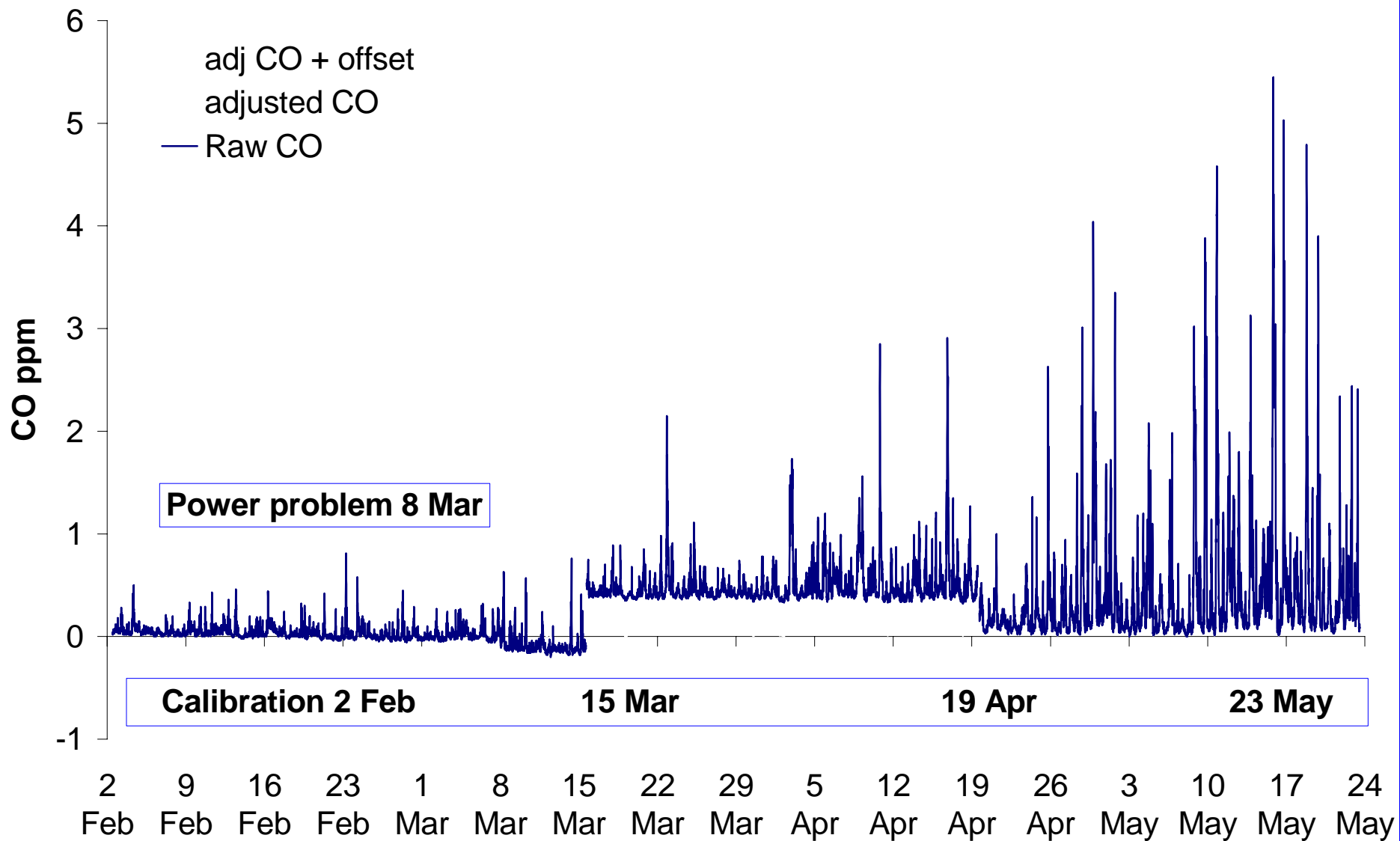
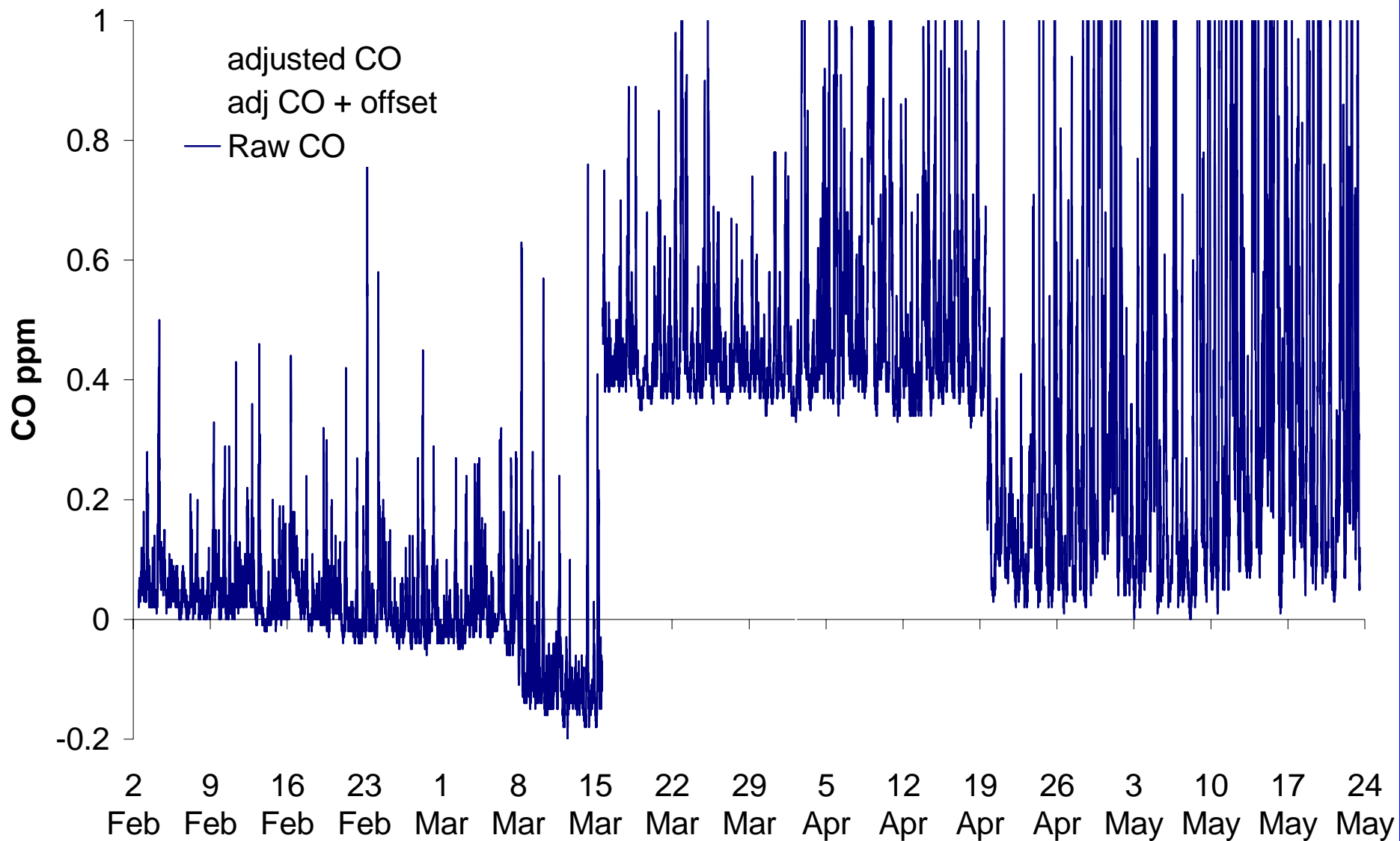


Calibration example

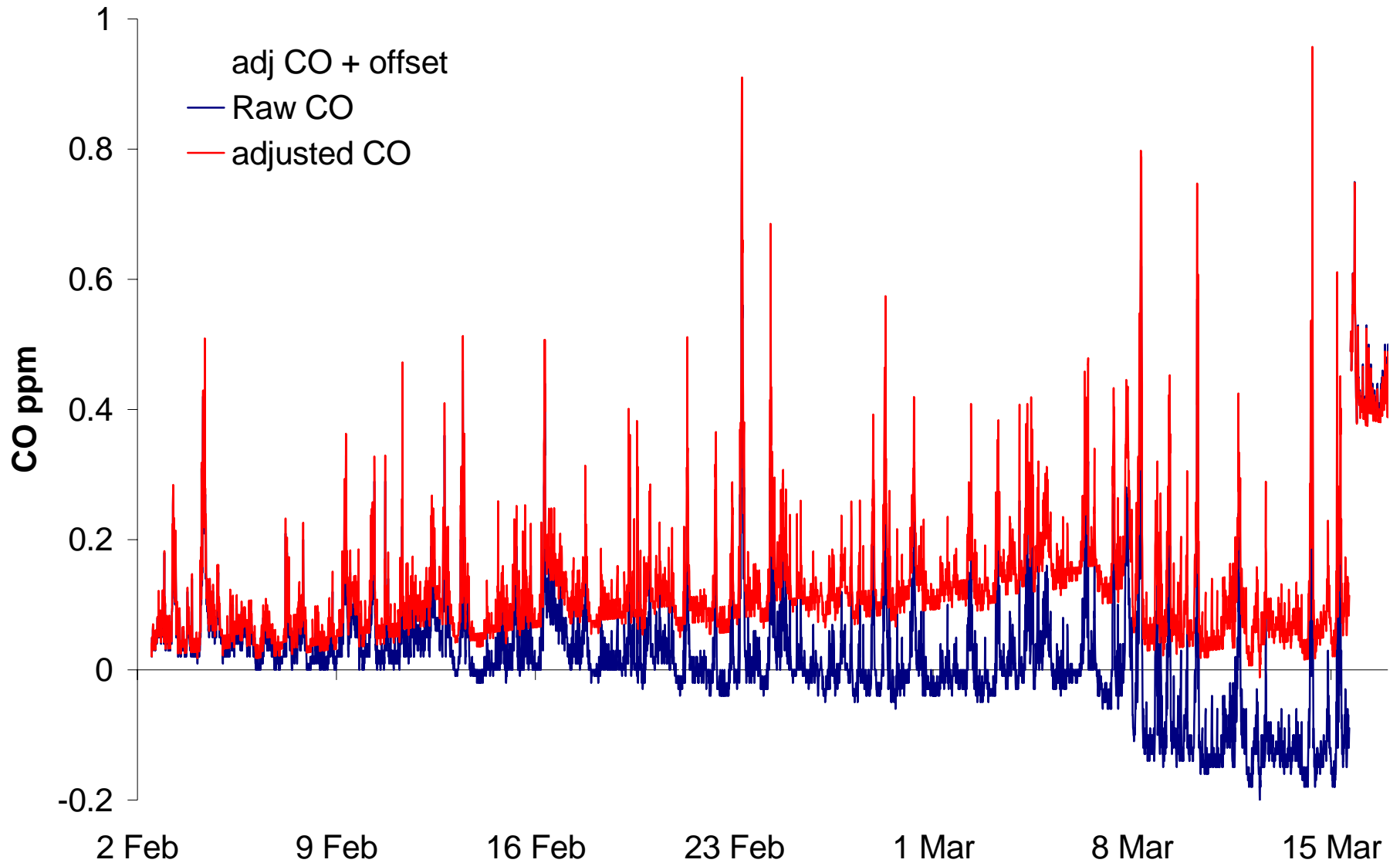


Calibration example

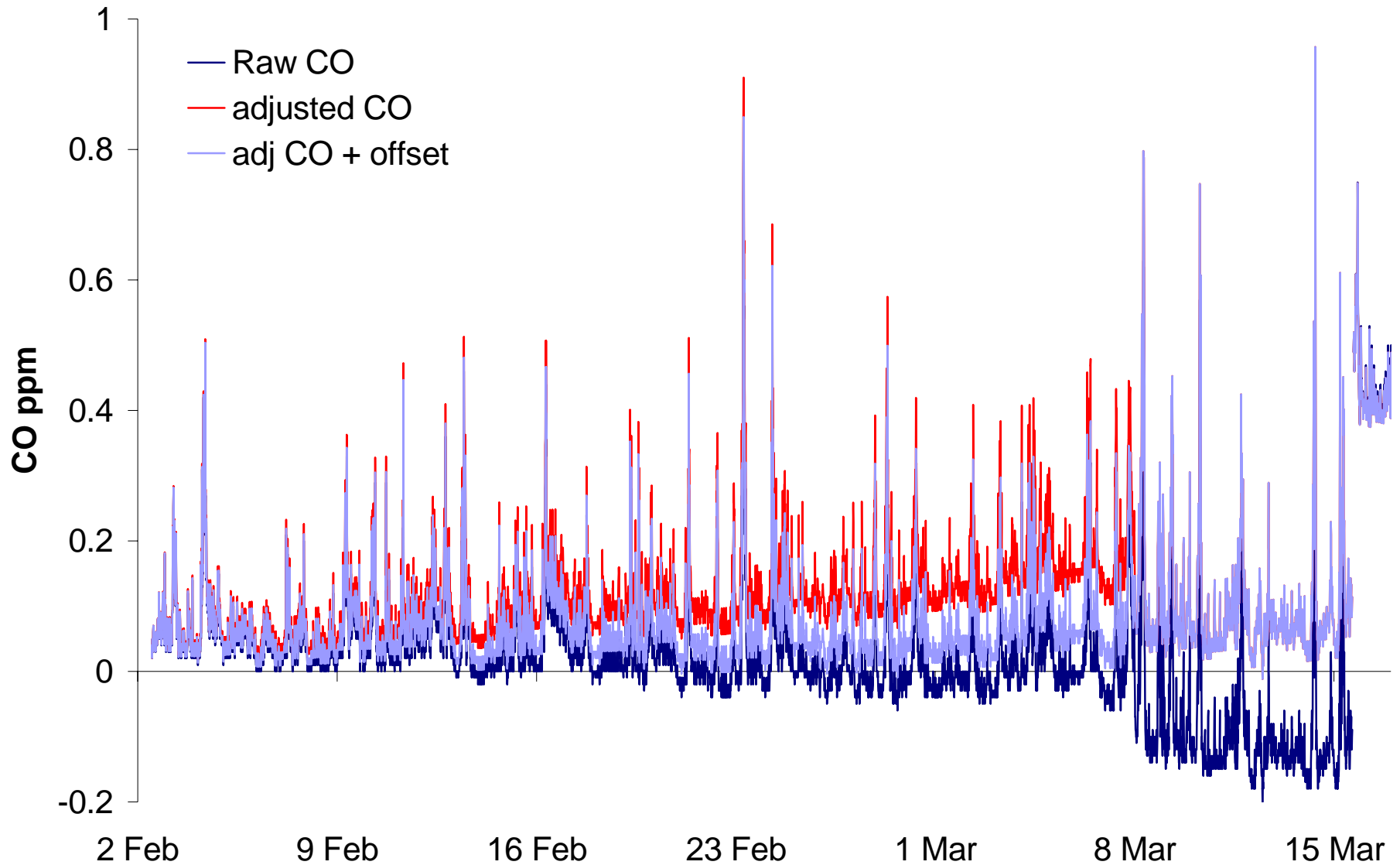


Calibration example

zero -0.2 ppm span(40.1) 38.8 ppm

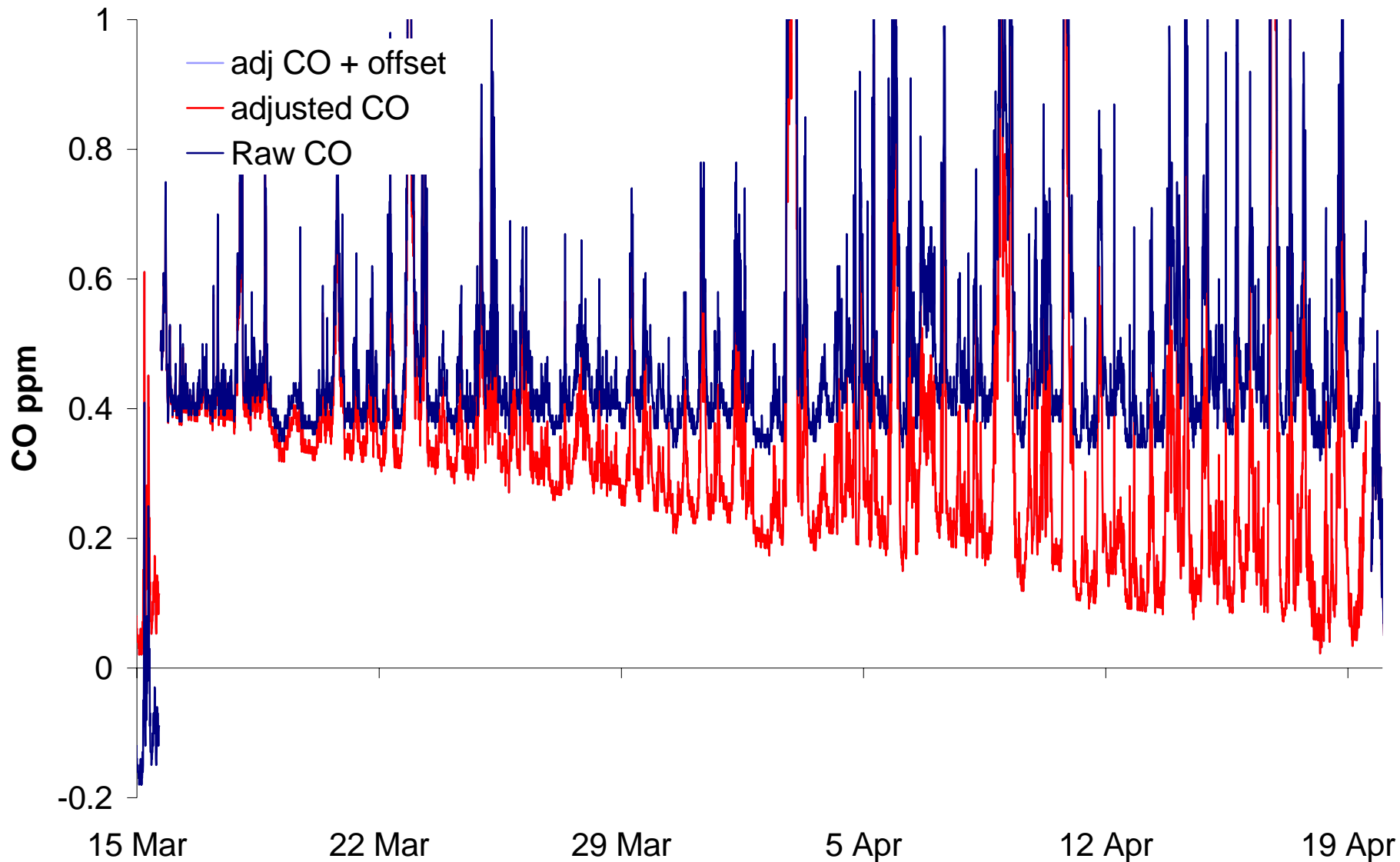


Calibration example

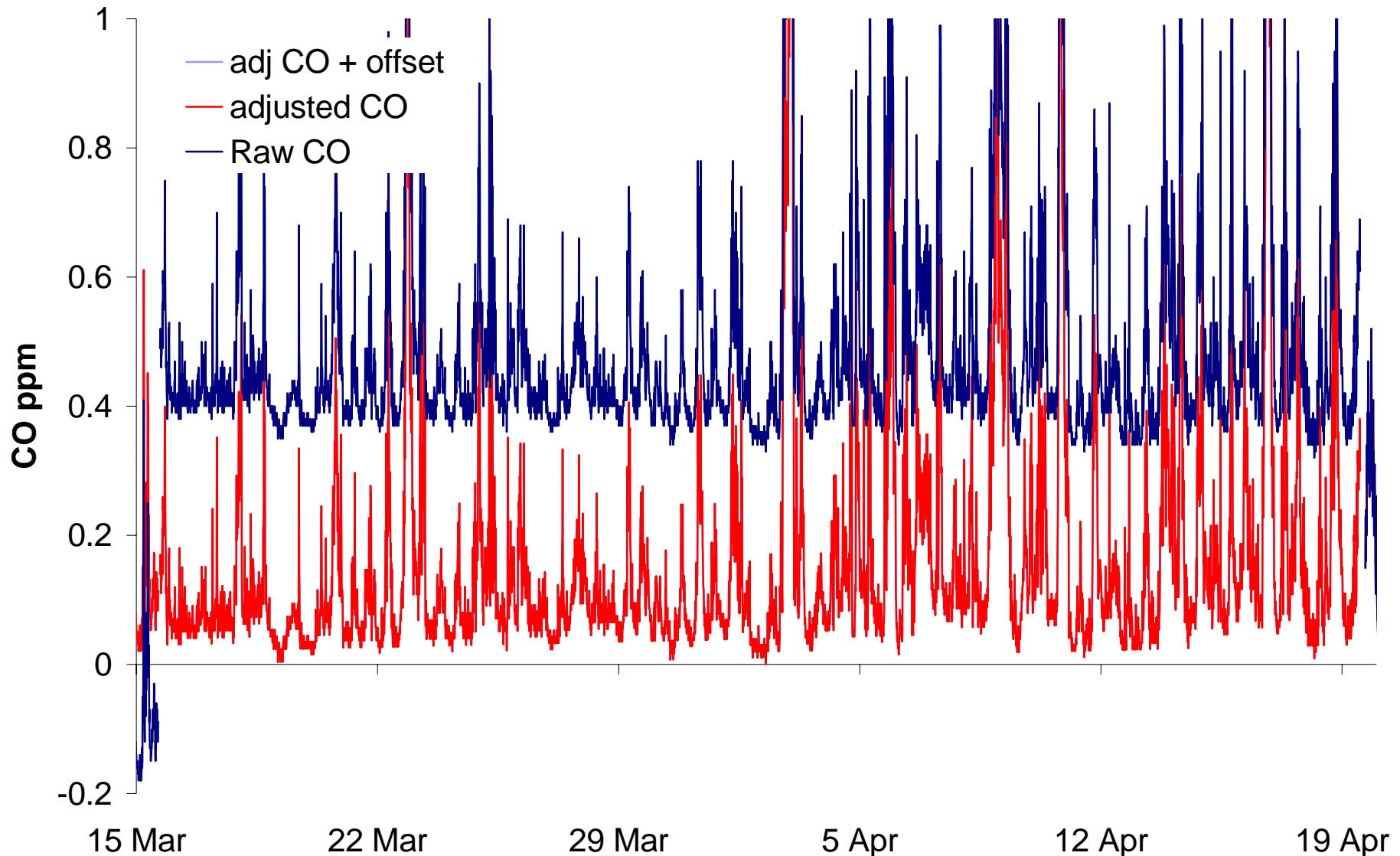


Calibration example

zero 0.3 ppm span(40.1) 41.4 ppm

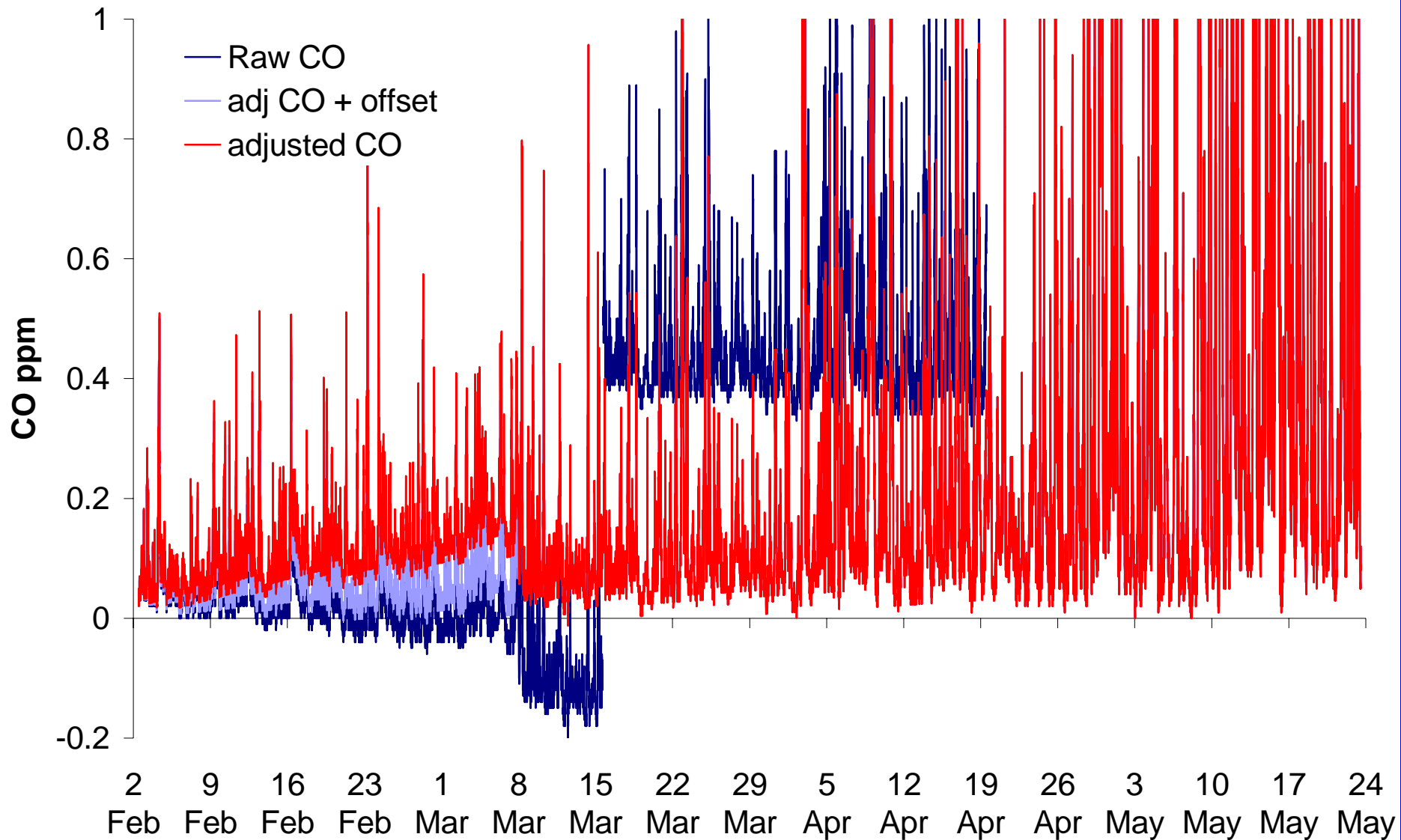


Calibration example

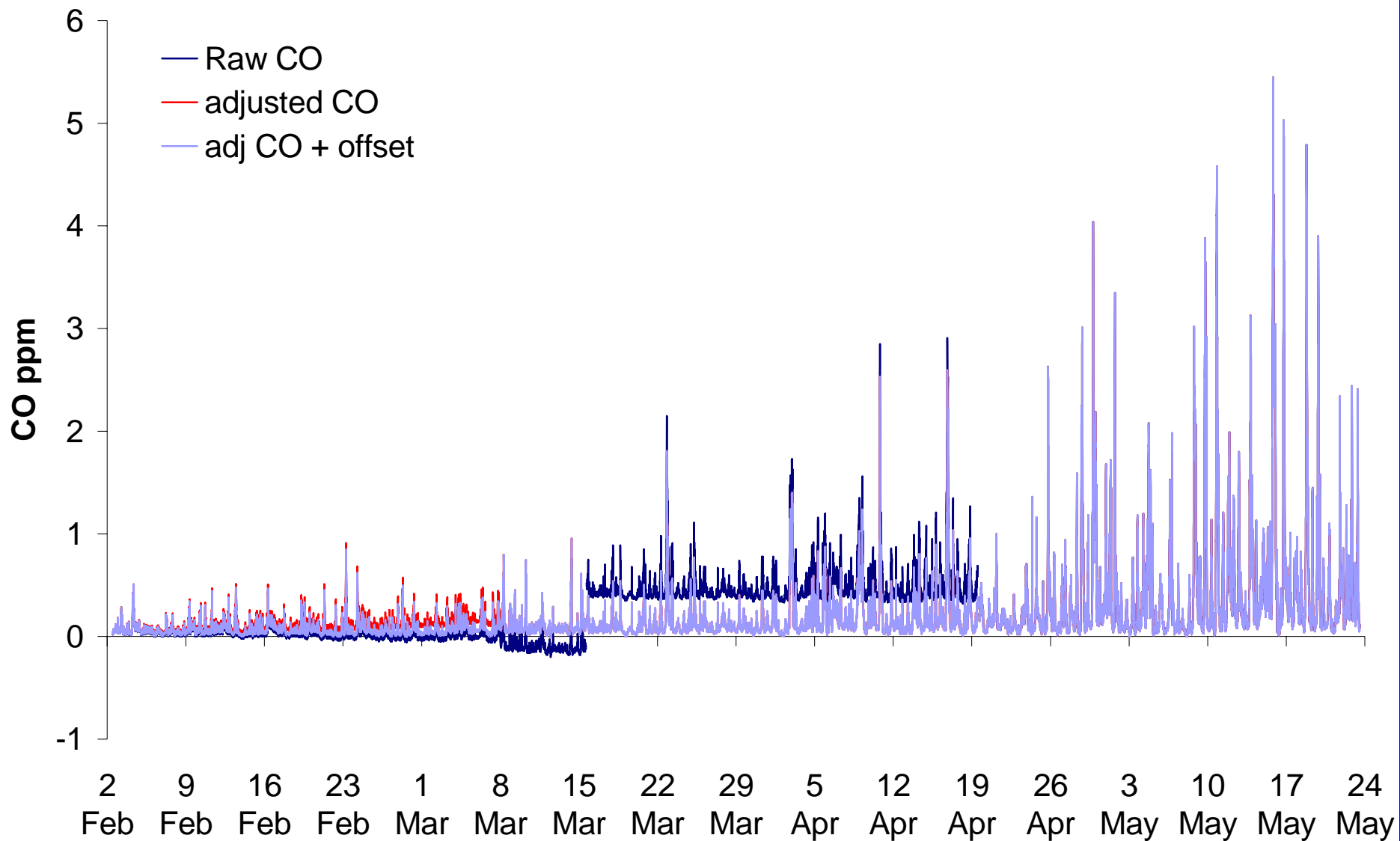


Calibration example

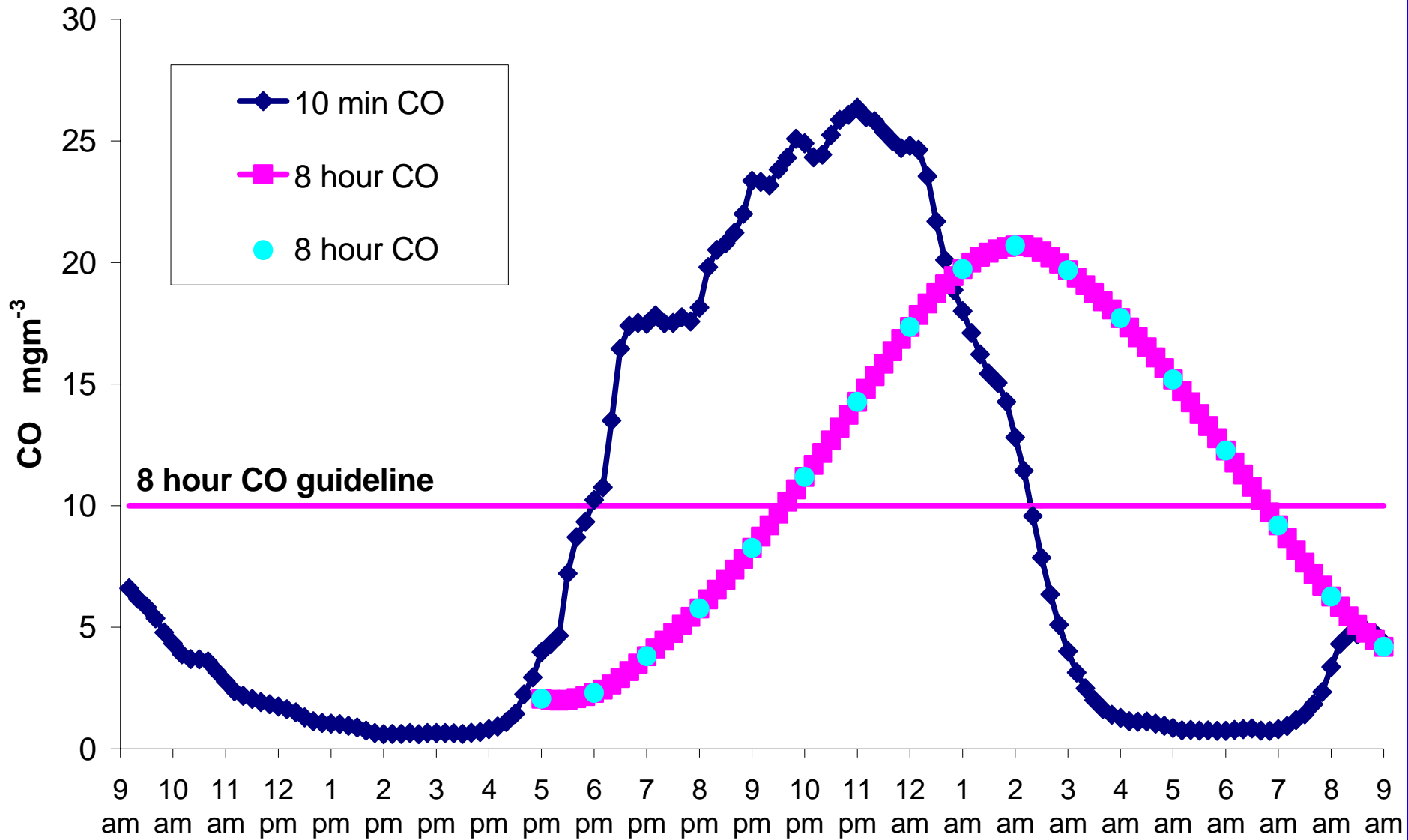
zero 0.0 ppm span(40.1) 40.0 ppm



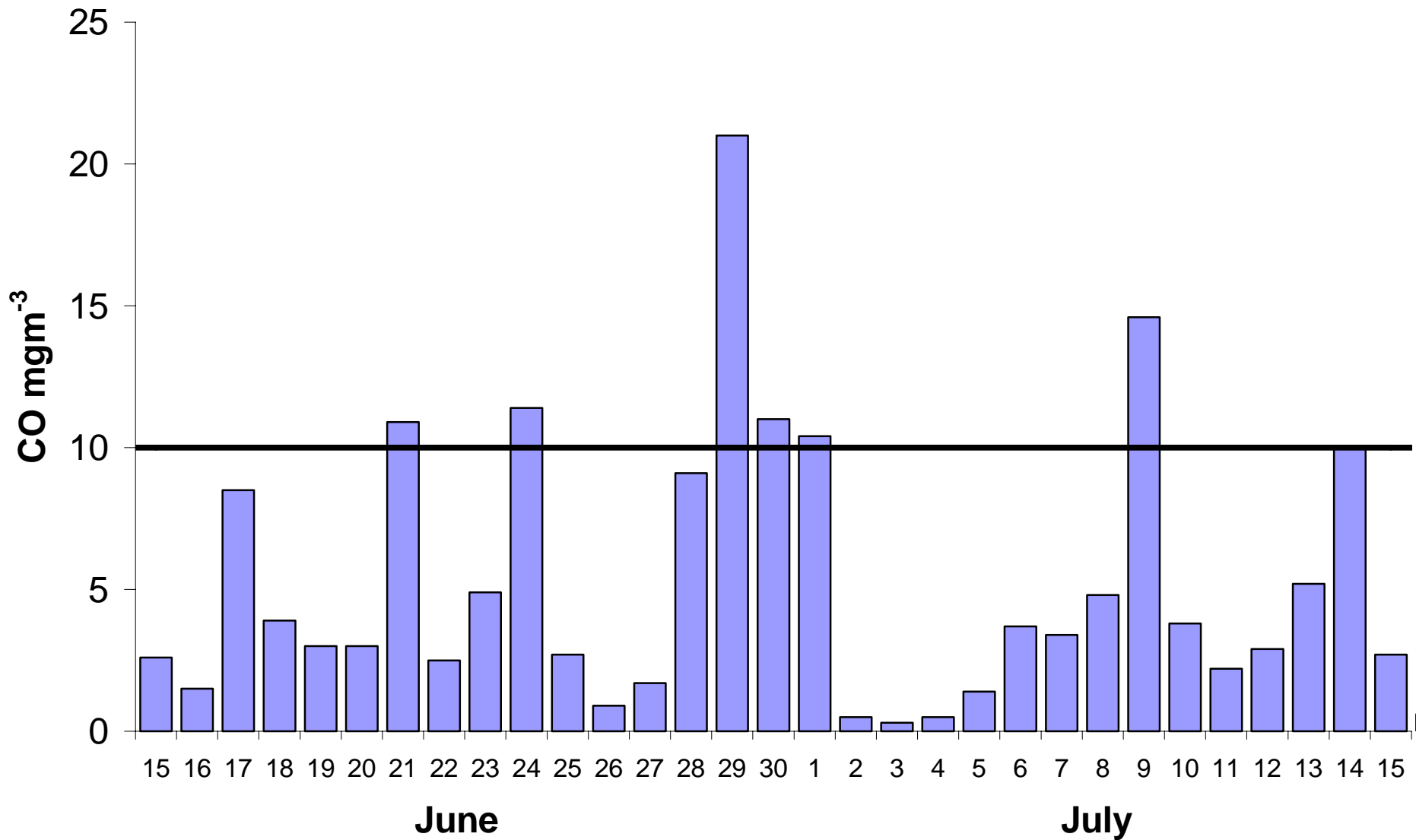
Calibration example



Daily Maximum 8 hour average



Daily Maximum 8 hour average



Recommendation 20 Temperature

The conversion temperature of 0°C should be used for reporting ambient monitoring results

Recommendation 21 Conversion Factors

To convert ppb to μgm^{-3} at 0°C multiply by:

SO₂	2.85	CO	1.25
NO	1.34	CO₂	1.96
NO₂	2.05	H₂S	1.52
NO_x (90:10 ratio)	1.41	CH₄	16
		NMHC (light)	3.21
O₃	2.14	NMHC (heavy)	6.42



Recommendation 22

Dealing with missing data

Where non-valid data are present, the cell should be converted to a blank.

Reasons for non-valid data should be recorded in the site and auxiliary information.

Where more than 25% of data are lost, no averaged value for that period should be calculated.

No hour average if 2 ten minute averages missing

No daily average if >6 hour averages missing

No month average if 8 days are missing

Useful to report the amount of valid data with the average.



Recommendation 23

Interpolation and Shape - fitting

Don't interpolate if gap is more than 1% of measurement period, unless concentrations can be predicted with reasonable accuracy.

Consider the nature of the contaminant, the atmospheric conditions affecting dispersion, trends and daily cycles of emissions and meteorology and the relevant averaging periods.

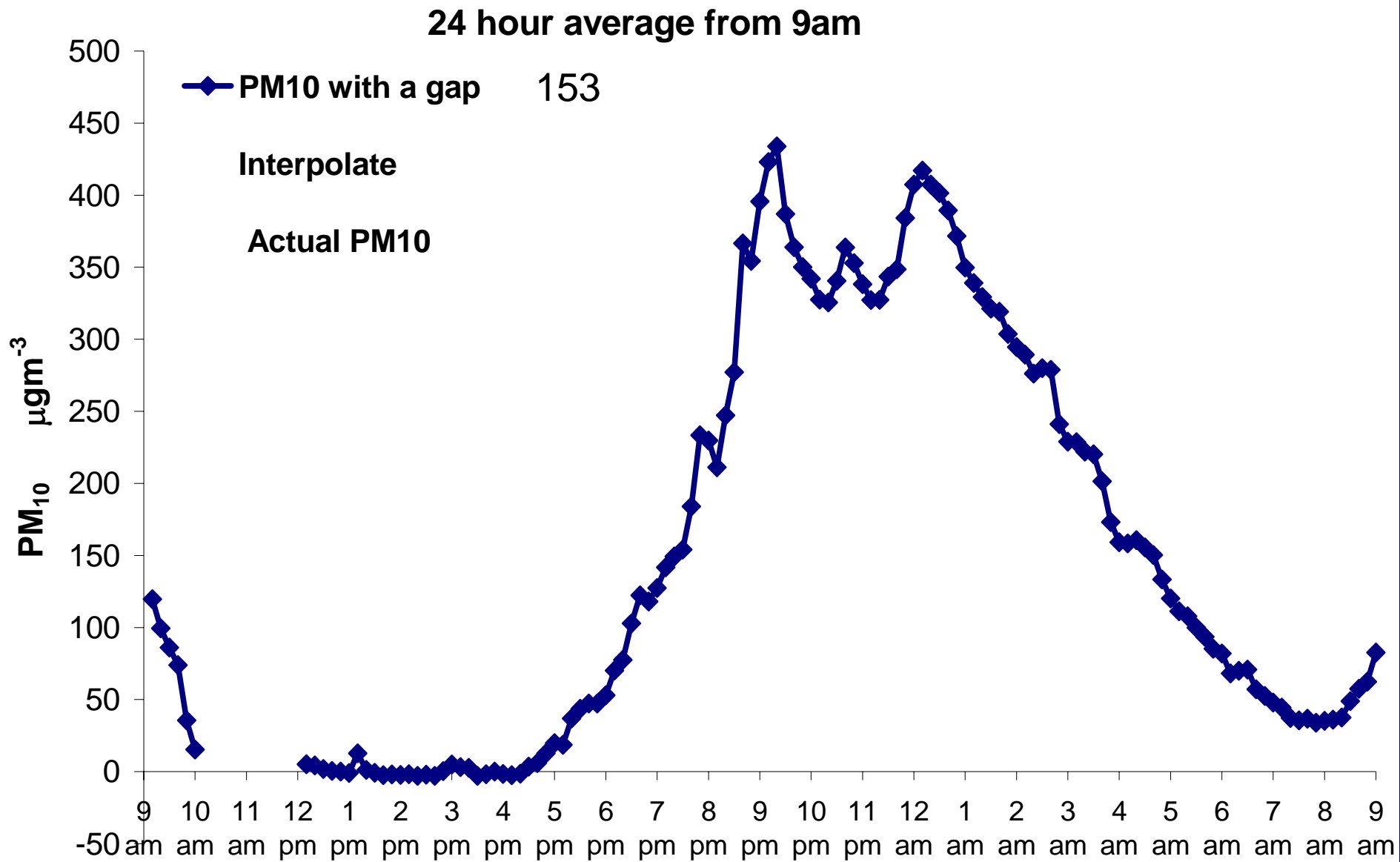


Interpolation by Environment Canterbury

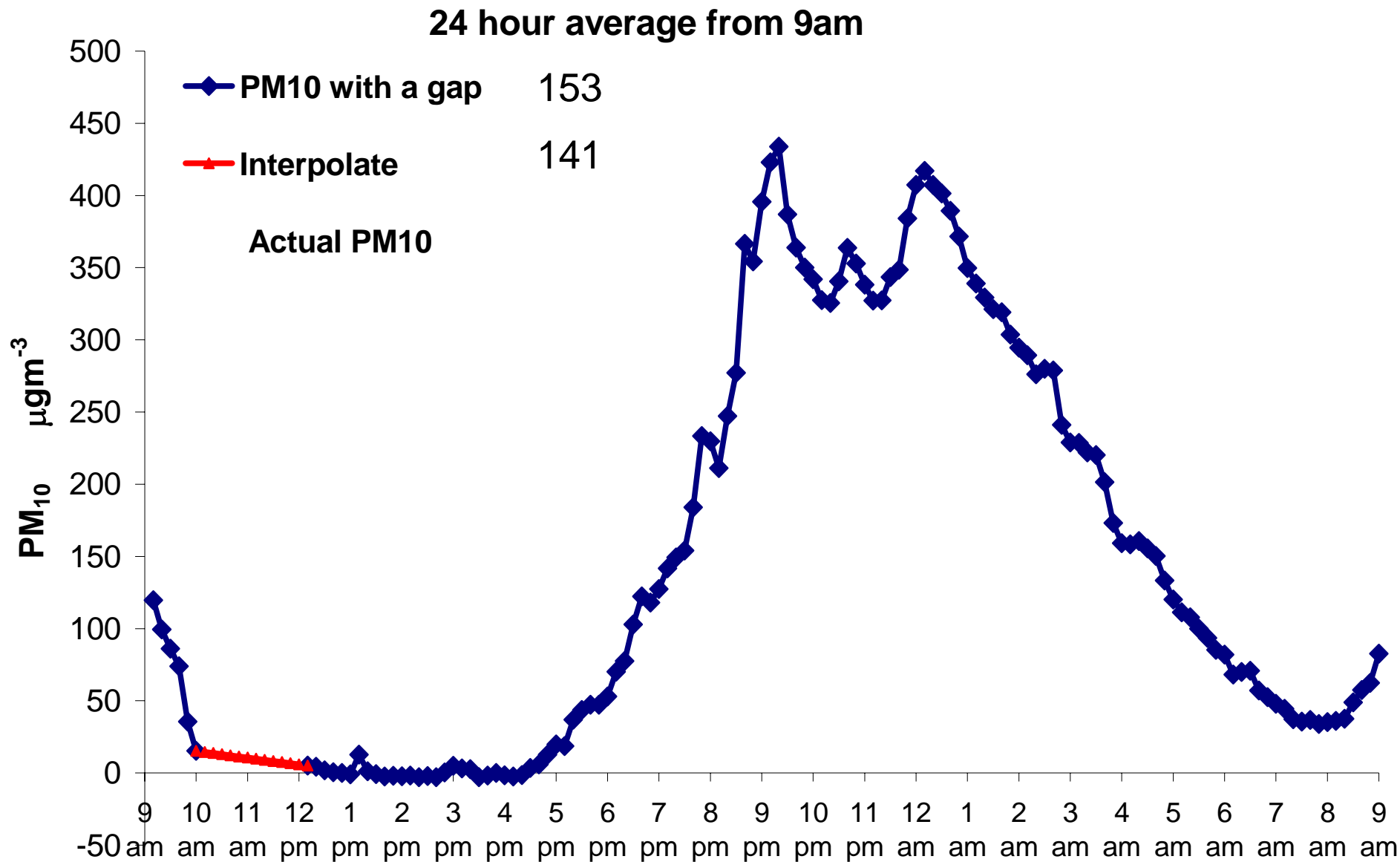
- Straight line interpolation is performed by Environment Canterbury based on a 24 hour period for gaps of up to 6 hours (25%).
- Gaps of up to 6 hours occur because of a site visit or a power disruption. An instrument fault will usually result in a longer period of non valid data.
- The typical daily variation of contaminants is generally predictable.
- Site visits are made during the day, when concentrations are low.



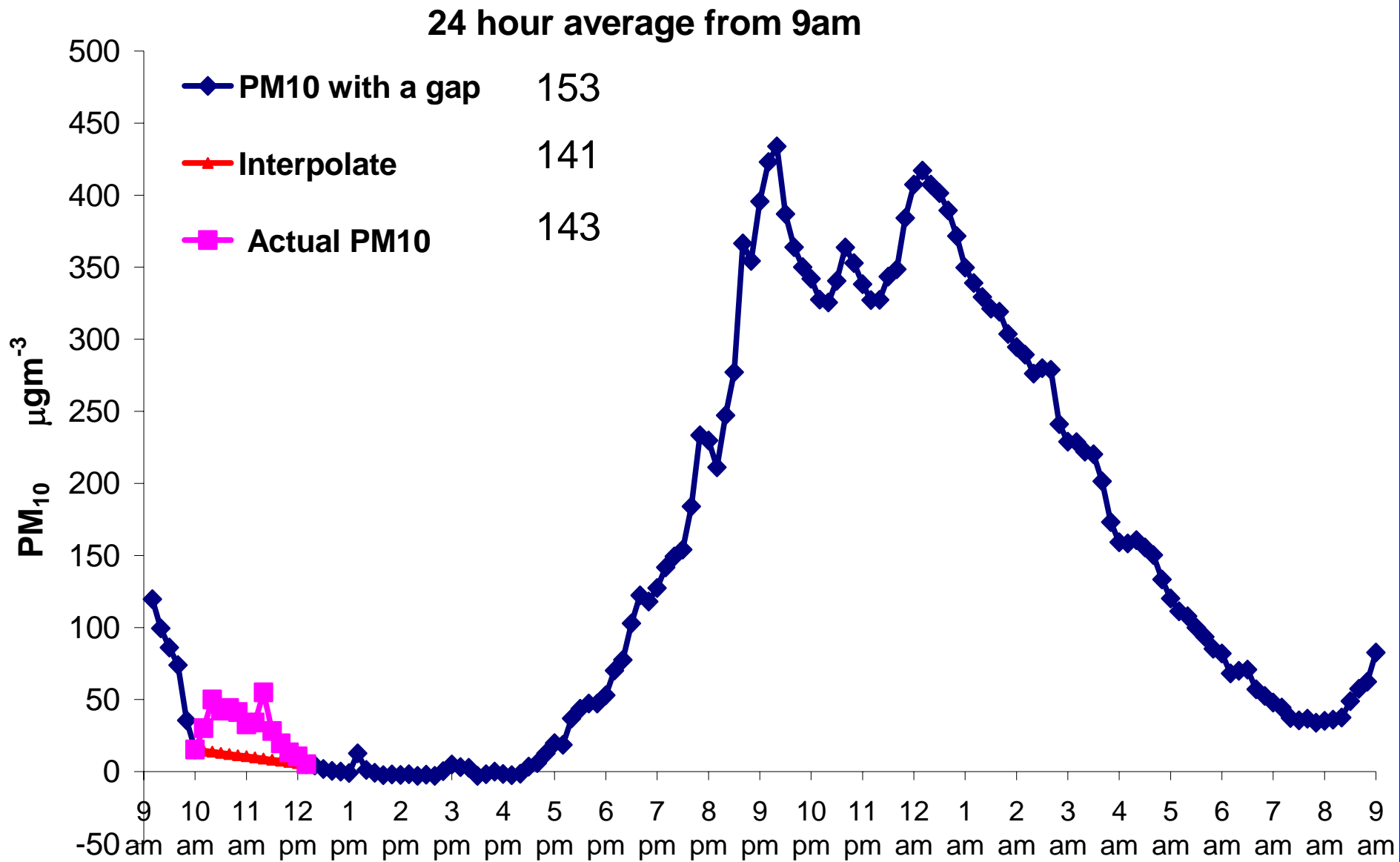
Example of interpolation used by Environment Canterbury



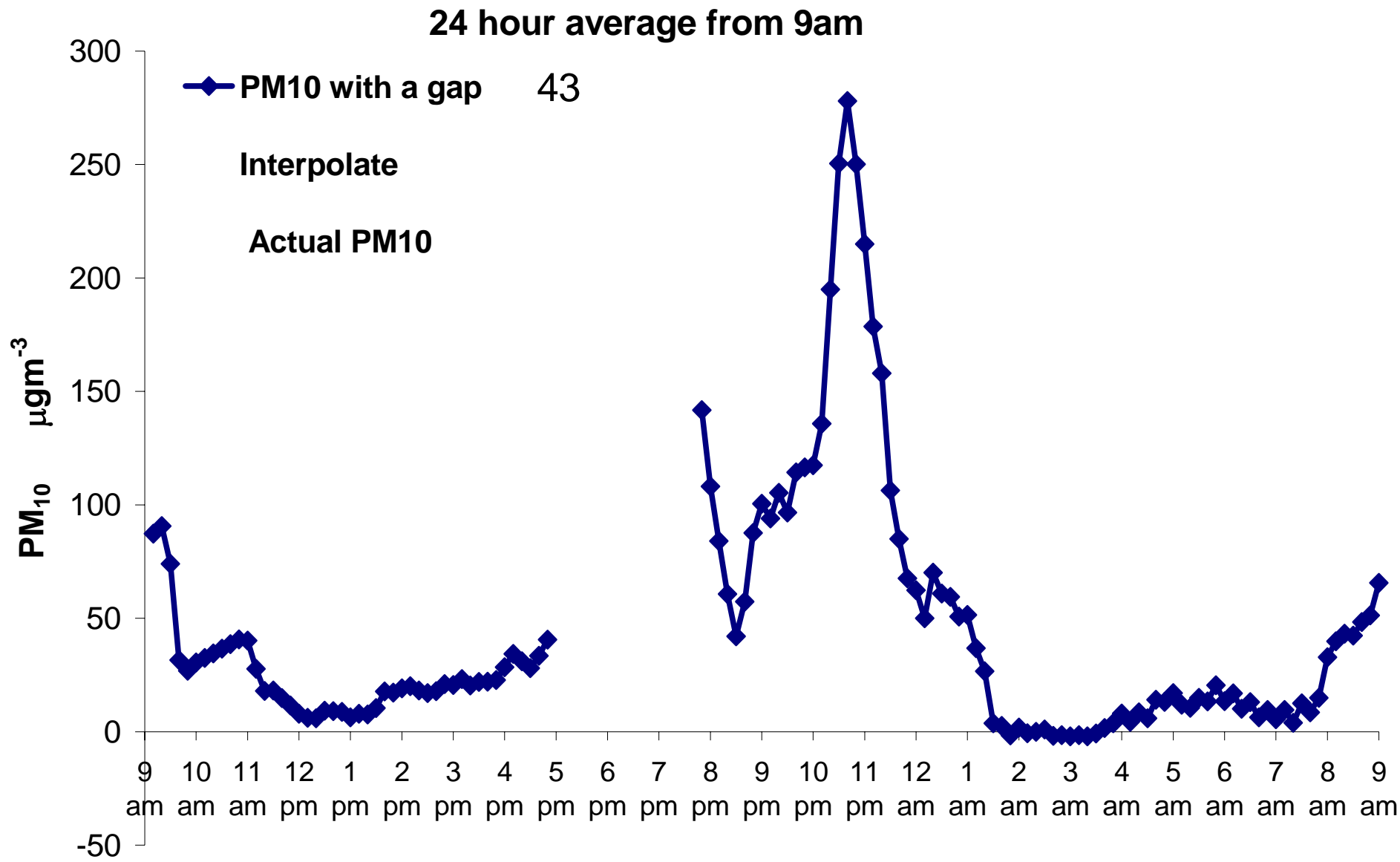
Example of interpolation used by Environment Canterbury



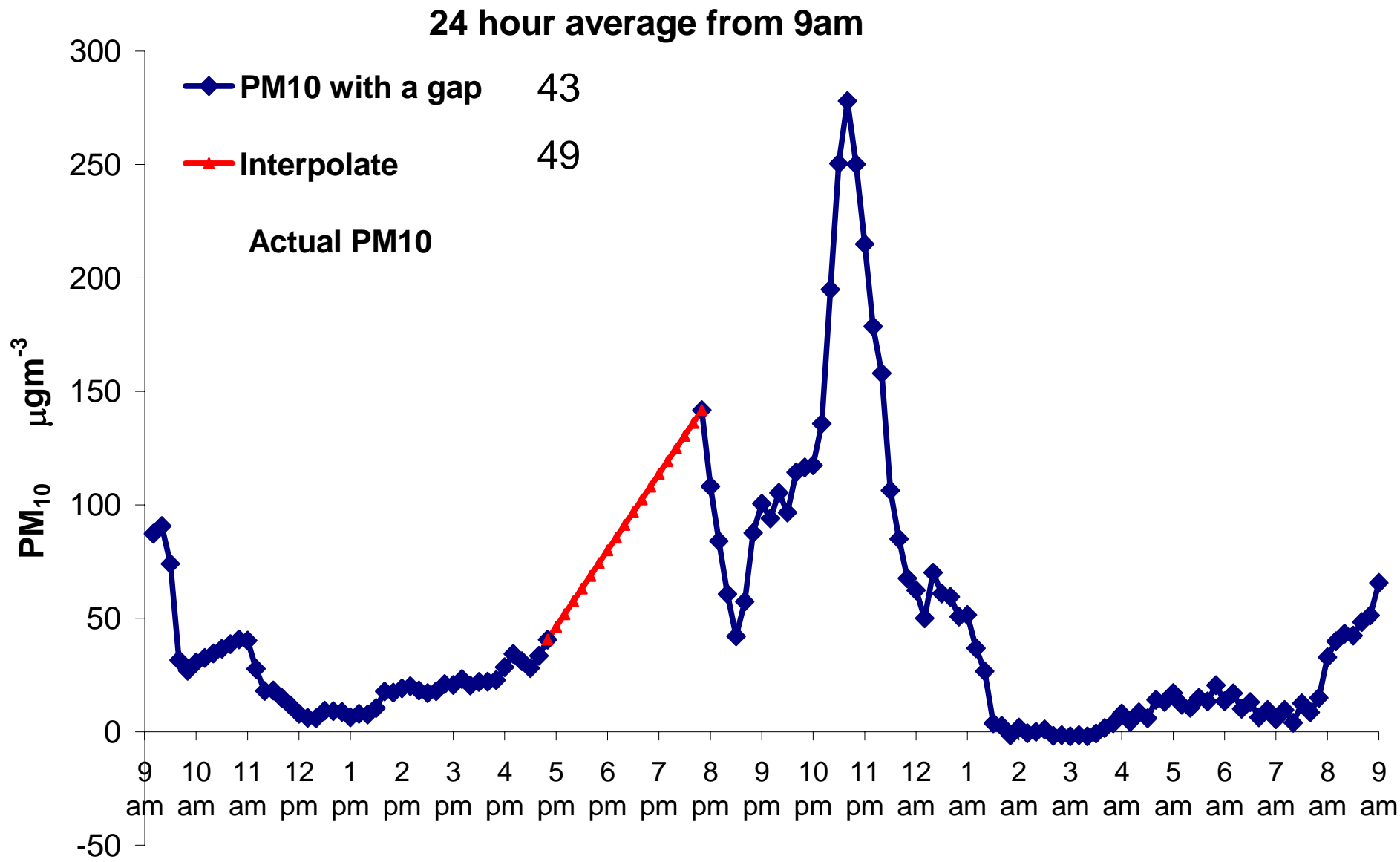
Example of interpolation used by Environment Canterbury



Example of interpolation used by Environment Canterbury



Example of interpolation used by Environment Canterbury



Example of interpolation used by Environment Canterbury

