Basic HOWTO guide for creating metrological data products from a real time streams.

741 Jim Normandeau February 28, 2012 Software 2512

This document is intended to provide a basic framework on how to utilize the UNAVCO realtime data streams.

Please review the PBO real time GPS data web page.

You will need to obtain access to the real time data streams first.

Download the NtripClient program (link below). This is a program written in python and is heavily based on the NtripPerlClient program written by BKG

Download the UNAVCO TEQC program.

To create just met files the command is (PORT provided by PBO realtime group. Must register to obtain it):

"./NtripClient.py rtgpsout.unavco.org PORT STATION_NAME | teqc -binex +bcf +met STATION_NAME.met> /dev/null"

This start to create a met file called STATION_NAME.met.

It will look like this:

2.11 METEOROLOGICAL DATA RINEX VERSION / TYPE

teqc 2012Jan19 20120224 18:32:42UTCPGM / RUN BY / DATE

OSX ker:10.8.0|Core 2 Duo|gcc 4.2 -m64|OSX ker:10.8.0+|=+ COMMENT

MARKER NAME

```
   7    PR    TD    HR    WS    WD    RI    HI          # / TYPES OF OBSERV
                                    0.0    PR SENSOR MOD/TYPE/ACC
                                    0.0    TD SENSOR MOD/TYPE/ACC
                                    0.0    HR SENSOR MOD/TYPE/ACC
                                    0.0    WS SENSOR MOD/TYPE/ACC
                                    0.0    WD SENSOR MOD/TYPE/ACC
                                    0.0    RI SENSOR MOD/TYPE/ACC
                                    0.0    HI SENSOR MOD/TYPE/ACC
     0.0000        0.0000        0.0000        0.0000 PR SENSOR POS XYZ/H
                                 END OF HEADER
 12  2 24 18 33  0  826.8    1.4   30.1    4.9  285.0    0.0    0.0
 12  2 24 18 34  0  826.8    1.5   31.1    3.9  286.0    0.0    0.0
 12  2 24 18 35  0  826.9    1.5   30.2    3.9  313.0    0.0    0.0
 12  2 24 18 36  0  826.8    1.5   28.7    4.1  297.0    0.0    0.0
 12  2 24 18 37  0  826.8    1.5   30.5    3.2  289.0    0.0    0.0
 12  2 24 18 38  0  826.9    1.6   33.7    3.5  287.0    0.0    0.0
…..
```