

Binary Encoders Module. This is an optional program module, which includes the BUFR and netCDF data encoders.

BUFR Encoder. This option saves the sounding in the special WMO code form FM 94 BUFR (Binary Universal Form for the Representation) data format. Both single and multiple sounding files can be encoded into the BUFR format.

The first tab of the BUFR encoder is shown below. It encodes administrative qualifiers necessary for the proper function of BUFR decoders. The topmost entry, "WMO Index" is a restricted entry field, as it only allows predetermined table options (reference: Common Code Table C-1). If you do not represent any of the allowed table entries, then you must contact the WMO to add your organization to the table listing. In contrast, the "Station acquisition" and "Observer ID" entries are optional and completely free form. The "Sounding Type" entries should be selected to best identify your sounding data.

The screenshot shows the "BUFR Encoder" dialog box with the "Header Data" tab selected. The "Originating/Generating Center" section contains a "WMO Index" dropdown menu with the value "253" and the text "Reserved for other centers". Below this is a note: "Leave blank (use top entry) if your organization is not listed. Contact the WMO to request table additions." There are two text input fields: "Station acquisition:" and "Observer ID:". The "Sounding Type" section has two radio buttons: "Conventional:" (selected) and "Satellite:". To the right of the "Conventional:" radio button is a "Sounding Sub-type:" dropdown menu with the value "Rawinsonde - fixed land". At the bottom of the dialog are three buttons: "Encode Sounding", "Cancel", and "Help".

The second tab of the BUFR encoder allows encoding of either a single sounding, all soundings within a multi-sounding file, or a specified range of soundings. Note that the BUFR Encoder only encodes the following parameters: Pressure, Temperature, Dewpoint, Height, and Winds (U,V,W components).

The screenshot shows the "BUFR Encoder" dialog box with the "Sounding Data" tab selected. The "Processing Option" section contains three radio buttons: "Plotted sounding only" (selected), "All soundings", and "Selected range of soundings".