map with numerous red dots representing observation locations. The interface includes navigation and search tools, and a task bar at the bottom showing the current task and command.



CodesUI is a standalone interactive application built on ecCodes and Qt5 to inspect:

- WMO FM-92 GRIB edition 1 and edition 2 messages
- WMO FM-94 BUFR edition 3 and edition 4 messages.

With CodesUI it is possible to:

- inspect the overall structure of GRIB and BUFR files
- examine the data and metadata of the individual messages

For BUFR data these additional features are also available:

- filtering BUFR messages
- extracting tabular data from BUFR messages
- plotting BUFR observation locations on an interactive map

Please note that although CodesUI has some basic plotting capabilities it is not a visualisation system.



CodesUI shares its codebase with the GRIB and BUFR examiners of the Metview meteorological workstation system. It was packaged as a standalone software application with the minimum possible dependencies requiring only ecCodes and Qt5 for installation.