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

Loading from flight 140319a
Data taken from NOx CPU c:\data\NOx

Data in flight appear normal.

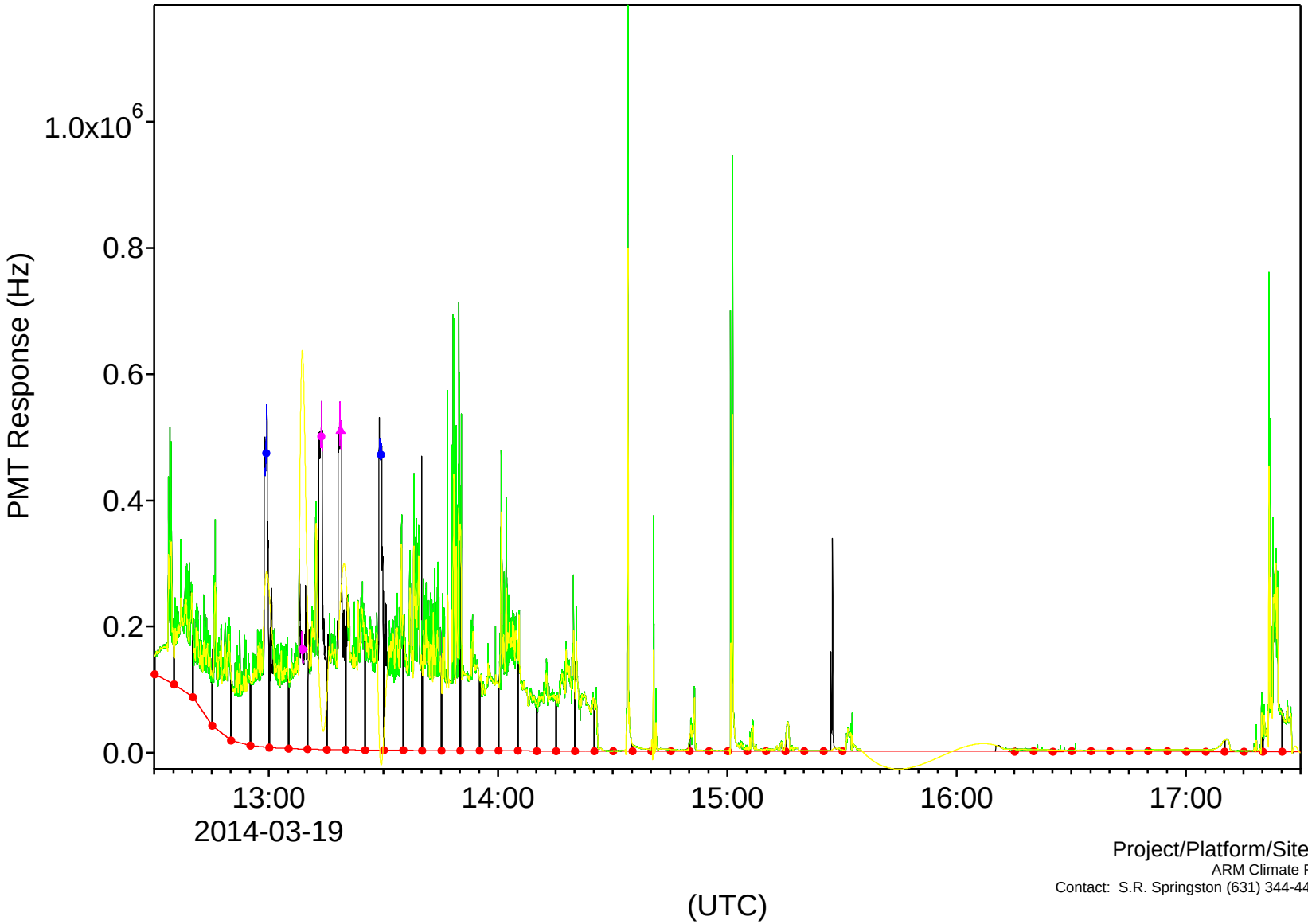
It has been observed that the NO/NO2 ratios do not appear reasonable at low levels (<500 pptv). The zero on the NO channel appears erroneously high. This affects both the NO and the NO2 results at low values. These data are only preliminary.

Data was lost in the air from 15:34 to 16:11. It's not clear what happened. After restart, the instrument appeared to take some time to return to baseline. This flight should be viewed with less confidence on the NO/NO2/NOy channels.

NO2 channel appears to have a high background. From 16:30 to 17:00, the Mo converter temperature went down to 250 C. It's not clear if this was a fault in the control or inability of the heater to keep up.

NOx channel offset appears very consistent and will be subtracted later.

AAF 3-Channel NO_x Analyzer
Parsed NOy Channel Data



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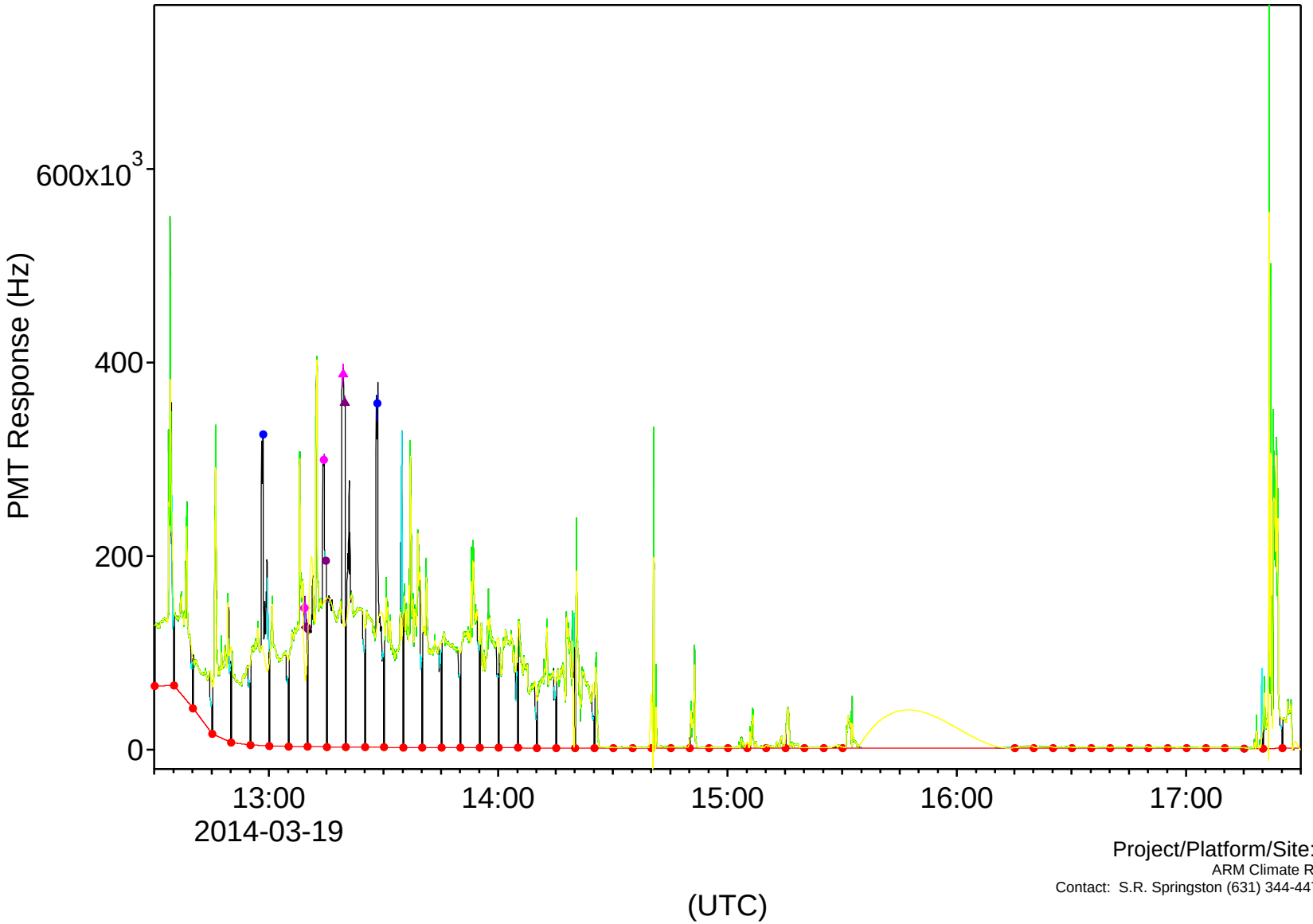
ARM Climate Research Facility
Contact: S.R. Springston (631) 344-4477, srs@bnl.gov

AAF 3-Channel NO_x Analyzer
Parsed NOx Channel Data



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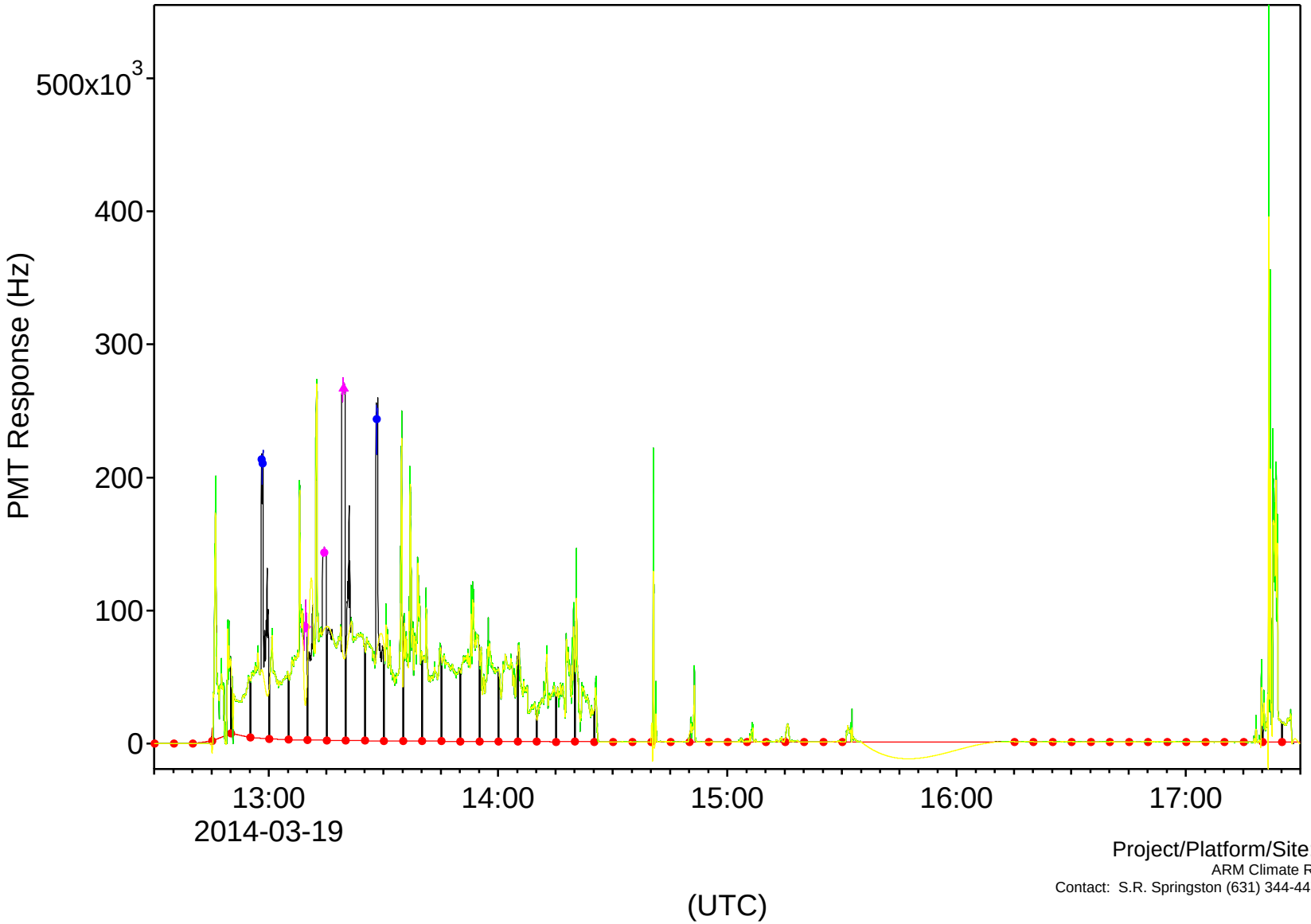
AAF 3-Channel NO_x Analyzer
Parsed NO Channel Data



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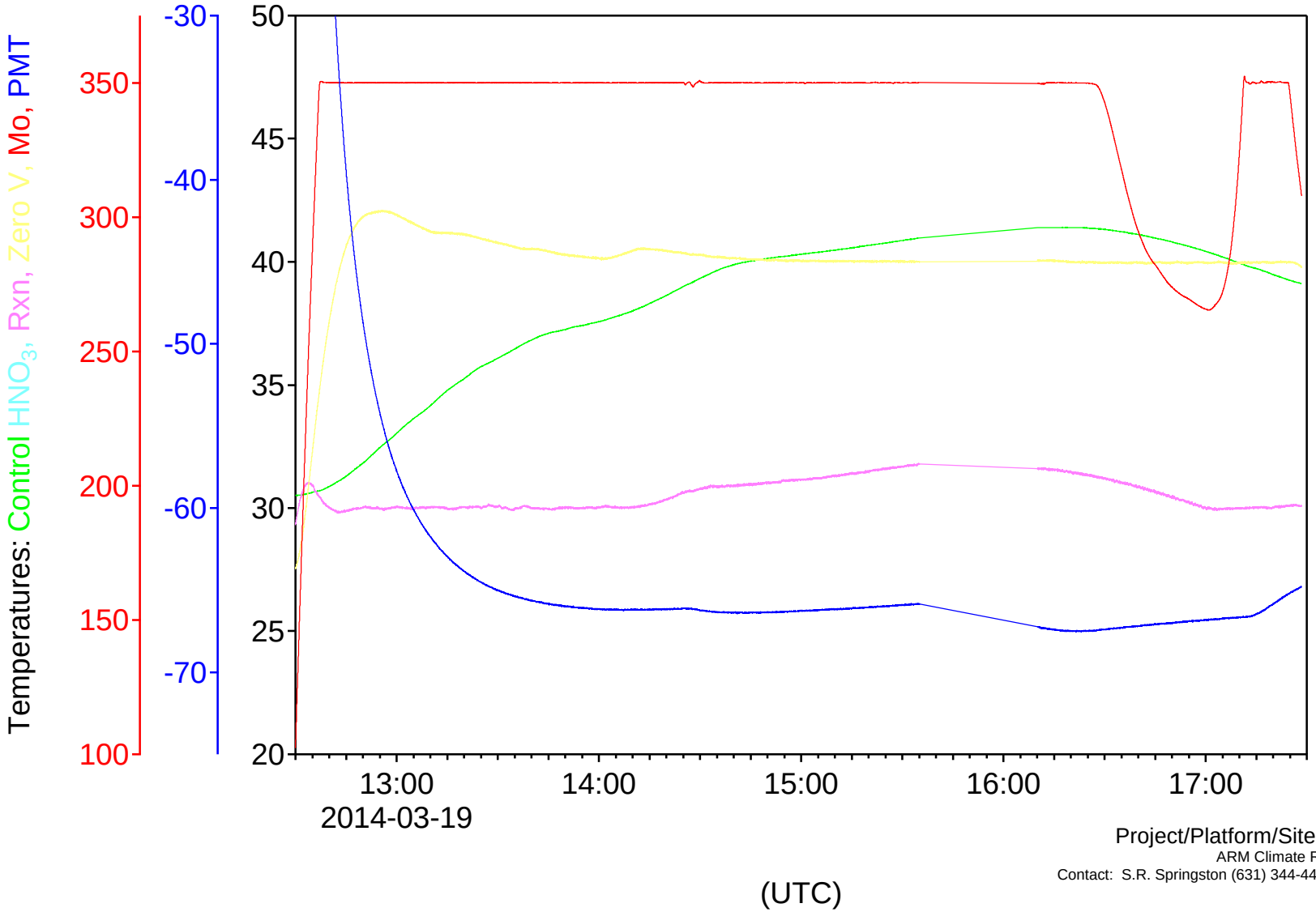
AAF 3-Channel NO_x Analyzer
Housekeeping T
Temperatures



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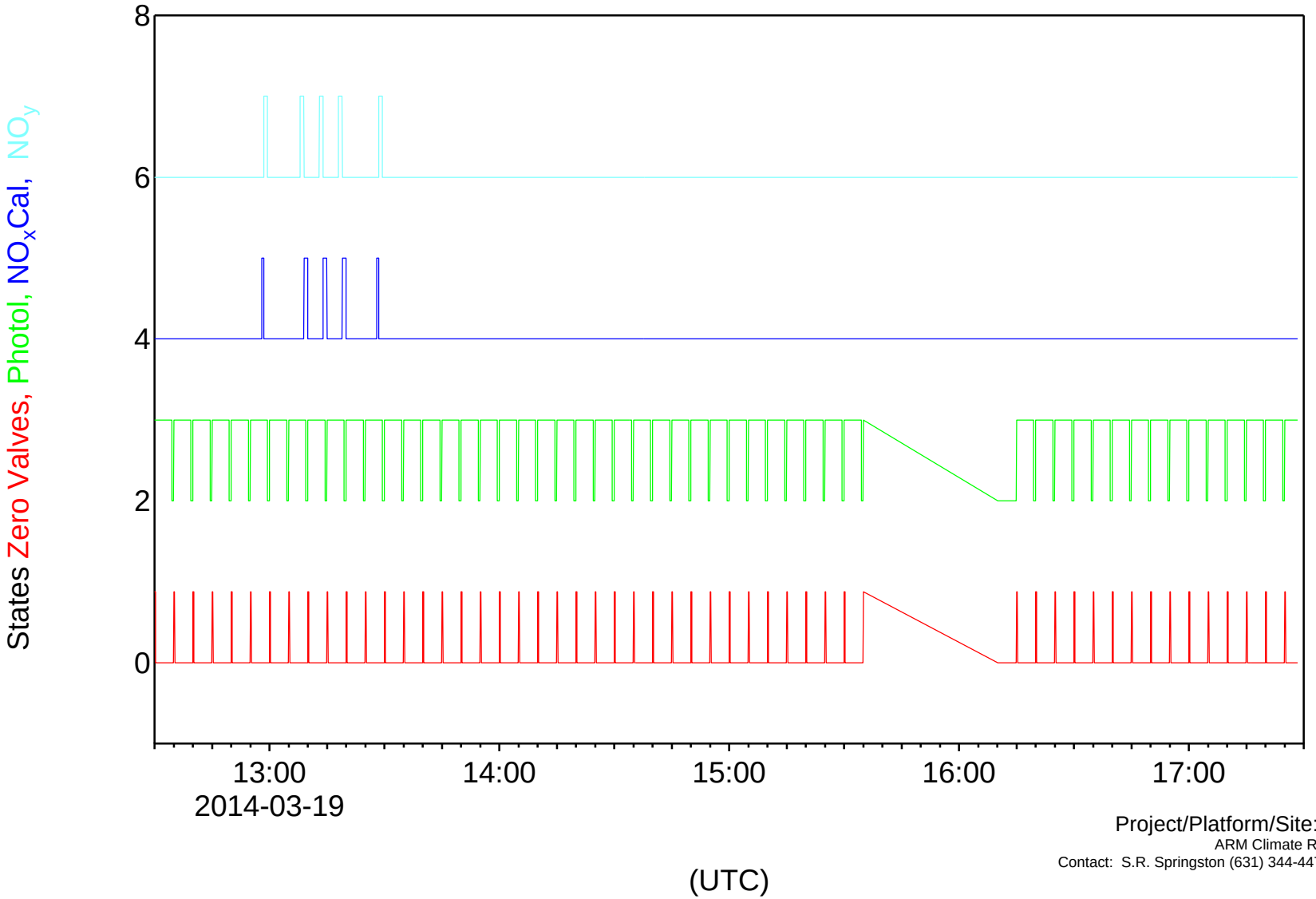
AAF 3-Channel NO_x Analyzer
Housekeeping 5
Zeros/Photol/SAs



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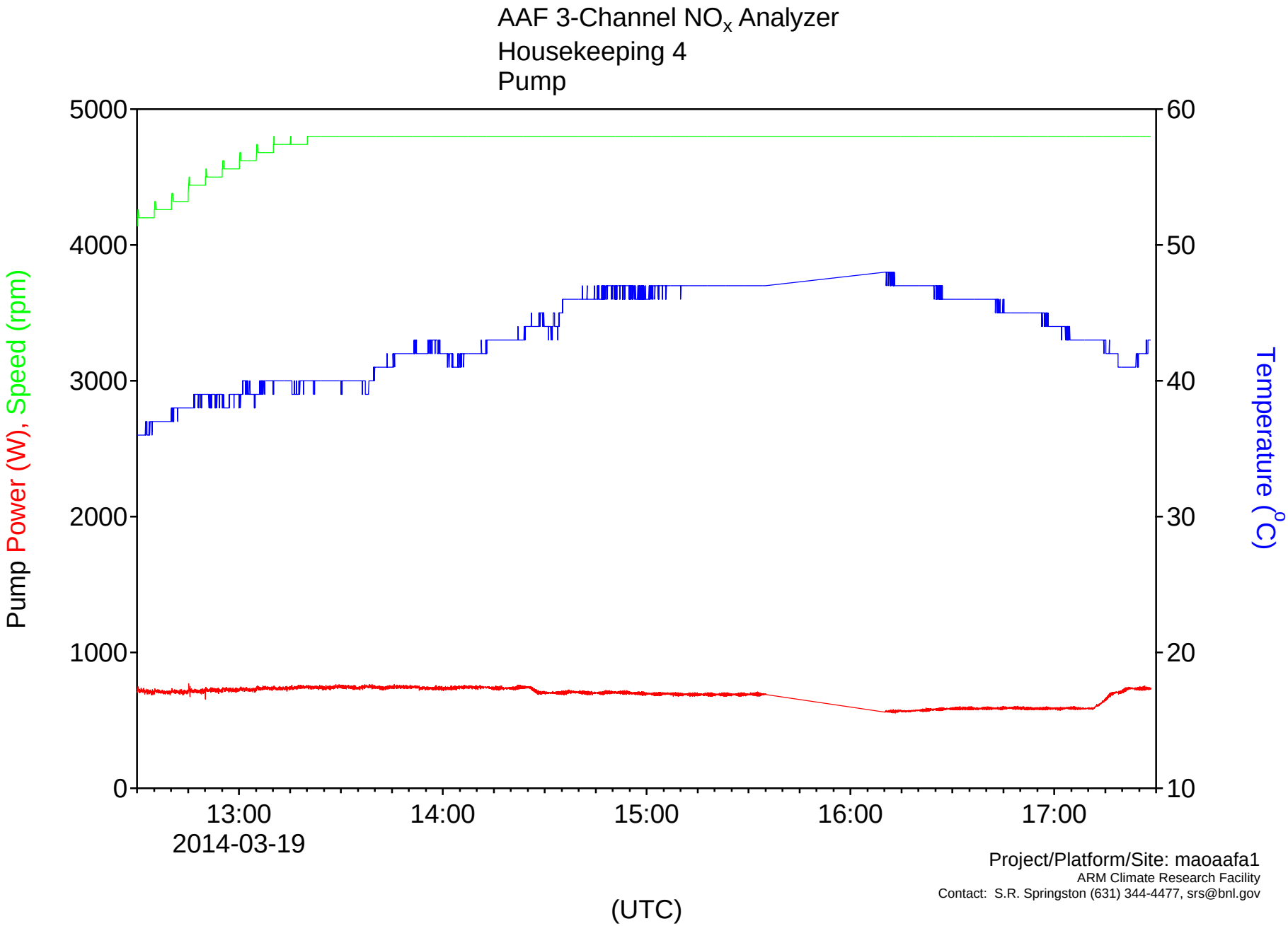
AAF 3-Channel NOx Analyzer
Housekeeping 4
Pump
Pump Power (W), Speed (rpm)
Temperature (°C)
5000
4000
3000
2000
1000
0
60
50
40
30
20
10
13:00
2014-03-19
14:00
15:00
16:00
17:00
(UTC)
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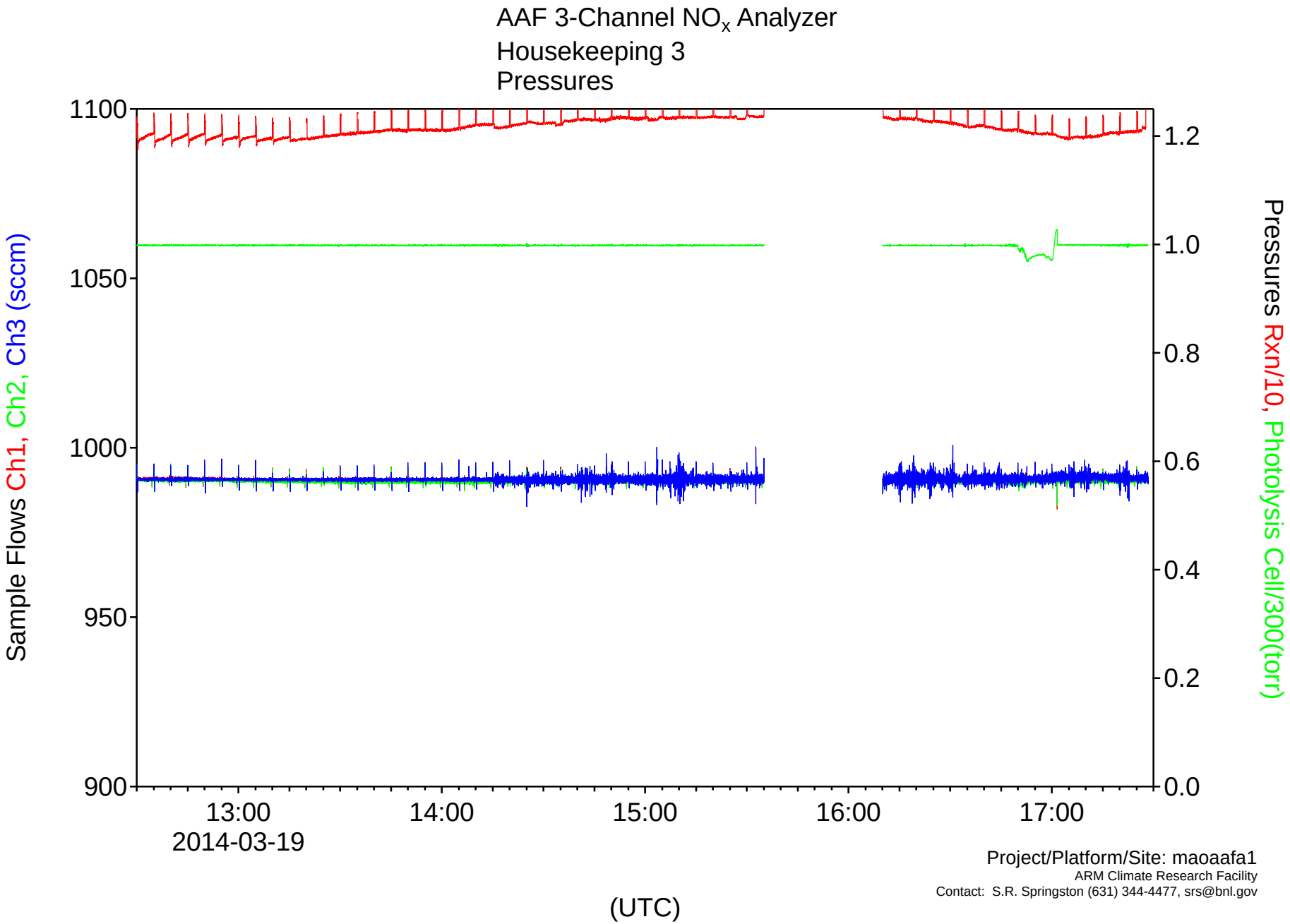
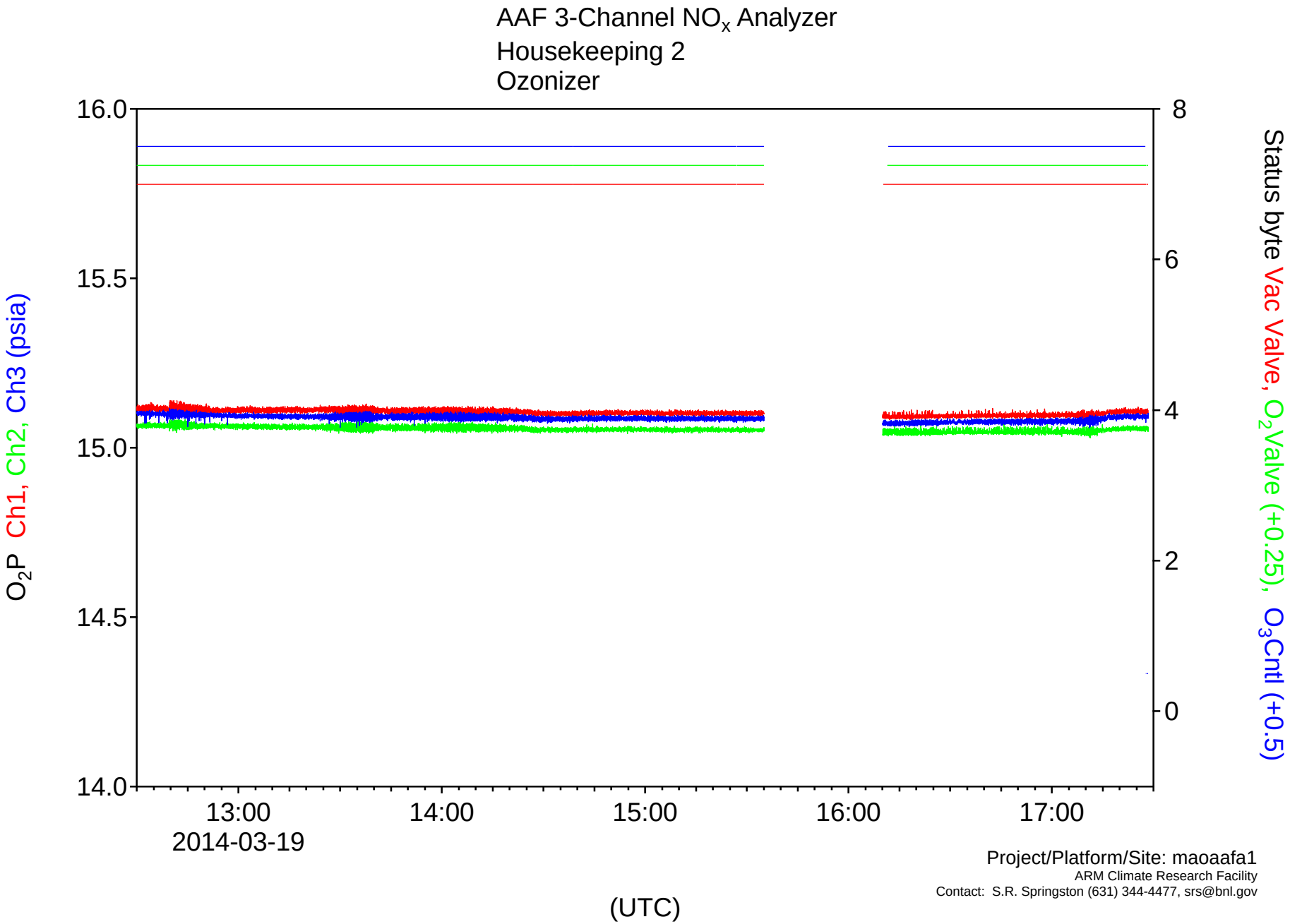

AAF 3-Channel NOx Analyzer
Housekeeping 3
Pressures
Sample Flows Ch1, Ch2, Ch3 (sccm)
Pressures Rxn/10, Photolysis Cell/300(torr)
1100
1050
1000
950
900
1.2
1.0
0.8
0.6
0.4
0.2
0.0
13:00
2014-03-19
14:00
15:00
16:00
17:00
(UTC)
Project/Platform/Site: maoaafa1
ARM Climate Research Facility
Contact: S.R. Springston (631) 344-4477, srs@bnl.gov


AAF 3-Channel NOx Analyzer
Housekeeping 2
Ozonizer
16.0
15.5
15.0
14.5
14.0
O2P Ch1, Ch2, Ch3 (psia)
8
6
4
2
0
Status byte Vac Valve, O2Valve (+0.25), O3Cntl (+0.5)
13:00
2014-03-19
14:00
15:00
16:00
17:00
(UTC)
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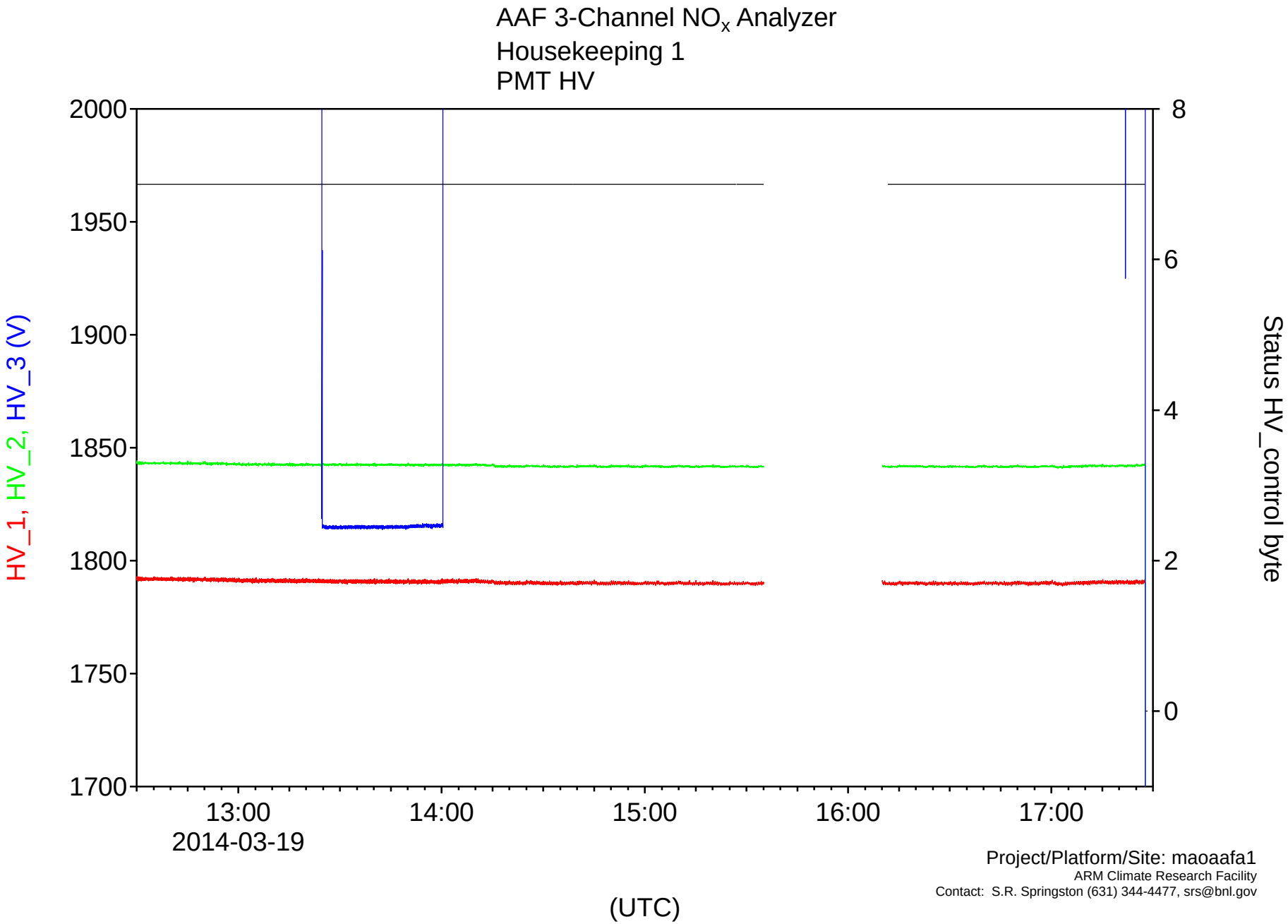
AAF 3-Channel NOx Analyzer
Housekeeping 1
PMT HV
HV_1, HV_2, HV_3 (V)
2000
1950
1900
1850
1800
1750
1700
8
6
4
2
0
Status HV_control byte
13:00
2014-03-19
14:00
15:00
16:00
17:00
(UTC)
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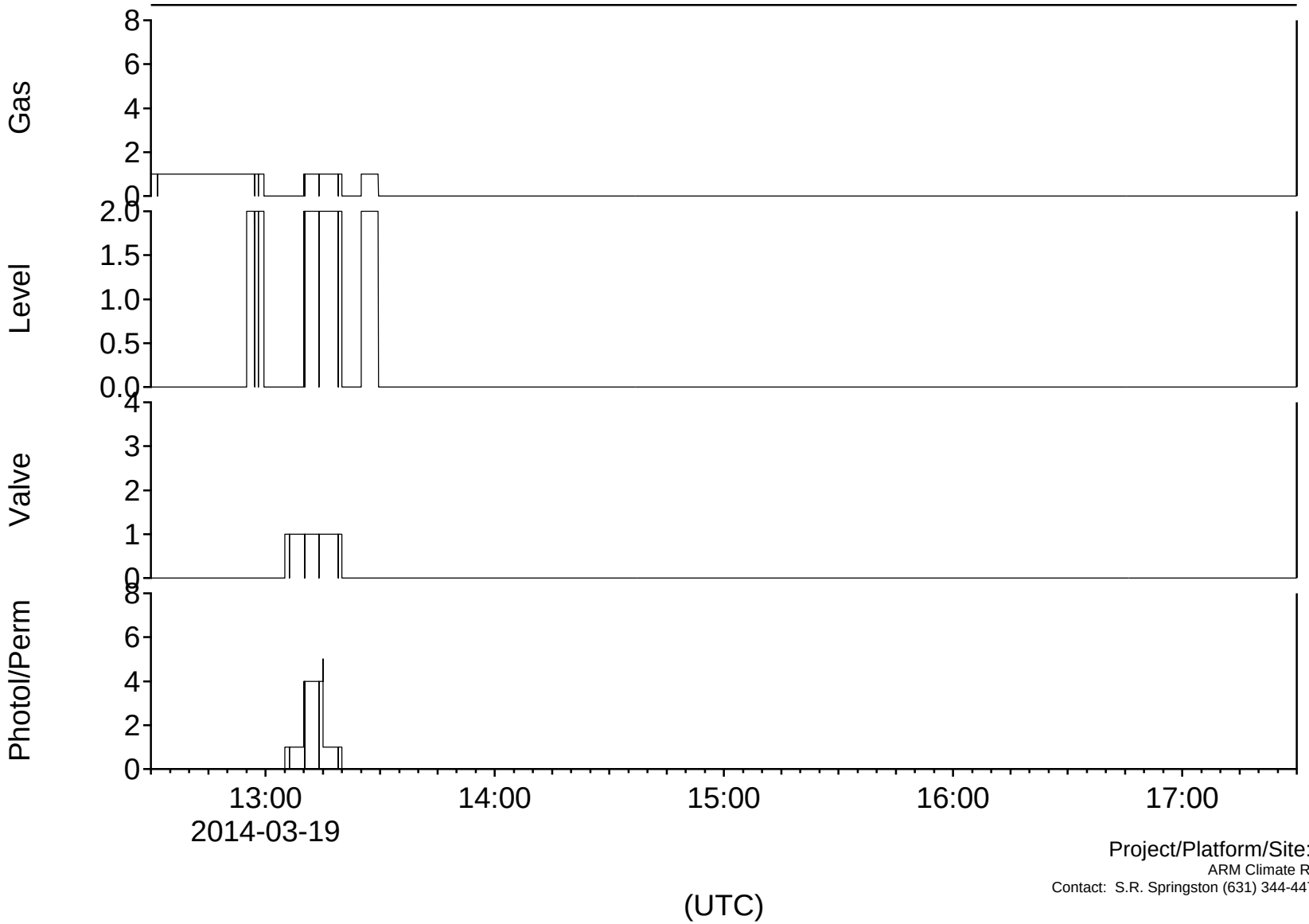
AAF TEI 146i Calibrator
State



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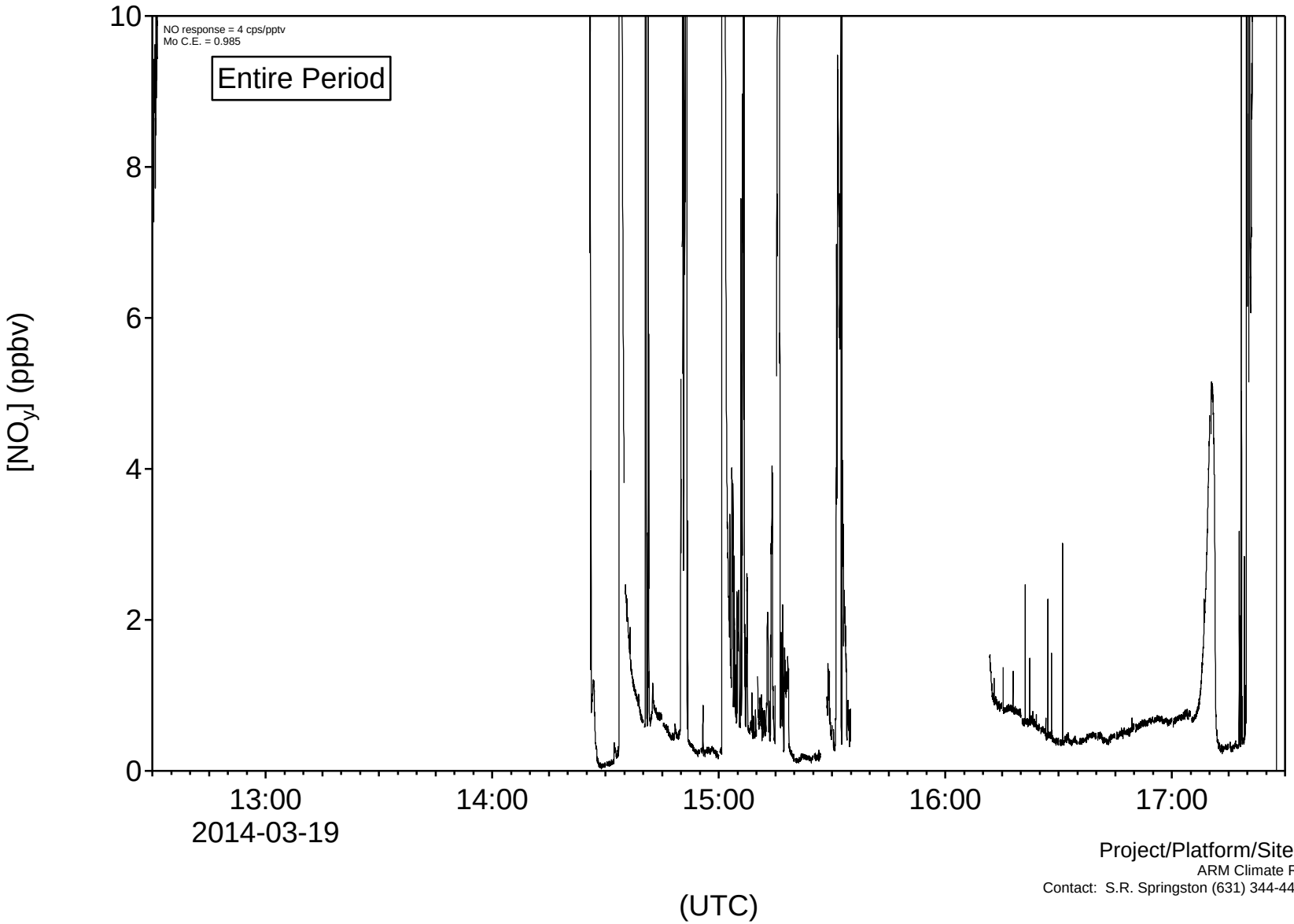
AAF 3-Channel NO_x Analyzer
Processed NO_y Channel Data



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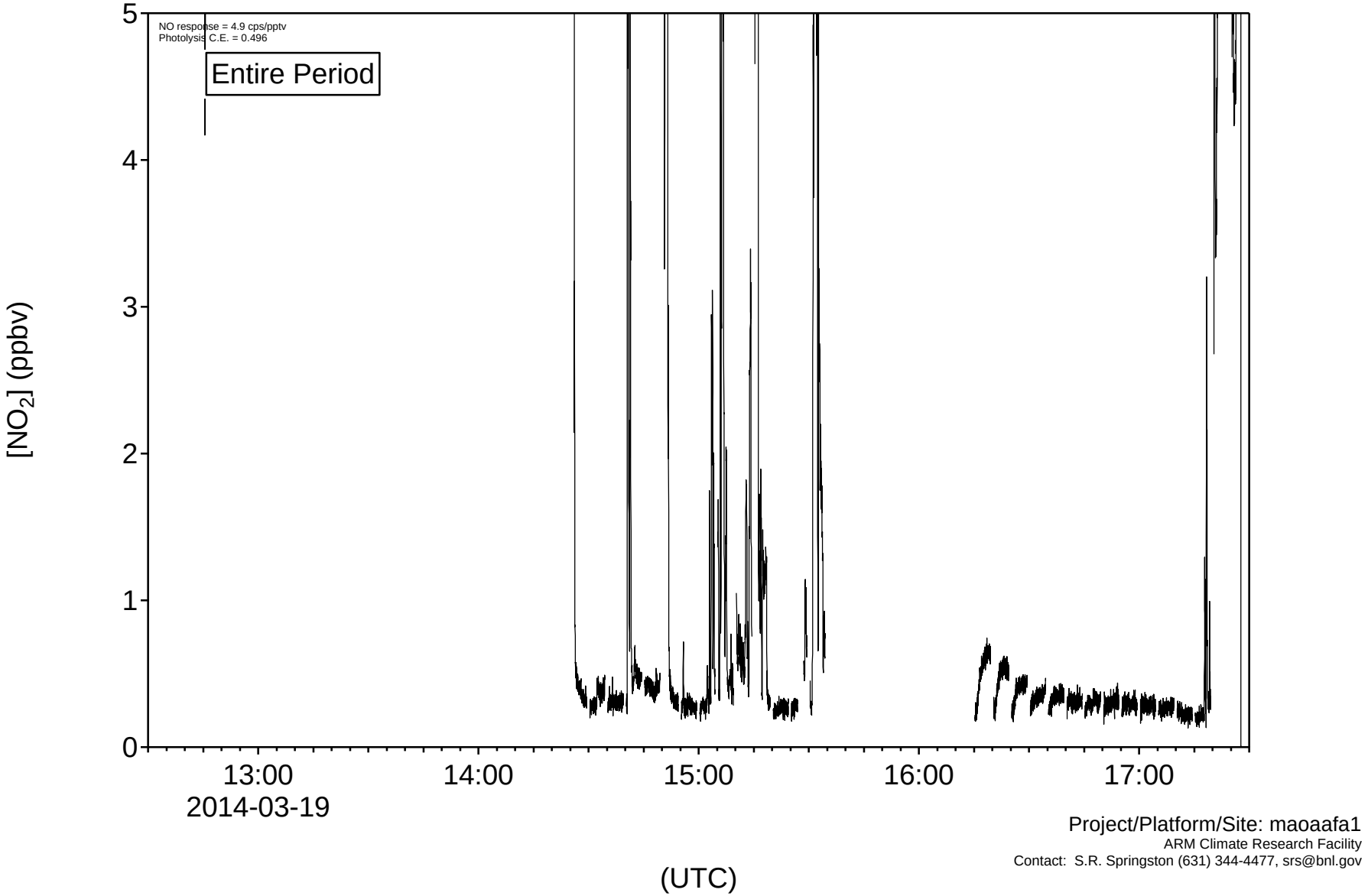
AAF 3-Channel NO_x Analyzer
Processed NO_2 Channel Data



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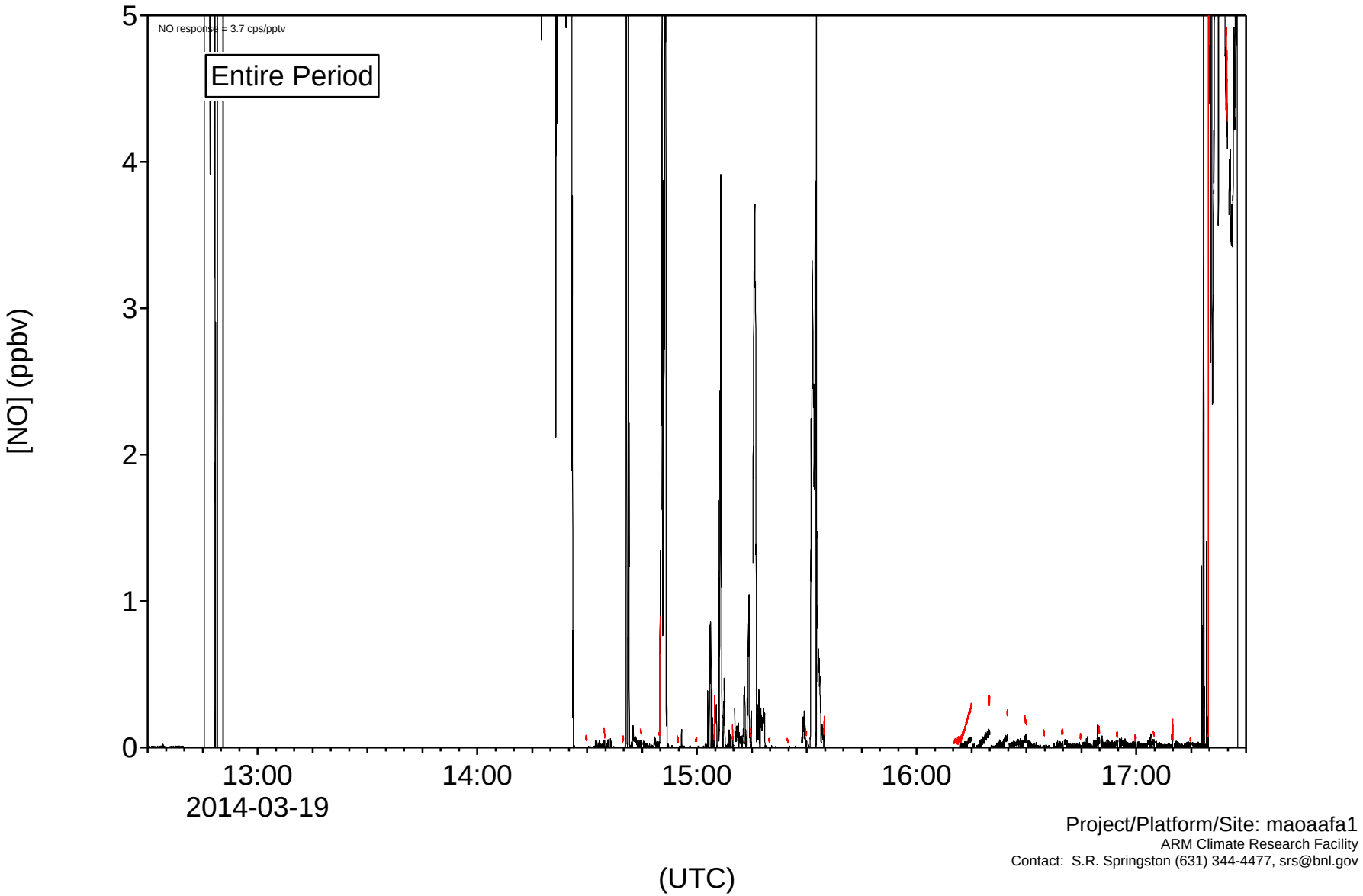
AAF 3-Channel NO_x Analyzer
Processed NO Channel Data



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