

Radiosonde decoding

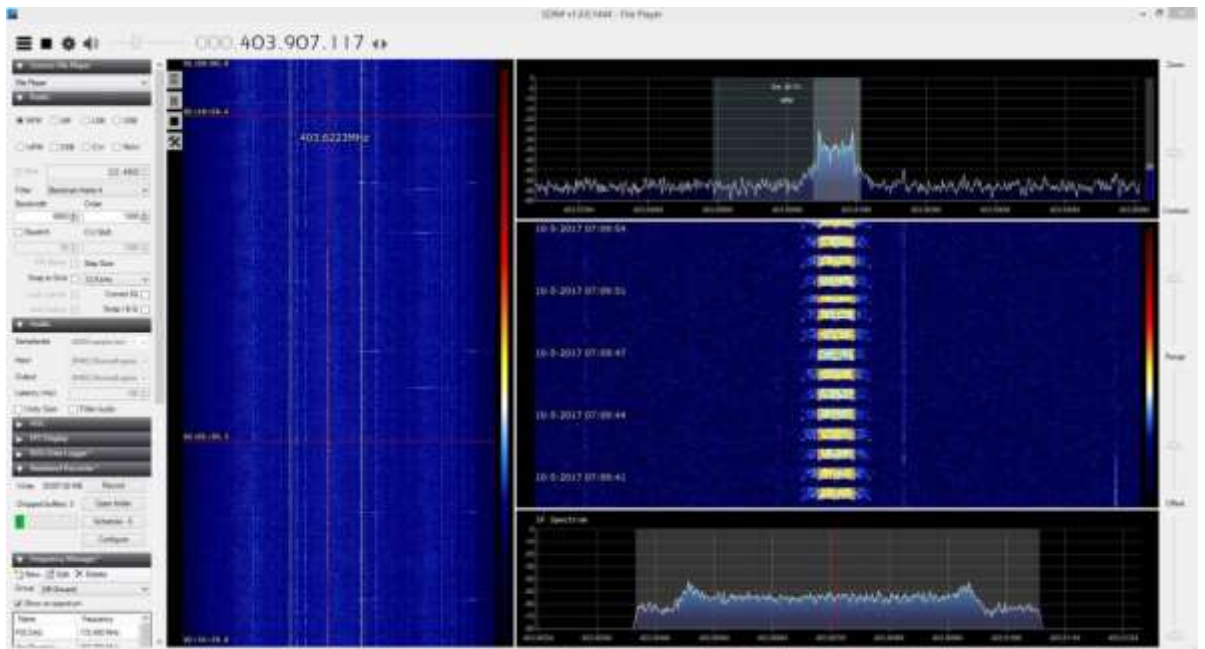
Equipment:

RTL-SDR connected to a 17cm groundplane antenna



Software:

SDR#



VB Cable

VB-Audio Virtual Cable Control Panel (Version 1.0.3.2)

Options About

Driver Name: **VB-Audio Virtual Cable**
 Driver Version: **1.0.3.2**
 Internal SR: **48000 Hz**
 Max Latency: **7168 smp**

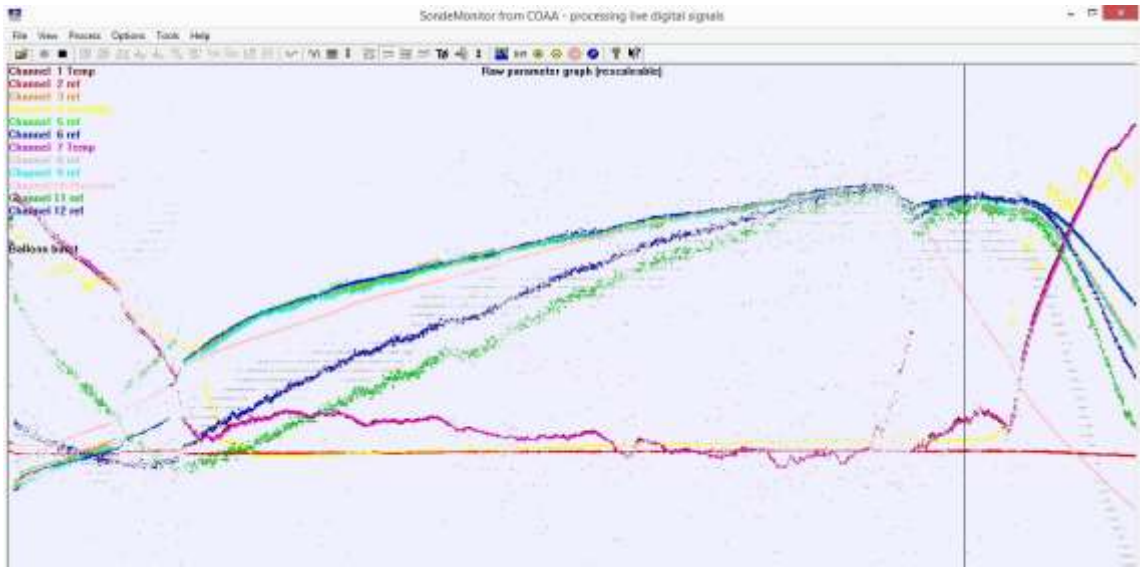
Statistics		Input	Output
Buffers:	750542	b128: 5070	b128: 62100
Push loss:	265848	b256: 740401	b256: 488919
Pull loss:	11768	b512: 0	b512: 0
Init:	1	b1024: 0	b1024: 0

Input Levels		
1	22.7 %	FL
2	22.7 %	FR
3	0.0 %	FC
4	0.0 %	LF
5	0.0 %	BL
6	0.0 %	BR
7	0.0 %	FLC
8	0.0 %	FRC

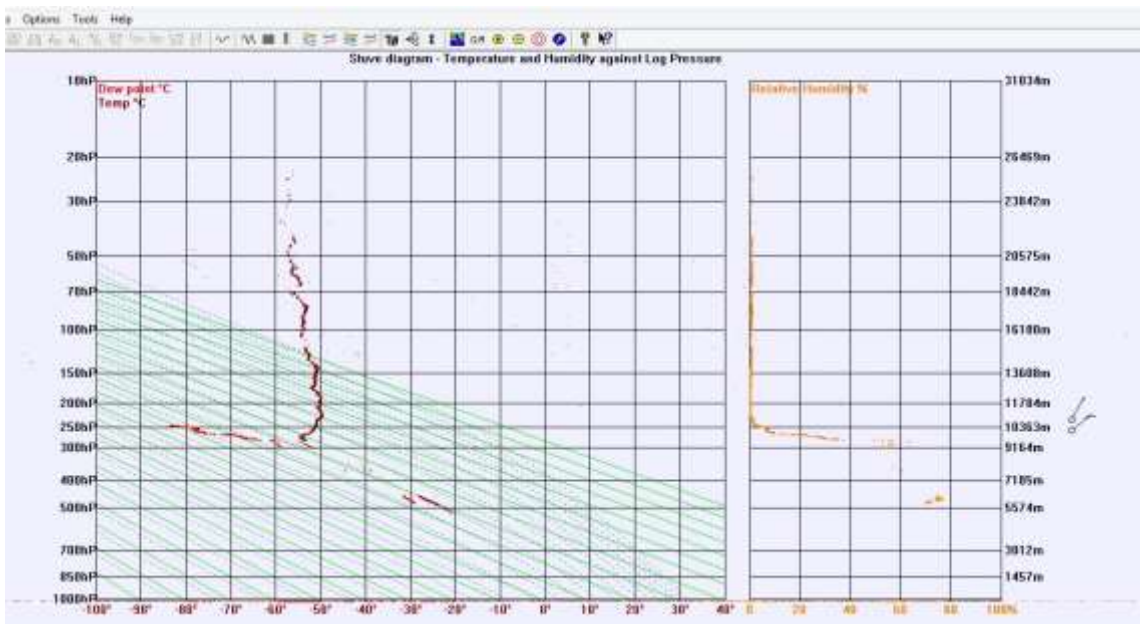
Input
 ch: 2
 sr: 44100 Hz
 res: 16 bits

Output
 ch: 2
 sr: 44100 Hz
 res: 16 bits

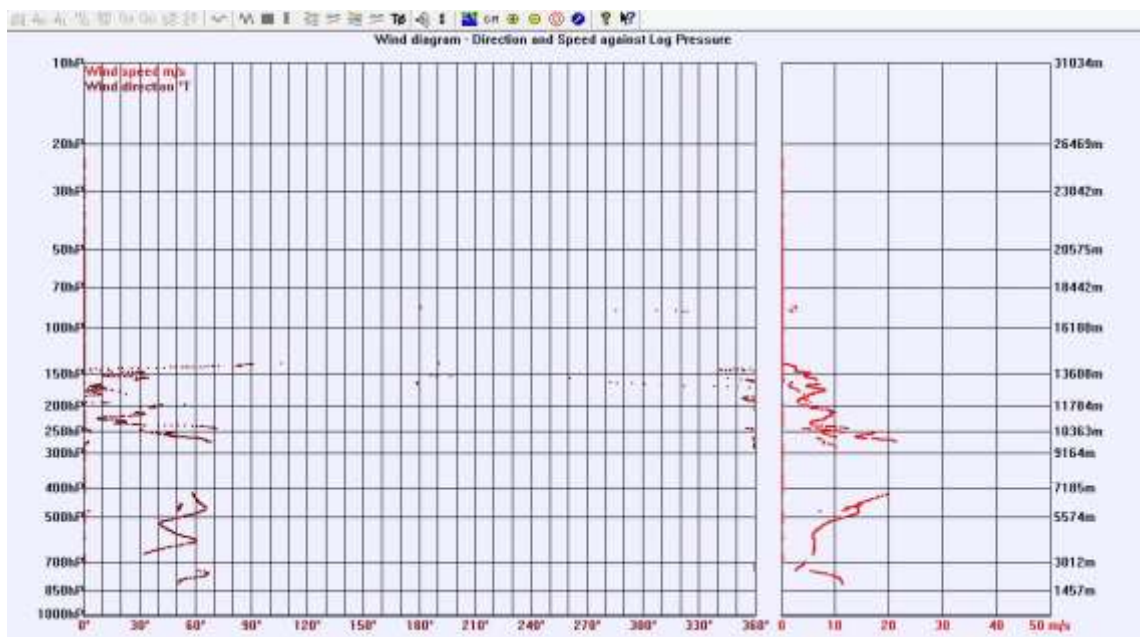
SondeMonitor decoder



SondeMonitor decoder



SondeMonitor decoder



SondeMonitor
decoder



From Wikipedia:

A radiosonde is a battery-powered telemetry instrument package carried into the atmosphere usually by a weather balloon that measures various atmospheric parameters and transmits them by radio to a ground receiver. Modern radiosondes measure or calculate the following variables: altitude, pressure, temperature, relative humidity, wind (both wind speed and wind direction), cosmic ray readings at high altitude and geographical position (latitude/longitude). Radiosondes measuring ozone concentration are known as ozonesondes.

Radiosondes may operate at a radio frequency of 403 MHz or 1680 MHz. A radiosonde whose position is tracked as it ascends to give wind speed and direction information is called a rawinsonde ("radar wind -sonde"). Most radiosondes have radar reflectors and are technically rawinsondes. A radiosonde that is dropped from an airplane and falls, rather than being carried by a balloon is called a dropsonde. Radiosondes are an essential source of meteorological data, and hundreds are launched all over the world daily.

Stations & frequencies

Beauvechain, BEL	404.010 MHz
Bergen, D	405.700 MHz
De Bilt, HOL	403.900 MHz
Essen, D	405.300 MHz
Herstmoncaux, G	404.800 MHz
Idar-Oberstein, D	402.700 MHz
Meppen 1 & 3, D	404.500 MHz
Meppen 2 & 4, D	405.100 MHz
Nordeney, D	404.100 MHz
Ukkel, BEL	403.500 MHz



Vaisala Radiosonde