With 1/2A Altitude as an NRC event this contest “year” some clarifications about using the Adrel ALT-BMP are in order. Bullet 7 of section 20.2 of The US Model Rocket Sporting Code states an NAR approved altimeter “Employs processing functions to reject false short-duration launch or apogee altitude transients that may be created by wind gusts or the pressure transients of ejection events.”

When data is downloaded from an ALT-BMP to a computer, the data presented is the raw data and so the altitude has NOT been processed as rule 20.2 requires. The filter button in the Adrel software must be clicked to meet the requirement and get the correct altitude.

For temperature correction, there are two ways this can be handled with the ALT-BMP.

1. Enter 15 degrees C as the temperature in the software and then use the correction algorithm in Sporting Code section 20.2.3. Note that Contest Manager will do that correction for you when you enter the altitude and ambient temperature for the flight. This is the preferred method since directors of NRC launches use Contest Manager to submit results to the National Scoreboard.

2. As an alternative, enter the air temperature at the time of launch in the Adrel software and it will do the compensation.

Do NOT leave the temperature as is reported during download. This is the sensor temperature, not the ambient temperature. Also, do NOT do both 1 and 2.

With regards to temperature compensation and filtering, the following sequence must be used in the Adrel software. Enter the temperature first (15C or ambient, depending on using method 1 or 2 above), then click the filter button.

One last note, the Adrel ALT-BMP altimeter is offered by North Coast Rocketry as the Adrel “MaxAlt”. This is the exact same altimeter as the ALT-BMP, not a new altimeter.