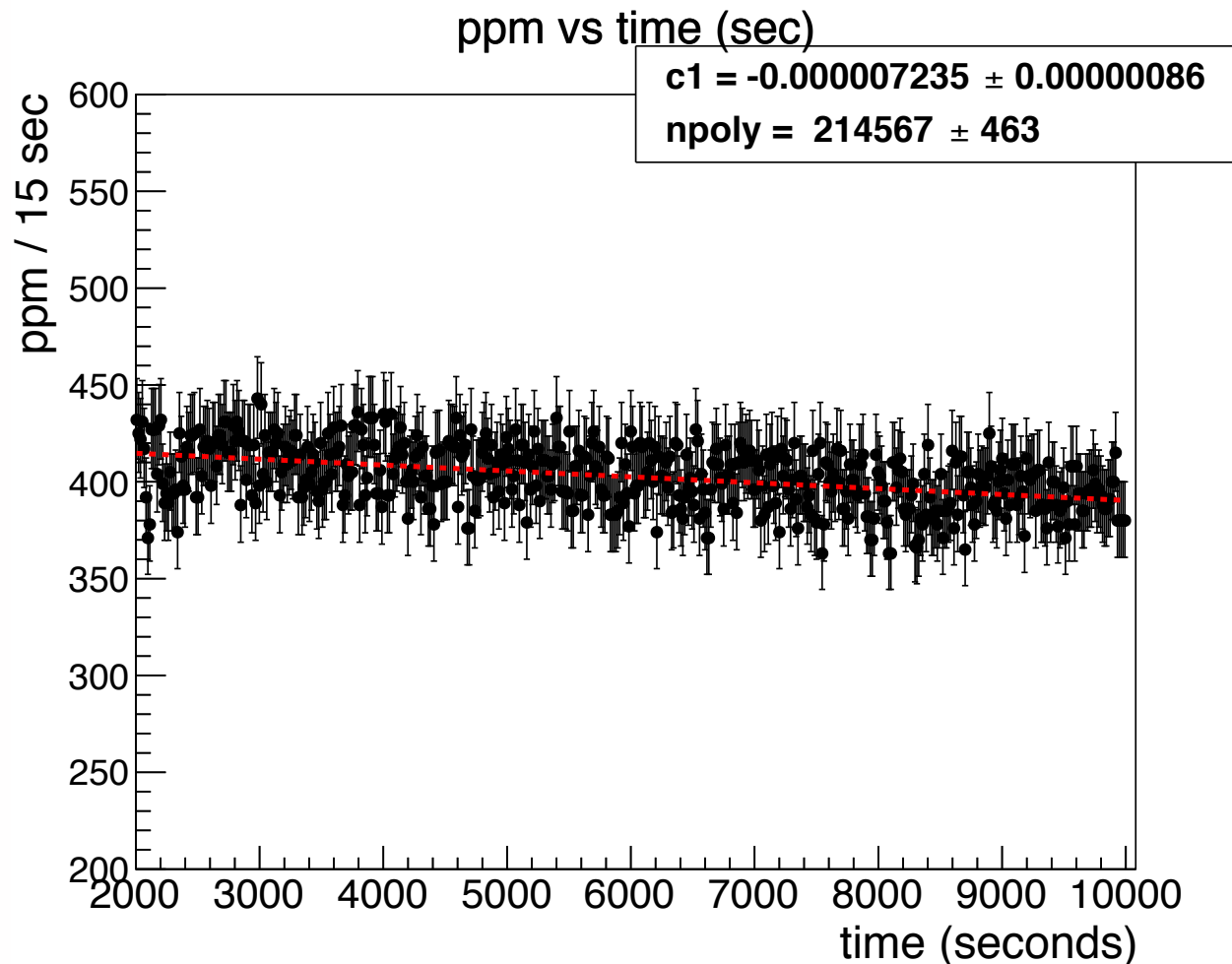


Extracting data (the $\Delta\text{ppm}(\text{time})$)

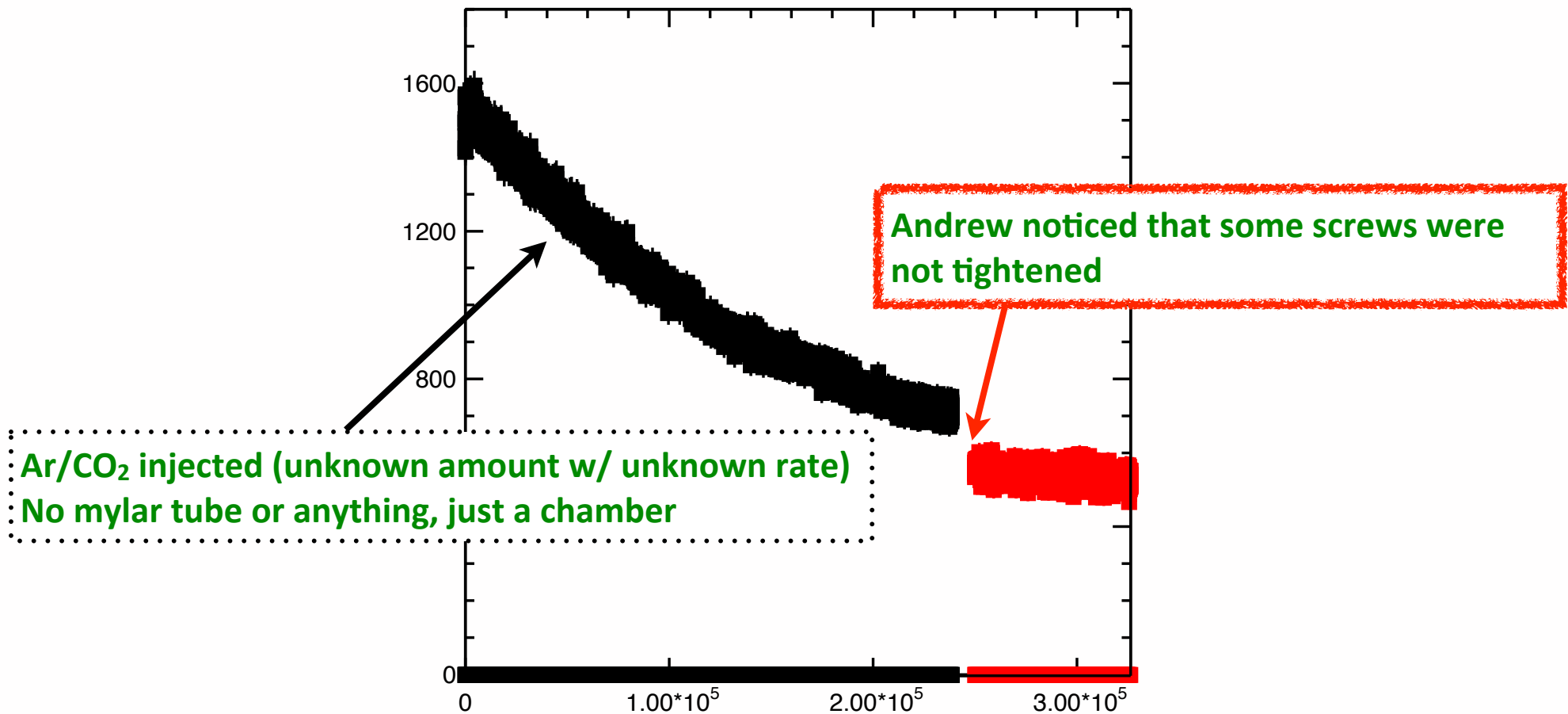
- The detector outputs “ppm” and “timestamps” in every 15 sec
- I wrote a short shell script that realign them in columns;
ppm, time (in seconds), error
where error = (± 50 + rel. 2%) ppm.
This shell script then gives the table in a text file .
- One could then read this text file by
ROOT, Excel, MNFIT, paw, Mathematica...etc.
- I wrote a short ROOT script that:
 - Reads the above text file.
 - Makes a histogram with a given bin width(default is 15 seconds).
 - Save the resultant ROOT histogram to a file.
 - Perform a fit to the distribution (ppm vs time) with a linear polynomial.
 - This can be improved further:
calculate/print fitted chi-square value?
show in “min” instead of “sec”?

Extracting data (the $\Delta\text{ppm}(\text{time})$)

- An example fit.
- I'll post the shell and ROOT scripts to our WiKi page.



No, it is not leaking.. much?



- Yesterday, we injected Ar/CO₂ again to two chambers (unknown amount w/ unknown rate), after flashing them with N₂ w/ SCFH~5 for 30 sec or so.
- The two detectors of the two chambers were immediately saturated. One showed ppm = 2000 constant. The other ppm = -1 constant.
- We then opened one of the chambers until the detector started to read, then closed it.
- This is the result based on the OPENED chamber in ~22 hours.
- The other chamber still shows ppm = 2000 counts after 22 hours.

