

# WXT rain

The rain value from the wxt has been a constant zero:

[http://www.eol.ucar.edu/isf/projects/SOAS/isfs/qcdata/plots/20130606/precip\\_20130606.png](http://www.eol.ucar.edu/isf/projects/SOAS/isfs/qcdata/plots/20130606/precip_20130606.png)

The current output message looks like so:

```
0R0,Dm=103D,Sm=0.8M,Ta=20.5C,Ua=94.2P,Pa=1.0072B,Rc=0.00M,Hc=0.0M,Vs=12.8V\r\n
```

I rserial'd in and displayed the current precip configuration with the "0RU cr lf" command:

```
0RU,R=00000000&10010000,I=1,U=M,S=M,M=C,Z=A,X=10000,Y=6553\r\n
```

Switched it from M=C to M=T:

```
0RU,M=T ctrl-M ctrl-J
```

From the manual, there is an indication that tipping bucket mode may loose some resolution:

```
M=Autosend mode
  C = tipping bucket: The transmitter sends a
    precipitation message at each unit increment (0.1
    mm/0.01 in). This simulates conventional tipping
    bucket method.
  T = time based: Transmitter sends a precipitation
    message in the intervals defined in the [I] field.
However, in polled protocols the autosend mode
tipping bucket should not be used as in it the
resolution of the output is decreased (quantized to
tipping bucket tips).
```

After the above change the wxt is now showing non-zero rain counts.

Jun 9 3 pm

Changed reporting interval to 10 seconds in case it improves the resolution.

```
0RU,I=10\r\n
0RU,R=00000000&10010000,I=10,U=M,S=M,M=T,Z=A,X=10000,Y=6553\r\n
```

However the wxt reports rain with .01 mm precision, so accumulating over 10 seconds may not be necessary and it could be changed back to a 1 second reporting interval. I plan to leave it in this mode until the next rain event.