



# **Peace Airshed Zone Association**

## **Ambient Air Monitoring Network Summary**

**Ambient Air Quality Monitoring Program  
Monthly Report  
March 2019**

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April 30<sup>th</sup>, 2019

**Alberta Environment and Parks**

11<sup>th</sup> Floor, Oxbridge Place  
9820-106 Street  
Edmonton Alberta T5K 2J6

**RE: Peace Airshed Zone Association (PAZA) – March 2019 Ambient Air Quality Monitoring Report**

Enclosed is the PAZA Ambient Air Quality Monitoring Network Report for the month of March 2019.

The representative of the Person Responsible for this monitoring program is:

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This report was prepared by Andersen Science Consulting and reviewed by Mandeep Dhaliwal.

PAZA has retained the services of WSP Canada Inc. to conduct continuous ambient monitoring and Andersen Science Consulting to provide data validation and reporting on its behalf.

This report is submitted by PAZA on behalf of the industrial member companies to satisfy the requirements of the following facility Operating Approvals:

| Company                                        | Facility       | LSD             | EPEA Approval Number |
|------------------------------------------------|----------------|-----------------|----------------------|
| Advantage Oil & Gas Ltd.                       | Glacier        | 05-02-076-13-W6 | 262479-00-00         |
| Alberta Power (2000) Ltd.<br>(an ATCO company) | Sturgeon       | SW-06-069-21-W5 | 10283-02-02          |
| ATCO Power Canada                              | Poplar Hill    | 11-19-073-08-W6 | 67774-01-01          |
| ATCO Power Canada                              | Valleyview     | SW-06-069-21-W5 | 147709-01-01         |
| AltaGas Ltd.                                   | Pouce Coupe    | 03-03-081-13-W6 | 247673-00-00         |
|                                                | Ante Creek     | 02-26-068-25-W5 | 266694-00-00         |
|                                                | Gordondale     | 16-31-78-11-W6M | 287474-00-00         |
| Apache Canada Ltd.                             | House Mountain | 01-08-070-10-W5 | 10137-02-02          |
| Birchcliff Energy Ltd.                         | Pouce Coupe    | 03-22-078-12-W6 | 252529-00-00         |

| <b>Company</b>                           | <b>Facility</b>                | <b>LSD</b>      | <b>EPEA Approval Number</b> |
|------------------------------------------|--------------------------------|-----------------|-----------------------------|
| Canadian Natural Resources Limited       | Bonanza                        | 11-25-081-11-W6 | 00000029-01-00              |
|                                          | Progress/Gordondale            | 01-01-077-10-W6 | 00010036-02-00              |
|                                          | Gold Creek                     | 13-26-067-05-W6 | 00010446-02-00              |
|                                          | Teepee Creek                   | SE-2-074-04-W6  | 00001635-02-00              |
|                                          | Sturgeon/Valleyview            | 02-02-069-22-W5 | 1633-02-00                  |
| Canfor Forest Products                   | Grande Prairie                 | SW-23-071-06-W6 | 152645-01-00                |
| Conocophillips Canada Energy Partnership | Wembley                        | 06-19-073-08-W6 | 00000212-01-00              |
| Devon Canada                             | NW Belloy (Dunvegan)           | 16-36-079-03-W6 | 00009810-02-00              |
|                                          | Eaglesham (South)              | 02-14-077-25-W5 | 00047669-01-00              |
|                                          | North Normanville              | 03-36-079-23-W5 | 00047455-01-00              |
|                                          | West Culp                      | 05-34-078-25-W6 | 00136284-00-00              |
|                                          | Cecil                          | 08-15-084-08-W6 | 00010032-02-00              |
| Encana Corporation                       | Sexsmith                       | 04-08-075-07-W6 | 00010002-01-00              |
| Enerplus Resources                       | Pouce Coupe                    | SW-06-069-21-W5 | 1464-02-03                  |
| Exshaw Oil Corporation                   | Spirit River                   | 03-10-077-07-W6 | 344521-00-00                |
| Grande Prairie Generation Inc.           | Northern Prairie Power Project | 04-19-073-08-W6 | 00238762-00-00              |
| Long Run Exploration                     | Eaglesham                      | 01-25-076-01-W6 | 00241532-00-00              |
|                                          | Kakut                          | 14-12-075-03-W6 | 00248469-00-00              |
|                                          | Donnelly                       | 06-01-077-21-W5 | 00000087-02-00              |
|                                          | Puskwaskau                     | 03-26-074-01-W6 | 00017524-01-00              |
| Longview Oil Corp.                       | Sunset House                   | 06-22-070-20-W5 | 138884-01-00                |
| Penn West Petroleum Ltd.                 | Tangent                        | 13-29-080-23-W5 | 00001746-02-00              |

| <b>Company</b>                       | <b>Facility</b>                    | <b>LSD</b>      | <b>EPEA Approval Number</b> |
|--------------------------------------|------------------------------------|-----------------|-----------------------------|
|                                      | Pouce Coupe                        | 16-07-078-11-W6 | 00000614-01-00              |
| Petrus Resources                     | Rycroft                            | 08-25-077-06-W6 | 11351-02-00                 |
|                                      | Spirit River                       | 08-34-077-06-W6 | 11096-02-00                 |
| Spectra Energy Midstream Corporation | Fourth Creek                       | 16-11-082-09-W6 | 00000263-01-00              |
|                                      | Gordondale                         | 11-26-079-09-W6 | 00011495-01-01              |
|                                      | Pouce Coupe/Bonanza                | 3-23-080-13-W6  | 00070203-01-01              |
| Suncor Energy Inc.                   | Progress                           | 07-22-078-09-W6 | 00011428-02-00              |
| TAQA North Ltd.                      | Valhalla                           | 13-21-076-09-W6 | 00017620-01-00              |
| Veresen Energy                       | Hythe Brainard                     | 11-18-074-12-W6 | 00010910-02-00              |
| Weyerhaeuser Canada                  | Grande Prairie Pulp and Wood Plant | 01-14-070-05-W6 | 00000113-02-00              |

Included in this report is a summary of the monthly passive monitoring and continuous monitoring programs and detailed hourly average reports. Operational summaries can be found on the “Continuous Ambient Network Equipment and Results Summary” pages of the report.

**Continuous Monitoring:**      **Seven (7) Stations including Henry Pirker (Grande Prairie), Evergreen Park, Smoky Heights, Beaverlodge, Valleyview, Donnelly and Wembley-Portable.**

#### **Calibration and Data Submission**

Hourly data for March 2019 were submitted to Alberta’s Ambient Air Data Warehouse for all stations. This report and calibration reports were emailed to [Air.Reporting@gov.ab.ca](mailto:Air.Reporting@gov.ab.ca)

During the month of March, the following events were noted:

#### **Beaverlodge Station:**

- ◆ The measured ambient air quality was within the AAAQO for the Beaverlodge station.
- ◆ All analyzers and meteorological sensors at the Beaverlodge station had operational uptimes greater than 90% for the month of March.

#### **Evergreen Park Station:**

- ◆ The measured ambient air quality was within the AAAQO for the Evergreen Park station.
- ◆ All analyzers and meteorological sensors at the Evergreen Park station had operational uptimes greater than 90% for the month of March.

**Henry Pirker Station:**

- ◆ The measured ambient air quality was within the AAAQO for the Henry Pirker station.
- ◆ All analyzers and meteorological sensors at the Henry Pirker station had operational uptimes greater than 90% for the month of March.

**Smoky Heights Station:**

- ◆ There was one (1) 1-hour exceedance of the AAAQG for PM<sub>2.5</sub> (80µg/m<sup>3</sup>) in March.

| Station Name  | Date      | Start Time | End Time | PM <sub>2.5</sub> Concentration | Reference Number |
|---------------|-----------|------------|----------|---------------------------------|------------------|
|               |           | (MST)      | (MST)    | (µg/m <sup>3</sup> )            |                  |
| Smoky Heights | 23-Mar-19 | 11:00      | 12:00    | 100.5                           | 351030           |

- ◆ All analyzers and meteorological sensors at the Smoky Heights station had operational uptimes greater than 90% for the month of March.

**Valleyview Station:**

- ◆ The measured ambient air quality was within the AAAQO for the Valleyview station.
- ◆ All analyzers and meteorological sensors at the Valleyview station had operational uptimes greater than 90% for the month of March.

**Donnelly Station:**

- ◆ The measured ambient air quality was within the AAAQO for the Donnelly station.
- ◆ All analyzers and meteorological sensors at the Donnelly station had operational uptimes greater than 90% for the month of March.

**Wembley-Portable Station:**

- ◆ The measured ambient air quality was within the AAAQO for the Wembley-Portable station.
- ◆ All analyzers and meteorological sensors at the Wembley-Portable station had operational uptimes greater than 90% for the month of March.

**Air Incidents**

None were reported to PAZA

**Deviations from Authorized Monitoring Methods**

Trees nearby to Valleyview air monitoring station exceed the height allowed under section 2.3 of the siting criteria in Chapter 3 of the AMD. This variance was authorized in writing by the director on March 4, 2019.

**Passive Monitoring - 32 Stations throughout the PAZA zone:**

There were six duplicate sites sampled in the month of March: Spirit River, Poplar, Saddle Hills (SO<sub>2</sub>), Bay Tree (O<sub>3</sub>), Bay Tree, Wanham (NO<sub>2</sub>), and Girouxville 3 (H<sub>2</sub>S). The passive sample analyses were performed by MAXXAM Analytics Inc. There were no exceedances of the AAAQOs for all monitored parameters at any of the passive monitoring stations during this month.

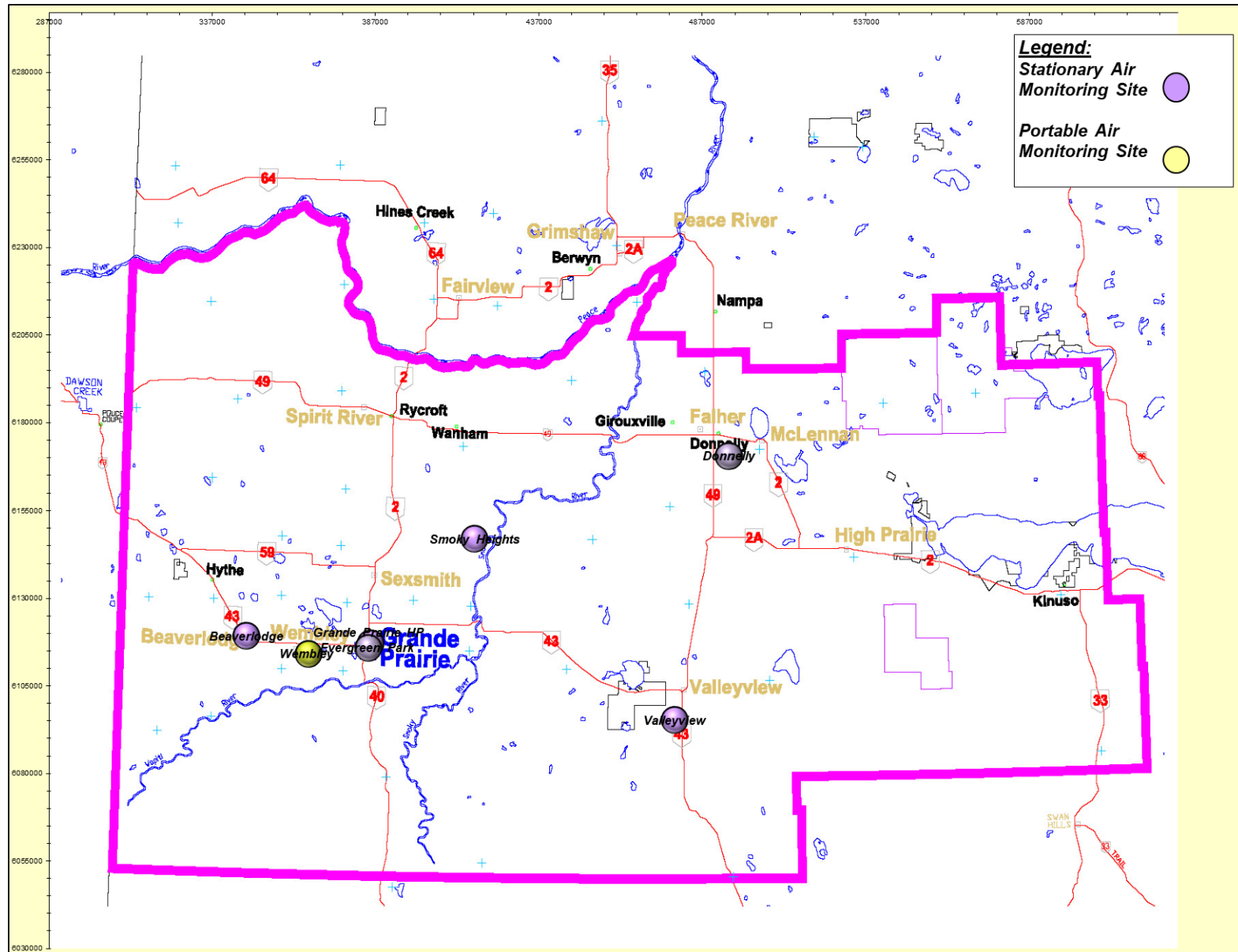
I certify that I have reviewed and verified this report and that the information is complete, accurate and representative of the monitoring results, reporting timeframe and the specified analysis, summarization and reporting requirements.

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Mandeep Dhaliwal, B.Sc., P.Chem.  
Program Manager

## Location of PAZA Continuous Monitoring Stations





## Continuous Ambient Network Equipment and Results Summary

### Beaverlodge Air Monitoring Station

| Mar-2019 Peace Airshed Zone Association |            |       |        |             |                    |       |            |       | Maximum Recorded Values |       |              |      |        |       |                         |                     |
|-----------------------------------------|------------|-------|--------|-------------|--------------------|-------|------------|-------|-------------------------|-------|--------------|------|--------|-------|-------------------------|---------------------|
|                                         |            |       |        |             |                    |       |            |       | 1-hr                    |       | 24-hr / 8-hr |      |        |       |                         |                     |
| Parameter<br>(units)                    | Objectives |       |        | Station     | Monthly<br>Average | Min   | Exceedence |       |                         | Conc  | Day          |      | Conc   | Day   | Operational<br>Time (%) | Calibration<br>Date |
|                                         | 1-hr       | 24-hr | 30-day |             |                    |       | 1-hr       | 24-hr | 30-day                  |       |              |      |        |       |                         |                     |
| SO <sub>2</sub> (ppb)                   | 172        | 48    | 8      | Beaverlodge | 0.7                | 0.0   | 0          | 0     | 0                       | 12.7  | Mar-25 22:00 | 1.8  | Mar-24 | 100.0 | Mar-01                  |                     |
| NO (ppb)                                |            |       |        |             | 1.6                | 0.0   | -          | -     | -                       | 56.1  | Mar-02 11:00 | 12.0 | Mar-02 | 100.0 | Mar-01                  |                     |
| NO <sub>2</sub> (ppb)                   | 159        | 106   |        |             | 5.6                | 0.6   | 0          | 0     | -                       | 39.2  | Mar-03 04:00 | 15.1 | Mar-02 | 100.0 | Mar-01                  |                     |
| NO <sub>x</sub> (ppb)                   |            |       |        |             | 7.2                | 0.7   | -          | -     | -                       | 80.4  | Mar-02 11:00 | 27.0 | Mar-02 | 100.0 | Mar-01                  |                     |
| O <sub>3</sub> (ppb)                    | 76         |       |        |             | 40.3               | 2.6   | 0          | -     | -                       | 63.5  | Mar-23 16:00 | 51.0 | Mar-19 | 100.0 | Mar-01                  |                     |
| O <sub>3</sub> (ppb) - 8-hr             |            |       |        |             |                    |       | -          | -     | -                       |       |              | 57.4 | Mar-19 |       | -                       |                     |
| PM <sub>2.5</sub> (µg/m3)               | 80         | 29    |        |             | 4.8                | 0.0   | 0          | 0     | -                       | 35.7  | Mar-09 01:00 | 18.0 | Mar-24 | 100.0 | Mar-19                  |                     |
| RH (%)                                  |            |       |        |             | 58.6               | 15.2  | -          | -     | -                       | 100.0 | Mar-08 05:00 | 79.3 | Mar-12 | 92.9  | -                       |                     |
| Temp (°C)                               |            |       |        |             | -2.4               | -34.5 | -          | -     | -                       | 16.3  | Mar-20 18:00 | 7.3  | Mar-18 | 99.6  | -                       |                     |
| WSPD v (km/hr)                          |            |       |        |             | 6.0                | 0.2   | -          | -     | -                       | 30.0  | Mar-10 20:00 | 14.9 | Mar-15 | 100.0 | 01/06/2017              |                     |
| WDIR                                    |            |       |        |             | NW                 |       | -          | -     | -                       | -     | -            | -    | -      | 100.0 | 01/06/2017              |                     |

| Parameter                           | Analyzer |       | Notes                                                                                       |
|-------------------------------------|----------|-------|---------------------------------------------------------------------------------------------|
|                                     | Make     | Model |                                                                                             |
| SO <sub>2</sub>                     | TECO     | 43I   |                                                                                             |
|                                     |          |       |                                                                                             |
| NO/NO <sub>2</sub> /NO <sub>x</sub> | TECO     | 42I   |                                                                                             |
| O <sub>3</sub>                      | TECO     | 49I   |                                                                                             |
| PM <sub>2.5</sub>                   | SHARP    | 5030  |                                                                                             |
| ET/RH                               |          |       | Invalid readings returned March 8 on ET and RH sensors, RH sensor flatlined March 1 and 5-7 |
| WS/WD                               | MetOne   | 50.5  |                                                                                             |

## Evergreen Park Air Monitoring Station

| Mar-2019 Peace Airshed Zone Association |            |       |        |                |                    |       |            |       | Maximum Recorded Values |      |              |      |        |                         |                     |
|-----------------------------------------|------------|-------|--------|----------------|--------------------|-------|------------|-------|-------------------------|------|--------------|------|--------|-------------------------|---------------------|
|                                         |            |       |        |                |                    |       |            |       | 1-hr                    |      | 24-hr / 8-hr |      |        |                         |                     |
| Parameter<br>(units)                    | Objectives |       |        | Station        | Monthly<br>Average | Min   | Exceedence |       |                         | Conc | Day          | Conc | Day    | Operational<br>Time (%) | Calibration<br>Date |
|                                         | 1-hr       | 24-hr | 30-day |                |                    |       | 1-hr       | 24-hr | 30-day                  |      |              |      |        |                         |                     |
| SO <sub>2</sub> (ppb)                   | 172        | 48    | 8      | Evergreen Park | 0.4                | 0.0   | 0          | 0     | 0                       | 4.6  | Mar-14 13:00 | 0.8  | Mar-07 | 98.5                    | Mar-24              |
| TRS (ppb)                               |            |       |        |                | 0.6                | 0.2   | -          | -     | -                       | 6.1  | Mar-18 17:00 | 1.0  | Mar-18 | 98.5                    | Mar-24              |
| PM <sub>2.5</sub> (µg/m3)               | 80         | 29    |        |                | 5.0                | 0.0   | 0          | 0     | -                       | 39.9 | Mar-24 14:00 | 13.3 | Mar-21 | 98.4                    | Mar-24              |
| RH (%)                                  |            |       |        |                | 62.6               | 16.2  | -          | -     | -                       | 94.9 | Mar-25 04:00 | 75.8 | Mar-24 | 98.4                    | -                   |
| Temp (°C)                               |            |       |        |                | -3.8               | -35.6 | -          | -     | -                       | 18.7 | Mar-20 17:00 | 6.3  | Mar-17 | 98.4                    | -                   |
| WSPD v (km/hr)                          |            |       |        |                | 6.5                | 0.0   | -          | -     | -                       | 34.6 | Mar-12 03:00 | 17.9 | Mar-15 | 97.7                    | -                   |
| WDIR                                    |            |       |        |                | W                  |       | -          | -     | -                       | -    | -            | -    | -      | 97.7                    | -                   |

| Parameter         | Analyzer |        | Notes                                    |
|-------------------|----------|--------|------------------------------------------|
|                   | Make     | Model  |                                          |
| SO <sub>2</sub>   | TECO     | 43I    | Power outage March 29-30                 |
| TRS               | TECO     | 43I    | Daily spans out of range March 12 and 13 |
| PM <sub>2.5</sub> | SHARP    | 5030   |                                          |
| ET/RH             |          |        |                                          |
| WS/WD             | Gil      | MetPak | Invalid spiking March 2                  |

# Henry Pirker Air Monitoring Station

| Mar-2019 Peace Airshed Zone Association |            |       |        |              |                    |       |            |       | Maximum Recorded Values |       |              |       |        |                         |                     |
|-----------------------------------------|------------|-------|--------|--------------|--------------------|-------|------------|-------|-------------------------|-------|--------------|-------|--------|-------------------------|---------------------|
|                                         |            |       |        |              |                    |       |            |       | 1-hr                    |       | 24-hr / 8-hr |       |        |                         |                     |
| Parameter<br>(units)                    | Objectives |       |        | Station      | Monthly<br>Average | Min   | Exceedence |       |                         | Conc  | Day          | Conc  | Day    | Operational<br>Time (%) | Calibration<br>Date |
|                                         | 1-hr       | 24-hr | 30-day |              |                    |       | 1-hr       | 24-hr | 30-day                  |       |              |       |        |                         |                     |
| SO <sub>2</sub> (ppb)                   | 172        | 48    | 8      | Henry Pirker | 0.5                | 0.0   | 0          | 0     | 0                       | 3.8   | Mar-07 14:00 | 1.3   | Mar-07 | 100.0                   | Mar-04              |
| H <sub>2</sub> S (ppb)                  |            |       |        |              | 0.3                | 0.0   | 0          | 0     | -                       | 1.9   | Mar-21 09:00 | 0.9   | Mar-21 | 97.2                    | Mar-06              |
| NO (ppb)                                |            |       |        |              | 7.3                | 0.0   | -          | -     | -                       | 136.0 | Mar-19 08:00 | 20.7  | Mar-19 | 100.0                   | Mar-04              |
| NO <sub>2</sub> (ppb)                   | 159        | 106   |        |              | 19.7               | 1.8   | 0          | 0     | -                       | 62.9  | Mar-20 20:00 | 32.0  | Mar-19 | 100.0                   | Mar-04              |
| NO <sub>x</sub> (ppb)                   |            |       |        |              | 27.2               | 2.2   | -          | -     | -                       | 195.2 | Mar-19 08:00 | 53.0  | Mar-19 | 100.0                   | Mar-04              |
| O <sub>3</sub> (ppb)                    | 76         |       |        |              | 25.9               | 0.2   | 0          | -     | -                       | 60.6  | Mar-23 17:00 | 40.2  | Mar-17 | 100.0                   | Mar-04              |
| O <sub>3</sub> (ppb) - 8-hr             |            |       |        |              |                    |       | -          | -     | -                       |       |              | 52.4  | Mar-23 |                         | -                   |
| CO (ppm)                                | 13         |       |        |              | 0.07               | 0.0   | 0          | 0     | -                       | 0.8   | Mar-22 08:00 | 0.3   | Mar-04 | 100.0                   | Mar-18              |
| CO (ppm) - 8-hr                         | 5          |       |        |              |                    |       | 0          |       |                         |       |              | 0.4   | Mar-04 |                         | -                   |
| THC (ppm)                               |            |       |        |              | 2.3                | 1.7   | -          | -     | -                       | 5.1   | Mar-22 02:00 | 2.8   | Mar-22 | 100.0                   | Mar-06              |
| CH <sub>4</sub> (ppm)                   |            |       |        |              | 2.3                | 1.7   | -          | -     | -                       | 4.4   | Mar-22 02:00 | 2.6   | Mar-22 | 100.0                   | Mar-06              |
| NMHC (ppm)                              |            |       |        |              | 0.1                | 0.0   | -          | -     | -                       | 0.8   | Mar-22 07:00 | 0.2   | Mar-22 | 100.0                   | Mar-06              |
| PM <sub>2.5</sub> (µg/m3)               | 80         | 29    |        |              | 8.8                | 0.1   | 0          | 0     | -                       | 42.8  | Mar-09 23:00 | 18.4  | Mar-21 | 100.0                   | Jan-04              |
| RH (%)                                  |            |       |        |              | 59.1               | 18.1  | -          | -     | -                       | 84.8  | Mar-25 08:00 | 69.4  | Mar-26 | 100.0                   | -                   |
| SR (W/m <sup>2</sup> )                  |            |       |        |              | 149.4              | 0.0   | -          | -     | -                       | 629.4 | Mar-30 14:00 | 198.9 | Mar-29 | 100.0                   | -                   |
| Temp (°C)                               |            |       |        |              | -3.4               | -36.2 | -          | -     | -                       | 16.6  | Mar-19 15:00 | 6.6   | Mar-17 | 100.0                   | -                   |
| WSPD v (km/hr)                          |            |       |        |              | 3.9                | 0.0   | -          | -     | -                       | 18.0  | Mar-12 04:00 | 9.7   | Mar-12 | 95.6                    | 01/07/2017          |
| WDIR                                    |            |       |        |              | WNW                |       | -          | -     | -                       | -     | -            | -     | -      | 95.6                    | 01/07/2017          |

| Parameter                           | Analyzer |                 | Notes                                                                            |
|-------------------------------------|----------|-----------------|----------------------------------------------------------------------------------|
|                                     | Make     | Model           |                                                                                  |
| SO <sub>2</sub>                     | TECO     | 43I             |                                                                                  |
| H <sub>2</sub> S                    | TECO     | 450I            | Perm tube replaced March 5, allowed to stabilize and recalibrated March 6        |
| NO/NO <sub>2</sub> /NO <sub>x</sub> | TECO     | 42I             |                                                                                  |
| O <sub>3</sub>                      | TECO     | 49I             |                                                                                  |
| CO                                  | TECO     | 48I-TLE/48C-TLE | Calibrated March 5, baseline drift over month prompted recalibration on March 18 |
| THC/CH <sub>4</sub> /NMHC           | TECO     | 55I             |                                                                                  |
| PM <sub>2.5</sub>                   | SHARP    | 5030            |                                                                                  |
| ET/RH                               |          |                 |                                                                                  |
| SR                                  |          |                 |                                                                                  |
| WS/WD                               | MetOne   | 50.5            | Invalid spiking recorded March 2-9                                               |

## Smoky Heights Air Monitoring Station

| Mar-2019 Peace Airshed Zone Association |            |       |        |               |                    |       |            |       |        | Maximum Recorded Values |              |              |        |                         |                     |
|-----------------------------------------|------------|-------|--------|---------------|--------------------|-------|------------|-------|--------|-------------------------|--------------|--------------|--------|-------------------------|---------------------|
| Parameter<br>(units)                    | Objectives |       |        | Station       | Monthly<br>Average | Min   | Exceedence |       |        | 1-hr                    |              | 24-hr / 8-hr |        | Operational<br>Time (%) | Calibration<br>Date |
|                                         | 1-hr       | 24-hr | 30-day |               |                    |       | 1-hr       | 24-hr | 30-day | Conc                    | Day          | Conc         | Day    |                         |                     |
| SO <sub>2</sub> (ppb)                   | 172        | 48    | 8      | Smoky Heights | 0.8                | 0.0   | 0          | 0     | 0      | 14.0                    | Mar-19 16:00 | 2.2          | Mar-03 | 100.0                   | Mar-14              |
| TRS (ppb)                               |            |       |        |               | 0.5                | 0.3   | -          | -     | -      | 1.0                     | Mar-04 10:00 | 0.7          | Mar-04 | 100.0                   | Mar-14              |
| PM <sub>2.5</sub> (µg/m3)               | 80         | 29    |        |               | 5.6                | 0.0   | 1          | 0     | -      | 100.5                   | Mar-23 12:00 | 12.6         | Mar-25 | 100.0                   | Feb-25              |
| Temp (°C)                               |            |       |        |               | -4.2               | -37.3 | -          | -     | -      | 12.6                    | Mar-20 17:00 | 5.4          | Mar-23 | 100.0                   | -                   |
| WSPD v (km/hr)                          |            |       |        |               | 9.8                | 0.0   | -          | -     | -      | 30.7                    | Mar-11 02:00 | 20.1         | Mar-15 | 100.0                   | 01/04/2017          |
| WDIR                                    |            |       |        |               | WSW                |       | -          | -     | -      | -                       | -            | -            | -      | 100.0                   | 01/04/2017          |

| Parameter         | Analyzer |       | Notes |
|-------------------|----------|-------|-------|
|                   | Make     | Model |       |
| SO <sub>2</sub>   | TECO     | 43I   |       |
| TRS               | TECO     | 43I   |       |
| PM <sub>2.5</sub> | SHARP    | 5030  |       |
| ET                |          |       |       |
| WS/WD             | MetOne   | 50.5  |       |

## Valleyview Air Monitoring Station

| Mar-2019 Peace Airshed Zone Association |            |       |        |            |                    |       |            |       |        | Maximum Recorded Values |              |              |        |                         |                     |
|-----------------------------------------|------------|-------|--------|------------|--------------------|-------|------------|-------|--------|-------------------------|--------------|--------------|--------|-------------------------|---------------------|
| Parameter<br>(units)                    | Objectives |       |        | Station    | Monthly<br>Average | Min   | Exceedence |       |        | 1-hr                    |              | 24-hr / 8-hr |        | Operational<br>Time (%) | Calibration<br>Date |
|                                         | 1-hr       | 24-hr | 30-day |            |                    |       | 1-hr       | 24-hr | 30-day | Conc                    | Day          | Conc         | Day    |                         |                     |
| SO <sub>2</sub> (ppb)                   | 172        | 48    | 8      | Valleyview | 0.5                | 0.0   | 0          | 0     | 0      | 10.9                    | Mar-04 14:00 | 1.4          | Mar-21 | 100.0                   | Mar-07              |
| H <sub>2</sub> S (ppb)                  | 10         | 3     |        |            | 0.2                | 0.0   | 0          | 0     | -      | 2.7                     | Mar-17 21:00 | 0.4          | Mar-03 | 100.0                   | Mar-07              |
| RH (%)                                  |            |       |        |            | 66.3               | 15.3  | -          | -     | -      | 100.0                   | Mar-12 06:00 | 83.3         | Mar-31 | 100.0                   | -                   |
| Temp (°C)                               |            |       |        |            | 0.7                | -29.5 | -          | -     | -      | 22.3                    | Mar-21 17:00 | 9.5          | Mar-21 | 100.0                   | -                   |
| WSPD v (km/hr)                          |            |       |        |            | 2.9                | 0.0   | -          | -     | -      | 19.9                    | Mar-12 05:00 | 6.7          | Mar-12 | 99.5                    | -                   |
| WDIR                                    |            |       |        |            | WNW                |       | -          | -     | -      | -                       | -            | -            | -      | 99.5                    | -                   |

| Parameter        | Analyzer |        | Notes                   |
|------------------|----------|--------|-------------------------|
|                  | Make     | Model  |                         |
| SO <sub>2</sub>  | TECO     | 43I    |                         |
| H <sub>2</sub> S | TECO     | 450I   |                         |
| ET/RH            |          |        |                         |
| WS/WD            | Gil      | MetPak | Invalid spiking March 2 |

## Donnelly Air Monitoring Station

| Mar-2019 Peace Airshed Zone Association |            |       |        |          |                    |       |            |       |        | Maximum Recorded Values |              |              |        |                         |                     |
|-----------------------------------------|------------|-------|--------|----------|--------------------|-------|------------|-------|--------|-------------------------|--------------|--------------|--------|-------------------------|---------------------|
| Parameter<br>(units)                    | Objectives |       |        | Station  | Monthly<br>Average | Min   | Exceedence |       |        | 1-hr                    |              | 24-hr / 8-hr |        | Operational<br>Time (%) | Calibration<br>Date |
|                                         | 1-hr       | 24-hr | 30-day |          |                    |       | 1-hr       | 24-hr | 30-day | Conc                    | Day          | Conc         | Day    |                         |                     |
| SO <sub>2</sub> (ppb)                   | 172        | 48    | 8      | Donnelly | 0.4                | 0.0   | 0          | 0     | 0      | 2.6                     | Mar-04 12:00 | 1.4          | Mar-08 | 100.0                   | Mar-30              |
| H <sub>2</sub> S (ppb)                  | 10         | 3     |        |          | 0.1                | 0.0   | 0          | 0     | -      | 0.4                     | Mar-26 08:00 | 0.2          | Mar-07 | 100.0                   | Mar-30              |
| Temp (°C)                               |            |       |        |          | -3.1               | -33.3 | -          | -     | -      | 14.5                    | Mar-21 16:00 | 6.5          | Mar-19 | 100.0                   | -                   |
| WSPD v (km/hr)                          |            |       |        |          | 8.6                | 0.1   | -          | -     | -      | 35.3                    | Mar-10 23:00 | 16.8         | Mar-10 | 100.0                   | 01/06/2017          |
| WDIR                                    |            |       |        |          | SSW                |       | -          | -     | -      | -                       | -            | -            | -      | 100.0                   | 01/06/2017          |

| Parameter        | Analyzer |       | Notes |
|------------------|----------|-------|-------|
|                  | Make     | Model |       |
| SO <sub>2</sub>  | TECO     | 43I   |       |
| H <sub>2</sub> S | TECO     | 450I  |       |
| ET/RH            |          |       |       |
| WS/WD            | RMYoung  | 5103  |       |

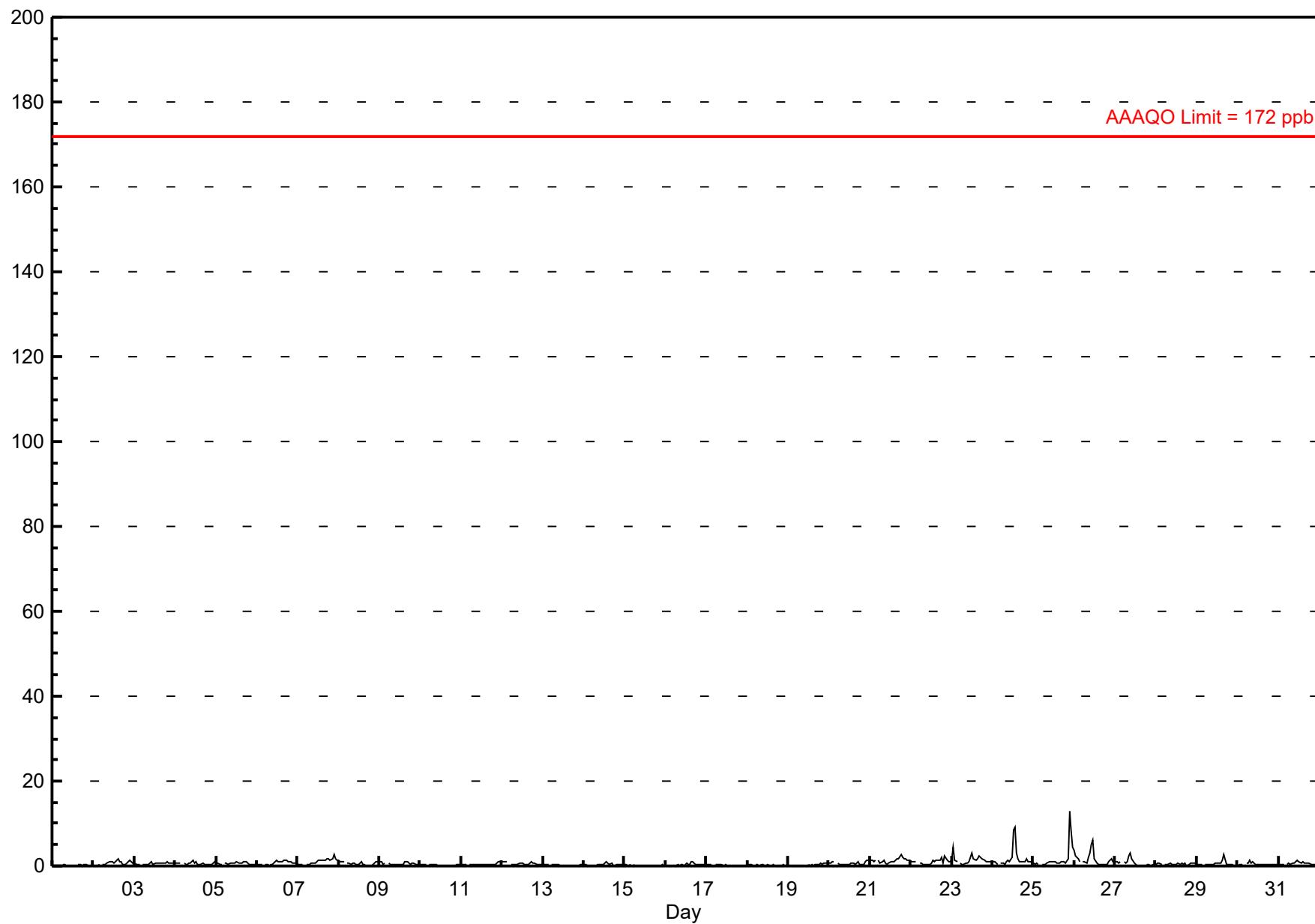
## Wembley-Portable Air Monitoring Station

| Mar-2019 Peace Airshed Zone Association |            |       |        |                  |                    |       |            |       |        | Maximum Recorded Values |              |              |        |                         |                     |
|-----------------------------------------|------------|-------|--------|------------------|--------------------|-------|------------|-------|--------|-------------------------|--------------|--------------|--------|-------------------------|---------------------|
| Parameter<br>(units)                    | Objectives |       |        | Station          | Monthly<br>Average | Min   | Exceedence |       |        | 1-hr                    |              | 24-hr / 8-hr |        | Operational<br>Time (%) | Calibration<br>Date |
|                                         | 1-hr       | 24-hr | 30-day |                  |                    |       | 1-hr       | 24-hr | 30-day | Conc                    | Day          | Conc         | Day    |                         |                     |
| SO <sub>2</sub> (ppb)                   | 172        | 48    | 8      | Wembley-Portable | 0.4                | 0.0   | 0          | 0     | 0      | 8.0                     | Mar-03 21:00 | 1.1          | Mar-03 | 100.0                   | Mar-12              |
| TRS (ppb)                               |            |       |        |                  | 0.1                | 0.0   | -          | -     | -      | 0.9                     | Mar-08 13:00 | 0.3          | Mar-03 | 99.7                    | Mar-13              |
| NO (ppb)                                |            |       |        |                  | 1.0                | 0.0   | -          | -     | -      | 11.5                    | Mar-14 11:00 | 3.5          | Mar-14 | 100.0                   | Mar-12              |
| NO <sub>2</sub> (ppb)                   | 159        | 106   |        |                  | 5.4                | 0.5   | 0          | 0     | -      | 33.7                    | Mar-03 01:00 | 13.6         | Mar-02 | 100.0                   | Mar-12              |
| NO <sub>x</sub> (ppb)                   |            |       |        |                  | 6.4                | 0.5   | -          | -     | -      | 38.1                    | Mar-02 02:00 | 17.1         | Mar-02 | 100.0                   | Mar-12              |
| O <sub>3</sub> (ppb)                    | 76         |       |        |                  | 38.4               | 0.0   | 0          | -     | -      | 62.5                    | Mar-19 15:00 | 51.0         | Mar-18 | 100.0                   | Mar-13              |
| O <sub>3</sub> (ppb) - 8-hr             |            |       |        |                  |                    |       | -          | -     | -      |                         |              | 56.5         | Mar-23 |                         | -                   |
| THC (ppm)                               |            |       |        |                  | 2.1                | 1.9   | -          | -     | -      | 3.0                     | Mar-04 00:00 | 2.5          | Mar-03 | 97.6                    | Mar-11              |
| CH <sub>4</sub> (ppm)                   |            |       |        |                  | 2.1                | 1.8   | -          | -     | -      | 3.0                     | Mar-04 00:00 | 2.5          | Mar-03 | 97.6                    | Mar-11              |
| NMHC (ppm)                              |            |       |        |                  | 0.0                | 0.0   | -          | -     | -      | 0.0                     | Mar-21 06:00 | 0.0          | Mar-21 | 97.6                    | Mar-11              |
| PM <sub>2.5</sub> (µg/m3)               | 80         | 29    |        |                  | 2.8                | 0.0   | 0          | 0     | -      | 13.6                    | Mar-24 14:00 | 8.4          | Mar-23 | 100.0                   | Mar-13              |
| Temp (°C)                               |            |       |        |                  | -3.5               | -37.3 | -          | -     | -      | 16.8                    | Mar-18 17:00 | 8.4          | Mar-18 | 100.0                   | -                   |
| WSPD v (km/hr)                          |            |       |        |                  | 6.4                | 0.2   | -          | -     | -      | 19.6                    | Mar-12 03:00 | 11.9         | Mar-15 | 100.0                   | 01/03/2017          |
| WDIR                                    |            |       |        |                  | WNW                |       | -          | -     | -      | -                       | -            | -            | -      | 100.0                   | 01/03/2017          |

| Parameter                           | Analyzer |       | Notes                                                                                                                 |
|-------------------------------------|----------|-------|-----------------------------------------------------------------------------------------------------------------------|
|                                     | Make     | Model |                                                                                                                       |
| SO <sub>2</sub>                     | TECO     | 43I   |                                                                                                                       |
| TRS                                 | TECO     | 43I   | Calibrated March 11. Leak in gas line repaired at that time. Analyzer responded slowly to 80% point on March 12.      |
|                                     |          |       | March 13 was noted that March 11 high point wasn't held for long enough, Removal cal, maintenance and troubleshooting |
|                                     |          |       | and installation calibration performed                                                                                |
| NO/NO <sub>2</sub> /NO <sub>x</sub> | TECO     | 42I   |                                                                                                                       |
| O <sub>3</sub>                      | TECO     | 49I   | Calibrated March 12. Tech noted a spike in the high and mid points, recalibrated to verify results.                   |
| THC/CH <sub>4</sub> /NMHC           | TECO     | 55I   | Nitrogen and Hydrogen cylinders expired March 10, replaced later that day.                                            |
| PM <sub>2.5</sub>                   | TEOM     |       |                                                                                                                       |
| ET/RH                               |          |       |                                                                                                                       |
| WS/WD                               | MetOne   | 50.5  |                                                                                                                       |

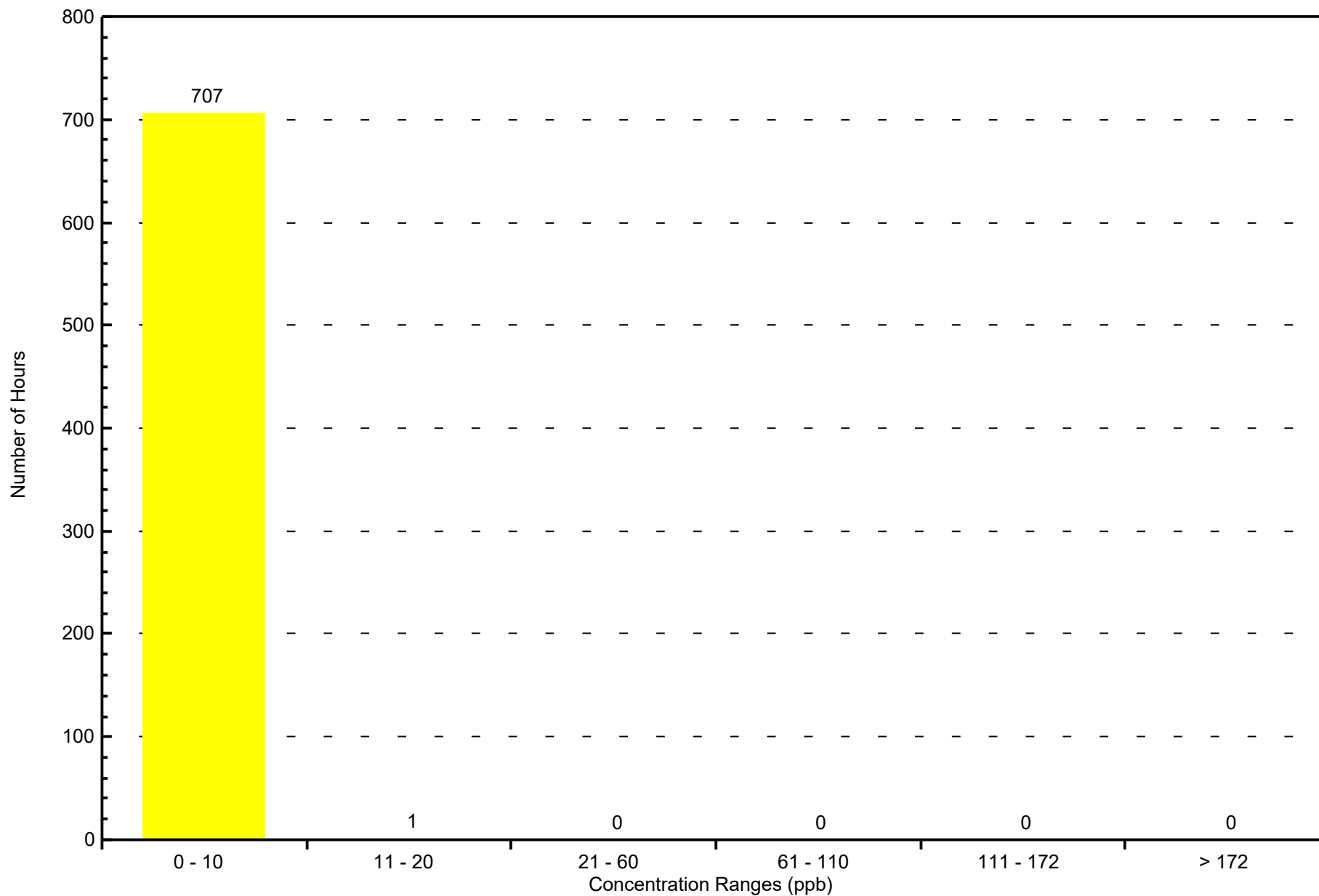
## Hourly Averages

**Sulphur Dioxide (SO<sub>2</sub>) - ppb**  
**Beaverlodge - March 2019**



## Histogram of Hourly Averages

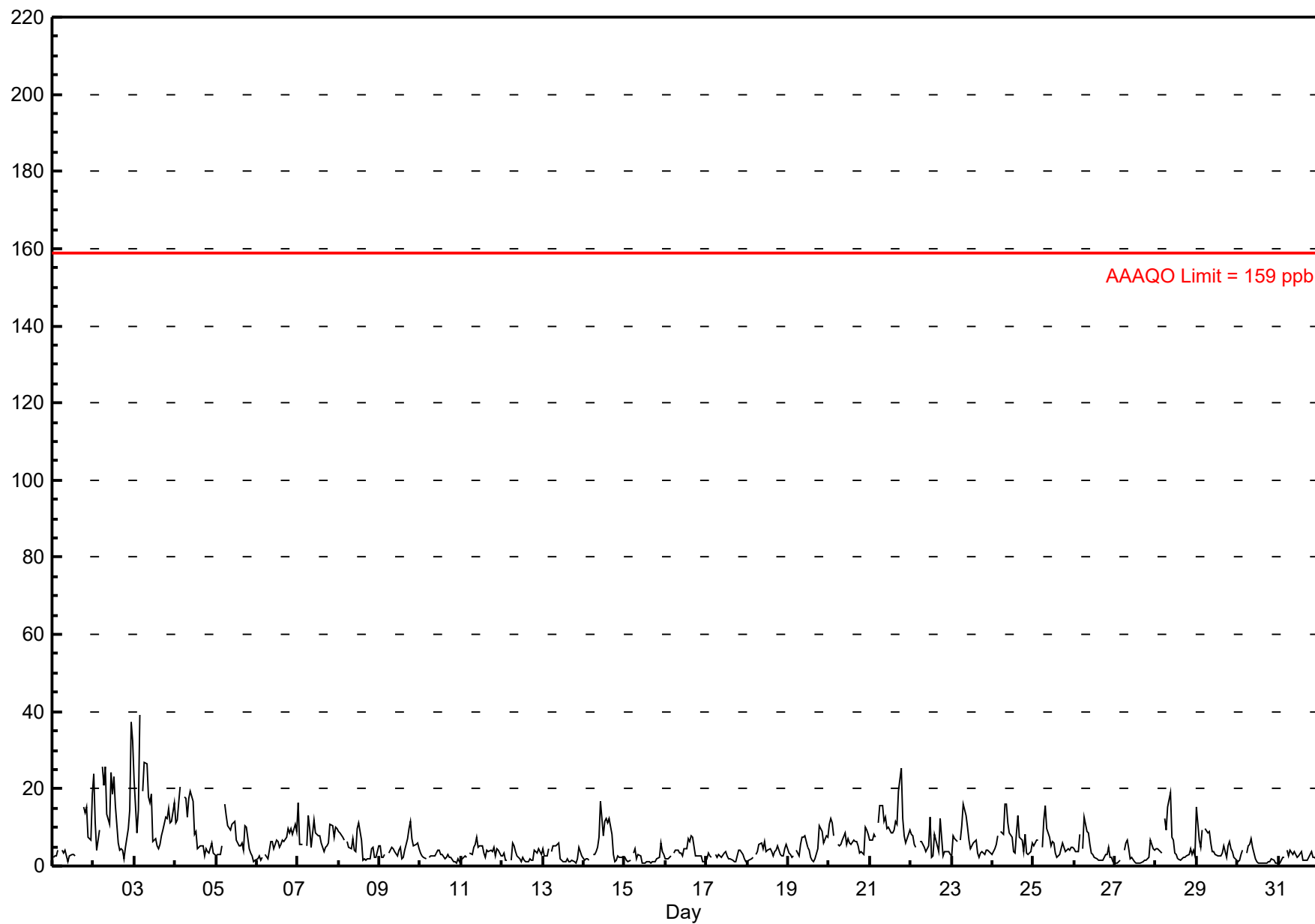
**Sulphur Dioxide (SO<sub>2</sub>) - ppb**  
**Beaverlodge - March 2019**





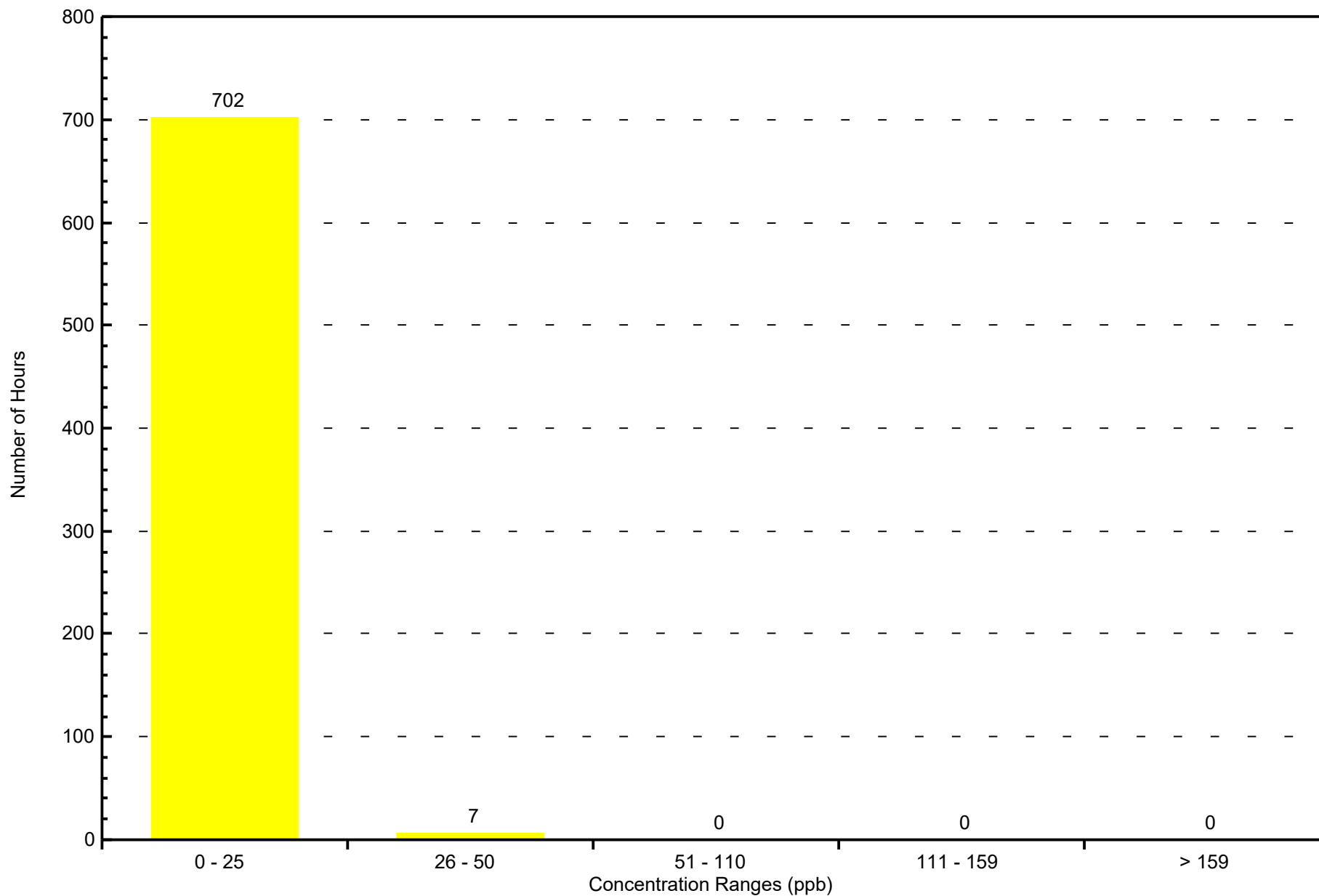
## Hourly Averages

**Nitrogen Dioxide (NO<sub>2</sub>) - ppb**  
**Beaverlodge - March 2019**



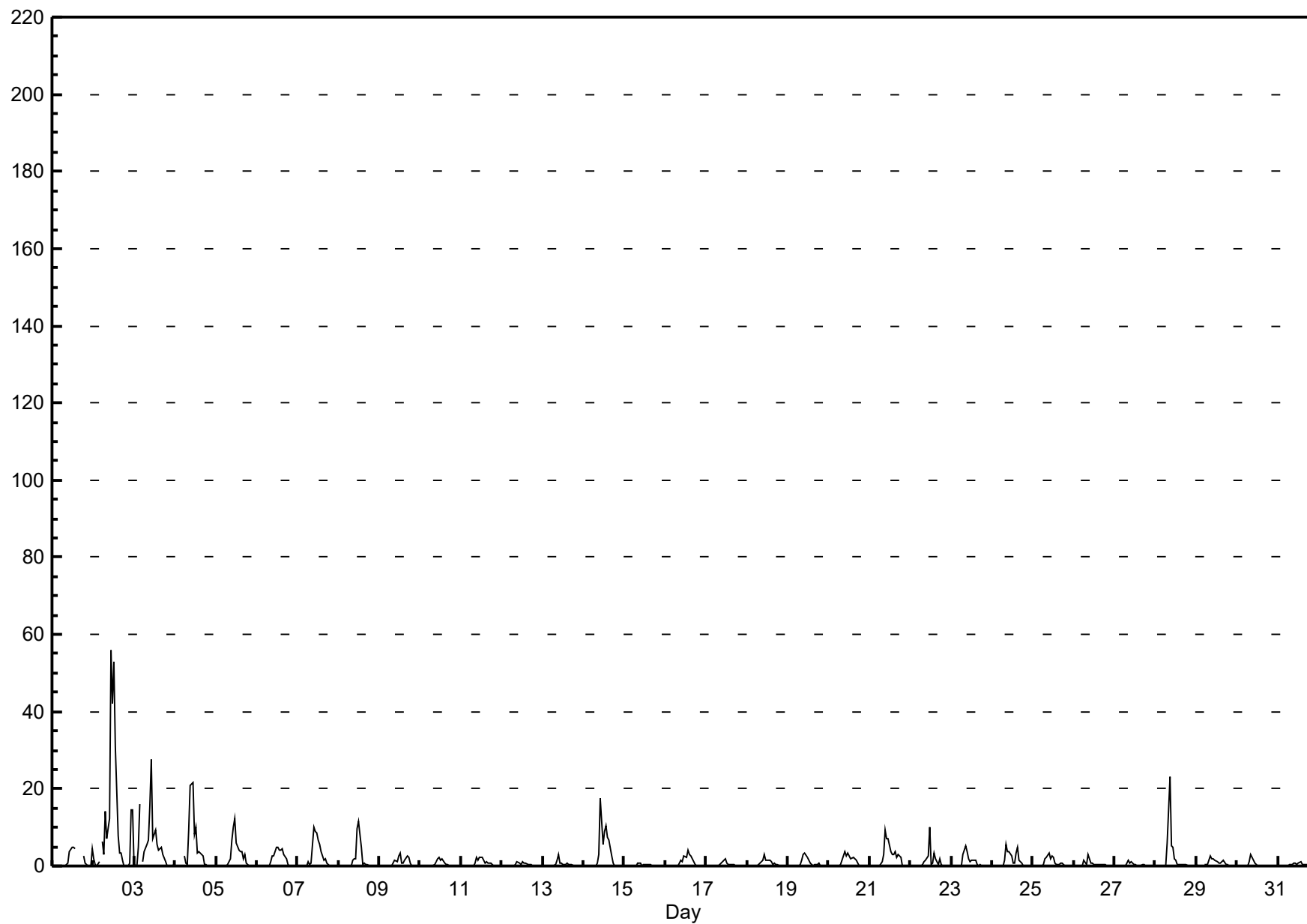
## Histogram of Hourly Averages

**Nitrogen Dioxide (NO<sub>2</sub>) - ppb**  
**Beaverlodge - March 2019**



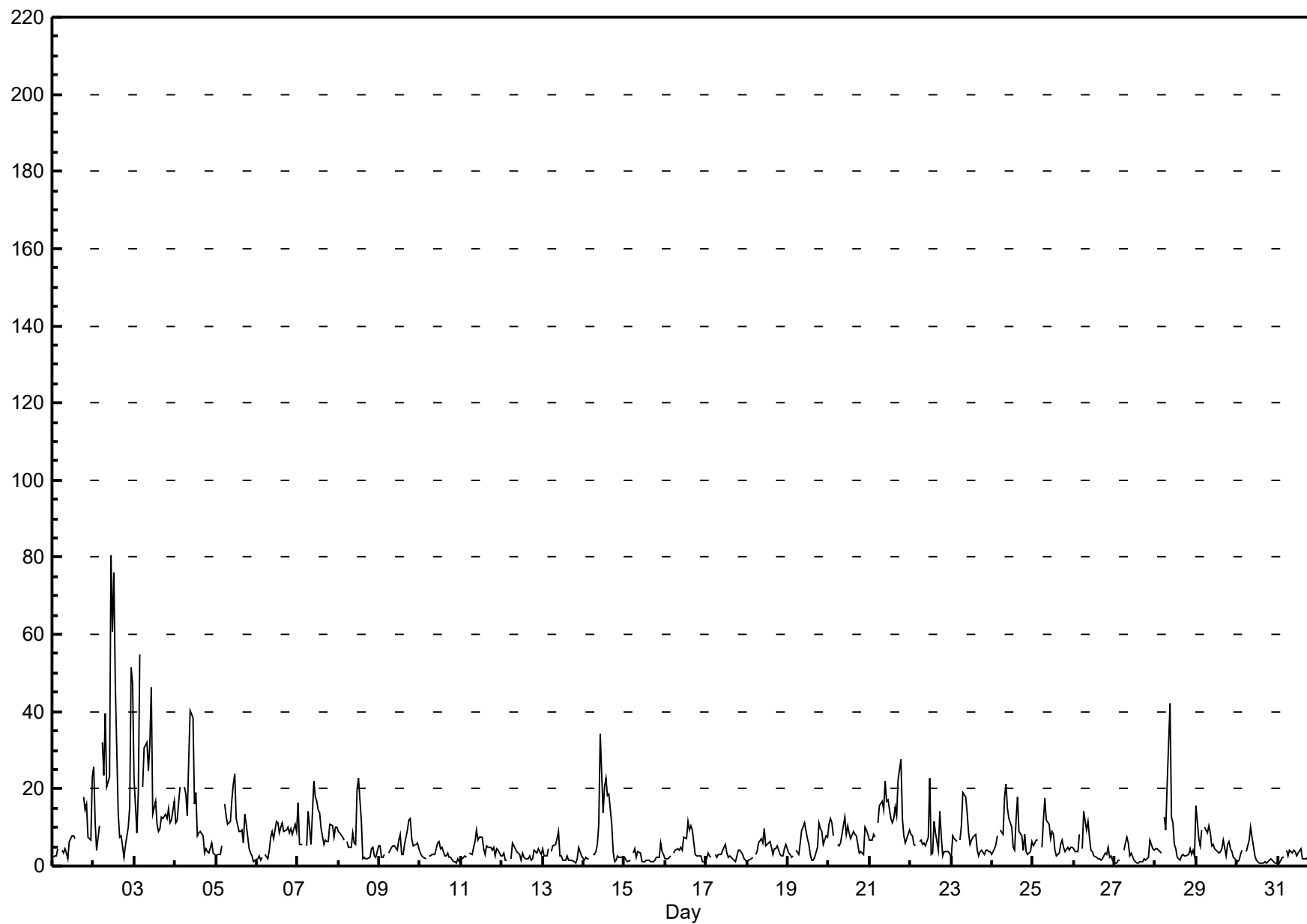
## Hourly Averages

**Nitrogen Oxide (NO) - ppb**  
**Beaverlodge - March 2019**



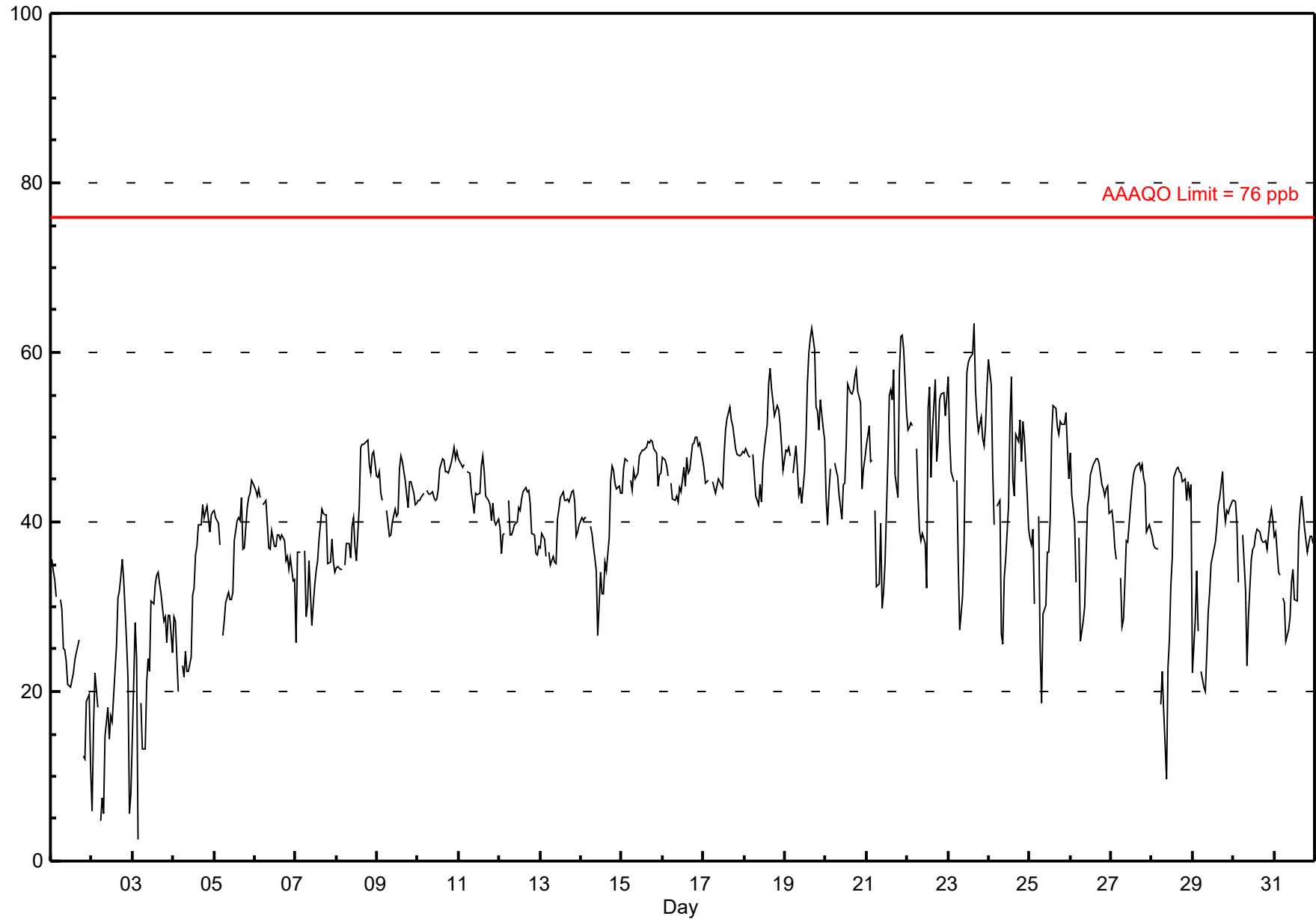
## Hourly Averages

Oxides of Nitrogen (NO<sub>x</sub>) - ppb  
Beaverlodge - March 2019



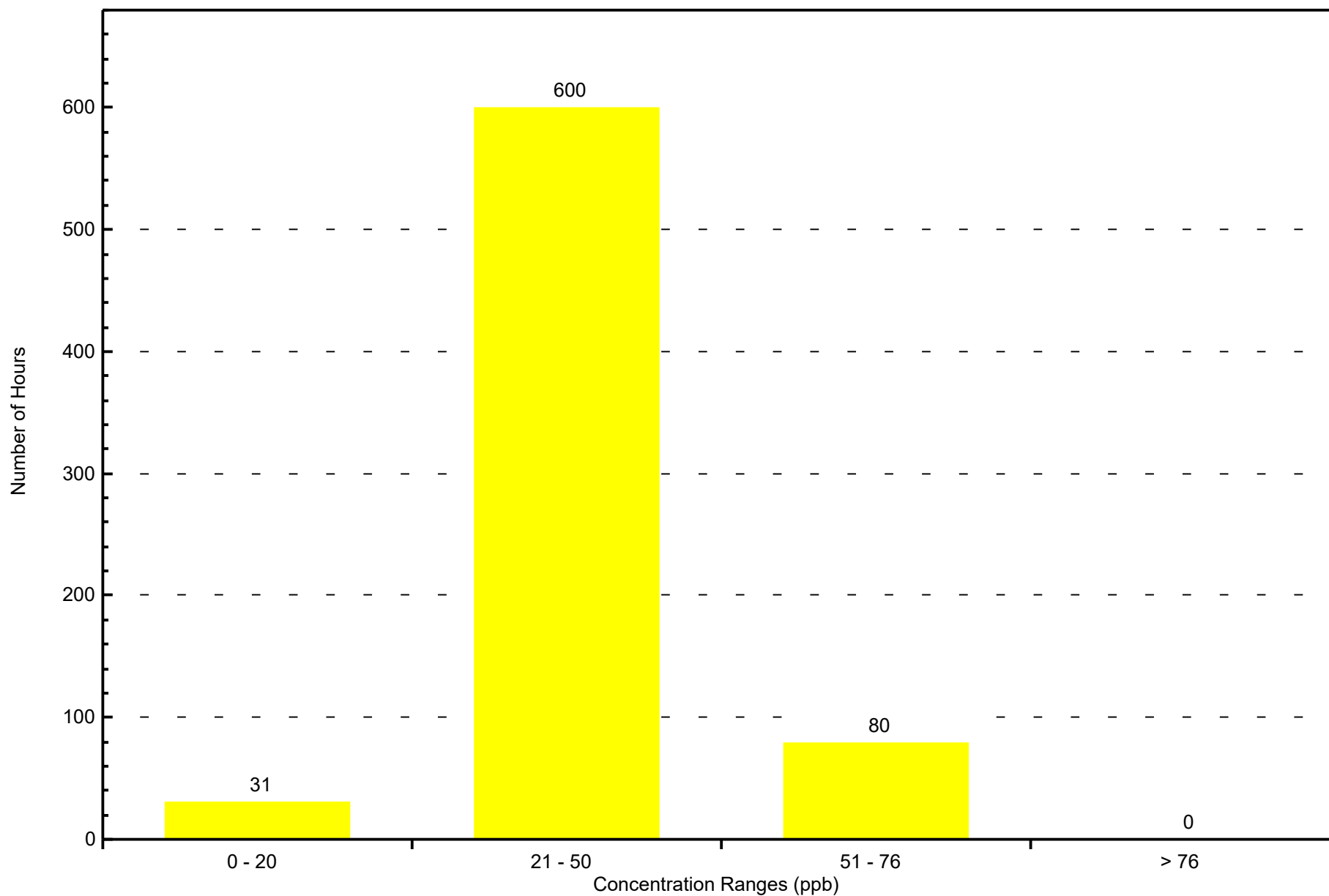
## Hourly Averages

Ozone (O<sub>3</sub>) - ppb  
Beaverlodge - March 2019



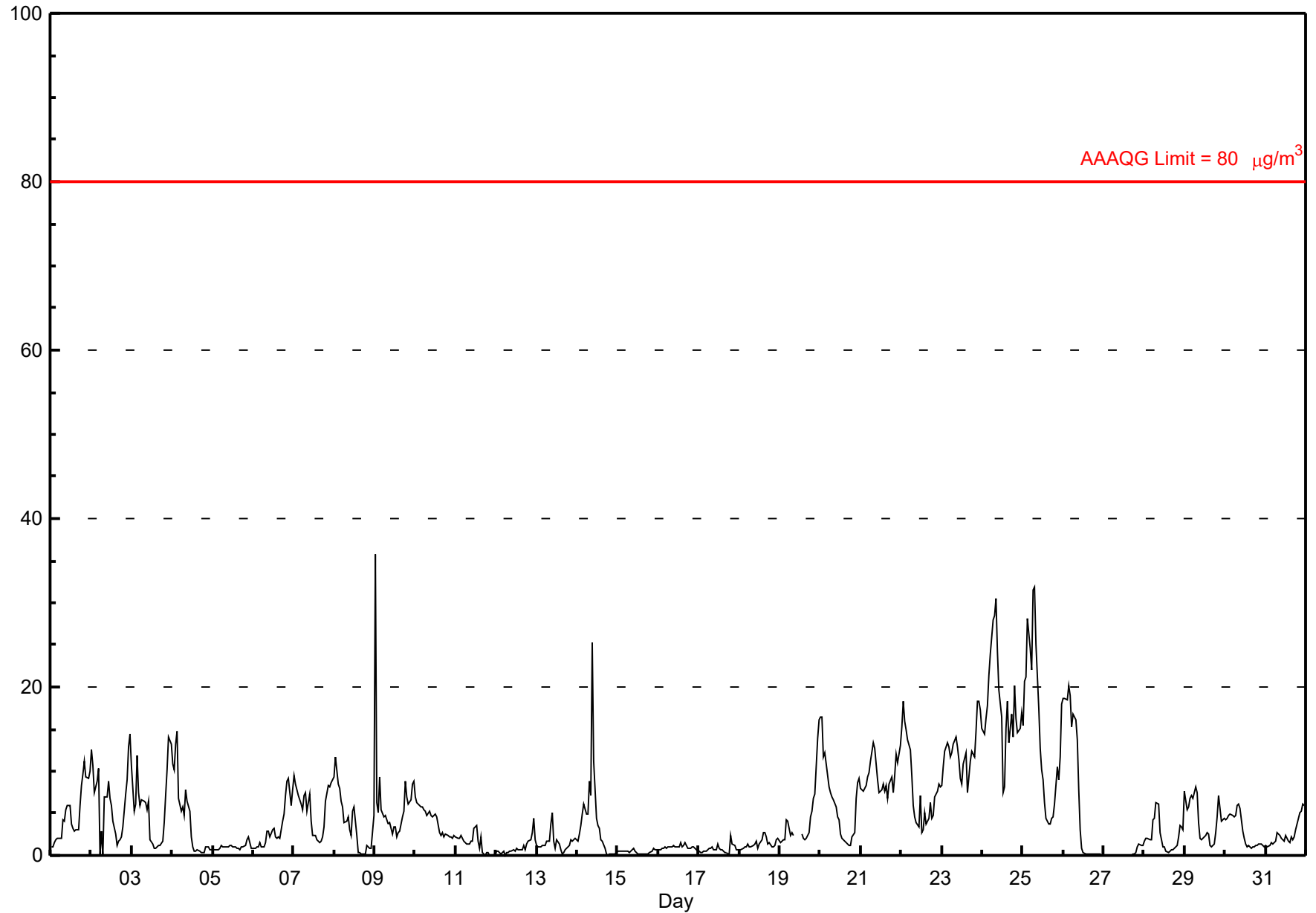
## Histogram of Hourly Averages

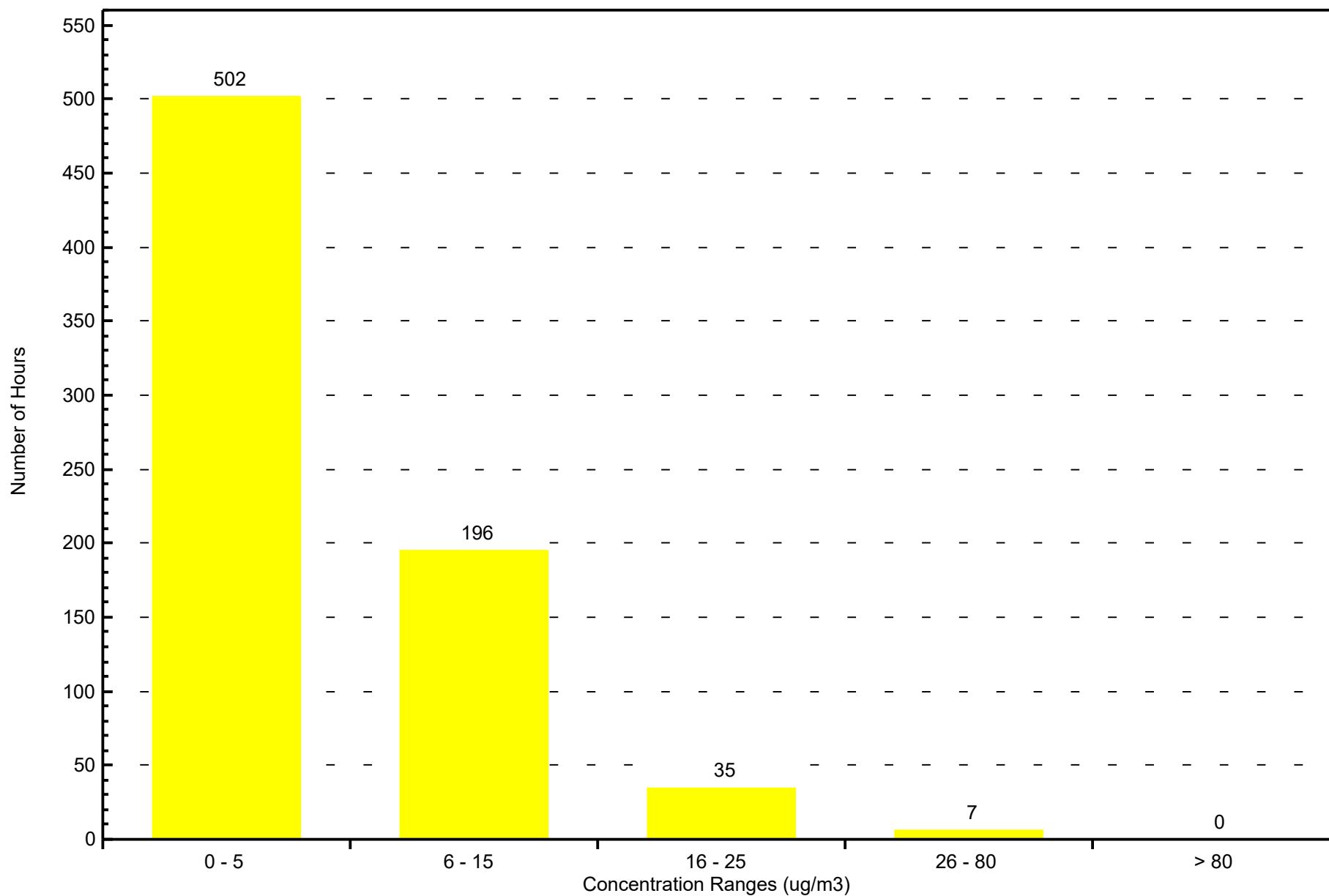
Ozone (O<sub>3</sub>) - ppb  
Beaverlodge - March 2019



## Hourly Averages

Particulate Matter 2.5 (PM<sub>2.5</sub>) -  $\mu\text{g}/\text{m}^3$   
Beaverlodge - March 2019



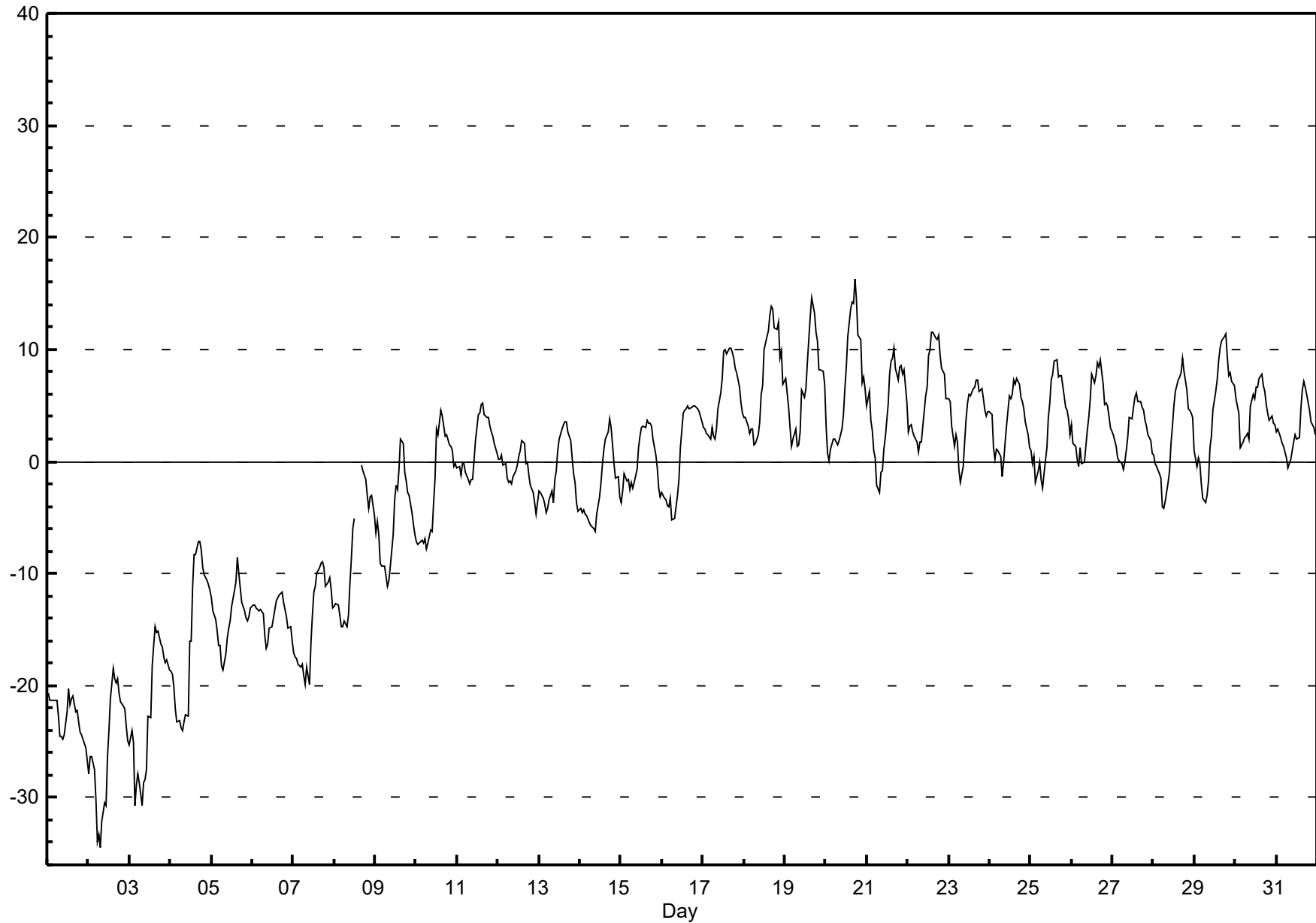




## Hourly Averages

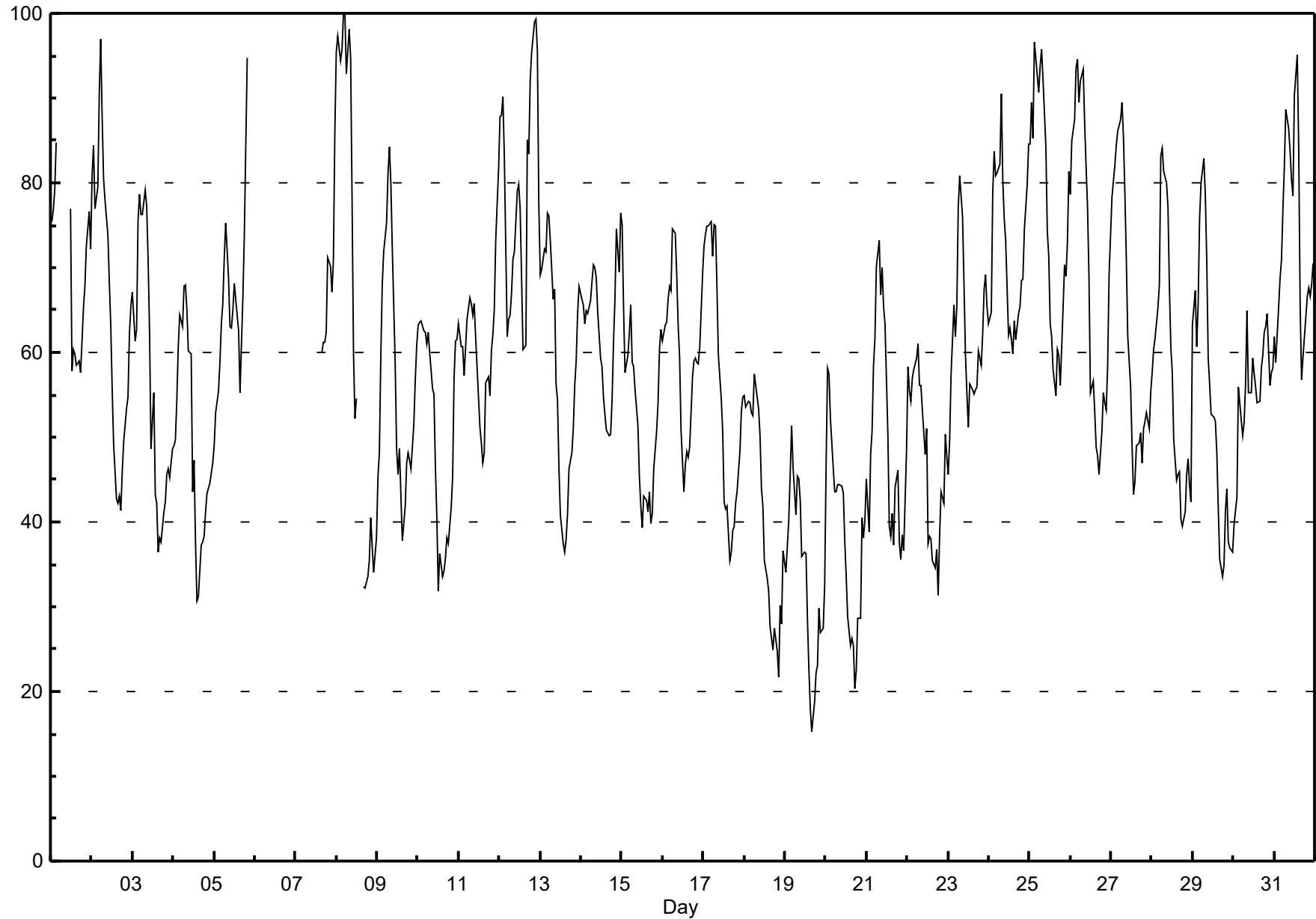
External Temperature (ET) - °C

Beaverlodge - March 2019



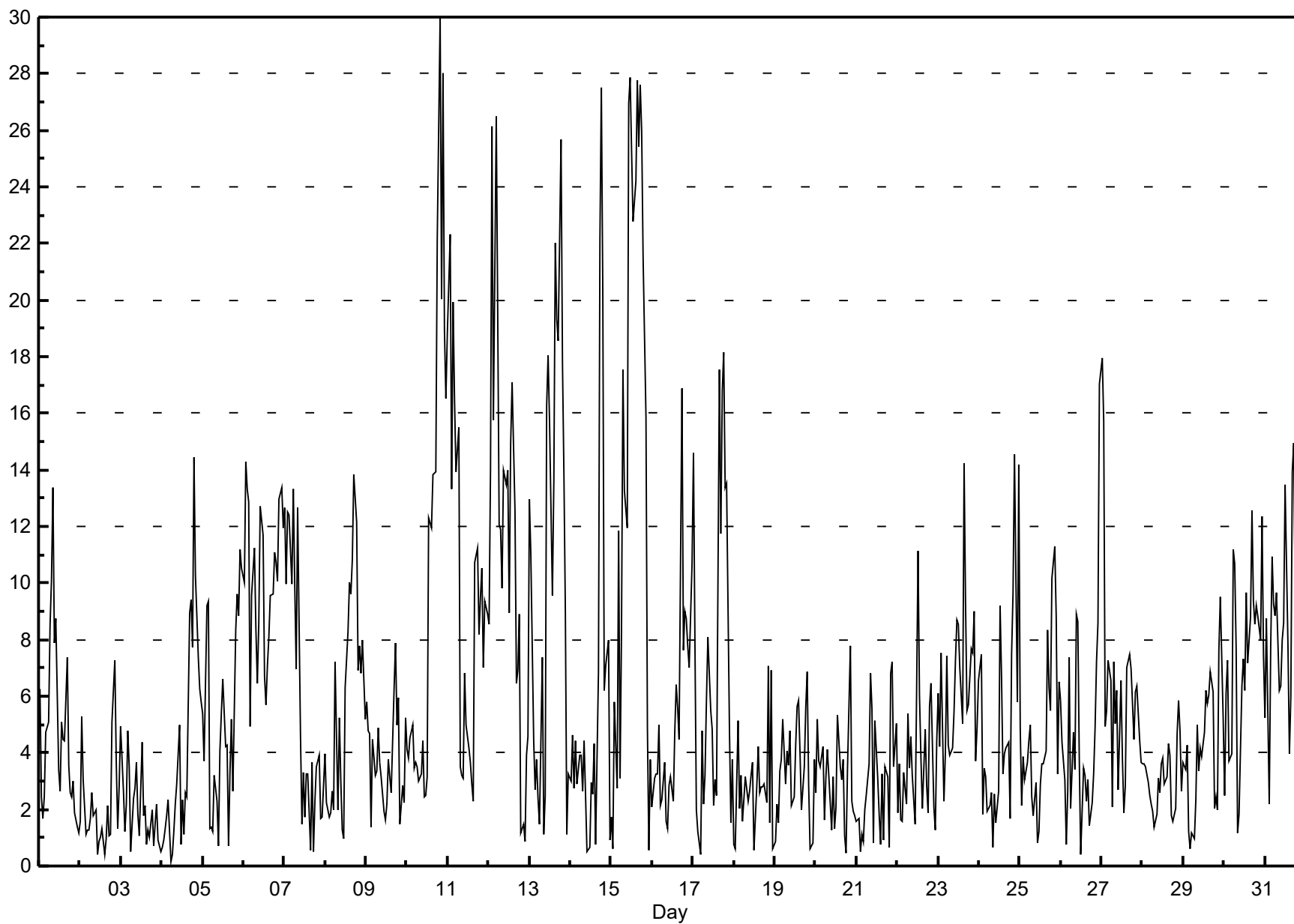
## Hourly Averages

Relative Humidity (RH) - %  
Beaverlodge - March 2019



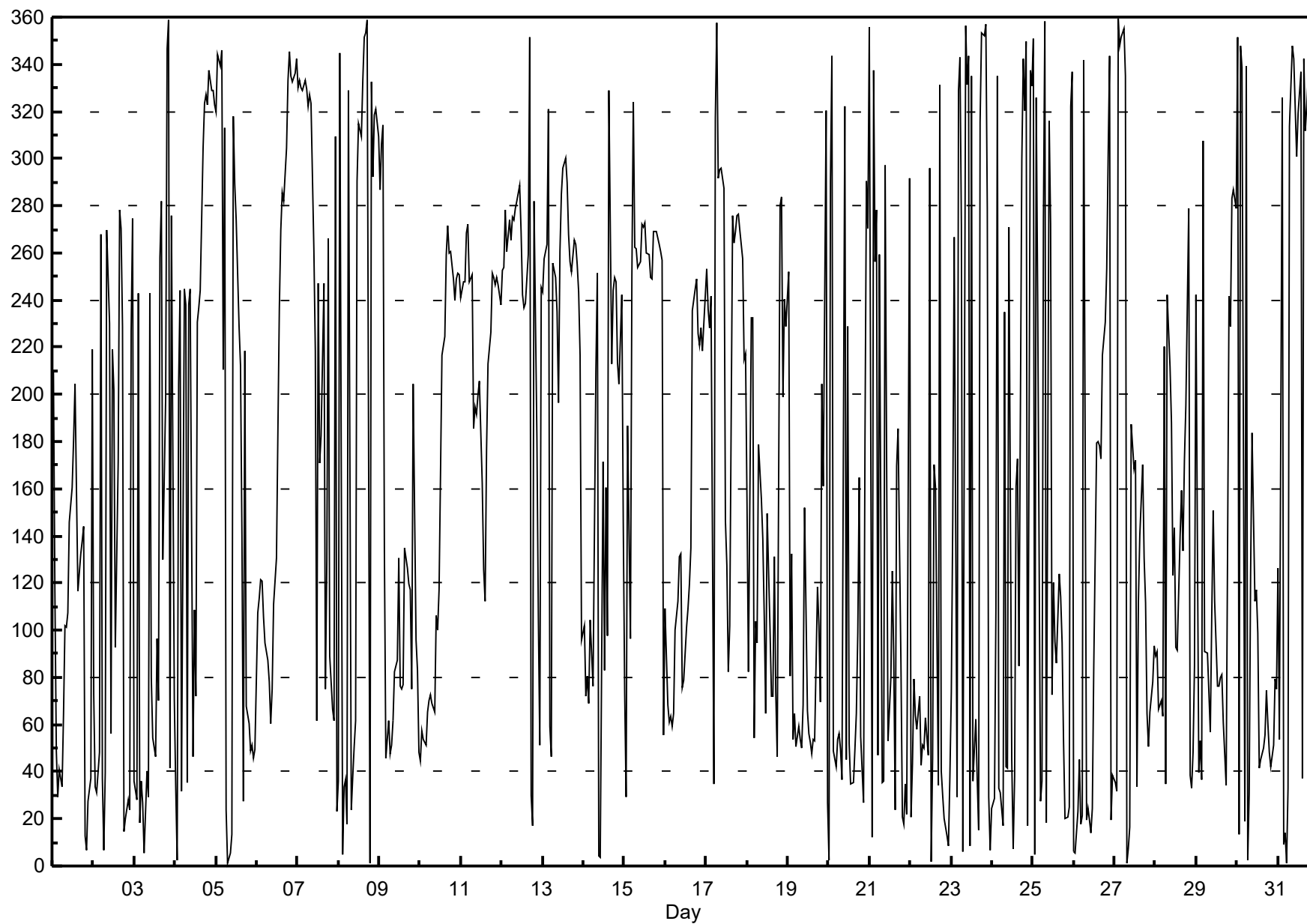
## Hourly Averages

**Wind Speed (WS) - km/h**  
**Beaverlodge - March 2019**



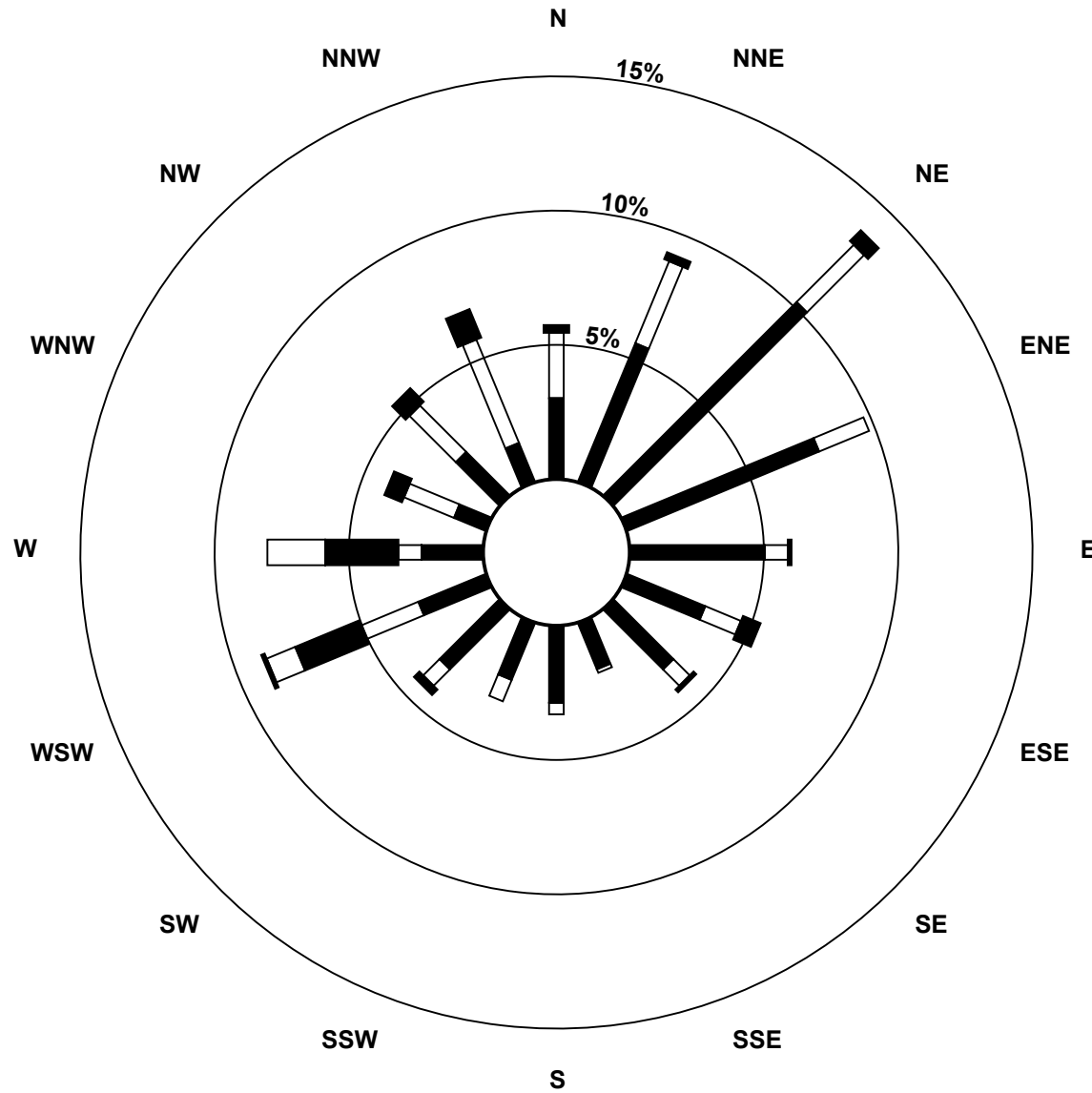
## Hourly Averages

Wind Direction (WD) - deg  
Beaverlodge - March 2019

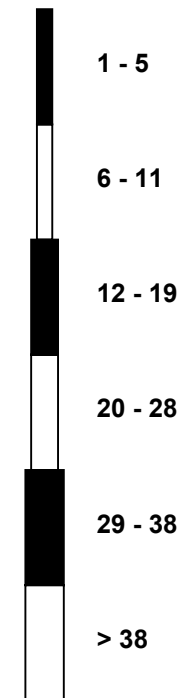


## Wind Rose

Wind Speed (WS) (km/h)  
Beaverlodge - March 2019

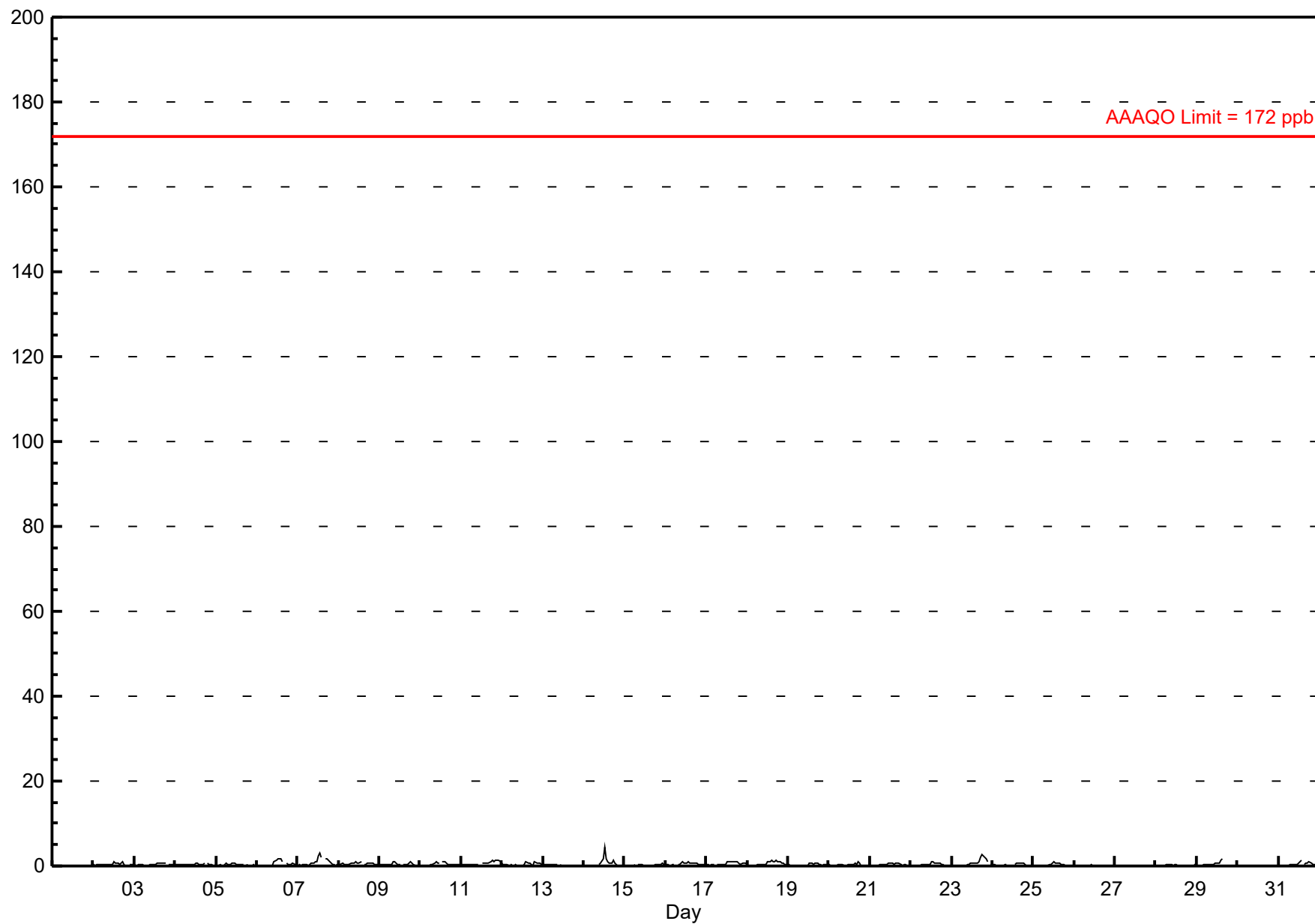


### Wind Speed Classes (km/h)



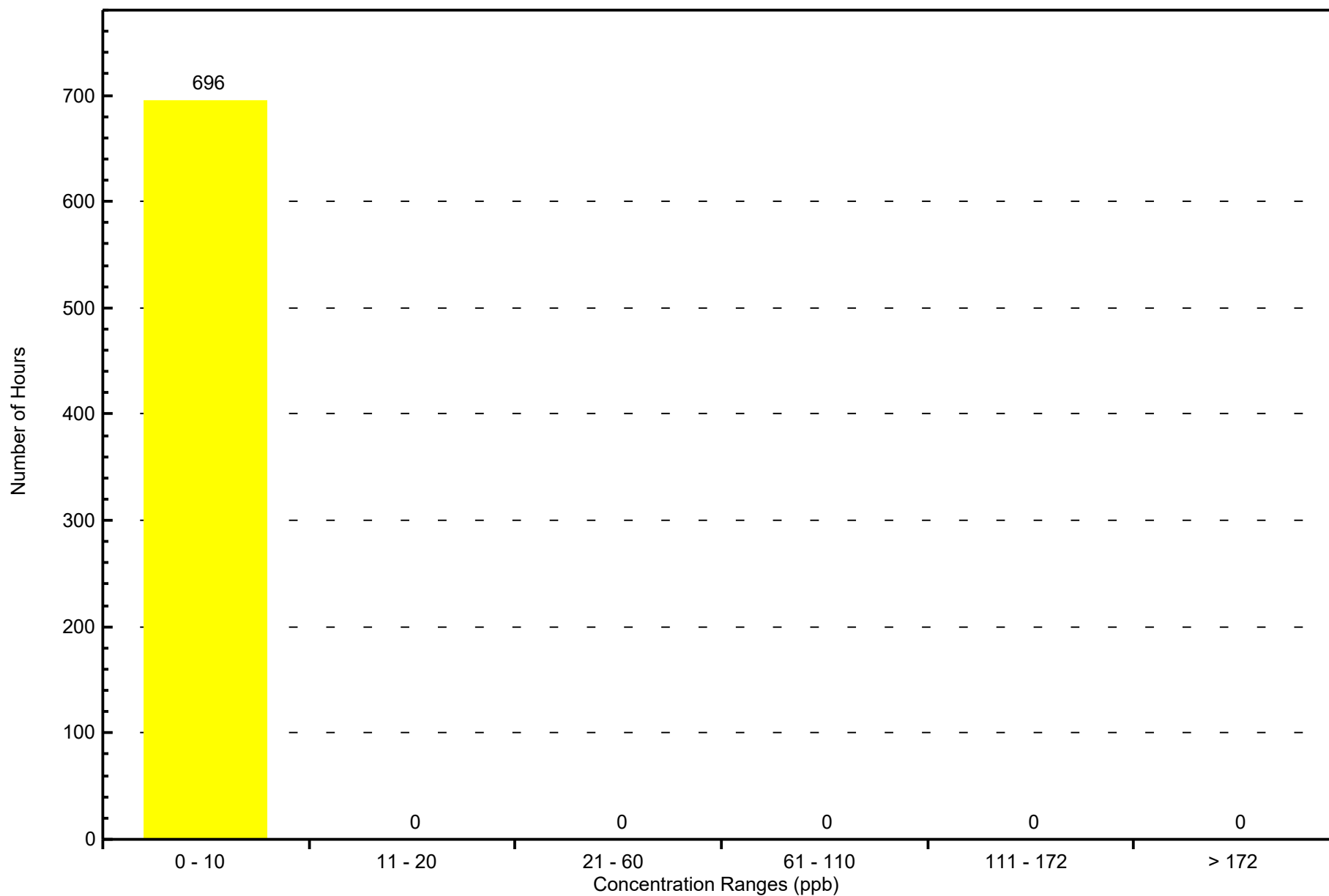
## Hourly Averages

**Sulphur Dioxide (SO<sub>2</sub>) - ppb**  
**Evergreen Park - March 2019**



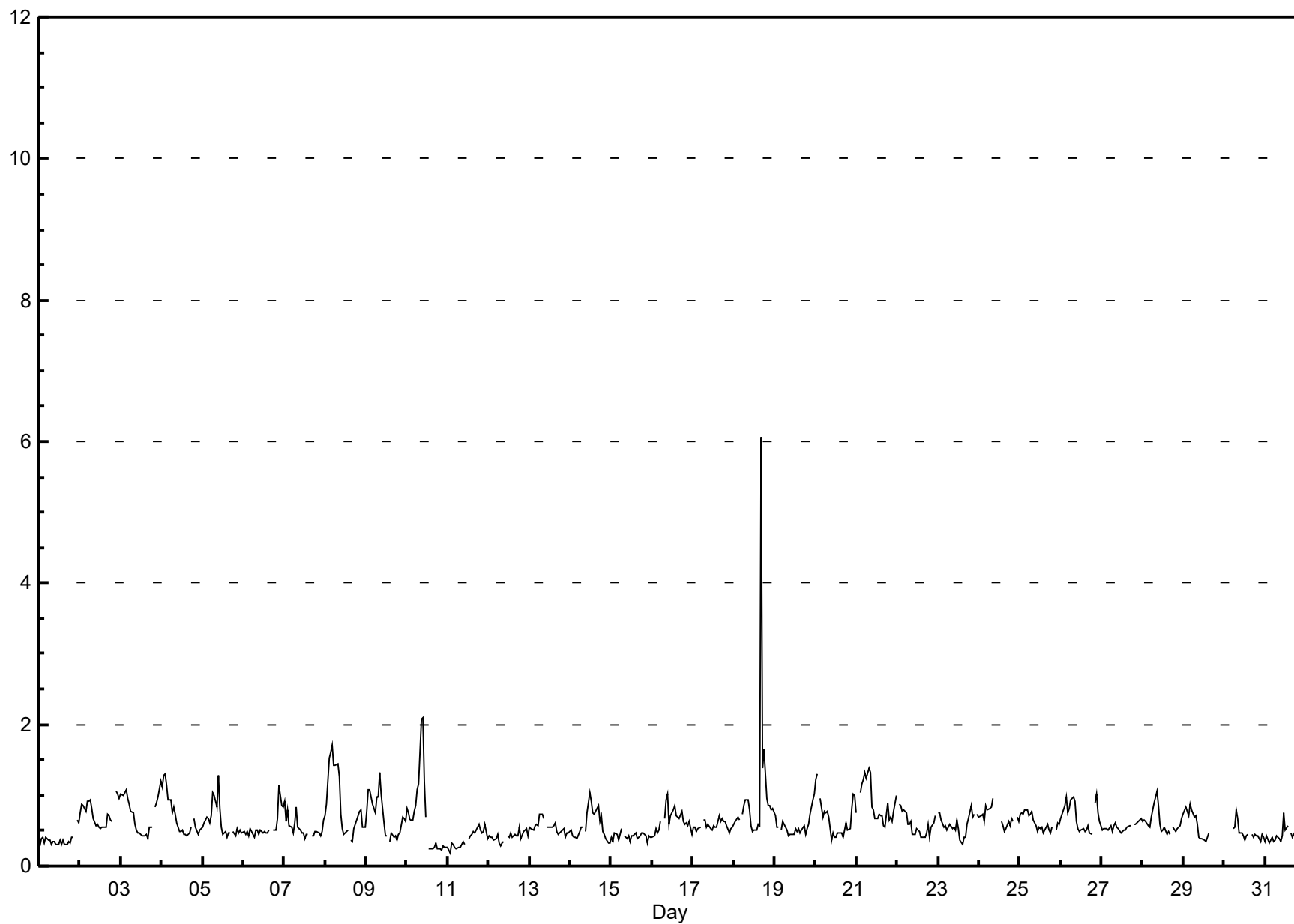
## Histogram of Hourly Averages

**Sulphur Dioxide (SO<sub>2</sub>) - ppb**  
**Evergreen Park - March 2019**

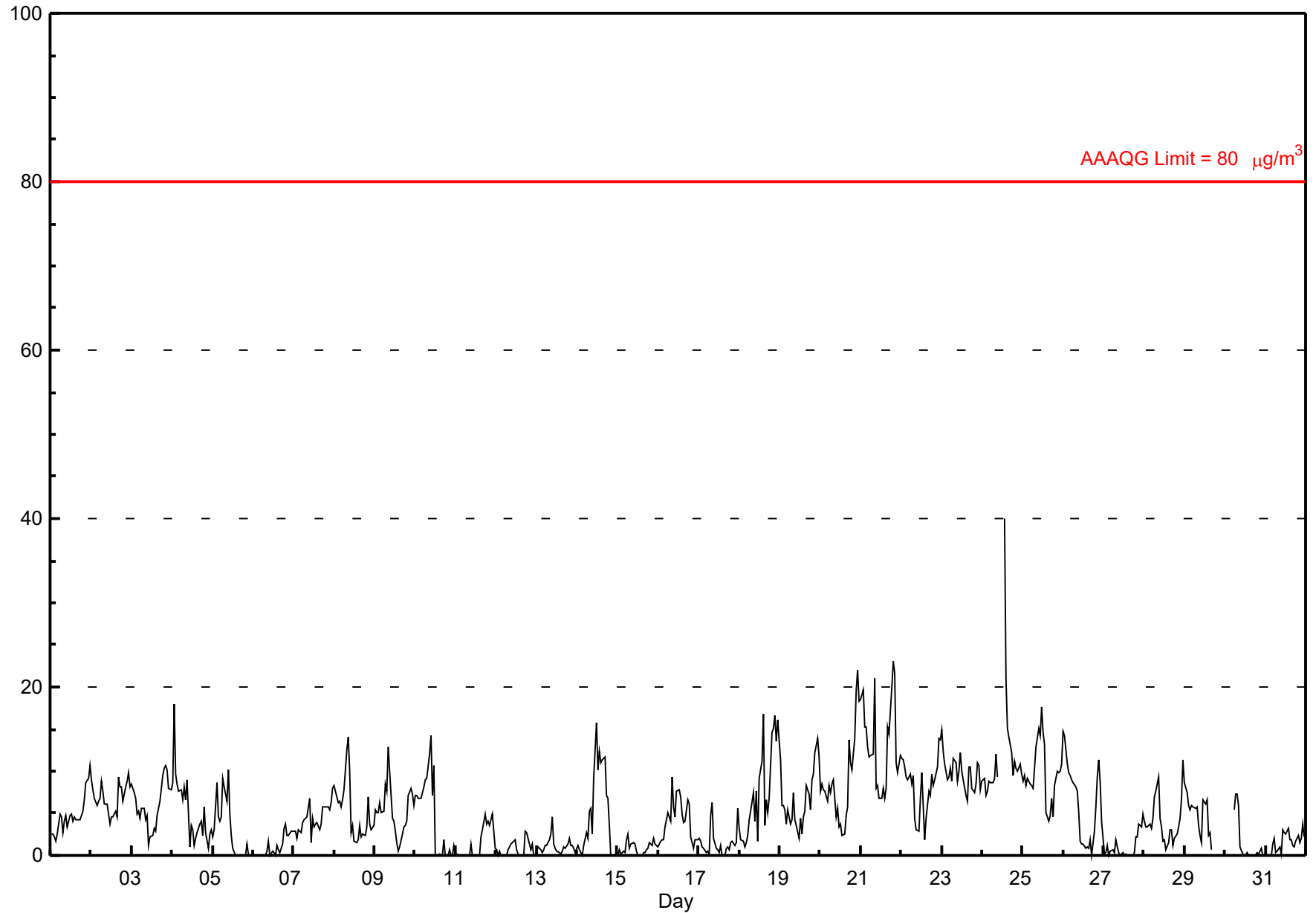


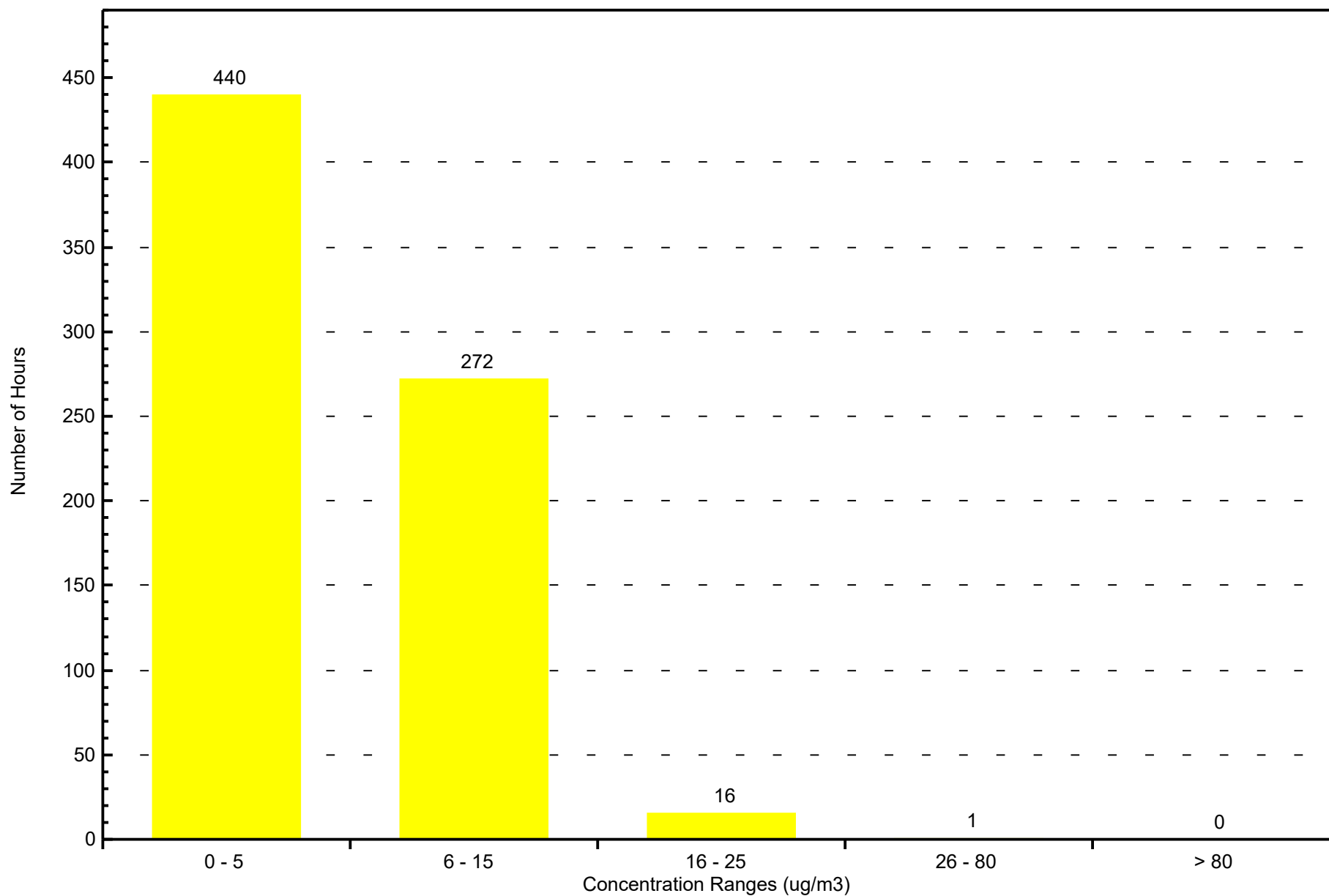
## Hourly Averages

Total Reduced Sulphur (TRS) - ppb  
Evergreen Park - March 2019





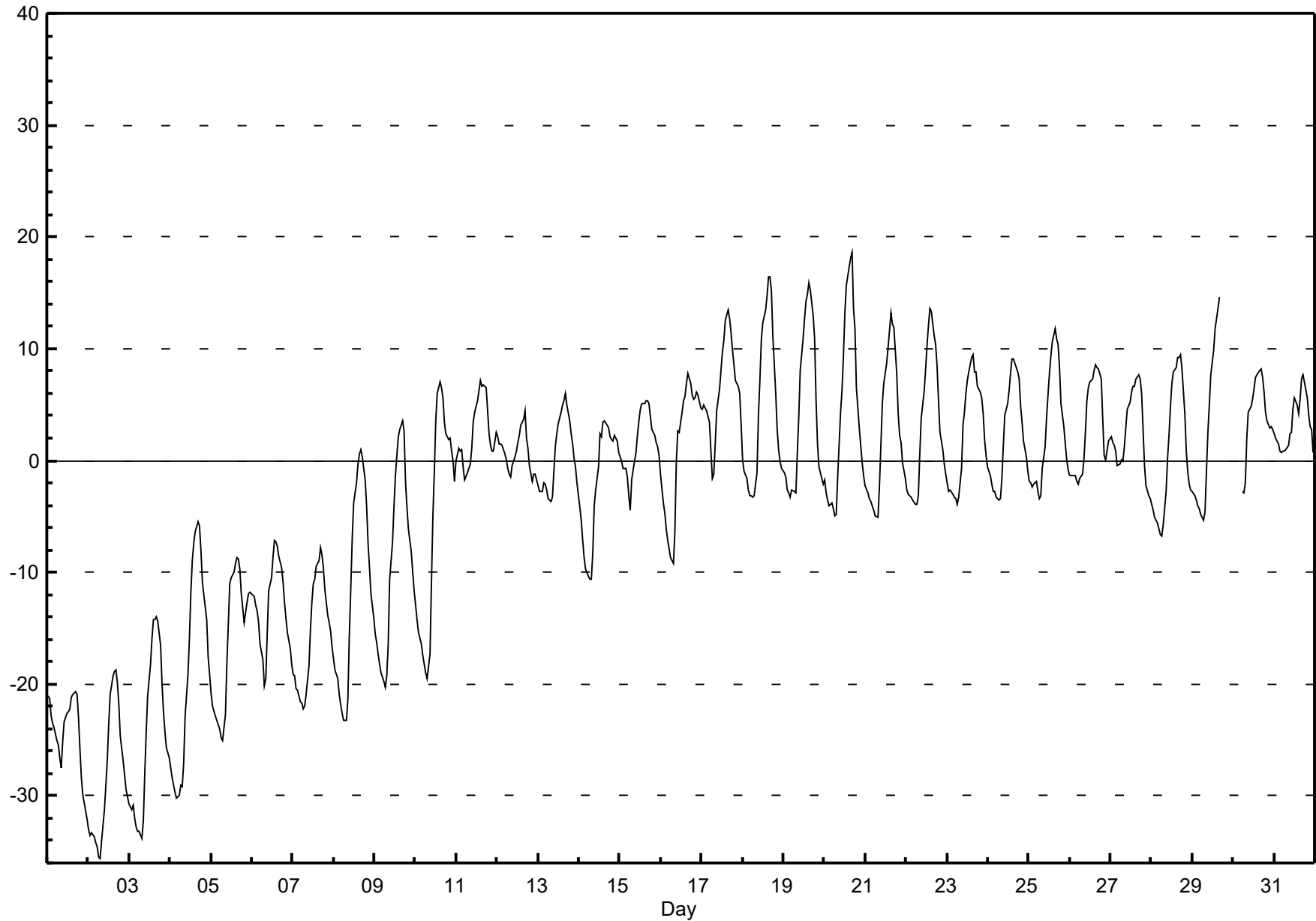




## Hourly Averages

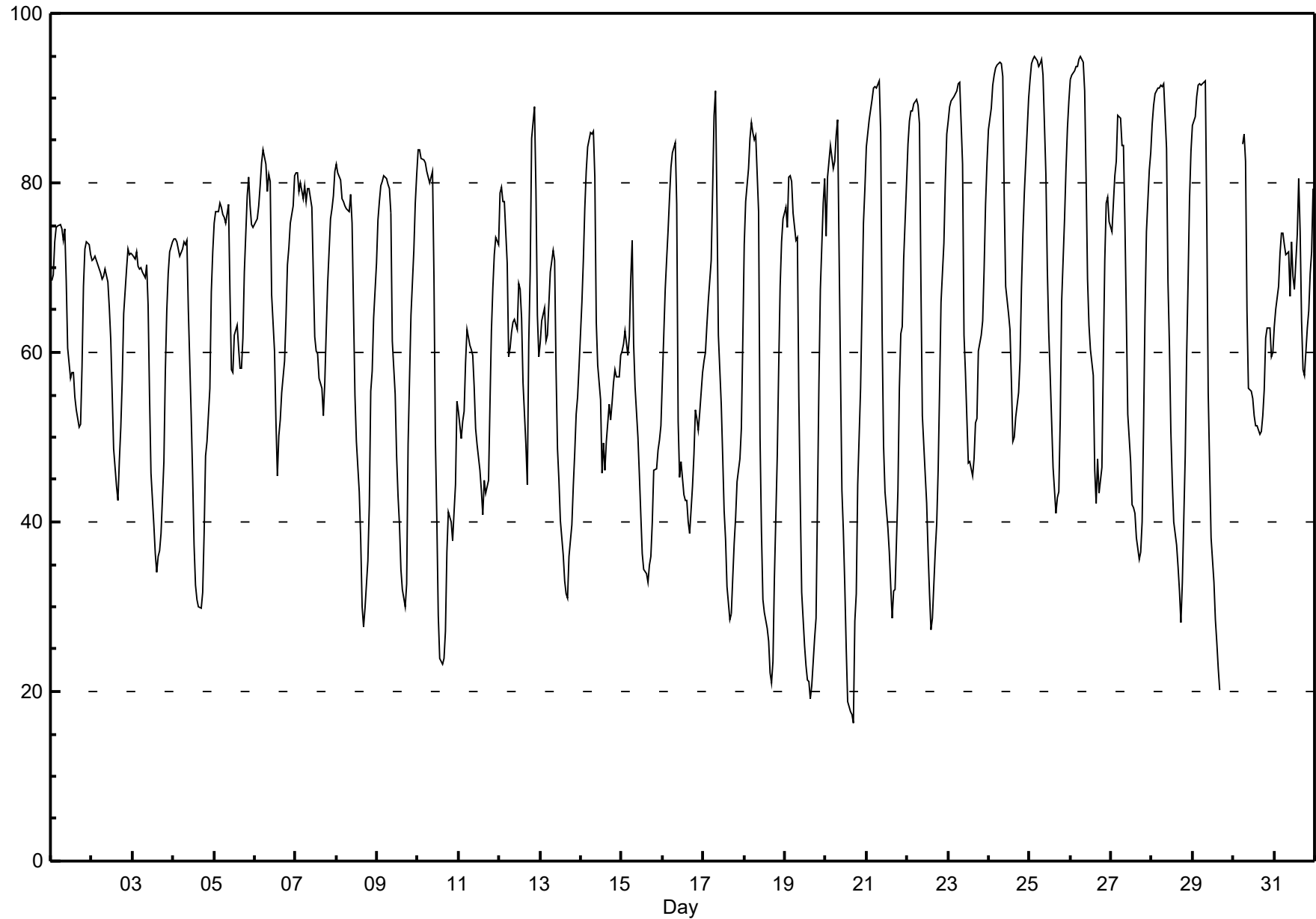
External Temperature (ET) - °C

Evergreen Park - March 2019



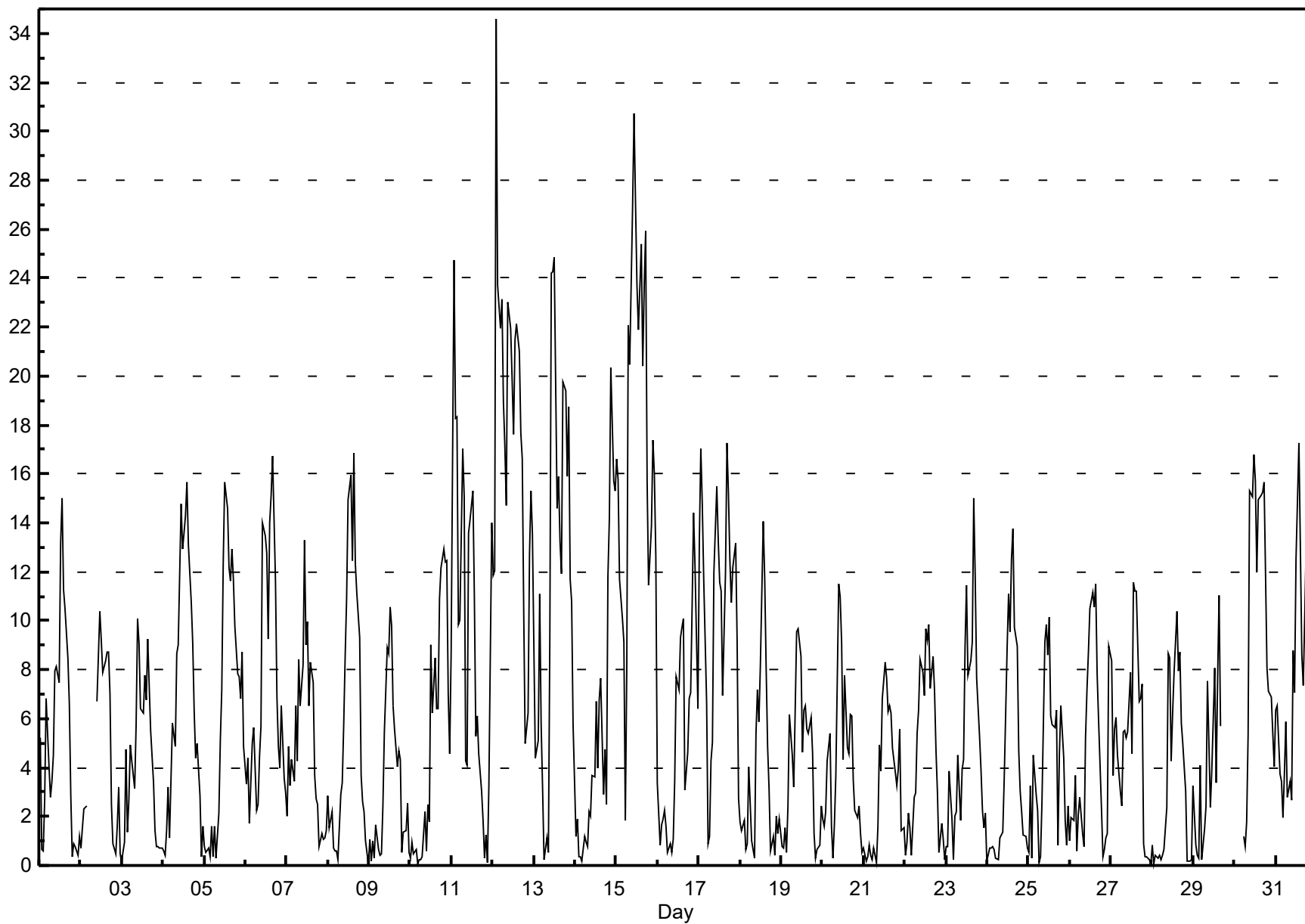
## Hourly Averages

**Relative Humidity (RH) - %**  
**Evergreen Park - March 2019**



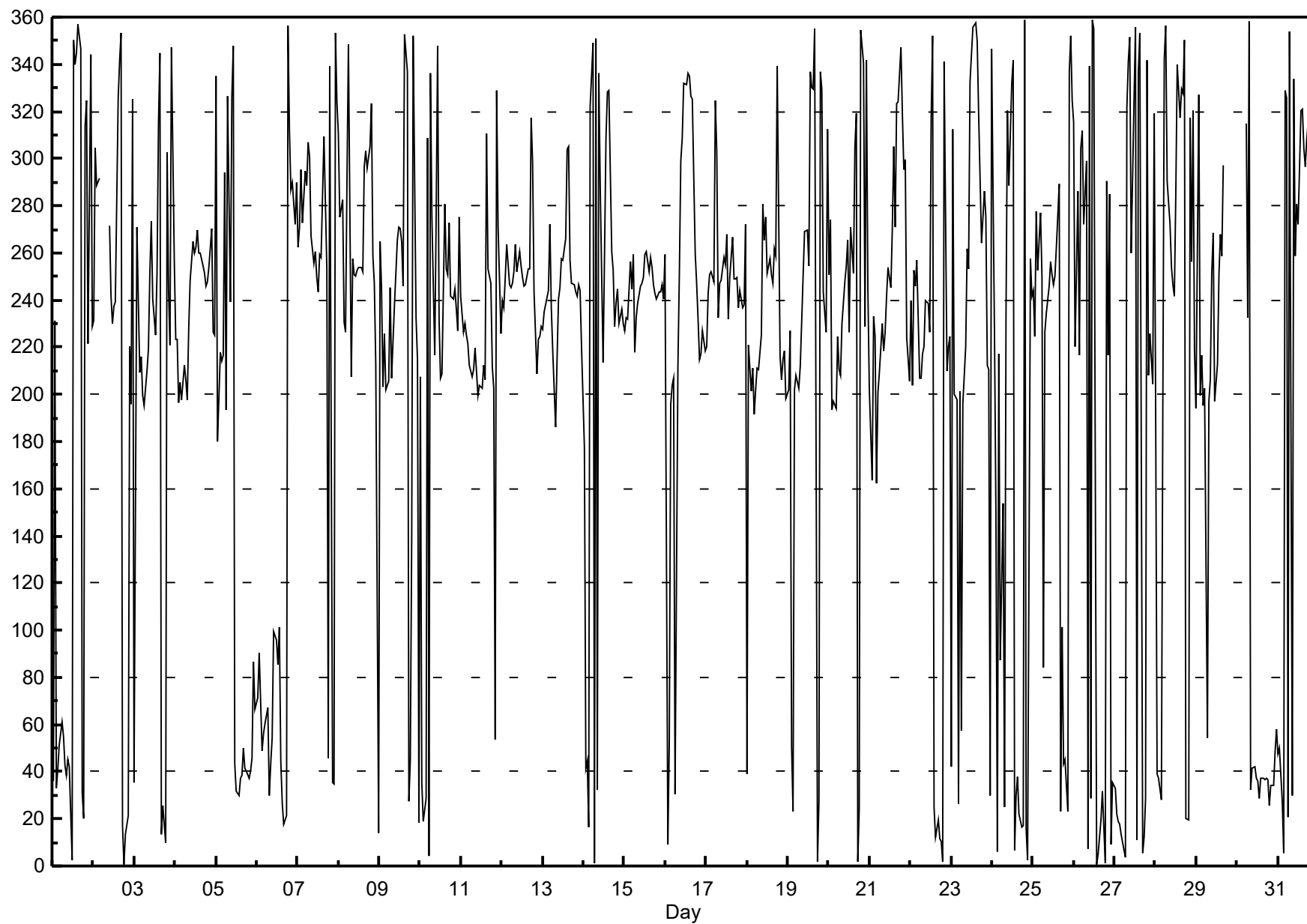
## Hourly Averages

Wind Speed (WS) - km/h  
Evergreen Park - March 2019



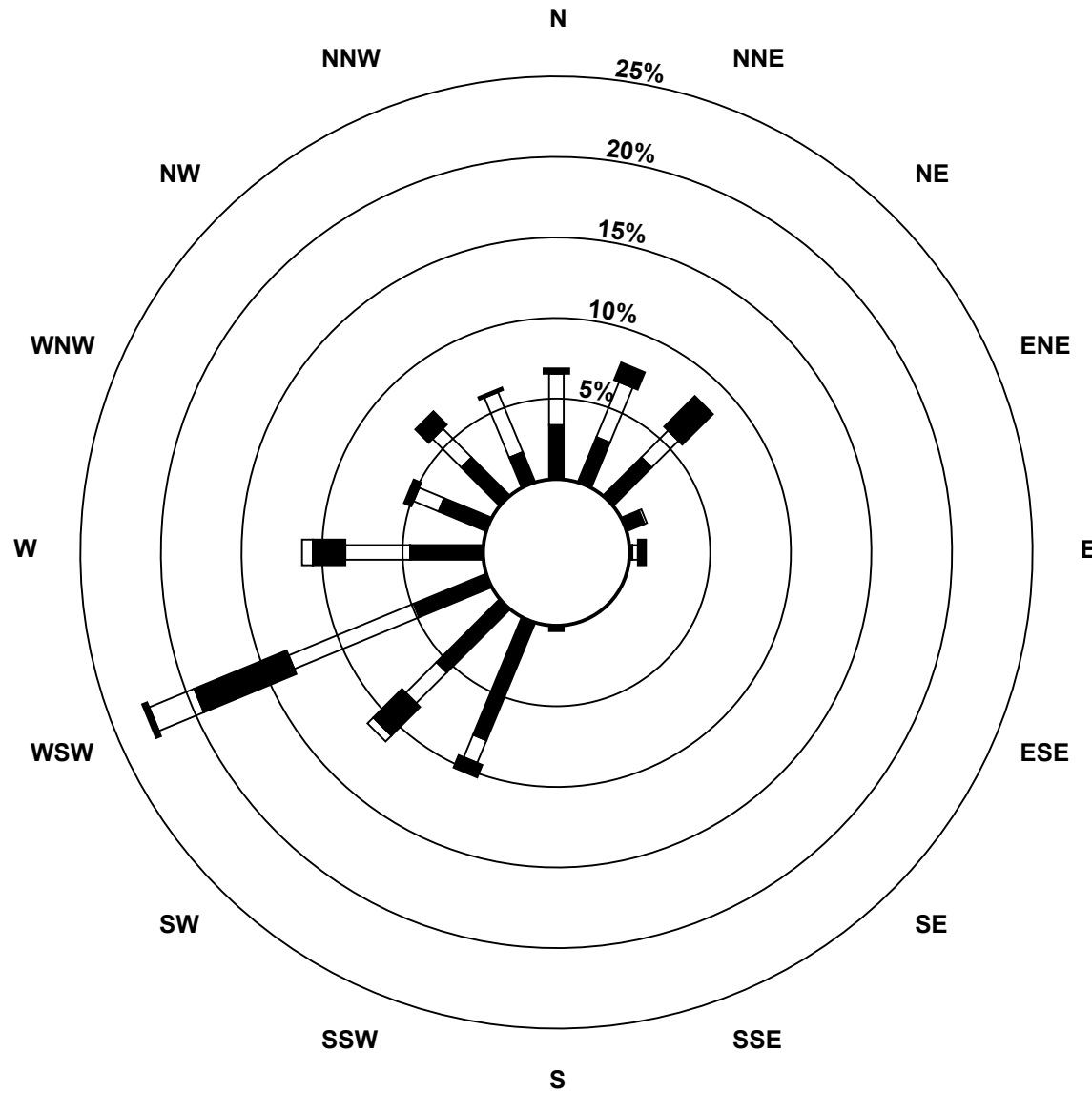
## Hourly Averages

Wind Direction (WD) - deg  
Evergreen Park - March 2019

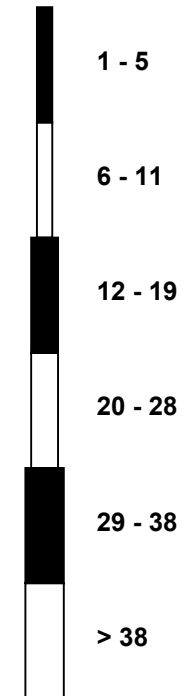


## Wind Rose

Wind Speed (WS) (km/h)  
Evergreen Park - March 2019



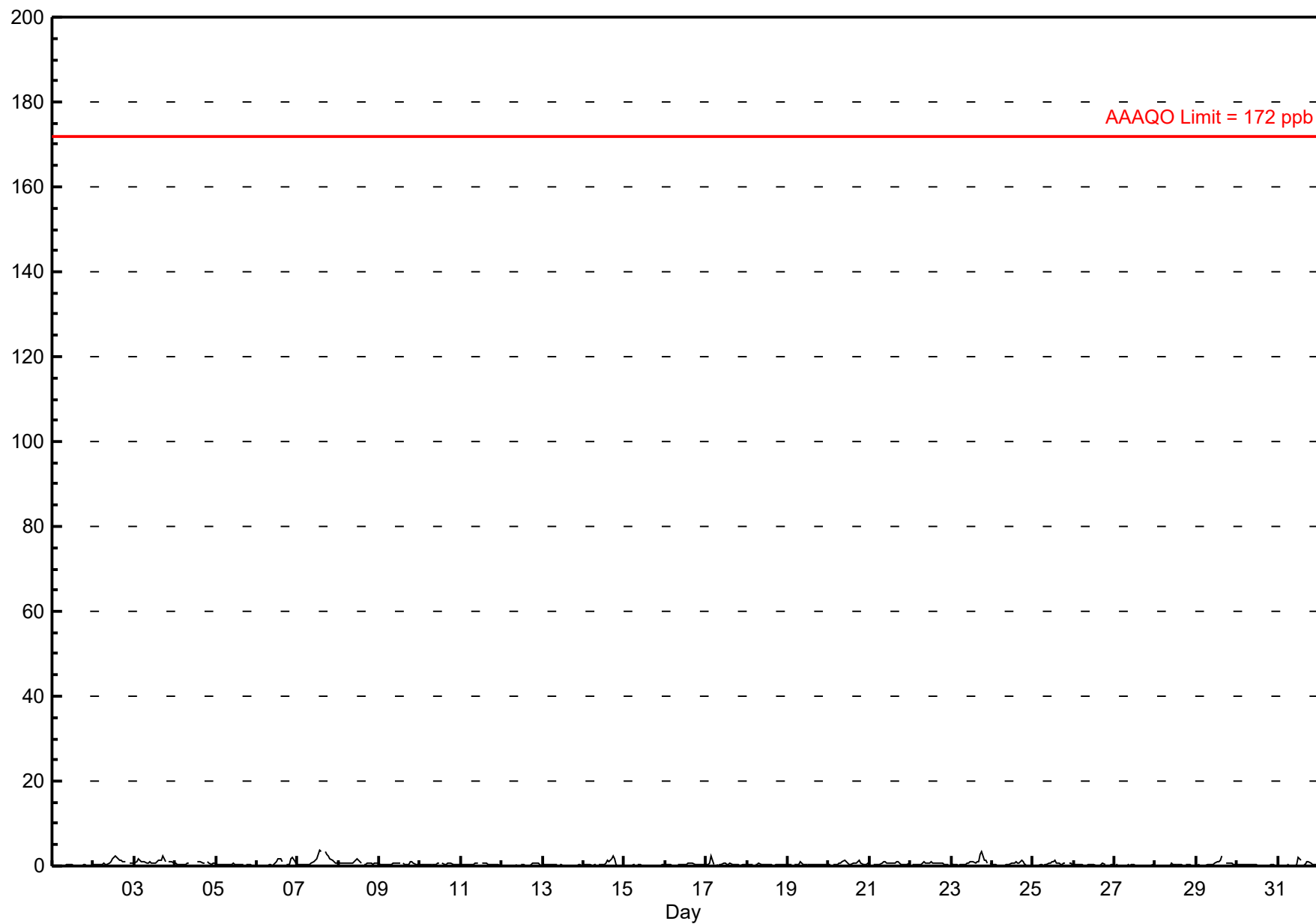
## Wind Speed Classes (km/h)



## Hourly Averages

Sulphur Dioxide (SO<sub>2</sub>) - ppb

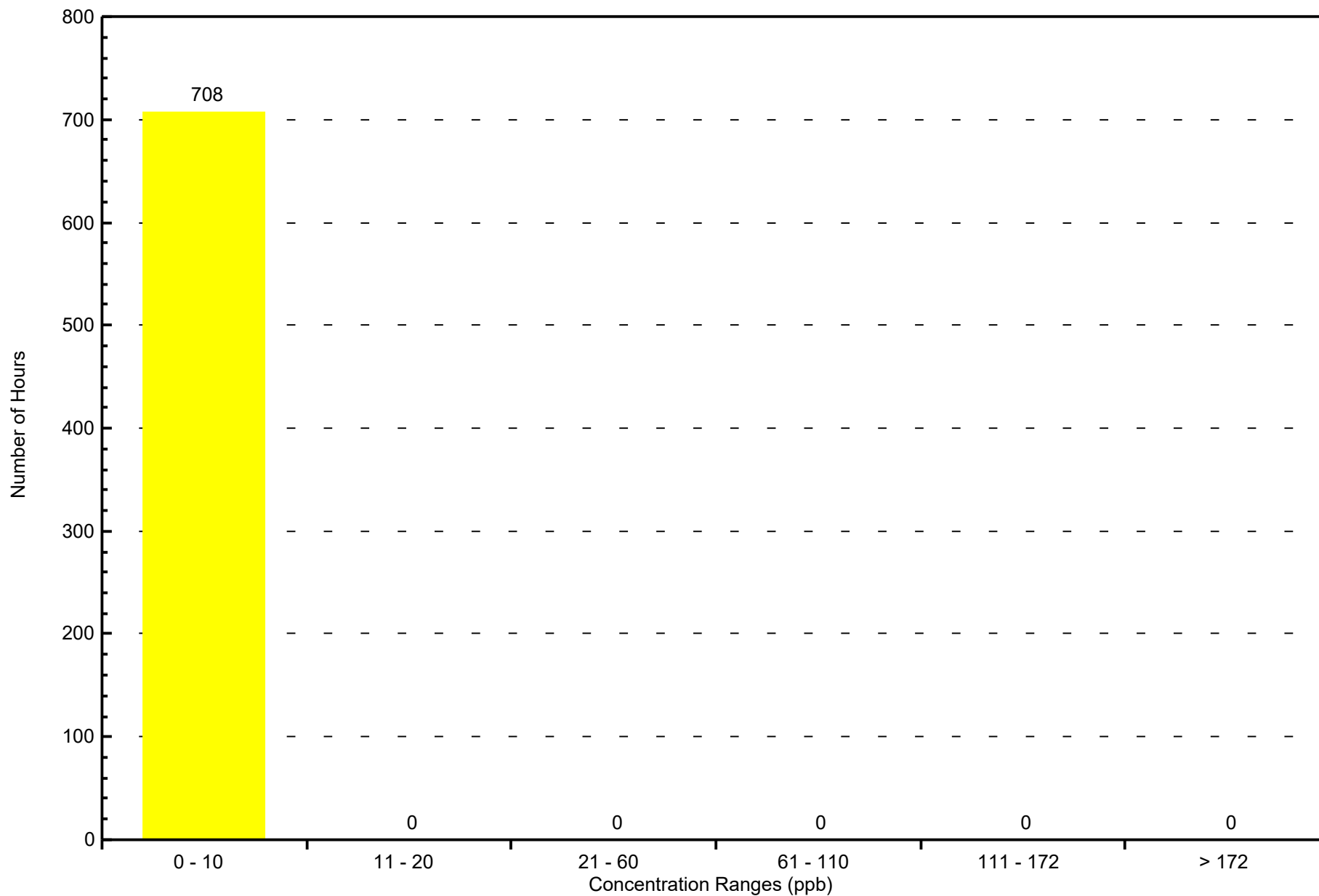
Henry Pirker - March 2019





## Histogram of Hourly Averages

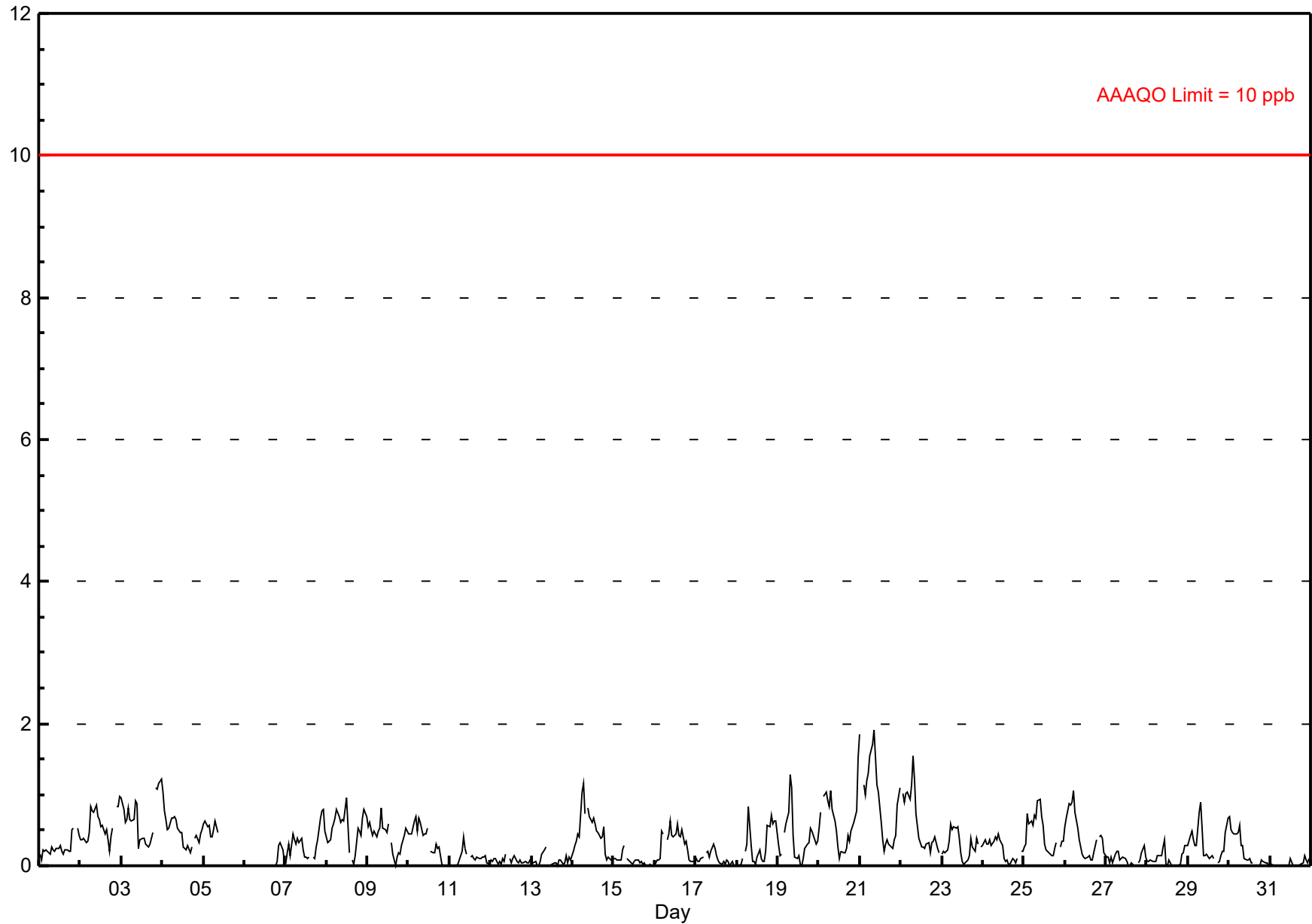
**Sulphur Dioxide (SO<sub>2</sub>) - ppb**  
**Henry Pirker - March 2019**



## Hourly Averages

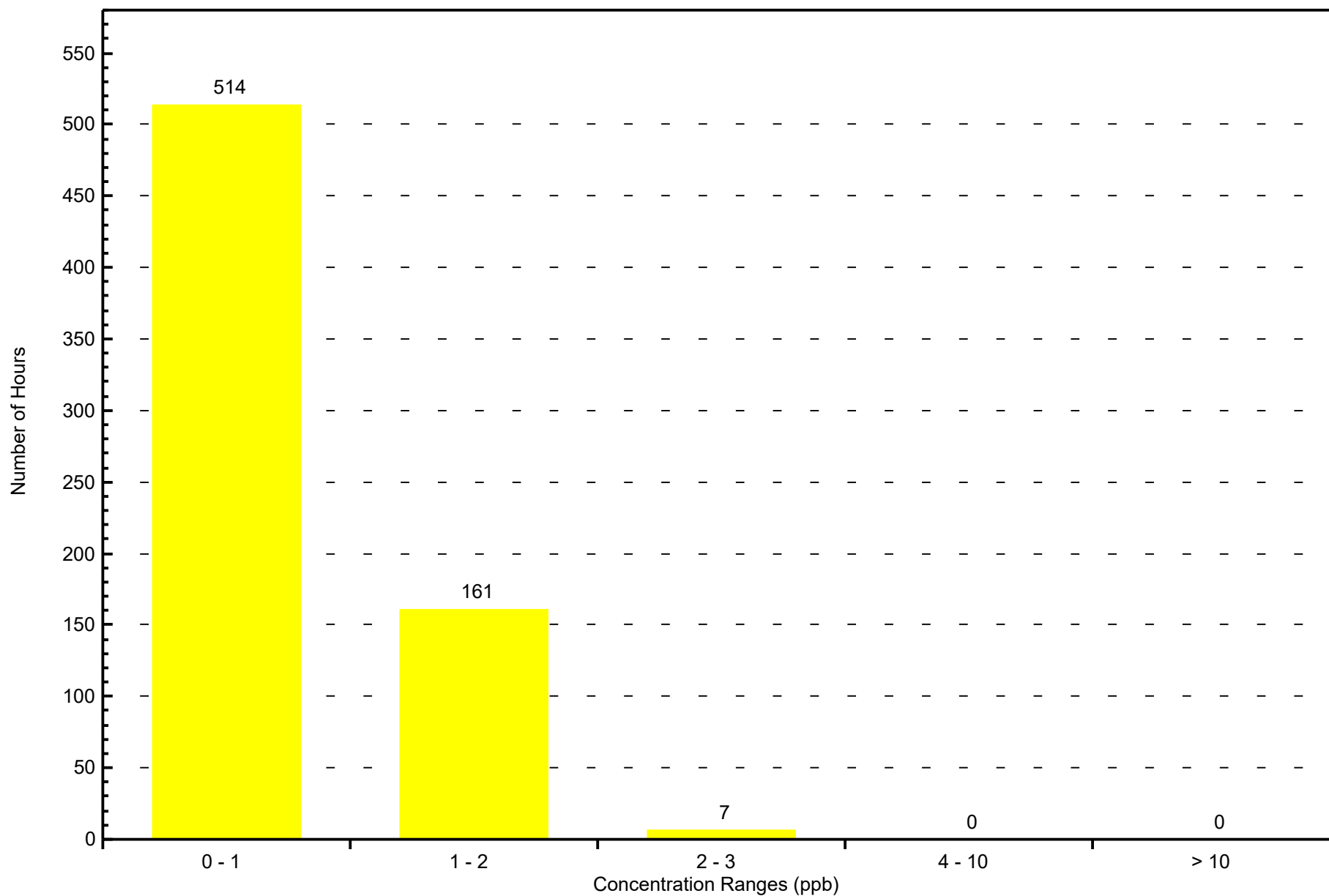
Hydrogen Sulphide ( $\text{H}_2\text{S}$ ) - ppb

Henry Pirker - March 2019



## Histogram of Hourly Averages

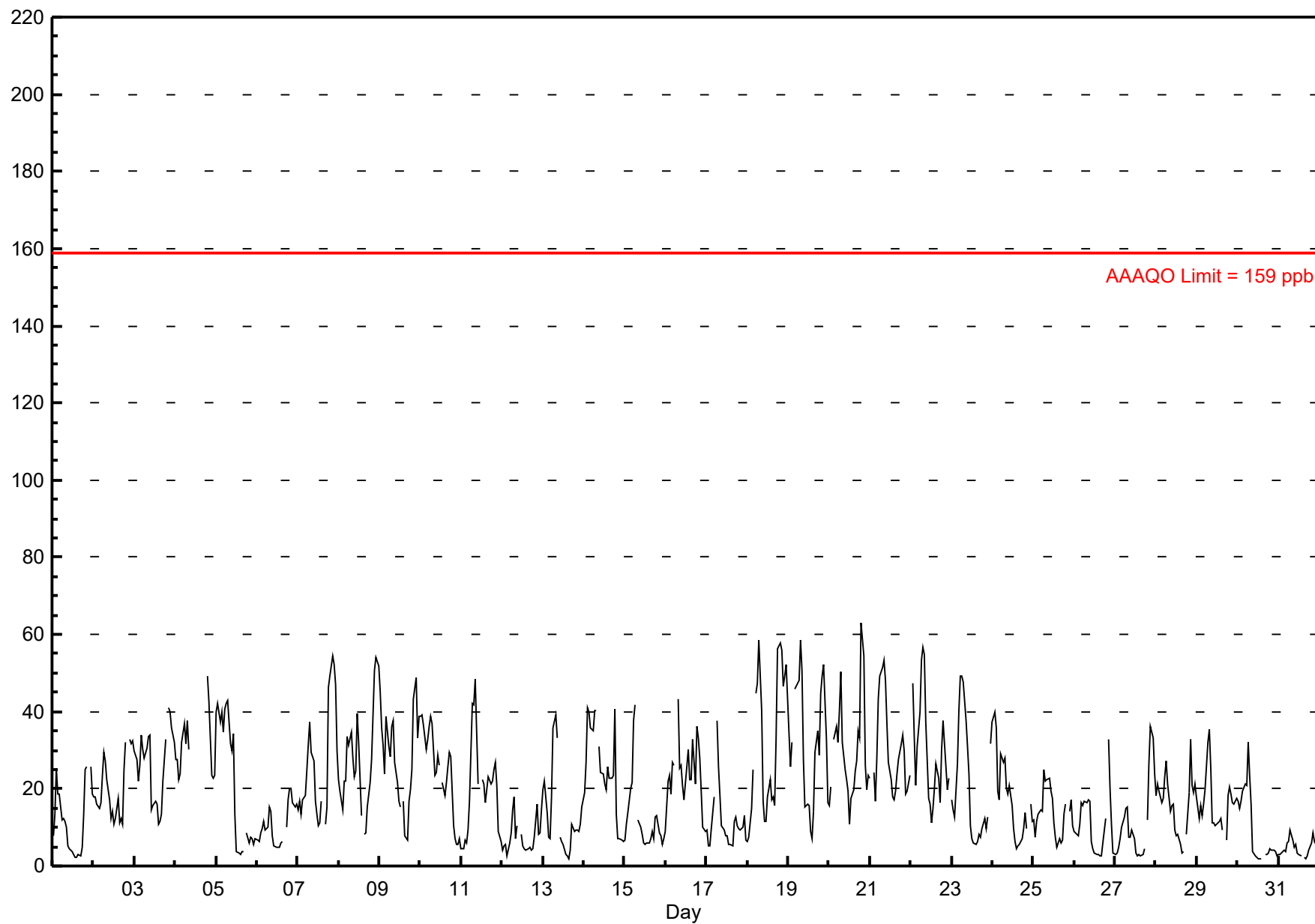
Hydrogen Sulphide (H<sub>2</sub>S) - ppb  
Henry Pirker - March 2019



## Hourly Averages

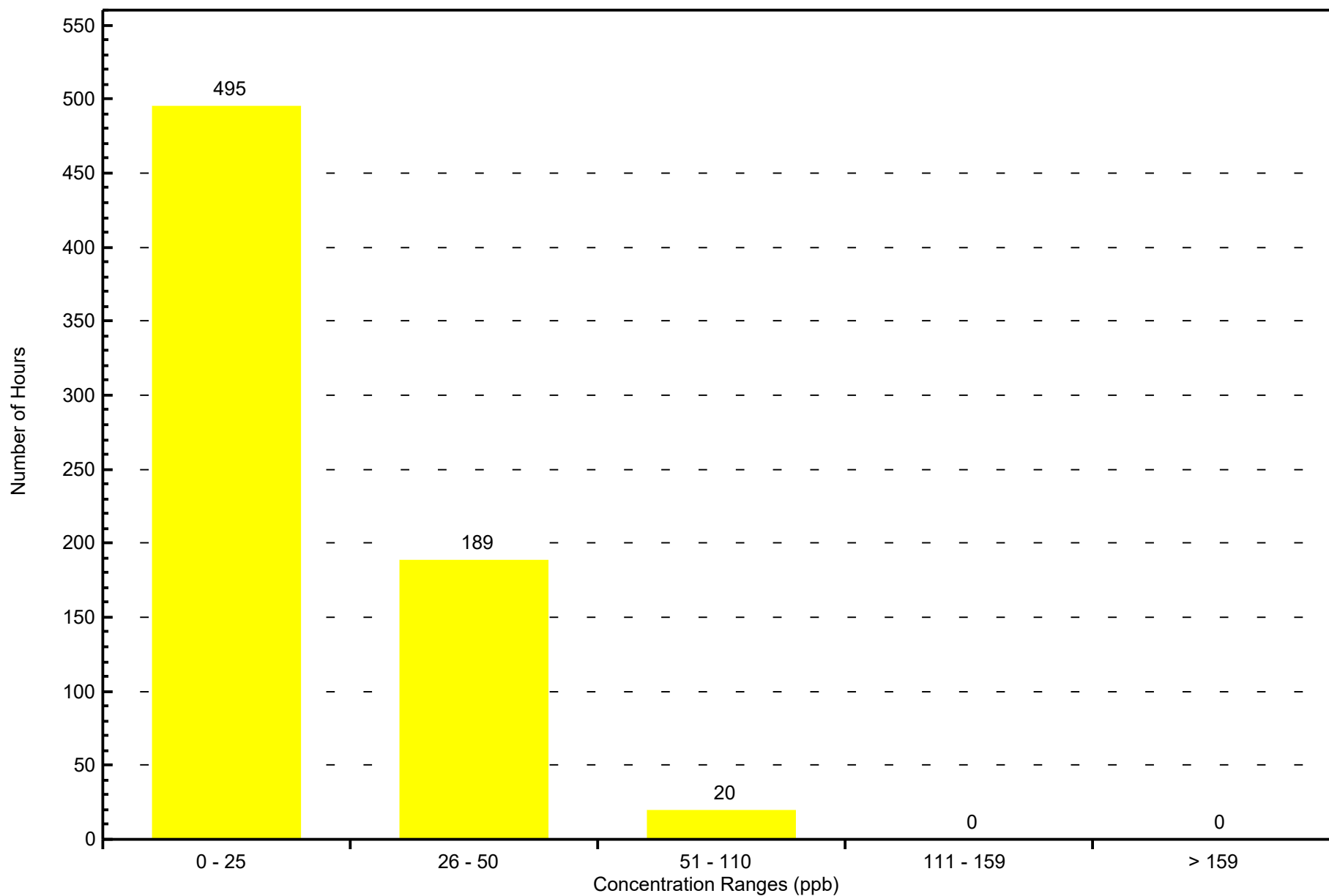
Nitrogen Dioxide (NO<sub>2</sub>) - ppb

Henry Pirker - March 2019



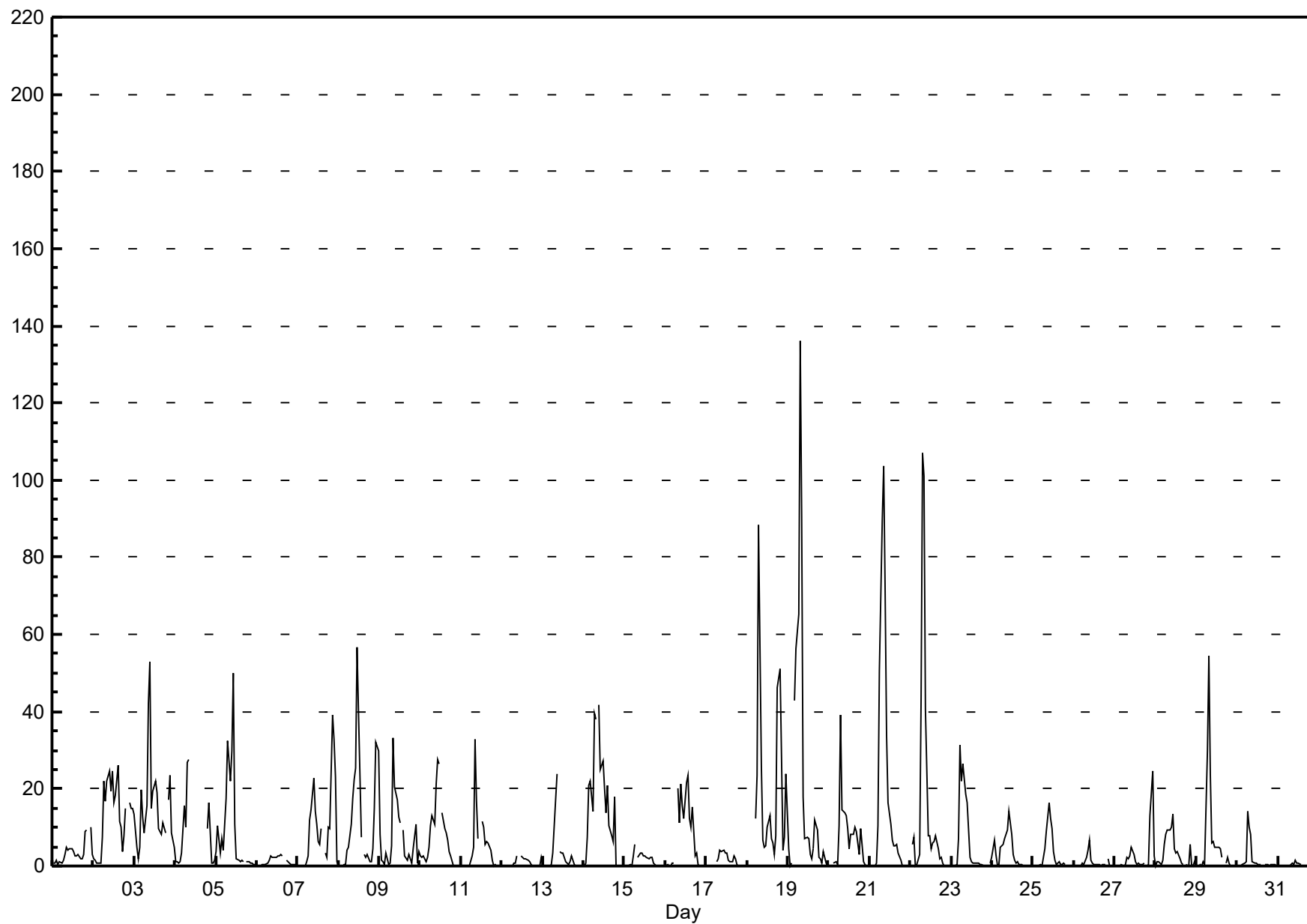
## Histogram of Hourly Averages

**Nitrogen Dioxide (NO<sub>2</sub>) - ppb**  
**Henry Pirker - March 2019**



## Hourly Averages

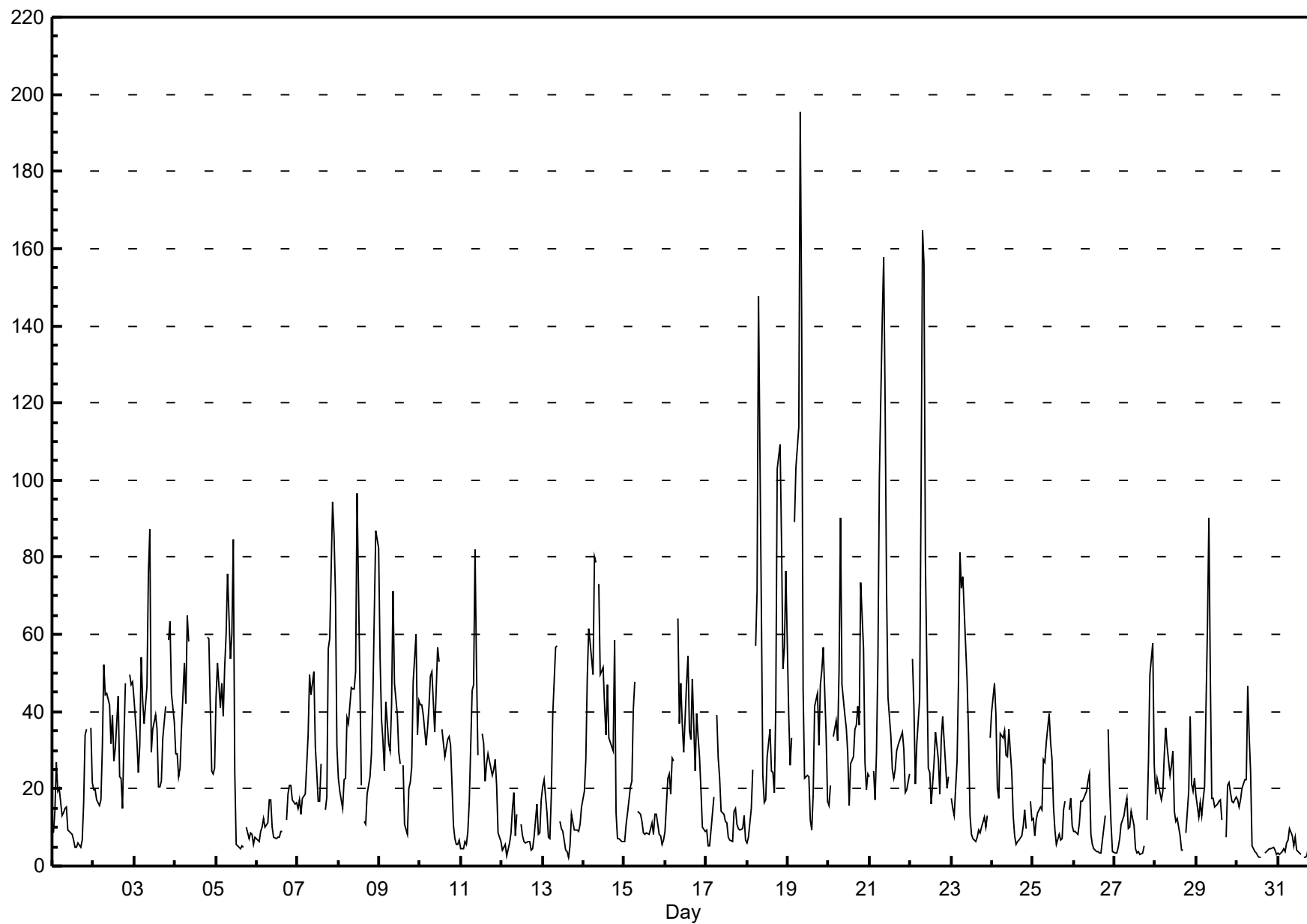
**Nitrogen Oxide (NO) - ppb**  
**Henry Pirker - March 2019**



## Hourly Averages

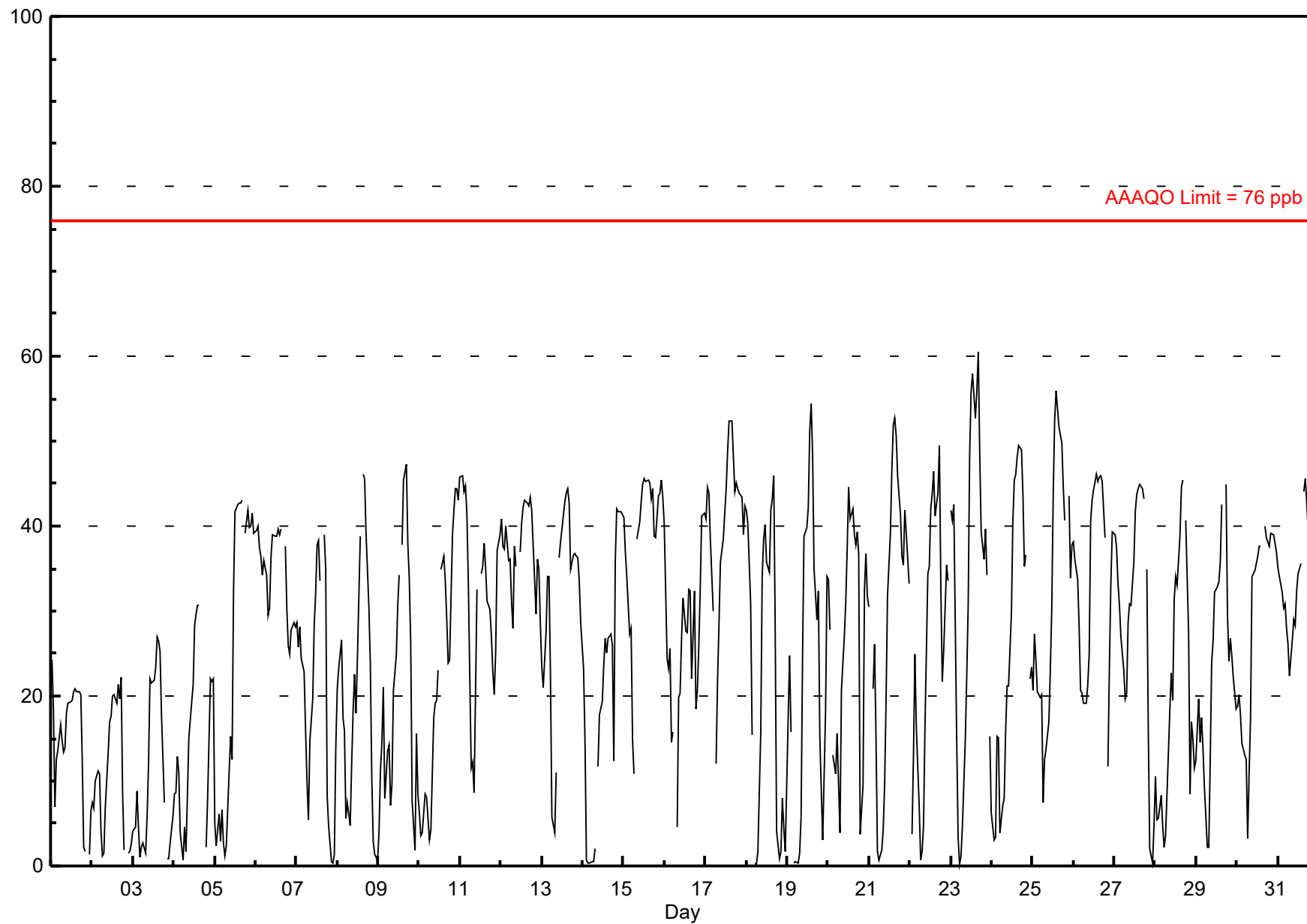
Oxides of Nitrogen (NO<sub>x</sub>) - ppb

Henry Pirker - March 2019



## Hourly Averages

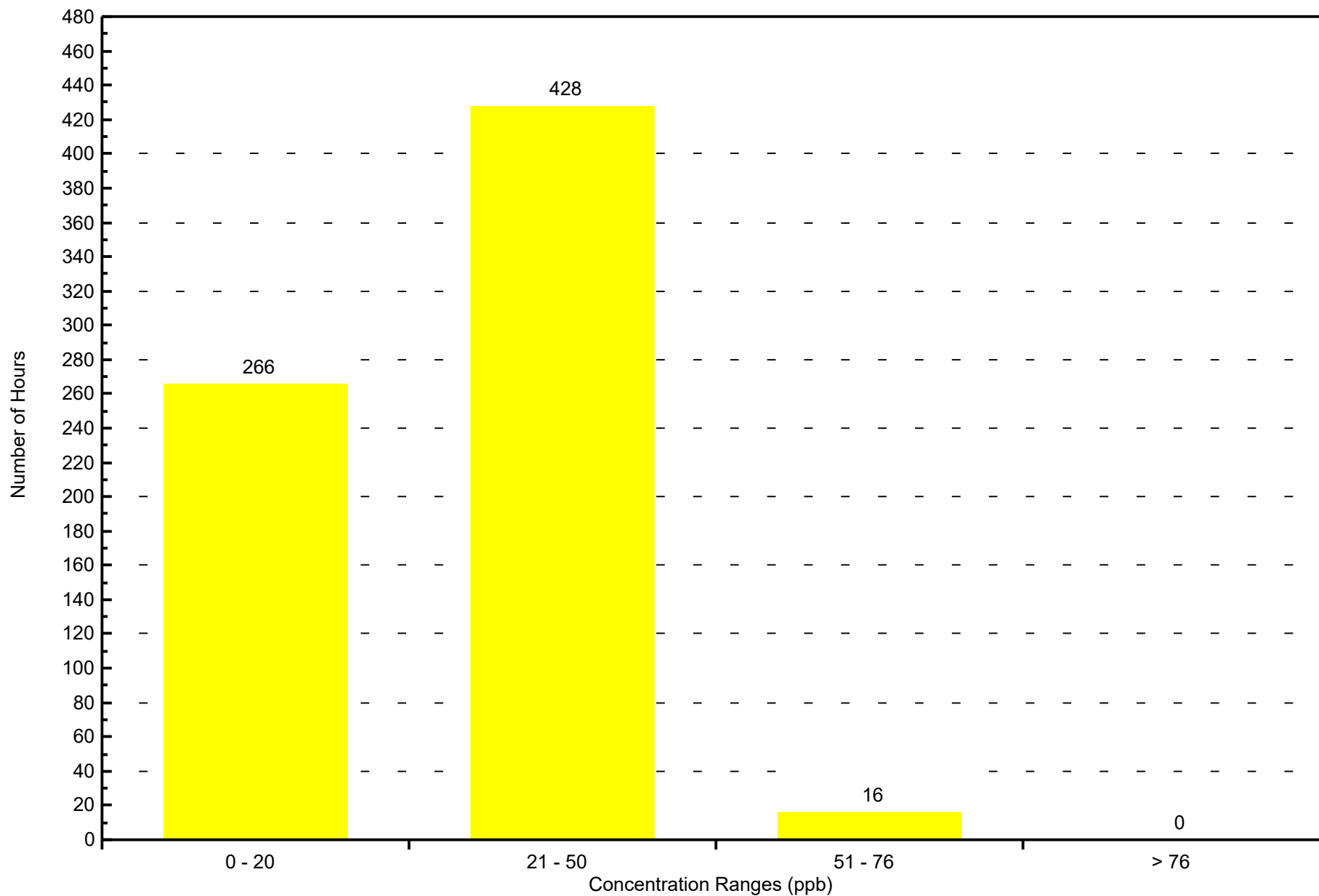
Ozone (O<sub>3</sub>) - ppb  
Henry Pirker - March 2019





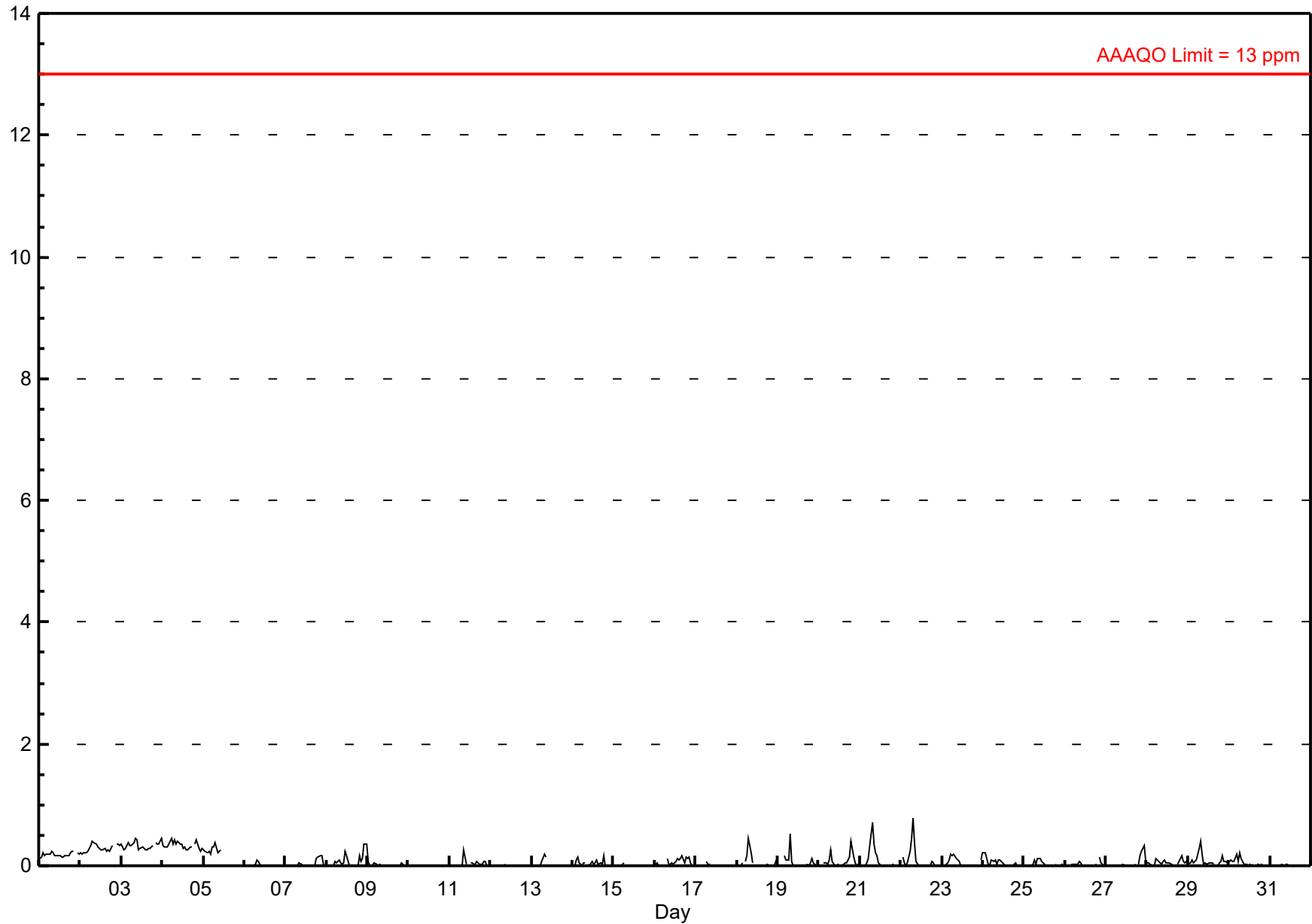
# Histogram of Hourly Averages

Ozone (O<sub>3</sub>) - ppb  
Henry Pirker - March 2019



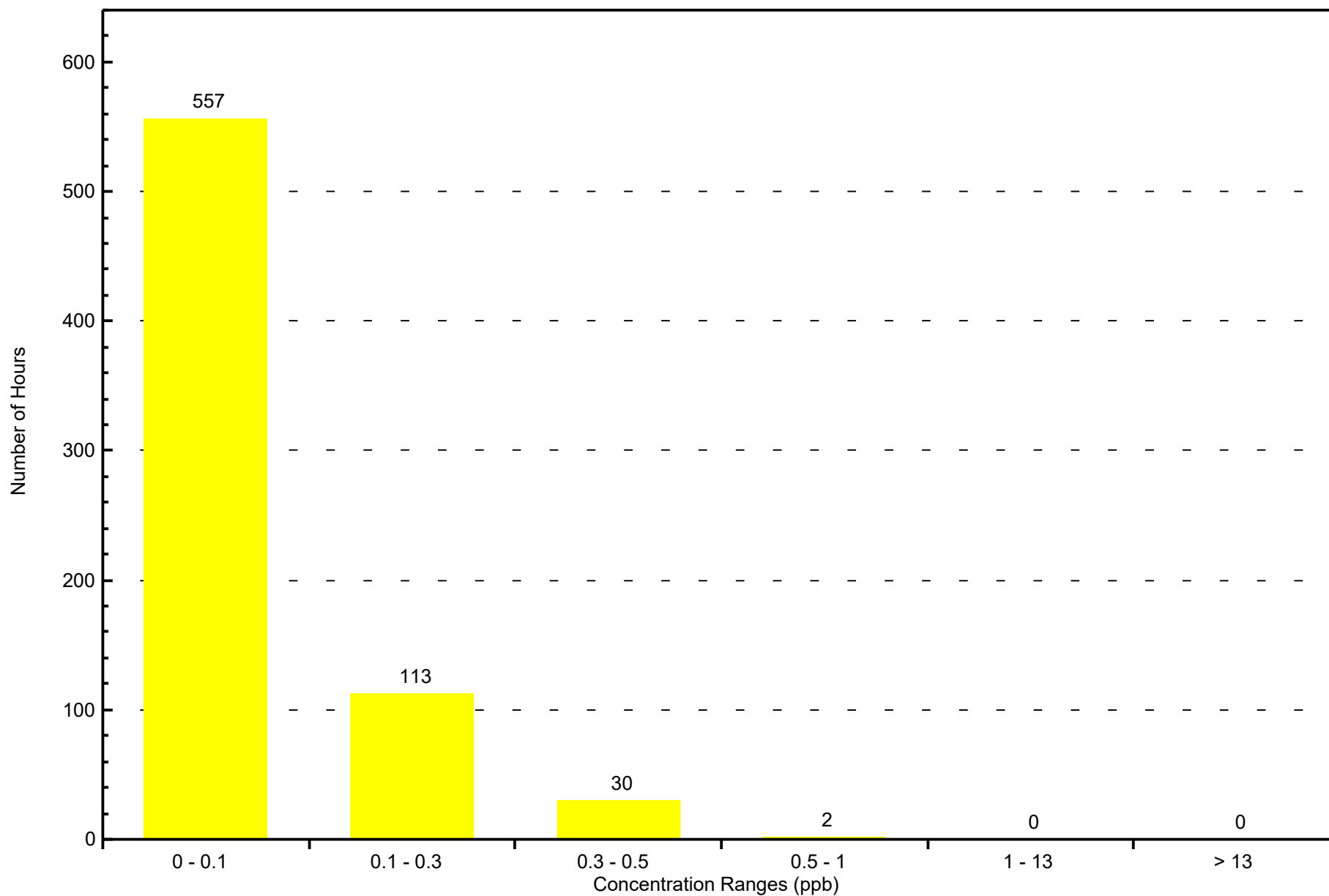
## Hourly Averages

**Carbon Monoxide (CO) - ppm**  
**Henry Pirker - March 2019**



## Histogram of Hourly Averages

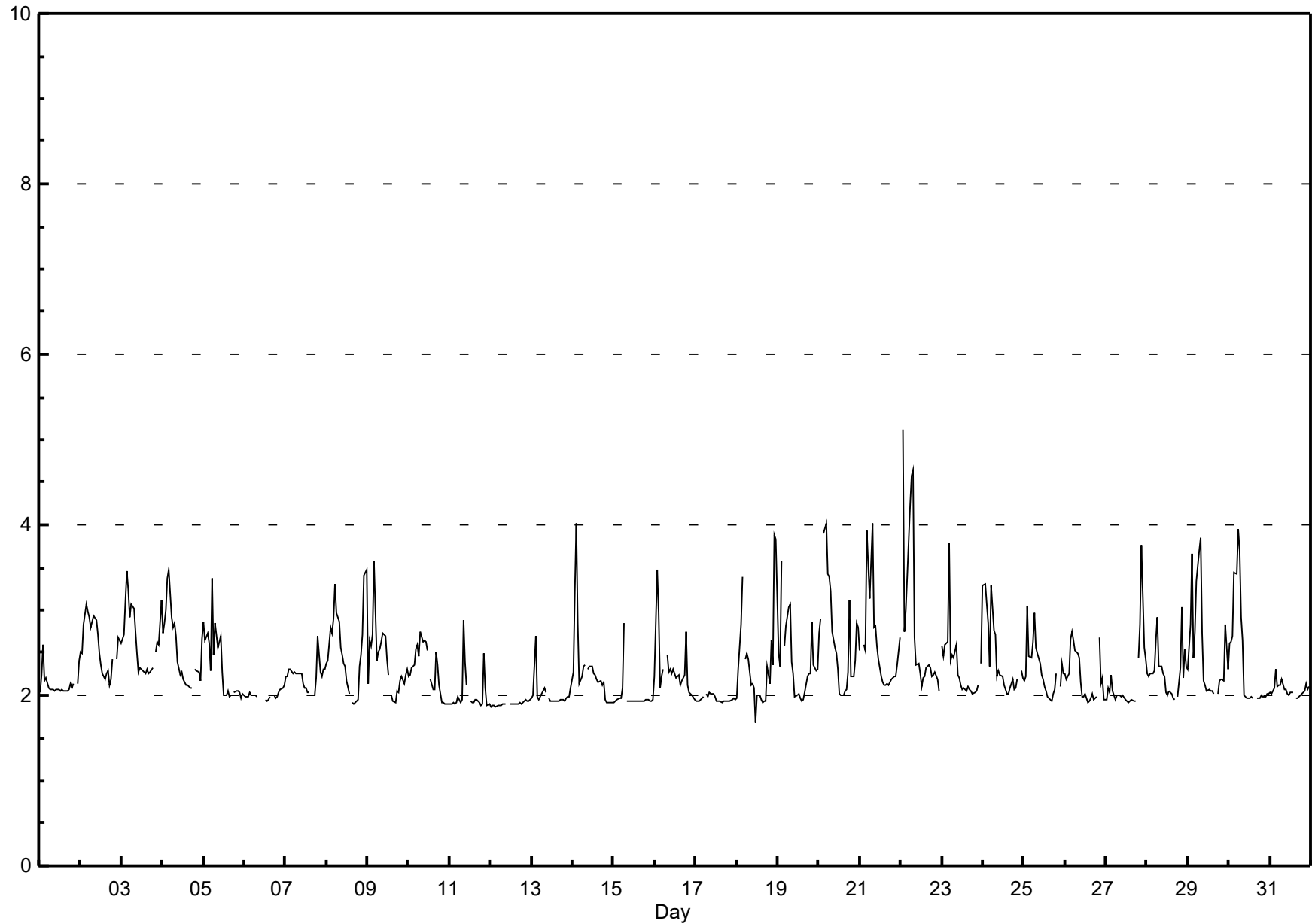
**Carbon Monoxide (CO) - ppm**  
**Henry Pirker - March 2019**



## Hourly Averages

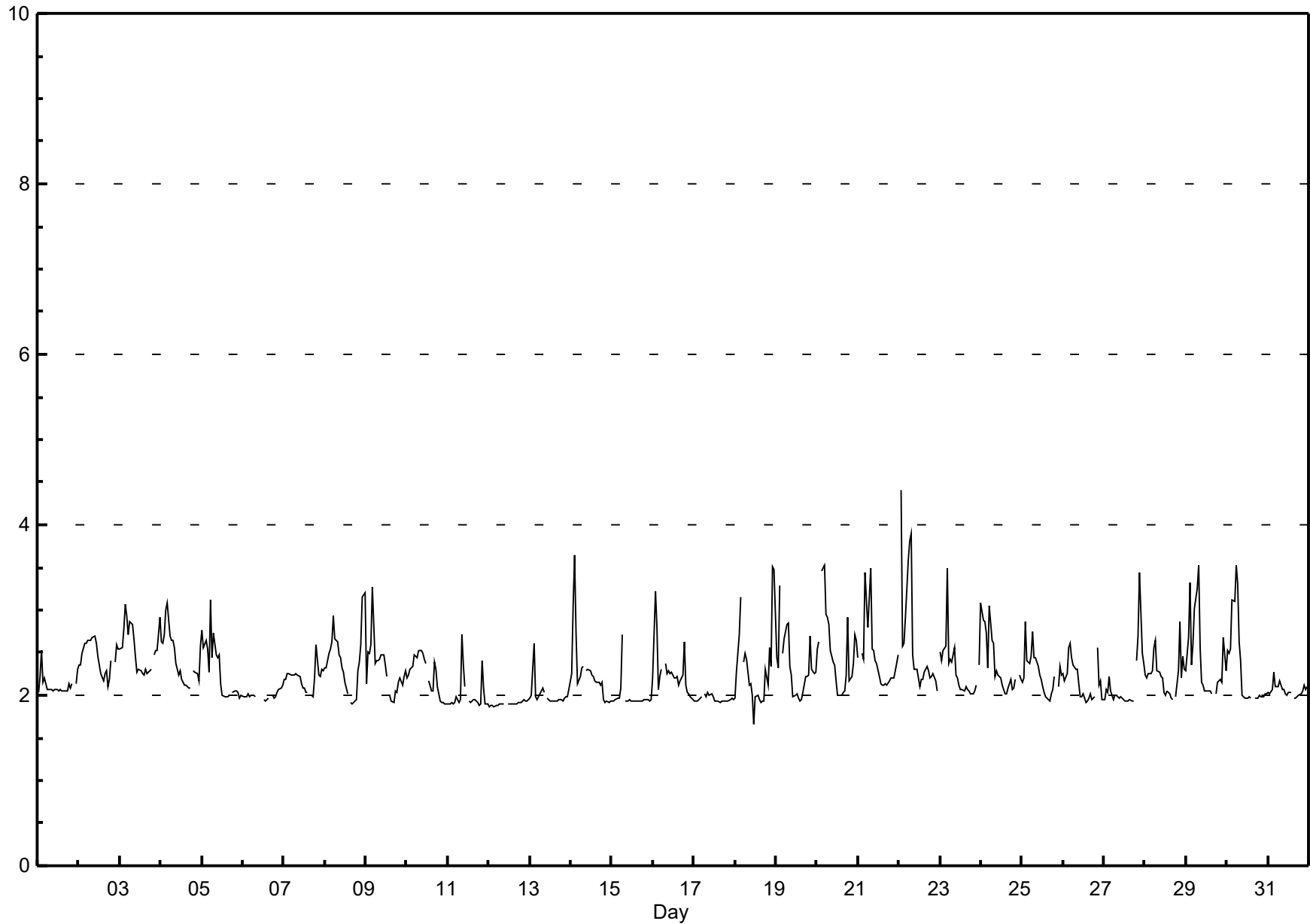
Total Hydrocarbons (THC) - ppm

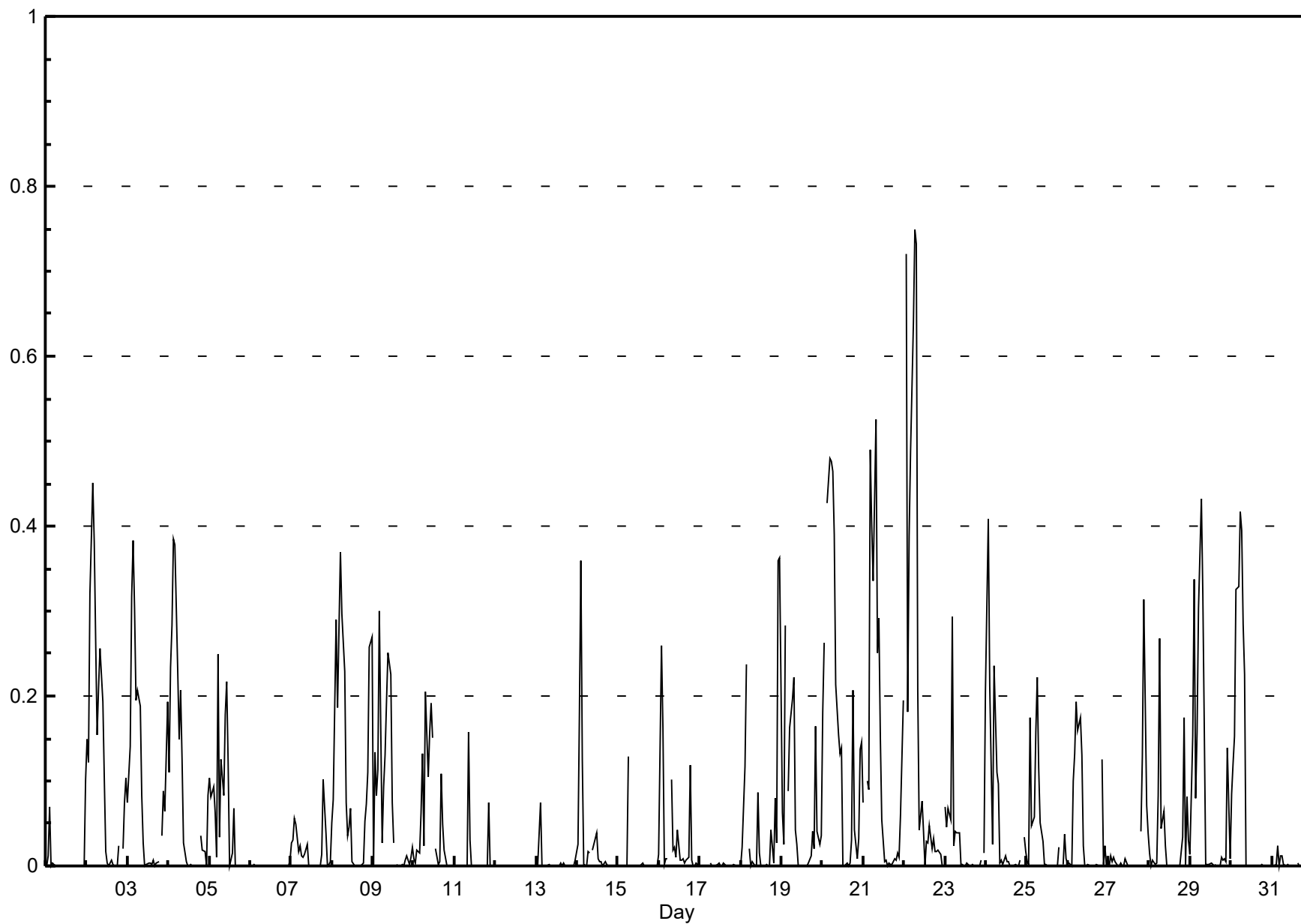
Henry Pirker - March 2019

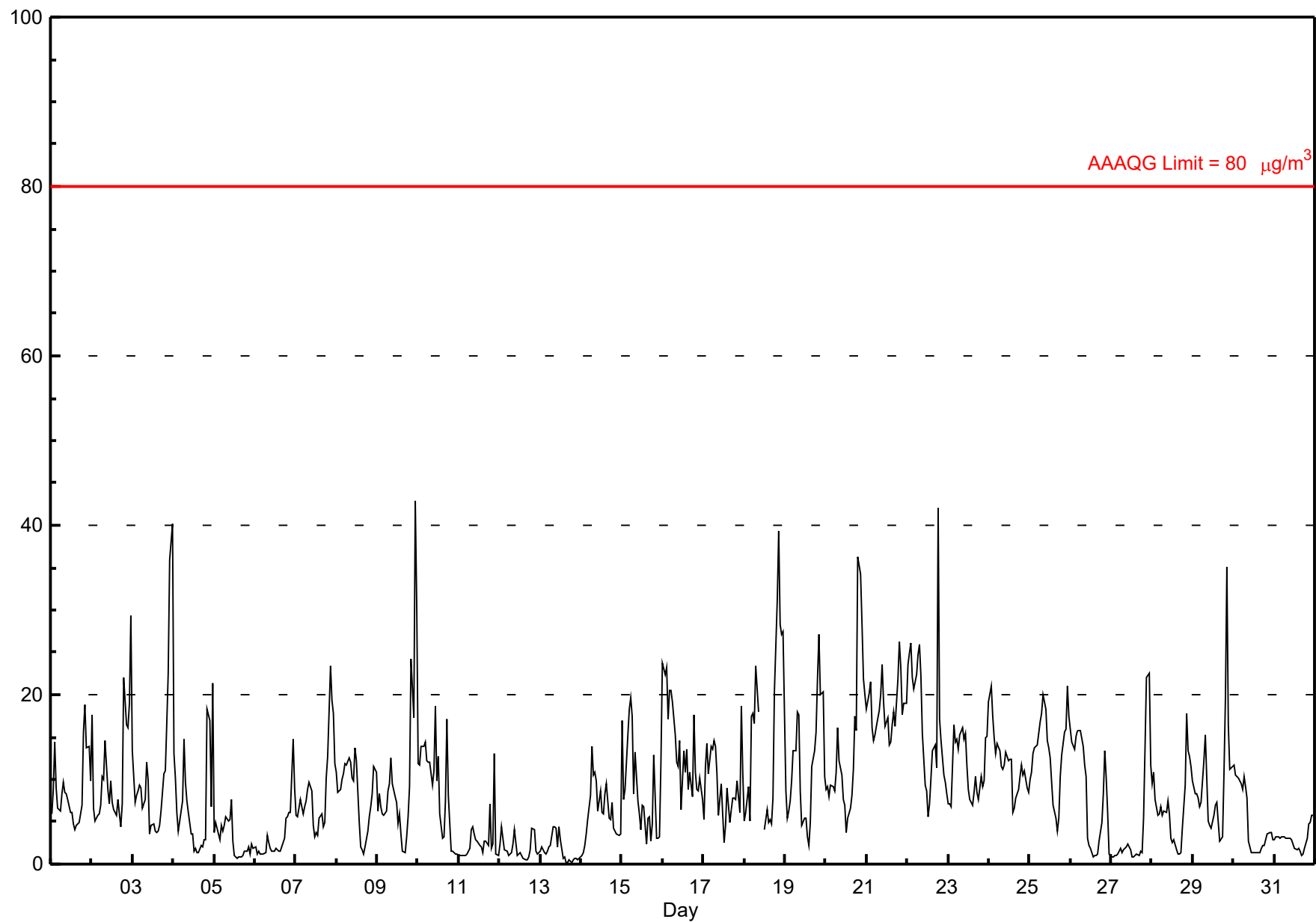


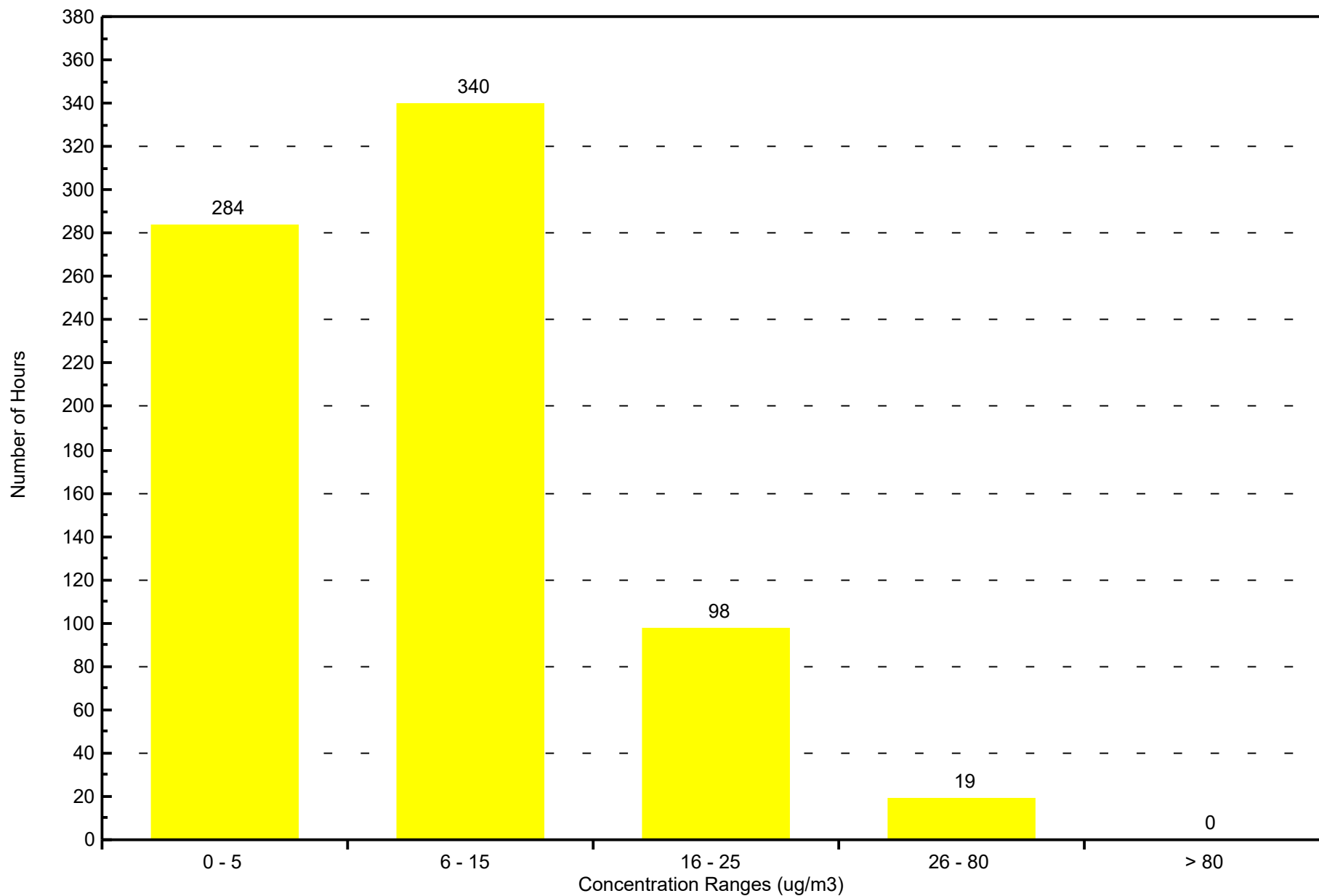
## Hourly Averages

**Methane (CH<sub>4</sub>) - ppm**  
**Henry Pirker - March 2019**







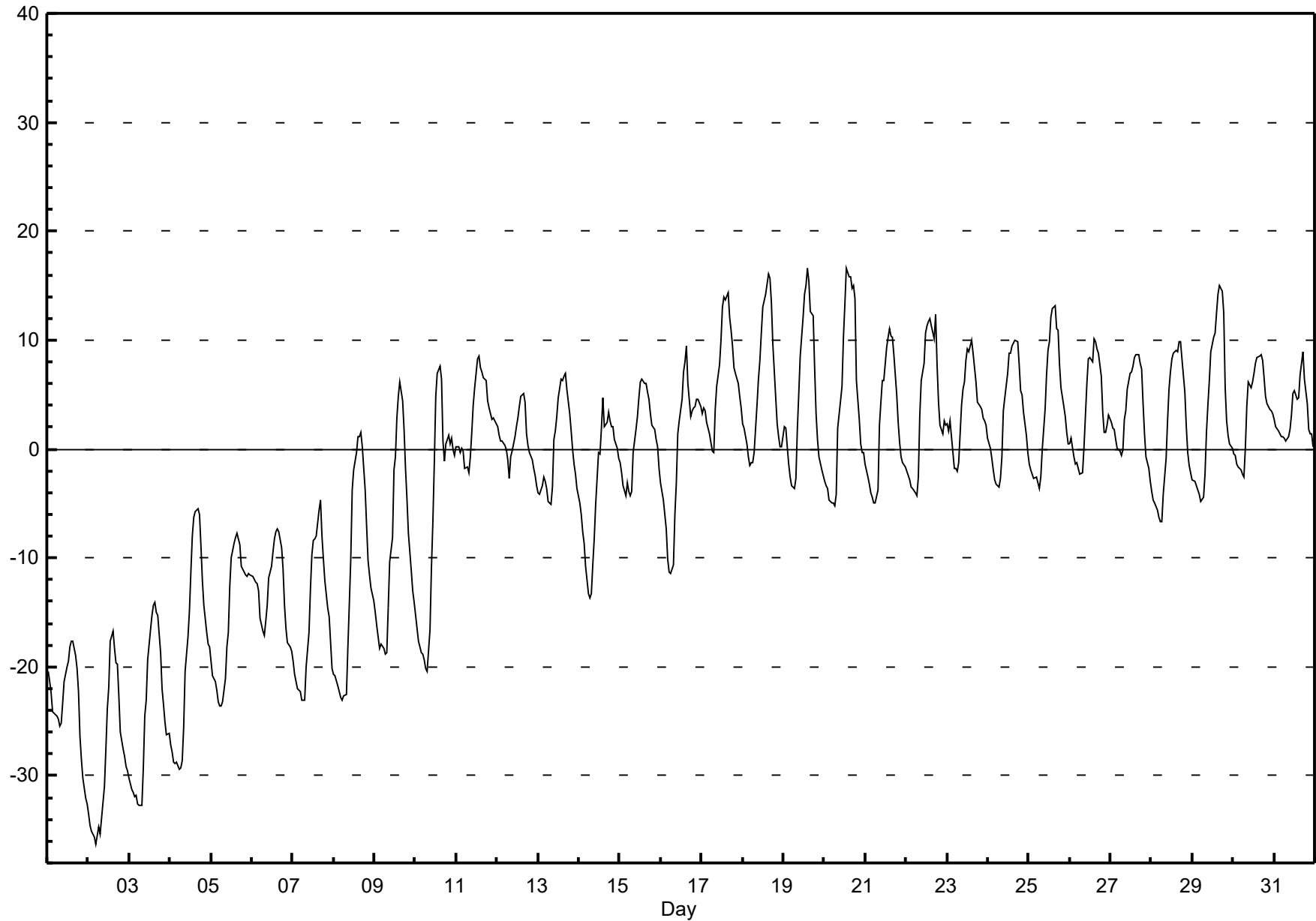




## Hourly Averages

External Temperature (ET) - °C

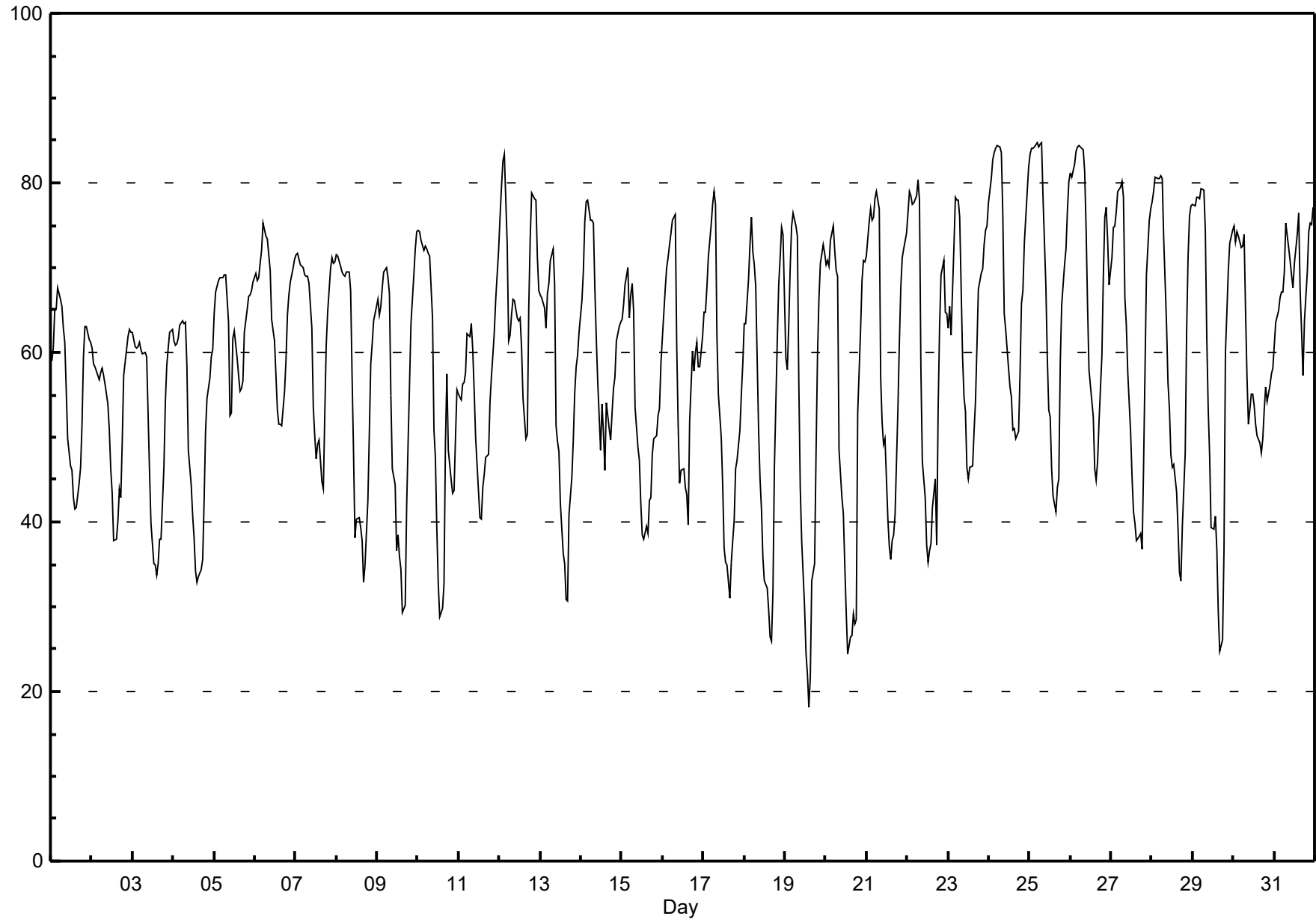
Henry Pirker - March 2019



## Hourly Averages

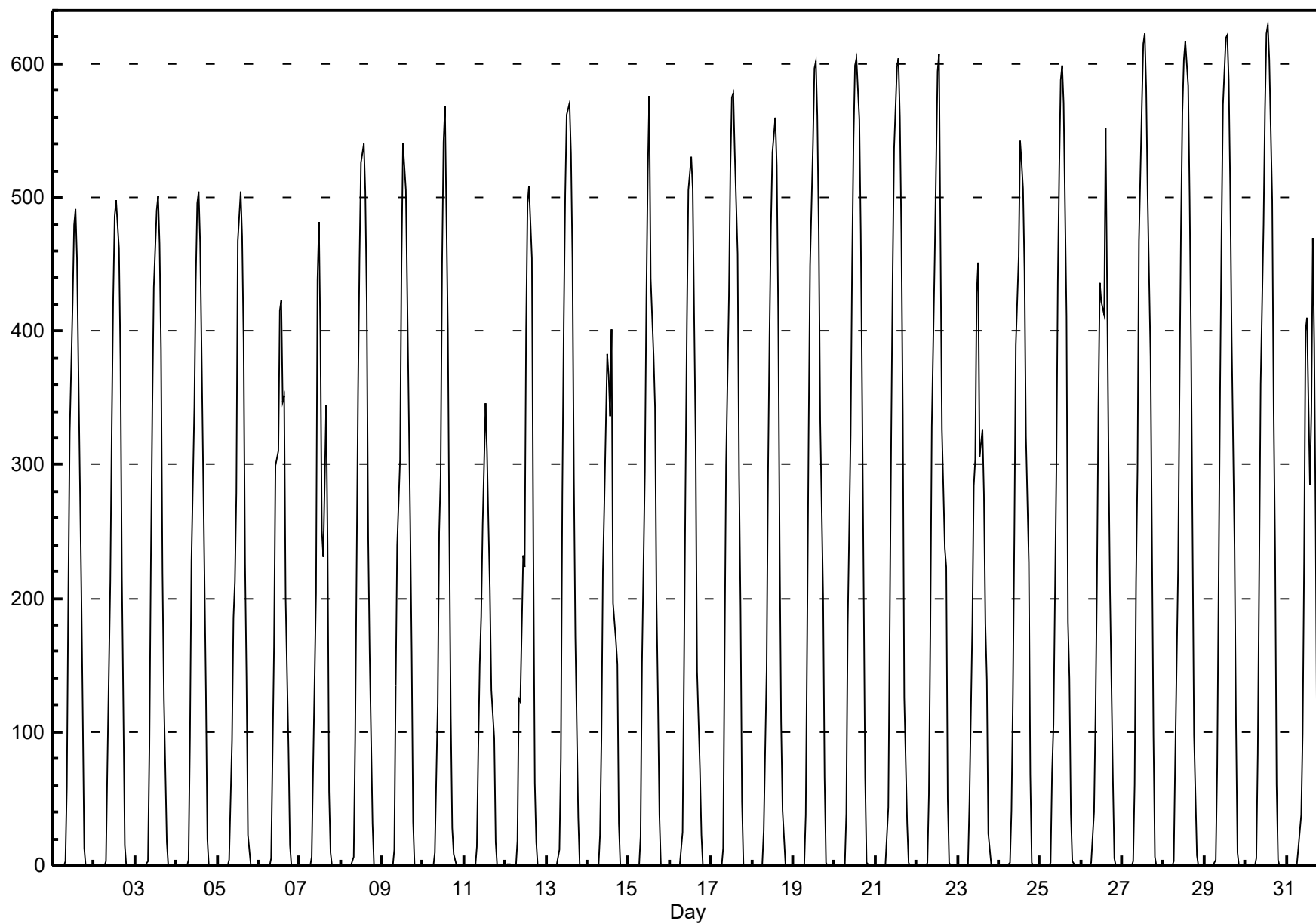
Relative Humidity (RH) - %

Henry Pirker - March 2019



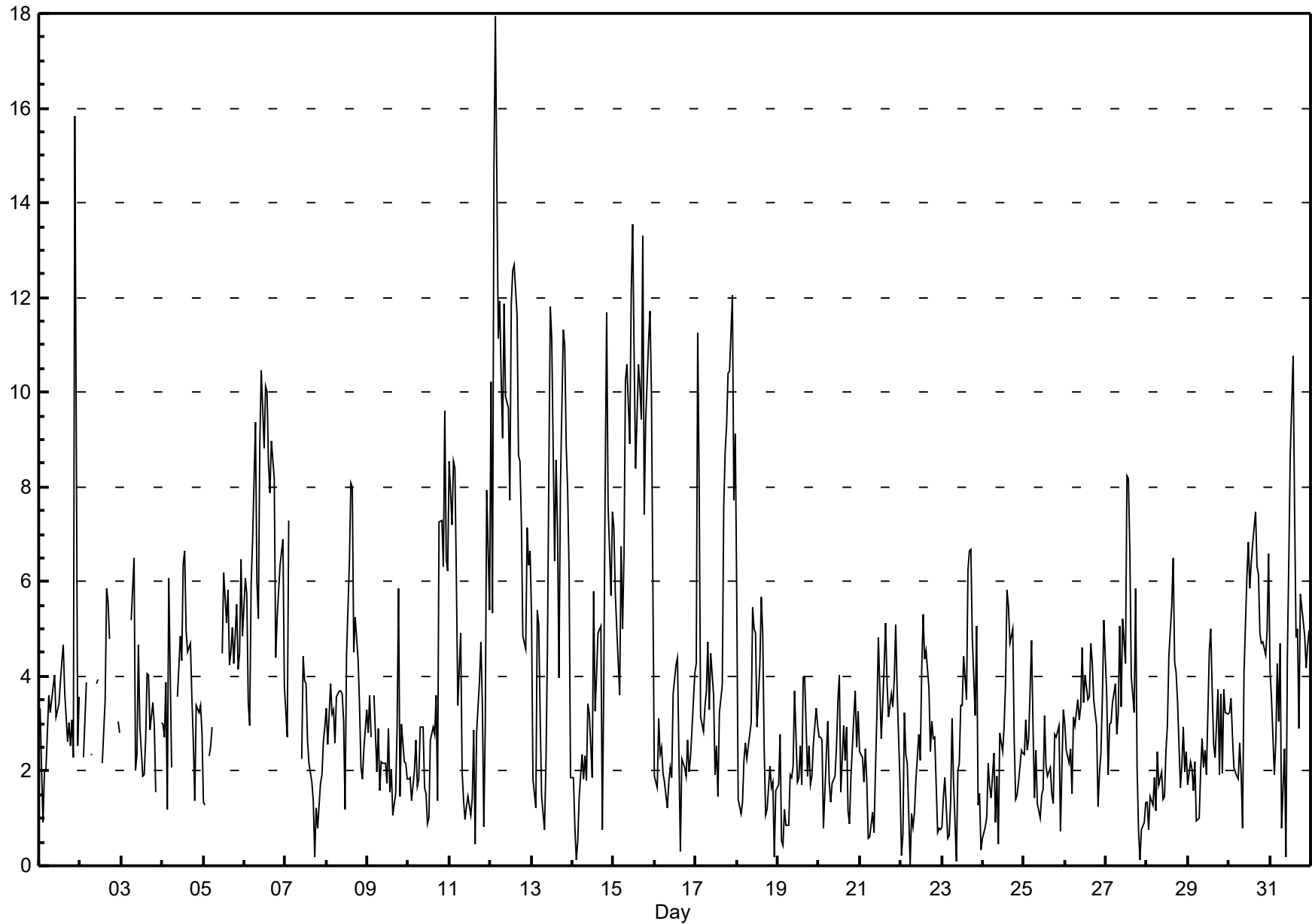
## Hourly Averages

Solar Radiation (SR) - W/m<sup>2</sup>  
Henry Pirker - March 2019



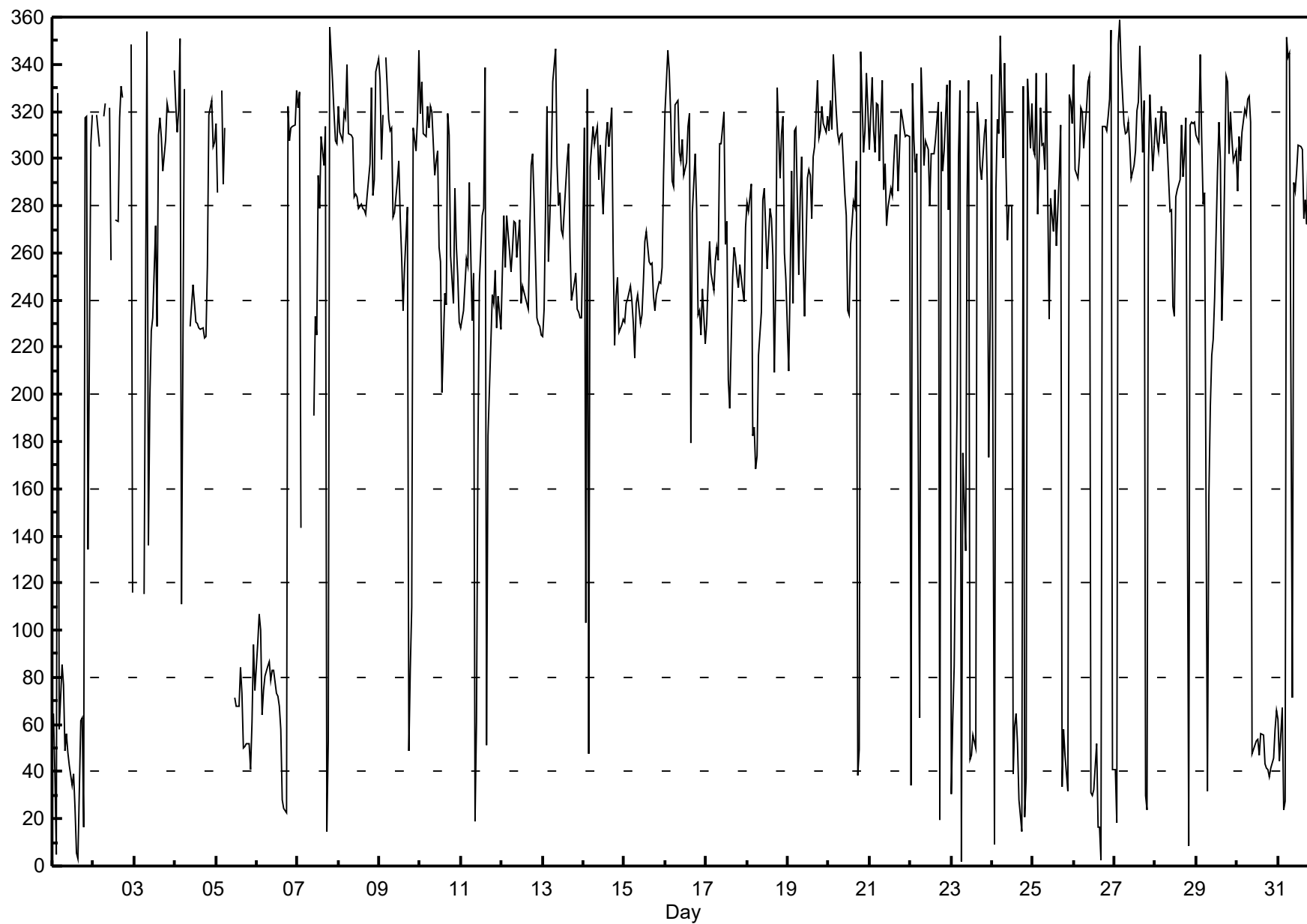
## Hourly Averages

Wind Speed (WS) - km/h  
Henry Pirker - March 2019



## Hourly Averages

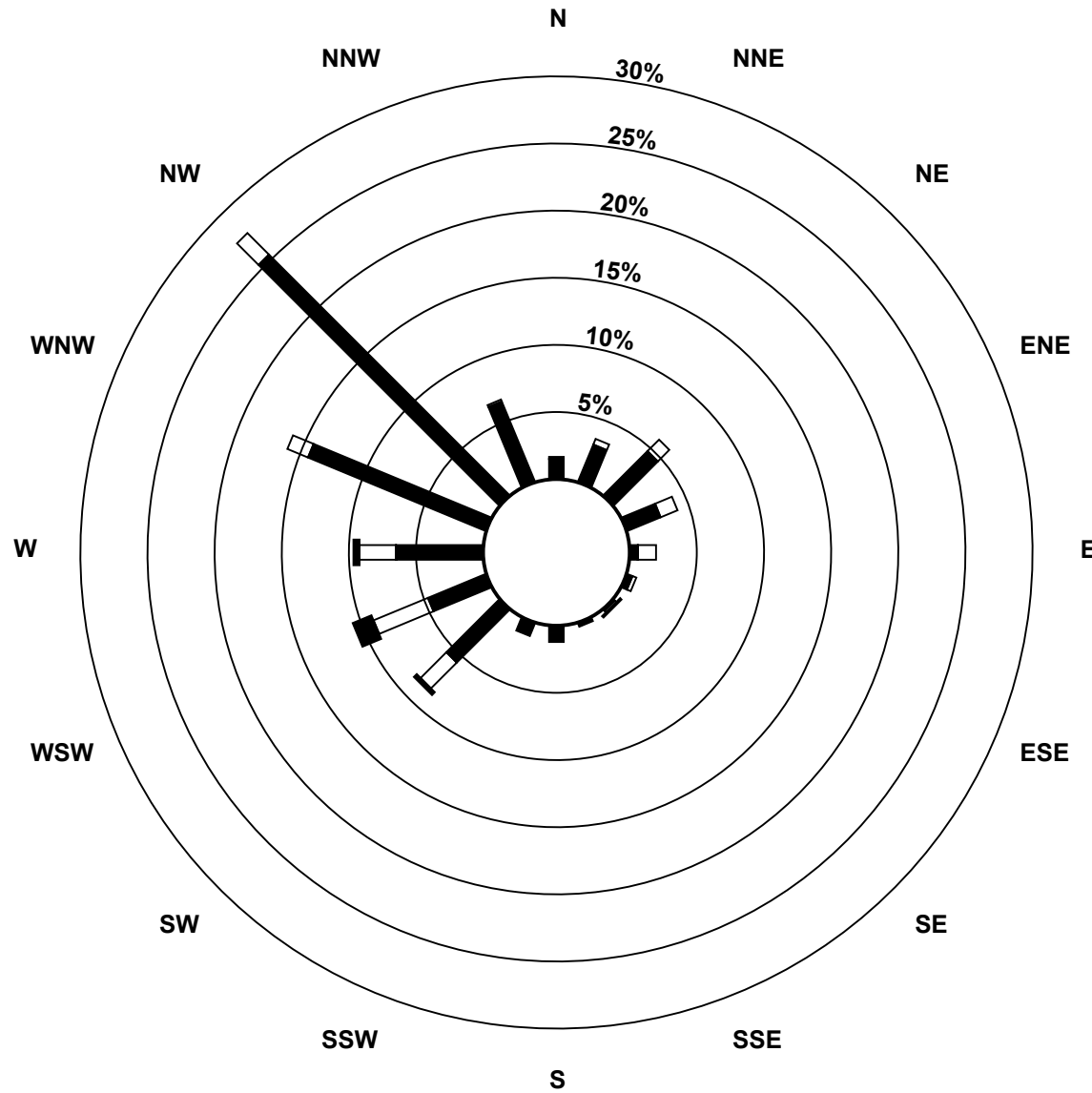
Wind Direction (WD) - deg  
Henry Pirker - March 2019



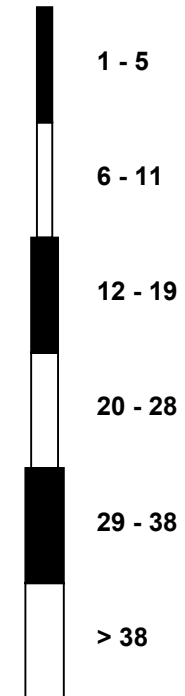
## Wind Rose

Wind Speed (WS) (km/h)

Henry Pirker - March 2019

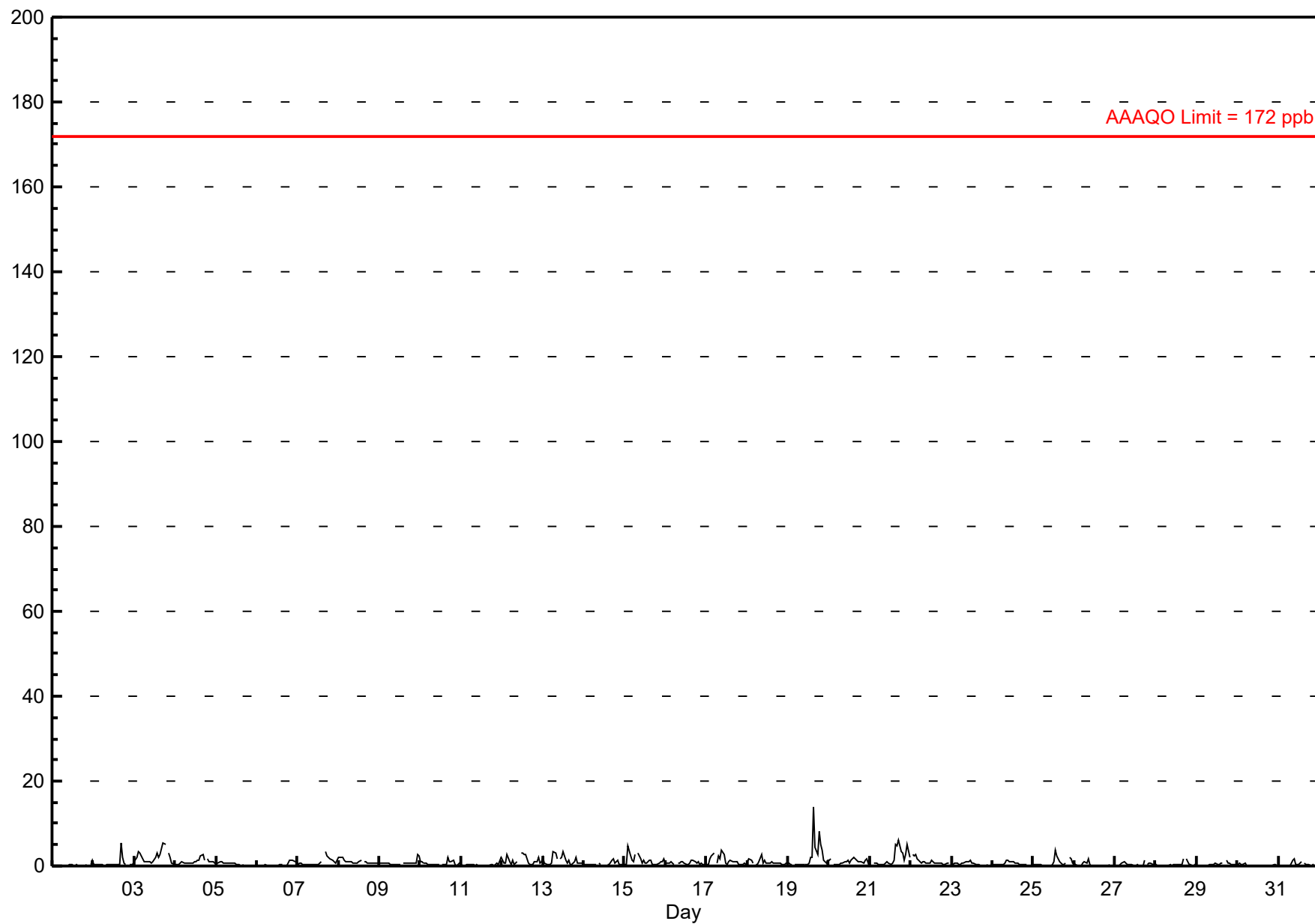


Wind Speed Classes (km/h)



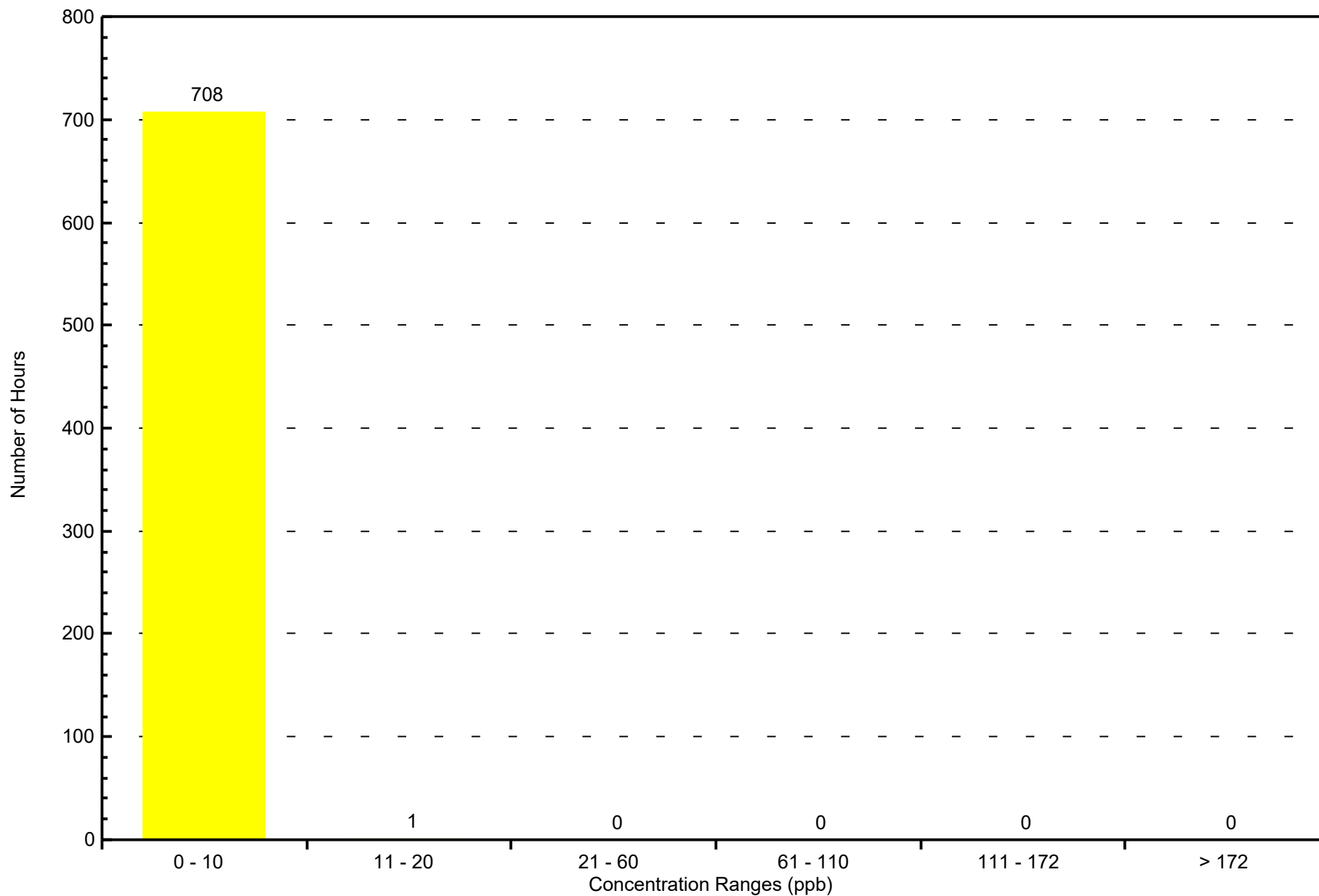
## Hourly Averages

**Sulphur Dioxide (SO<sub>2</sub>) - ppb**  
**Smoky Heights - March 2019**



## Histogram of Hourly Averages

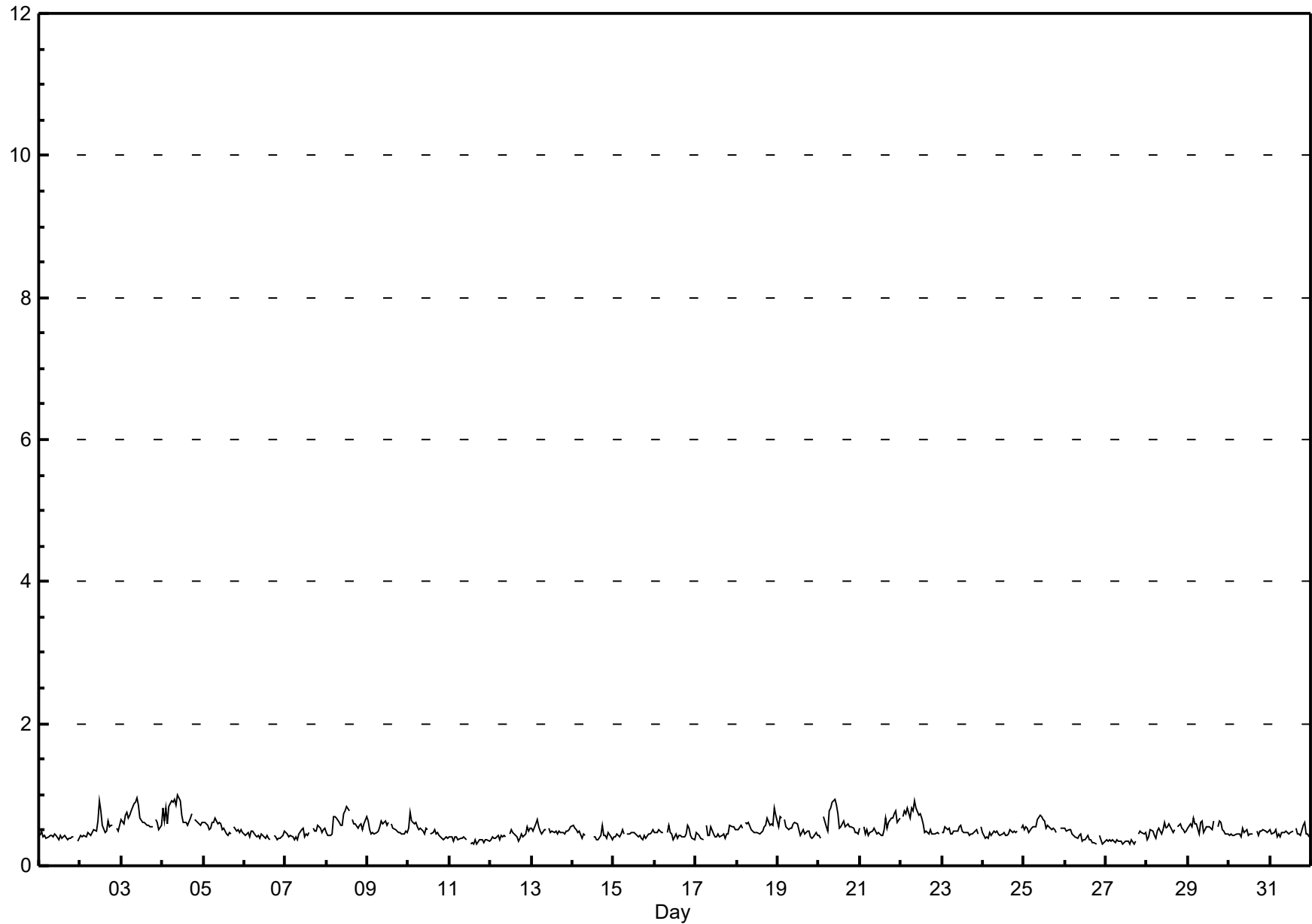
**Sulphur Dioxide (SO<sub>2</sub>) - ppb**  
**Smoky Heights - March 2019**

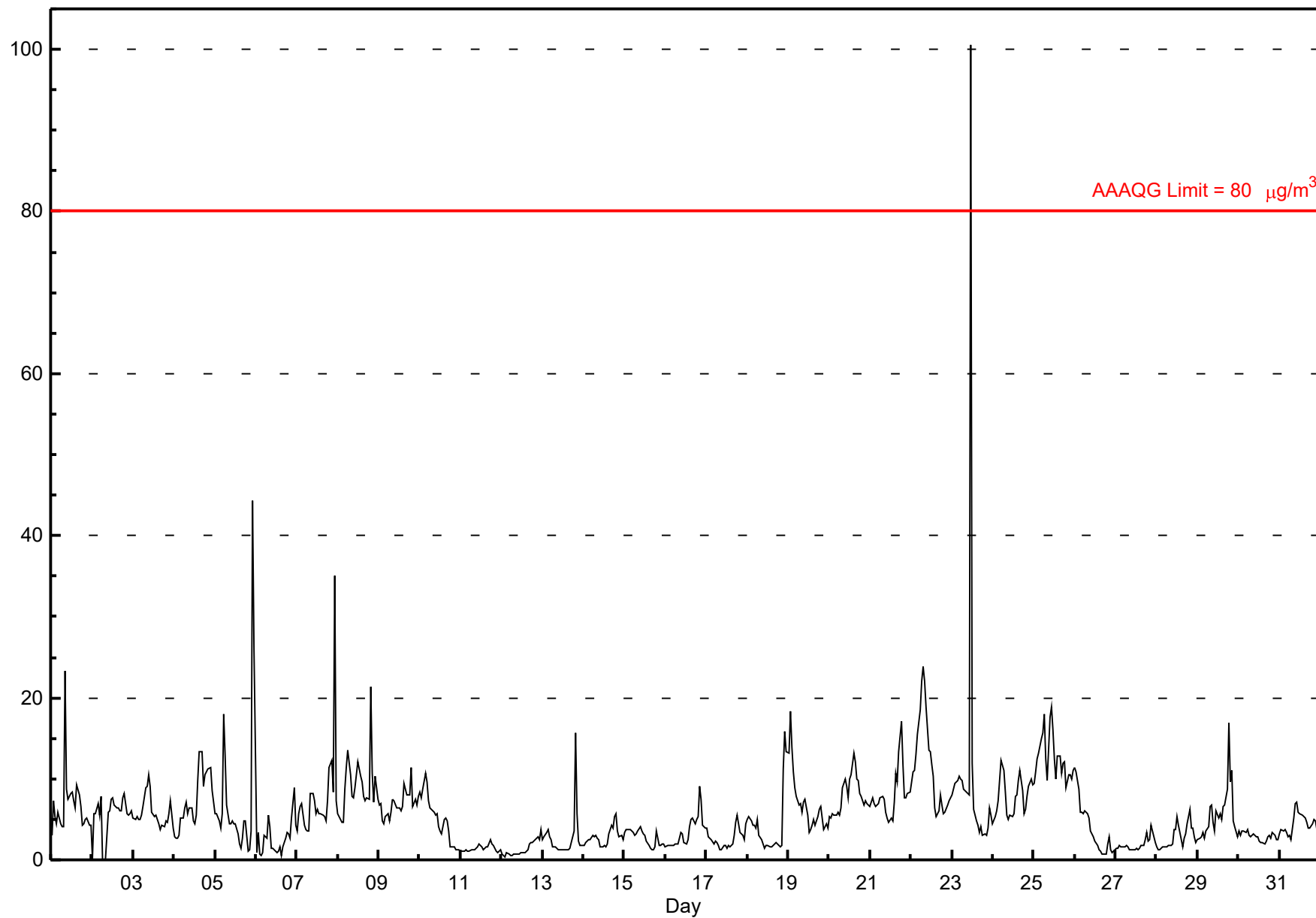


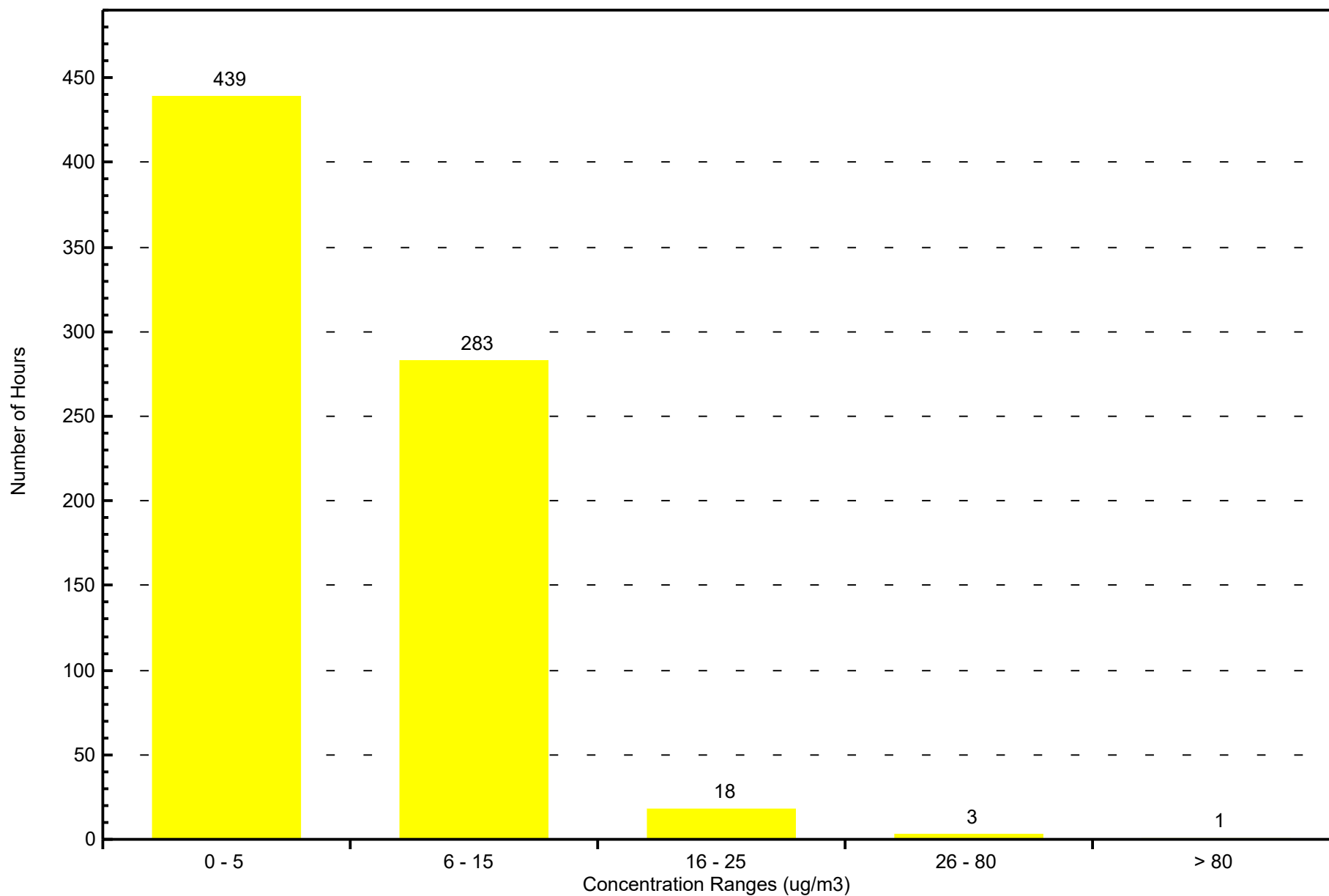


## Hourly Averages

Total Reduced Sulphur (TRS) - ppb  
Smoky Heights - March 2019



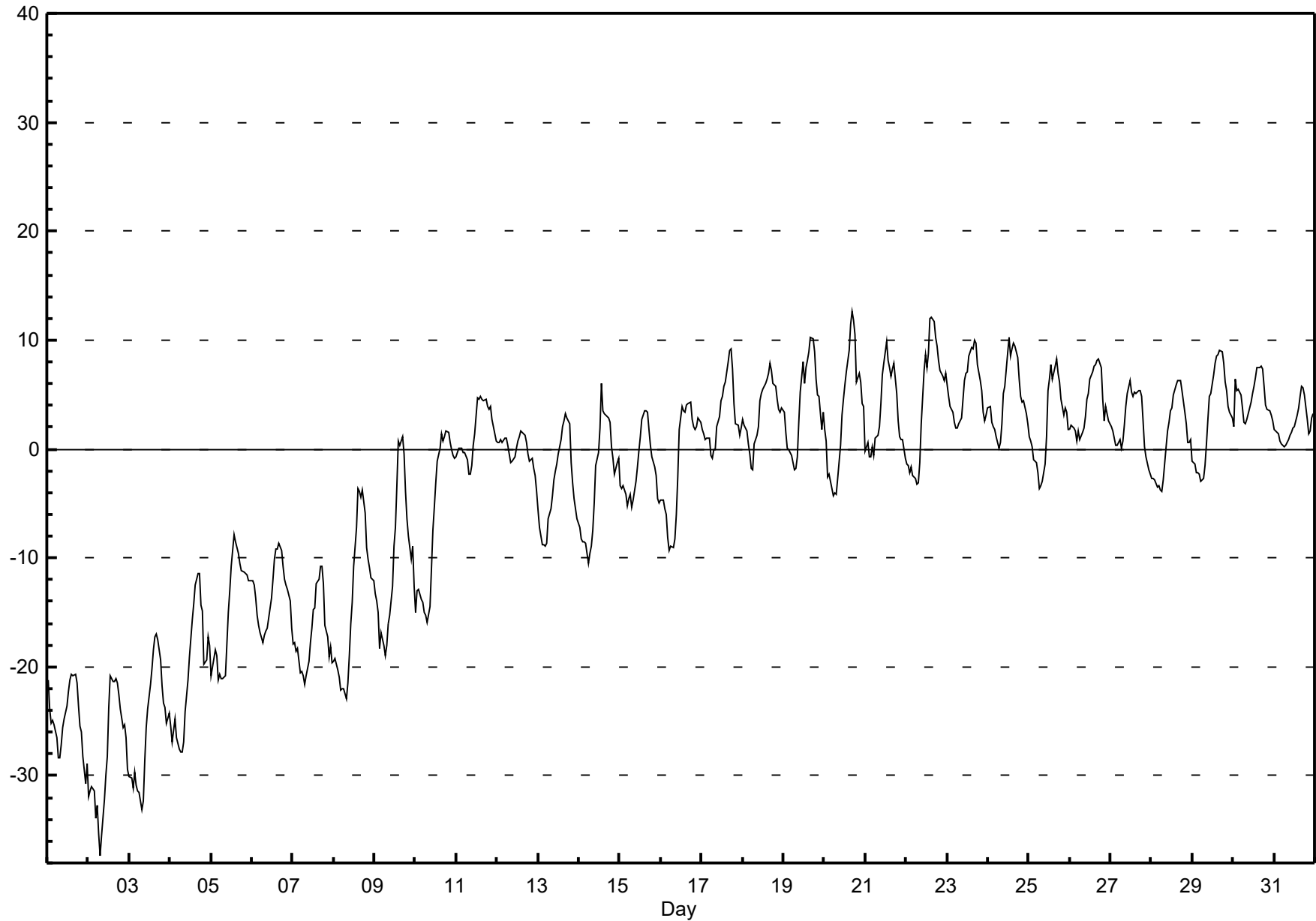




## Hourly Averages

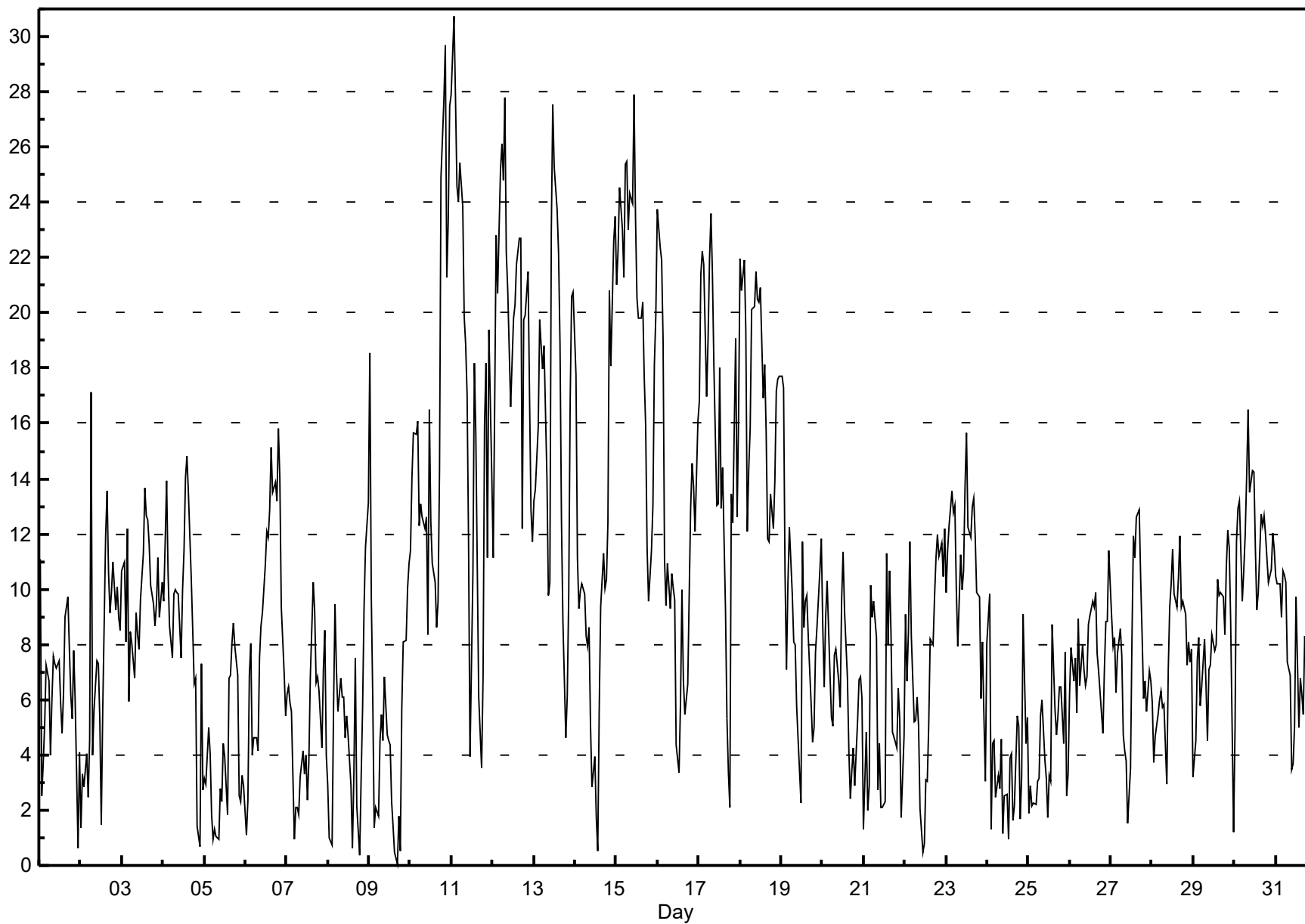
External Temperature (ET) - °C

Smoky Heights - March 2019



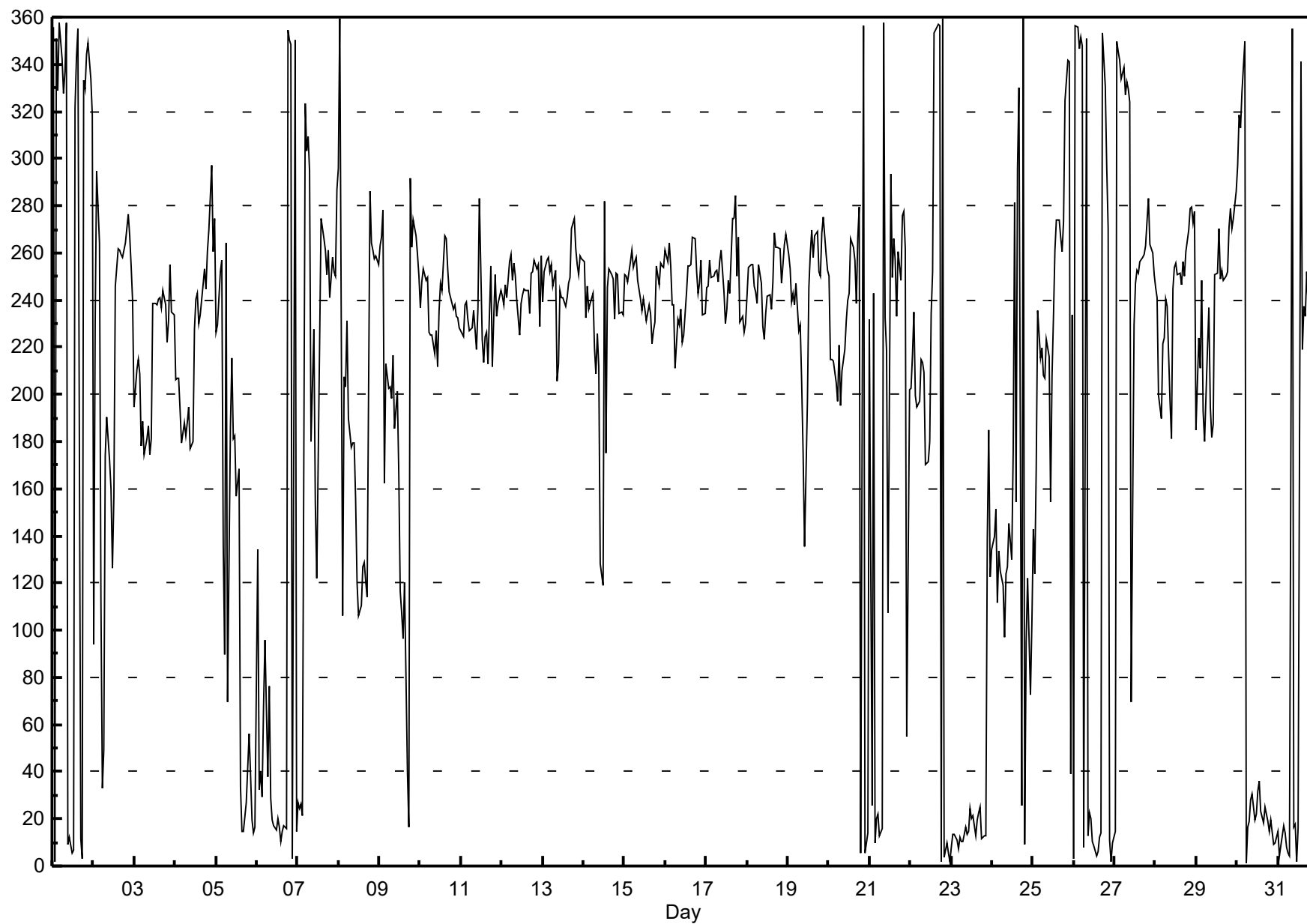
## Hourly Averages

**Wind Speed (WS) - km/h**  
**Smoky Heights - March 2019**



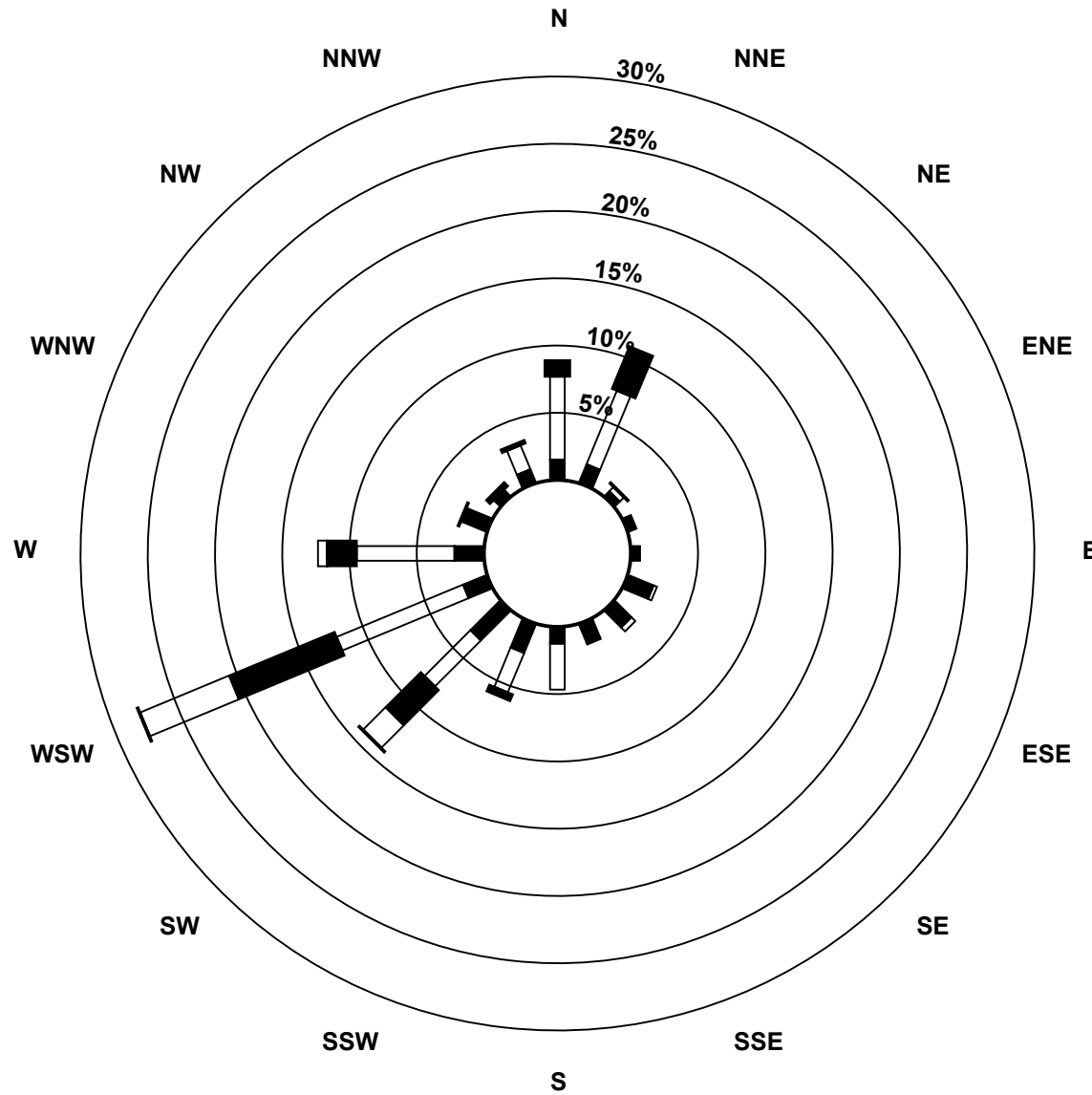
## Hourly Averages

Wind Direction (WD) - deg  
Smoky Heights - March 2019

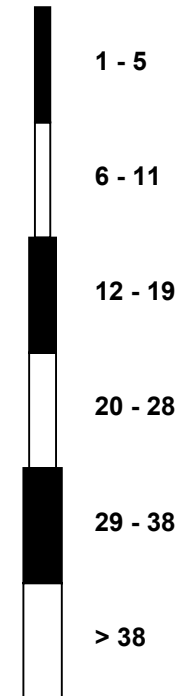


## Wind Rose

Wind Speed (WS) (km/h)  
Smoky Heights - March 2019



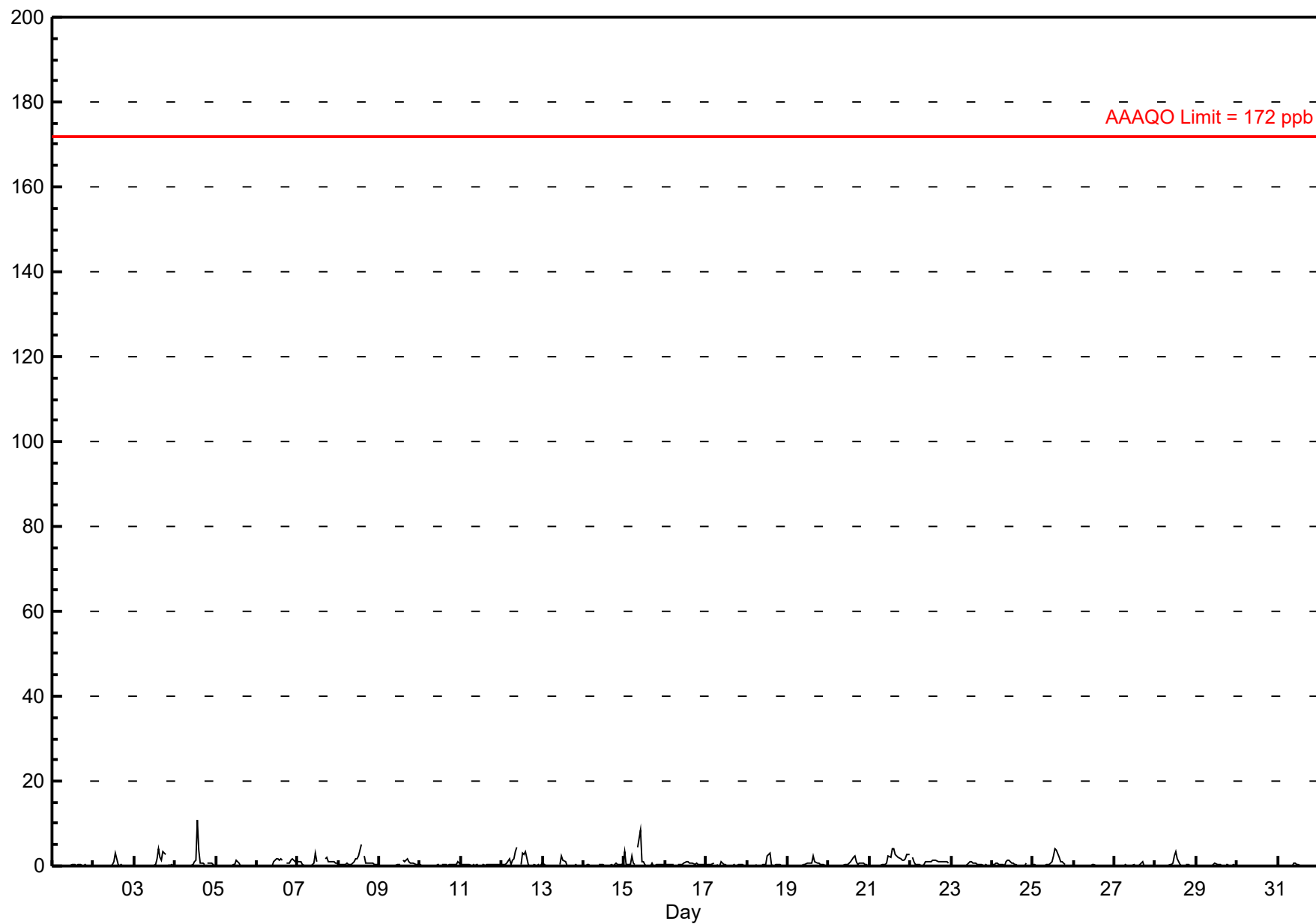
### Wind Speed Classes (km/h)



## Hourly Averages

Sulphur Dioxide (SO<sub>2</sub>) - ppb

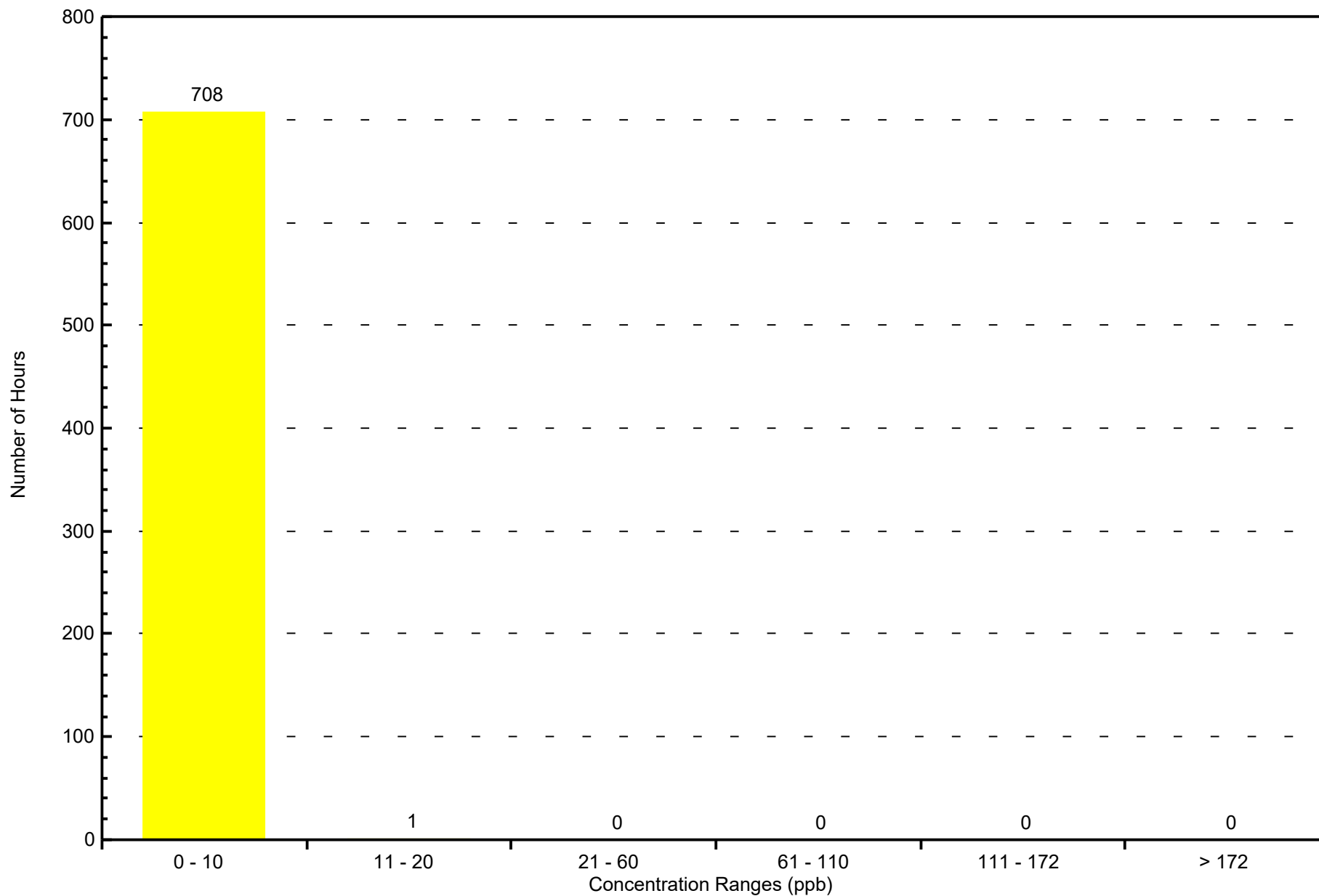
Valleyview - March 2019





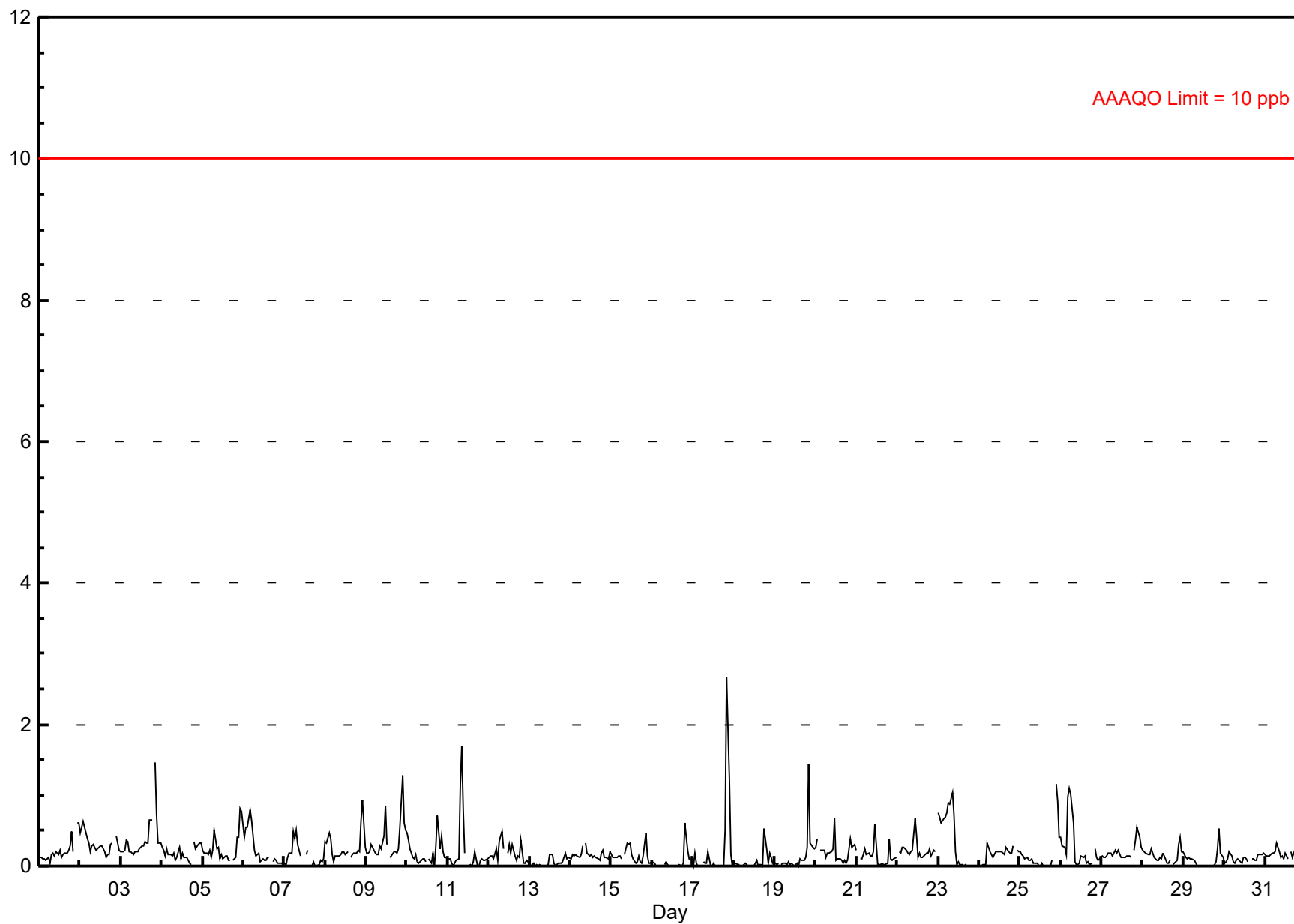
# Histogram of Hourly Averages

**Sulphur Dioxide (SO<sub>2</sub>) - ppb**  
**Valleyview - March 2019**



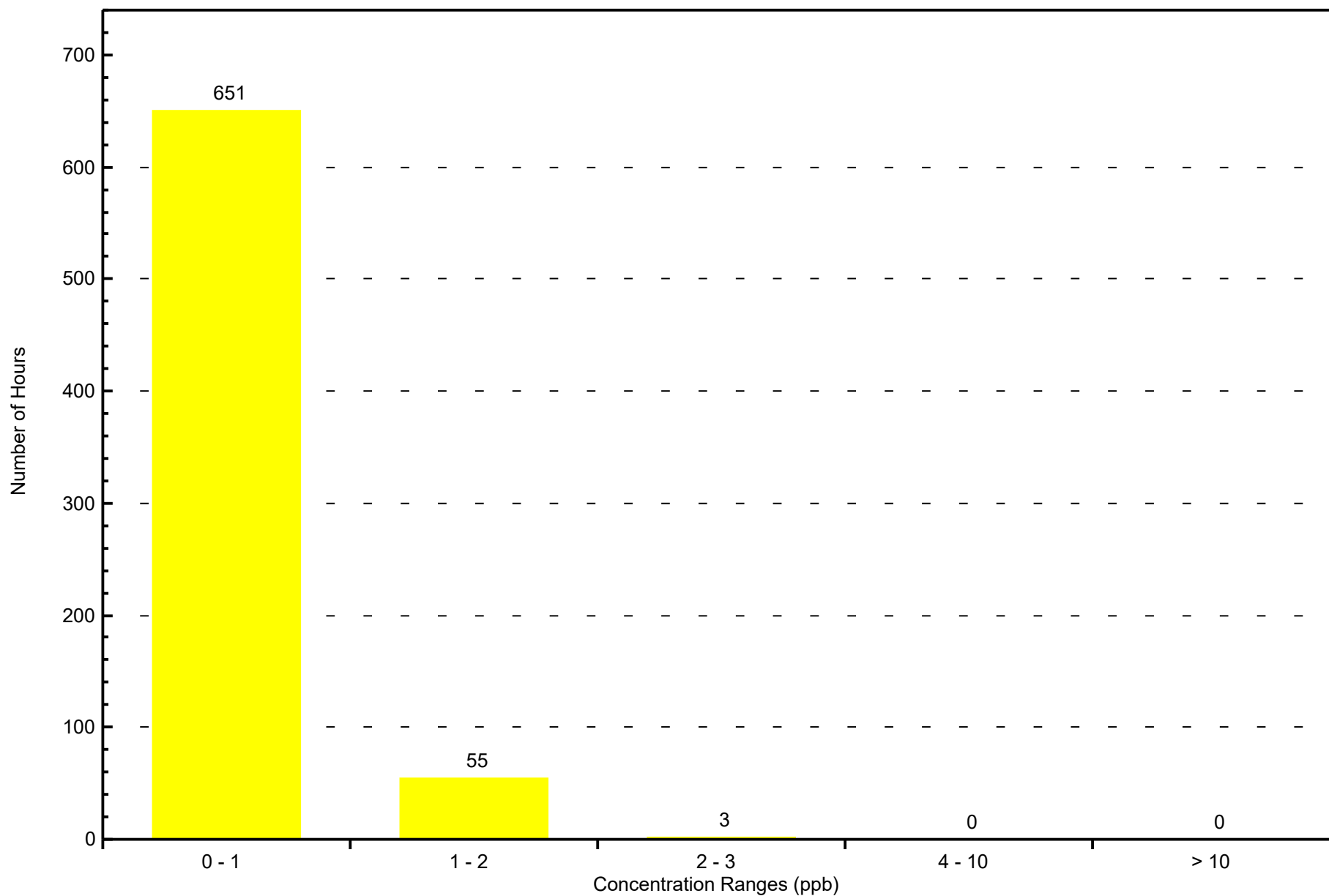
## Hourly Averages

Hydrogen Sulphide (H<sub>2</sub>S) - ppb  
Valleyview - March 2019



## Histogram of Hourly Averages

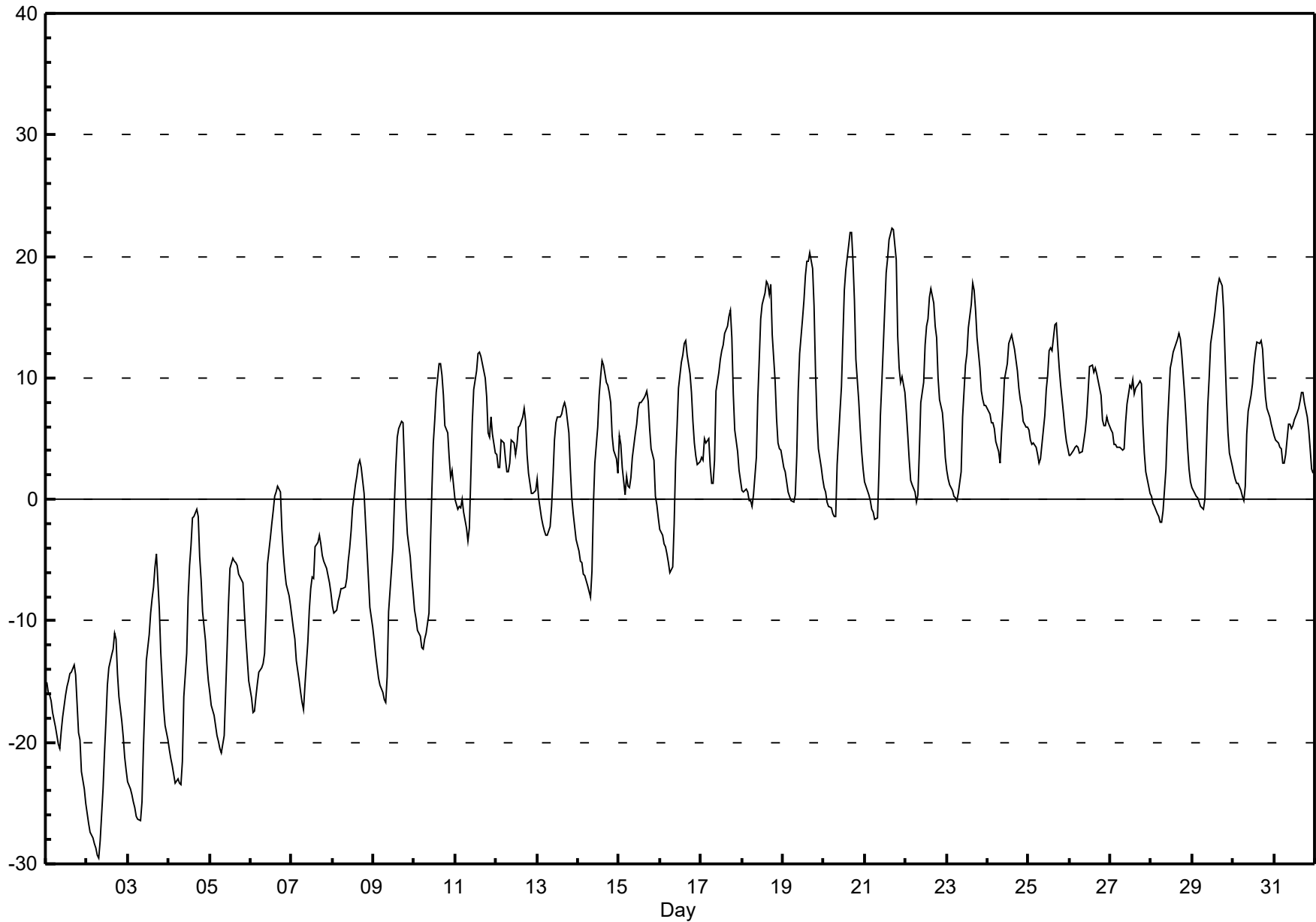
Hydrogen Sulphide (H<sub>2</sub>S) - ppb  
Valleyview - March 2019



## Hourly Averages

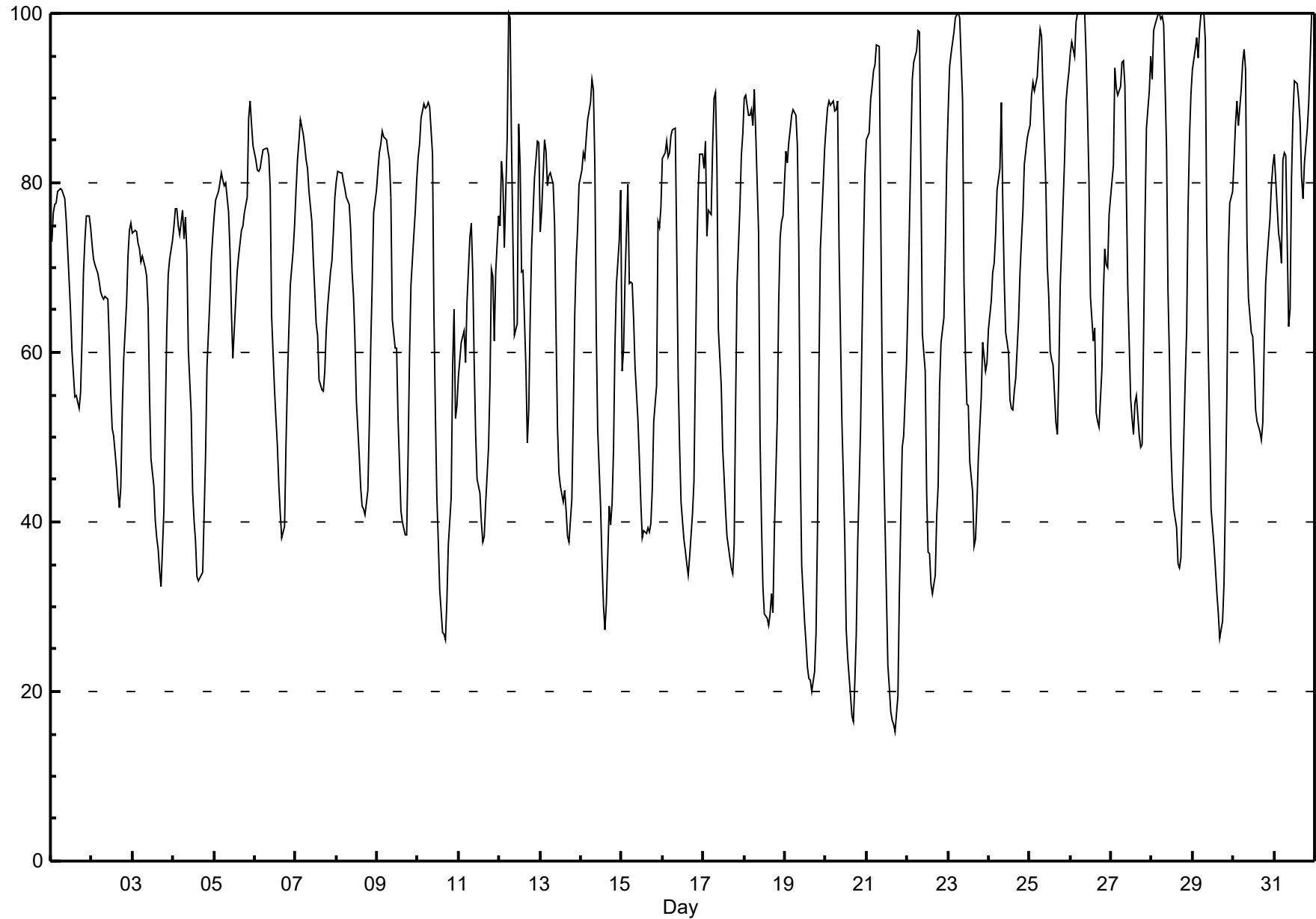
External Temperature (ET) - °C

Valleyview - March 2019



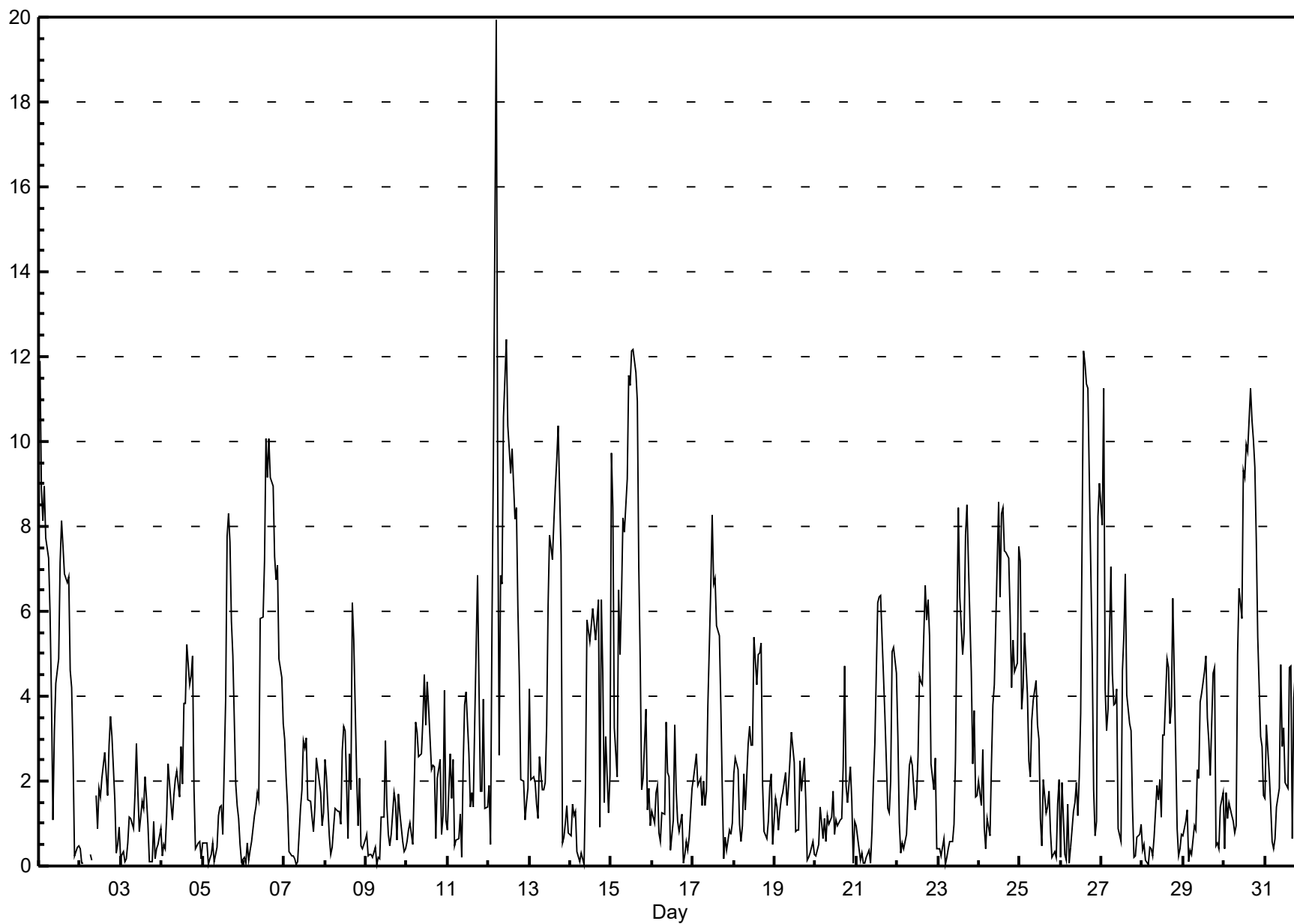
## Hourly Averages

Relative Humidity (RH) - %  
Valleyview - March 2019



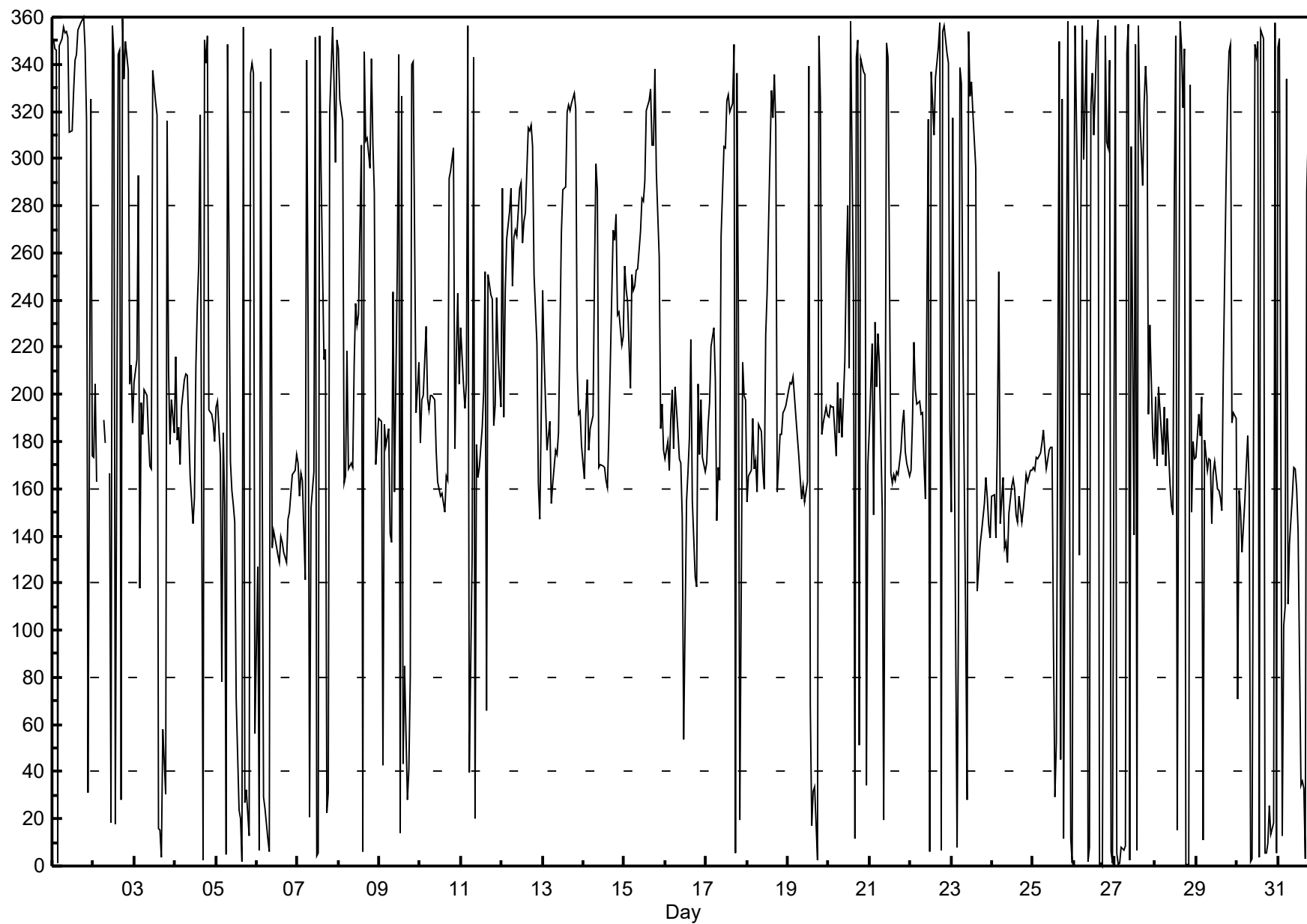
## Hourly Averages

**Wind Speed (WS) - km/h**  
**Valleyview - March 2019**



## Hourly Averages

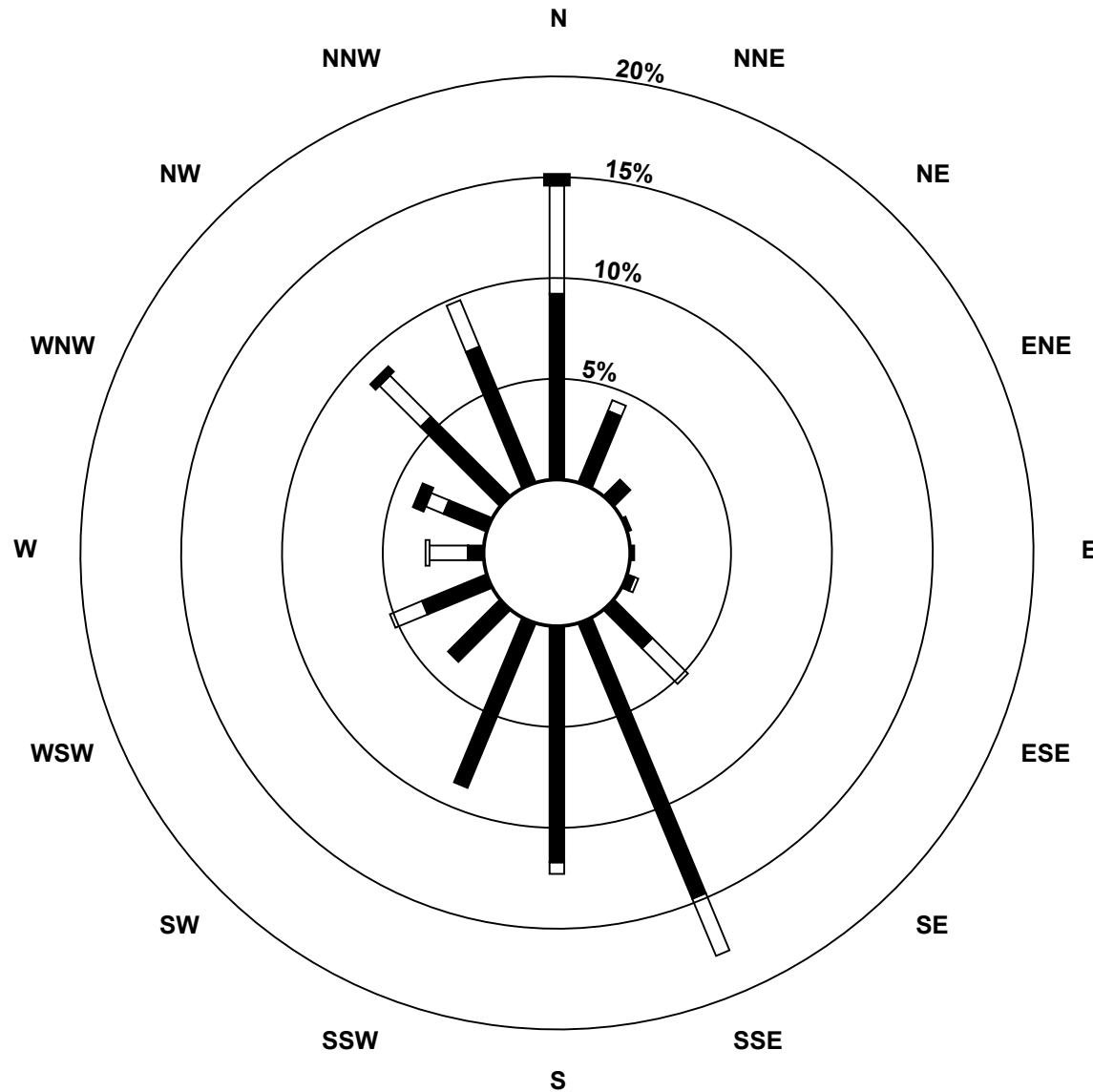
Wind Direction (WD) - deg  
Valleyview - March 2019



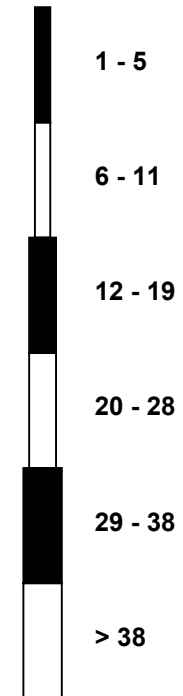
## Wind Rose

Wind Speed (WS) (km/h)

Valleyview - March 2019



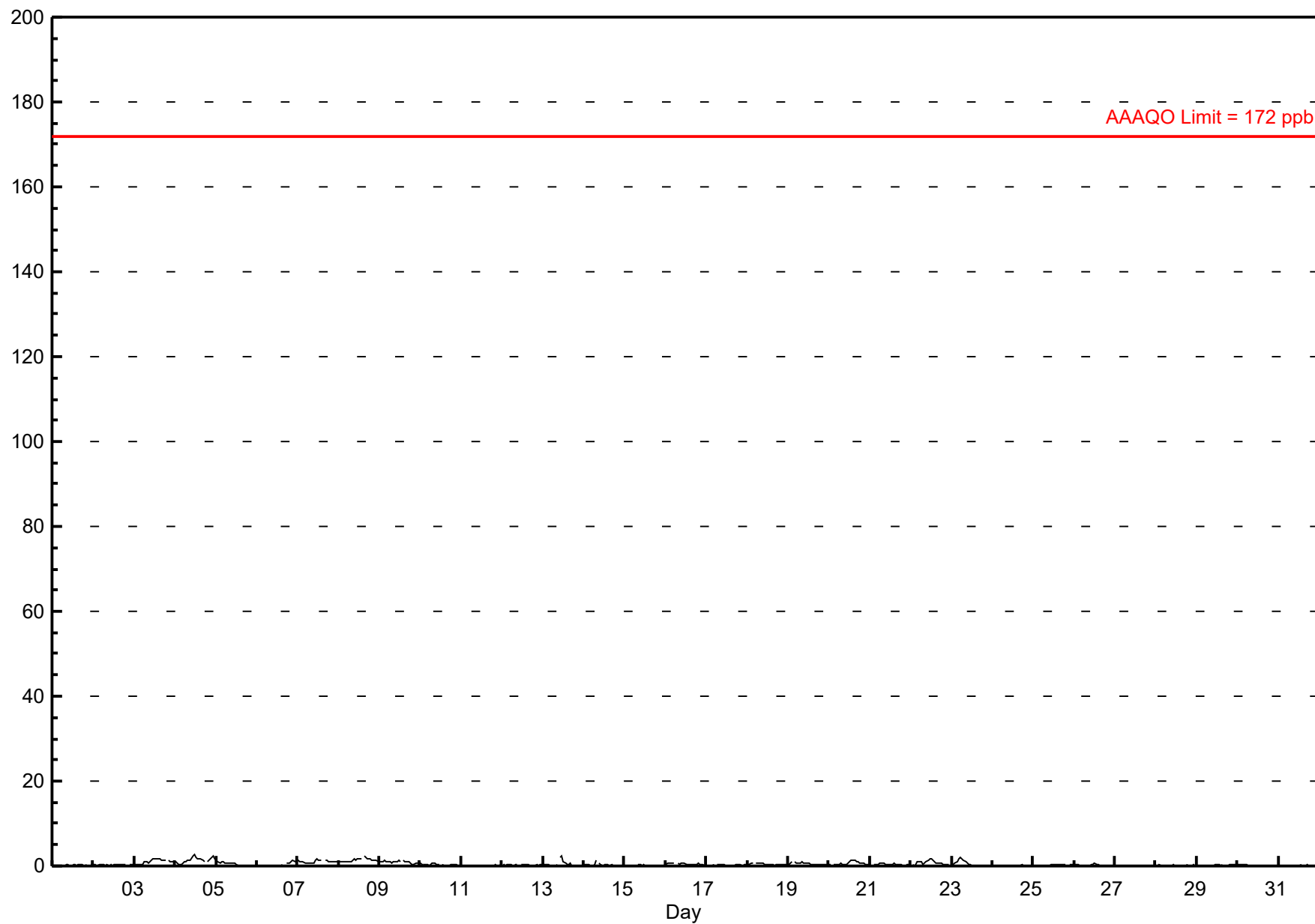
## Wind Speed Classes (km/h)





## Hourly Averages

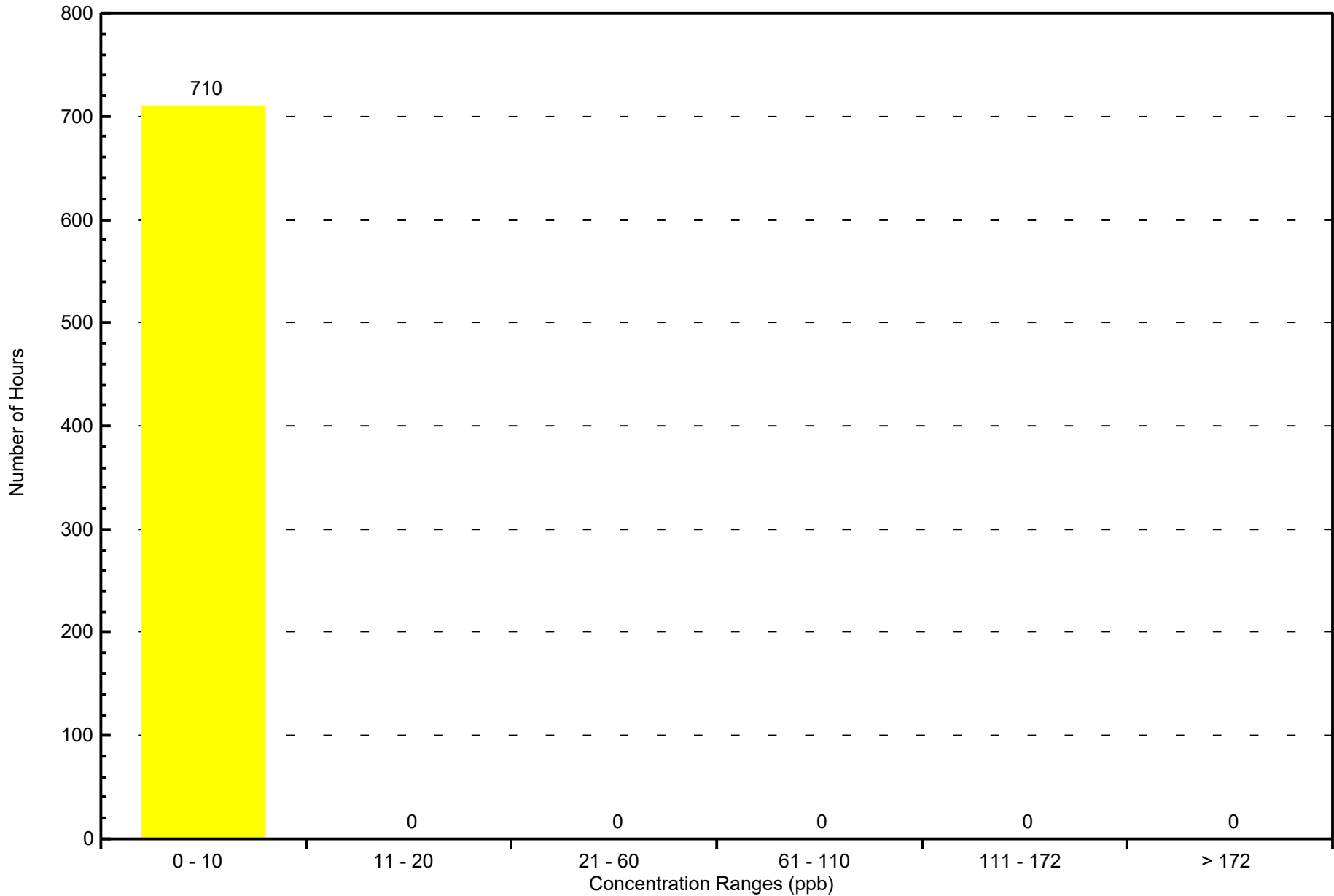
**Sulphur Dioxide (SO<sub>2</sub>) - ppb**  
**Donnelly - March 2019**



## Histogram of Hourly Averages

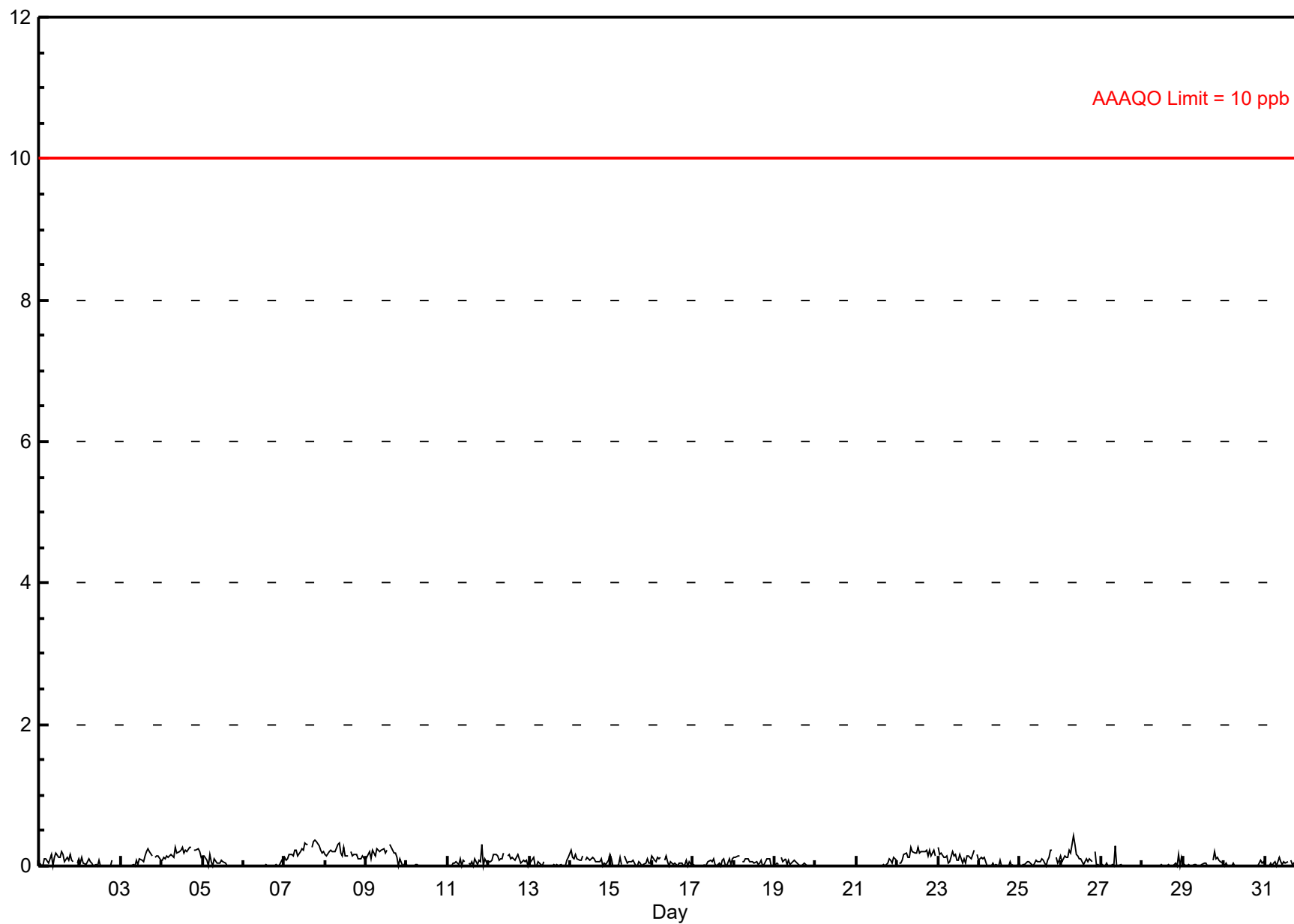
Sulphur Dioxide (SO<sub>2</sub>) - ppb

Donnelly - March 2019



## Hourly Averages

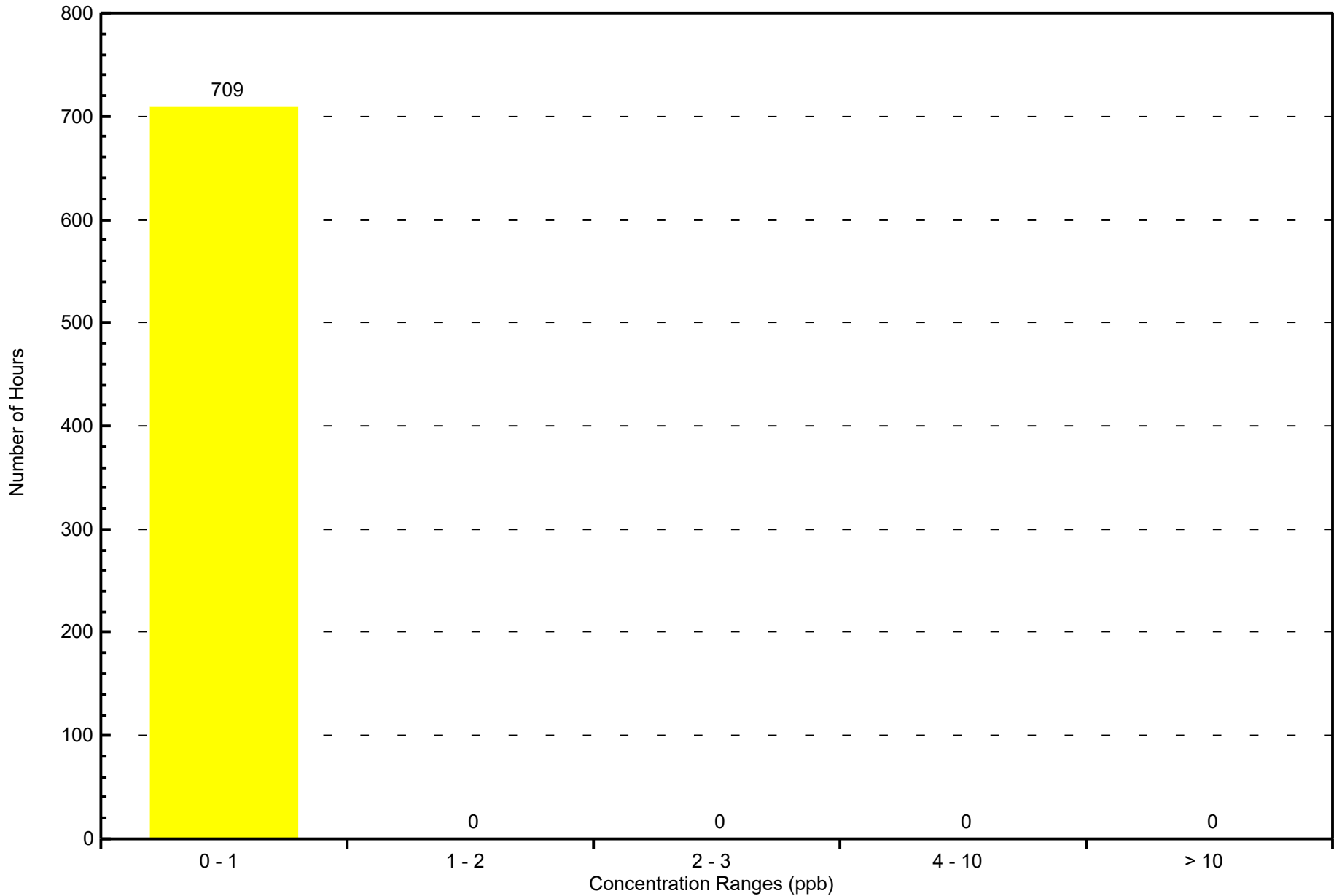
Hydrogen Sulphide (H<sub>2</sub>S) - ppb  
Donnelly - March 2019



## Histogram of Hourly Averages

Hydrogen Sulphide (H<sub>2</sub>S) - ppb

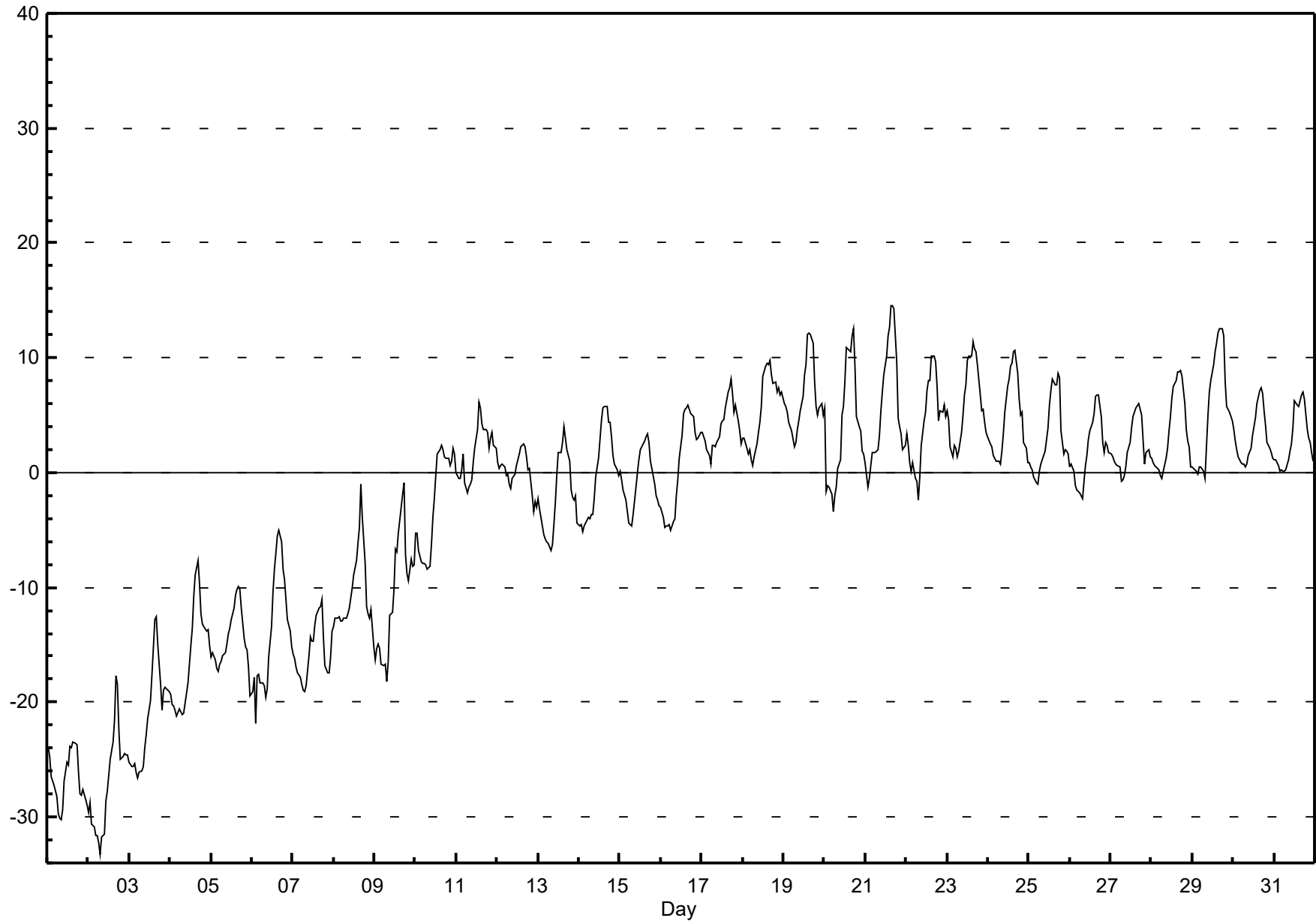
Donnelly - March 2019



## Hourly Averages

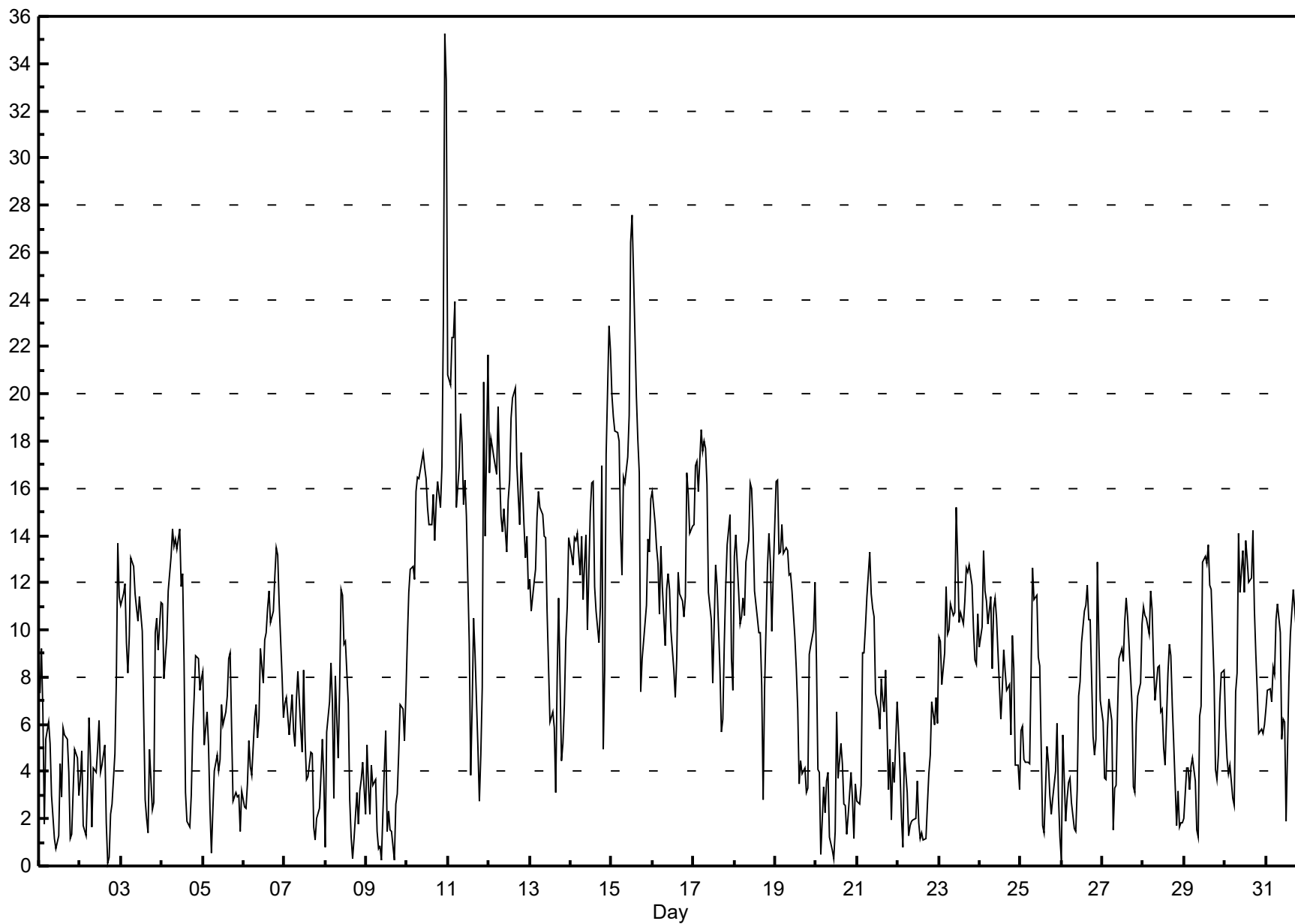
External Temperature (ET) - °C

Donnelly - March 2019



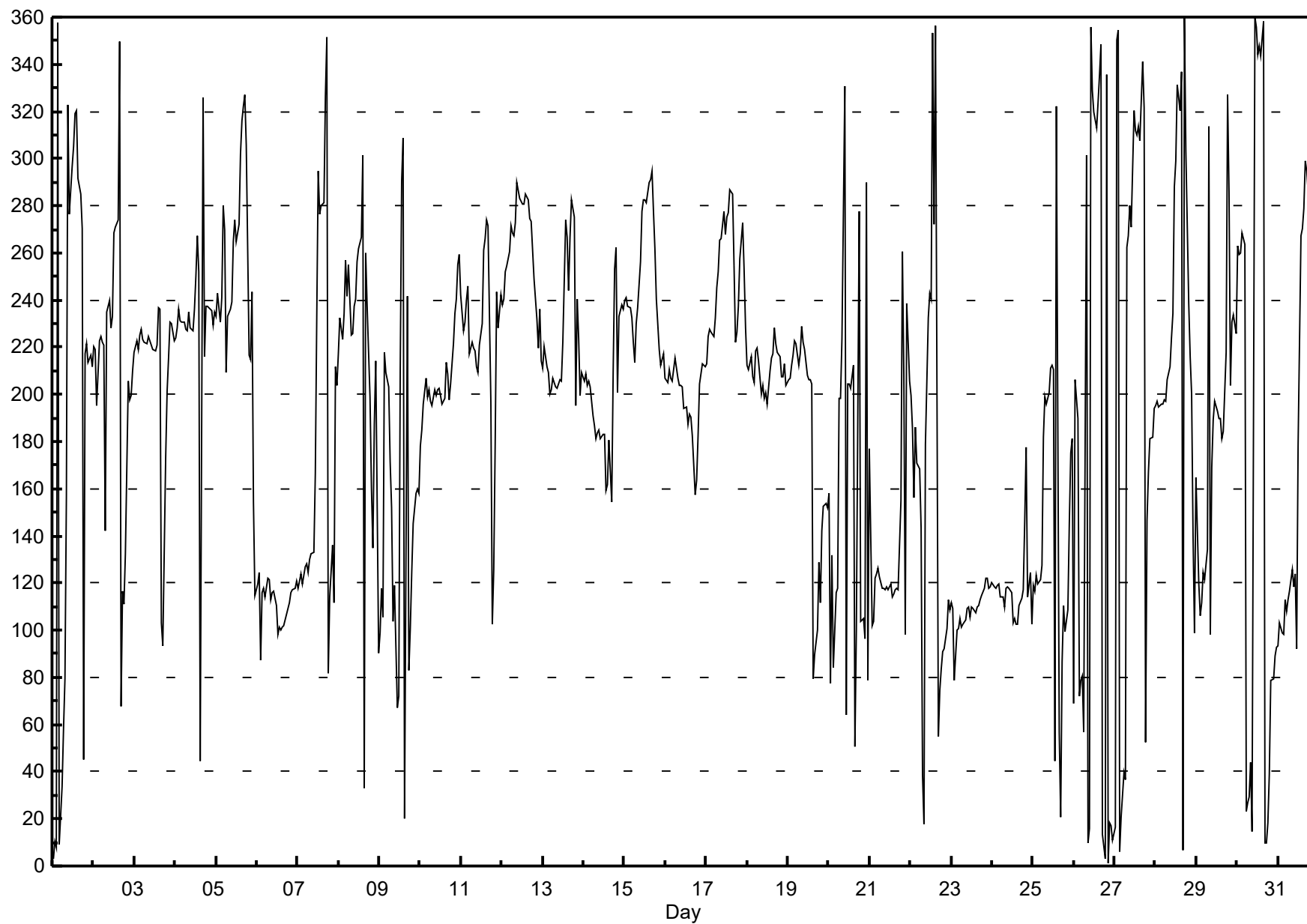
## Hourly Averages

**Wind Speed (WS) - km/h**  
**Donnelly - March 2019**



## Hourly Averages

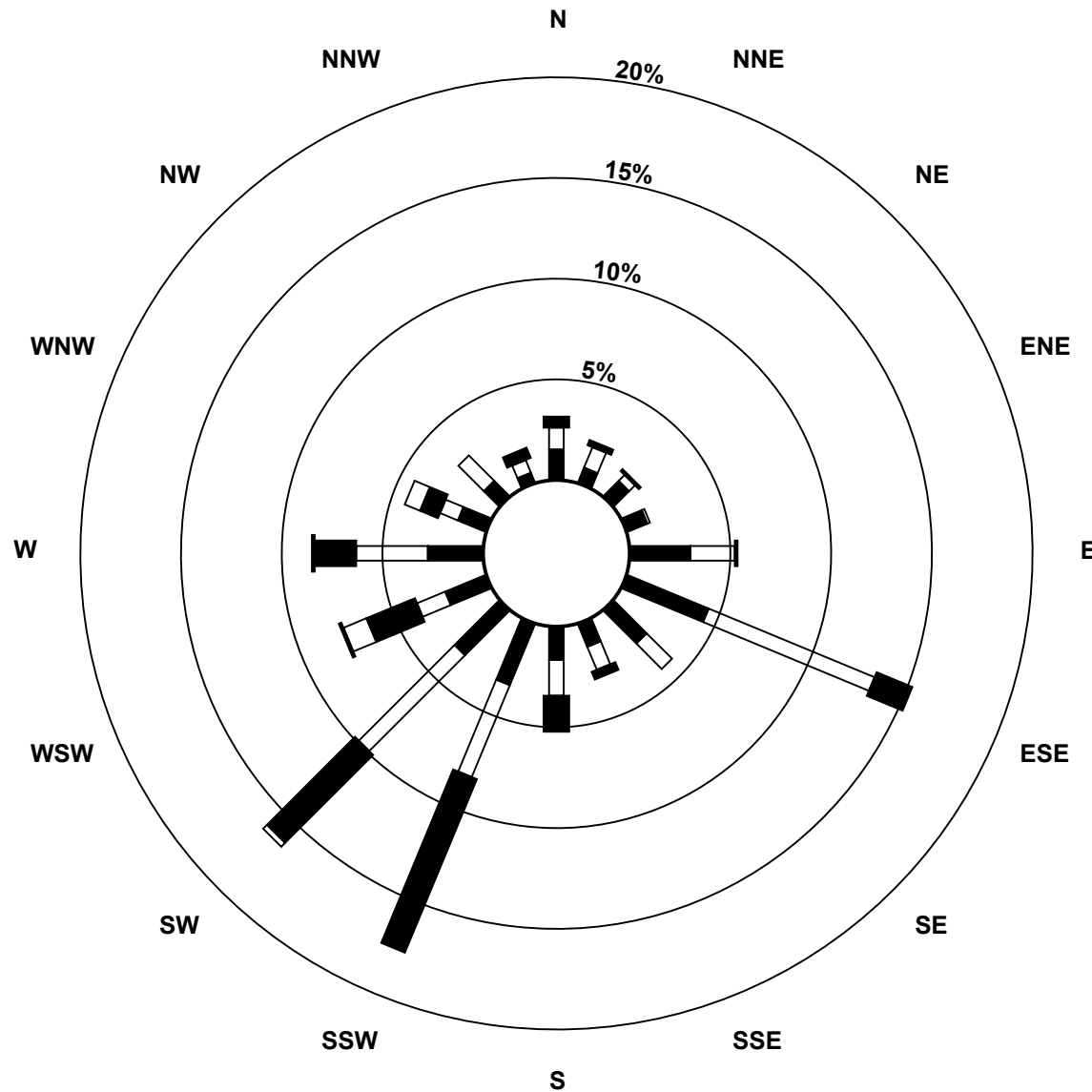
Wind Direction (WD) - deg  
Donnelly - March 2019



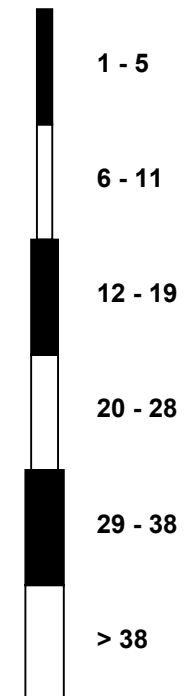
## Wind Rose

Wind Speed (WS) (km/h)

Donnelly - March 2019



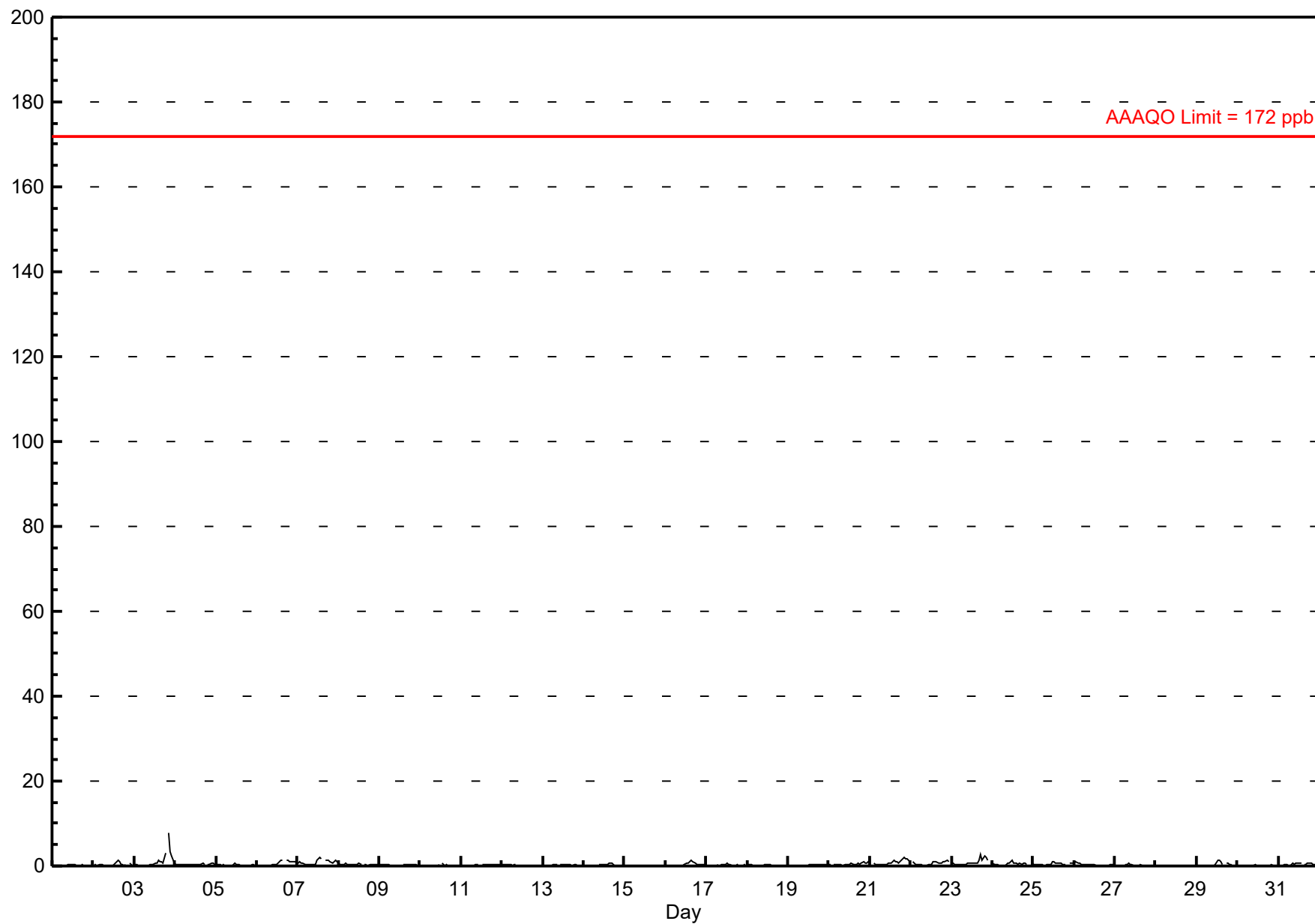
## Wind Speed Classes (km/h)





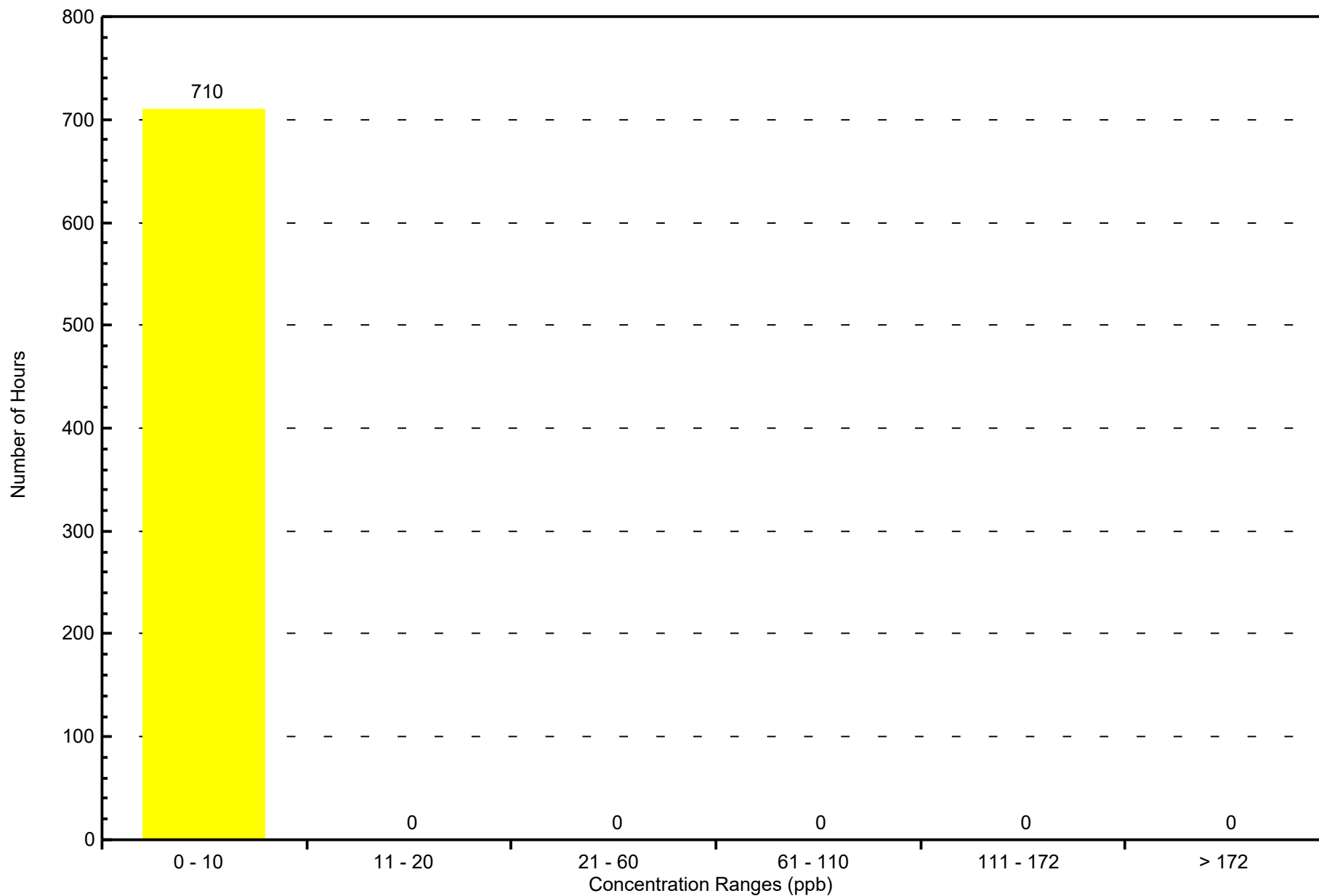
## Hourly Averages

Sulphur Dioxide (SO<sub>2</sub>) - ppb  
Wembley - March 2019



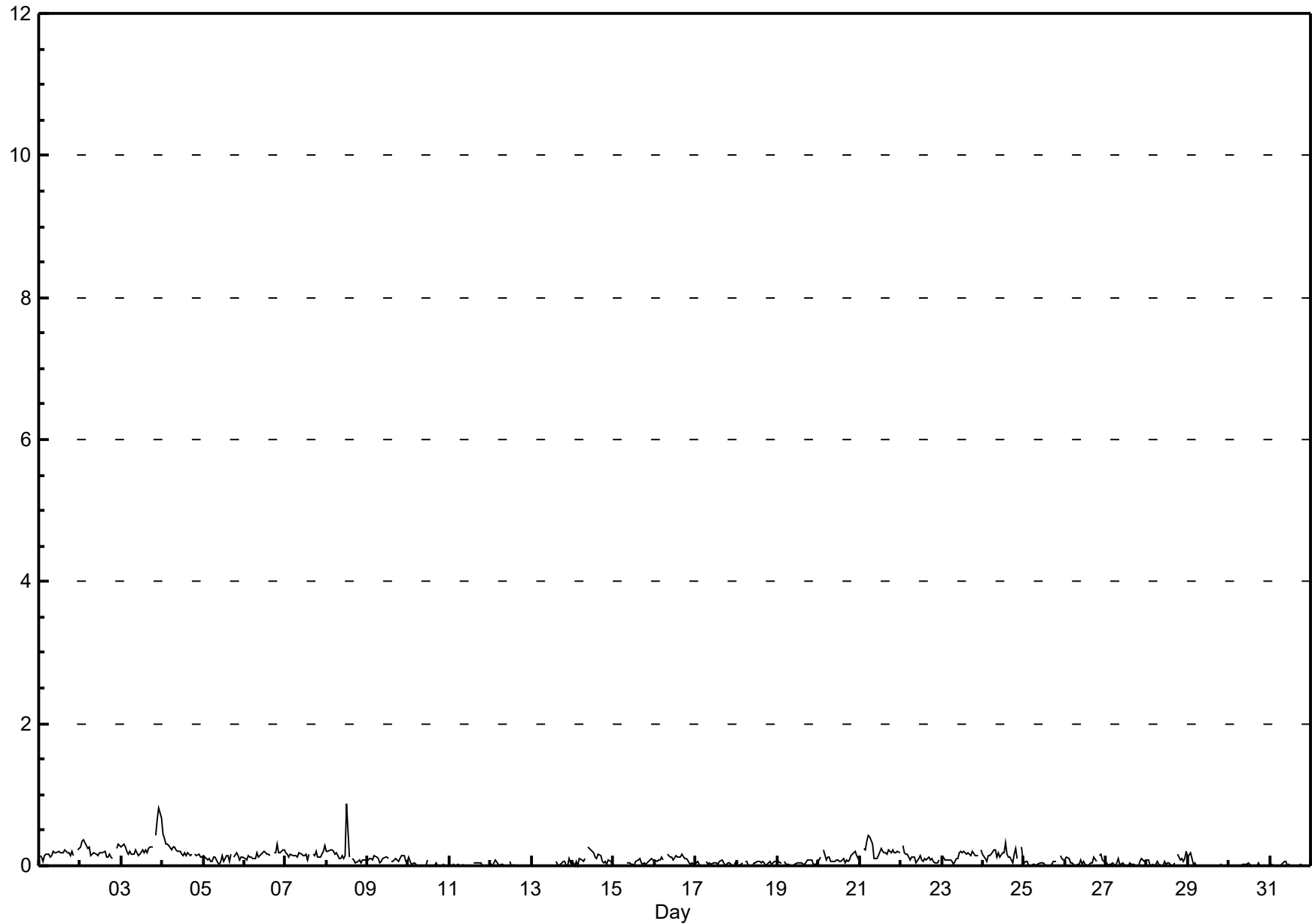
## Histogram of Hourly Averages

**Sulphur Dioxide (SO<sub>2</sub>) - ppb**  
**Wembley - March 2019**



## Hourly Averages

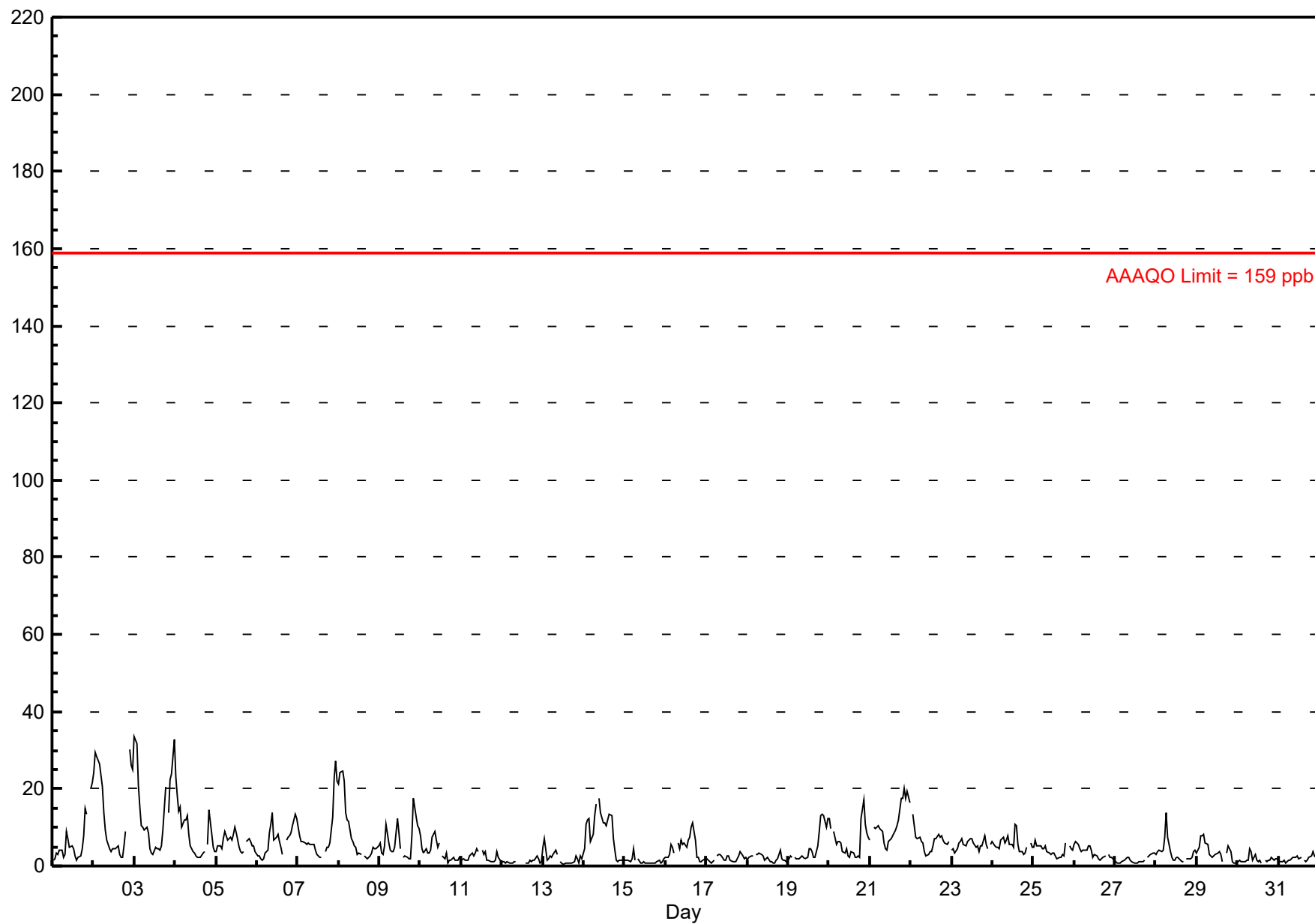
Total Reduced Sulphur (TRS) - ppb  
Wembley - March 2019



## Hourly Averages

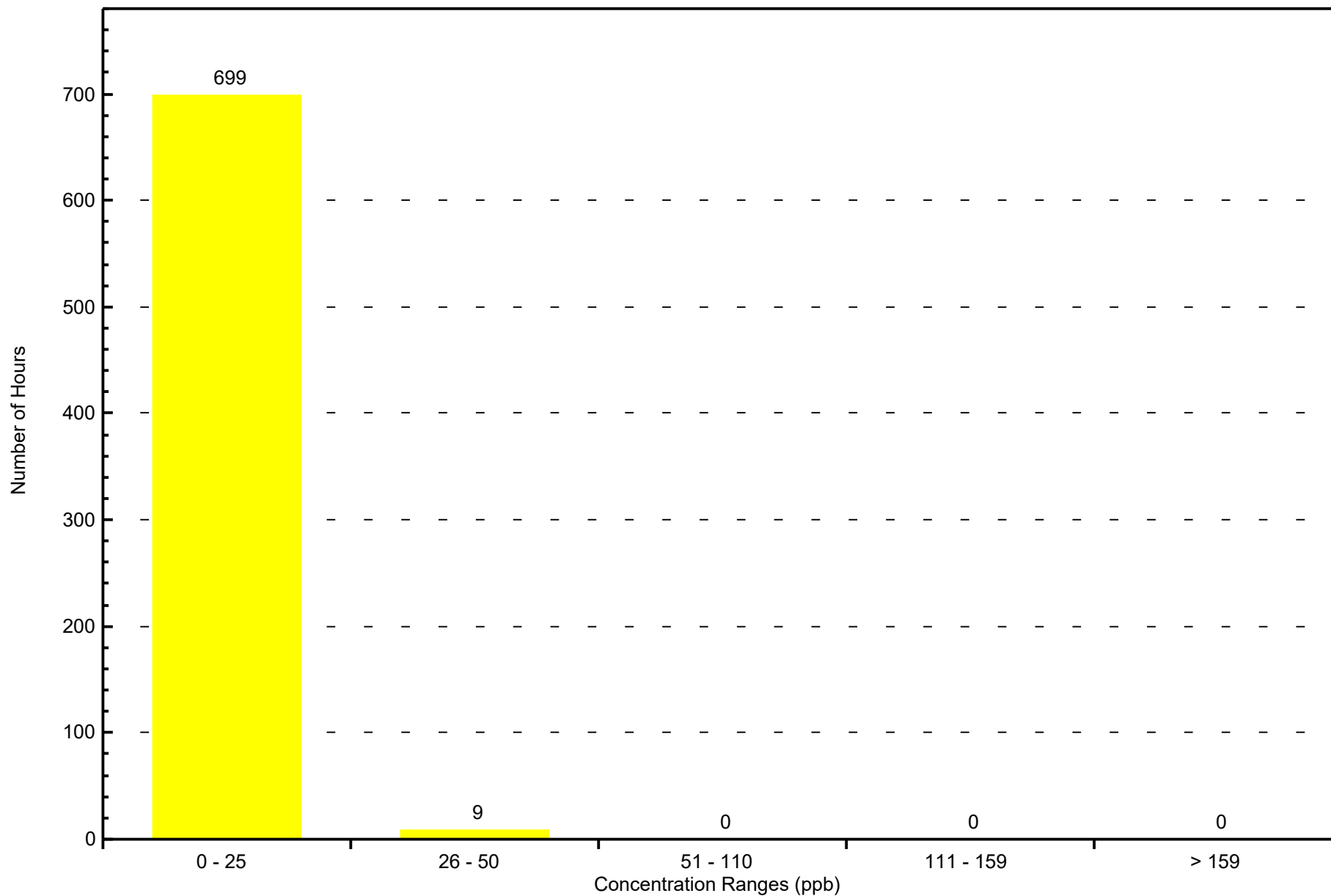
Nitrogen Dioxide (NO<sub>2</sub>) - ppb

Wembley - March 2019



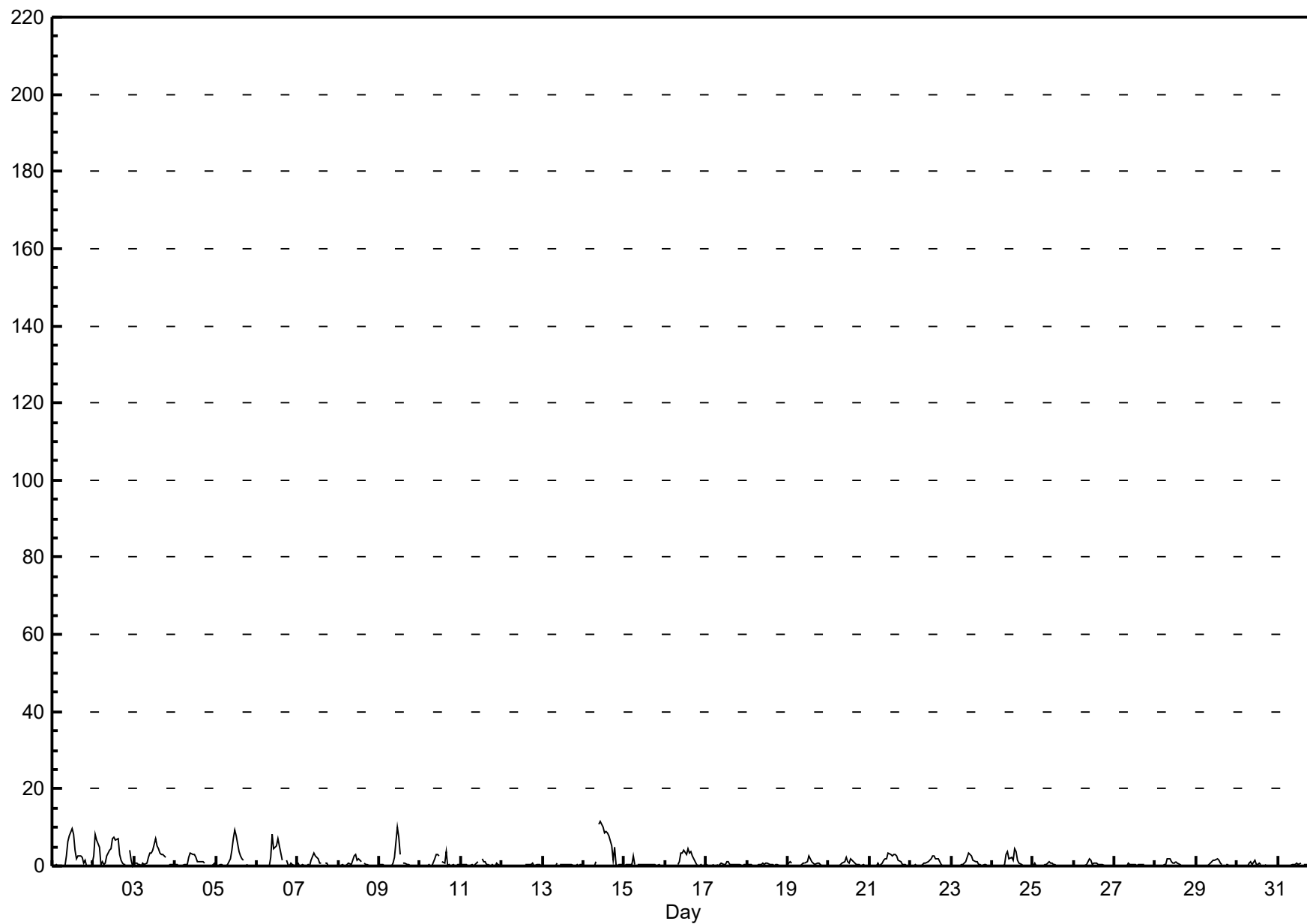
## Histogram of Hourly Averages

**Nitrogen Dioxide (NO<sub>2</sub>) - ppb**  
**Wembley - March 2019**



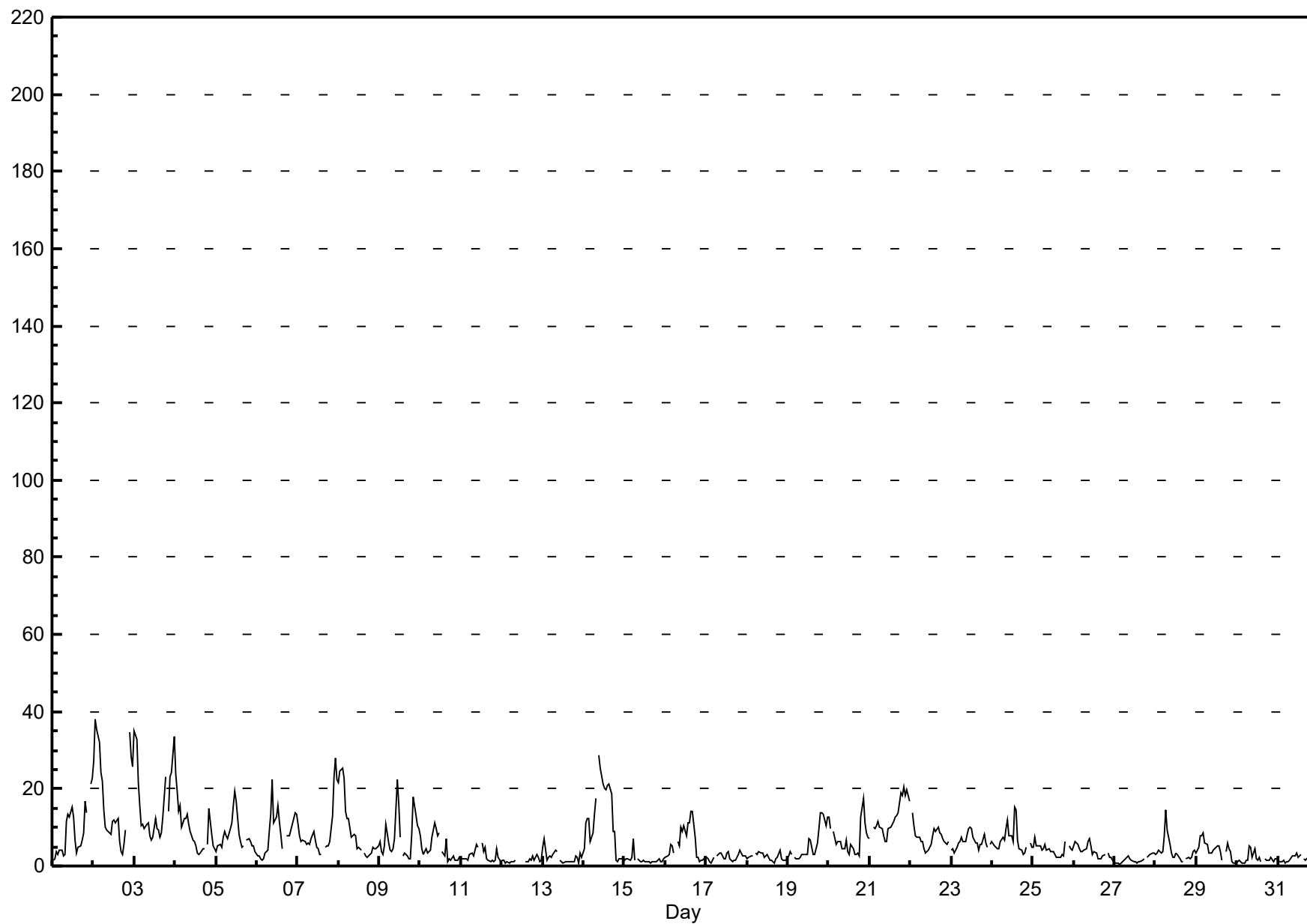
## Hourly Averages

**Nitrogen Oxide (NO) - ppb**  
**Wembley - March 2019**



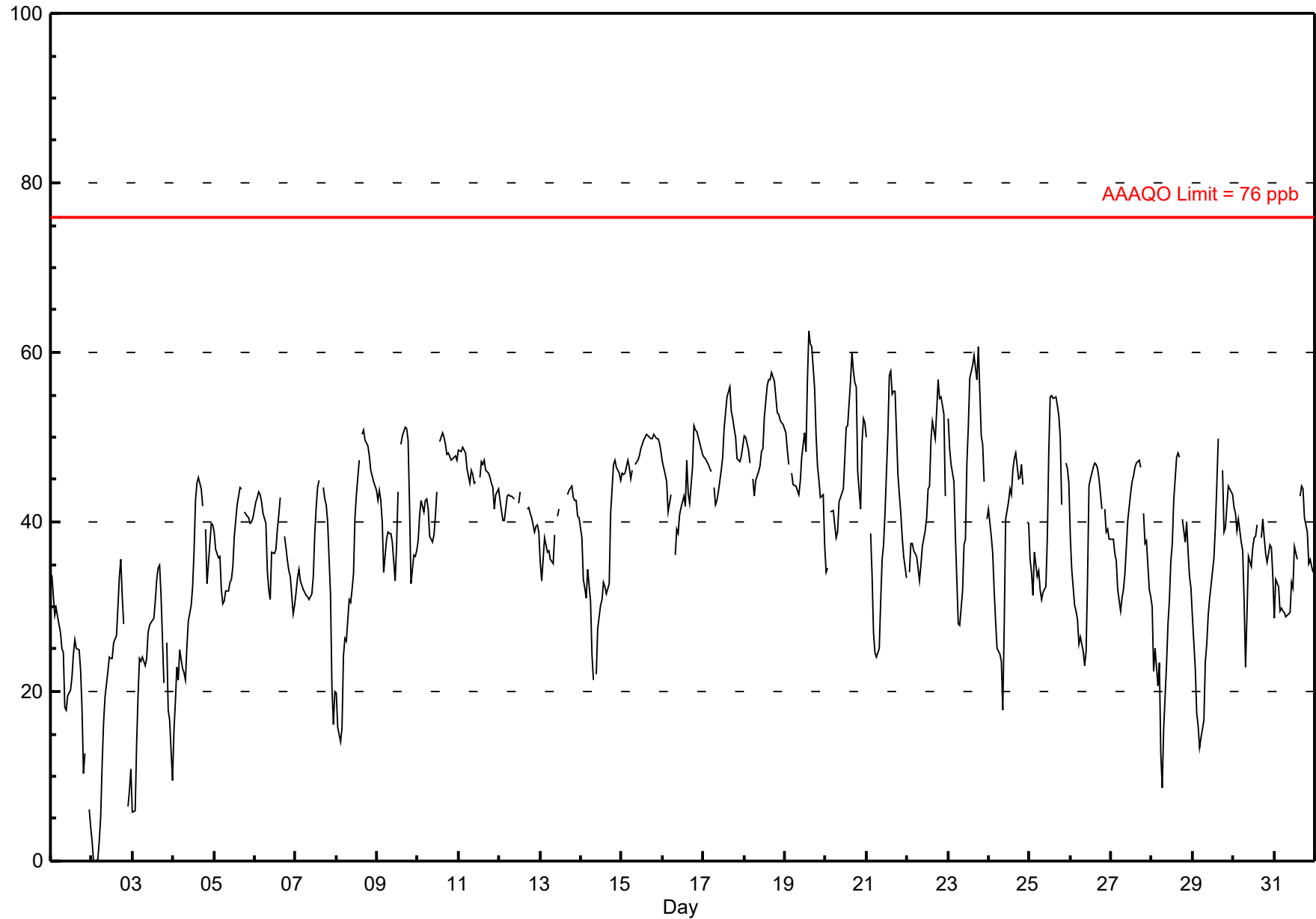
## Hourly Averages

Oxides of Nitrogen (NO<sub>x</sub>) - ppb  
Wembley - March 2019



## Hourly Averages

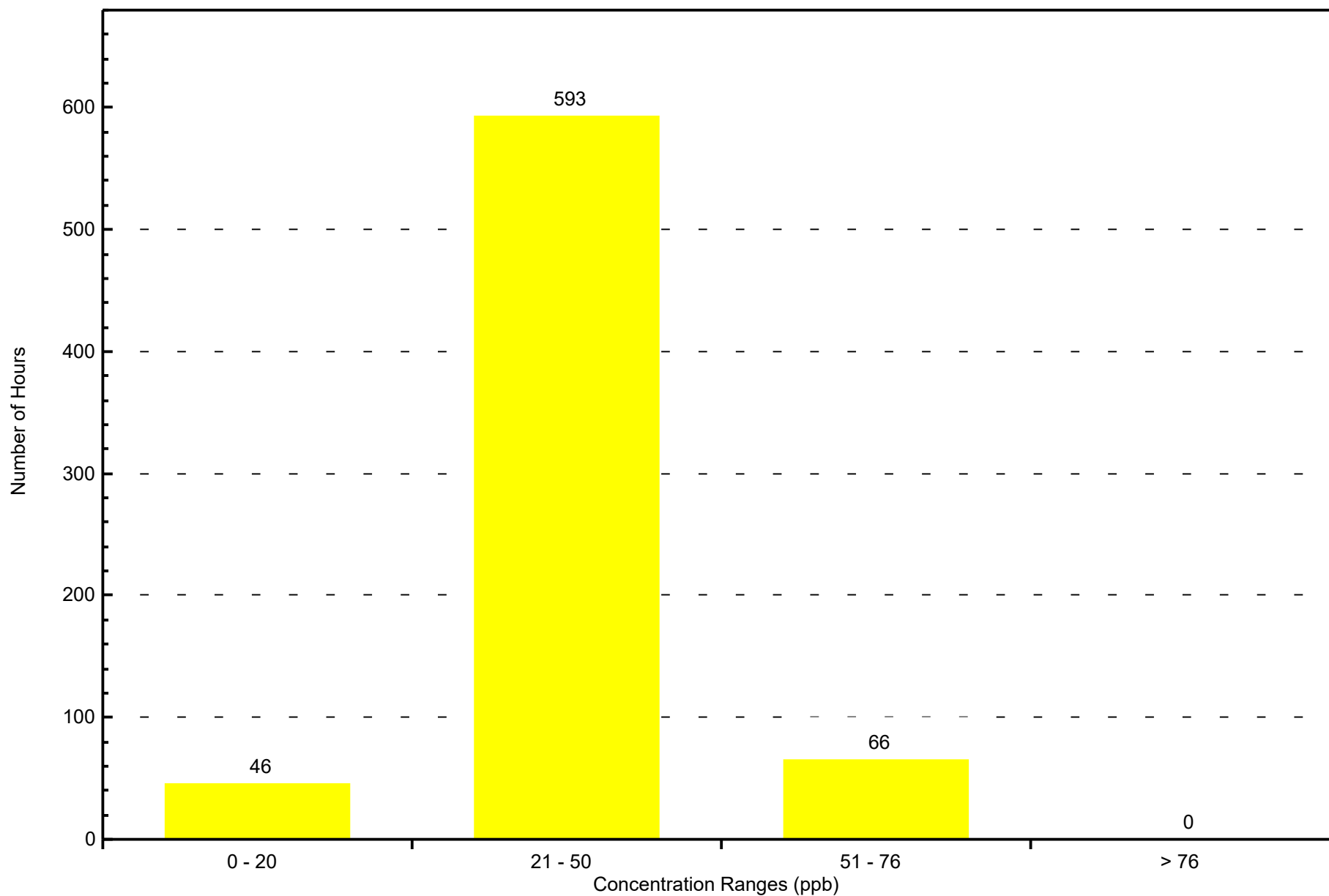
Ozone (O<sub>3</sub>) - ppb  
Wembley - March 2019





## Histogram of Hourly Averages

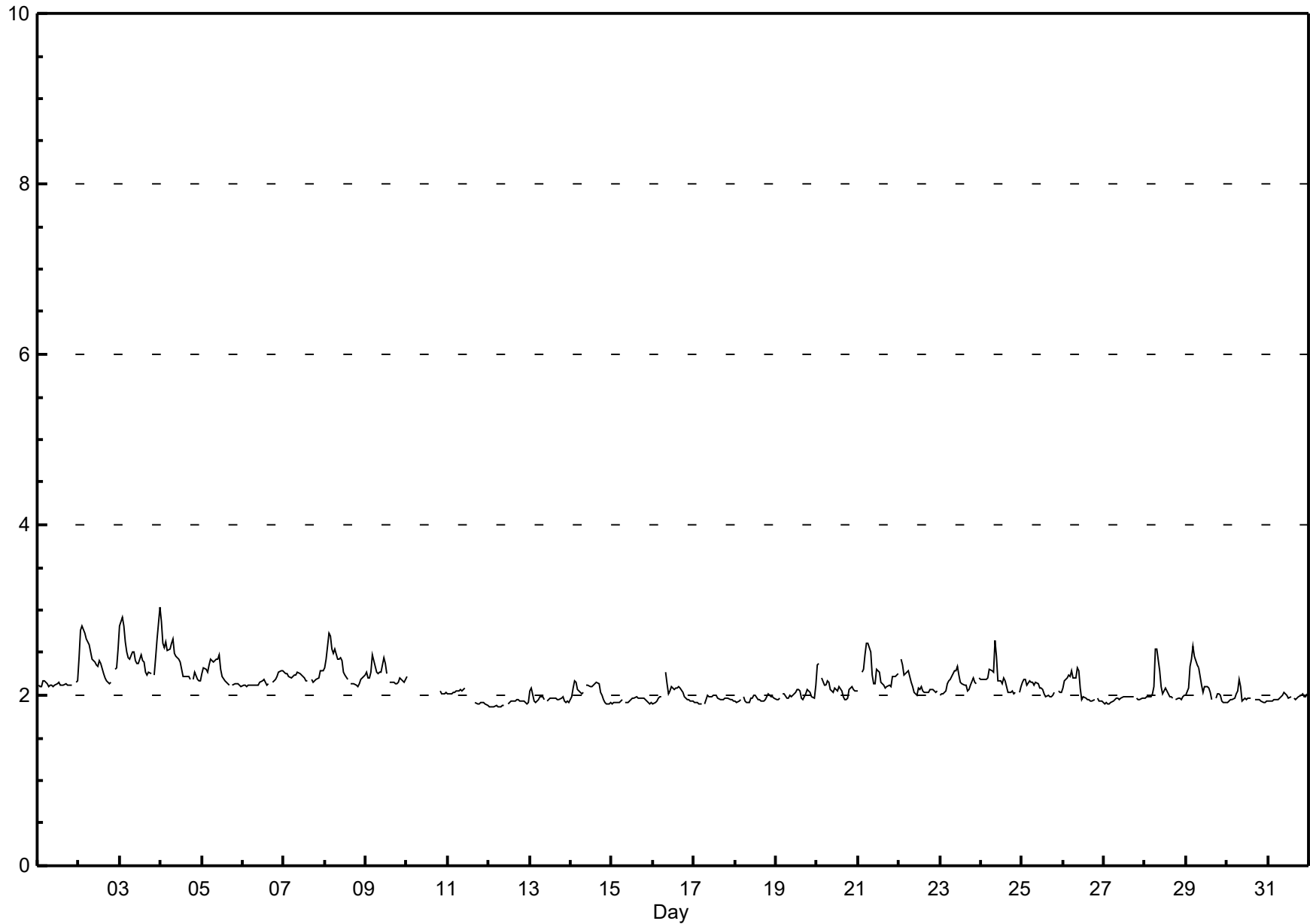
Ozone (O<sub>3</sub>) - ppb  
Wembley - March 2019



## Hourly Averages

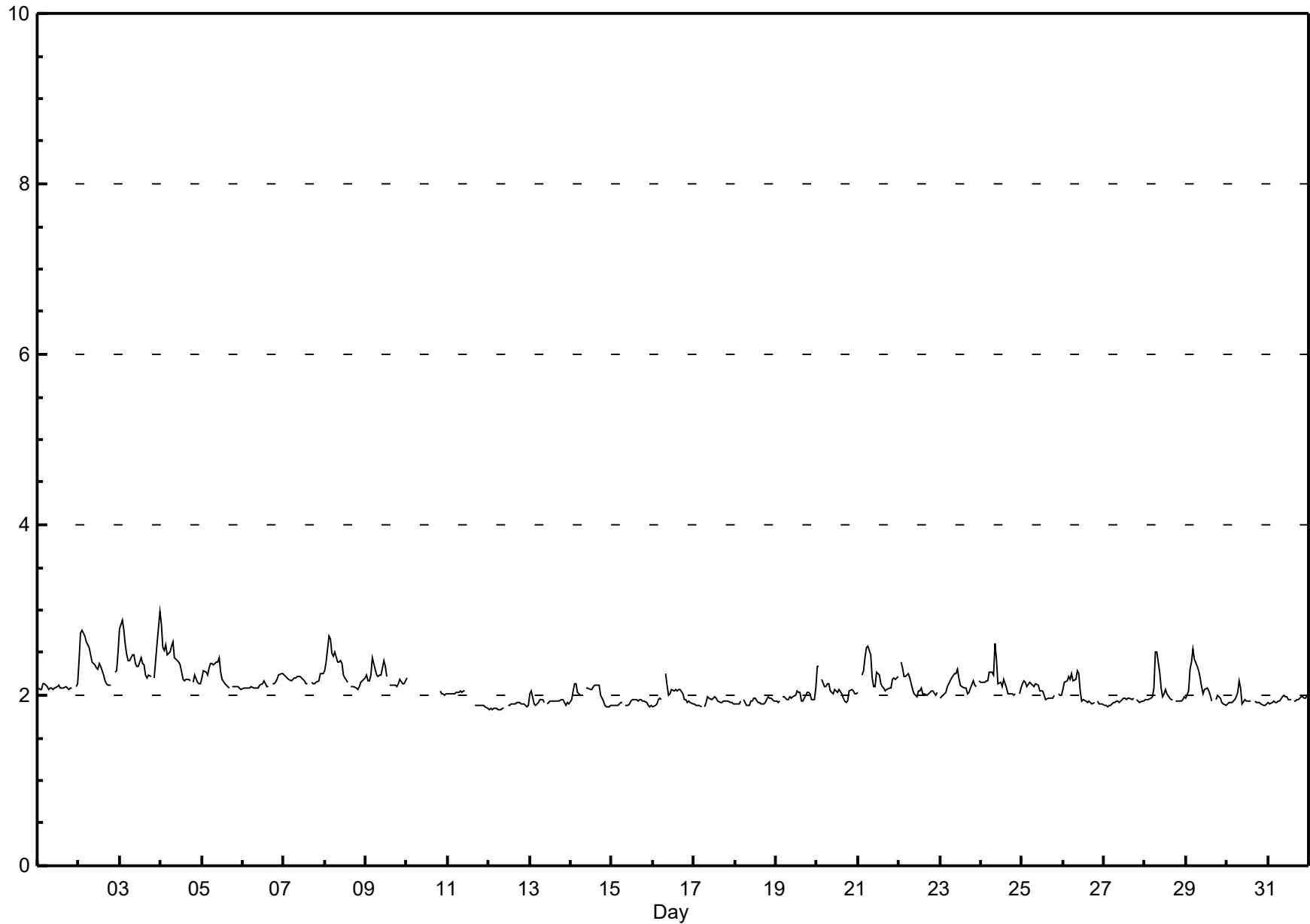
Total Hydrocarbons (THC) - ppm

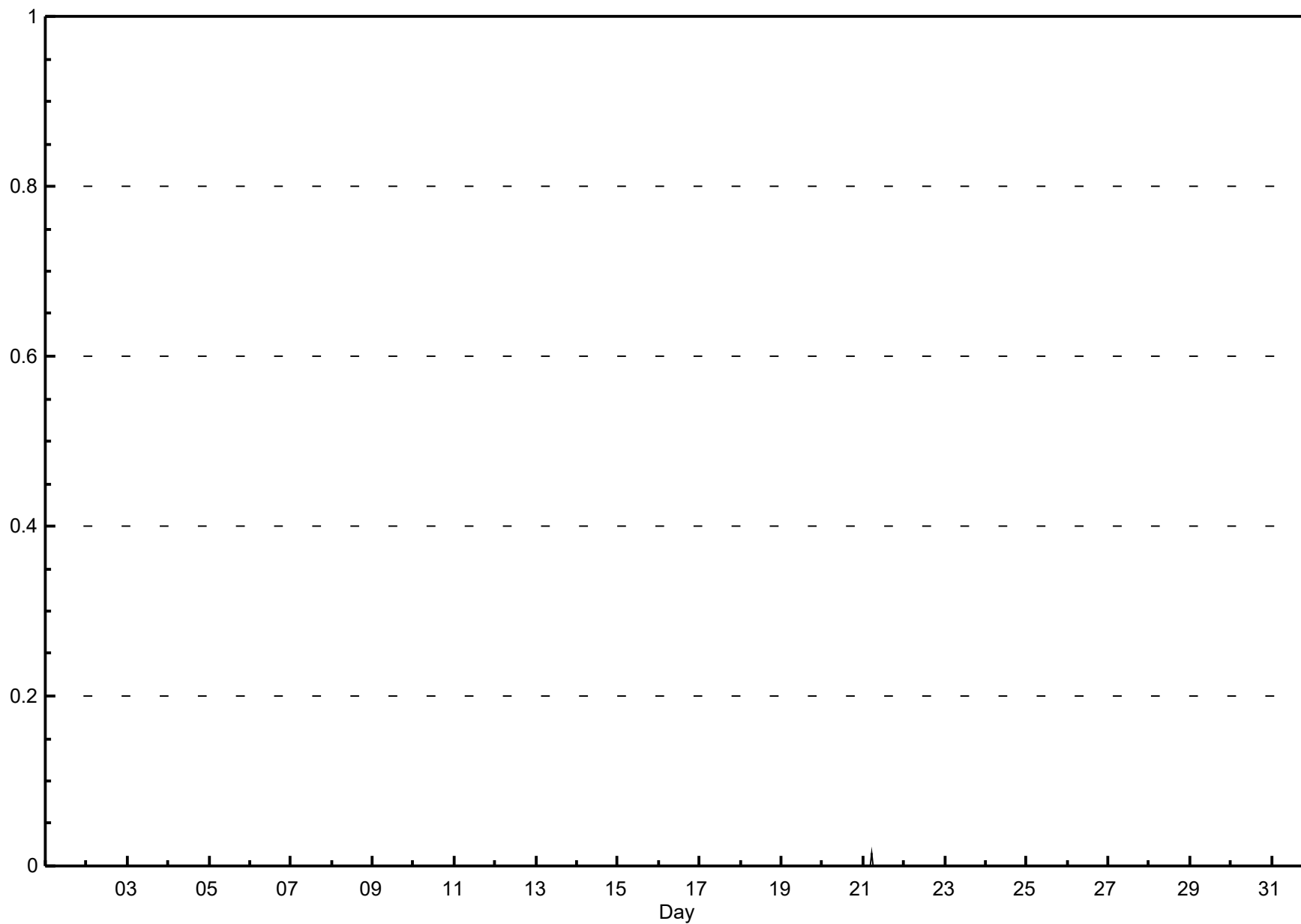
Wembley - March 2019



## Hourly Averages

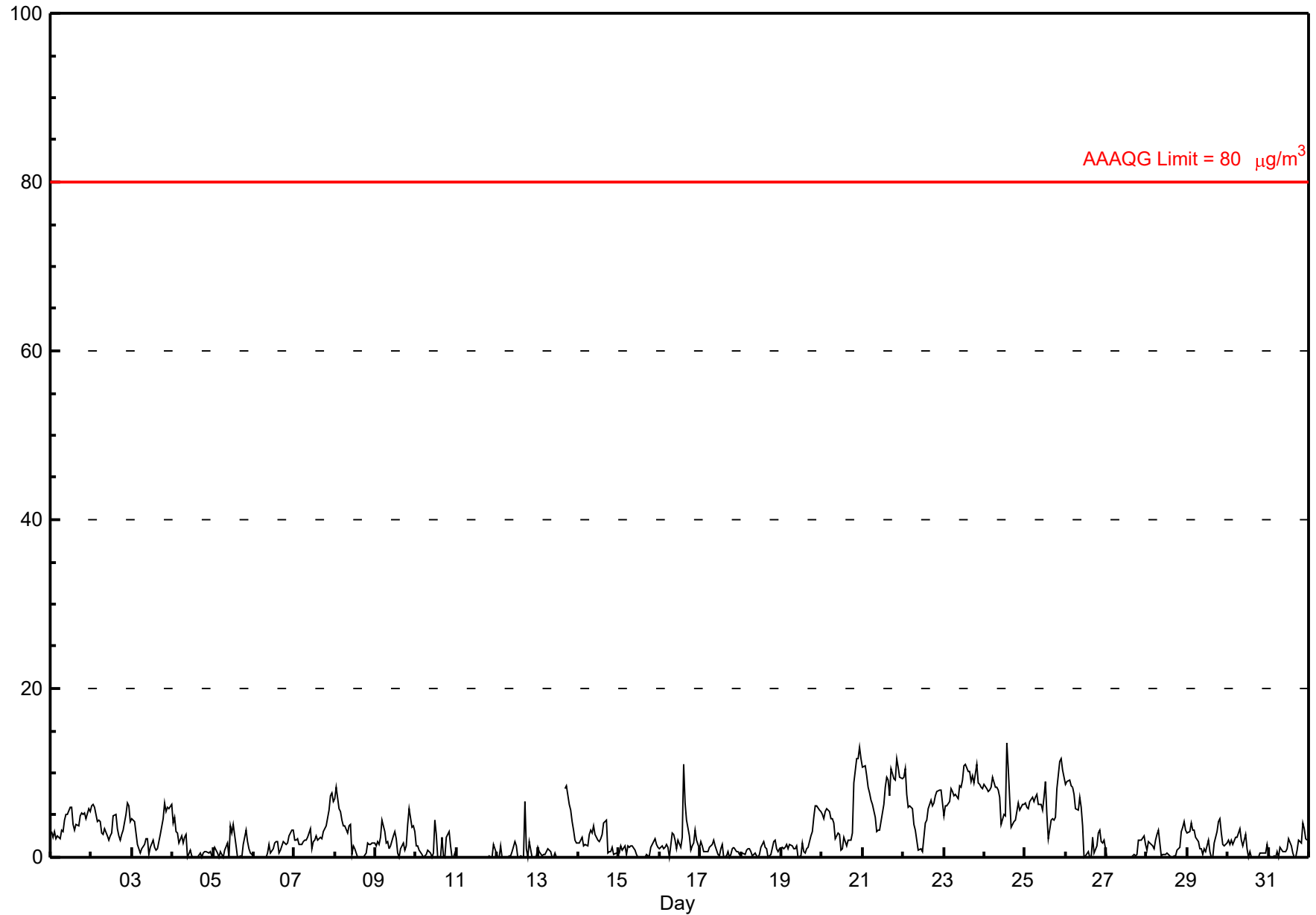
**Methane (CH<sub>4</sub>) - ppm**  
**Wembley - March 2019**





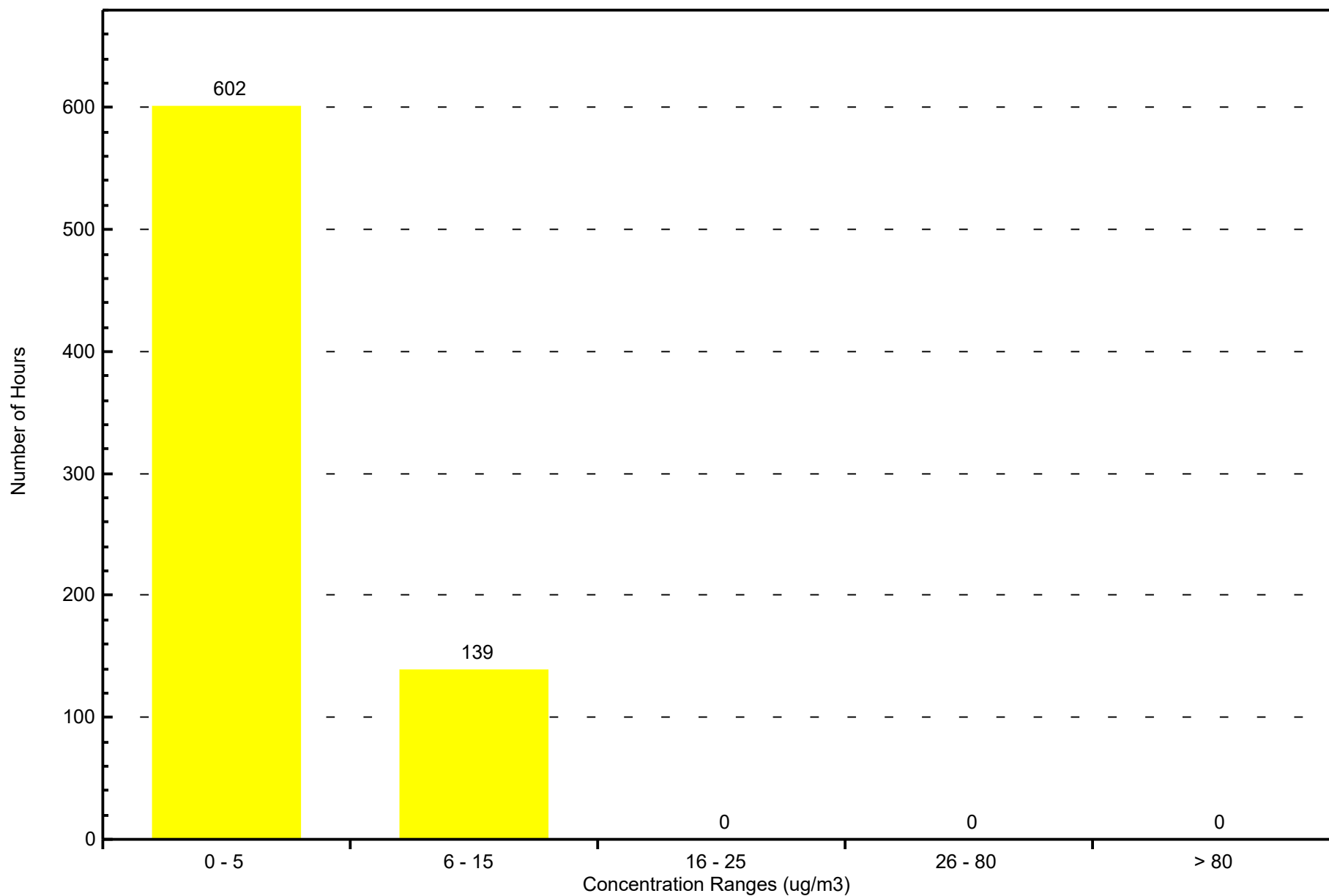
## Hourly Averages

**PM<sub>2.5</sub> (PM<sub>2.5</sub>) -  $\mu\text{g}/\text{m}^3$**   
**Wembley - March 2019**



## Histogram of Hourly Averages

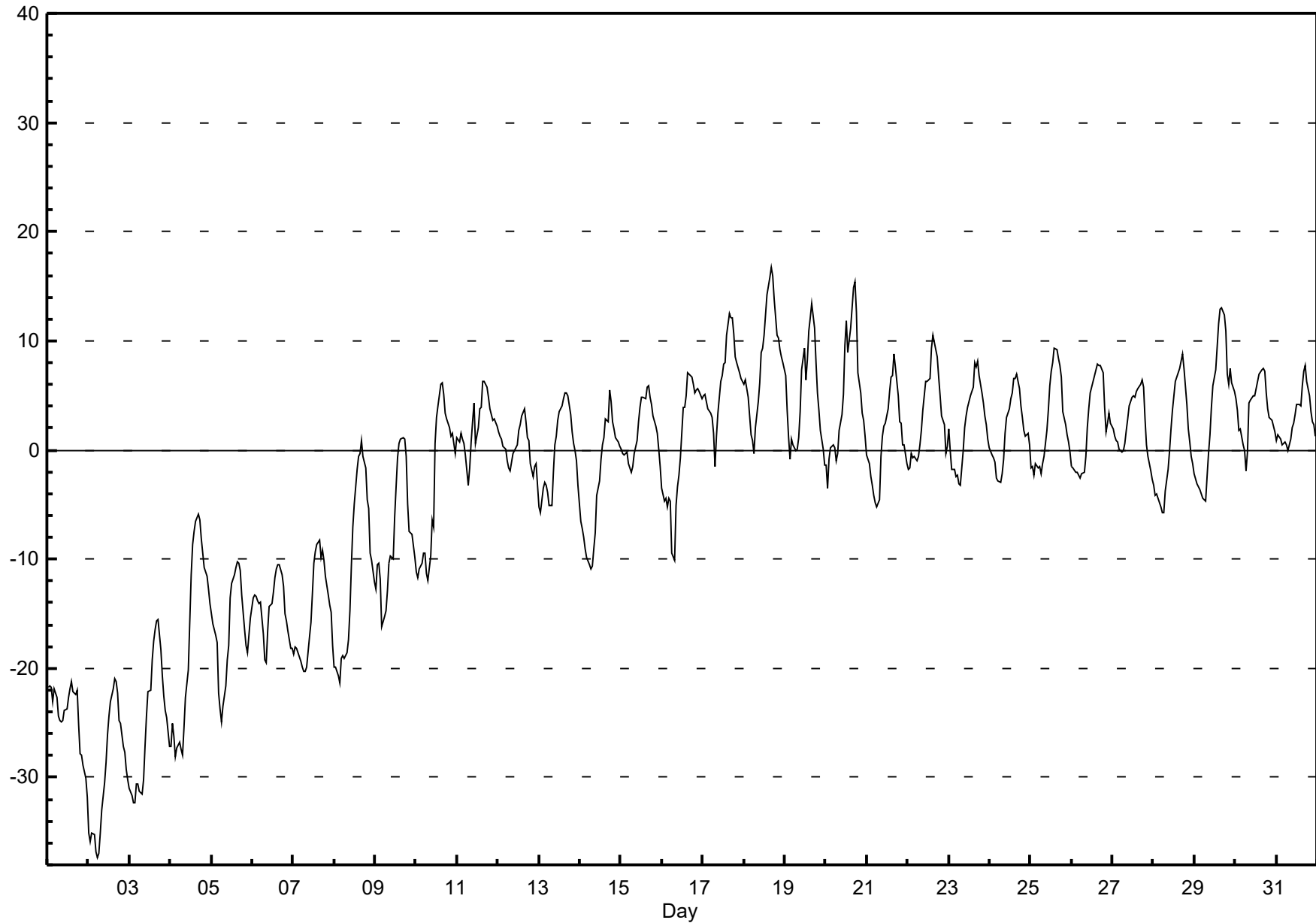
**PM<sub>2.5</sub> (PM<sub>2.5</sub>) -  $\mu\text{g}/\text{m}^3$**   
**Wembley - March 2019**



## Hourly Averages

External Temperature (ET) - °C

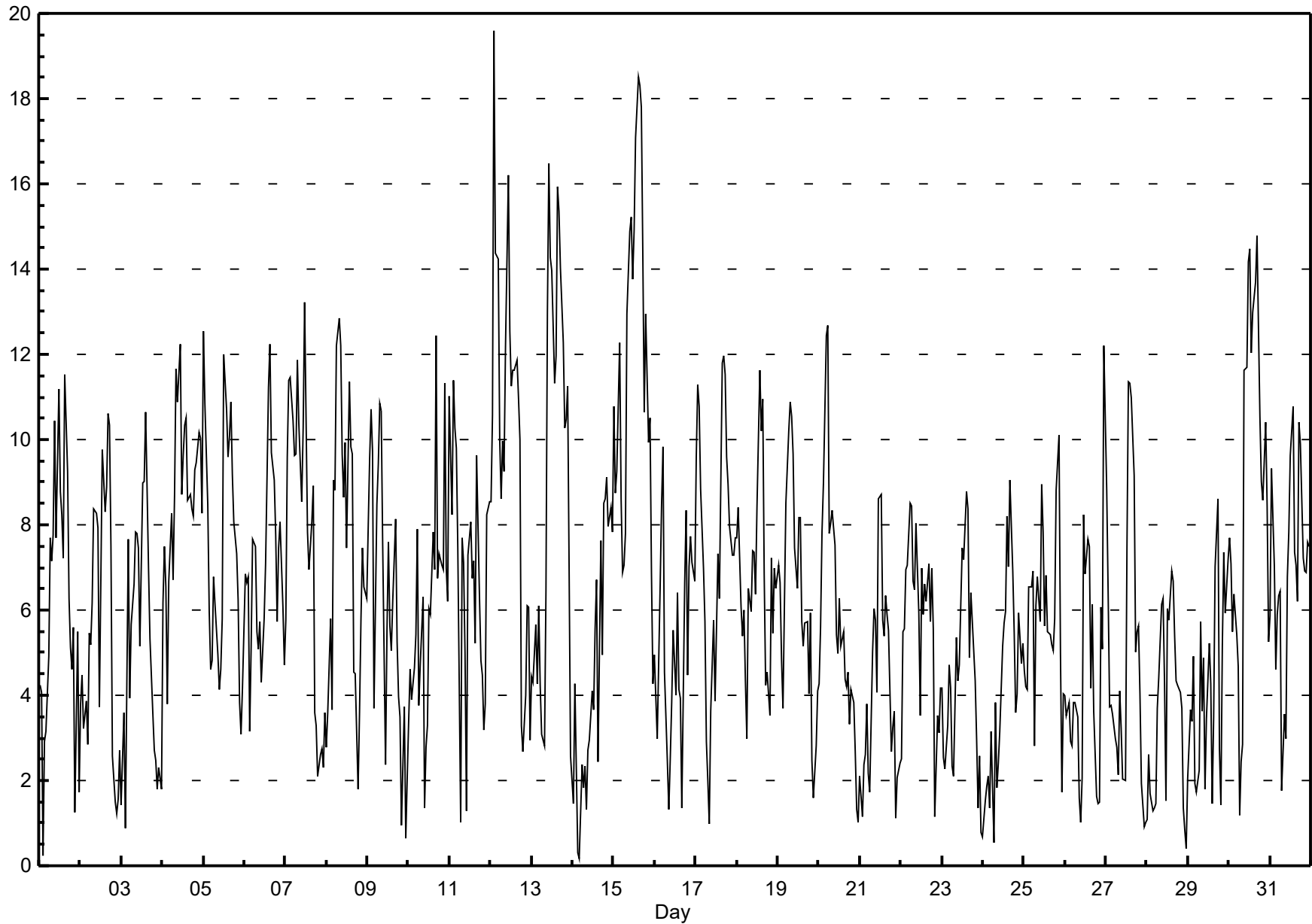
Wembley - March 2019



## Hourly Averages

Wind Speed (WS) - km/h

Wembley - March 2019

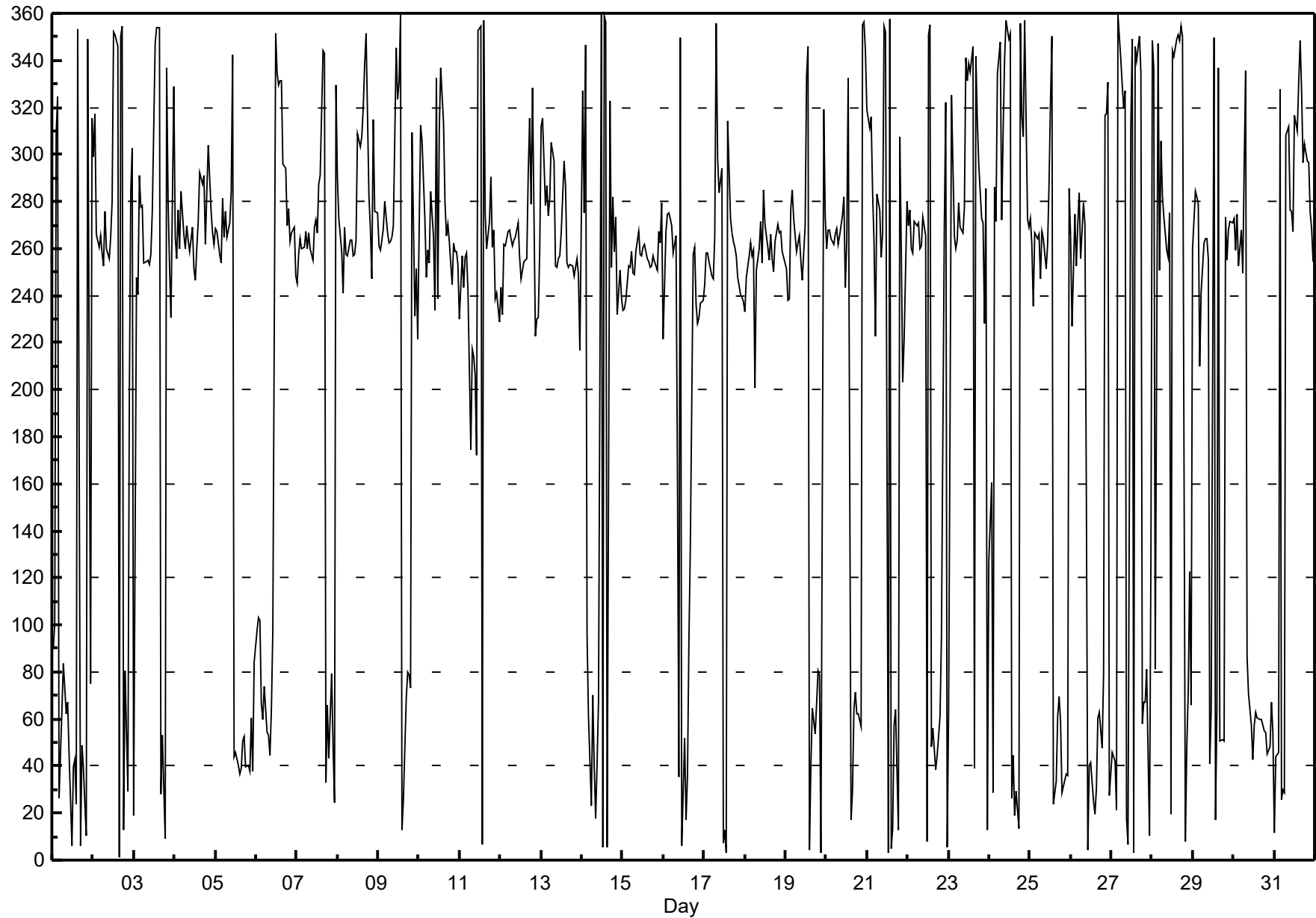




## Hourly Averages

Wind Direction (WD) - deg

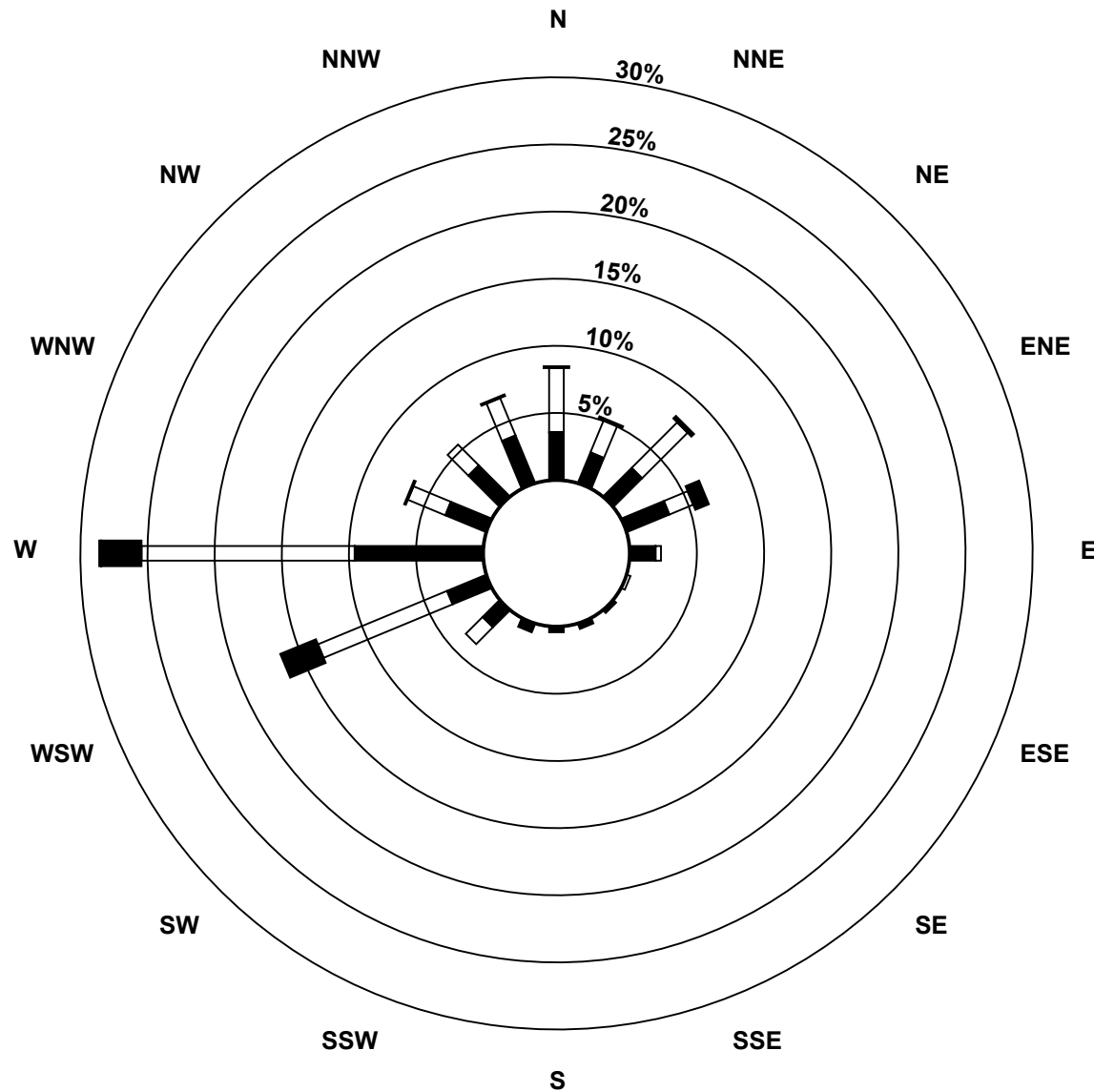
Wembley - March 2019



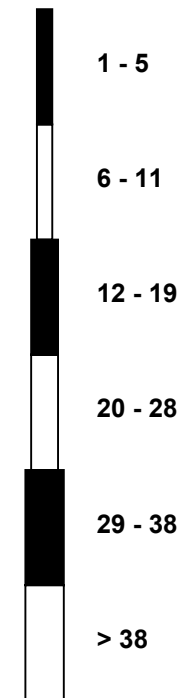
## Wind Rose

Wind Speed (WS) (km/h)

Wembley - March 2019



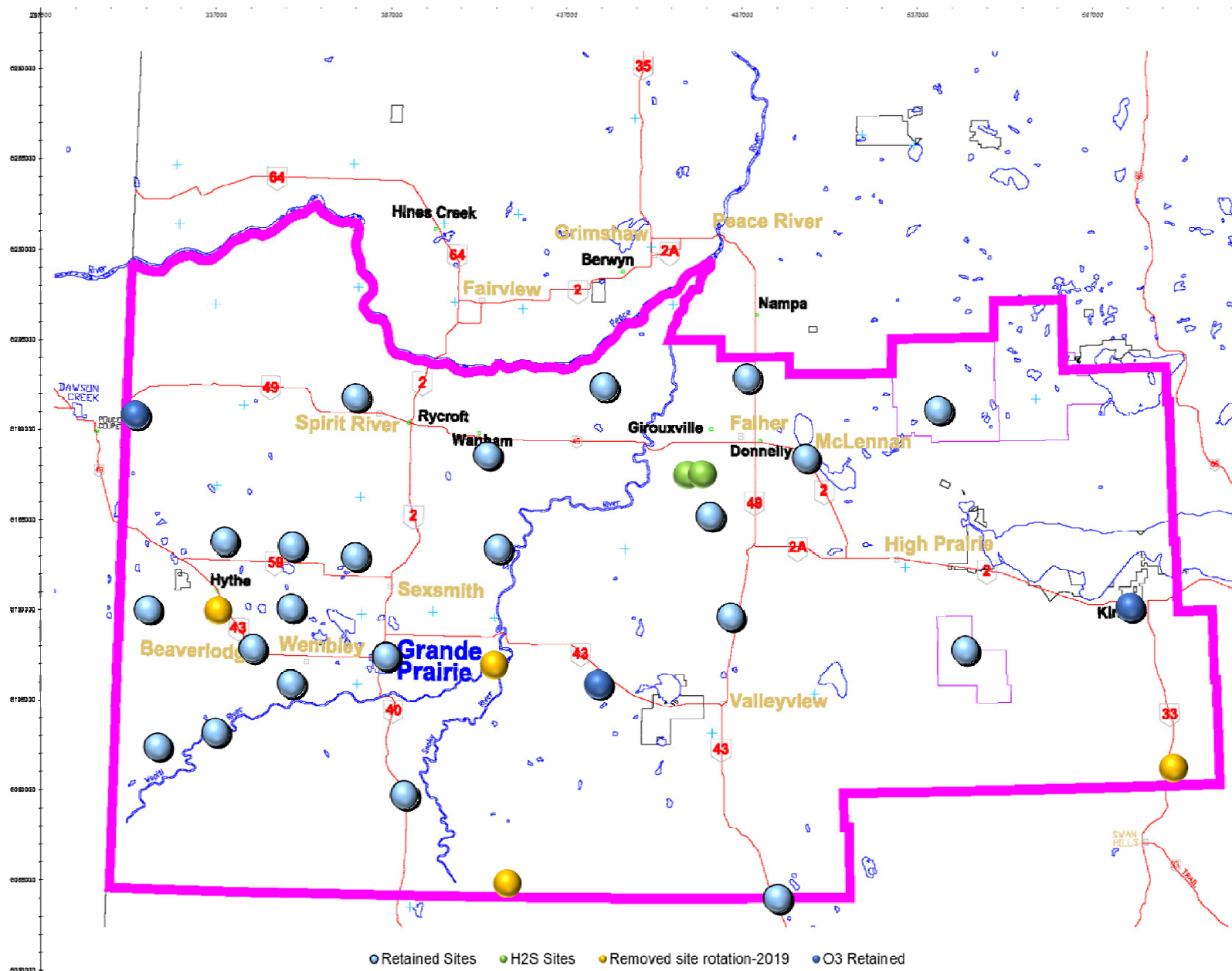
Wind Speed Classes (km/h)



**PAZA**

## Monthly Passive Data Summary

## Location of PAZA Passive Monitoring Stations



**Peace Airshed Zone Association - PAZA Passive Stations**  
**March 2019**

| Station Number    | Station Name      | SO2<br>ppb | O3<br>ppb | NO2<br>ppb | H2S<br>ppb | Site<br>Legal    |
|-------------------|-------------------|------------|-----------|------------|------------|------------------|
| <b>Duplicates</b> |                   |            |           |            |            |                  |
| 2a                | Bay Tree          |            | 44.2      | 0.3        |            |                  |
| 2b                | Bay Tree          |            | 40.7      | 0.3        |            |                  |
| 9a                | Spirit River      | 0.5        |           |            |            |                  |
| 9b                | Spirit River      | 0.4        |           |            |            |                  |
| 17a               | Poplar            | 0.8        |           |            |            |                  |
| 17b               | Poplar            | 0.7        |           |            |            |                  |
| 18a               | Saddle Hills      | 0.5        |           |            |            |                  |
| 18b               | Saddle Hills      | 0.7        |           |            |            |                  |
| 19a               | Wanham            |            |           | 0.4        |            |                  |
| 19b               | Wanham            |            |           | 0.4        |            |                  |
| 63a               | Girouxville 3     |            |           |            | 0.4        |                  |
| 63b               | Girouxville 3     |            |           |            | 0.4        |                  |
| 2                 | Bay Tree          | 0.3        | 42.4      | 0.3        |            | 13-16-078-13 W6M |
| 5                 | Boone Creek       | 0.4        |           | 0.4        |            | 16-36-074-11 W6M |
| 7                 | Steeprock Creek   | 0.4        |           | 0.4        |            | 09-35-072-13 W6M |
| 9                 | Spirit River      | 0.5        |           | 1.6        |            | 08-12-079-07 W6M |
| 11                | Webber Creek      | 0.6        |           | 0.6        |            | 09-36-074-09 W6M |
| 12                | Hythe             | 0.4        |           | 0.4        |            | 14-36-072-11 W6M |
| 14                | Sylvester         | 0.2        |           | 0.2        |            | 08-06-069-12 W6M |
| 16                | Beaverlodge       | 0.6        |           | 1.7        |            | 15-36-071-10 W6M |
| 17                | Poplar            | 0.8        |           | 1.4        |            | 13-06-073-08 W6M |
| 18                | Saddle Hills      | 0.6        |           | 0.4        |            | 04-25-074-07 W6M |
| 19                | Wanham            | 0.7        |           | 0.4        |            | 16-22-077-03 W6M |
| 21                | Eaglesham         | 0.0        |           | 0.2        |            | 16-21-079-25 W5M |
| 24                | Wembley           | 0.2        |           | 3.6        |            | 12-31-070-08 W6M |
| 25                | Pinto Creek       | 0.3        |           | 0.6        |            | 04-24-069-11 W6M |
| 27                | Grande Prairie I  | 0.5        |           | 10.0       |            | 08-15-071-06 W6M |
| 29                | Smoky Heights     | 1.2        |           | 1.2        |            | 04-06-075-02 W6M |
| 32                | Gold Creek        | 0.7        |           | 2.5        |            | 06-33-067-05 W6M |
| 33                | Wapiti            | 0.3        |           | 1.2        |            | 02-25-071-03 W6M |
| 35                | Jean Cote         | 0.5        |           | 0.4        |            | 12-35-079-21 W5M |
| 36                | Guy               | 0.3        |           | 0.4        | 0.4        | 03-04-076-22 W5M |
| 37                | Crooked Creek     | 0.3        | 35.3      | 0.2        |            | 16-01-071-26 W5M |
| 38                | Karr Creek        | 0.2        |           | 0.5        |            | 10-16-065-02 W6M |
| 39                | Clouston Creek    | 0.3        |           | 0.6        |            | 12-01-073-22 W5M |
| 40                | McLennan          | 0.5        |           | 0.4        |            | 03-29-077-19 W5M |
| 44                | Peavine           | 0.3        |           | 0.2        |            | 03-05-079-15 W5M |
| 46                | Little Smoky      | 0.3        |           | 3.6        |            | 12-01-065-21 W5M |
| 47                | Kinuso            | 0.2        | 32.7      | 0.5        |            | 12-10-073-10 W5M |
| 48                | Deer Mountain 2   | 0.2        |           | 0.2        |            | *                |
| 49                | Grande Prairie HP | 0.5        |           | 10.0       |            | 17-26-071-06 W6M |
| 50                | East Prairie      | 0.2        |           | 0.3        |            | 13-02-072-15 W5M |
| 63                | Girouxville 3     |            |           |            | 0.4        | 14-02-077-23 W5M |
| 64                | Girouxville 4     |            |           |            | 0.2        | 4-08-077-22 W5M  |

\*BDL = Below Detection Level

\*N/S - No sample

**End of Report  
PAZA  
March 2019  
Ambient Air Monitoring Report**