

SkySonde, a Weather Balloon Telemetry and Data Processing System

A. Jordan¹, E. Hall¹, D. Hurst¹, P. Cullis¹ and B. Johnson²

¹Cooperative Institute for Research in Environmental Sciences, University of Colorado, Boulder, CO 80309; 303-497-4781, E-mail: allen.jordan@noaa.gov

²NOAA Earth System Research Laboratory, Boulder, CO 80305

SkySonde is a suite of weather balloon telemetry and data processing software recently created in NOAA's Ozone and Water Vapor Group. It was designed to work with the Internet iMet-1 radiosonde that measures pressure/temperature/humidity/GPS, along with several external instruments (the EN-SCI ECC Ozonesonde and the NOAA Frostpoint Hygrometer, mainly) when they are launched on the balloons. SkySonde Server collects raw balloon data from a radio receiver, and makes it available locally or through the network to SkySonde Client that plots, processes, and outputs the data. SkySonde Processor can load data files after a flight to do any post-processing calculations, data editing, and final archive-quality file outputs. These programs have greatly simplified the balloon data collection and processing system while providing many useful new features.

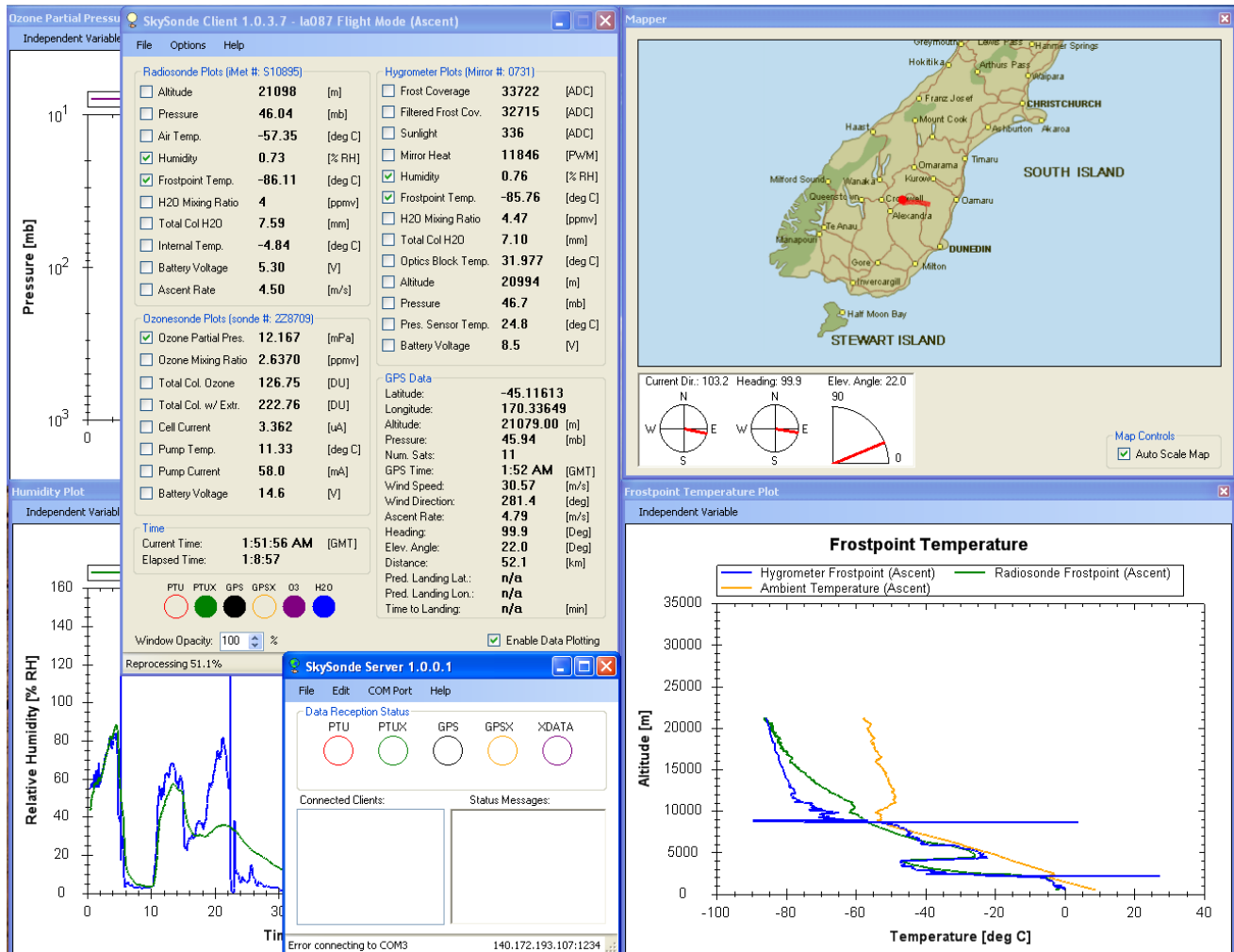


Figure 1. A screenshot of SkySonde Server and SkySonde Client with balloon data from a Lauder, New Zealand flight.