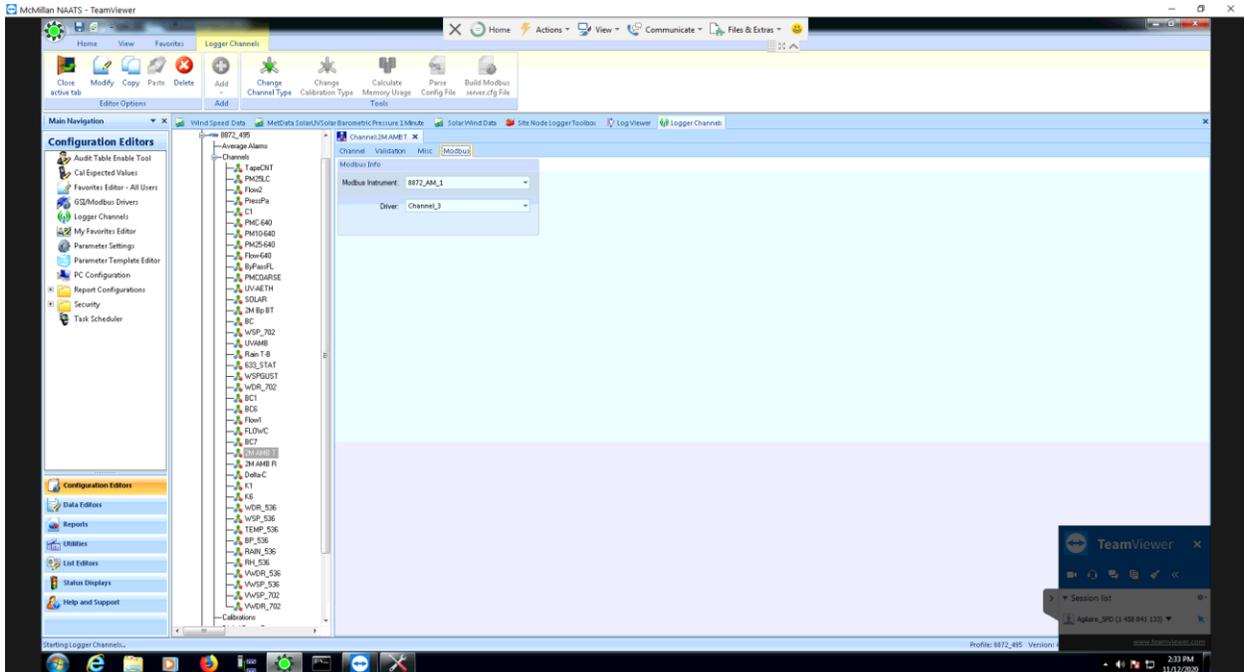
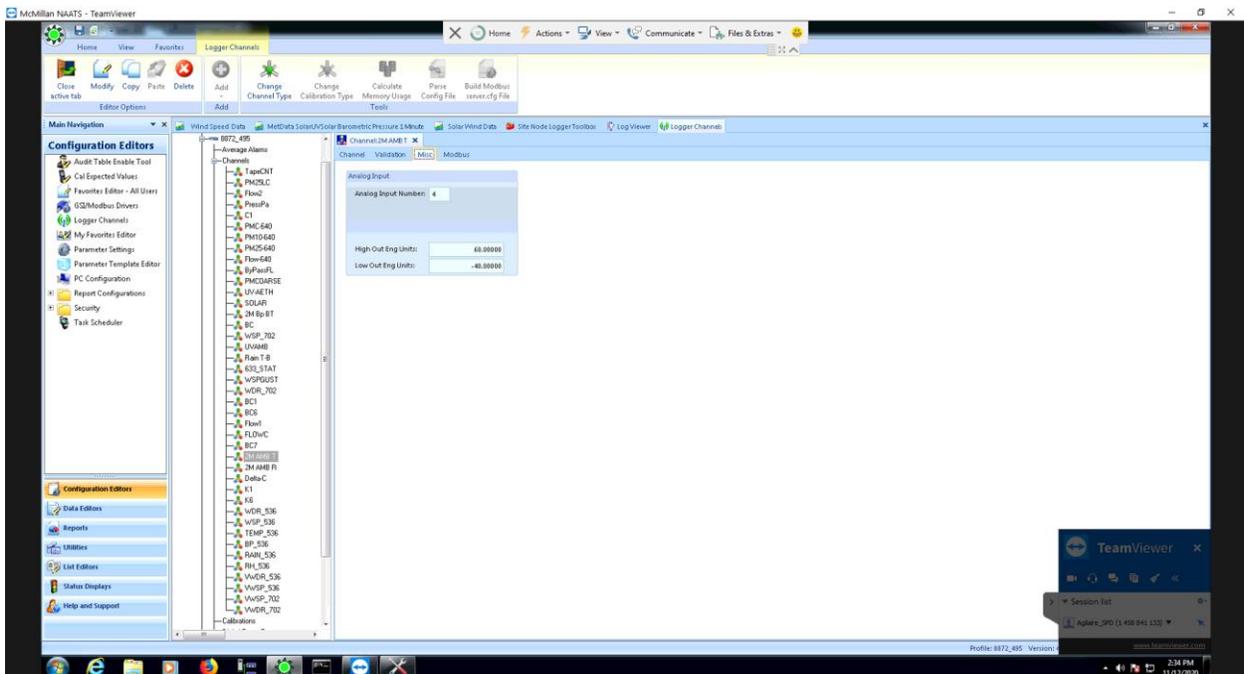


If the voltage is what you expect, open Configuration->Data Source Details. Open the channel in question, and select the “Modbus” tab. Make sure the correct module and “Channel” on the module is selected. In this case, Module 1 and “Channel3” on the module is Analog Input 04.



Then select the “Misc” tab and make sure your scaling is set correctly:



Perform a hand calculation based on the voltage from the Adam APAX utility screen:

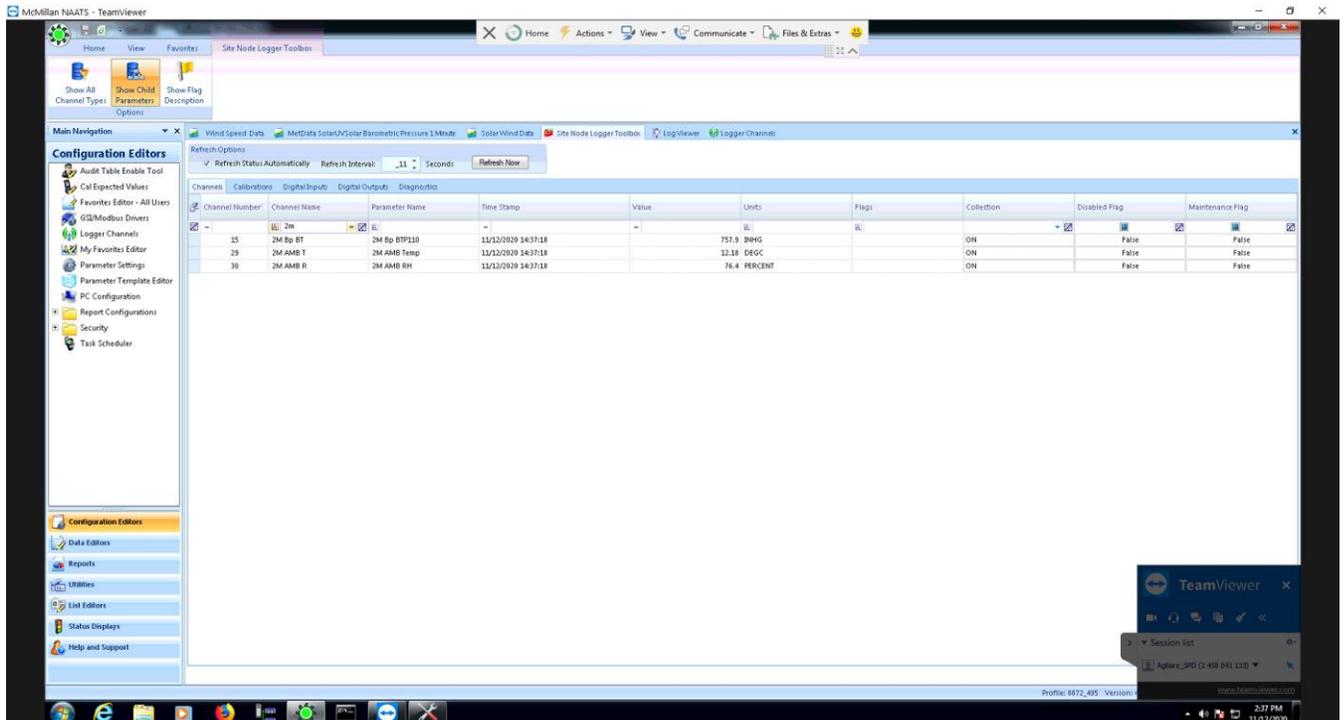
$$\text{Reading} = \text{Low Output} + (\text{High Output} - \text{Low Output}) * (\text{Voltage} / \text{Voltage Full Scale})$$

In our example:

$$(-40) + (60 - (-40)) * (5.22\text{V} / 10\text{V})$$

$$\text{Or } (-40) + (100 * 0.522) = 12.2$$

Which is pretty much what we are reading:



In short, the only things that can go wrong are:

- Voltage from instrument not what you expect
 - Instrument bad
 - Misunderstanding of the instrument output
 - Bad I/O module (test by moving to spare analog input)
- Incorrect connection on back of logger (wrong analog input)
- Wrong voltage scale in APAX utility (*newer version of AV-Trend take care of this automatically*)
- Bad setting on “Modbus” tab (wrong ‘channel’, again, *newer versions of AV-Trend take care of this automatically if you set “Analog Input” number on “Misc” tab to match back panel*)
- Incorrect scaling factors not matching instrument settings.