How to enable 20 Hz (and other high-rate) logging in Topcon GB-1000 Receivers

337 Freddy Blume August 24, 2009 Application Notes 23535

Topcon GB-1000 - How to enable 20 Hz (and other high-rate) logging

GB-1000 receivers are capable of logging at 20 Hz (50 ms.) sample rate, but in addition to specifying the sample rate for the log file two other receiver parameters must also be specified.

The internal "Raw Measurement Update" (pos/msint) and "Position Update"(raw/msint) parameters are set to 10 Hz (100 ms.) by default. This limits the logging rate to 10 Hz minimum or other sampling rates that are multiples of 100 ms. (10 Hz, 5 Hz, 3.33 Hz, 2.5 Hz, 2 Hz, 1 Sec., etc.). In order to attain 20 Hz (or other sampling intervals that are multiples of 50 ms. such as 4 Hz).

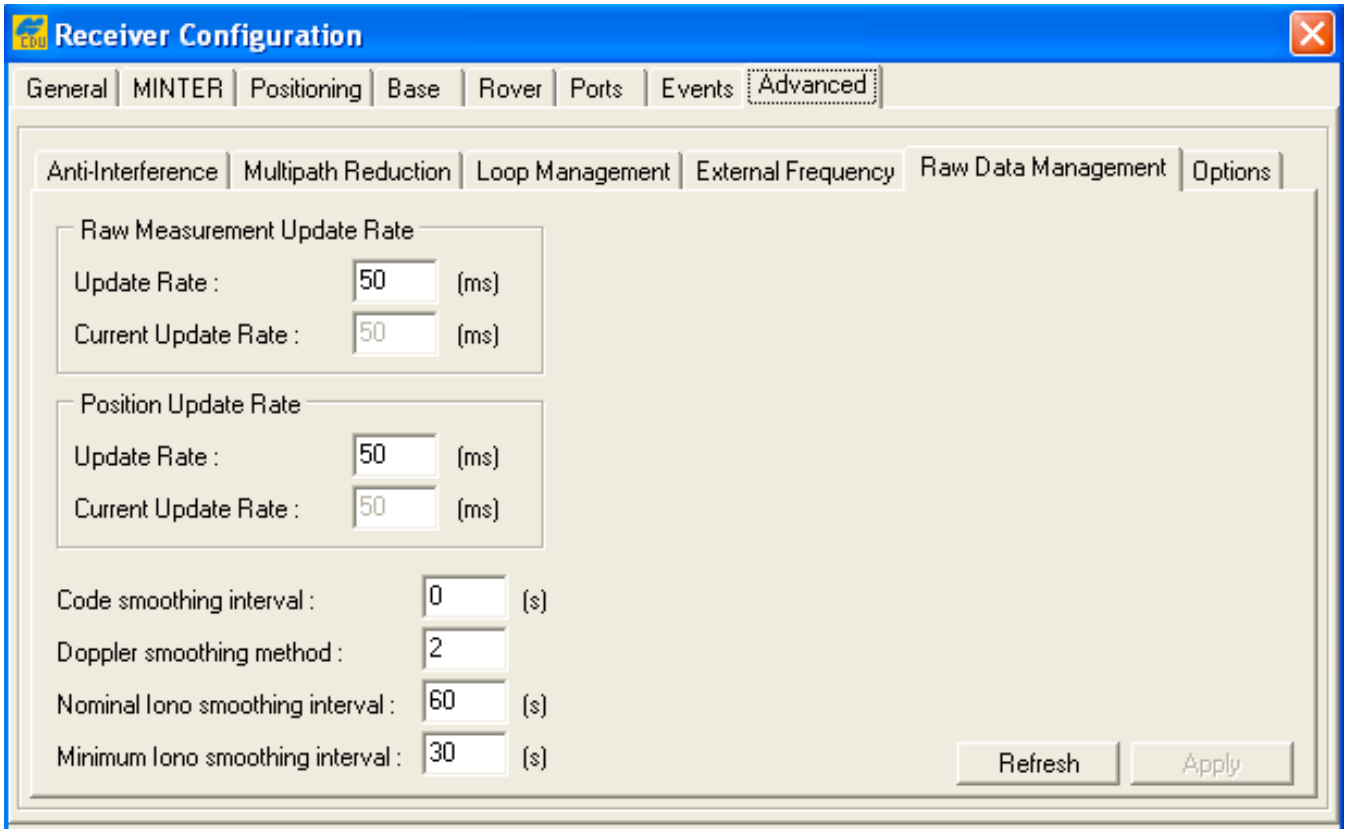
If using a GRIL configuration script the following lines should be used to enable 20 Hz:

%/par/pos/msint%set,/par/pos/msint,50 #Position Update Interval 50 ms (20 Hz)
%/par/raw/msint%set,/par/raw/msint,50 #Raw Update Interval 50 ms (20 Hz)

followed by the command to specify the sample rate in the log file:

%ope% set,/par/log/a/sc/period,0.05 #Logging Interval 0.05 sec (20 Hz)

If using PC-CDU, the "Raw Measurement Update" and "Position Update" parameters are set in the "Advanced/Raw Data Management" tabs of the receiver configuration menu, as shown in the screen shot below:



It is currently now possible to enable logging rates faster than 1 Hz from the front panel of the receiver. We have requested this capability of Topcon in a future firmware release.

Online URL:
https://kb.unavco.org/article/how-to-enable-20-hz-and-other-high-rate-logging-in-topcon-gb-1000-receivers-337.html