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

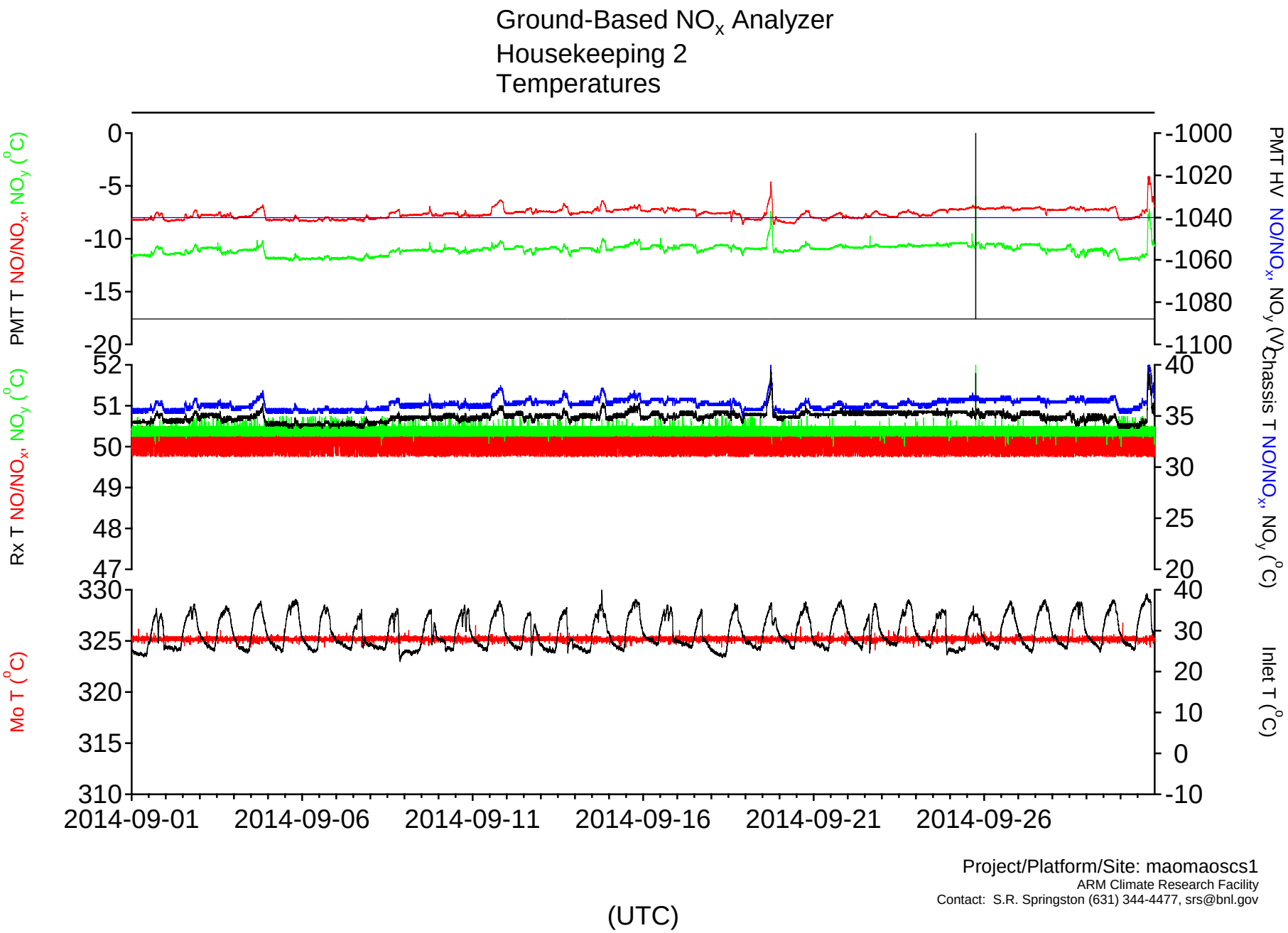
Loading from 2014-09-01 - 2014-10-01
Data taken from DMF, untarred, unzipped and renamed back to orignal file names

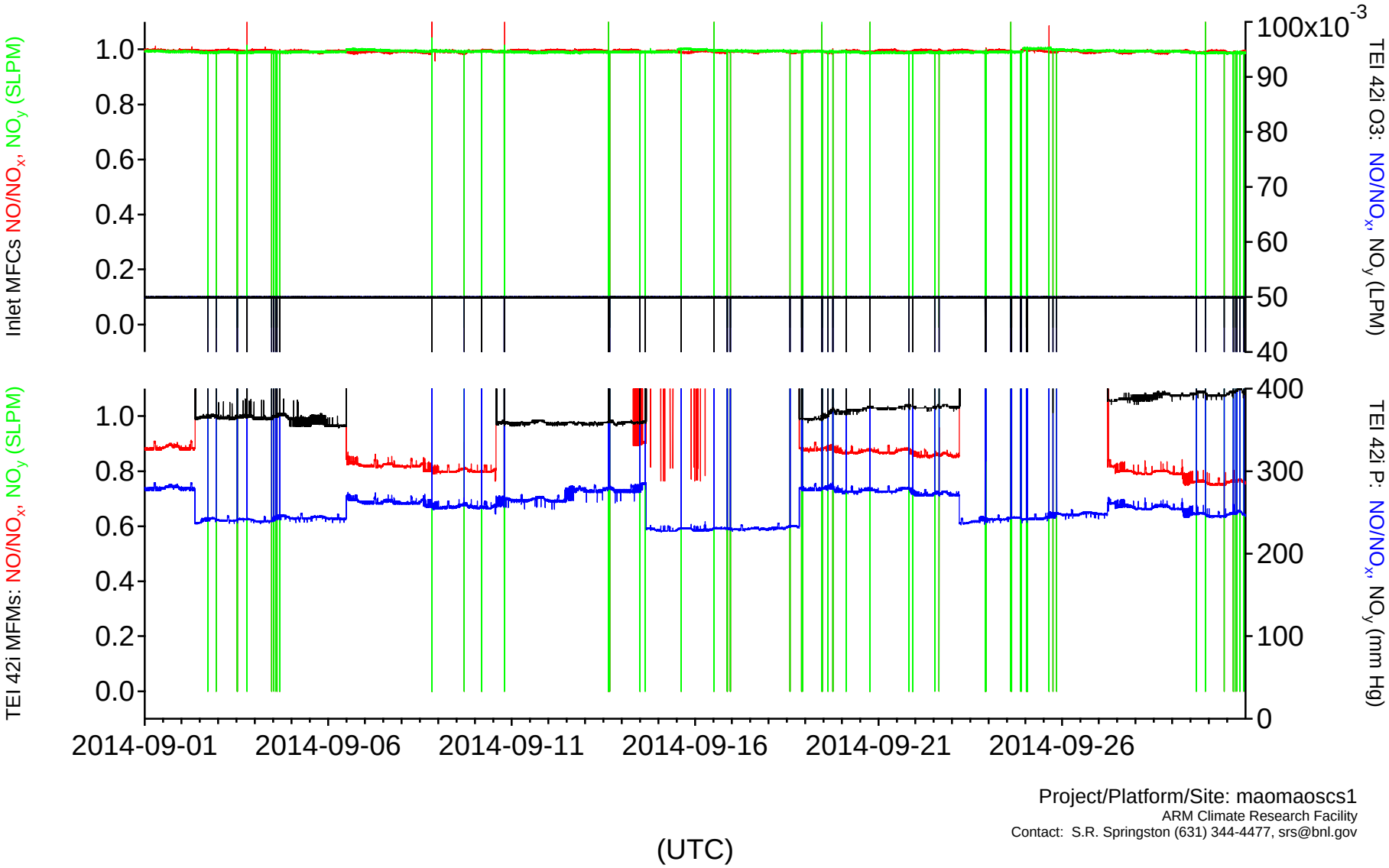
It was noted that BOTH TEI 42i's lost their internal Mass Flow Meters. This was not consequential as the inlet has much better Mass Flow Controllers.

Ambient data appear valid.

2014-09-14 a 47-mm x 5-um Teflon filter was added upstream of the NO/NOx channel. There has been issures with the operation of the winch to raise/lower the NOx inlet tower (necessary to change the filter on a 2-week schedule). Some evidence of reduced sensitivity after ~2014-09-24. It is not clear if this is due to the filter becoming dirty. The photolysis conversion efficiency is quite high (0.74) which is good. iAlso on 2014-09-24, the zero air signals on all three channel increased substantially.

Diurnal cycles of all three species are readily apparent. Generator operation and restarts seemed quite commone this month. No discrimination of these periods was provided.


Ground-Based NOx Analyzer
Housekeeping 2
Temperatures
PMT T NO/NOx, NOy (°C)
Rx T NO/NOx, NOy (°C)
Mo T (°C)
PMT HV NO/NOx, NOy (V)
Chassis T NO/NOx, NOy (°C)
Inlet T (°C)
0
-5
-10
-15
-20
52
51
50
49
48
47
330
325
320
315
310
-1000
-1020
-1040
-1060
-1080
-1100
40
35
30
25
20
40
30
20
10
0
-10
2014-09-01
2014-09-06
2014-09-11
2014-09-16
2014-09-21
2014-09-26
(UTC)
Project/Platform/Site: maomaoscs1
ARM Climate Research Facility
Contact: S.R. Springston (631) 344-4477, srs@bnl.gov



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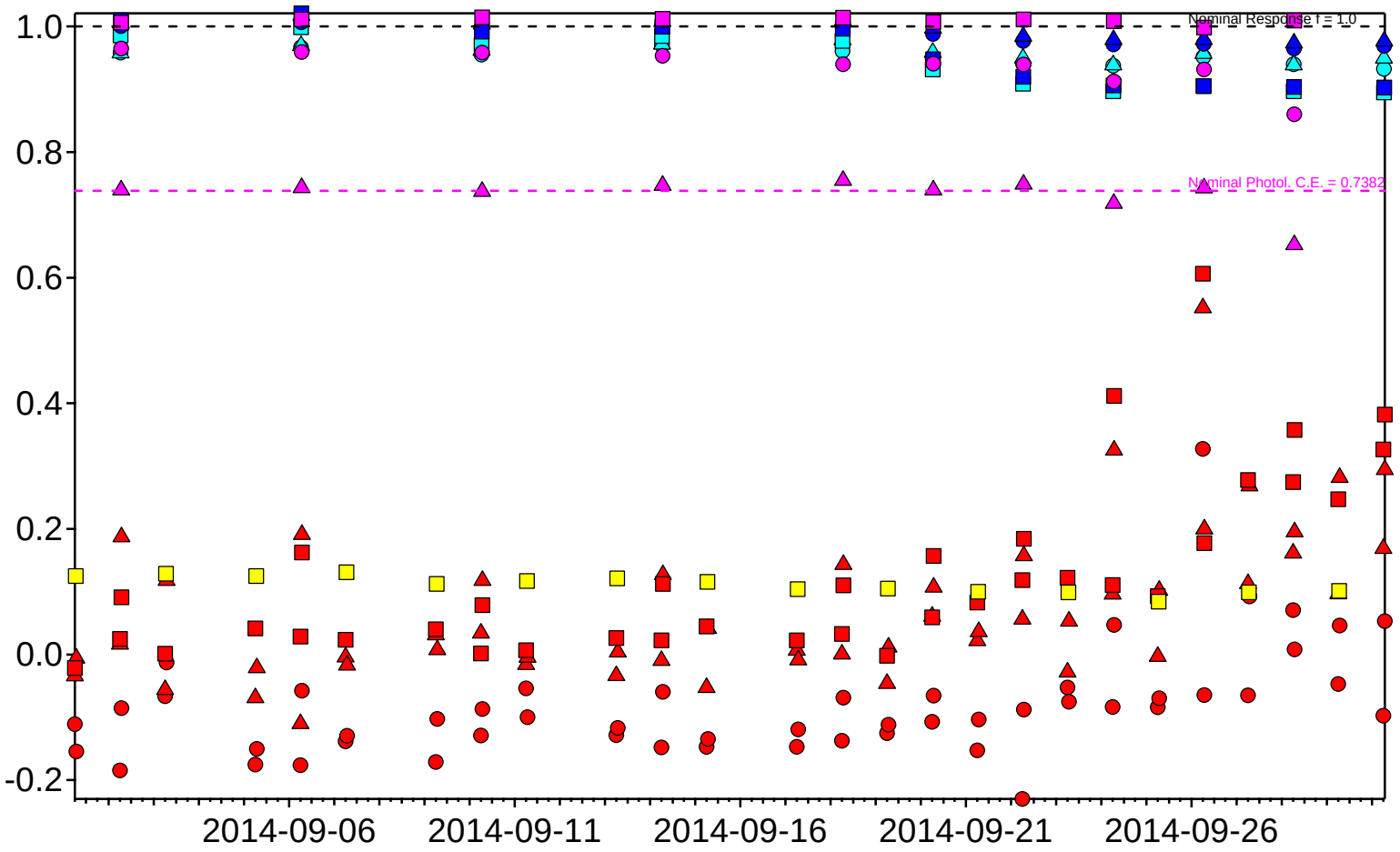
○ - NO Channel ; △ - NO_x Channel; □ - NO_y Channel
Zero Air Equivalent Signal (ppbv)
S.A. #1 (calibrated sig/dilution conc: [SA#1] = 21.51 ppbv)
S.A. #2 (calibrated sig/dilution conc: [SA#2] = 85.01 ppbv)
GPT + SA #2 (NO: frac titr., NO_x: Photol. C.E. (nom=0.7382), NO_y: Mo C.E. (nom=1.0085))
HNO_3 cal. (calibrated sig/perm conc: [HNO_3] = 73.9 ppbv)

Ground NO_x Analyzer Calibration Data



(UTC)

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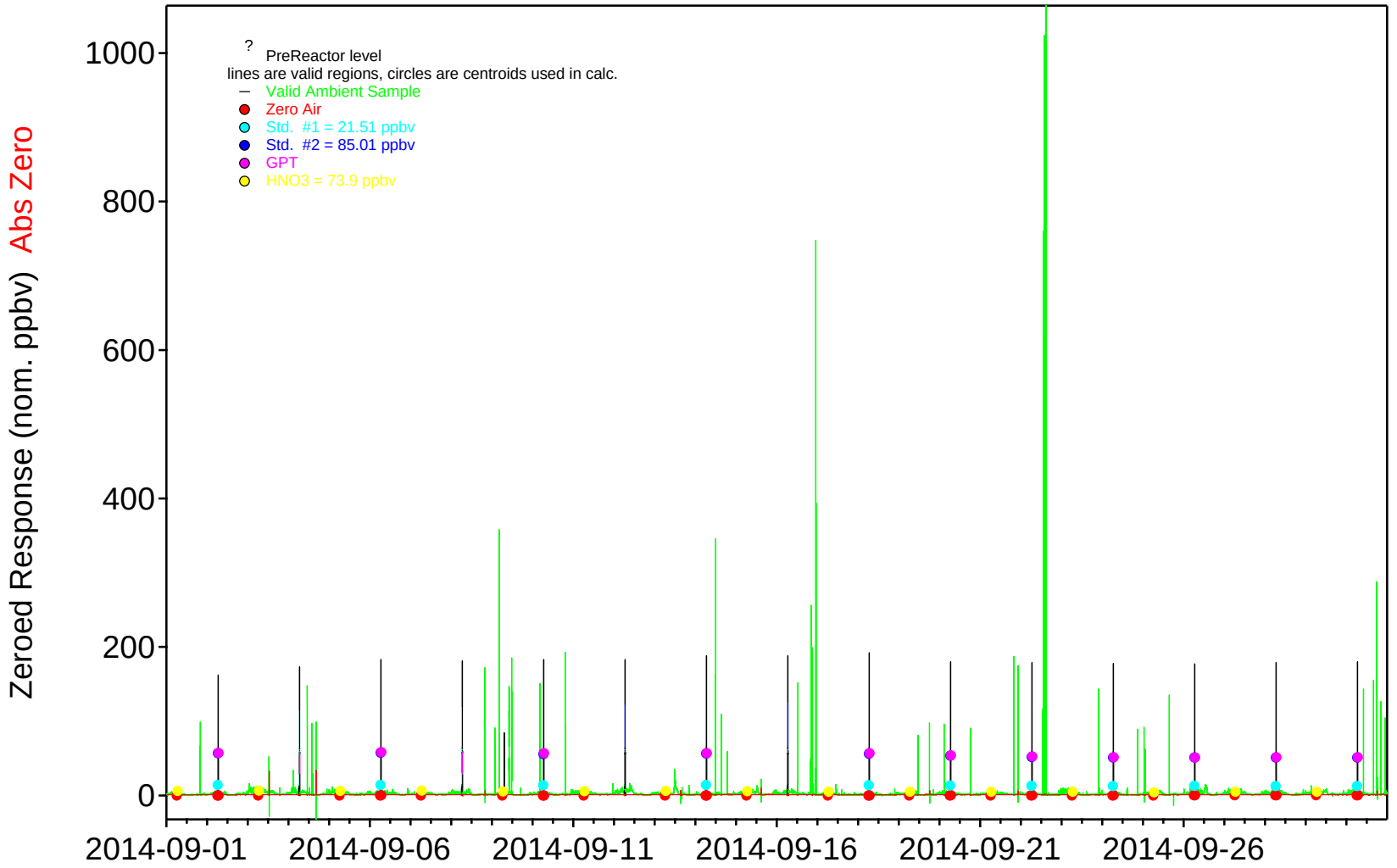
Ground NO_x Analyzer
Parsed NOy Channel Data



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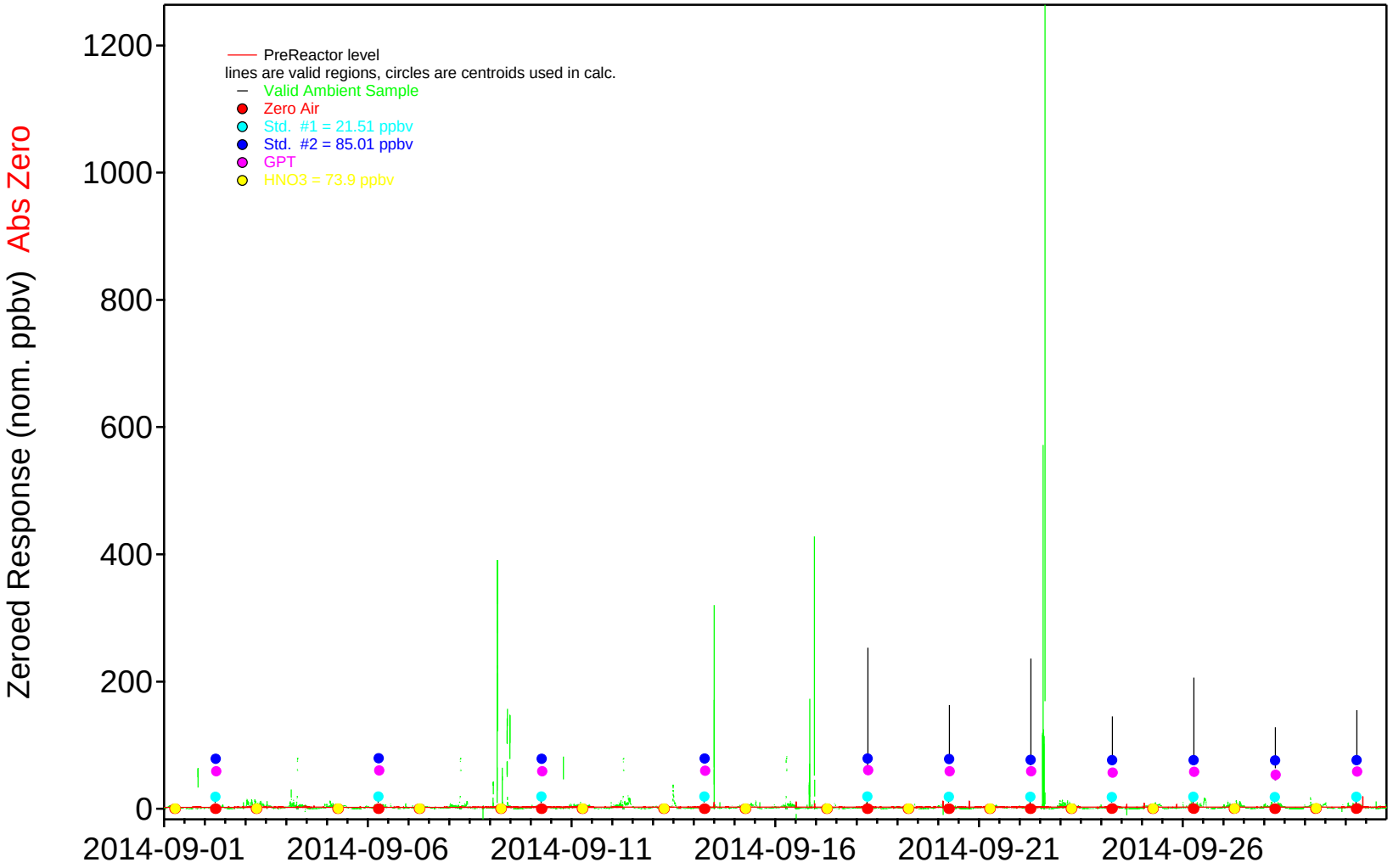
Ground NO_x Analyzer
Parsed NOx Channel Data



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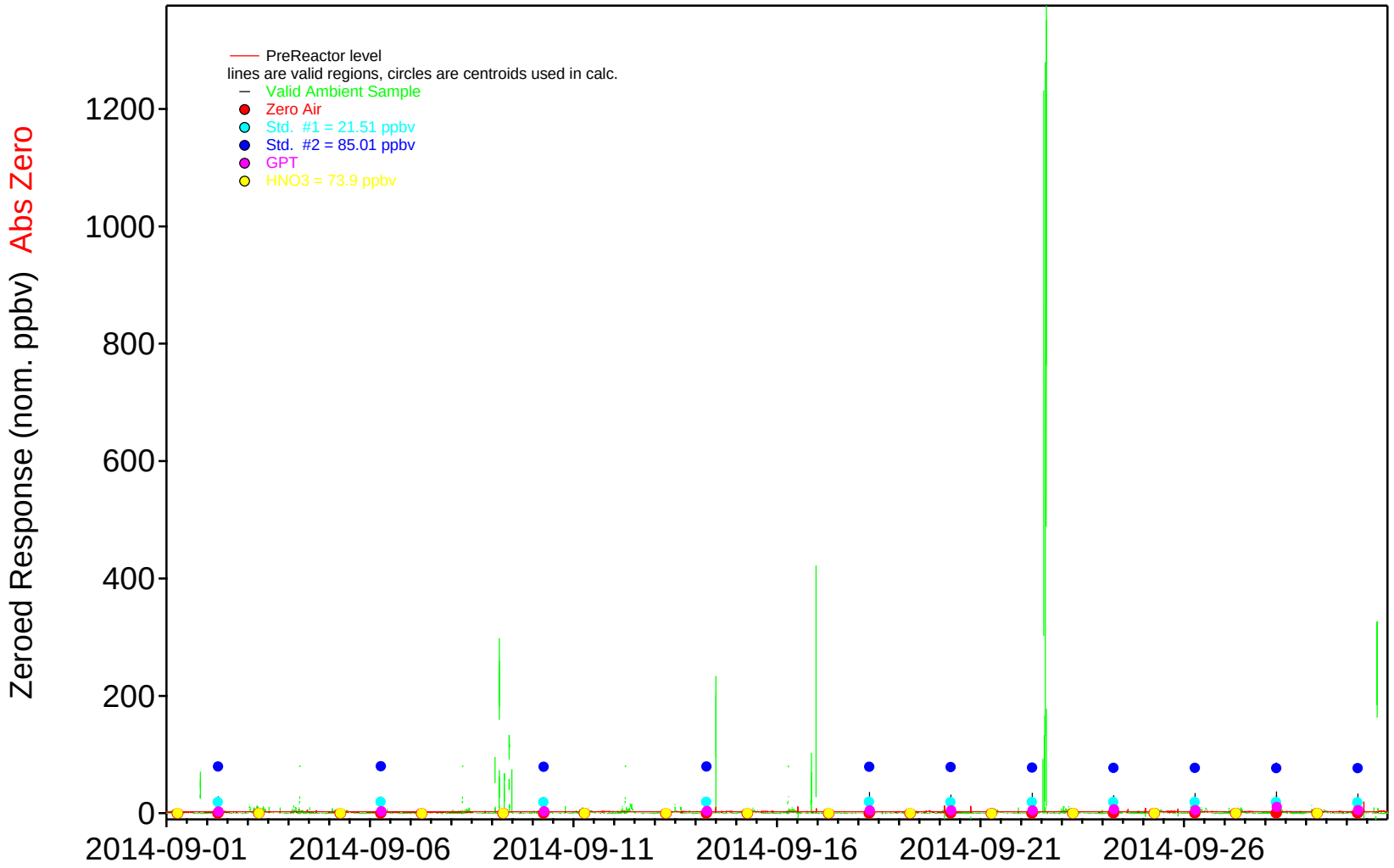
Ground NO_x Analyzer
Parsed NO Channel Data



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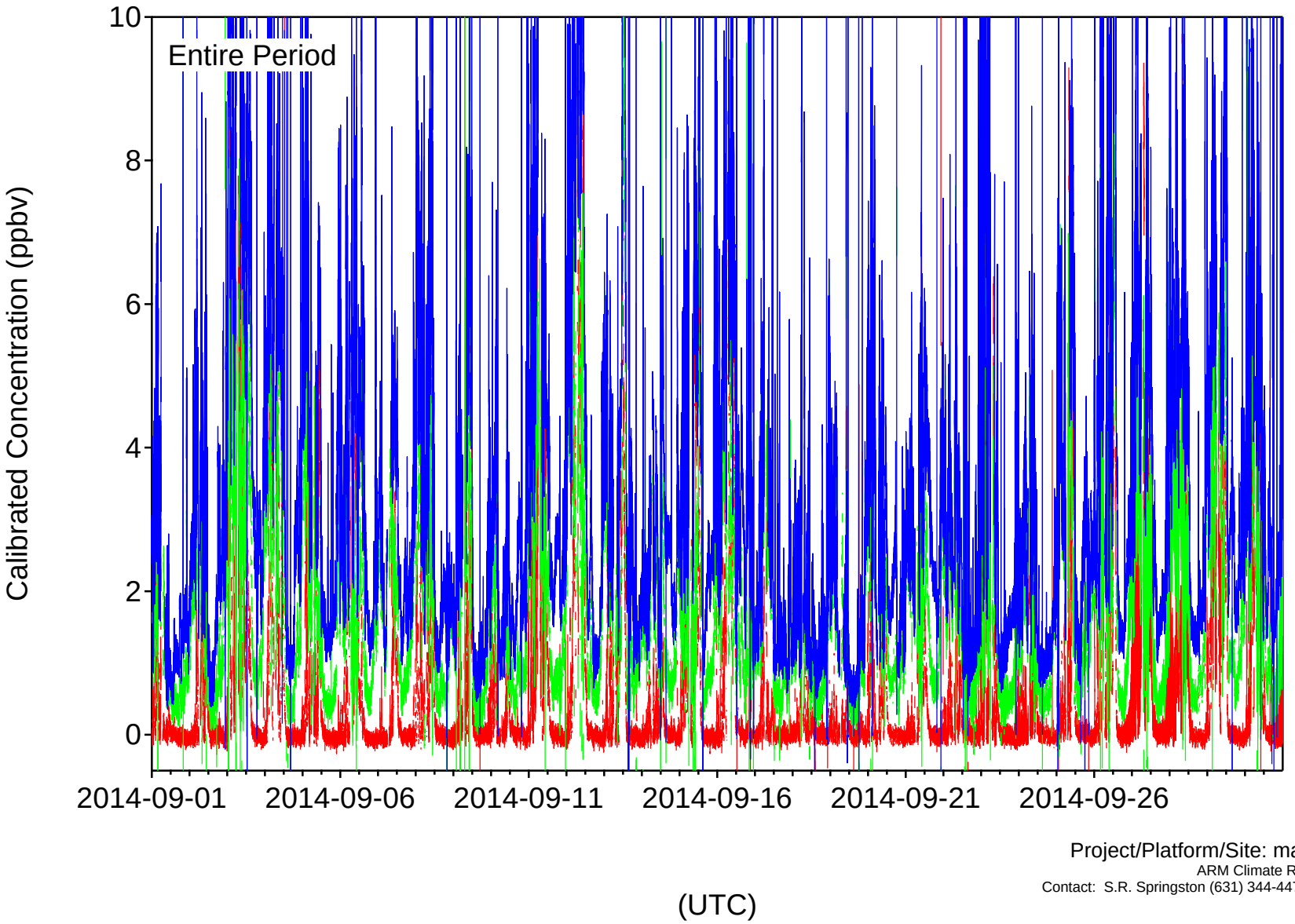
Calibration Factors Used:
NO: 1.07 ([calibrated]/[inst. reported])
NO_2: 1.087 ([calibrated]/[inst. reported]), C.E. = 0.7382
NO_y: 1.506 ([calibrated]/[inst. reported]), C.E. = 1.0085



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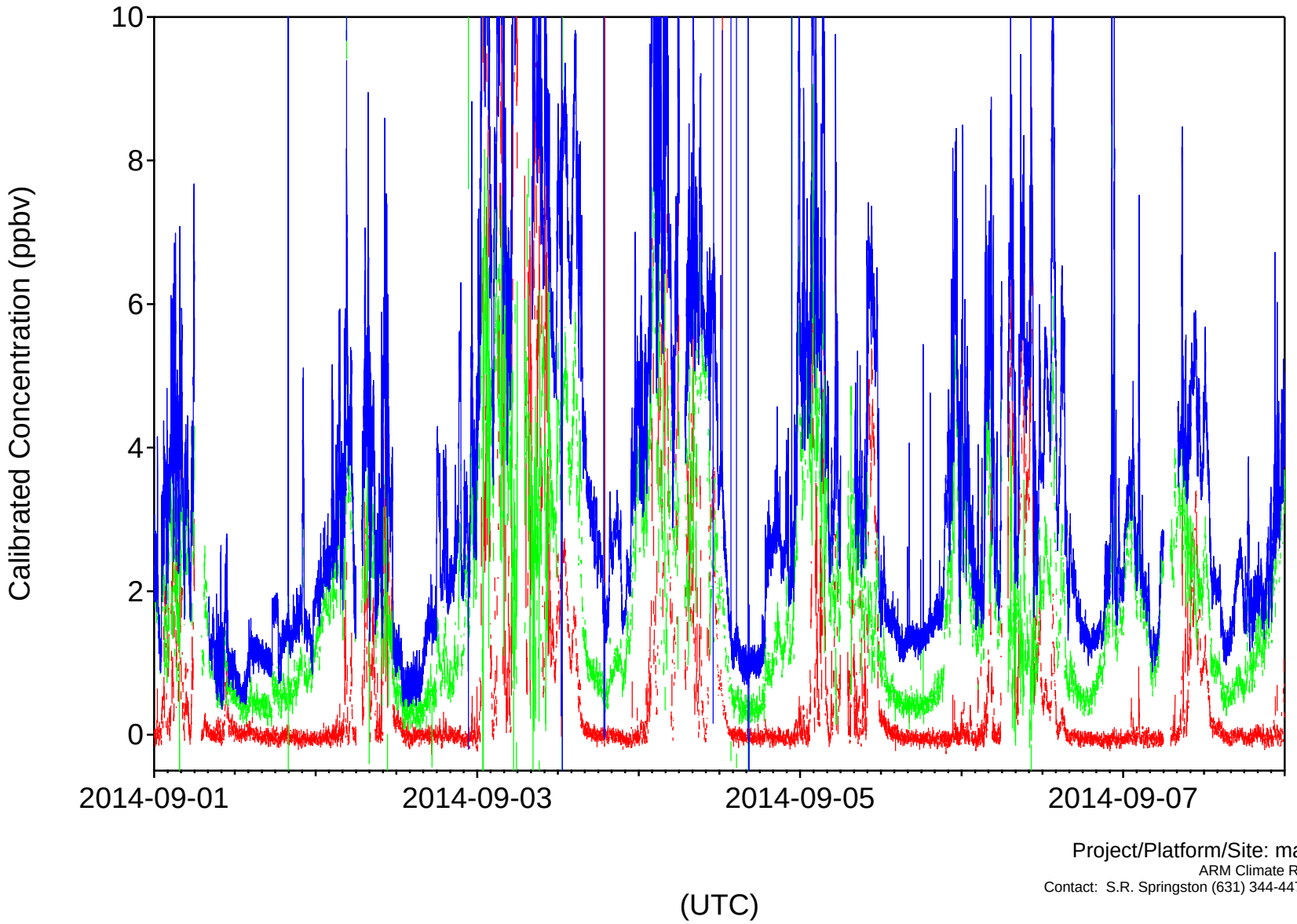

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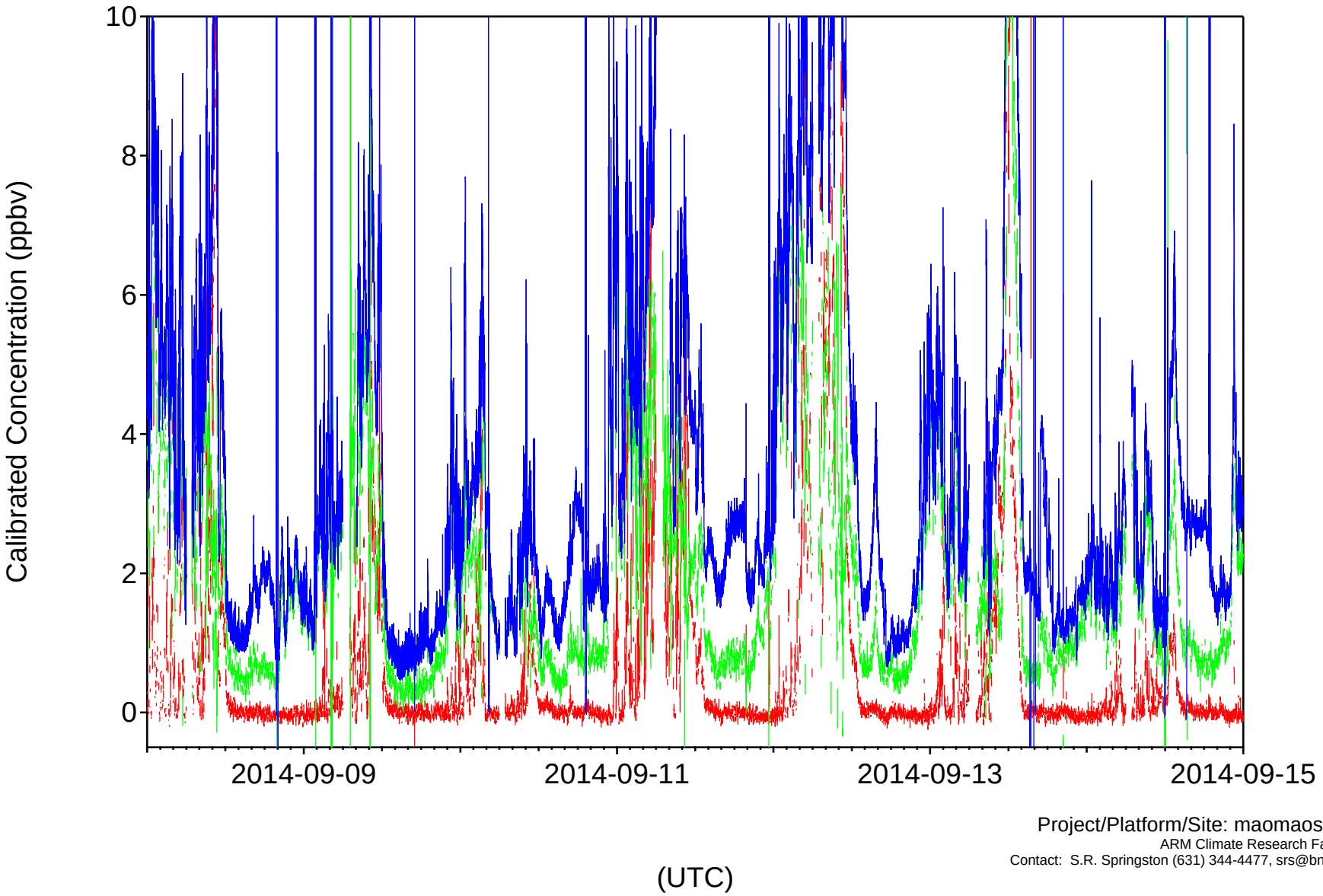

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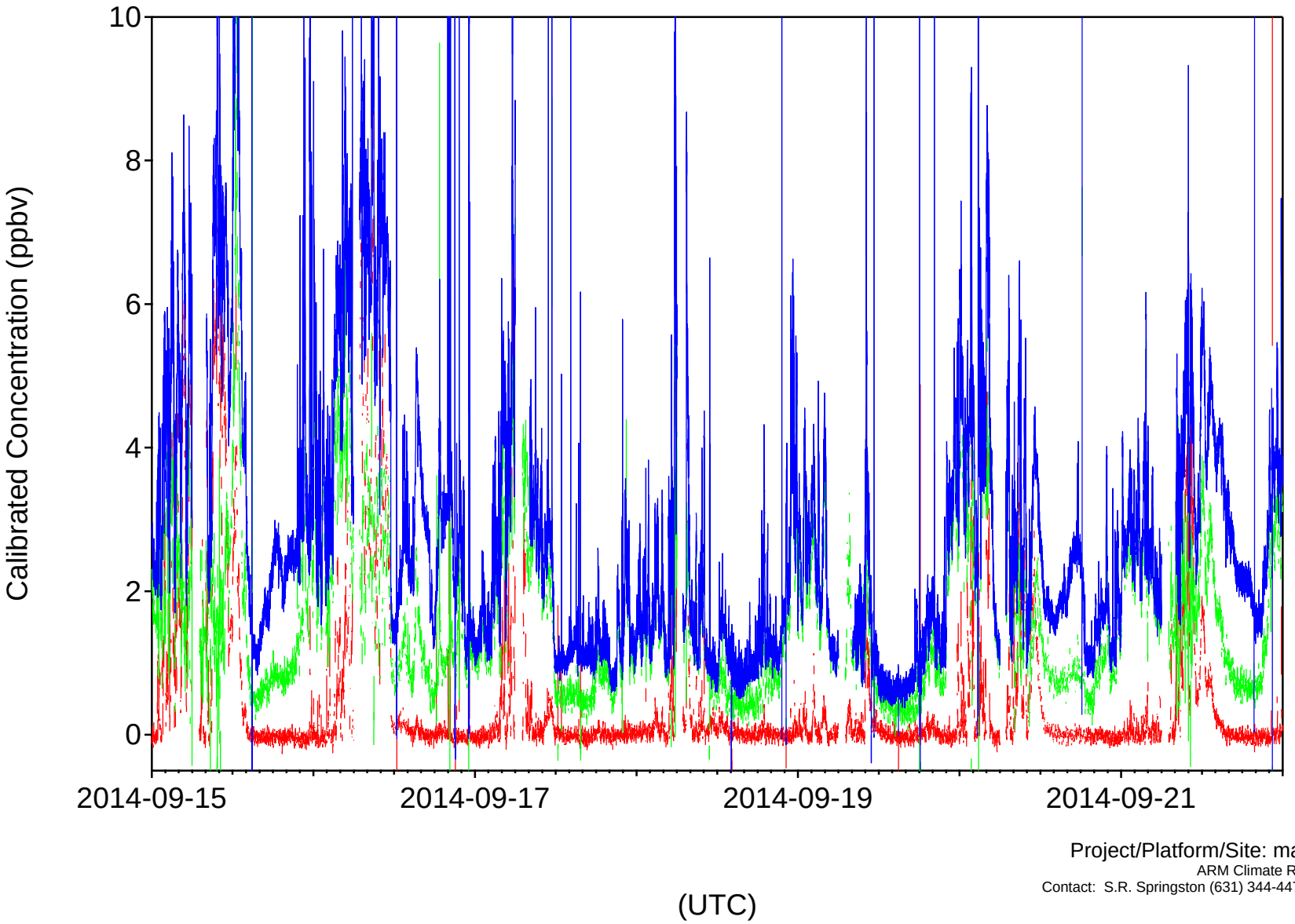

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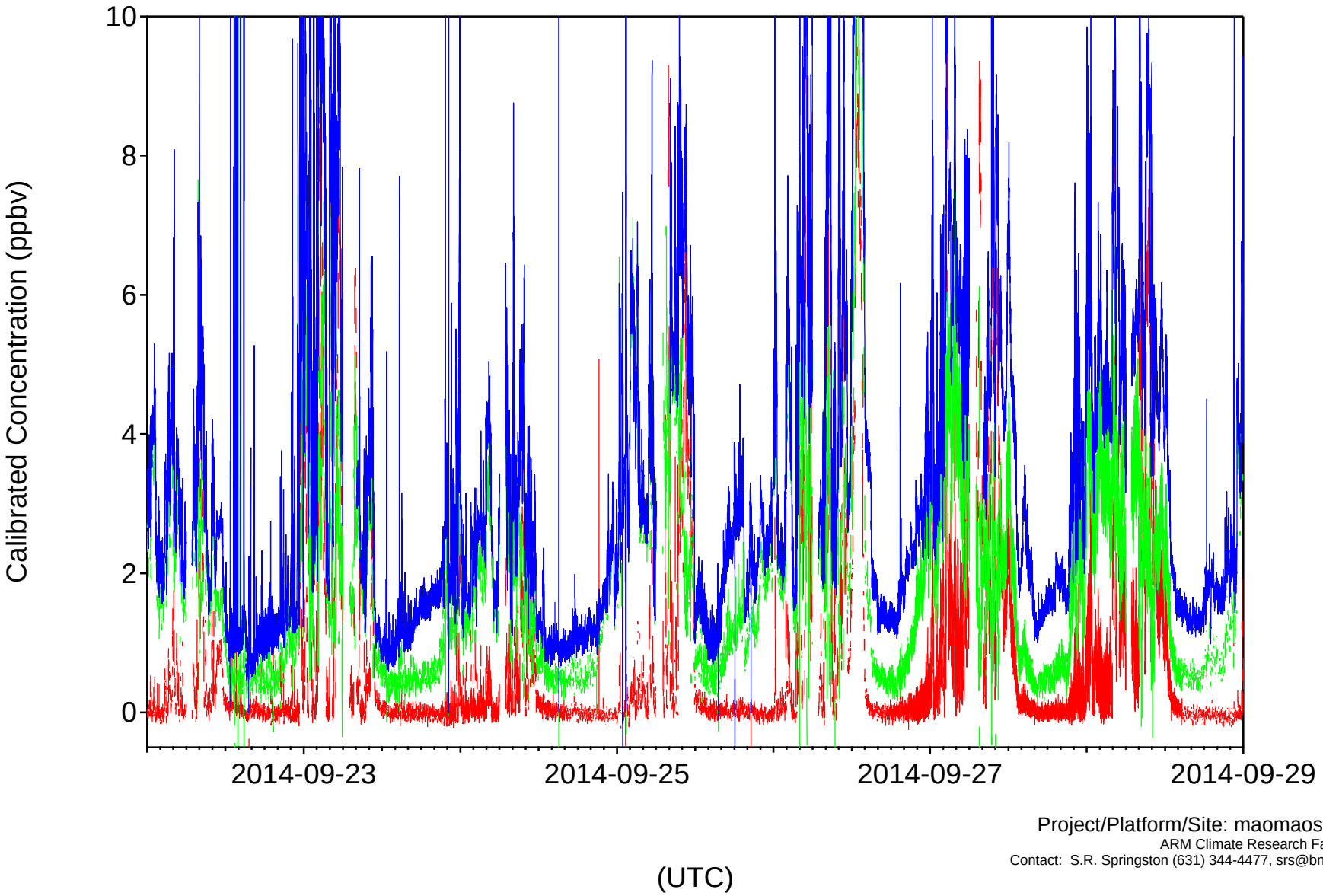

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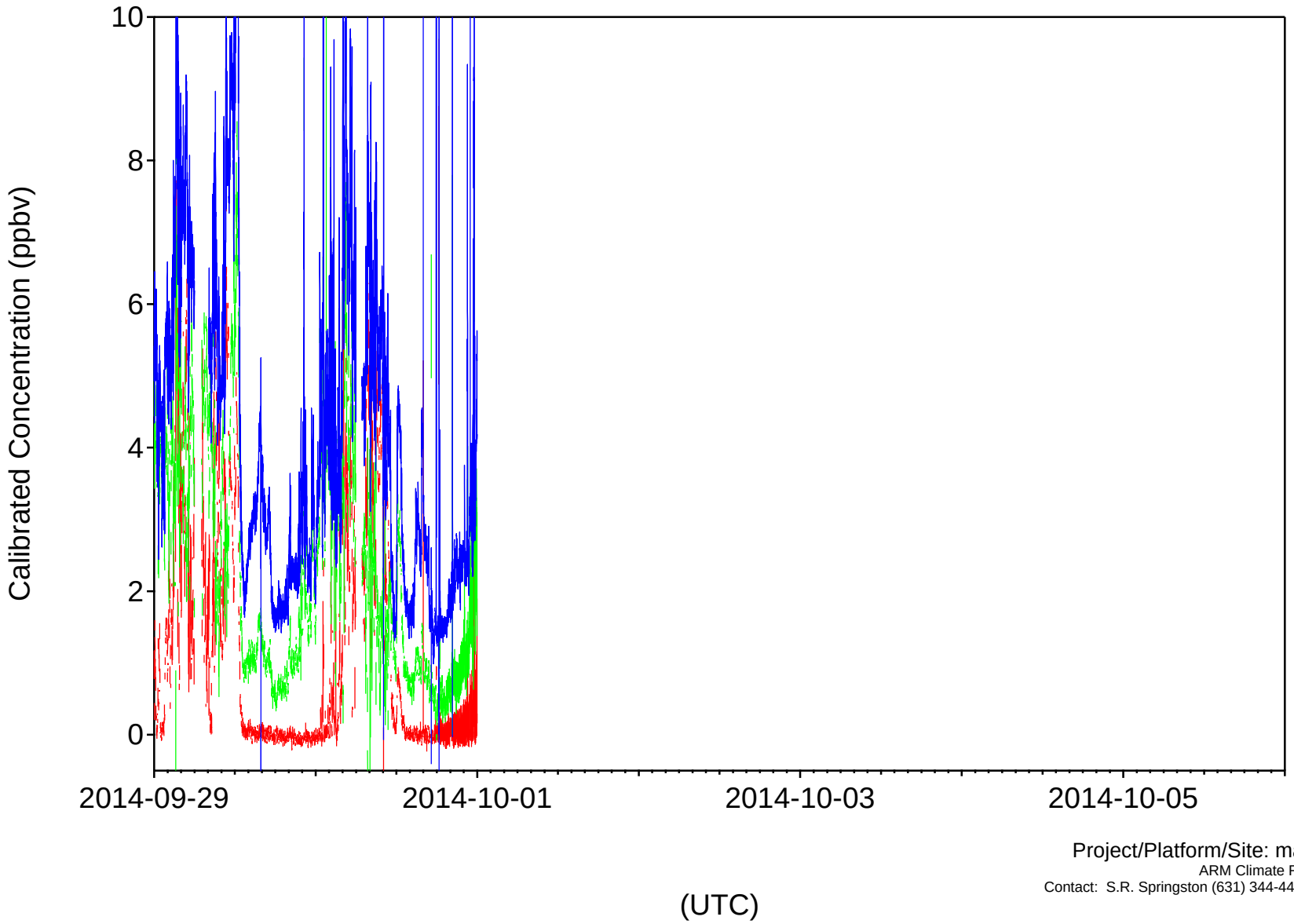

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