Upperair Haast_sonde

Author(s)

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Data queries: As above

Data set overview:

Intro: free-lift radiosonde flights conducted as requested by PI's based in Christchurch. Plus EWS surface weather data

Time period: sonde flights from 5 June 2014 to 14 July 2014

EWS data from 11 June 2014 to 14 July 2014

Location: Hannahs Clearing, South Westland, New Zealand

43.9380°S 168.8590°E 3m amsl

Instrument description:

Radiosonde soundings by Vaisala DigiCORA MW41 sounding system, portable antenna GC31 and using RS92 sondes. For full specifications see: http://www.vaisala.com/products/soundingsystemsandradiosondes/sounding systems/

Surface weather data from EWS using Vaisala WXT sensor

Data collection and processing:

51 radiosonde soundings, with following data files for each flight: EDT, FLEDT, FLSTD, FRAWPTU, GPS_ORB, GPSCCLOC, GPSCCREM, GPSDCC_RESULT, RS92SONDEID, RSSTATUS, STD

QA and control via supplied Vaisala DigiCORA software.

EWS data: 10-minute means of temperature (mean, max, min), RH (%), pressure, rainfall, wind direction and speed (mean), sd of direction and speed, max wind gust direction and speed, solar radiation (W/m^2).

Data file format:

Sonde data in excel spreadsheets

EWS data: excel spreadsheet

Remarks: Overall, no problems or issues with the instrumentation. All requested soundings were accomplished except for 15Z on 29 June; this flight was not attempted due to severe thunderstorms making working out in the open too dangerous. Two flights (09Z 24 June and 15Z 24 June) did not reach the tropopause due to sudden loss of the data signal, possibly due to intense rain from very thick cloud layers and strong winds possibly pushing the balloon behind high mountains to the SE.