

Processing Record for this file:
(Make notes here unique for this file)

Loading 8/1 - 9/1/2014
Data loaded directly from DMF

Processed SO₂ data normally. These data are taken with a ~10-s time constant on the instrument.

2014-03-08 02:34 - 2014-08-08 21:21 DQR D140902.1 The instrument flash lamp failed, at first intermittently and then completely. The data grew increasingly noisy. The ambient signal appeared near background when the instrument was functioning. The flash lamp was replaced but did not solve the problem. A Mentor visit revealed the flash lamp had again failed and also the associated flash pack. Both were replaced and the optical chamber cleaned. The instrument response was reset. No valid data reported after 2014-03-08 01:49 and several shorter period prior to this. The problem wasn't fully solved until the Mentor visit 2014-08-08

When the instrument was repaired and turned back on, internal parameters were adjusted. This required entering Service Mode. The instrument was inadvertently left in Service Mode and so automatic zeros were not carried out. The Average zero value (2.33124) from the operational period was used in lieu of a measured zero for the part of the month until Service Mode was turned off ~2014-09-15.

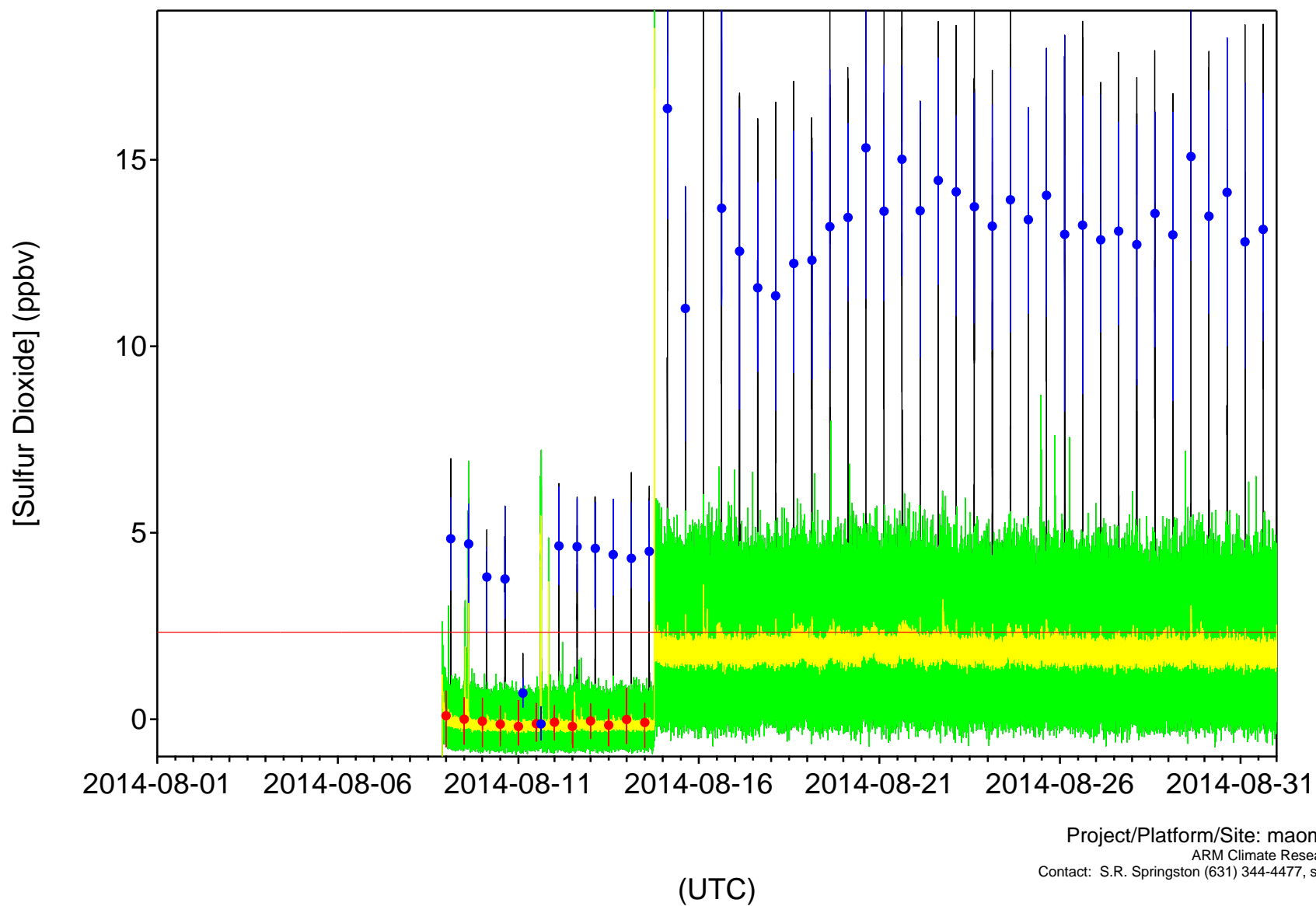
i.e.,

zero_cont=2.33124

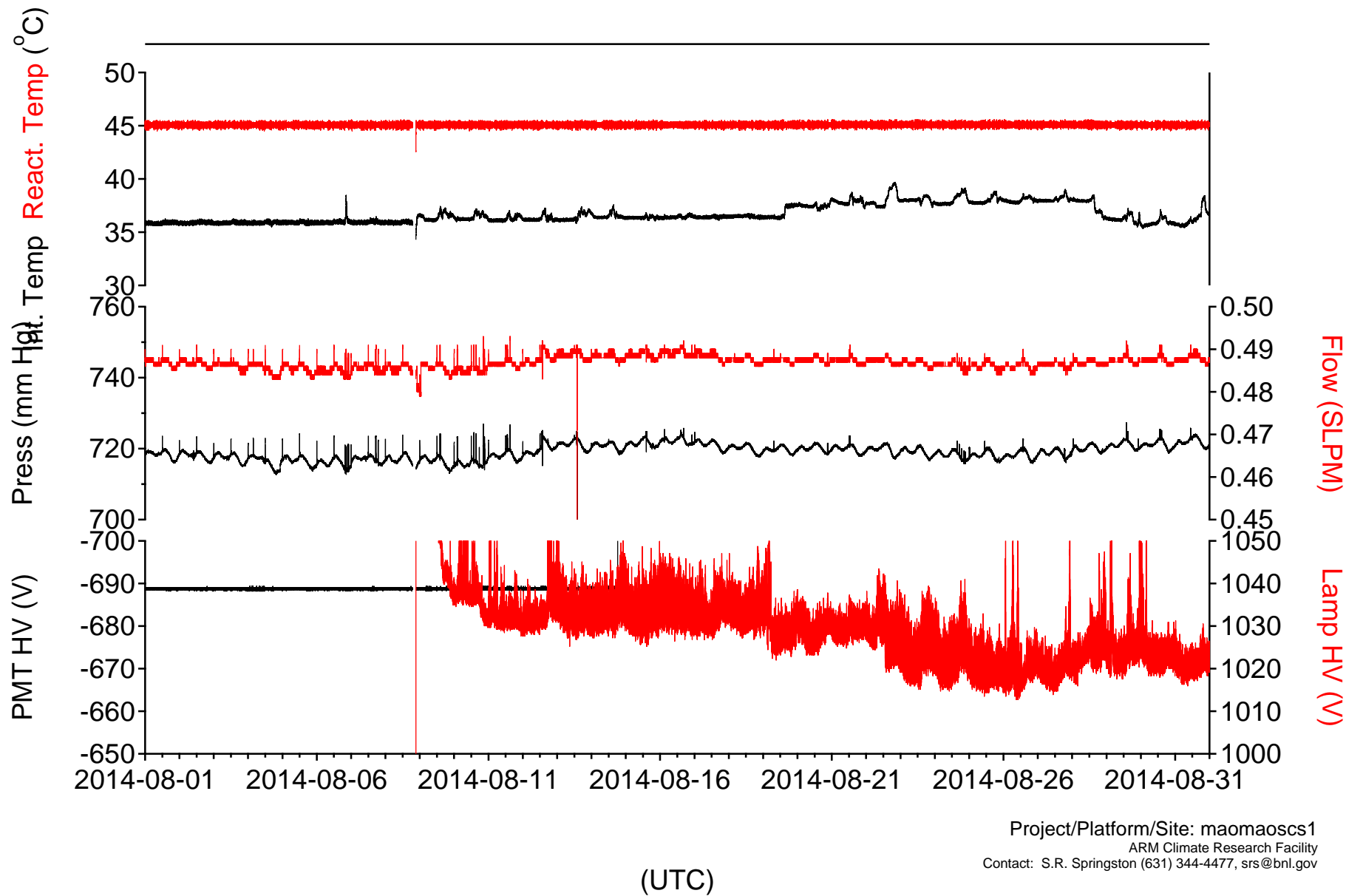
so2_proc(8,1)

Noise is greater than expected, but appears ok. Long period (>1 min) averaging shows a slight negative bias (~0.3-5 ppbv) in the signal.

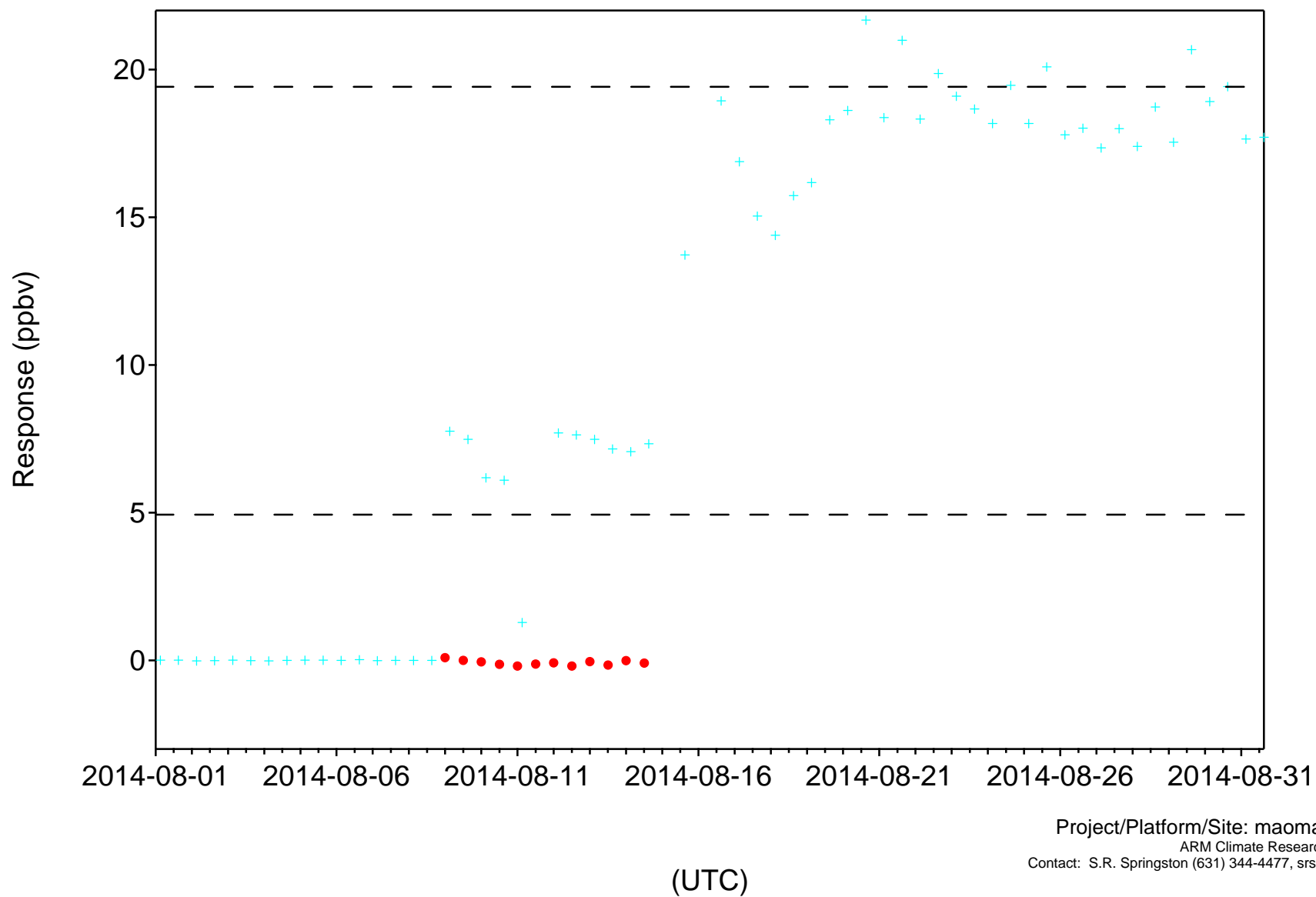
TEI Model 43i-TLE Pulsed Fluorescence SO₂ Analyzer



TEI Model 43i-TLE Pulsed Fluorescence SO₂ Analyzer
Housekeeping



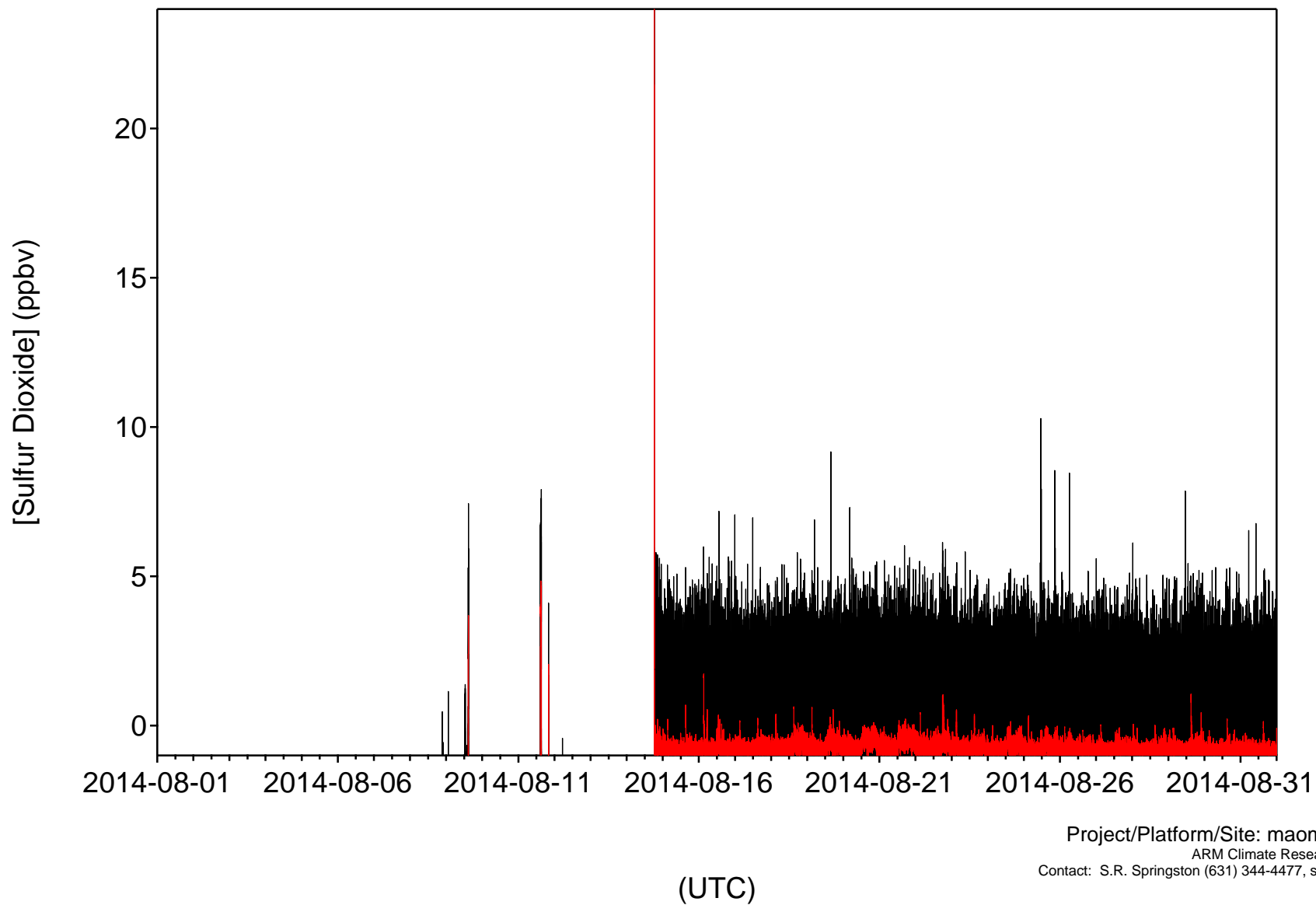
TEI Model 43i-TLE Pulsed Fluorescence SO₂ Analyzer
Zero/Span Checks



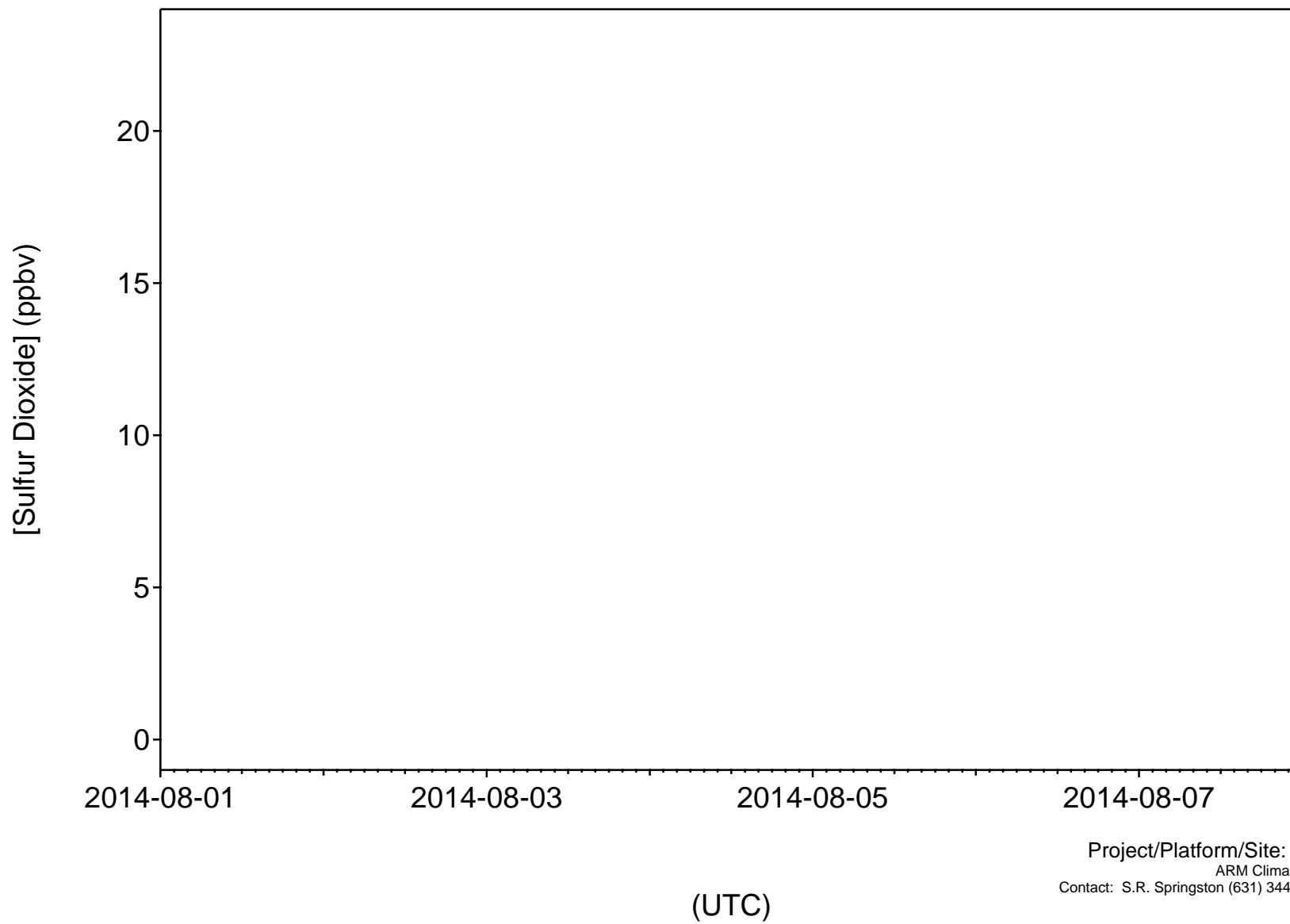
Project/Platform/Site: maomaoscs1
ARM Climate Research Facility
Contact: S.R. Springston (631) 344-4477, srs@bnl.gov

Entire Period

TEI Model 43i-TLE Pulsed Fluorescence SO₂ Analyzer

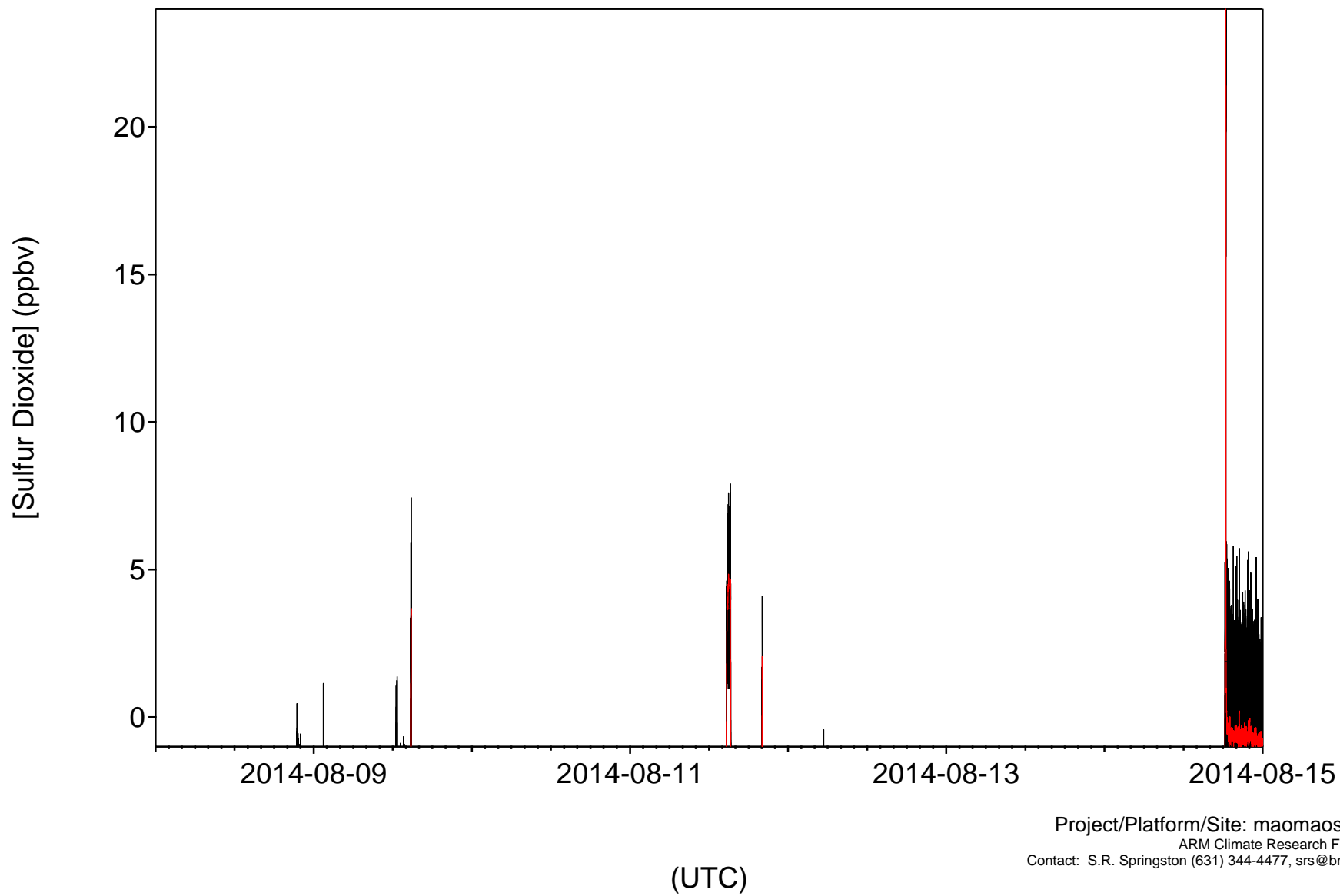


TEI Model 43i-TLE Pulsed Fluorescence SO₂ Analyzer

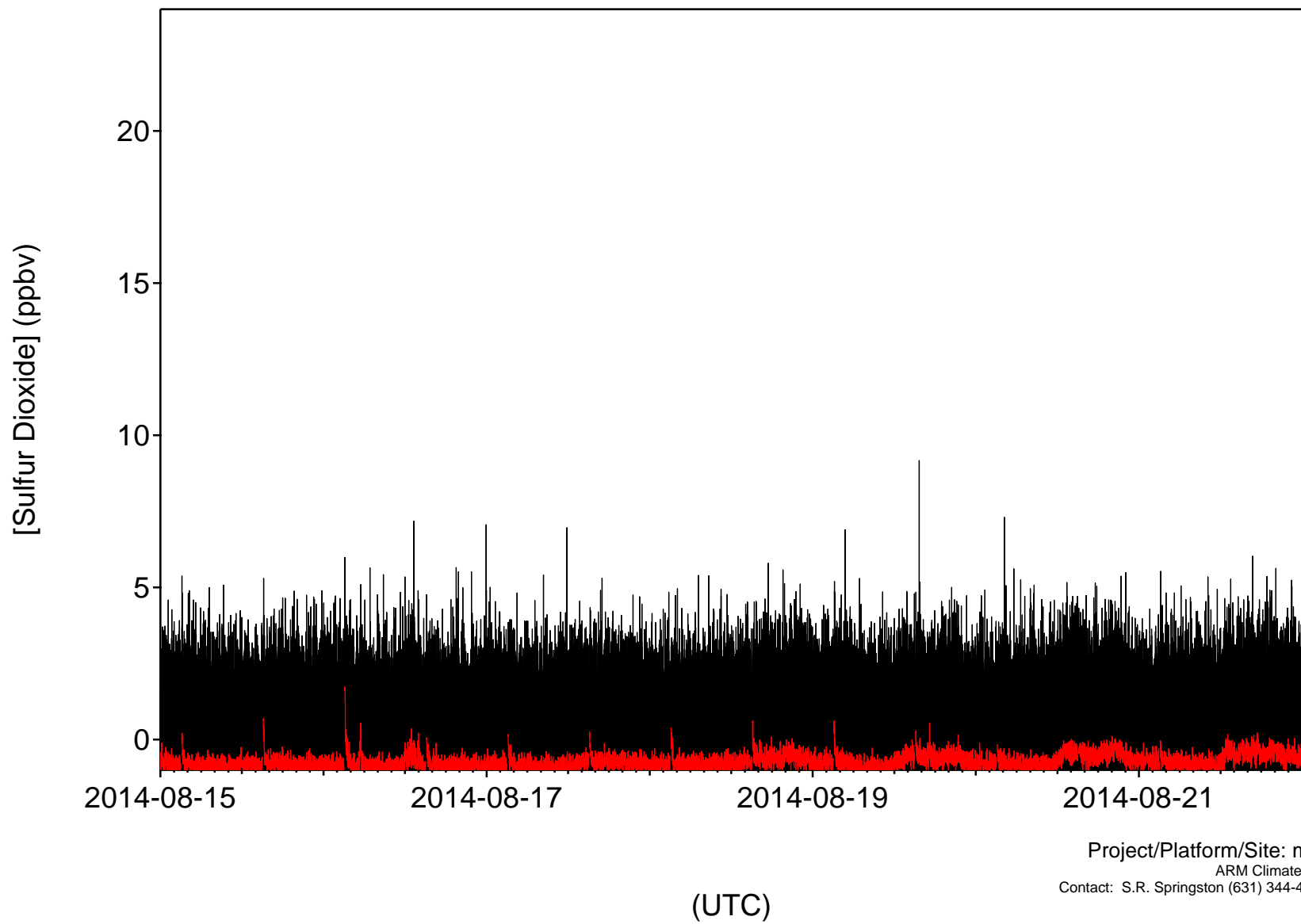


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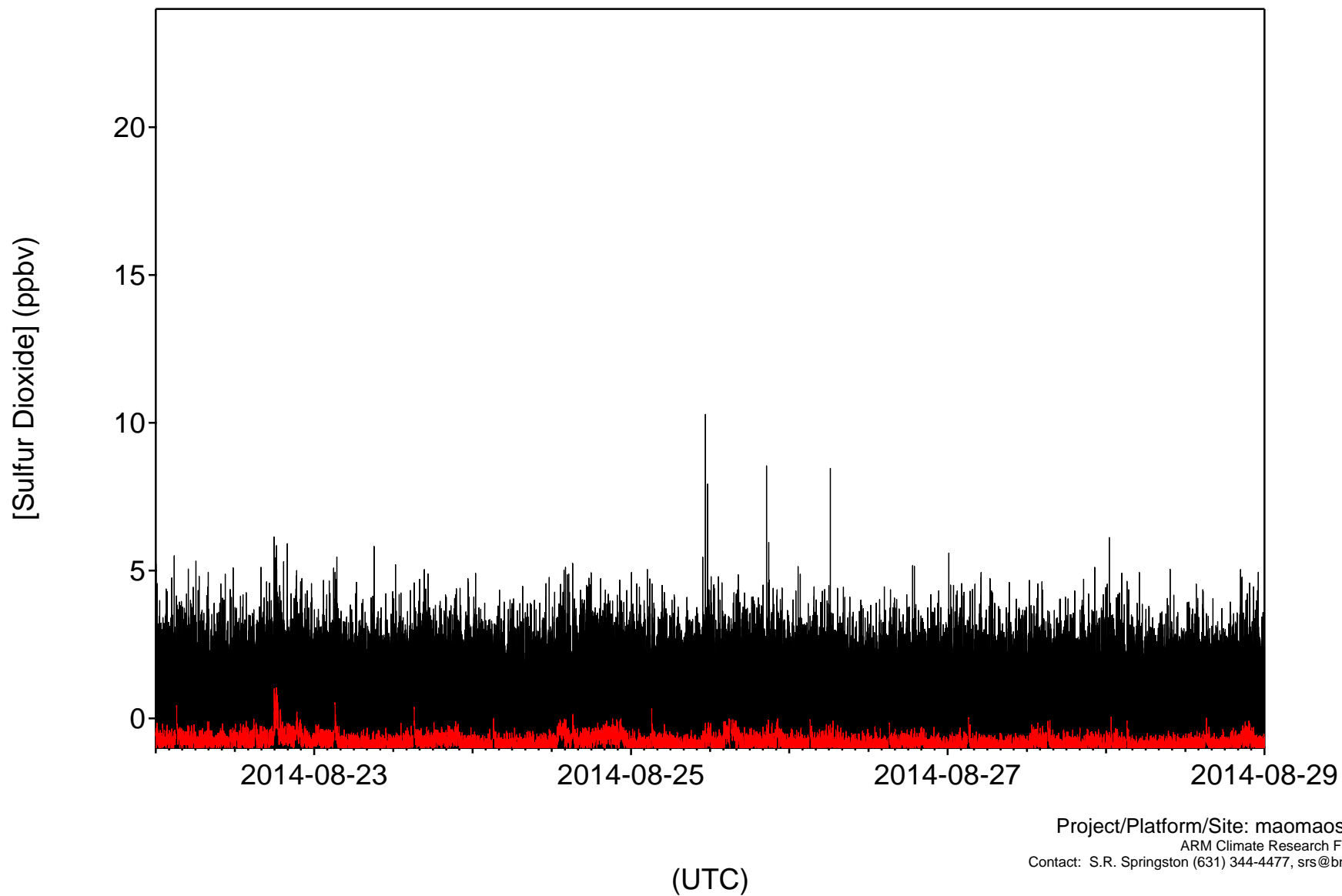
TEI Model 43i-TLE Pulsed Fluorescence SO₂ Analyzer



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