



**FIRST MINING  
GOLD**



## **APPENDIX H**

### **SOUND & VIBRATION TECHNICAL SUPPORT DOCUMENT**

- H-1 Baseline Sound & Vibration (Leaves Off)**
- H-2 Baseline Sound & Vibration (Leaves On)
- H-3 Baseline Sound Noise Assessment Report
- H-4 Blasting Assessment Report



# **2021 Sound and Vibration Baseline Report (Leaves-Off Program)**

Springpole Gold Project  
First Mining Gold Corp.

ONS2104

Prepared by:  
WSP Canada Inc

October 2024



# **2021 Sound and Vibration Baseline Report (Leaves-Off Program) Springpole Gold Project**

Red Lake District, Northwest Ontario  
Project #ONS2104

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## EXECUTIVE SUMMARY

First Mining Gold Corp. (FMG) proposes to develop, operate and eventually decommission / close an open pit gold and silver mine and ore process plant with supporting facilities known as the Springpole Gold Project (Project). The Project is located in a remote area of northwestern Ontario, approximately 110 kilometres (km) northeast of the Municipality of Red Lake and 145 km north of the Municipality of Sioux Lookout (Figure 1-1).

This document is one of a series of baseline reports prepared by WSP Canada Inc. on behalf of First Mining Gold Corp. to describe the current environmental conditions in the area. During the consultation process, Project-specific input from regulatory agencies and Indigenous communities will be considered at key milestones of the environmental assessment process, including baseline studies, alternatives, assessment approach, mitigation and monitoring where appropriate.

Two monitoring locations were selected for the baseline sound and vibration investigation. The locations were selected to be representative of potential sensitive receptors based on proximity and directionality in relation to the proposed Project location. This report summarizes relevant sound and vibration data collected during the first of two baseline monitoring field programs, conducted from April 15 to April 22, 2021, scheduled to avoid when leaves were on the trees to represent an acoustic environment when sounds due to nature are expected to be at a minimum. The second baseline monitoring program was conducted from June 22 to June 29, 2021, scheduled when leaves were on trees to represent the acoustic environment when sounds due to nature are expected to be at a maximum, and is summarized in a separate report (Appendix H-2 of the Environment Impact Statement / Environmental Assessment). No difference in existing vibration levels was expected between the two baseline monitoring field programs. This report describes the baseline monitoring locations and dates of the leaves-off monitoring program, outlines the baseline data collection method and presents summaries of the baseline monitoring data. The baseline monitoring field program was carried out in accordance with applicable noise and vibration guidelines.

The baseline sound levels were characterized using the hourly A-weighted equivalent sound level ( $L_{Aeq-1hr}$ ), daytime and nighttime sound levels ( $L_d$  and  $L_n$ ) and the day-night sound level ( $L_{dn}$ ). The baseline vibration levels were characterized using the peak particle velocity (PPV) ( $V_{PPV}$ ) and root mean square (RMS) velocity ( $V_{RMS}$ ) values. The following findings from the two locations monitored in the baseline assessment are presented in this report:

- The baseline sound level monitoring results showed  $L_d$  noise levels under 45 A-weighted decibels (dBA) and  $L_n$  noise levels under 35 dBA. The average  $L_{dn}$  levels at the monitoring locations were found to be lower than 45 dBA.
- The baseline vibration monitoring results showed  $V_{PPV}$  values under 0.01 millimetres per second (mm/s) for more than 95 percent (%) of the data collected, and the average  $V_{RMS}$  is approximately 0.001 mm/s.

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- Attachment A Technical Terms and Acoustical Descriptors
- Attachment B Calibration Certificates
- Attachment C Sound Monitoring Results
- Attachment D Vibration Monitoring Results

## LIST OF ABBREVIATIONS

°	degree
°C	degrees Celsius
°F	degrees Fahrenheit
%	percent
B&K	Brüel & Kjær
dB	decibel
dba	A-weighted decibels
FMG	First Mining Gold Corp.
km	kilometre
km/h	kilometres per hour
$L_{Aeq}$	A-weighted equivalent sound level
$L_{Aeq-1hr}$	hourly A-weighted equivalent sound level
$L_{ASmin}$	A-weighted slow response minimum sound level
$L_{ASmax}$	A-weighted slow response maximum sound level
$L_d$	daytime sound level
$L_n$	nighttime sound level
$L_{dn}$	day-night sound level
m	metre
MECP	Ministry of Environment, Conservation and Parks
mm/s	millimetres per second
mph	miles per hour
NMT	noise monitoring terminal
PPV	peak particle velocity
Project	Springpole Gold Project
RMS	root mean square
UTM	Universal Transverse Mercator
VMT	vibration monitoring terminal
$V_{PPV}$	vibration peak particle velocity
$V_{RMS}$	vibration root mean square
WSP	WSP Canada Inc.

## 1.0 INTRODUCTION

First Mining Gold Corp. (FMG) proposes to develop, operate, and eventually decommission / close an open pit gold and silver mine and ore process plant with supporting facilities known as the Springpole Gold Project (the Project). The Project is located in a remote area of northwestern Ontario, approximately 110 kilometres (km) northeast of the Municipality of Red Lake and 145 km north of the Municipality of Sioux Lookout (Figure 1).

An environmental assessment pursuant to the *Canadian Environmental Assessment Act, 2012* (SC 2012, c. 19, s. 52) and the Ontario *Environmental Assessment Act* (RSO 1990, c. E.18) is required to be completed for the Project. This document is one of a series of baseline reports prepared by WSP Canada Inc. (WSP) on behalf of FMG to describe the current environmental conditions and update existing information. This introduction is included in each baseline document, such that the reports can be read independent of one another. Other environmental baseline reports in the series address the following environmental aspects:

- Air quality;
- Ambient light;
- Geochemistry
- Hydrogeology;
- Hydrology;
- Surface water quality;
- Aquatic resources;
- Terrestrial resources; and
- Socioeconomic.

During the consultation process, Project-specific input from regulatory agencies and Indigenous communities was considered at key milestones of the environmental assessment process, including baseline studies, alternatives, assessment approach, mitigation and monitoring where appropriate. Non-confidential information from Indigenous Traditional Knowledge and Traditional Land Use studies is presented in the Environment Impact Statement / Environmental Assessment, where applicable to the Project.

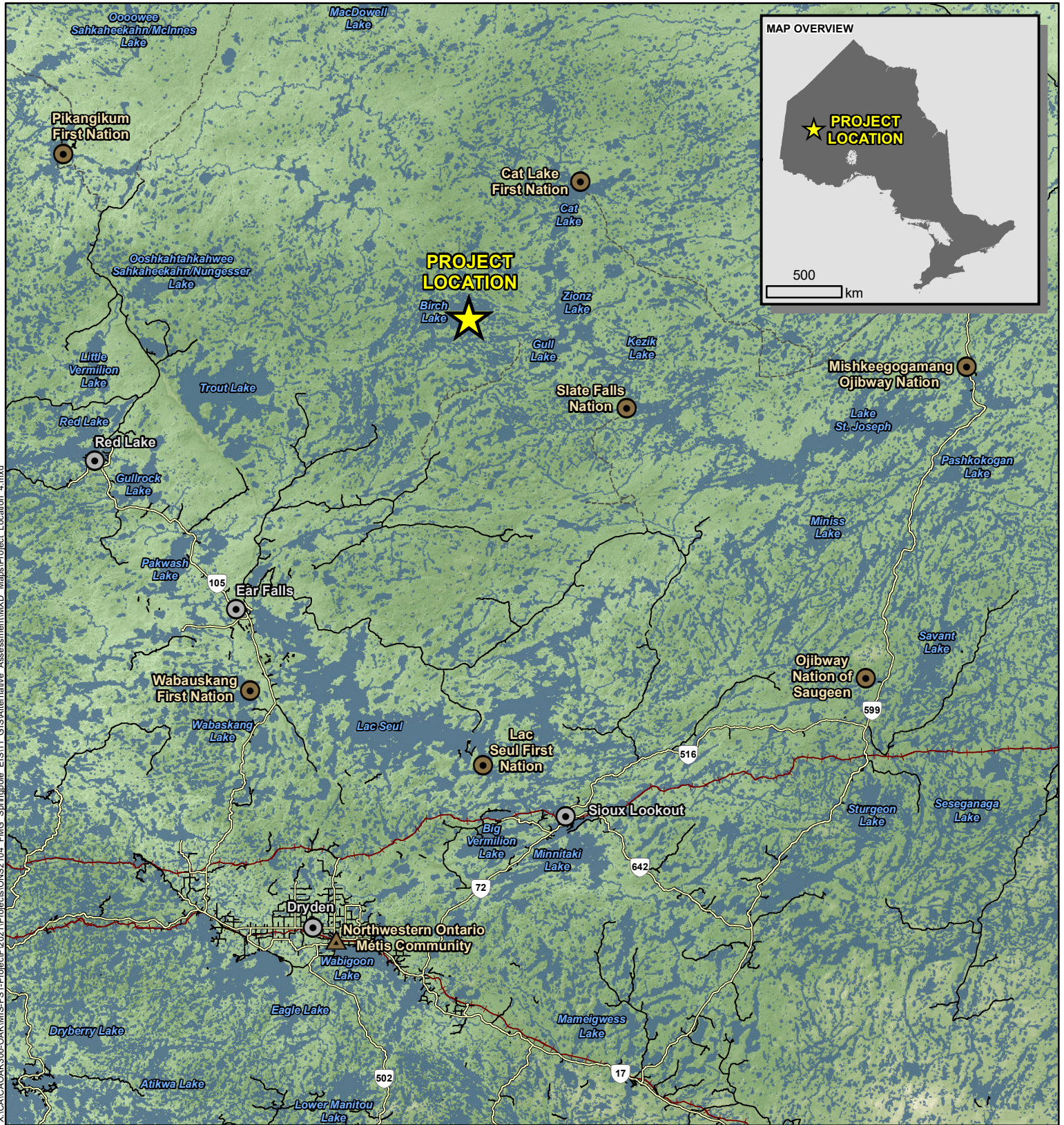
An overview of the consultation input and key Indigenous information considered in the effects assessment in relation to this report is provided in the Environment Impact Statement / Environmental Assessment. Feedback received relating to the sound and vibration baseline program has been incorporated into this baseline report as follows:

- The Ministry of Environment, Conservation and Parks (MECP) stated that the minimum hourly noise levels should be provided for each period of evaluation and that arithmetic averages should not be considered. The applicable periods of evaluation from the MECP are daytime (07:00 to 19:00), evening (19:00 to 23:00) and nighttime (23:00 to 07:00). The report has been prepared accordingly and presents the minimum one-hour noise levels for each period of evaluation and considers logarithmic averages when considering average noise levels.

- Cat Lake First Nation, Lac Seul First Nation and Slate Falls Nation requested further information on the applicable regulations and criteria for the Project. The report has been prepared accordingly to include a summary of the applicable guidelines. Further, the applicable noise and vibration criteria are described in detail in the Noise Modelling Report (Appendix H-3, Section 2) and Blasting Assessment Report (Appendix H-4, Section 2).
- Cat Lake First Nation, Lac Seul First Nation and Slate Falls Nation requested a description of the existing environmental conditions for each noise monitoring location, including details of the meteorological station and further discussion on the presentation and results of the monitoring programs. A description of the monitoring locations is provided in the report; the further discussion on the presentation and results of the monitoring programs has also been provided.

This report summarizes relevant sound and vibration data collected during the first of two baseline monitoring field programs, conducted from April 15 to April 22, 2021, scheduled to avoid when leaves are on the trees to represent the acoustic environment when sounds due to nature (e.g., leaves rustling) are expected to be at a minimum. The second baseline monitoring program was conducted from June 22 to June 29, 2021, scheduled when leaves are on trees to represent the acoustic environment when sounds due to nature are expected to be at a maximum and is summarized in a separate report (Appendix H-2 of the Environment Impact Statement / Environmental Assessment). No difference in existing vibration levels was expected between the two baseline monitoring field programs. The report describes the baseline monitoring locations and dates of the monitoring program, outlines the baseline data collection methods and presents summaries of the baseline monitoring data.

Several appendices are included with this report. Technical terms and definitions are provided in Attachment A. Calibration certificates for the equipment used on site are provided in Attachment B. Detailed sound and vibration monitoring results are presented in Attachments C and D, respectively.



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**LEGEND**

- Project Location
- Town
- First Nation Reserve
- Northwestern Ontario Métis Community
- Highway
- Secondary Road
- Resource / Winter Road
- Railway

NOTES:  
- Topographic information extracted from LIO, MNRF.



**SPRINGPOLE GOLD PROJECT**

**Project Location**

Datum: NAD83  
Projection: UTM Zone 18N

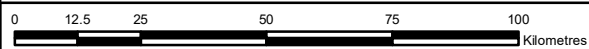


PROJECT N°: ONS2104

FIGURE: 1-1

SCALE: 1:1,500,000

DATE: September 2024



## 2.0 APPLICABLE GUIDANCE DOCUMENTS

The following guidance documents and policies are applicable for providing criteria and additional guidance for the assessment of baseline noise and vibration for this Project:

- MECP (2013) Environmental Noise Guideline - Stationary and Transportation Sources - Approval and Planning Publication NPC-300 (NPC-300);
- MECP (1978a) Model Municipal Noise Control Bylaw Procedures, Publication NPC-103 (NPC 103);
- Health Canada (2017) *Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise* (Health Canada Noise Guideline);
- MECP (1978b) Model Municipal Noise Control Bylaw Blasting, Publication NPC-119 (NPC 119); and
- California Department of Transportation *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020).

### **3.0 BASELINE MONITORING PROGRAM**

The leaves-off baseline sound and vibration monitoring field program was conducted in April 2021. Details of the monitoring program are outlined in Table 3-1, which includes the Universal Transverse Mercator (UTM) coordinates of the monitoring locations and the periods of monitoring at each location.

Figure 3-1 provides a geographical overview of the monitoring locations. The locations were selected to be representative of potential sensitive receptors based on information readily available at that time and proximity and directionality in relation to the proposed Project location. The selection of appropriate locations for baseline monitoring was further constrained by rights to access and accessibility conditions during the field work. The two monitoring stations, SP1 and SP2, were located northwest and south of the proposed Project, respectively. The monitoring stations consisted of a noise monitoring terminal (NMT) and vibration monitoring terminal (VMT). For each monitoring station, two photos are included in this section to show the equipment setup, as well as the location surroundings (Photo 3-1 and Photo 3-2).

Monitoring location SP1 was located adjacent to a frozen, snow-covered lake and (primarily coniferous) trees, as shown in Photo 3-1, and was located within the proposed Project footprint. Monitoring location SP2 was located approximately 20 m inland from Springpole Lake and was surrounded by (primarily coniferous) trees as shown in Photo 3-2. SP2 was located approximately 1.5 km south of the Project. Existing noise levels at both monitoring locations were primarily influenced by the natural environment (e.g., wind-induced noise, including rustling leaves). There were no substantial existing sources of vibration.

**Table 3-1: Leaves-Off Baseline Sound and Vibration Monitoring Program**

Monitoring Location	Monitoring Station Identifier	Start Date	End Date	UTM Coordinates <sup>(1)</sup>	
				Easting (m)	Northing (m)
SP1	NMT1	April 15, 2021	April 22, 2021	547208	5694725
	VMT1	April 15, 2021	April 22, 2021	547208	5694725
SP2	NMT2	April 15, 2021	April 22, 2021	549544	5690934
	VMT2	April 15, 2021	April 22, 2021	549544	5690934

**Notes:**

(1) All coordinates are in UTM coordinate system Zone 15N (NAD83).

NAD = North American Datum; NMT = noise monitoring terminal; VMT = vibration monitoring terminal.

547000

548500

550000

551500

553000

Birch Lake

Birch Lake

Dole Lake

SP1

L-18

L-1

L-19

PROJECT LOCATION

L-2

L-17

L-20

L-3

L-4

L-5

L-6

L-16

SP2

Springpole Lake (North Basin)

5696000  
5694500  
5693000  
5691500  
5690000  
5688500

X:\CACA\OAK300-OAK\MIS-FS1-Project\ONS2104\_FMG\_Springpole\_EIS11\_GIS\Notes\Baseline\_Report\MXD\Baseline\_SoundVibration\_Monitoring\_Locs\_6.mxd

**LEGEND**

 Project Location

 Sound and Vibration Monitoring Locations

 Watercourse

**NOTES:**

- Topographic information extracted from LIO, MNRF.
- Aerial imagery provided by First Mining Gold, 2020.



**FIRST MINING GOLD**



**SPRINGPOLE GOLD PROJECT**

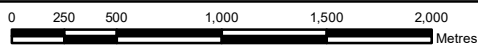
**Baseline Sound and Vibration Monitoring Locations**

Datum: NAD83  
Projection: UTM Zone 15N



PROJECT N°: ONS2104

FIGURE: 3-1



SCALE: 1:36,000

DATE: October 2024



(a) SP1 Installation



(b) SP1 Surroundings

**Photo 3-1: Monitoring Setup at Location SP1**



(a) SP2 Installation



(b) SP2 Surroundings

**Photo 3-2: Monitoring Setup at Location SP2**

## 4.0 MEASUREMENT METHODS

### 4.1 Sound Monitoring

The equipment at each sound monitoring location included a Brüel & Kjær (B&K) Type 1 integrating sound level meter (ANSI 2006; IEC 2013) set to slow response, A-weighting, and programmed to continuously measure and log one-hour data for the following metrics:  $L_{Aeq}$ ,  $L_{ASmin}$  and  $L_{ASmax}$  (A-weighted equivalent, slow response minimum, and slow response maximum sound levels). The metrics collected inform the assessment of potential impacts with respect to the following:

- One-hour equivalent sound level  $L_{Aeq-1hr}$  during the predictable worst-case scenario per NPC-300 (MECP 2013); and
- Daytime sound Level ( $L_d$ ), nighttime sound level ( $L_n$ ) and day-night sound level ( $L_{dn}$ ) per the Health Canada Noise Guideline (Health Canada 2017).

As presented in Section 2.0, guidance for the sound monitoring was taken from NPC-300 and the Health Canada Noise Guideline. Therefore, the sound monitoring data were processed for the daytime (07:00 to 19:00), evening (19:00 to 23:00) and nighttime (23:00 to 07:00) periods as defined in NPC-300 and daytime (07:00 to 22:00) and nighttime (22:00 to 07:00) periods as defined in the Health Canada Noise Guideline. Depending on the metric presented (i.e., hourly sound levels for NPC-300 and day-night sound levels for Health Canada), the appropriate time period was considered.

The sound level meters were each outfitted with a manufacturer-approved pre-amplifier and free-field microphone. Each of the sound monitoring setups was installed in an environmental protection case with the microphone mounted on an external tripod and fitted with an appropriate windscreen. The microphones were set to a typical outdoor listening height of between 1.5 and 2.0 metres (m) above ground. Table 4-1 presents a summary of the equipment deployed on site. Calibration certificates for the deployed equipment are provided in Attachment B.

Field calibrations were also conducted before and after the monitoring. An acoustical calibrator (IEC 2003) from B&K (Type 4231) was used for field calibrations. The field calibration variance, before and after the monitoring, was less than  $\pm 0.5$  decibels (dB).

### 4.2 Weather Information Collection

Sound levels and sound monitoring equipment may be affected by local meteorological conditions. To account for this potential influence, Project-specific weather data were collected to identify periods when sound monitoring could have been affected. Noise monitoring data collected during periods of inclement weather were excluded from the monitoring dataset. For the purpose of this program, in general accordance with NPC-103 (MECP 1978a) and industry practices, it was considered that inclement weather conditions occur when:

- Humidity levels are above 90%;
- Precipitation has occurred;
- Wind velocity has exceeded 20 kilometres per hour (km/h); or
- Temperature is outside the operating range defined by the manufacturer of the sound level meter (i.e., -10 degrees Celsius [ $^{\circ}C$ ] to +50 $^{\circ}C$ ).

FMG operates a meteorological station at the Springpole exploration camp site (548877 m Easting, 5694163 m Northing [UTM NAD83, Zone 15N]). Weather data from the onsite meteorological station were used to determine periods of inclement weather. The onsite meteorological station is programmed to collect data for the following metrics on a 15-minute basis:

- Wind speed (miles per hour; mph);
- Wind direction in degrees (°);
- Air temperature (degrees Fahrenheit; °F);
- Relative humidity (%); and
- Total precipitation (inches).

The weather data were processed into one-hour intervals to determine the hourly inclement weather periods. Weather data are provided in Attachment C.

### 4.3 Vibration Monitoring

The equipment at each vibration monitoring terminal included a B&K vibration analyzer set to measure one-second history data of peak particle velocity (PPV) ( $V_{PPV}$ ) and root mean square (RMS) velocity ( $V_{RMS}$ ) along three orthogonal axes<sup>1</sup>. Each of the vibration monitor systems was fitted with a triaxial geophone (DIN 2010). At each of the vibration monitoring locations, the geophone was securely installed on the ground. The geophone was fitted with a three-pronged mount which was pushed firmly into the ground to fix the unit in place.

The metrics collected will inform the assessment of potential impacts:

- $V_{PPV}$  is used for assessment of potential damage to building structures due to vibration, in particular from blasting, as outlined in NPC-119 (MECP 1978b).
- $V_{RMS}$  is used for assessment of potential impacts related to human perception of vibrations, as outlined in the *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020).

Table 4-2 presents a summary of the equipment deployed on site. Calibration certificates can be found in Attachment B.

### 4.4 Field Inspection

Site activities in relation to inspection and maintenance of the monitoring stations were undertaken during the monitoring program on April 19, 2021. Notable sound and vibration levels were recorded during the inspection period when the sound levels and ground vibrations were affected by inspection activities (e.g., transportation of field staff). These recordings were not considered as representative of the baseline levels. Monitoring data collected during the period of site inspection and maintenance were excluded from the dataset.

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<sup>1</sup> The three orthogonal axes are designated as transverse, longitudinal and vertical. Note that in this case, the longitudinal axis was pointed toward geographic north.

**Table 4-1: List of Sound Monitoring Equipment Used on Site**

Monitoring Location	Monitoring Station Identifier	Equipment Type	Model	Serial Number	Last Factory Calibration Date
SP1	NMT1	Sound level meter	B&K 2250	3011887	Feb. 24, 2020
		Pre-amplifier	B&K ZC-0032	27164	Feb. 24, 2020
		Microphone	B&K 4189	3130964	Feb. 24, 2020
SP2	NMT2	Sound level meter	B&K 2250	3004068	Jan. 13, 2020
		Pre-amplifier	B&K ZC-0032	19685	Jan. 13, 2020
		Microphone	B&K 4189	2877087	Jan. 13, 2020
n/a	n/a	Acoustical calibrator	B&K 4231	2053018	Apr. 22, 2020

**Note:**

n/a = not applicable.

**Table 4-2: List of Vibration Monitoring Equipment Used on Site**

Monitoring Location	Monitoring Station Identifier	Equipment Type	Model	Serial Number	Last Factory Calibration Date
SP1	VMT1	Vibration analyzer	B&K 4450	3102279	n/a
		Geophone	B&K 8380	194	Dec. 8, 2020
SP2	VMT2	Vibration analyzer	B&K 4450	1000147	n/a
		Geophone	B&K 8380	125	Dec. 6, 2020

**Note:**

n/a = not applicable.

## 5.0 BASELINE MONITORING RESULTS

### 5.1 Sound Monitoring Results

The following sections outline the results of the sound monitoring baseline field program. Tables and figures of the hourly sound monitoring data are presented in Attachment C.

Sound monitoring took place from April 15 (installation date) at approximately 10 a.m. (10:00) to April 22, 2021 (removal date) at approximately 12 p.m. (12:00) at the two locations (SP1 and SP2) identified in Table 3-1 and Figure 3-1.

#### 5.1.1 Hourly Sound Levels

Table 5-1 presents a summary of the collected sound data, presented for the daytime (07:00 to 19:00), evening (19:00 to 23:00) and nighttime (23:00 to 07:00) periods as defined in NPC-300, including the number of complete hourly records<sup>2</sup> and the number of hourly records where the sound data were measured during inclement weather conditions. The metrics presented in Table 5-1 correspond to the minimum and logarithmic average of the hourly  $L_{Aeq}$ , minimum of the hourly value of  $L_{ASmin}$  and maximum of the hourly value of  $L_{ASmax}$ .

The data suggest low background sound levels with the average hourly  $L_{Aeq}$  under 35 A-weighted decibels (dBA) during the daytime, under 30 dBA during the evening, and under 25 dBA during the nighttime at NMT1 and under 45 dBA during the daytime and evening and under 35 dBA during the nighttime at NMT2. While NMT1 and NMT2 share a similar range of  $L_{ASmin}$  to  $L_{ASmax}$  during either the daytime or nighttime, a higher average hourly  $L_{Aeq}$  was observed at NMT2.

#### 5.1.2 Day-Night Sound Levels

Table 5-2 presents a summary of the collected sound data, with the daytime sound level ( $L_d$ ), nighttime sound level ( $L_n$ ) and day-night sound level ( $L_{dn}$ ) calculated for each day of the monitoring period, with the time periods defined per the Health Canada Noise Guideline (Health Canada 2017). Table 5-2 shows the minimum, logarithmic average and maximum values of the three metrics (i.e.,  $L_d$ ,  $L_n$  and  $L_{dn}$ ).

Detailed daily day-night sound levels can be found in Table 5-3. The collected data suggest that, on average, NMT2 has a higher baseline  $L_{dn}$  level (42 dBA versus 31 dBA at NMT1) and a greater value range.

### 5.2 Vibration Monitoring Results

The Sections 5.2.1 and 5.2.2 outline the results of the vibration monitoring baseline field program. Figures of the vibration monitoring data are presented in Attachment D. Vibration monitoring took place from April 15 (installation date) at approximately 10 a.m. (10:00) to April 22, 2021 (removal date) at approximately 12 p.m. (12:00) at the two locations (SP1 and SP2) identified in Table 3-1 and Figure 3-1.

Vibration monitoring data are presented in terms of the  $V_{PPV}$  and  $V_{RMS}$  metrics recorded for one-second intervals along transverse, longitudinal (northward) and vertical axes. Baseline vibration conditions were summarized with respect to the  $V_{PPV}$  and  $V_{RMS}$  levels based on the following metrics:

- **The  $V_{PPV}$  metric for potential building damage:** The 95<sup>th</sup> percentile value of the measured PPV values was determined, which is considered to represent the likely maximum value of  $V_{PPV}$  at a location. The outliers of the dataset may have been affected by random disturbance and are not considered typical baseline scenarios.

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<sup>2</sup> For the purposes of this report, hourly record corresponds to an hour of time where sound data have been collected with an integration time of one hour, starting at the top of each hour. Records collected that do not meet the criteria of integration time suggest interrupted measurement, with possible causes such as equipment maintenance, and have been discarded from this report.

- **The  $V_{RMS}$  metric for potential human annoyance:** The arithmetic average of the  $V_{RMS}$  values was determined.

### 5.2.1 Vibration Levels

A summary of the collected vibration data is presented in Table 5-4. The results suggest that, for both monitoring locations, the background  $V_{PPV}$  values are under 0.01 mm/s for more than 95% of the data collected and the average  $V_{RMS}$  is approximately 0.001 mm/s.

### 5.2.2 Statistical Review

Statistical analysis was carried out on the one-second  $V_{PPV}$  and  $V_{RMS}$  metrics. Summaries of the statistical analysis are included in Table 5-5 and Table 5-6 for VMT1 and VMT2, respectively. The vibration levels measured at VMT1 and VMT2 are similar with regard to both numerical values and level variation.

**Table 5-1: One-Hour Sound Levels Summary**

Monitoring Station	Number of Hourly Records <sup>(1)</sup>		Sound Metrics Collected (1-hour) <sup>(2,3,4)</sup>											
	Total	Inclement Weather	Daytime (07:00–19:00)				Evening (19:00–23:00)				Nighttime (23:00–07:00)			
			L <sub>ASmin</sub>	Min L <sub>Aeq</sub>	L <sub>Aeq</sub>	L <sub>ASmax</sub>	L <sub>ASmin</sub>	Min L <sub>Aeq</sub>	L <sub>Aeq</sub>	L <sub>ASmax</sub>	L <sub>ASmin</sub>	Min L <sub>Aeq</sub>	L <sub>Aeq</sub>	L <sub>ASmax</sub>
NMT1	166	9	17	20	30	60	17	17	27	61	17	17	22	55
NMT2	165	8	16	17	42	63	16	17	40	59	16	17	31	51

**Notes:**

- The number of records with length of measurement equal to one hour taken for the period indicated:
  - Total:** total number of hourly records, excluding data collected during periods of site inspection and maintenance;
  - Inclement weather:** total number of hourly records that fall within a period of inclement weather as defined in Section 4.2.
- Denotes all metrics collected in terms of one-hour values, not coinciding with an hour in which inclement weather conditions were observed. For each of the metrics, the following processing was considered:
  - L<sub>ASmin</sub> denotes the minimum of the one-hour L<sub>ASmin</sub> collected.
  - Min L<sub>Aeq</sub> denotes the minimum of the one-hour L<sub>Aeq</sub> collected.
  - L<sub>Aeq</sub> denotes the logarithmic average of the one-hour L<sub>Aeq</sub> collected.
  - L<sub>ASmax</sub> denotes the maximum of the one-hour L<sub>ASmax</sub> collected.
- Daytime (07:00 to 19:00), evening (19:00 to 23:00), and nighttime (23:00 to 07:00) periods as defined in NPC-300 (MECP 2013).
- B&K 2250 noise floor is approximately 17 dBA.

**Table 5-2: Day-Night Sound Levels Summary**

Monitoring Station	Sound Metrics Collected <sup>(1,2,3,4)</sup>								
	L <sub>d</sub> (07:00–22:00)			L <sub>n</sub> (22:00–07:00)			L <sub>dn</sub>		
	Min.	Avg.	Max.	Min.	Avg.	Max.	Min.	Avg.	Max.
NMT1	24	30	34	17	22	26	26	31	35
NMT2	27	42	48	17	32	39	27	42	48

**Notes:**

- Denotes all metrics calculated based on one-hour values, not coinciding with an hour in which inclement weather conditions were observed, and excluding data collected during periods of site inspection and maintenance. For each of the metrics, the following processing was considered:
  - L<sub>d</sub> denotes the daytime equivalent sound level from 07:00 to 22:00.
  - L<sub>n</sub> denotes the nighttime equivalent sound level from 22:00 to 07:00.
  - L<sub>dn</sub> denotes the day-night sound level for a 24-hour period, with the nighttime contributions adjusted by +10 dB.
- Metrics presented: maximum, logarithmic average, and minimum.
- Daytime (07:00 to 22:00) and nighttime (22:00 to 07:00) periods as defined by Health Canada (2017).
- B&K 2250 noise floor is approximately 17 dBA.

**Table 5-3: Detailed Day-Night Sound Levels**

Monitoring Period	Sound Metrics Collected <sup>(1)</sup>					
	NMT1			NMT2		
	L <sub>d</sub>	L <sub>n</sub>	L <sub>dn</sub>	L <sub>d</sub>	L <sub>n</sub>	L <sub>dn</sub>
Thu - April 15, 2021	24	20	27	27	17	27
Fri - April 16, 2021	26	19	28	29	17	28
Sat - April 17, 2021	28	21	29	33	18	32
Sun - April 18, 2021	34	26	35	48	39	48
Mon - April 19, 2021	31	24	33	46	36	46
Tue - April 20, 2021	26	19	28	39	25	38
Wed - April 21, 2021	29	17	28	37	19	35
Thu - April 22, 2021	29	24	31	29	24	31

**Note:**

(1) Denotes all metrics calculated based on one-hour values, not coinciding with an hour in which inclement weather conditions were observed, and excluding data collected during periods of site inspection and maintenance. For each of the metrics, the following processing was considered:

L<sub>d</sub> denotes the daytime equivalent sound level from 07:00 to 22:00.

L<sub>n</sub> denotes the nighttime equivalent sound level from 22:00 to 07:00.

L<sub>dn</sub> denotes the day-night sound level for a 24-hour period, with the nighttime contributions adjusted by +10 dB.

**Table 5-4: Vibration Levels Summary**

Monitoring Station	Total Number of 1-Second Records <sup>(1)</sup>	Vibration Metrics Collected (1-second) <sup>(2,3)</sup>					
		PPV (mm/s)			RMS (mm/s)		
		Tran.	Long.	Vert.	Tran.	Long.	Vert.
VMT1	598,112	0.008	0.006	0.004	0.001	0.001	0.001
VMT2	596,150	0.003	0.004	0.004	0.001	0.001	0.001

**Notes:**

(1) The total number of one-second records taken for the monitoring period indicated, excluding data collected during periods of site inspection and maintenance.

(2) Denotes all metrics collected in terms of one-second values. For each of the metrics, the following processing was considered:

**PPV** denotes the 95<sup>th</sup> percentile value of PPV from all monitoring data along transverse, longitudinal and vertical axes.

**RMS** denotes the arithmetic average of RMS velocity from all monitoring data along transverse, longitudinal and vertical axes.

(3) The values presented are rounded to 3 decimal places.

**Table 5-5: Vibration Levels Statistical Summary – VMT1**

Vibration Levels <sup>(1)</sup>	Vibration Metrics Collected (1-second) <sup>(2,3)</sup>					
	PPV (mm/s)			RMS (mm/s)		
	Tran.	Long.	Vert.	Tran.	Long.	Vert.
Max	1.126	0.179	0.110	0.082	0.057	0.019
95%	0.008	0.006	0.004	0.003	0.002	0.001
75%	0.002	0.002	0.003	0.001	0.001	0.001
Mean	0.003	0.002	0.002	0.001	0.001	0.001
Median	0.002	0.002	0.002	0.001	0.001	0.001
25%	0.001	0.001	0.002	<0.001	0.001	<0.001
5%	0.001	0.001	0.001	<0.001	<0.001	<0.001
Min	0.001	0.001	0.001	<0.001	<0.001	<0.001

**Notes:**

- (1) Statistical metrics: maximum, 95<sup>th</sup> percentile, 75<sup>th</sup> percentile, mean, median, 25<sup>th</sup> percentile, 5<sup>th</sup> percentile, and minimum.
- (2) Denotes PPV and RMS collected in terms of one-second values from all monitoring data along transverse, longitudinal, and vertical axes, excluding levels during site inspections.
- (3) The values presented are rounded to 3 decimal places.

**Table 5-6: Vibration Levels Statistical Summary – VMT2**

Vibration Levels <sup>(1)</sup>	Vibration Metrics Collected (1-second) <sup>(2,3)</sup>					
	PPV (mm/s)			RMS (mm/s)		
	Tran.	Long.	Vert.	Tran.	Long.	Vert.
Max	1.564	1.098	1.476	0.117	0.126	0.134
95%	0.003	0.004	0.004	0.001	0.001	0.001
75%	0.002	0.003	0.002	0.001	0.001	0.001
Mean	0.002	0.002	0.002	0.001	0.001	0.001
Median	0.002	0.002	0.002	0.001	0.001	0.001
25%	0.001	0.002	0.001	0.001	0.001	<0.001
5%	0.001	0.001	0.001	<0.001	<0.001	<0.001
Min	0.001	0.001	0.001	<0.001	<0.001	<0.001

**Notes:**

- (1) Statistical metrics: maximum, 95<sup>th</sup> percentile, 75<sup>th</sup> percentile, mean, median, 25<sup>th</sup> percentile, 5<sup>th</sup> percentile, and minimum.
- (2) Denotes PPV and RMS collected in terms of one-second values from all monitoring data along transverse, longitudinal, and vertical axes, excluding levels during site inspections.
- (3) The values presented are rounded to 3 decimal places.

## **6.0 CLOSING**

This Sound and Vibration Baseline Report was prepared for FMG by WSP. The quality of information and conclusions contained here is consistent with the level of effort involved in WSP's services and based on 1) information available at the time of preparation; 2) data supplied by outside sources; and 3) the assumptions, conditions and qualifications set forth in this report.

Yours truly,

**WSP Canada Inc.**

Shira Daltrop, M.A.Sc.  
Noise Specialist

Daniel Corkery  
Principal Blasting/Vibration Consultant

### ***Original signed***

Stefan Cicak, P.Eng.  
Senior Acoustics, Noise and Vibration Engineer

## 7.0 REFERENCES

- American National Standards Institute (ANSI). 2006. ANSI S1.4-1983 (R2006) plus Amendment S1.4A-1985 (R2006) – American National Standard Specification for Sound Level Meters. Washington DC: ANSI.
- California Department of Transportation (Caltrans). 2020. Transportation and Construction Vibration Guidance Manual. April 2020.
- Deutsches Institut für Normung (DIN). 2010. DIN 45669-1, Measurement of vibration immission – Part 1: Vibration meters – Requirements and tests.
- Health Canada. 2017. Guidance for Evaluating Human Health Impacts in Environmental Assessment: NOISE. January 2017
- International Electrotechnical Commission (IEC). 2003. IEC 60942 – Electroacoustics – Sound calibrators. Geneva.
- International Electrotechnical Commission (IEC). 2013. IEC 61672-1 – Electroacoustics – Sound level meters – Part 1: Specifications. Geneva: International Electrotechnical Commission.
- Ontario Ministry of the Environment, Conservation and Parks (MECP). 1978a. Publication NPC-103 Procedures. Published under the Model Municipal Noise Control Bylaw.
- Ontario Ministry of the Environment, Conservation and Parks (MECP). 1978b. Publication NPC-119 Blasting. Published under the Model Municipal Noise Control Bylaw. Revision Oct. 1982
- Ontario Ministry of the Environment, Conservation and Parks (MECP). 2013. Publication NPC-300, Environmental Noise Guideline - Stationary and Transportation Sources - Approval and Planning. August 2013.

**Attachment A**  
**Technical Terms and Acoustical Descriptors**

## Technical Terms and Acoustical Descriptors

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<i>Frequency</i>	<p>Typically the rate in hertz (Hz); previously denoted cycles per second, at which an event is repeated.</p> <p>Normal human hearing extends over a range of frequencies from about 15 Hz to about 15 kilohertz (kHz).</p>
<i>A-Weighting Network</i>	<p>A frequency-response adjustment that conforms to the human response. The sensitivity of the human ear is frequency dependent. At low and high frequencies, the ear is not very sensitive, but between 500 Hz and 6 kHz, the ear is very sensitive. The A-weighting filter is a broadband filter that covers the interval from 20 Hz to 20 kHz. The shape of the A-weighting curve approximates the frequency sensitivity of the human ear. Therefore, the A-weighted value of a noise source is an approximation to how the human ear perceives the noise and is written in decibels (dB) as dB(A) or dBA.</p>
<i>Z-Weighting Network</i>	<p>Z for "Zero" frequency weighting, which implies no frequency weighting. In reality, the range is 10 Hz to 20 kHz <math>\pm</math> 1.5 dB.</p> <p>Introduced (IEC 61672 2003) to replace the Flat or Linear Filters. Written as dB(Z) or dBZ</p>
<i>Exponential Averaging</i>	<p>Generates a continuous running average where the most recently sampled levels have more influence on the average than older samples. This provides a convenient form to examine rapidly changing data with the benefit of some averaging to smooth the spectra.</p>
<i>Time Constants or Time Weightings</i>	<p>Time constants used for exponential averaging.</p> <p>Three time constants can be used and are defined as follows:</p> <p>Fast "F" time constant corresponds to 125 milliseconds (ms).</p> <p>Slow "S" time constant corresponds to 1 second (s).</p> <p>Impulse "I" time constant corresponding to 35 ms while the signal level is increasing and 1,500 ms while the signal level is decreasing.</p>
<i>Sound Pressure Level (SPL)</i>	<p>A measurement of instantaneous sound pressure and equal to 20 times the logarithm (base 10) of the ratio of the instantaneous sound pressure of a sound divided by the reference sound pressure of 20 micropascals (<math>\mu</math>Pa) (0 dB).</p>

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*$L_{x\text{eq}}(T)$  – Equivalent continuous sound level with a frequency weighting, x* The equivalent continuous sound level (also called time-average sound level),  $L_{x\text{eq}}(T)$ , is defined as 20 times the logarithm to base ten of the ratio of a root mean square (RMS) sound pressure during a time interval (T) to the reference sound pressure, sound pressure being obtained with a frequency weighting, x.

x can be replaced by:

A for A-weighted;

B for B-weighted;

C for C-weighted; or

Z for Z-weighted.

---

*$L_{xy\text{max}}(T)$  – Maximum sound level, with a frequency weighting, x, and with a time-weighting, y* The maximum time-weighted sound level,  $L_{xy\text{max}}(T)$ , is defined as the greatest time-weighted sound level,  $L_{xy}(t)$ , within a measurement interval (T).

x can be replaced by:

A for A-weighted;

B for B-weighted;

C for C-weighted; or

Z for Z-weighted.

y can be replaced by:

S for slow time weighting; or

F for fast time weighting.

---

*$L_{xy\text{min}}(T)$  – Minimum sound level, with a frequency weighting, x, and with a time-weighting, y* The minimum time-weighted sound level,  $L_{xy\text{min}}(T)$ , is defined as the smallest time-weighted sound level,  $L_{xy}(t)$ , within a measurement interval (T).

x can be replaced by:

A for A-weighted;

B for B-weighted;

C for C-weighted; or

Z for Z-weighted.

y can be replaced by:

S for slow time weighting; or

F for fast time weighting.

---

*Octave Band*

A band of frequencies where the upper limiting frequency is twice the lower limiting frequency. Octave bands are identified by their centre-frequencies. The octave bands standardized for acoustic measurements include those centred at 31.5, 63, 125, 250, 500, 1,000, 2,000, 4,000, and 8,000 Hz.

<i>1/N Octave Band</i>	A band of frequencies integrally divided from an Octave Band. The upper limiting frequency equals $2^{1/N}$ times the lower limiting frequency. The most commonly used frequency band is the 1/3 octave band.
<i>Velocity</i>	Rate of change in position, measured in distance per unit of time. When measuring vibration signals, velocity represents the rate of change in displacement.  Unit: millimetres per second (mm/s).
<i>Peak Particle Velocity (PPV)</i>	Highest particle velocity which is recorded during a particular vibration event.  Unit: millimetres per second (mm/s).
<i>Root Mean Square (RMS) Velocity</i>	Square root of the average of the squared instantaneous vibration velocity (V) over a specified time interval or integration time (T) reported in millimetres per second (mm/s).  For the purposes of vibration monitoring, the integration time (T) is one second.  Unit: millimetres per second (mm/s).

**Attachment B**  
**Calibration Certificates**

**CERTIFICATE OF CALIBRATION**

Certificate No: CAS-436568-Z1G7P5-301

Page 1 of 9

**CALIBRATION OF:**

Sound Level Meter:	Brüel & Kjær	2250	Serial No: 3011887
Microphone:	Brüel & Kjær	4189	Serial No: 3130964
Preamplifier:	Brüel & Kjær	ZC-0032	Serial No: 27164
Software version:	BZ7222 Version 4.7.5		

**CLIENT:**

Xscala Rental Instruments  
 234-5149 Country Hills Blvd. NW Suite 516  
 Calgary, AB T3A 5K8

**CALIBRATION CONDITIONS:**

Preconditioning: 4 hours at 23 ± 3 °C  
 Environment conditions See actual values in Environmental Condition sections

**SPECIFICATIONS:**

This document certifies that the instrument as listed under "Model/Serial Number" has been calibrated and unless otherwise indicated under "Final Data", meets acceptance criteria as prescribed by the referenced Procedure. The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor  $k = 2$  providing a level of confidence of approximately 95%. Statements of compliance, where applicable, are based on calibration results falling within specified criteria with no reduction by the uncertainty of the measurement. The calibration of the listed instrumentation, was accomplished using a test system which conforms with the requirements of ISO/IEC 17025, ANSI/NCSL Z540-1, and ISO 10012-1. For "as received" and/or "final" data, see the attached page(s). Items marked with one asterisk (\*) are not covered by the scope of the current A2LA accreditation This Certificate and attached data pages shall not be reproduced, except in full, without the written approval of the Brüel and Kjær Calibration Laboratory-Duluth, GA. Results relate only to the items tested. This instrument has been calibrated using Measurement Standards with values traceable to the National Institute of Standards and Technology, National Measurement Institutes or derived from natural physical constants.

**PROCEDURE:**

Brüel and Kjær Model 3630 Sound Level Meter Calibration System Software 7763 Version 8.0 - DB: 8.00 Test Collection 2250-4189.

**RESULTS:**

As Received Condition	As Received Data	Final Data
<input checked="" type="checkbox"/> Received in good condition	<input type="checkbox"/> Within acceptance criteria	<input checked="" type="checkbox"/> Within acceptance criteria
<input type="checkbox"/> Damaged - See attached report	<input type="checkbox"/> Outside acceptance criteria	<input type="checkbox"/> Limited test - See attached details
	<input checked="" type="checkbox"/> Inoperative	
	<input type="checkbox"/> Data not taken	

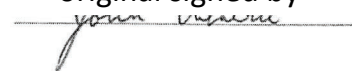
Date of Calibration: 21 Feb. 2020

Certificate issued: 24 Feb. 2020

Kyle Chancey

Calibration Technician

<original signed by>



Quality Representative

## CERTIFICATE OF CALIBRATION

Certificate No: CAS-428360-H0R5F9-301

Page 1 of 9

### CALIBRATION OF:

Sound Level Meter:	Brüel & Kjær	2250	Serial No: 3004068
Microphone:	Brüel & Kjær	4189	Serial No: 2877087
Preamplifier:	Brüel & Kjær	ZC-0032	Serial No: 19685
Software version:	BZ7222 Version 4.7.5		

### CLIENT:

XSCALA Rental Instruments Inc.  
234-5149 Country Hills Blvd. NW  
Calgary, AB T3A 5K8

### CALIBRATION CONDITIONS:

Preconditioning: 4 hours at  $23 \pm 3$  °C  
Environment conditions See actual values in Environmental Condition sections

### SPECIFICATIONS:

This document certifies that the instrument as listed under "Model/Serial Number" has been calibrated and unless otherwise indicated under "Final Data", meets acceptance criteria as prescribed by the referenced Procedure. The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor  $k = 2$  providing a level of confidence of approximately 95%. Statements of compliance, where applicable, are based on calibration results falling within specified criteria with no reduction by the uncertainty of the measurement. The calibration of the listed instrumentation, was accomplished using a test system which conforms with the requirements of ISO/IEC 17025, ANSI/NCSL Z540-1, and ISO 10012-1. For "as received" and/or "final" data, see the attached page(s). Items marked with one asterisk (\*) are not covered by the scope of the current A2LA accreditation This Certificate and attached data pages shall not be reproduced, except in full, without the written approval of the Brüel and Kjær Calibration Laboratory-Duluth, GA. Results relate only to the items tested. This instrument has been calibrated using Measurement Standards with values traceable to the National Institute of Standards and Technology, National Measurement Institutes or derived from natural physical constants.

### PROCEDURE:

Brüel and Kjær Model 3630 Sound Level Meter Calibration System Software 7763 Version 8.0 - DB: 8.00 Test Collection 2250-4189.

### RESULTS:

As Received Condition	As Received Data	Final Data
<input checked="" type="checkbox"/> Received in good condition	<input checked="" type="checkbox"/> Within acceptance criteria	<input checked="" type="checkbox"/> Within acceptance criteria
<input type="checkbox"/> Damaged - See attached report	<input type="checkbox"/> Outside acceptance criteria	<input type="checkbox"/> Limited test - See attached details
	<input type="checkbox"/> Inoperative	
	<input type="checkbox"/> Data not taken	

Date of Calibration: 13 Jan. 2020

Certificate issued: 13 Jan. 2020

Kyle Chancey

Calibration Technician

<original signed by>

Quality Representative



## Calibration chart

### **Device Under Calibration:**

Manufacturer: **SVI Slovakia**  
Type: **8380**  
Serial number: **125**  
Identification:

### **Product & Calibration details:**

Calibration is performed using Brüel & Kjær Vibration Transducer Calibration System type 3629 and fully complies with ISO 16063-21 and ISO/IEC 17025 standard.

Please find current product data sheet and detailed specifications etc. at [www.bksv.com](http://www.bksv.com) for Brüel & Kjær products.

All measurements are traceable to national standards.

### **Calibration description:**

Air Temperature: **23 ± 3 °C**  
Relative Humidity: **< 75 %**  
Excitation angle: **0°**  
Procedure used: **PC\_Z-Axis\_2 - 550Hz**

### **Calibration reference values:**

Reference sensitivity: **29.466 mV/(m/s<sup>2</sup>)**  
Reference frequency: **80Hz,  $\omega = 1000\text{s}^{-1}$**   
Reference phase: **0**  
Tolerances: **Passed**

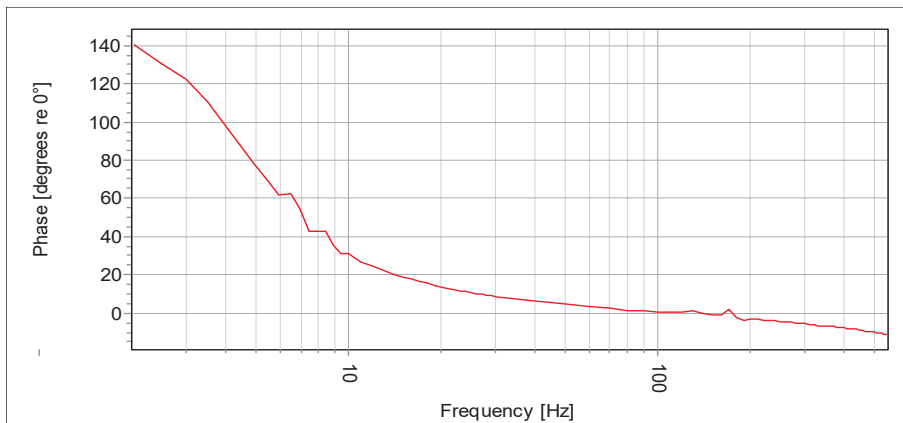
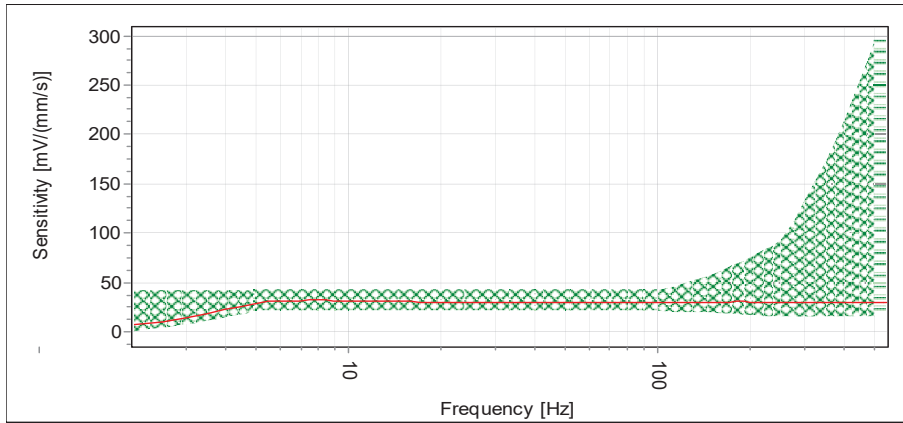
**Date of Calibration:** 12/6/2020

**Calibration Technician:** David Fousek

## Calibration chart

### Detailed results, graphical

Displayed frequency range: Displayed frequency range: 2 - 550 [Hz]



## Calibration chart

### **Device Under Calibration:**

Manufacturer: **SVI Slovakia**  
Type: **8380**  
Serial number: **125**  
Identification:

### **Product & Calibration details:**

Calibration is performed using Brüel & Kjær Vibration Transducer Calibration System type 3629 and fully complies with ISO 16063-21 and ISO/IEC 17025 standard.

Please find current product data sheet and detailed specifications etc. at [www.bksv.com](http://www.bksv.com) for Brüel & Kjær products.

All measurements are traceable to national standards.

### **Calibration description:**

Air Temperature: **23 ± 3 °C**  
Relative Humidity: **< 75 %**  
Excitation angle: **0°**  
Procedure used: **PC\_X-Axis\_2 - 550Hz**

### **Calibration reference values:**

Reference sensitivity: **29.514 mV/(m/s<sup>2</sup>)**  
Reference frequency: **80Hz,  $\omega = 1000\text{s}^{-1}$**   
Reference phase: **0**  
Tolerances: **Passed**

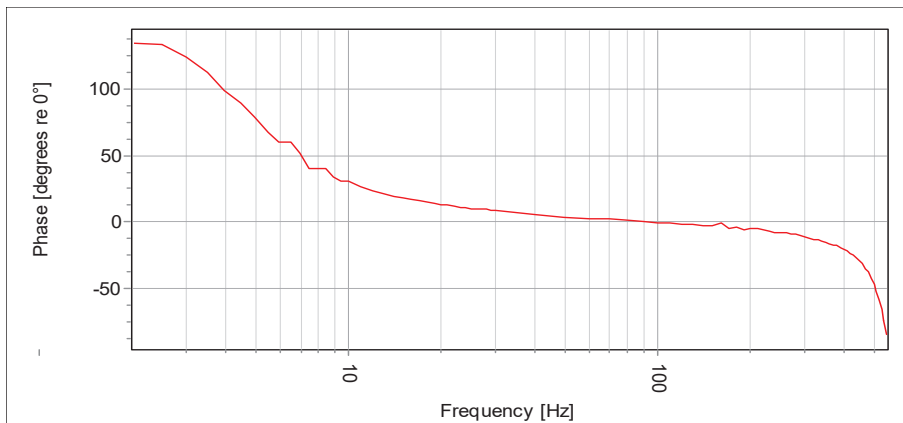
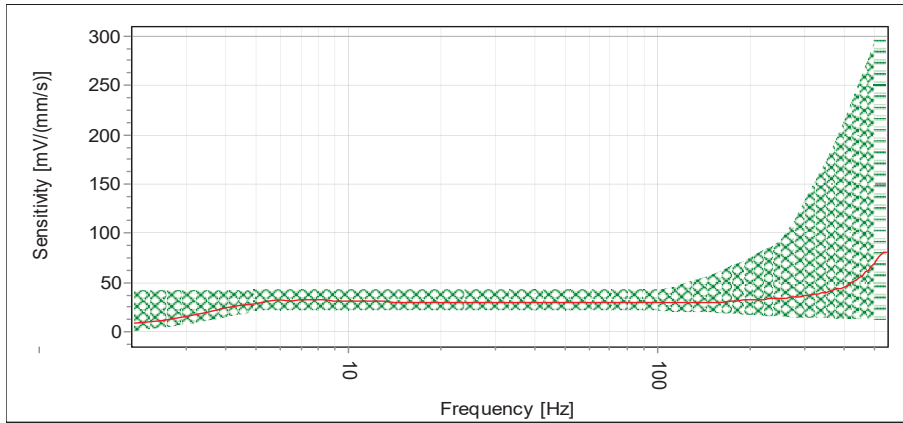
**Date of Calibration:** 12/6/2020

**Calibration Technician:** David Fousek

## Calibration chart

### Detailed results, graphical

Displayed frequency range: Displayed frequency range: 2 - 550 [Hz]



## Calibration chart

### **Device Under Calibration:**

Manufacturer: **SVI Slovakia**  
Type: **8380**  
Serial number: **125**  
Identification:

### **Product & Calibration details:**

Calibration is performed using Brüel & Kjær Vibration Transducer Calibration System type 3629 and fully complies with ISO 16063-21 and ISO/IEC 17025 standard.

Please find current product data sheet and detailed specifications etc. at [www.bksv.com](http://www.bksv.com) for Brüel & Kjær products.

All measurements are traceable to national standards.

### **Calibration description:**

Air Temperature: **23 ± 3 °C**  
Relative Humidity: **< 75 %**  
Excitation angle: **0°**  
Procedure used: **PC\_Y-Axis\_2 - 550Hz**

### **Calibration reference values:**

Reference sensitivity: **28.976 mV/(m/s<sup>2</sup>)**  
Reference frequency: **80Hz,  $\omega = 1000\text{s}^{-1}$**   
Reference phase: **0**  
Tolerances: **Passed**

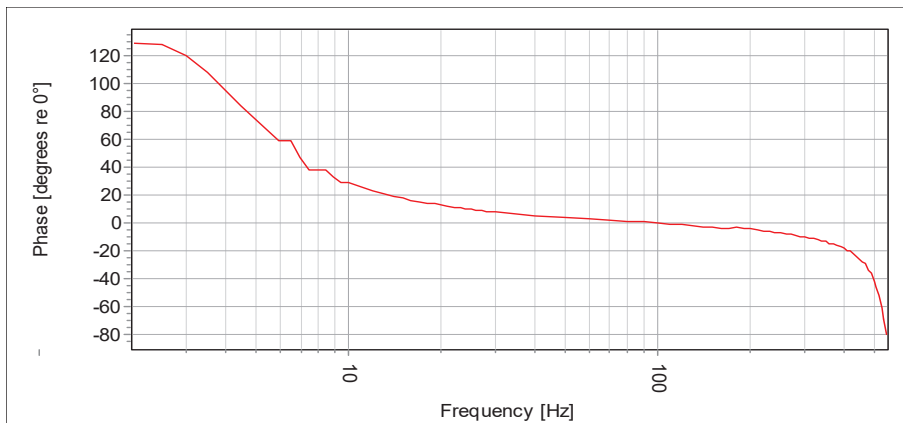
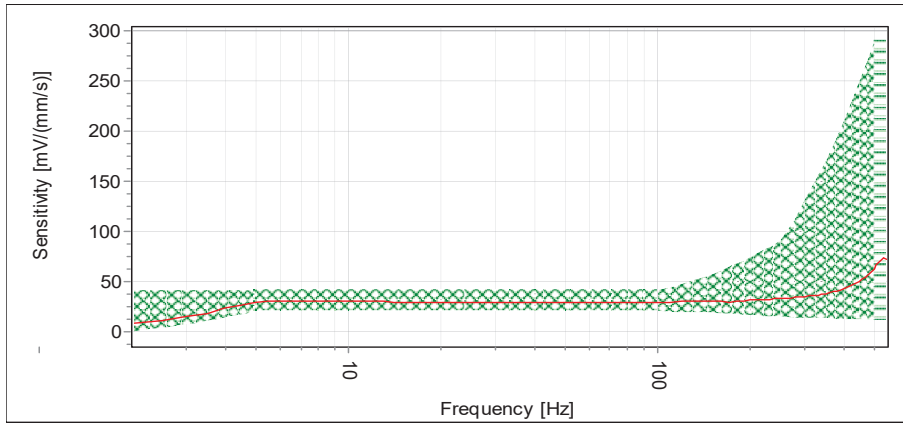
**Date of Calibration:** 12/6/2020

**Calibration Technician:** David Fousek

## Calibration chart

### Detailed results, graphical

Displayed frequency range: Displayed frequency range: 2 - 550 [Hz]



## Calibration chart

### **Device Under Calibration:**

Manufacturer: **SVI Slovakia**  
Type: **8380**  
Serial number: **194**  
Identification:

### **Product & Calibration details:**

Calibration is performed using Brüel & Kjær Vibration Transducer Calibration System type 3629 and fully complies with ISO 16063-21 and ISO/IEC 17025 standard.

Please find current product data sheet and detailed specifications etc. at [www.bksv.com](http://www.bksv.com) for Brüel & Kjær products.

All measurements are traceable to national standards.

### **Calibration description:**

Air Temperature: **23 ± 3 °C**  
Relative Humidity: **< 75 %**  
Excitation angle: **0°**  
Procedure used: **PC\_X-Axis\_2 - 550Hz**

### **Calibration reference values:**

Reference sensitivity: **28.769 mV/(m/s<sup>2</sup>)**  
Reference frequency: **80Hz,  $\omega = 1000\text{s}^{-1}$**   
Reference phase: **0**  
Tolerances: **Passed**

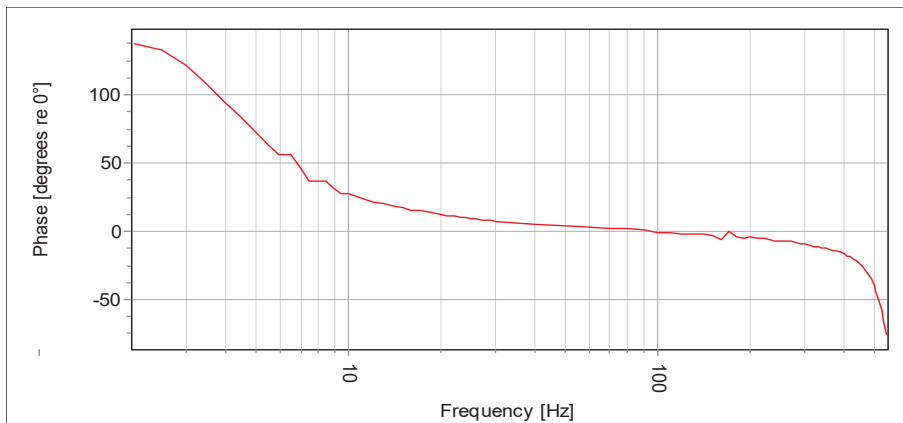
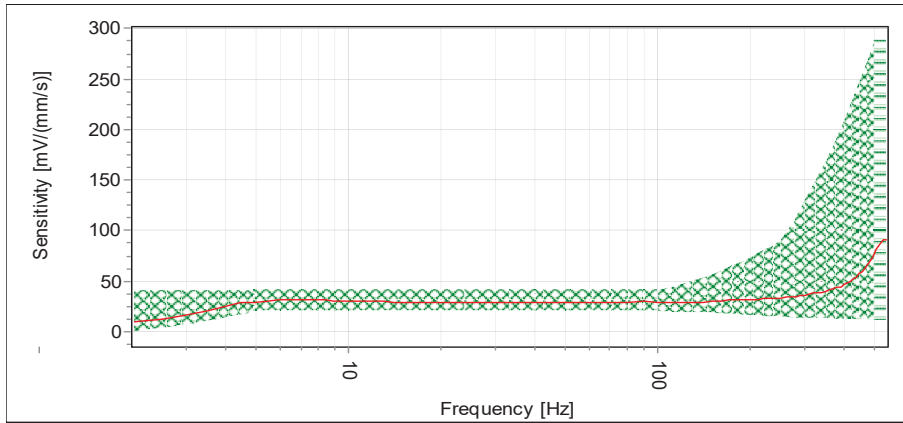
**Date of Calibration:** 12/8/2020

**Calibration Technician:** David Fousek

## Calibration chart

### Detailed results, graphical

Displayed frequency range: Displayed frequency range: 2 - 550 [Hz]



## Calibration chart

### **Device Under Calibration:**

Manufacturer: **SVI Slovakia**  
Type: **8380**  
Serial number: **194**  
Identification:

### **Product & Calibration details:**

Calibration is performed using Brüel & Kjær Vibration Transducer Calibration System type 3629 and fully complies with ISO 16063-21 and ISO/IEC 17025 standard.

Please find current product data sheet and detailed specifications etc. at [www.bksv.com](http://www.bksv.com) for Brüel & Kjær products.

All measurements are traceable to national standards.

### **Calibration description:**

Air Temperature: **23 ± 3 °C**  
Relative Humidity: **< 75 %**  
Excitation angle: **0°**  
Procedure used: **PC\_Y-Axis\_2 - 550Hz**

### **Calibration reference values:**

Reference sensitivity: **29.793 mV/(m/s<sup>2</sup>)**  
Reference frequency: **80Hz,  $\omega = 1000\text{s}^{-1}$**   
Reference phase: **0**  
Tolerances: **Passed**

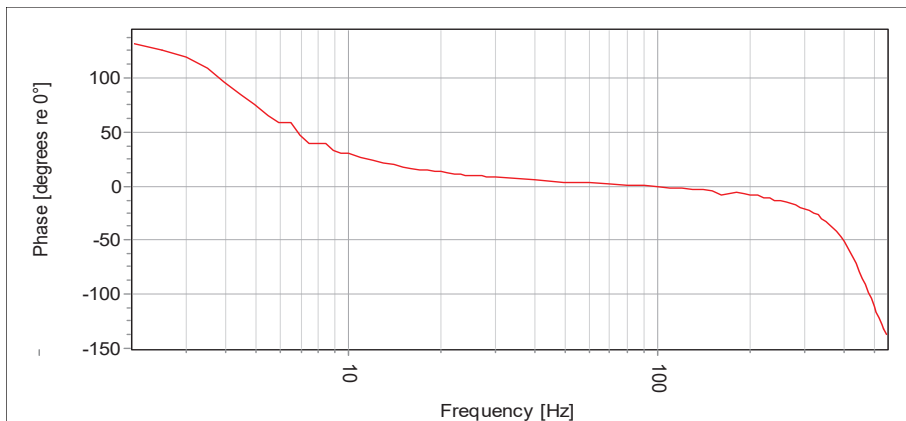
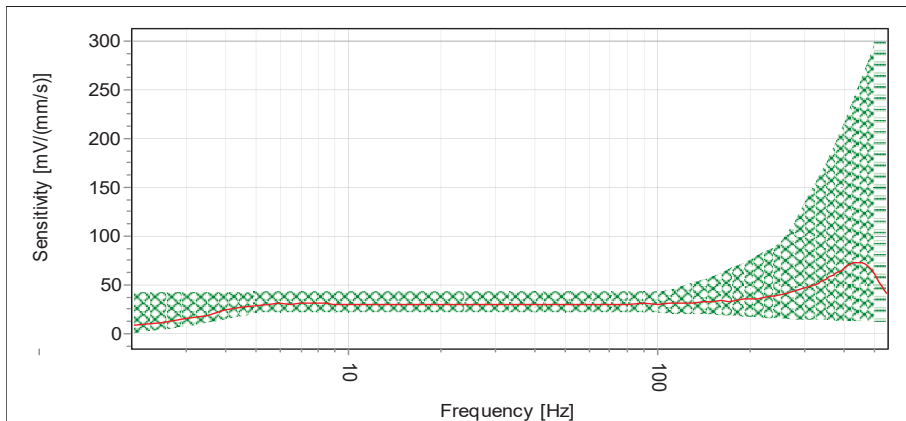
**Date of Calibration:** 12/7/2020

**Calibration Technician:** David Fousek

## Calibration chart

### Detailed results, graphical

Displayed frequency range: Displayed frequency range: 2 - 550 [Hz]



## Calibration chart

### **Device Under Calibration:**

Manufacturer: **SVI Slovakia**  
Type: **8380**  
Serial number: **194**  
Identification:

### **Product & Calibration details:**

Calibration is performed using Brüel & Kjær Vibration Transducer Calibration System type 3629 and fully complies with ISO 16063-21 and ISO/IEC 17025 standard.

Please find current product data sheet and detailed specifications etc. at [www.bksv.com](http://www.bksv.com) for Brüel & Kjær products.

All measurements are traceable to national standards.

### **Calibration description:**

Air Temperature: **23 ± 3 °C**  
Relative Humidity: **< 75 %**  
Excitation angle: **0°**  
Procedure used: **PC\_Z-Axis\_2 - 550Hz**

### **Calibration reference values:**

Reference sensitivity: **29.443 mV/(m/s<sup>2</sup>)**  
Reference frequency: **80Hz,  $\omega = 1000\text{s}^{-1}$**   
Reference phase: **0**  
Tolerances: **Passed**

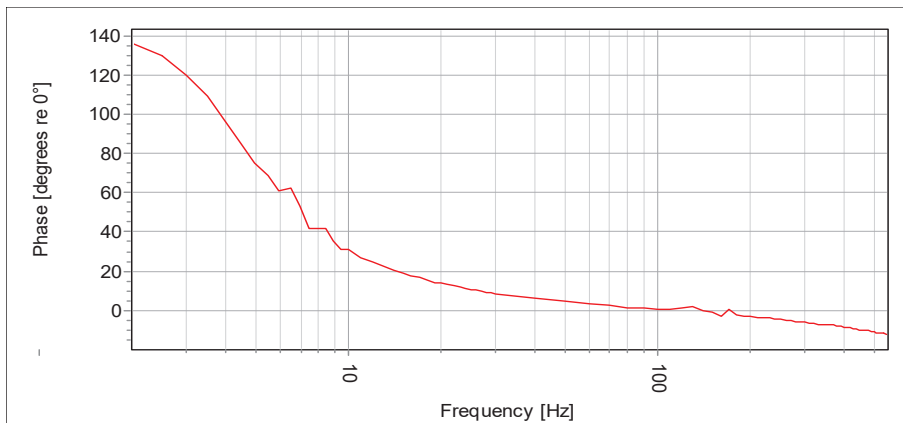
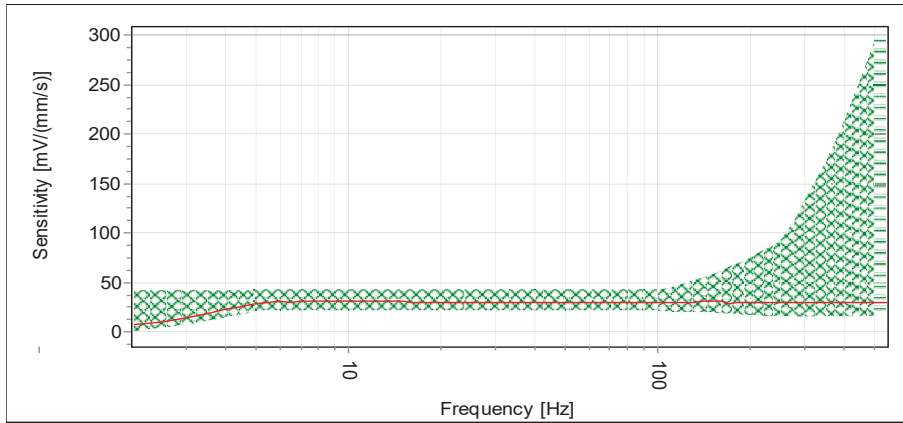
**Date of Calibration:** 12/7/2020

**Calibration Technician:** David Fousek

## Calibration chart

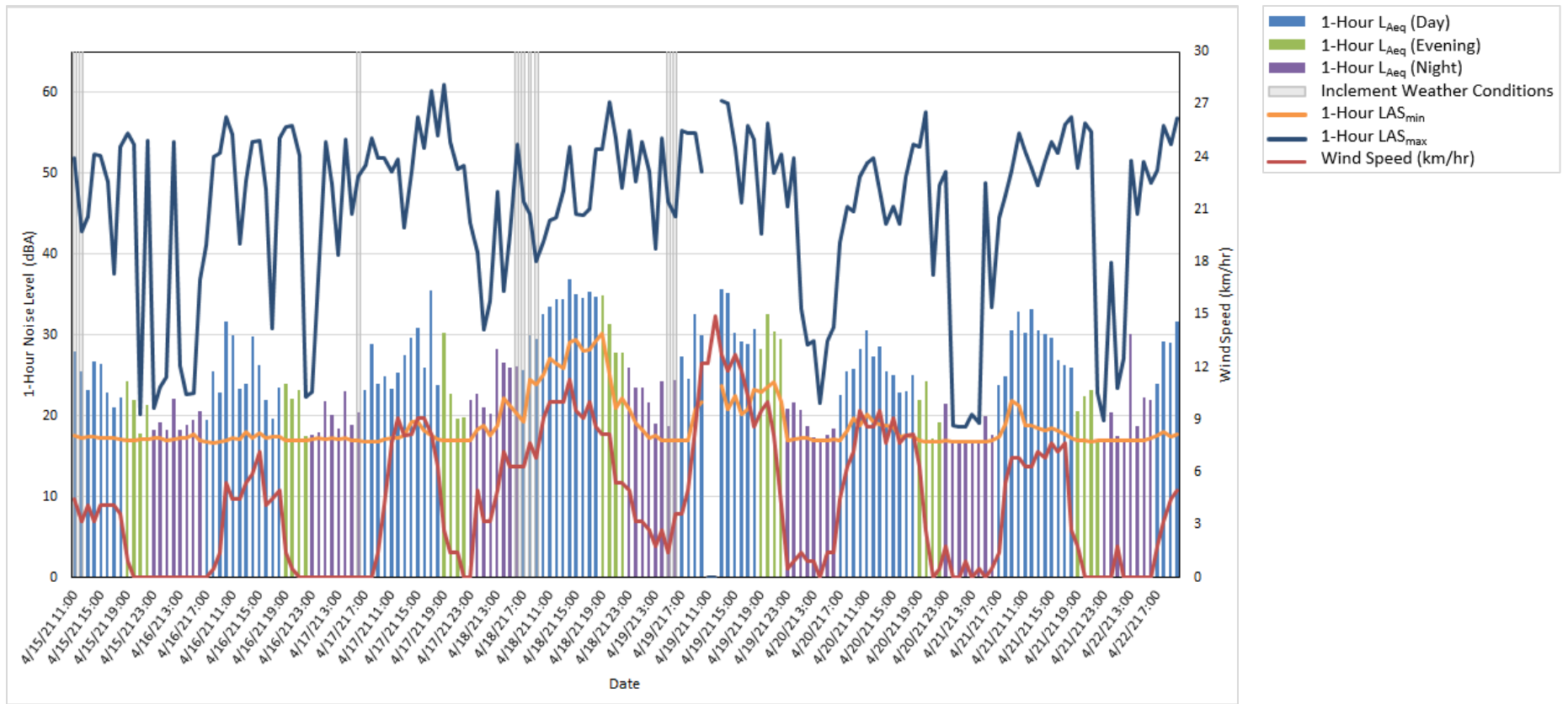
### Detailed results, graphical

Displayed frequency range: Displayed frequency range: 2 - 550 [Hz]

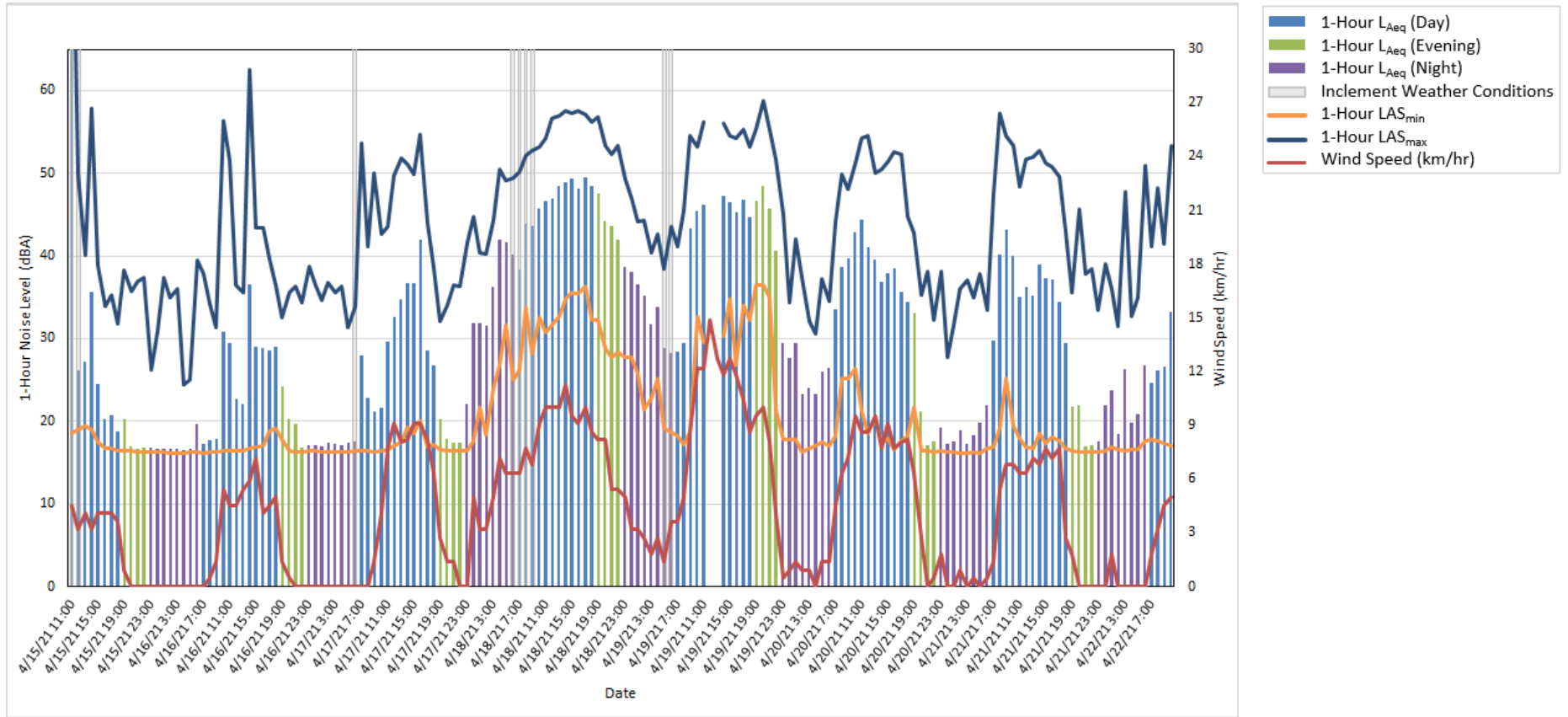


# **Attachment C**

## **Sound Monitoring Results**



**Figure C-1: Sound Levels at NMT1 (1-hour  $L_{Aeq}$ )**



**Figure C-2: Sound Levels at NMT2 (1-hour  $L_{Aeq}$ )**

Sound Monitoring Results at NMT1



Date	Start Time	Meteorological Data				INCLEMENT WEATHER CONDITIONS	Sound Level Data			Notes on Measurements . Not Available (loss of power, equipment error) . Incomplete dataset (less than one hour) . Data discarded due to inspection interruption
		Wind Speed [km/h]	Temp. [°C]	Humidity [%]	Precipitation [Y/N]		1 Hour LAeq [dBA]	1 Hour LASmin [dBA]	1 Hour LASmax [dBA]	
Thu - Apr 15, 2021	0:00	0.5	-3.4	92.2	N	YES	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	1:00	1.4	-3.5	92.4	N	YES	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	2:00	0	-3.5	91.6	N	YES	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	3:00	0	-3.4	90.1	N	YES	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	4:00	0	-3.5	88.7	N	NO	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	5:00	0.5	-3.7	88.9	Y	YES	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	6:00	1.8	-3.8	87.7	N	NO	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	7:00	1.8	-3.4	86.0	Y	YES	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	8:00	3.2	-0.8	78.5	N	NO	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	9:00	4.1	0.7	70.8	Y	YES	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	10:00	4.1	2.3	62.4	Y	YES	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	11:00	4.5	4.0	56.6	Y	YES	28.0	17.5	51.8	-
Thu - Apr 15, 2021	12:00	3.2	6.5	48.6	Y	YES	25.5	17.3	42.8	-
Thu - Apr 15, 2021	13:00	4.1	7.6	37.5	N	NO	23.2	17.4	44.7	-
Thu - Apr 15, 2021	14:00	3.2	8.5	33.3	N	NO	26.7	17.4	52.4	-
Thu - Apr 15, 2021	15:00	4.1	8.9	30.2	N	NO	26.4	17.3	52.2	-
Thu - Apr 15, 2021	16:00	4.1	9.1	28.8	N	NO	22.9	17.2	49.0	-
Thu - Apr 15, 2021	17:00	4.1	9.5	26.7	N	NO	21.0	17.2	37.6	-
Thu - Apr 15, 2021	18:00	3.6	8.3	27.0	N	NO	22.3	17.1	53.2	-
Thu - Apr 15, 2021	19:00	0.9	4.7	31.7	N	NO	24.2	17.0	55.0	-
Thu - Apr 15, 2021	20:00	0	1.6	37.6	N	NO	21.9	17.0	53.5	-
Thu - Apr 15, 2021	21:00	0	-0.3	47.0	N	NO	17.7	17.1	20.1	-
Thu - Apr 15, 2021	22:00	0	-1.5	53.0	N	NO	21.3	17.1	54.0	-
Thu - Apr 15, 2021	23:00	0	-2.2	58.6	N	NO	18.3	17.3	21.0	-
Fri - Apr 16, 2021	0:00	0	-1.7	58.7	N	NO	19.2	17.3	23.5	-
Fri - Apr 16, 2021	1:00	0	-2.1	59.1	N	NO	18.2	17.0	24.7	-
Fri - Apr 16, 2021	2:00	0	-2.9	66.7	N	NO	22.1	17.1	53.9	-
Fri - Apr 16, 2021	3:00	0	-3.9	67.6	N	NO	18.2	17.2	26.1	-
Fri - Apr 16, 2021	4:00	0	-4.2	74.5	N	NO	18.8	17.3	22.6	-
Fri - Apr 16, 2021	5:00	0	-3.6	78.6	N	NO	19.4	17.7	22.7	-
Fri - Apr 16, 2021	6:00	0	-3.0	77.7	N	NO	20.6	16.9	36.8	-
Fri - Apr 16, 2021	7:00	0	-1.7	64.7	N	NO	19.5	16.7	41.1	-
Fri - Apr 16, 2021	8:00	0.5	1.4	50.0	N	NO	25.5	16.6	52.0	-
Fri - Apr 16, 2021	9:00	1.4	3.3	39.0	N	NO	22.9	16.8	52.5	-
Fri - Apr 16, 2021	10:00	5.4	4.5	31.3	N	NO	31.7	16.9	56.9	-
Fri - Apr 16, 2021	11:00	4.5	5.8	27.0	N	NO	30.0	17.3	54.8	-
Fri - Apr 16, 2021	12:00	4.5	7.0	25.6	N	NO	23.3	17.1	41.2	-
Fri - Apr 16, 2021	13:00	5.4	8.1	25.2	N	NO	24.0	18.0	49.1	-
Fri - Apr 16, 2021	14:00	5.9	8.7	25.1	N	NO	29.7	17.3	53.9	-
Fri - Apr 16, 2021	15:00	7.2	9.1	25.1	N	NO	26.2	17.8	54.0	-
Fri - Apr 16, 2021	16:00	4.1	9.1	24.5	N	NO	21.9	17.2	48.0	-
Fri - Apr 16, 2021	17:00	4.5	9.1	23.9	N	NO	19.6	17.4	30.8	-
Fri - Apr 16, 2021	18:00	5	8.1	24.6	N	NO	23.5	17.4	54.4	-
Fri - Apr 16, 2021	19:00	1.4	5.3	30.6	N	NO	23.9	17.0	55.7	-

Sound Monitoring Results at NMT1



Date	Start Time	Meteorological Data				INCLEMENT WEATHER CONDITIONS	Sound Level Data			Notes on Measurements . Not Available (loss of power, equipment error) . Incomplete dataset (less than one hour) . Data discarded due to inspection interruption
		Wind Speed [km/h]	Temp. [°C]	Humidity [%]	Precipitation [Y/N]		1 Hour LAeq [dBA]	1 Hour LASmin [dBA]	1 Hour LASmax [dBA]	
Fri - Apr 16, 2021	20:00	0.5	2.4	36.0	N	NO	22.1	17.0	55.8	-
Fri - Apr 16, 2021	21:00	0	0.6	38.4	N	NO	23.2	17.0	52.1	-
Fri - Apr 16, 2021	22:00	0	-1.1	46.0	N	NO	17.4	17.0	22.3	-
Fri - Apr 16, 2021	23:00	0	-2.6	56.8	N	NO	17.6	17.1	22.9	-
Sat - Apr 17, 2021	0:00	0	-3.4	65.2	N	NO	17.9	17.2	37.0	-
Sat - Apr 17, 2021	1:00	0	-4.1	72.7	N	NO	21.7	17.1	53.9	-
Sat - Apr 17, 2021	2:00	0	-5.2	80.2	N	NO	20.1	17.2	48.7	-
Sat - Apr 17, 2021	3:00	0	-5.8	82.7	N	NO	18.4	17.1	39.8	-
Sat - Apr 17, 2021	4:00	0	-6.1	84.1	N	NO	23.0	17.2	54.1	-
Sat - Apr 17, 2021	5:00	0	-6.7	89.1	N	NO	18.9	17.0	45.0	-
Sat - Apr 17, 2021	6:00	0	-6.7	92.2	N	YES	20.4	16.9	49.5	-
Sat - Apr 17, 2021	7:00	0	-3.0	86.5	N	NO	23.2	16.8	51.0	-
Sat - Apr 17, 2021	8:00	0	1.7	68.4	N	NO	28.9	16.8	54.4	-
Sat - Apr 17, 2021	9:00	1.4	5.6	43.5	N	NO	23.9	16.8	51.8	-
Sat - Apr 17, 2021	10:00	4.1	8.0	33.2	N	NO	24.9	17.1	51.8	-
Sat - Apr 17, 2021	11:00	7.7	9.5	29.6	N	NO	23.3	17.2	50.1	-
Sat - Apr 17, 2021	12:00	9.1	10.5	28.9	N	NO	25.3	17.3	51.7	-
Sat - Apr 17, 2021	13:00	8.1	11.3	28.3	N	NO	27.5	17.6	43.3	-
Sat - Apr 17, 2021	14:00	8.2	12.3	27.2	N	NO	29.6	19.3	50.2	-
Sat - Apr 17, 2021	15:00	9.1	12.0	29.2	N	NO	30.8	19.3	56.9	-
Sat - Apr 17, 2021	16:00	9.1	11.6	31.2	N	NO	25.9	18.1	53.1	-
Sat - Apr 17, 2021	17:00	8.2	11.6	32.2	N	NO	35.5	17.6	60.2	-
Sat - Apr 17, 2021	18:00	6.3	9.6	35.4	N	NO	23.7	17.1	54.7	-
Sat - Apr 17, 2021	19:00	2.7	7.9	38.7	N	NO	30.3	17.0	61.0	-
Sat - Apr 17, 2021	20:00	1.4	5.3	45.8	N	NO	22.7	17.0	53.9	-
Sat - Apr 17, 2021	21:00	1.4	4.4	48.6	N	NO	19.6	17.0	50.5	-
Sat - Apr 17, 2021	22:00	0	1.6	60.0	N	NO	19.8	17.0	51.0	-
Sat - Apr 17, 2021	23:00	0	0.9	72.1	N	NO	21.9	17.0	43.8	-
Sun - Apr 18, 2021	0:00	5	2.3	67.6	N	NO	22.7	18.3	40.1	-
Sun - Apr 18, 2021	1:00	3.2	1.6	73.0	N	NO	21.0	18.8	30.7	-
Sun - Apr 18, 2021	2:00	3.2	1.1	77.2	N	NO	20.3	17.6	34.1	-
Sun - Apr 18, 2021	3:00	5	0.4	79.4	N	NO	28.2	18.8	47.7	-
Sun - Apr 18, 2021	4:00	7.2	-0.7	82.4	N	NO	26.6	22.2	35.4	-
Sun - Apr 18, 2021	5:00	6.3	-1.5	83.6	N	NO	25.9	21.3	42.4	-
Sun - Apr 18, 2021	6:00	6.3	-2.5	90.6	N	YES	26.1	20.2	53.6	-
Sun - Apr 18, 2021	7:00	6.3	-2.7	94.6	N	YES	25.6	19.3	46.4	-
Sun - Apr 18, 2021	8:00	7.7	-3.1	93.8	N	YES	29.9	24.5	44.9	-
Sun - Apr 18, 2021	9:00	6.8	-3.0	92.5	N	YES	29.5	23.8	39.1	-
Sun - Apr 18, 2021	10:00	9.1	-2.6	84.7	N	NO	32.6	25.1	41.5	-
Sun - Apr 18, 2021	11:00	10	-1.5	75.8	N	NO	33.4	27.1	44.1	-
Sun - Apr 18, 2021	12:00	10	-0.6	68.5	N	NO	34.4	26.4	44.4	-
Sun - Apr 18, 2021	13:00	10	0.0	62.2	N	NO	34.4	25.9	47.8	-
Sun - Apr 18, 2021	14:00	11.3	-0.6	62.5	N	NO	36.9	29.1	53.3	-
Sun - Apr 18, 2021	15:00	9.5	-0.7	62.2	N	NO	35.0	29.4	45.0	-

Sound Monitoring Results at NMT1



Date	Start Time	Meteorological Data				INCLEMENT WEATHER CONDITIONS	Sound Level Data			Notes on Measurements
		Wind Speed [km/h]	Temp. [°C]	Humidity [%]	Precipitation [Y/N]		1 Hour LAeq [dBA]	1 Hour LASmin [dBA]	1 Hour LASmax [dBA]	
Sun - Apr 18, 2021	16:00	9.1	-0.6	61.6	N	NO	34.5	28.0	44.8	-
Sun - Apr 18, 2021	17:00	10	-1.5	64.7	N	NO	35.3	28.1	45.5	-
Sun - Apr 18, 2021	18:00	8.6	-2.0	65.2	N	NO	34.7	29.3	52.9	-
Sun - Apr 18, 2021	19:00	8.2	-2.6	65.2	N	NO	34.9	30.1	52.9	-
Sun - Apr 18, 2021	20:00	8.2	-3.0	64.0	N	NO	31.3	25.1	58.8	-
Sun - Apr 18, 2021	21:00	5.4	-3.2	60.9	N	NO	27.8	21.0	54.3	-
Sun - Apr 18, 2021	22:00	5.4	-4.2	59.7	N	NO	27.7	22.2	48.2	-
Sun - Apr 18, 2021	23:00	5	-5.3	62.5	N	NO	26.0	20.8	55.2	-
Mon - Apr 19, 2021	0:00	3.2	-6.2	64.6	N	NO	23.4	19.1	49.0	-
Mon - Apr 19, 2021	1:00	3.2	-7.0	66.0	N	NO	23.5	18.3	53.8	-
Mon - Apr 19, 2021	2:00	2.7	-7.9	68.4	N	NO	21.6	17.3	50.2	-
Mon - Apr 19, 2021	3:00	1.8	-8.7	71.6	N	NO	19.0	17.6	40.7	-
Mon - Apr 19, 2021	4:00	2.7	-9.5	71.6	N	NO	24.3	17.0	54.4	-
Mon - Apr 19, 2021	5:00	1.4	-10.2	73.3	N	YES	18.7	16.9	46.5	-
Mon - Apr 19, 2021	6:00	3.6	-10.2	71.7	N	YES	24.4	16.9	44.6	-
Mon - Apr 19, 2021	7:00	3.6	-8.8	66.5	N	NO	27.3	16.9	55.2	-
Mon - Apr 19, 2021	8:00	5	-6.6	56.7	N	NO	24.5	16.9	55.0	-
Mon - Apr 19, 2021	9:00	8.6	-4.4	53.2	N	NO	32.6	20.7	54.9	-
Mon - Apr 19, 2021	10:00	12.2	-3.4	53.4	N	NO	29.9	21.7	50.2	-
Mon - Apr 19, 2021	11:00	12.2	-1.8	50.5	N	NO	-	-	-	Incomplete dataset (less than one hour)
Mon - Apr 19, 2021	12:00	14.9	-0.7	48.4	N	NO	-	-	-	Data discarded due to inspection interruption
Mon - Apr 19, 2021	13:00	12.7	0.8	43.8	N	NO	35.7	23.7	58.9	-
Mon - Apr 19, 2021	14:00	11.8	1.0	41.9	N	NO	35.2	20.8	58.7	-
Mon - Apr 19, 2021	15:00	12.7	1.6	39.3	N	NO	30.2	22.5	53.1	-
Mon - Apr 19, 2021	16:00	11.8	1.2	38.9	N	NO	29.2	20.1	46.3	-
Mon - Apr 19, 2021	17:00	10.4	0.4	39.6	N	NO	28.8	20.8	55.9	-
Mon - Apr 19, 2021	18:00	8.6	-0.8	42.0	N	NO	30.7	23.3	54.1	-
Mon - Apr 19, 2021	19:00	9.5	-2.1	46.2	N	NO	28.3	23.0	42.5	-
Mon - Apr 19, 2021	20:00	10	-3.2	51.7	N	NO	32.5	23.5	56.2	-
Mon - Apr 19, 2021	21:00	8.1	-4.1	55.4	N	NO	30.4	24.1	50.0	-
Mon - Apr 19, 2021	22:00	4.1	-4.9	57.8	N	NO	29.4	21.7	52.4	-
Mon - Apr 19, 2021	23:00	0.5	-6.0	60.4	N	NO	20.9	17.0	45.9	-
Tue - Apr 20, 2021	0:00	0.9	-6.2	61.4	N	NO	21.6	17.1	51.9	-
Tue - Apr 20, 2021	1:00	1.4	-6.0	60.3	N	NO	20.7	17.2	33.3	-
Tue - Apr 20, 2021	2:00	0.9	-6.3	62.4	N	NO	18.7	17.2	28.7	-
Tue - Apr 20, 2021	3:00	0.9	-6.5	65.7	N	NO	17.3	16.9	29.2	-
Tue - Apr 20, 2021	4:00	0	-6.7	70.2	N	NO	17.1	16.9	21.5	-
Tue - Apr 20, 2021	5:00	1.4	-7.0	74.9	N	NO	17.6	17.0	29.3	-
Tue - Apr 20, 2021	6:00	1.4	-7.1	76.9	N	NO	18.4	17.1	31.0	-
Tue - Apr 20, 2021	7:00	4.5	-6.8	76.0	N	NO	22.5	17.0	41.4	-
Tue - Apr 20, 2021	8:00	6.3	-6.3	69.8	N	NO	25.5	18.1	45.8	-
Tue - Apr 20, 2021	9:00	7.2	-5.6	61.0	N	NO	25.8	19.7	45.3	-
Tue - Apr 20, 2021	10:00	9.5	-5.0	57.0	N	NO	28.2	18.8	49.6	-
Tue - Apr 20, 2021	11:00	8.6	-3.2	47.8	N	NO	30.5	20.2	51.2	-

Sound Monitoring Results at NMT1



Date	Start Time	Meteorological Data				INCLEMENT WEATHER CONDITIONS	Sound Level Data			Notes on Measurements . Not Available (loss of power, equipment error) . Incomplete dataset (less than one hour) . Data discarded due to inspection interruption
		Wind Speed [km/h]	Temp. [°C]	Humidity [%]	Precipitation [Y/N]		1 Hour LAeq [dBA]	1 Hour LASmin [dBA]	1 Hour LASmax [dBA]	
Tue - Apr 20, 2021	12:00	8.6	-2.7	45.2	N	NO	27.3	19.2	51.8	-
Tue - Apr 20, 2021	13:00	9.5	-2.8	46.8	N	NO	28.6	19.0	47.9	-
Tue - Apr 20, 2021	14:00	7.7	-1.8	44.5	N	NO	25.5	18.7	43.7	-
Tue - Apr 20, 2021	15:00	9.1	-1.5	41.8	N	NO	25.0	18.6	45.8	-
Tue - Apr 20, 2021	16:00	7.7	-1.3	42.0	N	NO	22.8	17.4	43.7	-
Tue - Apr 20, 2021	17:00	8.1	-1.7	43.6	N	NO	23.0	17.5	49.5	-
Tue - Apr 20, 2021	18:00	8.2	-1.9	43.9	N	NO	25.0	17.4	53.5	-
Tue - Apr 20, 2021	19:00	6.3	-2.9	47.0	N	NO	21.9	17.0	53.3	-
Tue - Apr 20, 2021	20:00	2.7	-4.3	54.0	N	NO	24.3	16.8	57.5	-
Tue - Apr 20, 2021	21:00	0	-5.7	63.4	N	NO	17.2	16.8	37.4	-
Tue - Apr 20, 2021	22:00	0.5	-4.8	61.6	N	NO	19.1	16.8	48.5	-
Tue - Apr 20, 2021	23:00	1.8	-4.6	59.6	N	NO	21.5	16.9	50.1	-
Wed - Apr 21, 2021	0:00	0	-5.0	62.1	N	NO	17.0	16.8	18.8	-
Wed - Apr 21, 2021	1:00	0	-4.7	62.3	N	NO	16.9	16.8	18.6	-
Wed - Apr 21, 2021	2:00	0.9	-4.7	61.8	N	NO	16.9	16.8	18.6	-
Wed - Apr 21, 2021	3:00	0	-4.8	63.2	N	NO	17.0	16.8	20.1	-
Wed - Apr 21, 2021	4:00	0.5	-4.7	64.4	N	NO	17.0	16.8	19.1	-
Wed - Apr 21, 2021	5:00	0	-5.0	66.3	N	NO	19.9	16.8	48.8	-
Wed - Apr 21, 2021	6:00	0.5	-5.1	68.1	N	NO	17.6	16.9	33.4	-
Wed - Apr 21, 2021	7:00	1.4	-3.8	63.0	N	NO	23.8	17.4	44.4	-
Wed - Apr 21, 2021	8:00	5.4	-2.6	61.4	N	NO	24.9	19.0	47.2	-
Wed - Apr 21, 2021	9:00	6.8	-1.4	57.8	N	NO	30.6	21.8	50.4	-
Wed - Apr 21, 2021	10:00	6.8	0.3	54.0	N	NO	32.8	21.2	54.9	-
Wed - Apr 21, 2021	11:00	6.3	2.6	50.2	N	NO	30.3	18.7	52.7	-
Wed - Apr 21, 2021	12:00	6.3	2.6	50.8	N	NO	33.1	18.8	50.7	-
Wed - Apr 21, 2021	13:00	7.2	4.5	46.9	N	NO	30.6	18.4	48.5	-
Wed - Apr 21, 2021	14:00	6.8	5.2	45.8	N	NO	30.1	18.1	51.5	-
Wed - Apr 21, 2021	15:00	7.7	5.8	45.3	N	NO	29.6	18.5	53.9	-
Wed - Apr 21, 2021	16:00	7.2	6.3	44.0	N	NO	26.9	18.1	52.5	-
Wed - Apr 21, 2021	17:00	7.7	6.0	43.4	N	NO	26.3	17.7	56.0	-
Wed - Apr 21, 2021	18:00	2.7	5.4	45.2	N	NO	25.9	17.2	56.9	-
Wed - Apr 21, 2021	19:00	1.8	3.7	49.8	N	NO	20.6	16.9	50.7	-
Wed - Apr 21, 2021	20:00	0	0.7	58.5	N	NO	22.4	16.9	56.2	-
Wed - Apr 21, 2021	21:00	0	-1.4	69.4	N	NO	23.2	16.8	55.1	-
Wed - Apr 21, 2021	22:00	0	-2.5	80.1	N	NO	17.0	16.9	22.8	-
Wed - Apr 21, 2021	23:00	0	-3.0	85.0	N	NO	17.0	16.9	19.4	-
Thu - Apr 22, 2021	0:00	0	-3.0	84.1	N	NO	20.4	16.9	38.9	-
Thu - Apr 22, 2021	1:00	1.8	-2.0	78.5	N	NO	17.4	17.0	23.4	-
Thu - Apr 22, 2021	2:00	0	-2.4	79.3	N	NO	17.1	16.9	27.1	-
Thu - Apr 22, 2021	3:00	0	-3.0	83.0	N	NO	30.1	16.9	51.5	-
Thu - Apr 22, 2021	4:00	0	-3.2	84.6	N	NO	18.7	17.0	44.9	-
Thu - Apr 22, 2021	5:00	0	-3.2	86.2	N	NO	22.2	17.0	51.4	-
Thu - Apr 22, 2021	6:00	0	-2.7	86.8	N	NO	21.9	17.3	48.8	-
Thu - Apr 22, 2021	7:00	1.8	0.8	78.6	N	NO	23.9	17.5	50.3	-

Sound Monitoring Results at NMT1



Date	Start Time	Meteorological Data				INCLEMENT WEATHER CONDITIONS	Sound Level Data			Notes on Measurements
		Wind Speed [km/h]	Temp. [°C]	Humidity [%]	Precipitation [Y/N]		1 Hour LAeq [dBA]	1 Hour LASmin [dBA]	1 Hour LASmax [dBA]	
Thu - Apr 22, 2021	8:00	3.2	4.3	66.7	N	NO	29.1	18.0	55.9	-
Thu - Apr 22, 2021	9:00	4.5	7.3	54.9	N	NO	29.0	17.4	53.6	-
Thu - Apr 22, 2021	10:00	5	10.4	43.3	N	NO	31.6	17.7	56.8	-
Thu - Apr 22, 2021	11:00	5	14.0	34.2	N	NO	0.0	0.0	0.0	Not Available

Sound Monitoring Results at NMT2



Date	Start Time	Meteorological Data				INCLEMENT WEATHER CONDITIONS	Sound Level Data			Notes on Measurements . Not Available (loss of power, equipment error) . Incomplete dataset (less than one hour) . Data discarded due to inspection interruption
		Wind Speed [km/h]	Temp. [°C]	Humidity [%]	Precipitation [Y/N]		1 Hour LAeq [dBA]	1 Hour LASmin [dBA]	1 Hour LASmax [dBA]	
Thu - Apr 15, 2021	0:00	0.5	-3.4	92	N	YES	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	1:00	1.4	-3.5	92	N	YES	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	2:00	0	-3.5	92	N	YES	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	3:00	0	-3.4	90	N	YES	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	4:00	0	-3.5	89	N	NO	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	5:00	0.5	-3.7	89	Y	YES	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	6:00	1.8	-3.8	88	N	NO	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	7:00	1.8	-3.4	86	Y	YES	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	8:00	3.2	-0.8	79	N	NO	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	9:00	4.1	0.7	71	Y	YES	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	10:00	4.1	2.3	62	Y	YES	0.0	0.0	0.0	Not Available
Thu - Apr 15, 2021	11:00	4.5	4.0	57	Y	YES	70.2	18.6	91.5	-
Thu - Apr 15, 2021	12:00	3.2	6.5	49	Y	YES	26.2	19.0	50.0	-
Thu - Apr 15, 2021	13:00	4.1	7.6	38	N	NO	27.2	19.5	40.1	-
Thu - Apr 15, 2021	14:00	3.2	8.5	33	N	NO	35.7	19.0	57.9	-
Thu - Apr 15, 2021	15:00	4.1	8.9	30	N	NO	24.5	17.5	38.9	-
Thu - Apr 15, 2021	16:00	4.1	9.1	29	N	NO	20.3	16.8	33.9	-
Thu - Apr 15, 2021	17:00	4.1	9.5	27	N	NO	20.7	16.7	35.3	-
Thu - Apr 15, 2021	18:00	3.6	8.3	27	N	NO	18.8	16.5	31.8	-
Thu - Apr 15, 2021	19:00	0.9	4.7	32	N	NO	20.2	16.4	38.3	-
Thu - Apr 15, 2021	20:00	0	1.6	38	N	NO	17.0	16.4	35.7	-
Thu - Apr 15, 2021	21:00	0	-0.3	47	N	NO	16.7	16.3	36.9	-
Thu - Apr 15, 2021	22:00	0	-1.5	53	N	NO	16.8	16.3	37.4	-
Thu - Apr 15, 2021	23:00	0	-2.2	59	N	NO	16.8	16.3	26.2	-
Fri - Apr 16, 2021	0:00	0	-1.7	59	N	NO	16.7	16.3	30.9	-
Fri - Apr 16, 2021	1:00	0	-2.1	59	N	NO	16.7	16.3	37.3	-
Fri - Apr 16, 2021	2:00	0	-2.9	67	N	NO	16.7	16.2	35.0	-
Fri - Apr 16, 2021	3:00	0	-3.9	68	N	NO	16.6	16.2	36.0	-
Fri - Apr 16, 2021	4:00	0	-4.2	75	N	NO	16.5	16.2	24.4	-
Fri - Apr 16, 2021	5:00	0	-3.6	79	N	NO	16.7	16.3	25.0	-
Fri - Apr 16, 2021	6:00	0	-3.0	78	N	NO	19.7	16.3	39.5	-
Fri - Apr 16, 2021	7:00	0	-1.7	65	N	NO	17.2	16.2	37.9	-
Fri - Apr 16, 2021	8:00	0.5	1.4	50	N	NO	17.7	16.3	34.2	-
Fri - Apr 16, 2021	9:00	1.4	3.3	39	N	NO	17.8	16.3	31.4	-
Fri - Apr 16, 2021	10:00	5.4	4.5	31	N	NO	30.8	16.5	56.3	-
Fri - Apr 16, 2021	11:00	4.5	5.8	27	N	NO	29.5	16.4	51.5	-
Fri - Apr 16, 2021	12:00	4.5	7.0	26	N	NO	22.7	16.5	36.5	-
Fri - Apr 16, 2021	13:00	5.4	8.1	25	N	NO	22.1	16.5	35.6	-
Fri - Apr 16, 2021	14:00	5.9	8.7	25	N	NO	36.6	16.7	62.6	-
Fri - Apr 16, 2021	15:00	7.2	9.1	25	N	NO	29.0	16.9	43.4	-
Fri - Apr 16, 2021	16:00	4.1	9.1	25	N	NO	28.8	17.1	43.4	-
Fri - Apr 16, 2021	17:00	4.5	9.1	24	N	NO	28.5	18.8	39.6	-
Fri - Apr 16, 2021	18:00	5	8.1	25	N	NO	29.0	19.2	36.5	-
Fri - Apr 16, 2021	19:00	1.4	5.3	31	N	NO	24.2	17.8	32.5	-

Sound Monitoring Results at NMT2



Date	Start Time	Meteorological Data				INCLEMENT WEATHER CONDITIONS	Sound Level Data			Notes on Measurements . Not Available (loss of power, equipment error) . Incomplete dataset (less than one hour) . Data discarded due to inspection interruption
		Wind Speed [km/h]	Temp. [°C]	Humidity [%]	Precipitation [Y/N]		1 Hour LAeq [dBA]	1 Hour LASmin [dBA]	1 Hour LASmax [dBA]	
Fri - Apr 16, 2021	20:00	0.5	2.4	36	N	NO	20.2	16.4	35.6	-
Fri - Apr 16, 2021	21:00	0	0.6	38	N	NO	19.7	16.3	36.3	-
Fri - Apr 16, 2021	22:00	0	-1.1	46	N	NO	16.8	16.3	34.4	-
Fri - Apr 16, 2021	23:00	0	-2.6	57	N	NO	17.1	16.4	38.8	-
Sat - Apr 17, 2021	0:00	0	-3.4	65	N	NO	17.1	16.4	36.4	-
Sat - Apr 17, 2021	1:00	0	-4.1	73	N	NO	17.0	16.3	34.6	-
Sat - Apr 17, 2021	2:00	0	-5.2	80	N	NO	17.4	16.3	36.7	-
Sat - Apr 17, 2021	3:00	0	-5.8	83	N	NO	17.2	16.3	35.5	-
Sat - Apr 17, 2021	4:00	0	-6.1	84	N	NO	17.1	16.3	36.3	-
Sat - Apr 17, 2021	5:00	0	-6.7	89	N	NO	17.4	16.3	31.4	-
Sat - Apr 17, 2021	6:00	0	-6.7	92	N	YES	17.6	16.5	33.9	-
Sat - Apr 17, 2021	7:00	0	-3.0	87	N	NO	27.9	16.4	53.6	-
Sat - Apr 17, 2021	8:00	0	1.7	68	N	NO	22.8	16.4	41.1	-
Sat - Apr 17, 2021	9:00	1.4	5.6	44	N	NO	21.1	16.3	50.1	-
Sat - Apr 17, 2021	10:00	4.1	8.0	33	N	NO	21.7	16.4	42.6	-
Sat - Apr 17, 2021	11:00	7.7	9.5	30	N	NO	29.6	16.6	43.5	-
Sat - Apr 17, 2021	12:00	9.1	10.5	29	N	NO	32.6	17.1	49.8	-
Sat - Apr 17, 2021	13:00	8.1	11.3	28	N	NO	34.8	17.5	51.9	-
Sat - Apr 17, 2021	14:00	8.2	12.3	27	N	NO	36.7	19.3	51.1	-
Sat - Apr 17, 2021	15:00	9.1	12.0	29	N	NO	36.7	18.5	49.9	-
Sat - Apr 17, 2021	16:00	9.1	11.6	31	N	NO	42.0	20.0	54.7	-
Sat - Apr 17, 2021	17:00	8.2	11.6	32	N	NO	28.6	16.9	44.0	-
Sat - Apr 17, 2021	18:00	6.3	9.6	35	N	NO	26.7	17.2	38.6	-
Sat - Apr 17, 2021	19:00	2.7	7.9	39	N	NO	20.3	16.6	32.1	-
Sat - Apr 17, 2021	20:00	1.4	5.3	46	N	NO	17.8	16.5	34.1	-
Sat - Apr 17, 2021	21:00	1.4	4.4	49	N	NO	17.4	16.5	36.4	-
Sat - Apr 17, 2021	22:00	0	1.6	60	N	NO	17.4	16.5	36.3	-
Sat - Apr 17, 2021	23:00	0	0.9	72	N	NO	22.1	16.4	41.6	-
Sun - Apr 18, 2021	0:00	5	2.3	68	N	NO	31.8	17.6	44.7	-
Sun - Apr 18, 2021	1:00	3.2	1.6	73	N	NO	31.9	21.7	40.4	-
Sun - Apr 18, 2021	2:00	3.2	1.1	77	N	NO	31.5	18.4	40.2	-
Sun - Apr 18, 2021	3:00	5	0.4	79	N	NO	36.3	23.9	44.3	-
Sun - Apr 18, 2021	4:00	7.2	-0.7	82	N	NO	41.9	26.9	50.5	-
Sun - Apr 18, 2021	5:00	6.3	-1.5	84	N	NO	41.6	31.6	49.1	-
Sun - Apr 18, 2021	6:00	6.3	-2.5	91	N	YES	40.1	25.0	49.4	-
Sun - Apr 18, 2021	7:00	6.3	-2.7	95	N	YES	38.4	26.2	50.2	-
Sun - Apr 18, 2021	8:00	7.7	-3.1	94	N	YES	44.0	33.8	52.2	-
Sun - Apr 18, 2021	9:00	6.8	-3.0	93	N	YES	43.6	28.2	52.8	-
Sun - Apr 18, 2021	10:00	9.1	-2.6	85	N	NO	45.7	32.6	53.2	-
Sun - Apr 18, 2021	11:00	10	-1.5	76	N	NO	46.6	30.8	54.2	-
Sun - Apr 18, 2021	12:00	10	-0.6	69	N	NO	47.0	31.6	56.6	-
Sun - Apr 18, 2021	13:00	10	0.0	62	N	NO	48.4	32.7	56.9	-
Sun - Apr 18, 2021	14:00	11.3	-0.6	63	N	NO	48.9	34.8	57.6	-
Sun - Apr 18, 2021	15:00	9.5	-0.7	62	N	NO	49.3	35.5	57.3	-

Sound Monitoring Results at NMT2



Date	Start Time	Meteorological Data				INCLEMENT WEATHER CONDITIONS	Sound Level Data			Notes on Measurements . Not Available (loss of power, equipment error) . Incomplete dataset (less than one hour) . Data discarded due to inspection interruption
		Wind Speed [km/h]	Temp. [°C]	Humidity [%]	Precipitation [Y/N]		1 Hour LAeq [dBA]	1 Hour LASmin [dBA]	1 Hour LASmax [dBA]	
Sun - Apr 18, 2021	16:00	9.1	-0.6	62	N	NO	48.2	35.4	57.6	-
Sun - Apr 18, 2021	17:00	10	-1.5	65	N	NO	49.5	36.3	57.1	-
Sun - Apr 18, 2021	18:00	8.6	-2.0	65	N	NO	48.5	32.2	56.2	-
Sun - Apr 18, 2021	19:00	8.2	-2.6	65	N	NO	47.6	32.2	56.8	-
Sun - Apr 18, 2021	20:00	8.2	-3.0	64	N	NO	44.3	28.8	53.4	-
Sun - Apr 18, 2021	21:00	5.4	-3.2	61	N	NO	43.7	27.7	52.3	-
Sun - Apr 18, 2021	22:00	5.4	-4.2	60	N	NO	42.0	28.4	53.4	-
Sun - Apr 18, 2021	23:00	5	-5.3	63	N	NO	38.7	27.7	49.3	-
Mon - Apr 19, 2021	0:00	3.2	-6.2	65	N	NO	38.0	27.8	47.0	-
Mon - Apr 19, 2021	1:00	3.2	-7.0	66	N	NO	36.5	25.8	44.1	-
Mon - Apr 19, 2021	2:00	2.7	-7.9	68	N	NO	35.2	21.4	44.3	-
Mon - Apr 19, 2021	3:00	1.8	-8.7	72	N	NO	31.7	22.7	40.4	-
Mon - Apr 19, 2021	4:00	2.7	-9.5	72	N	NO	33.8	25.2	42.6	-
Mon - Apr 19, 2021	5:00	1.4	-10.2	73	N	YES	28.9	19.2	38.4	-
Mon - Apr 19, 2021	6:00	3.6	-10.2	72	N	YES	28.2	18.7	43.5	-
Mon - Apr 19, 2021	7:00	3.6	-8.8	67	N	NO	28.4	18.3	41.2	-
Mon - Apr 19, 2021	8:00	5	-6.6	57	N	NO	29.4	17.2	45.5	-
Mon - Apr 19, 2021	9:00	8.6	-4.4	53	N	NO	43.3	18.7	54.5	-
Mon - Apr 19, 2021	10:00	12.2	-3.4	53	N	NO	45.5	32.7	53.2	-
Mon - Apr 19, 2021	11:00	12.2	-1.8	51	N	NO	46.2	29.5	56.2	-
Mon - Apr 19, 2021	12:00	14.9	-0.7	48	N	NO	-	-	-	Incomplete data set (less than one hour)
Mon - Apr 19, 2021	13:00	12.7	0.8	44	N	NO	-	-	-	Data discarded due to inspection interruption
Mon - Apr 19, 2021	14:00	11.8	1.0	42	N	NO	47.3	30.3	56.0	-
Mon - Apr 19, 2021	15:00	12.7	1.6	39	N	NO	46.5	34.8	54.5	-
Mon - Apr 19, 2021	16:00	11.8	1.2	39	N	NO	45.3	26.8	54.2	-
Mon - Apr 19, 2021	17:00	10.4	0.4	40	N	NO	46.8	34.0	55.3	-
Mon - Apr 19, 2021	18:00	8.6	-0.8	42	N	NO	44.7	32.2	53.2	-
Mon - Apr 19, 2021	19:00	9.5	-2.1	46	N	NO	46.7	36.4	55.3	-
Mon - Apr 19, 2021	20:00	10	-3.2	52	N	NO	48.5	36.4	58.7	-
Mon - Apr 19, 2021	21:00	8.1	-4.1	55	N	NO	45.7	34.9	55.3	-
Mon - Apr 19, 2021	22:00	4.1	-4.9	58	N	NO	40.6	21.4	51.7	-
Mon - Apr 19, 2021	23:00	0.5	-6.0	60	N	NO	29.5	17.8	45.0	-
Tue - Apr 20, 2021	0:00	0.9	-6.2	61	N	NO	27.7	17.8	34.4	-
Tue - Apr 20, 2021	1:00	1.4	-6.0	60	N	NO	29.5	17.8	42.1	-
Tue - Apr 20, 2021	2:00	0.9	-6.3	62	N	NO	23.3	16.3	37.4	-
Tue - Apr 20, 2021	3:00	0.9	-6.5	66	N	NO	24.0	16.7	32.1	-
Tue - Apr 20, 2021	4:00	0	-6.7	70	N	NO	23.3	17.0	30.6	-
Tue - Apr 20, 2021	5:00	1.4	-7.0	75	N	NO	26.0	17.5	37.2	-
Tue - Apr 20, 2021	6:00	1.4	-7.1	77	N	NO	26.4	17.1	34.5	-
Tue - Apr 20, 2021	7:00	4.5	-6.8	76	N	NO	33.6	18.3	44.1	-
Tue - Apr 20, 2021	8:00	6.3	-6.3	70	N	NO	38.6	25.2	49.9	-
Tue - Apr 20, 2021	9:00	7.2	-5.6	61	N	NO	39.7	25.1	48.1	-
Tue - Apr 20, 2021	10:00	9.5	-5.0	57	N	NO	42.8	26.3	51.3	-
Tue - Apr 20, 2021	11:00	8.6	-3.2	48	N	NO	44.4	21.3	54.2	-

Sound Monitoring Results at NMT2



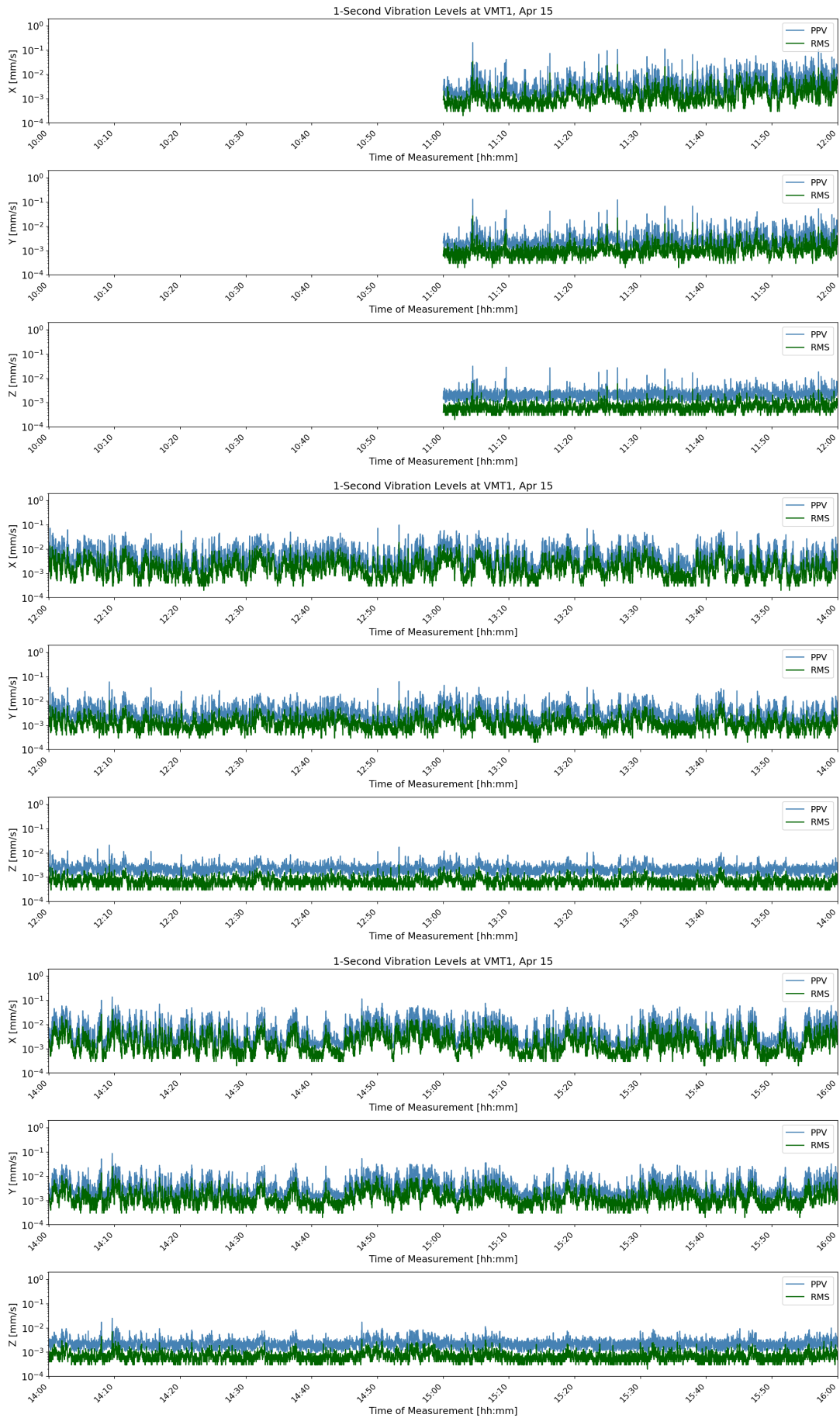
Date	Start Time	Meteorological Data				INCLEMENT WEATHER CONDITIONS	Sound Level Data			Notes on Measurements . Not Available (loss of power, equipment error) . Incomplete dataset (less than one hour) . Data discarded due to inspection interruption
		Wind Speed [km/h]	Temp. [°C]	Humidity [%]	Precipitation [Y/N]		1 Hour LAeq [dBA]	1 Hour LASmin [dBA]	1 Hour LASmax [dBA]	
Tue - Apr 20, 2021	12:00	8.6	-2.7	45	N	NO	41.0	18.5	54.6	-
Tue - Apr 20, 2021	13:00	9.5	-2.8	47	N	NO	39.5	20.5	50.0	-
Tue - Apr 20, 2021	14:00	7.7	-1.8	45	N	NO	36.9	17.3	50.5	-
Tue - Apr 20, 2021	15:00	9.1	-1.5	42	N	NO	37.9	17.9	51.4	-
Tue - Apr 20, 2021	16:00	7.7	-1.3	42	N	NO	38.5	16.6	52.6	-
Tue - Apr 20, 2021	17:00	8.1	-1.7	44	N	NO	35.7	17.7	52.3	-
Tue - Apr 20, 2021	18:00	8.2	-1.9	44	N	NO	34.5	18.3	44.8	-
Tue - Apr 20, 2021	19:00	6.3	-2.9	47	N	NO	33.1	21.7	42.8	-
Tue - Apr 20, 2021	20:00	2.7	-4.3	54	N	NO	21.2	16.4	35.2	-
Tue - Apr 20, 2021	21:00	0	-5.7	63	N	NO	17.1	16.4	38.2	-
Tue - Apr 20, 2021	22:00	0.5	-4.8	62	N	NO	17.6	16.3	32.2	-
Tue - Apr 20, 2021	23:00	1.8	-4.6	60	N	NO	19.2	16.4	38.1	-
Wed - Apr 21, 2021	0:00	0	-5.0	62	N	NO	17.2	16.3	27.8	-
Wed - Apr 21, 2021	1:00	0	-4.7	62	N	NO	17.6	16.3	31.7	-
Wed - Apr 21, 2021	2:00	0.9	-4.7	62	N	NO	18.9	16.2	36.0	-
Wed - Apr 21, 2021	3:00	0	-4.8	63	N	NO	17.2	16.2	37.0	-
Wed - Apr 21, 2021	4:00	0.5	-4.7	64	N	NO	18.3	16.3	35.0	-
Wed - Apr 21, 2021	5:00	0	-5.0	66	N	NO	19.8	16.2	37.8	-
Wed - Apr 21, 2021	6:00	0.5	-5.1	68	N	NO	22.0	16.8	33.4	-
Wed - Apr 21, 2021	7:00	1.4	-3.8	63	N	NO	29.7	16.9	47.4	-
Wed - Apr 21, 2021	8:00	5.4	-2.6	61	N	NO	40.2	19.1	57.3	-
Wed - Apr 21, 2021	9:00	6.8	-1.4	58	N	NO	43.1	25.1	54.6	-
Wed - Apr 21, 2021	10:00	6.8	0.3	54	N	NO	40.0	19.5	53.3	-
Wed - Apr 21, 2021	11:00	6.3	2.6	50	N	NO	35.0	17.9	48.4	-
Wed - Apr 21, 2021	12:00	6.3	2.6	51	N	NO	36.2	16.9	51.7	-
Wed - Apr 21, 2021	13:00	7.2	4.5	47	N	NO	35.2	16.7	52.0	-
Wed - Apr 21, 2021	14:00	6.8	5.2	46	N	NO	39.0	18.6	52.8	-
Wed - Apr 21, 2021	15:00	7.7	5.8	45	N	NO	37.3	17.4	51.3	-
Wed - Apr 21, 2021	16:00	7.2	6.3	44	N	NO	37.1	18.1	50.8	-
Wed - Apr 21, 2021	17:00	7.7	6.0	43	N	NO	34.4	17.6	49.6	-
Wed - Apr 21, 2021	18:00	2.7	5.4	45	N	NO	29.5	16.7	43.0	-
Wed - Apr 21, 2021	19:00	1.8	3.7	50	N	NO	21.8	16.4	35.5	-
Wed - Apr 21, 2021	20:00	0	0.7	59	N	NO	21.9	16.3	45.6	-
Wed - Apr 21, 2021	21:00	0	-1.4	69	N	NO	17.0	16.3	37.9	-
Wed - Apr 21, 2021	22:00	0	-2.5	80	N	NO	17.1	16.3	38.4	-
Wed - Apr 21, 2021	23:00	0	-3.0	85	N	NO	17.5	16.3	33.4	-
Thu - Apr 22, 2021	0:00	0	-3.0	84	N	NO	21.9	16.4	39.0	-
Thu - Apr 22, 2021	1:00	1.8	-2.0	79	N	NO	23.7	16.9	36.0	-
Thu - Apr 22, 2021	2:00	0	-2.4	79	N	NO	18.4	16.6	31.5	-
Thu - Apr 22, 2021	3:00	0	-3.0	83	N	NO	26.3	16.5	47.7	-
Thu - Apr 22, 2021	4:00	0	-3.2	85	N	NO	19.8	16.6	32.7	-
Thu - Apr 22, 2021	5:00	0	-3.2	86	N	NO	20.9	16.6	35.0	-
Thu - Apr 22, 2021	6:00	0	-2.7	87	N	NO	26.8	17.7	51.0	-
Thu - Apr 22, 2021	7:00	1.8	0.8	79	N	NO	24.7	17.8	41.2	-

Sound Monitoring Results at NMT2



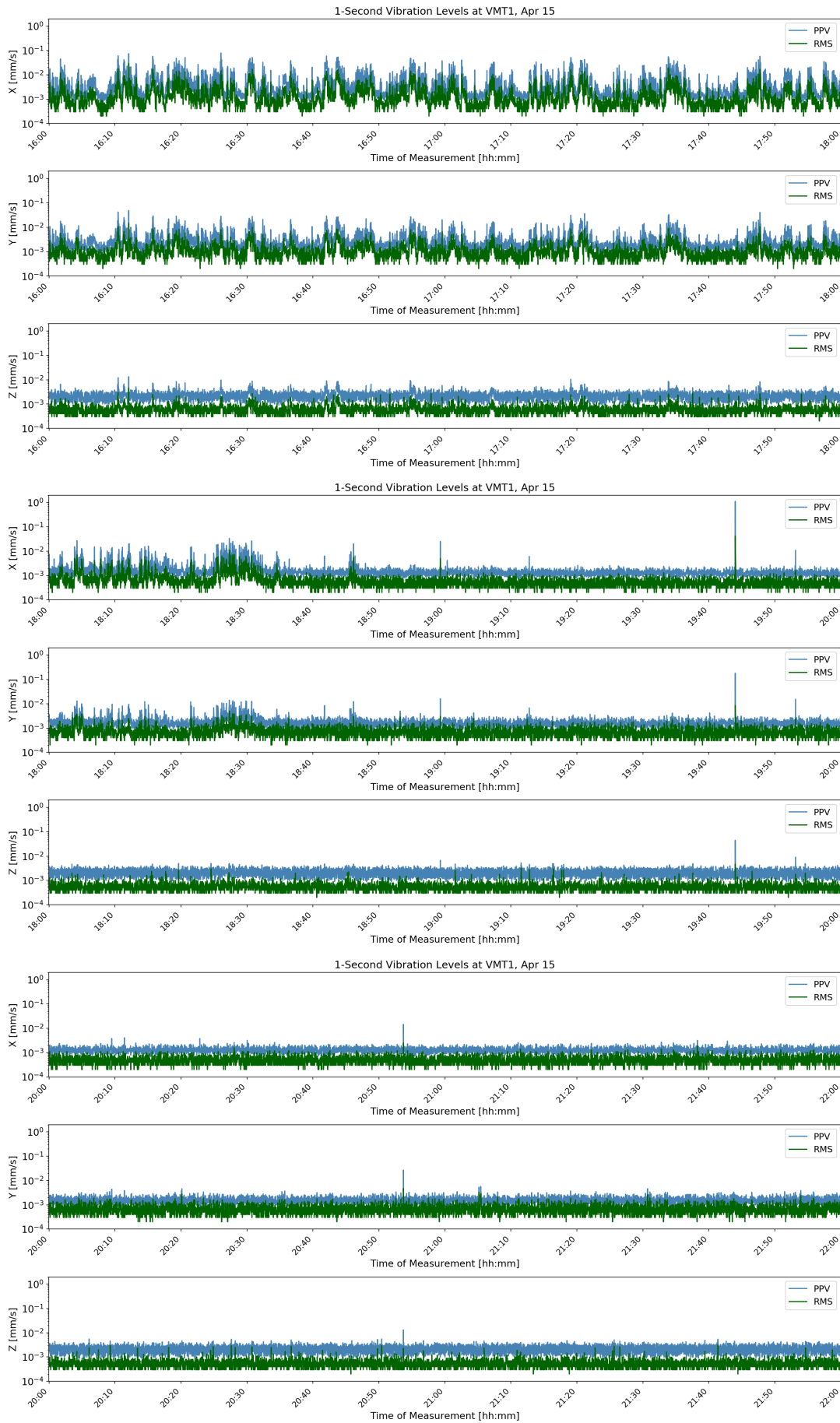
Date	Start Time	Meteorological Data				INCLEMENT WEATHER CONDITIONS	Sound Level Data			Notes on Measurements
		Wind Speed [km/h]	Temp. [°C]	Humidity [%]	Precipitation [Y/N]		1 Hour LAeq [dBA]	1 Hour LASmin [dBA]	1 Hour LASmax [dBA]	
Thu - Apr 22, 2021	8:00	3.2	4.3	67	N	NO	26.2	17.6	48.2	-
Thu - Apr 22, 2021	9:00	4.5	7.3	55	N	NO	26.6	17.4	41.5	-
Thu - Apr 22, 2021	10:00	5	10.4	43	N	NO	33.2	17.1	53.4	-
Thu - Apr 22, 2021	11:00	5	14.0	34	N	NO	-	-	-	Data discarded due to inspection interruption

**Attachment D**  
**Vibration Monitoring Results**



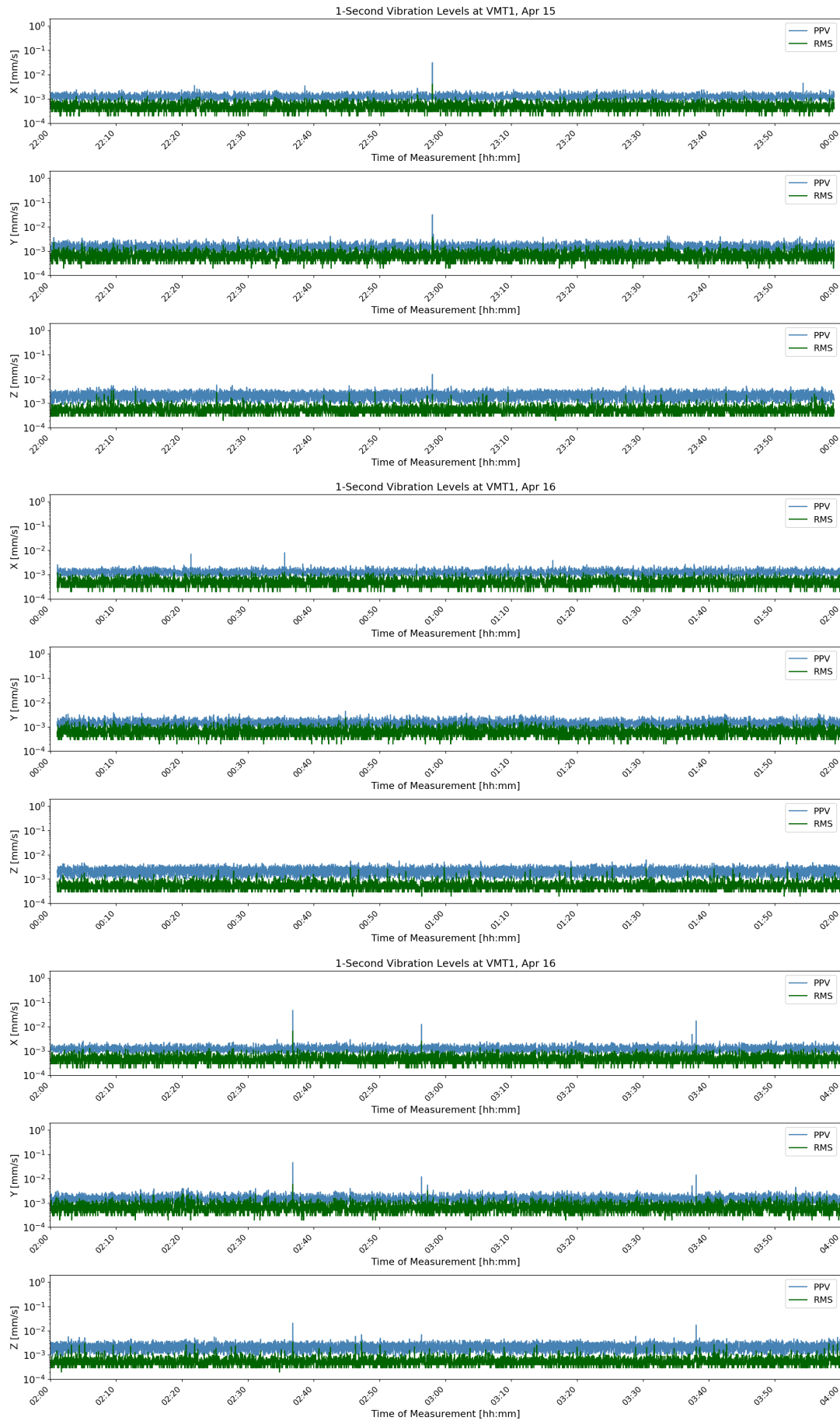
**Figure D-1: VMT1 1-Second Velocity History Apr 15 10:00**





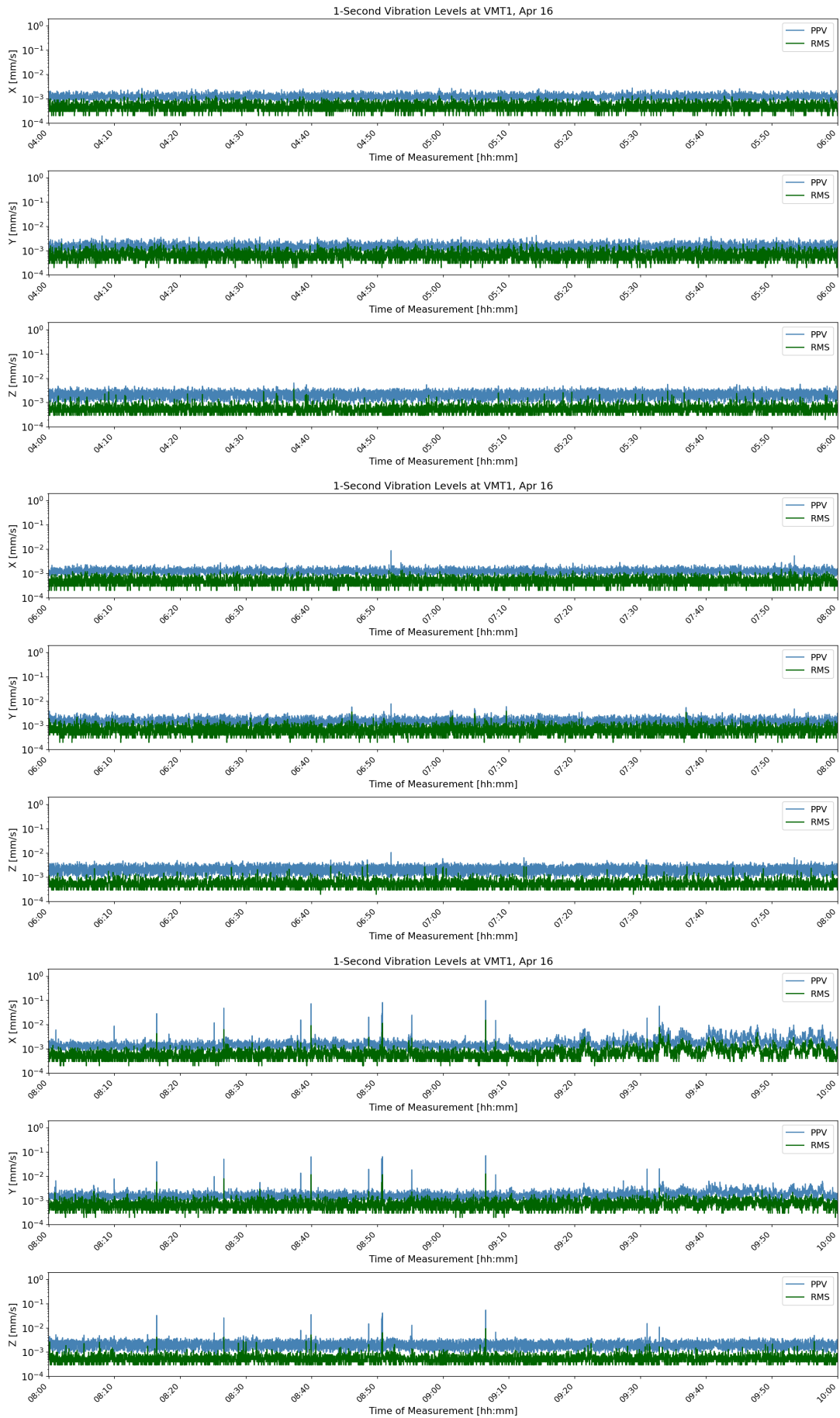
**Figure D-2: VMT1 1-Second Velocity History Apr 15 16:00**





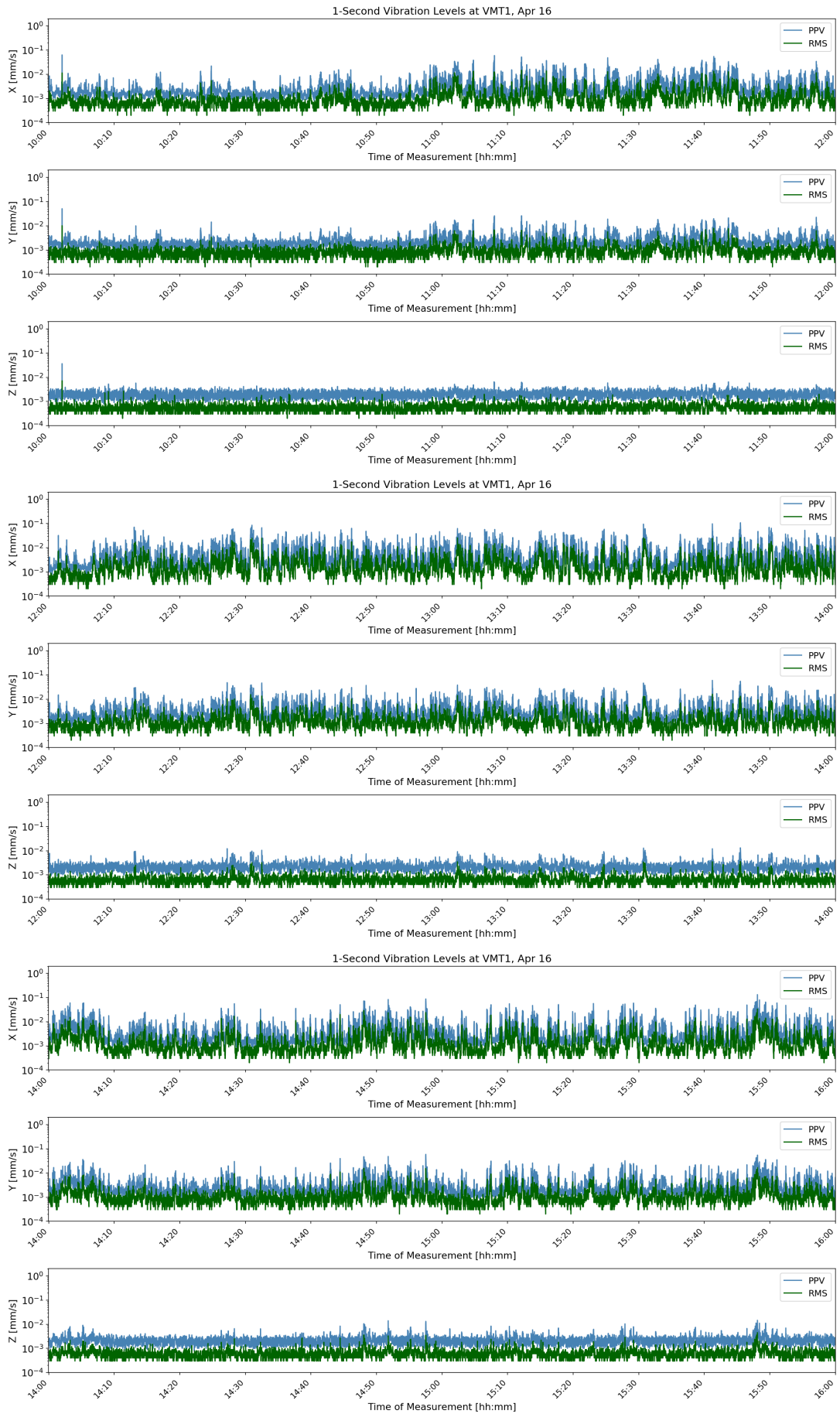
**Figure D-3: VMT1 1-Second Velocity History Apr 16 22:00**





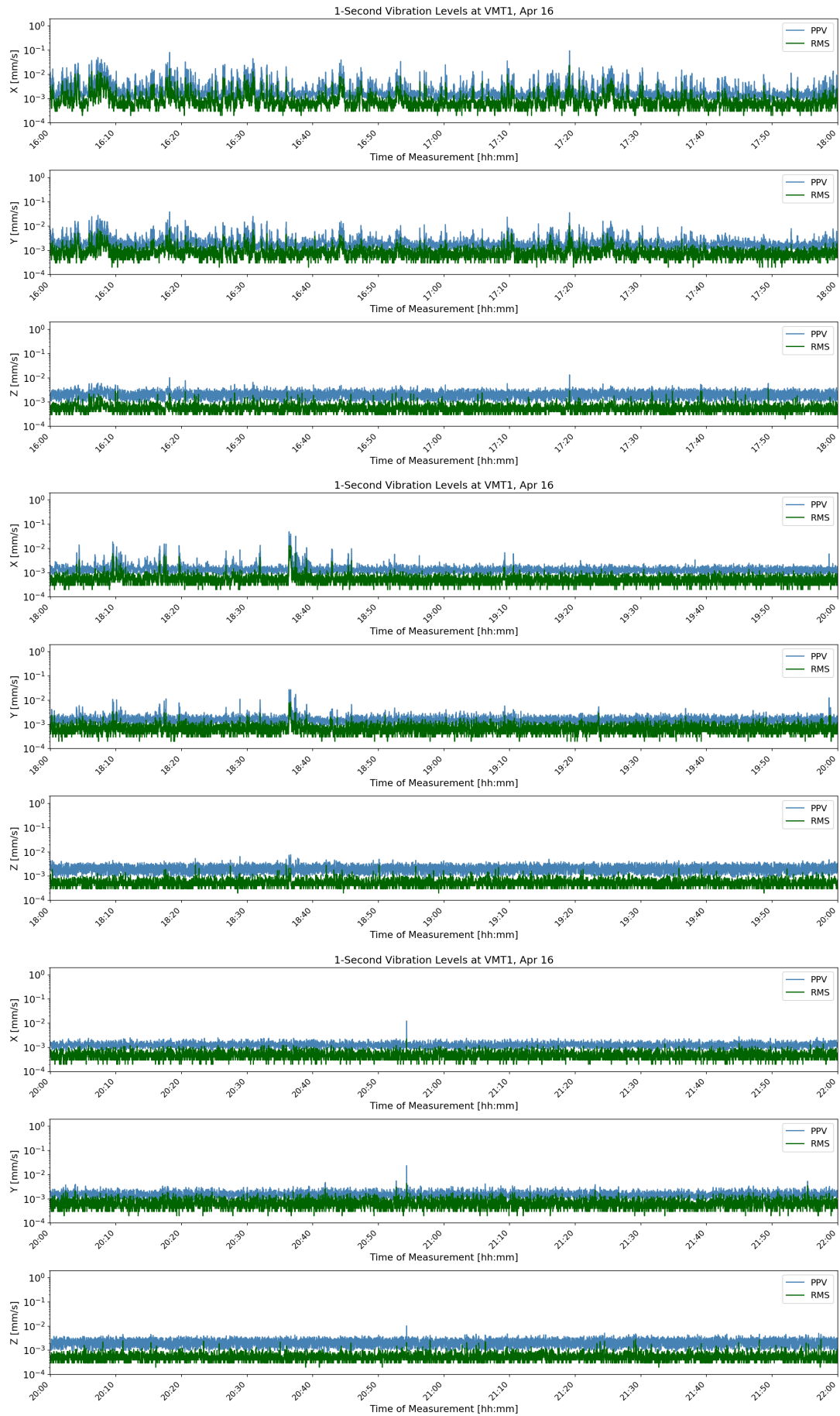
**Figure D-4: VMT1 1-Second Velocity History Apr 16 04:00**





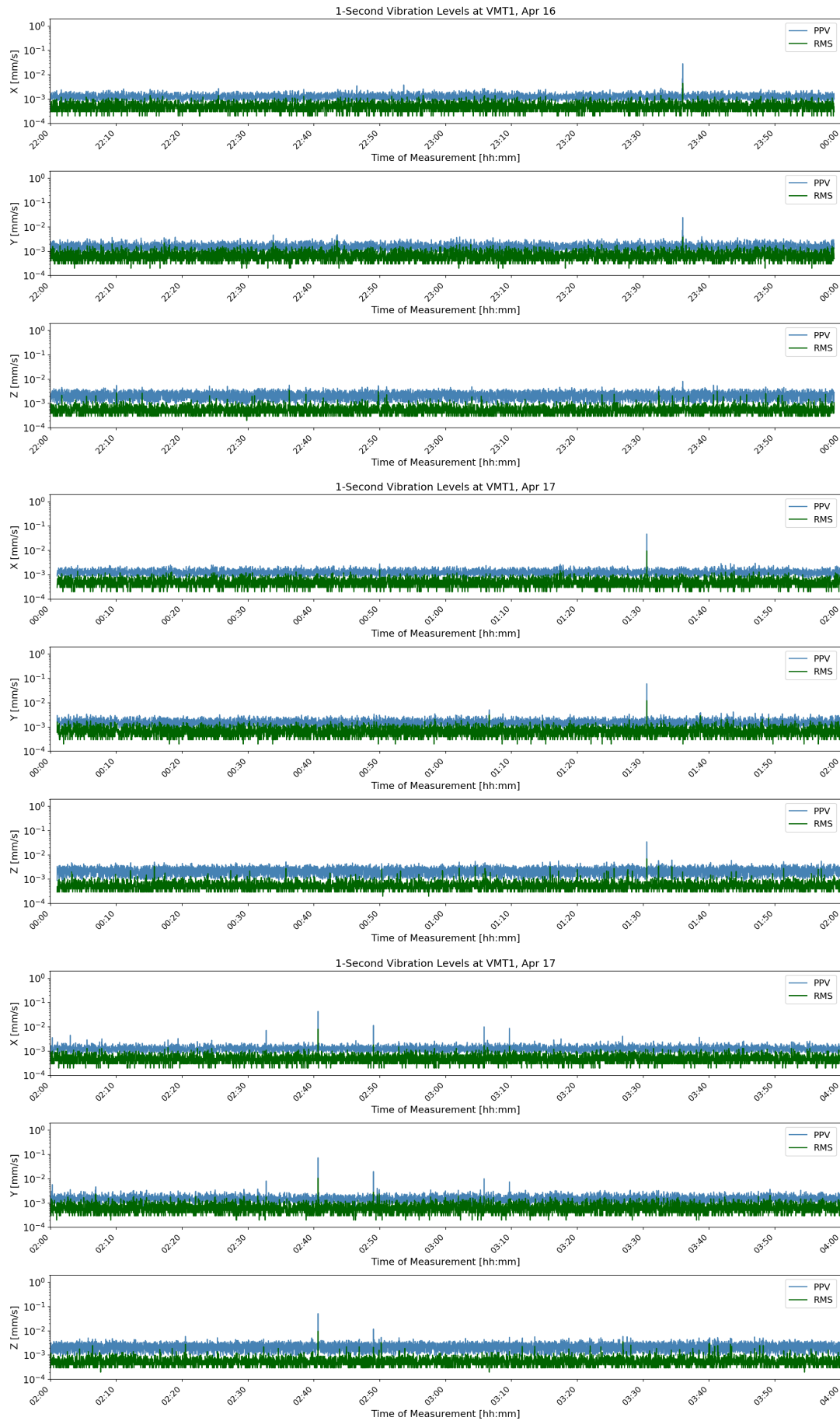
**Figure D-5: VMT1 1-Second Velocity History Apr 16 10:00**





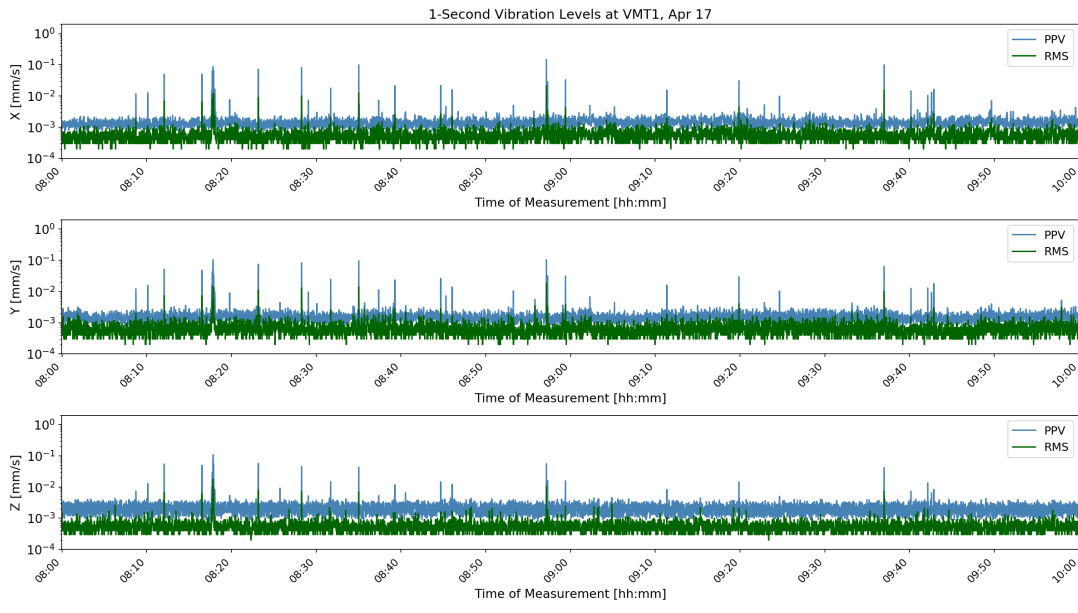
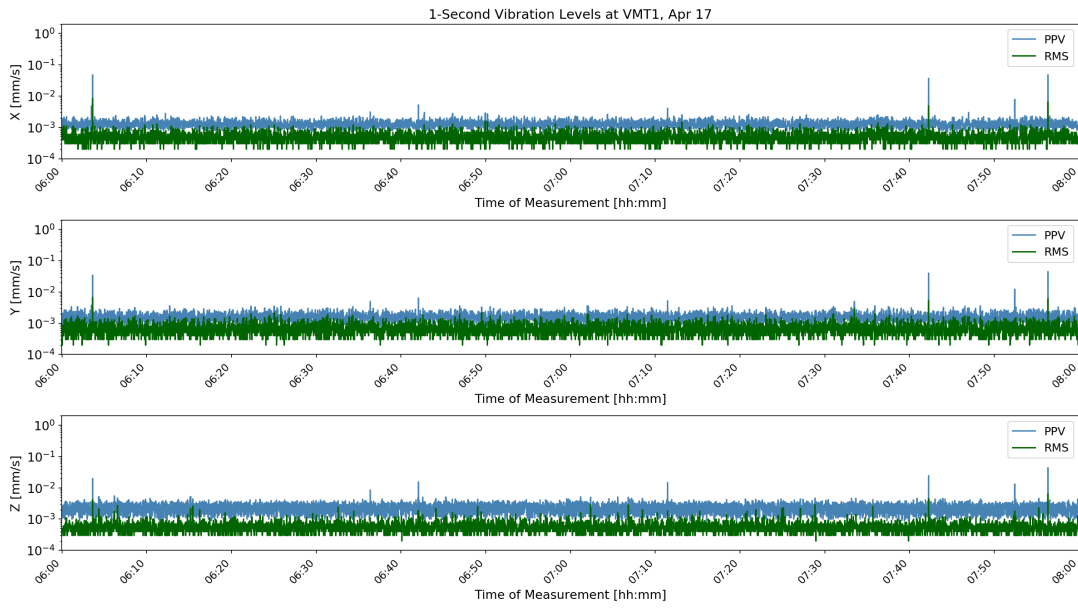
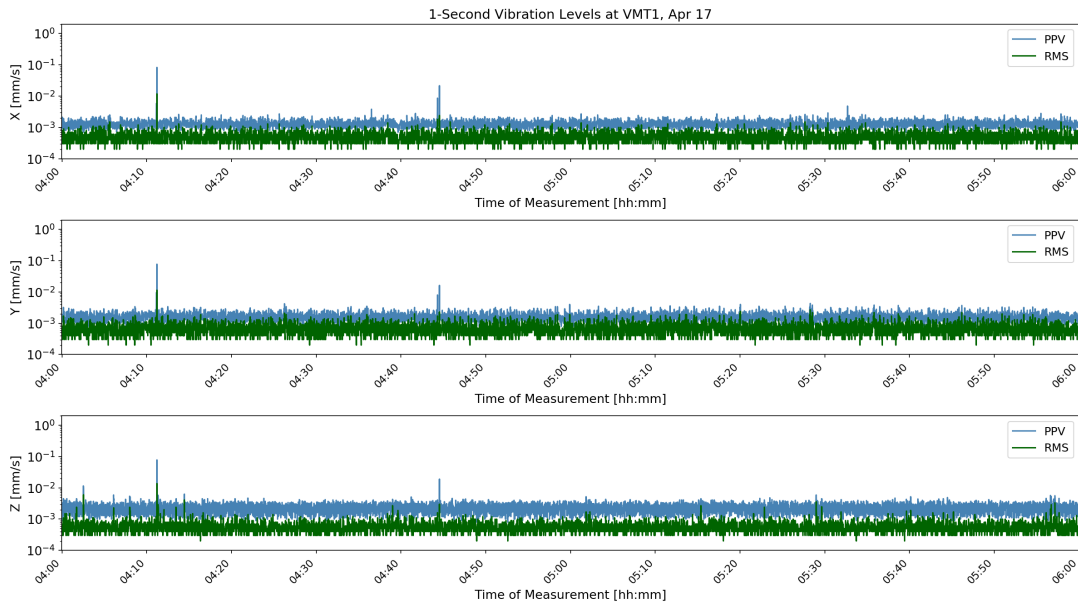
**Figure D-6: VMT1 1-Second Velocity History Apr 16 16:00**





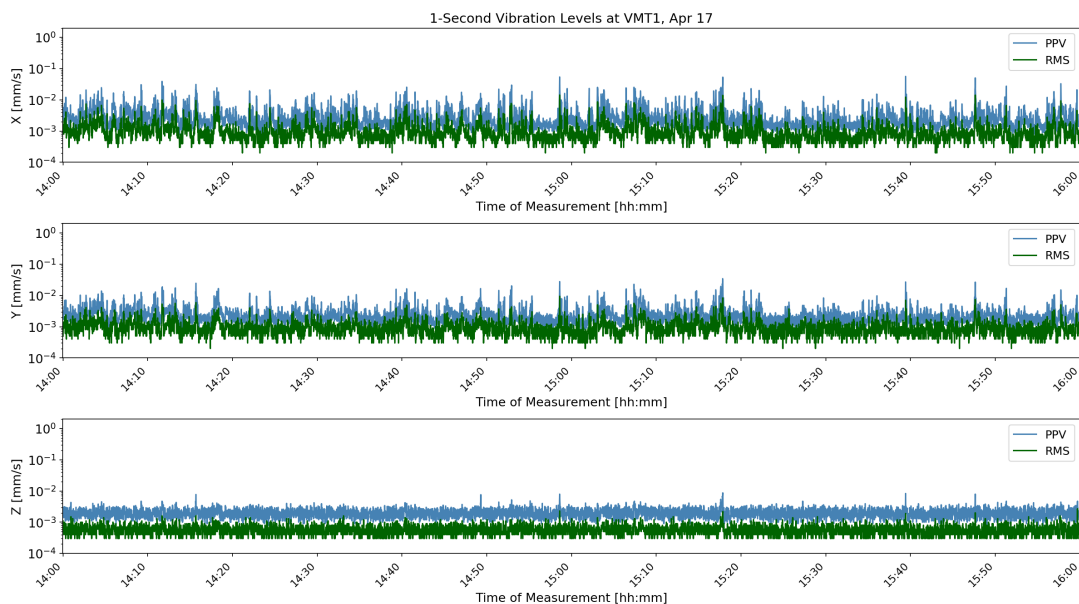
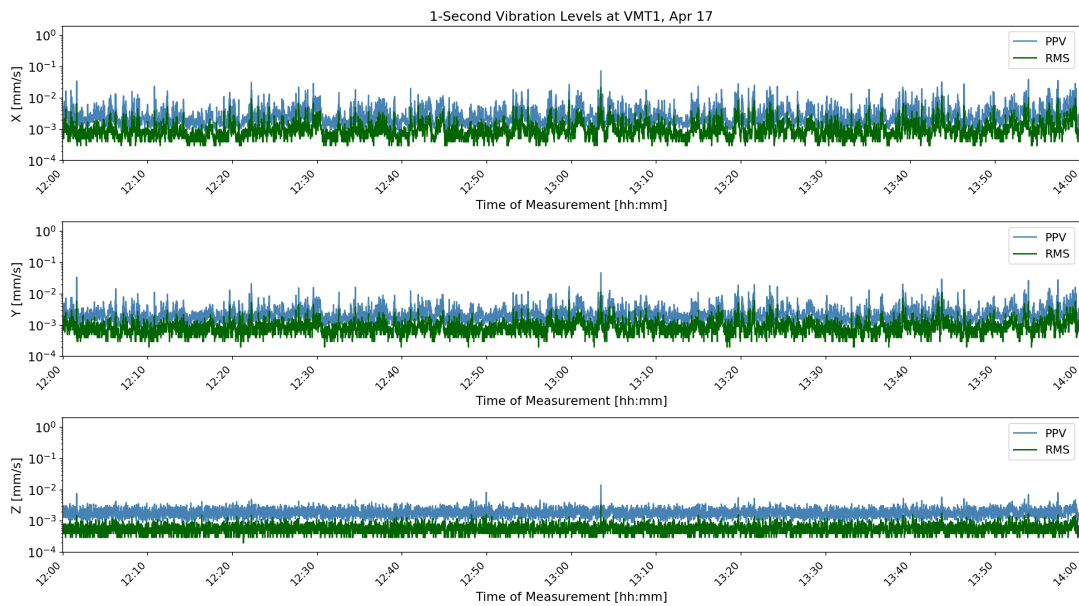
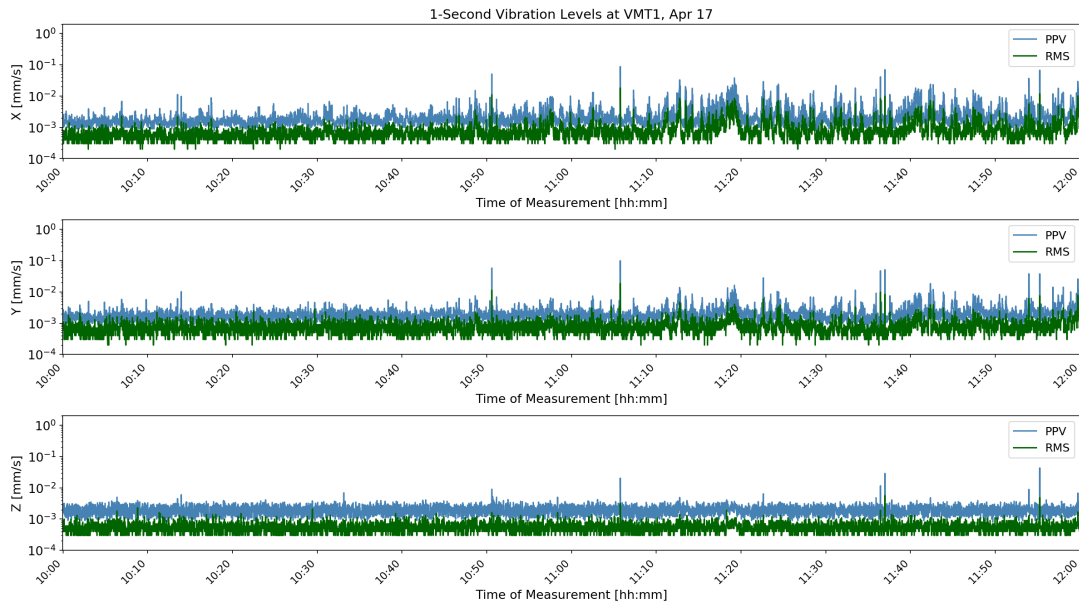
**Figure D-7: VMT1 1-Second Velocity History Apr 17 22:00**





**Figure D-8: VMT1 1-Second Velocity History Apr 17 04:00**





**Figure D-9: VMT1 1-Second Velocity History Apr 17 10:00**



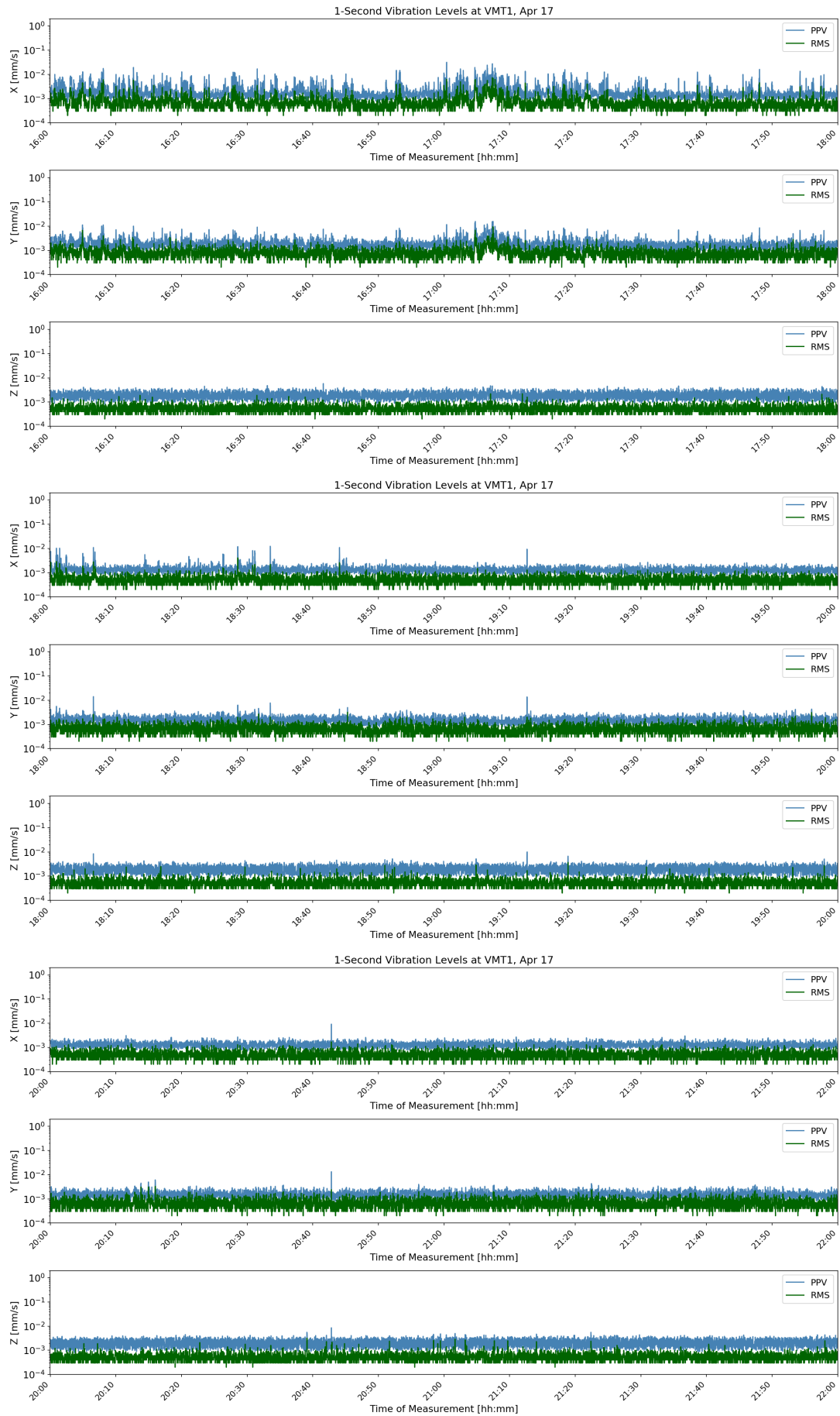
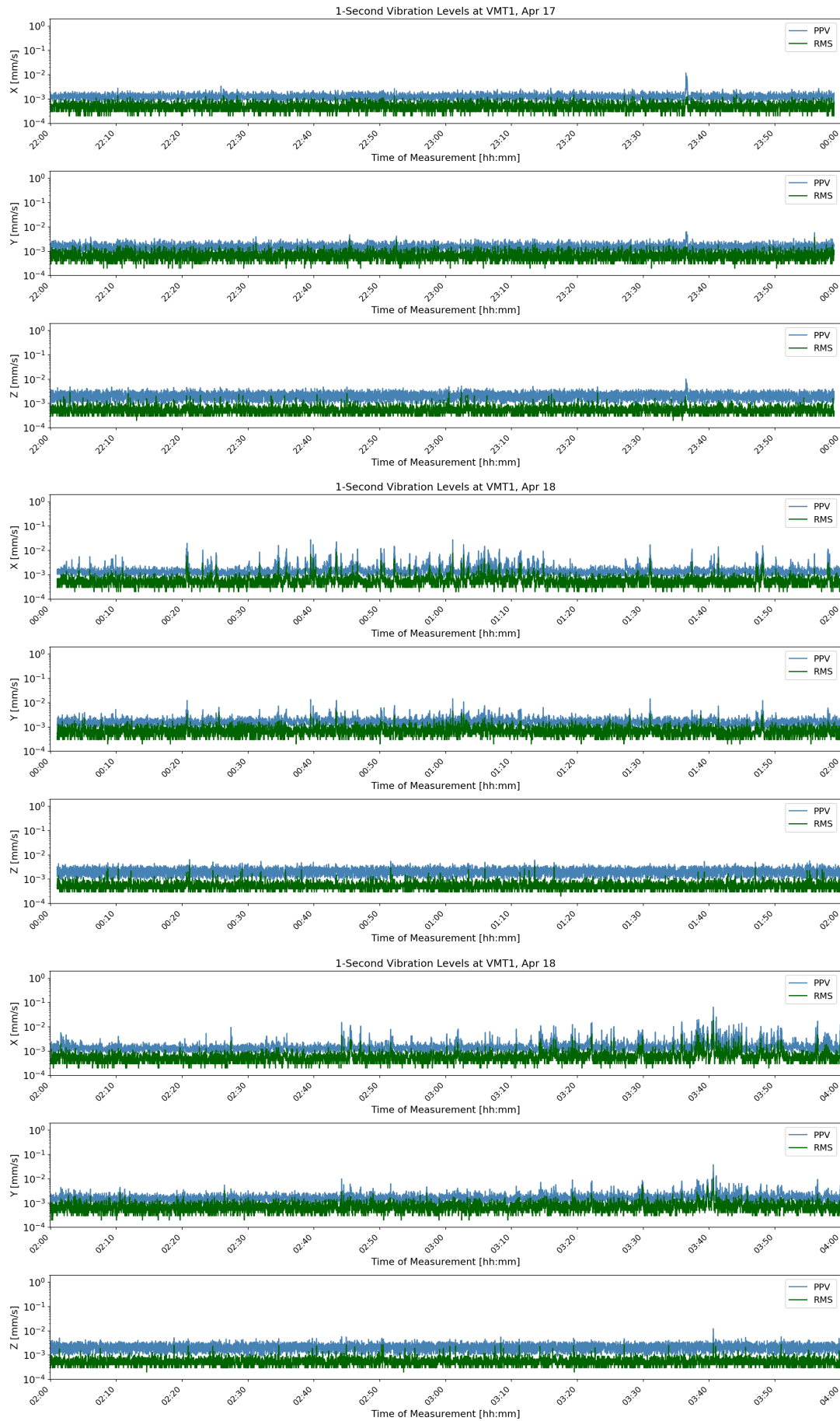


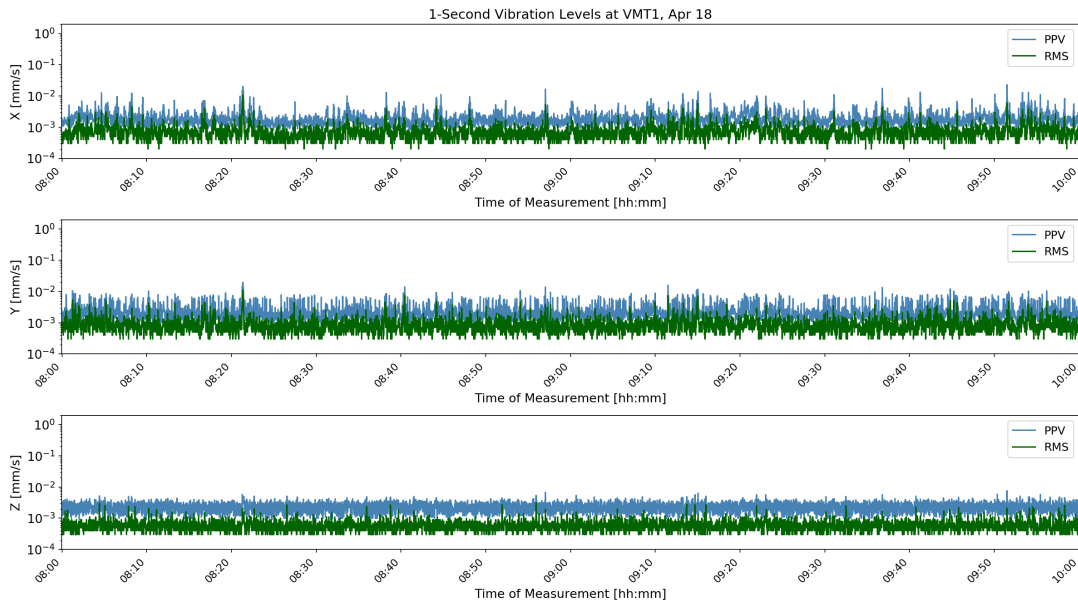
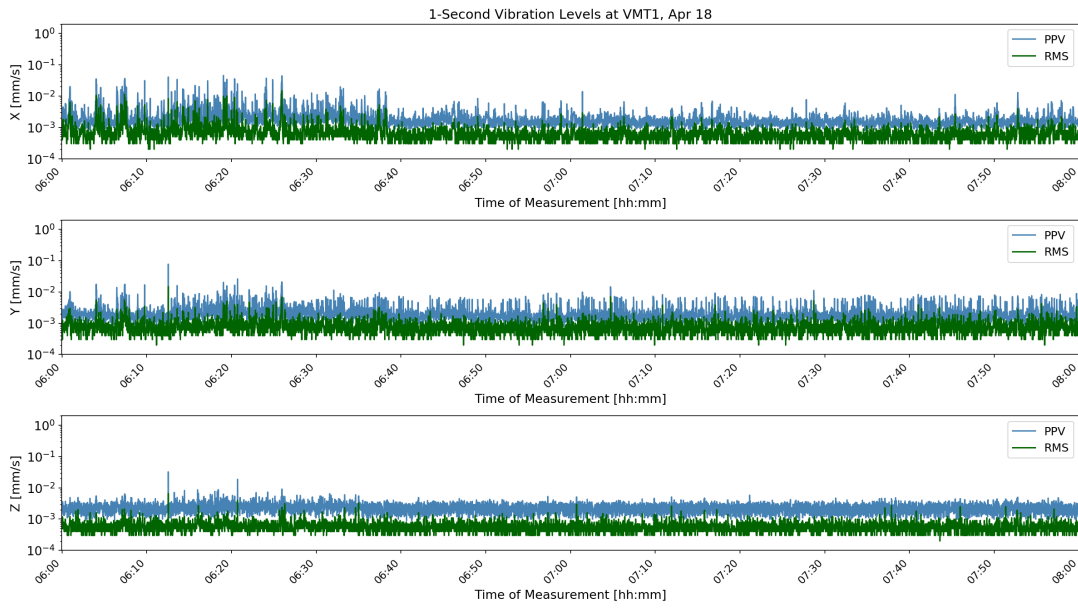
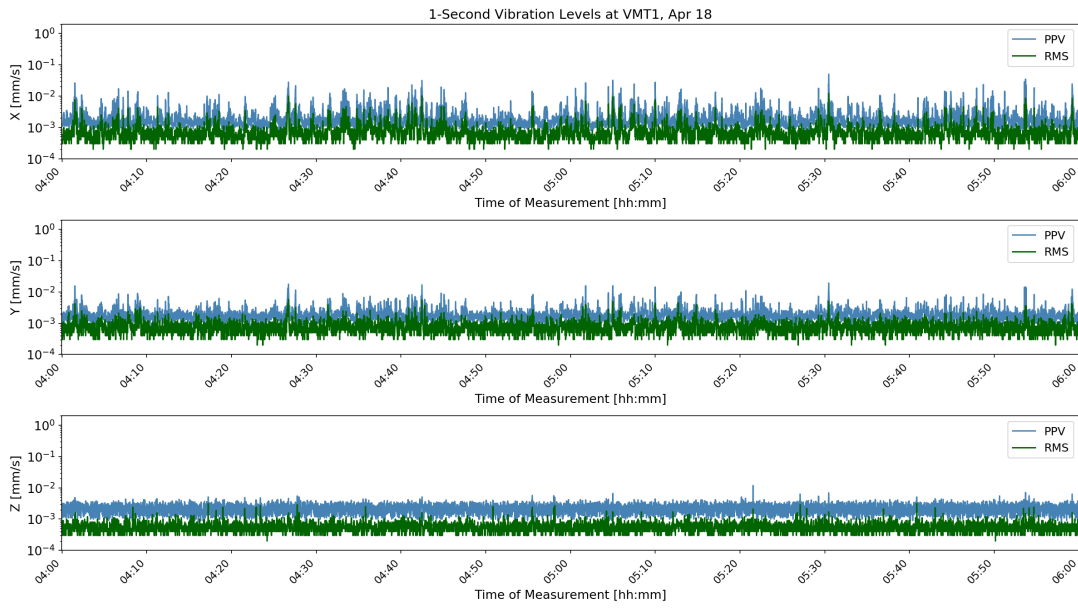
Figure D-10: VMT1 1-Second Velocity History Apr 17 16:00





**Figure D-11: VMT1 1-Second Velocity History Apr 18 22:00**





**Figure D-12: VMT1 1-Second Velocity History Apr 18 04:00**



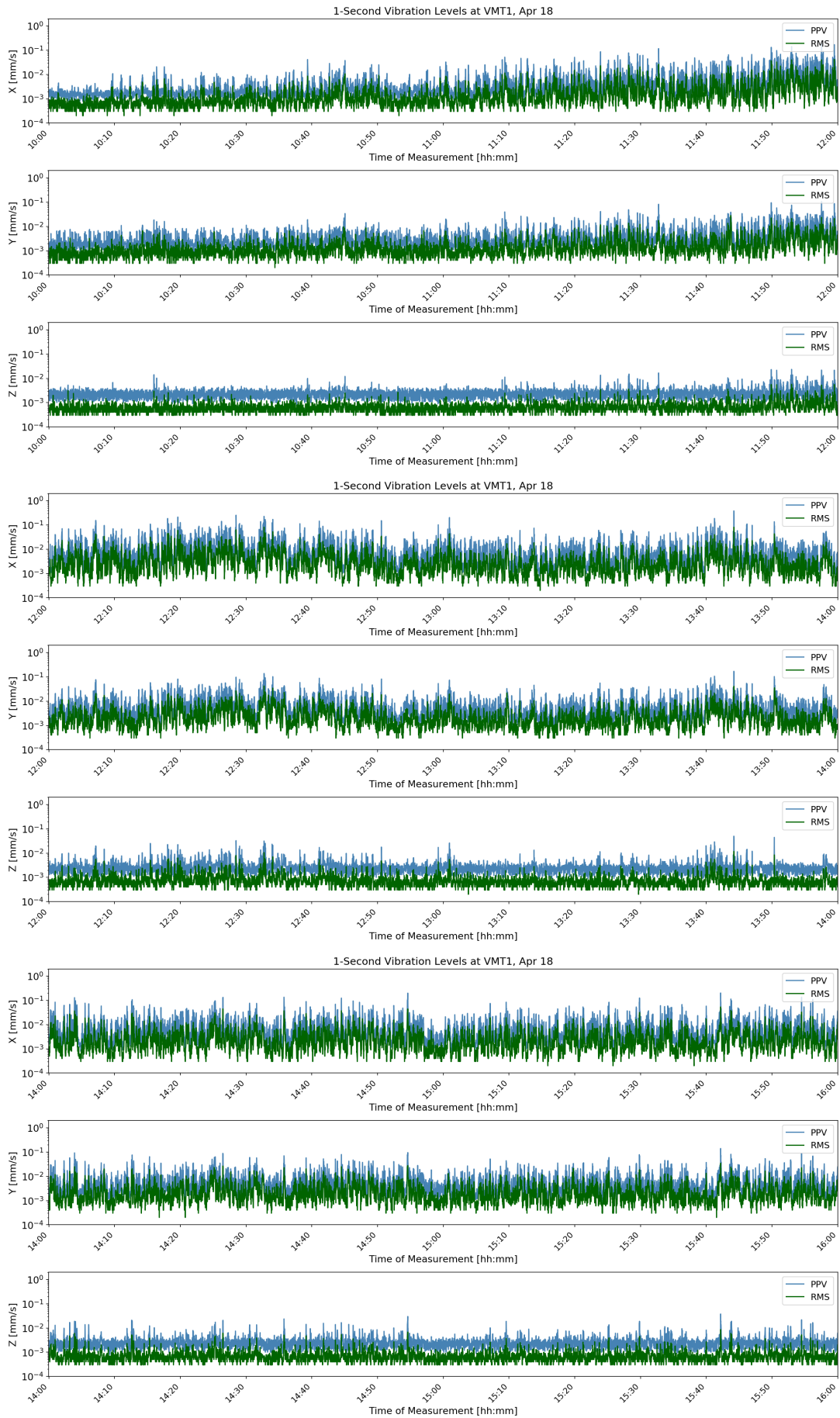


Figure D-13: VMT1 1-Second Velocity History Apr 18 10:00



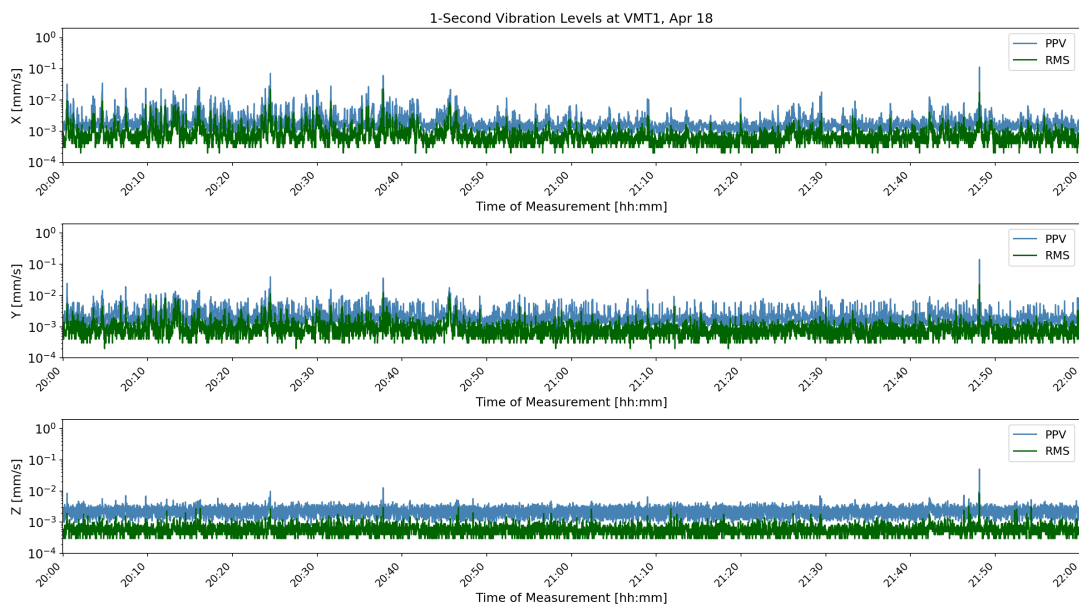
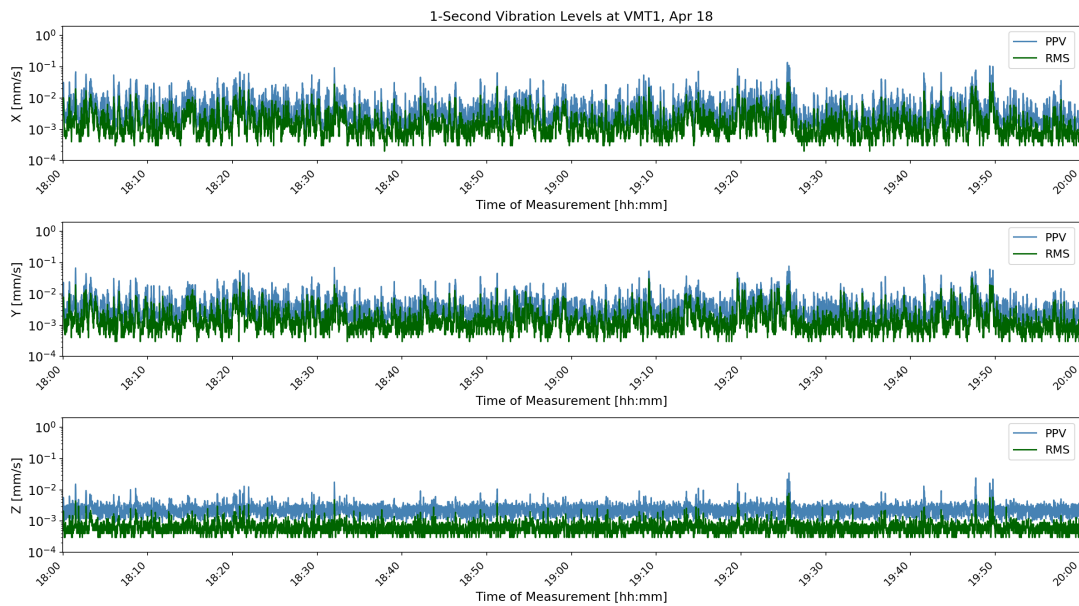
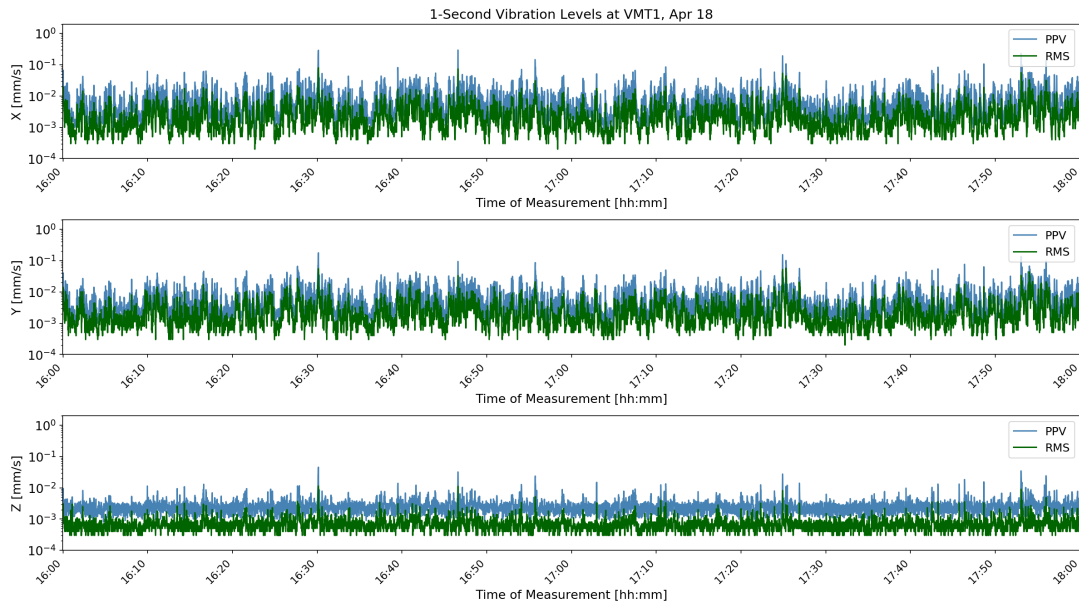


Figure D-14: VMT1 1-Second Velocity History Apr 18 16:00



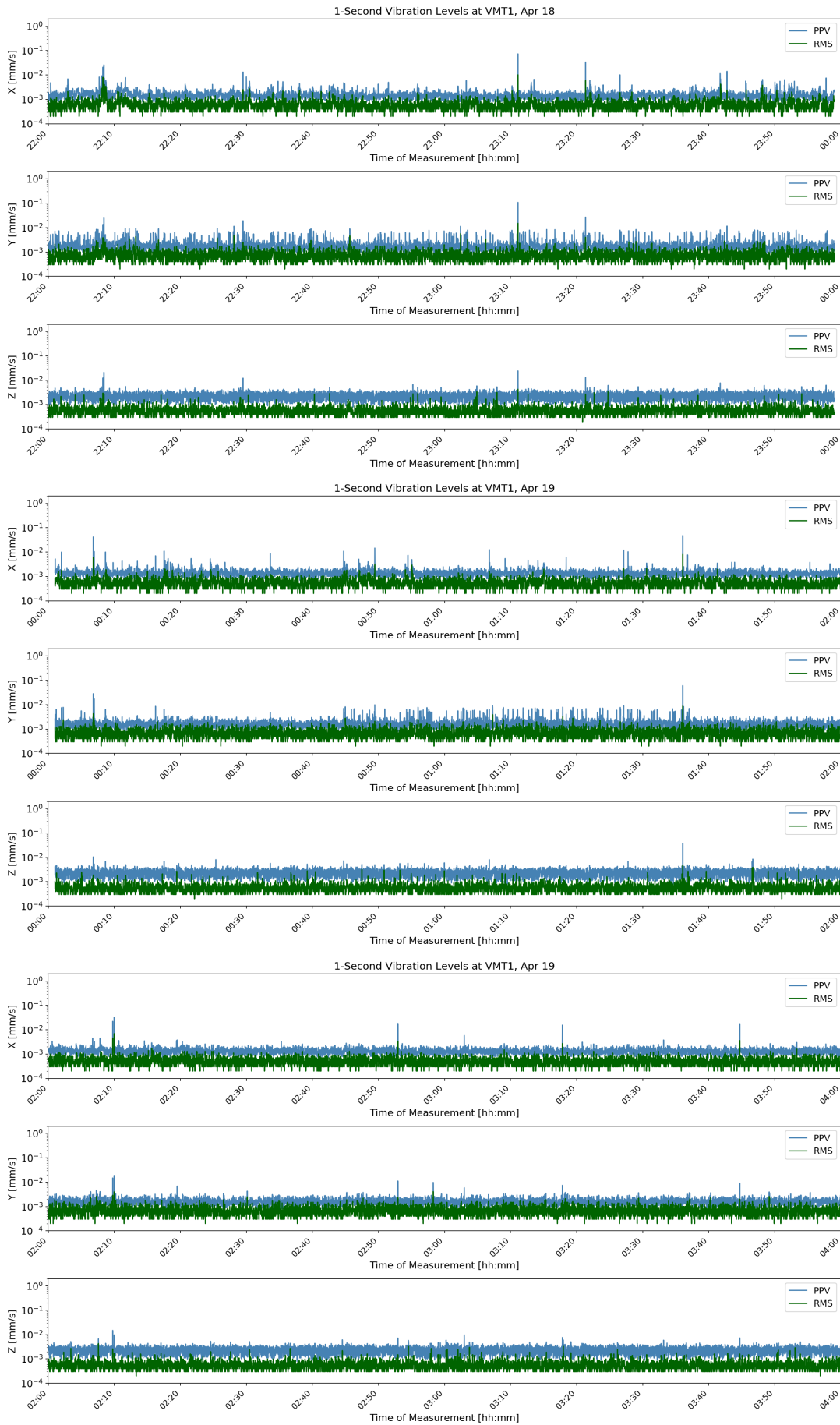


Figure D-15: VMT1 1-Second Velocity History Apr 19 22:00



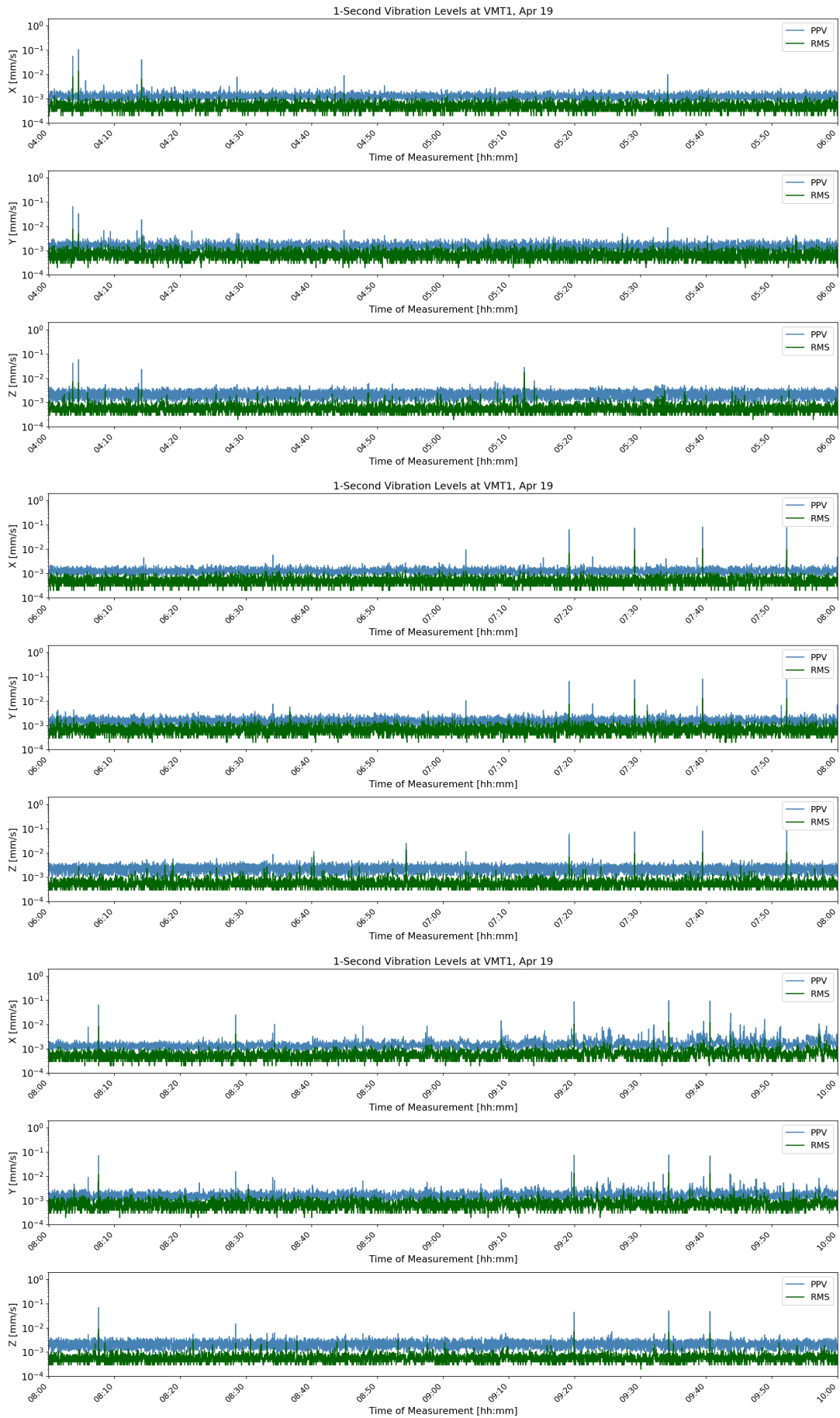


Figure D-16: VMT1 1-Second Velocity History Apr 19 04:00



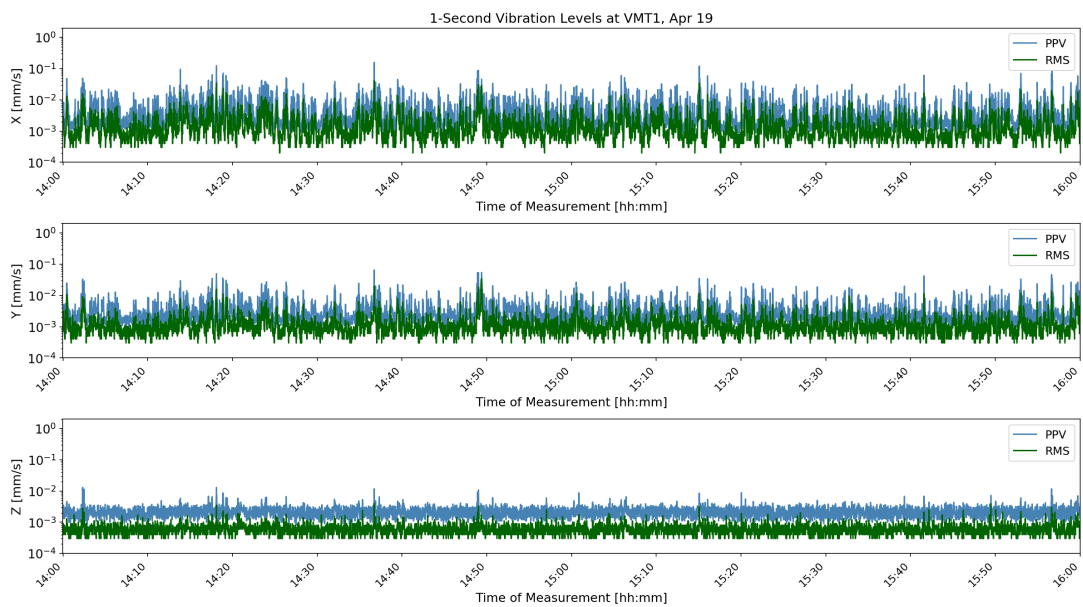
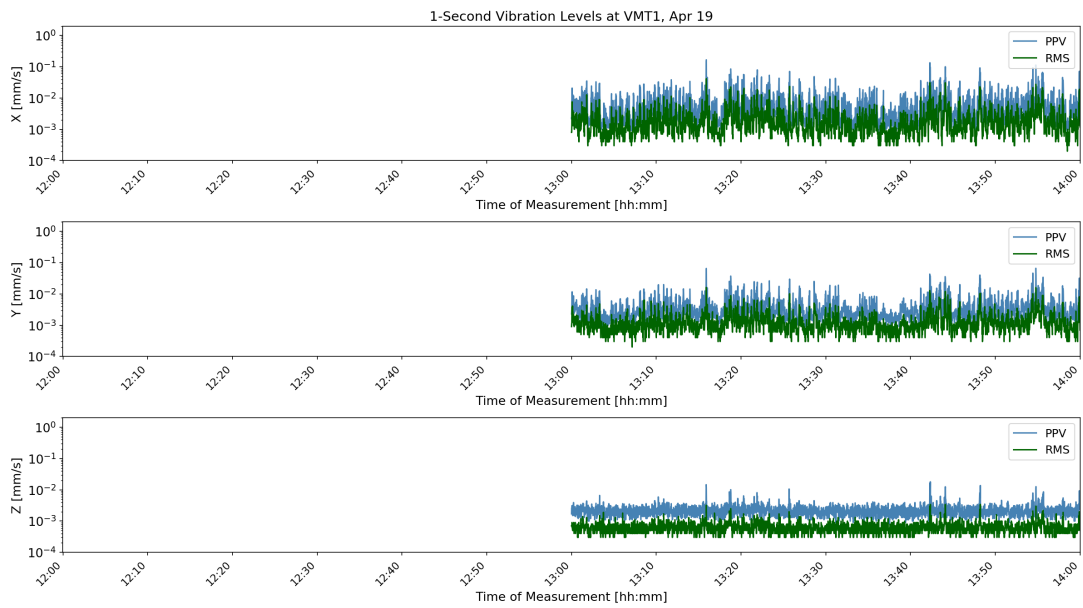
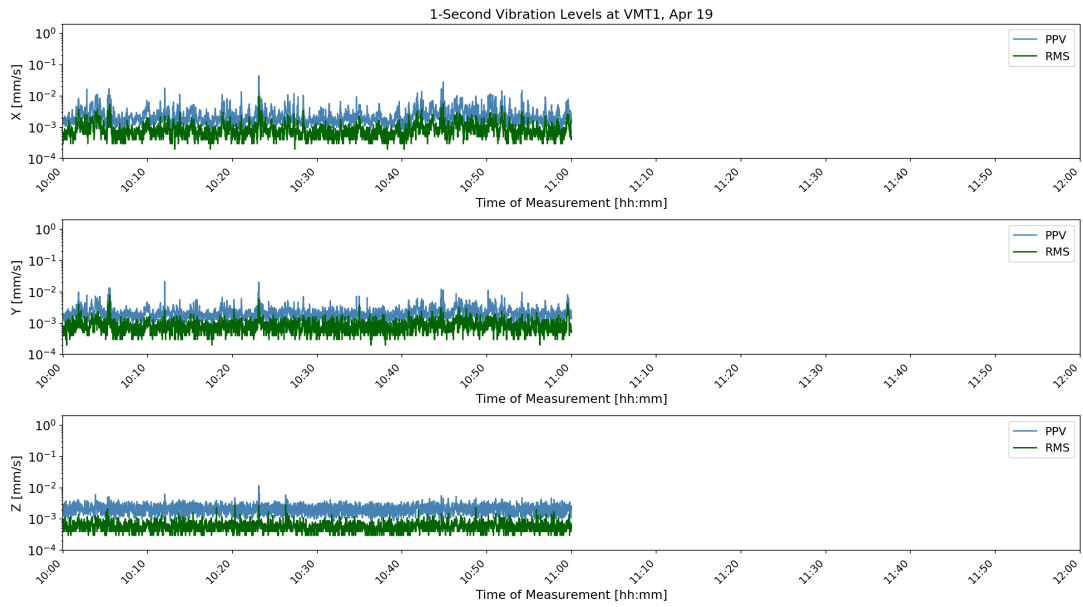


Figure D-17: VMT1 1-Second Velocity History Apr 19 10:00



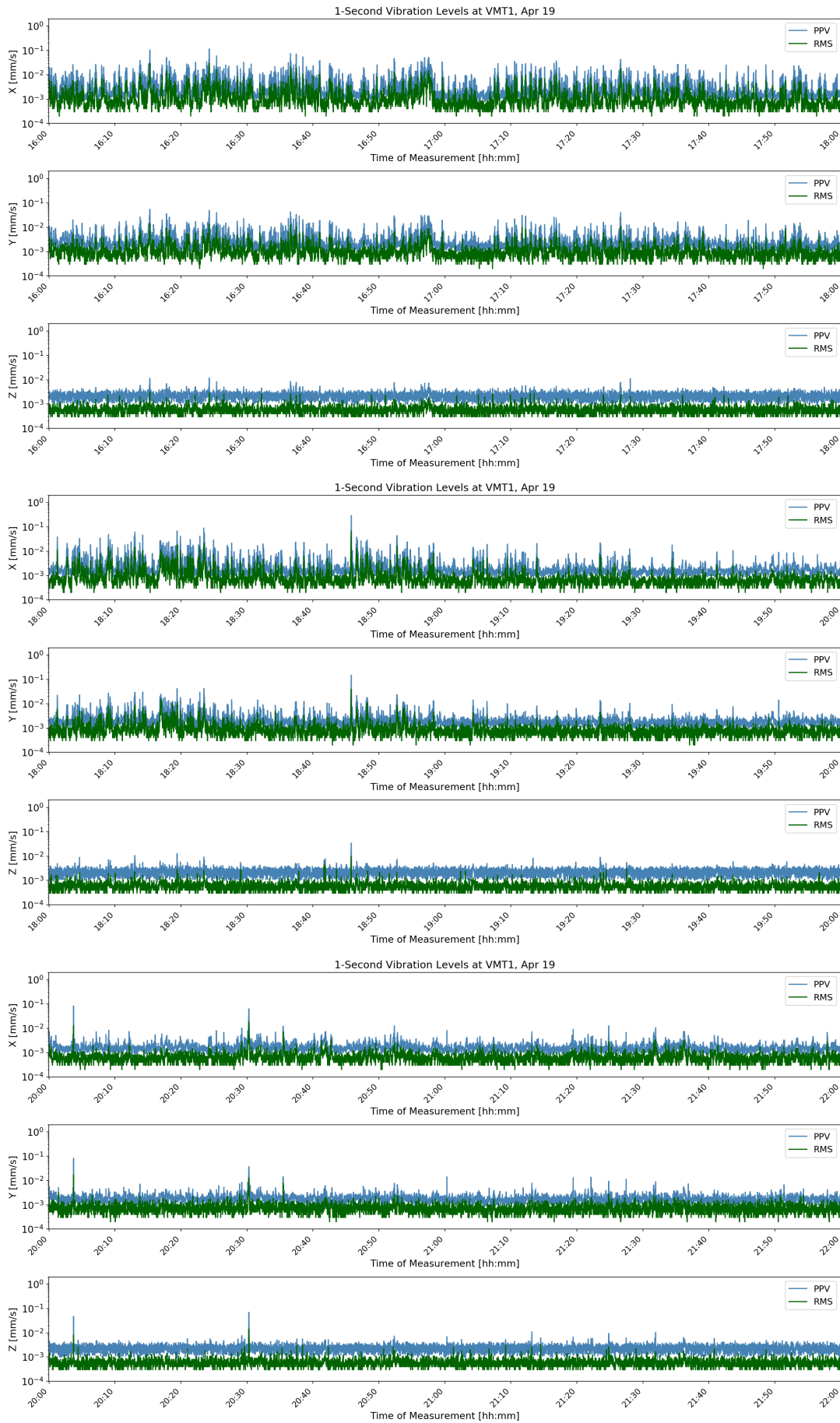


Figure D-18: VMT1 1-Second Velocity History Apr 19 16:00



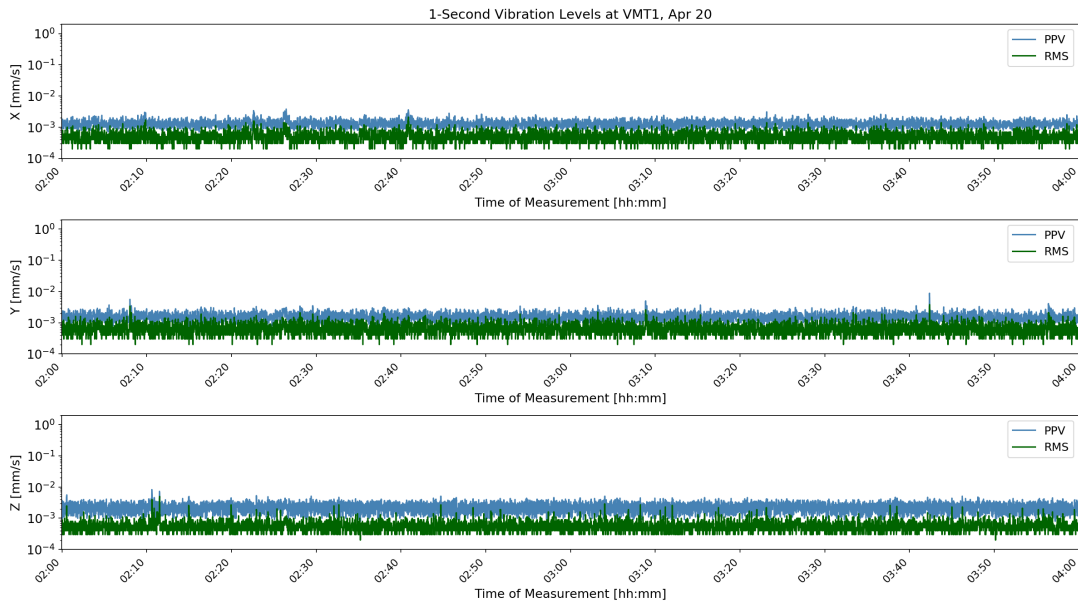
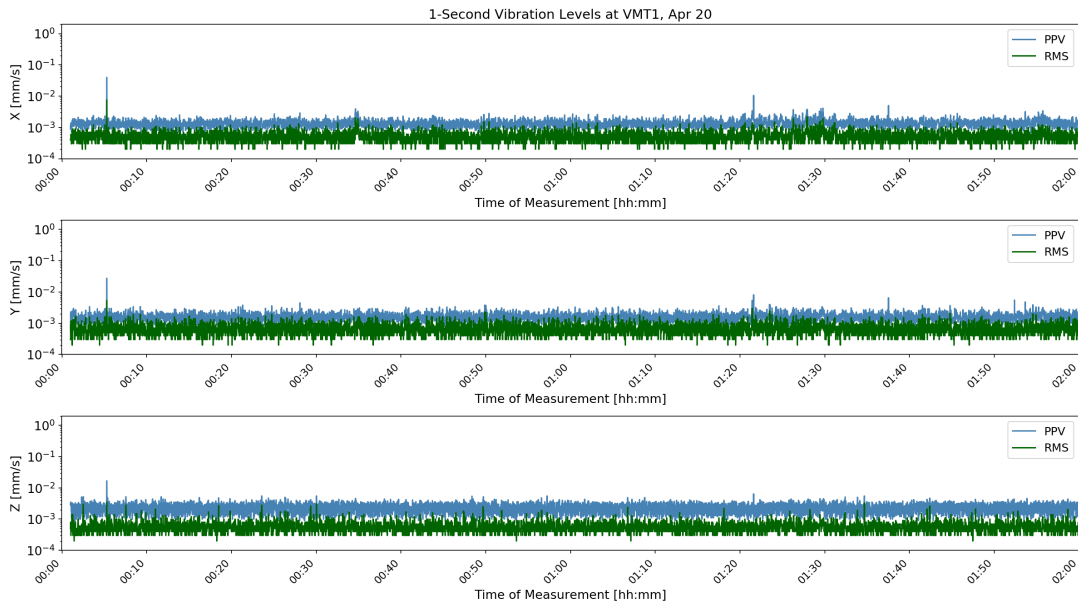
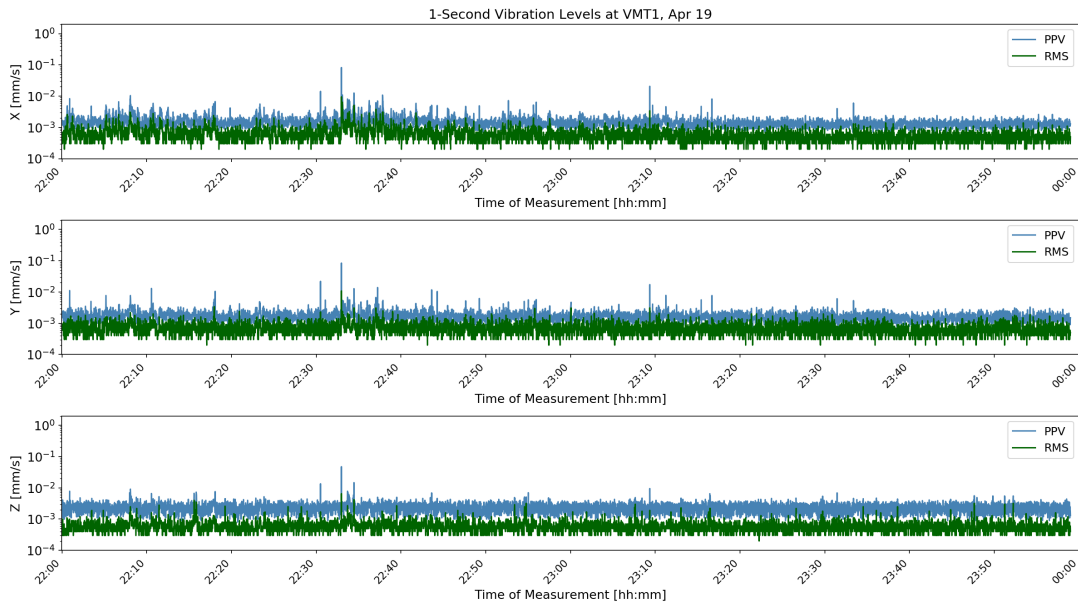


Figure D-19: VMT1 1-Second Velocity History Apr 20 22:00



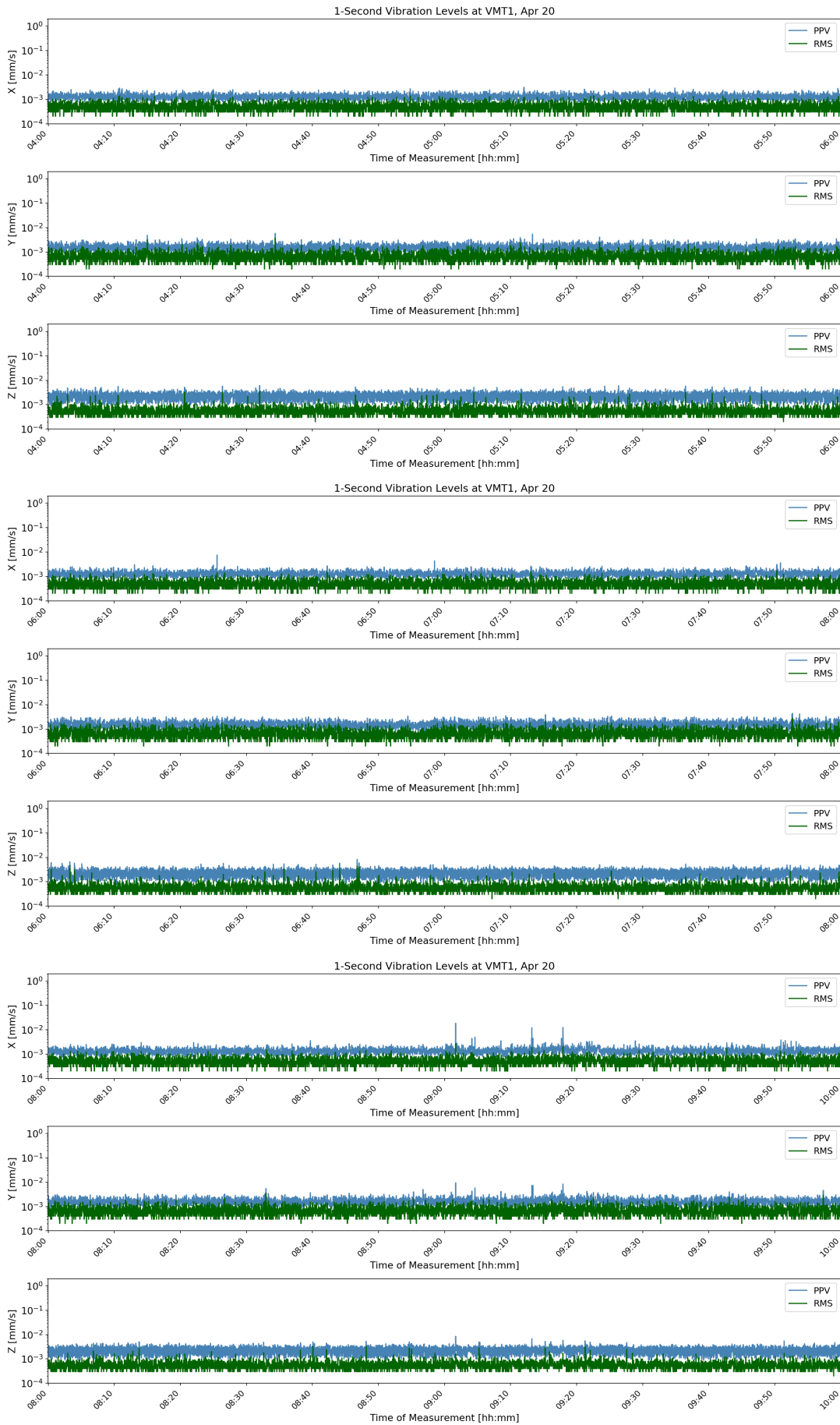


Figure D-20: VMT1 1-Second Velocity History Apr 20 04:00



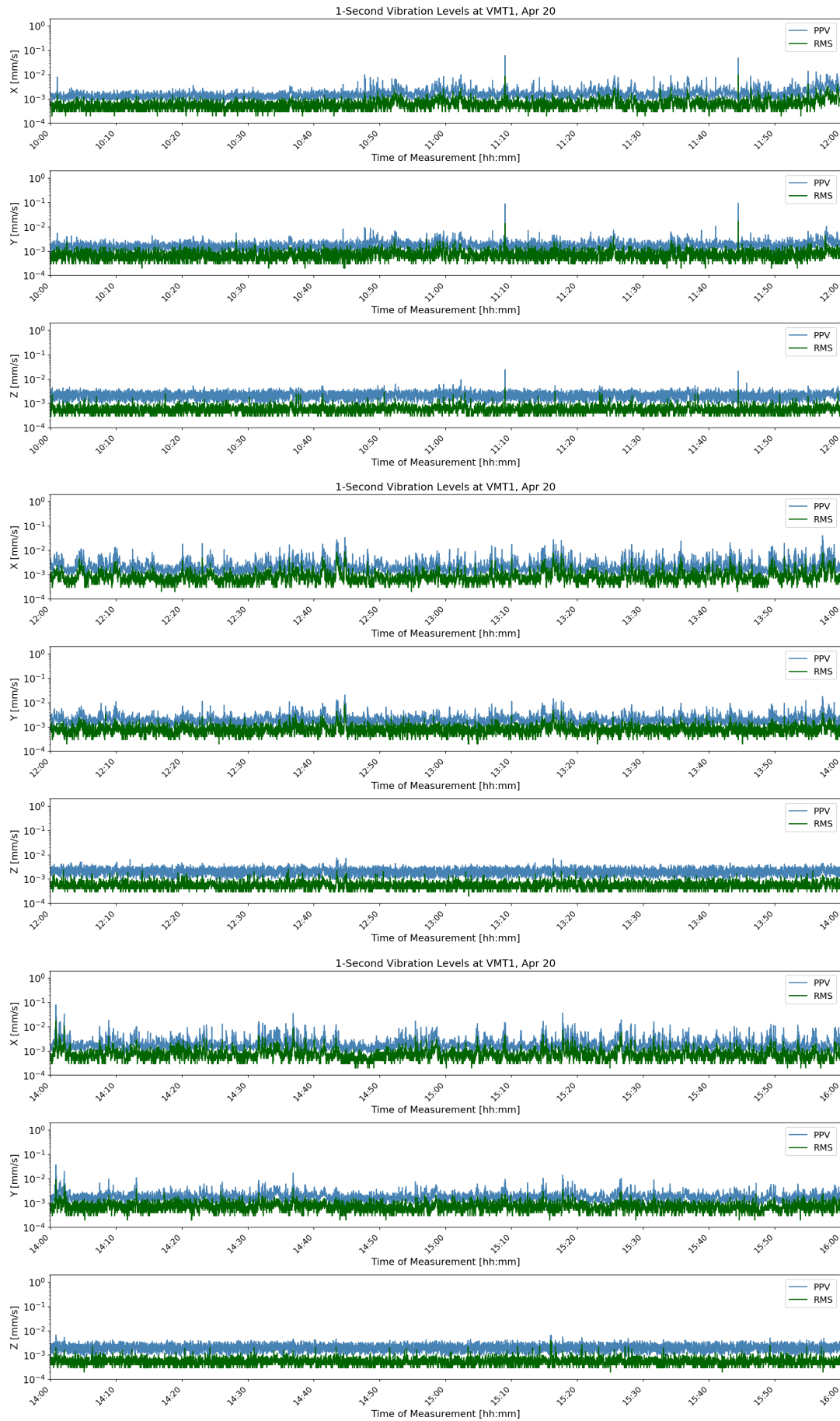


Figure D-21: VMT1 1-Second Velocity History Apr 20 10:00



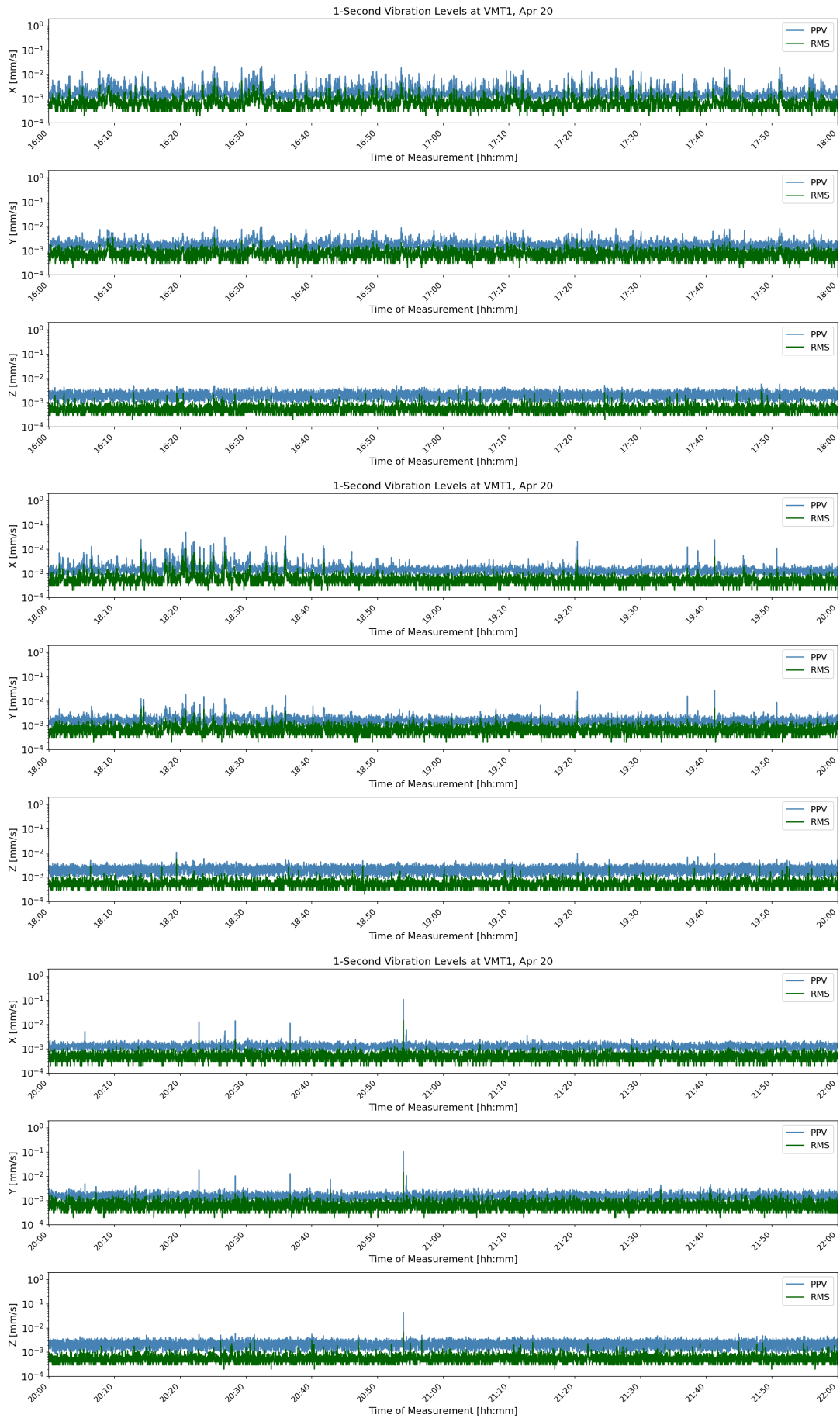


Figure D-22: VMT1 1-Second Velocity History Apr 20 16:00



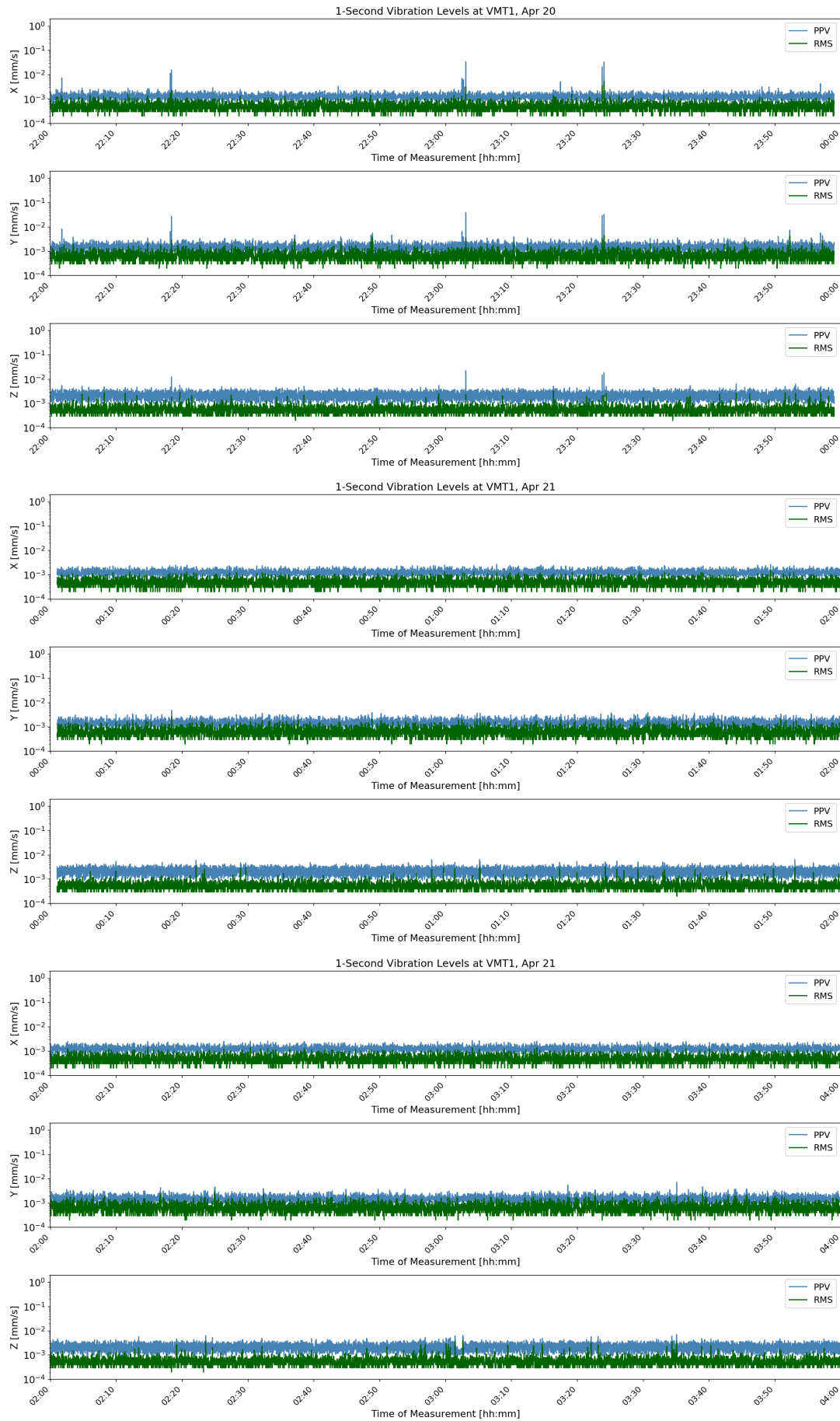


Figure D-23: VMT1 1-Second Velocity History Apr 21 22:00



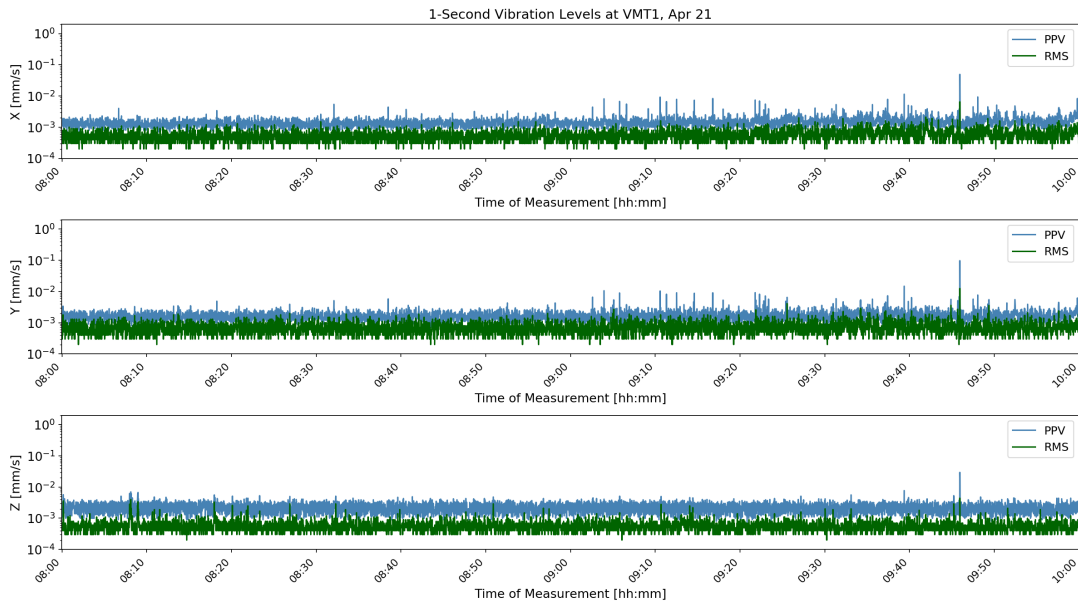
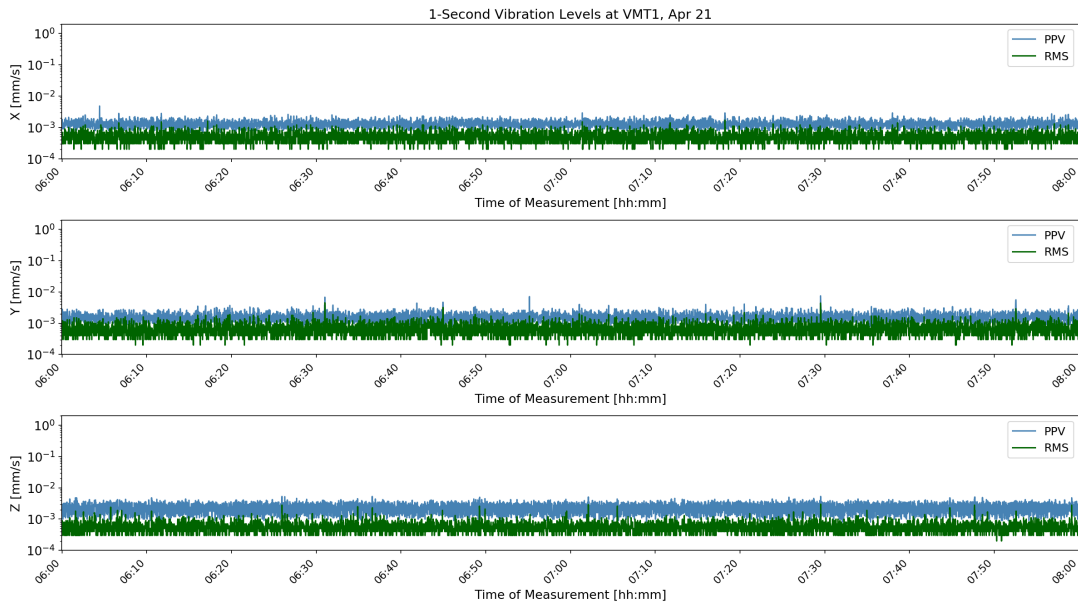
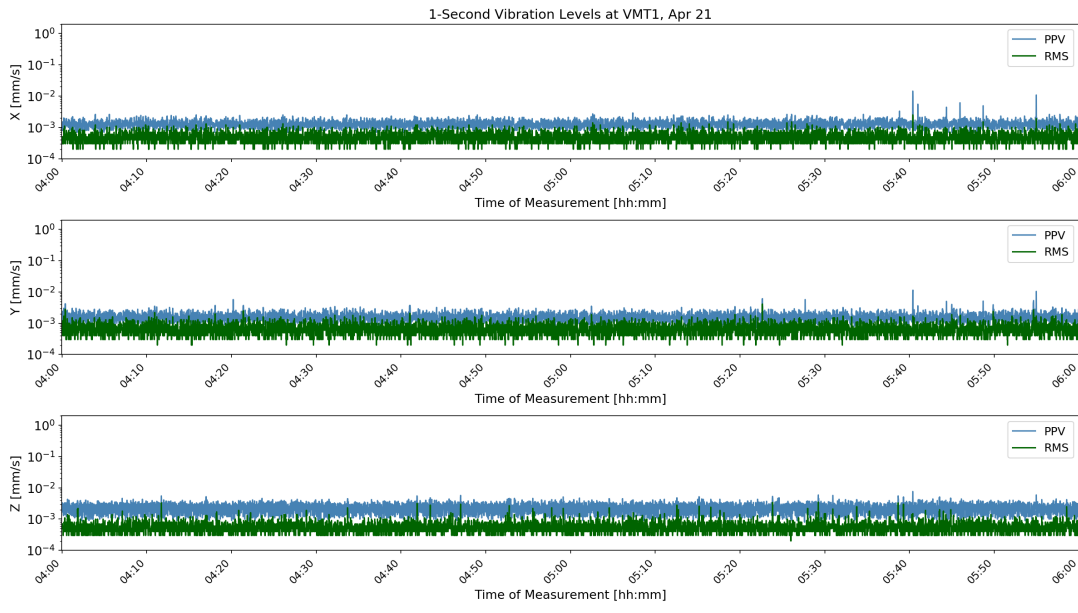


Figure D-24: VMT1 1-Second Velocity History Apr 21 04:00



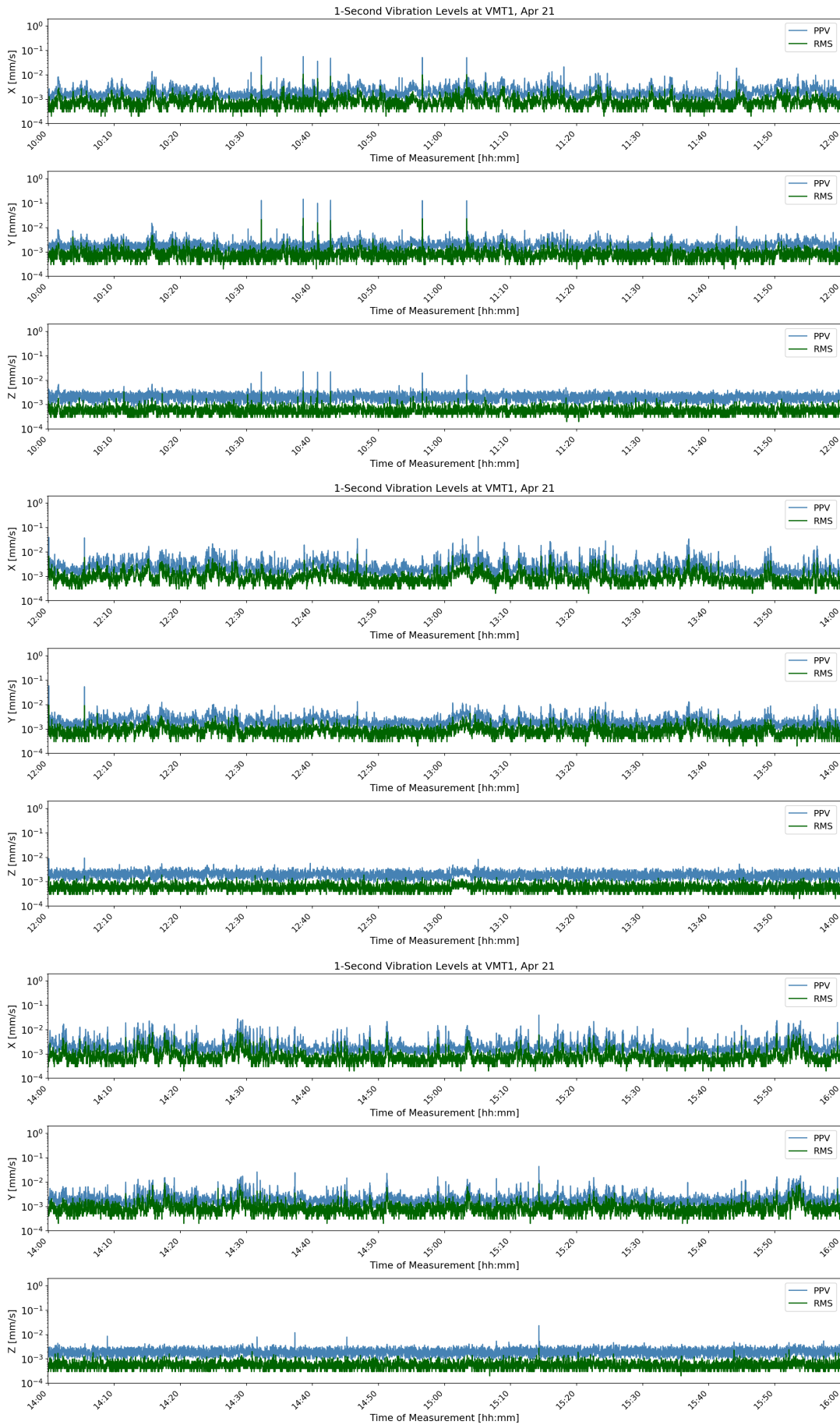


Figure D-25: VMT1 1-Second Velocity History Apr 21 10:00



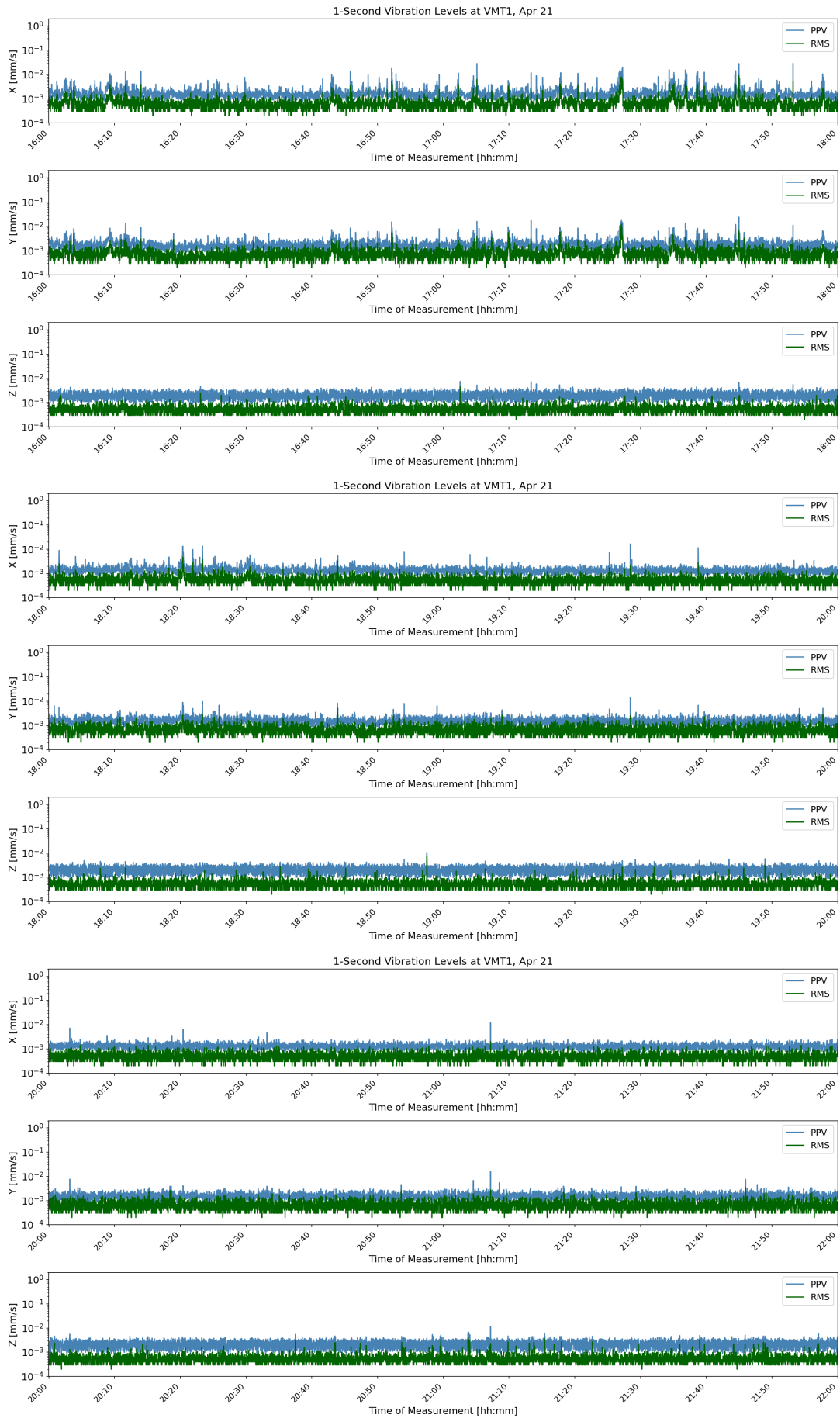


Figure D-26: VMT1 1-Second Velocity History Apr 21 16:00



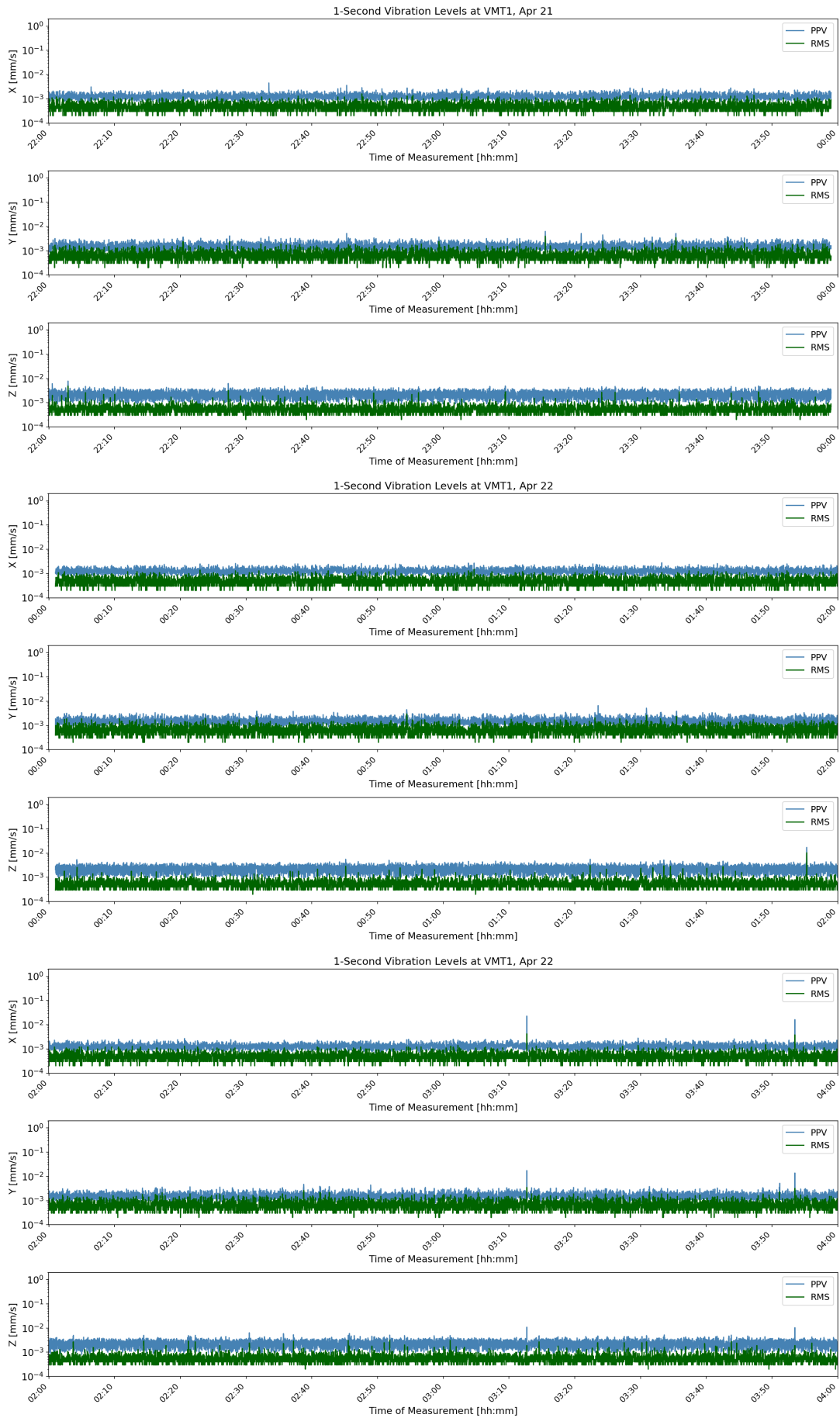


Figure D-27: VMT1 1-Second Velocity History Apr 22 22:00



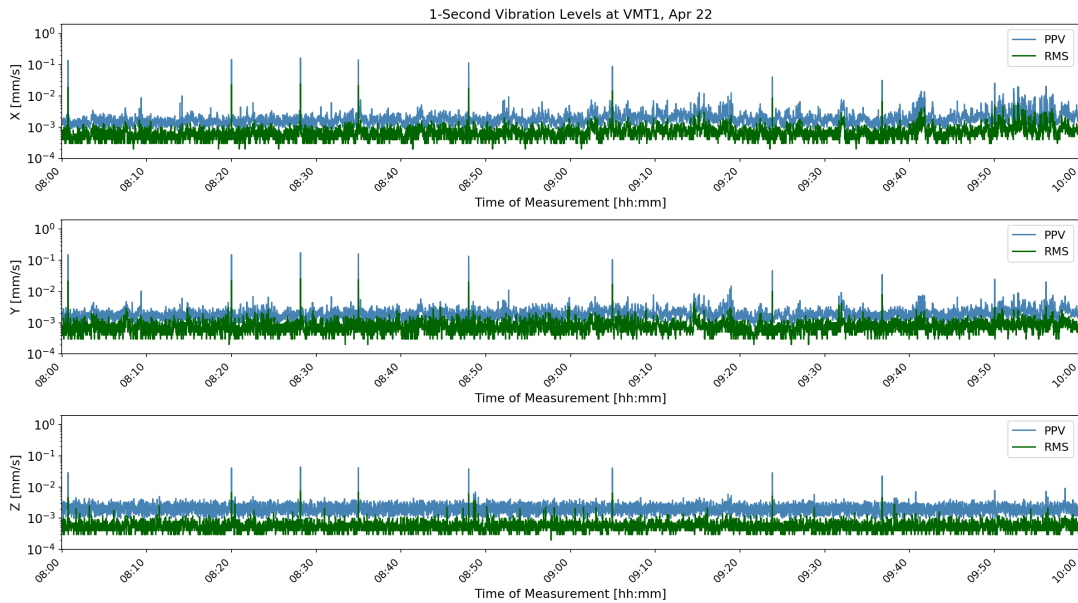
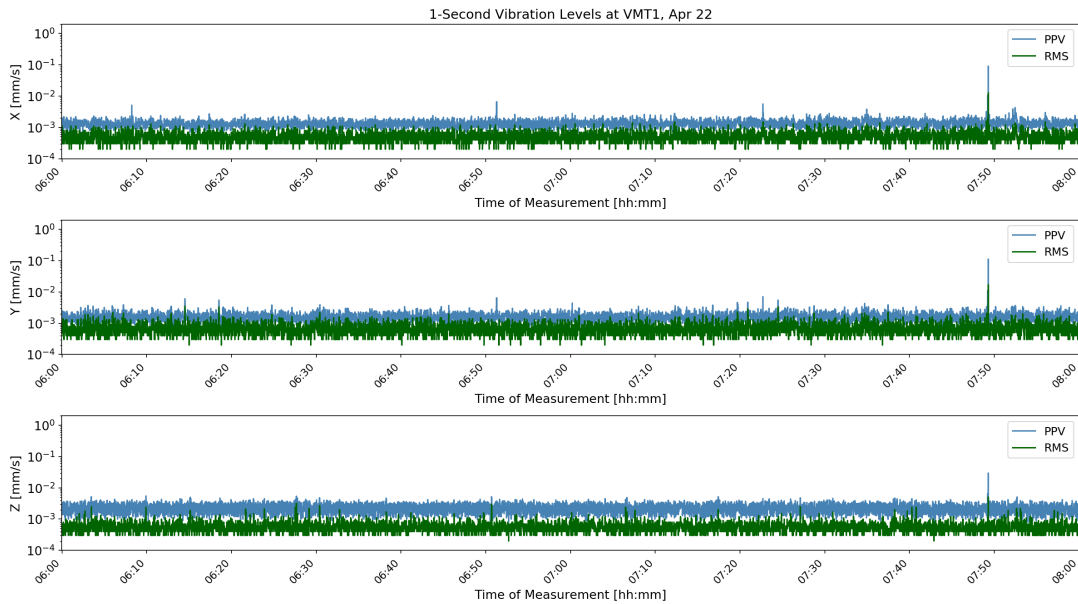
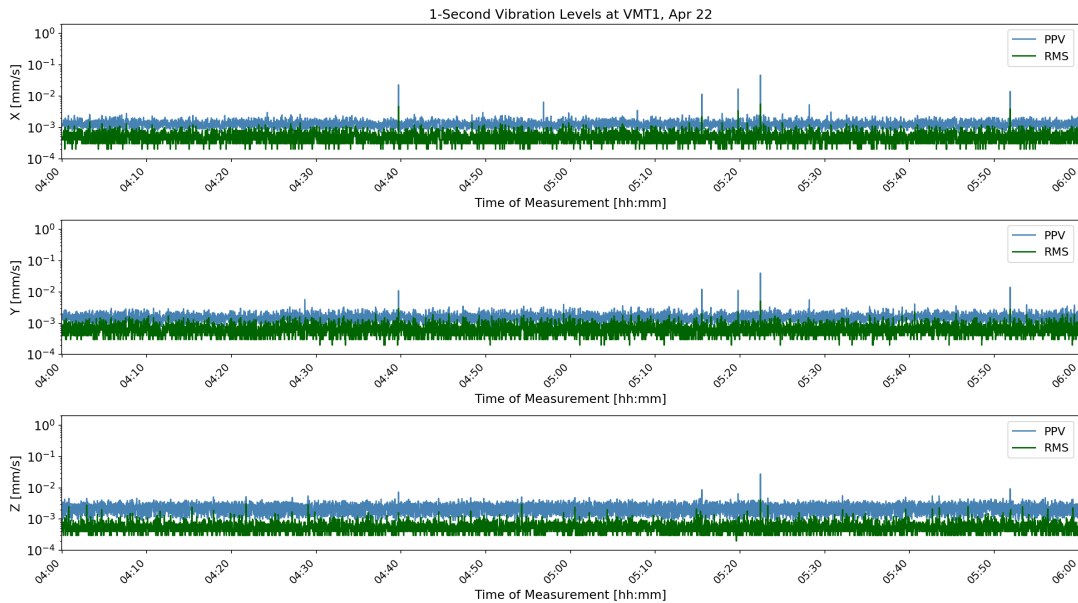


Figure D-28: VMT1 1-Second Velocity History Apr 22 04:00



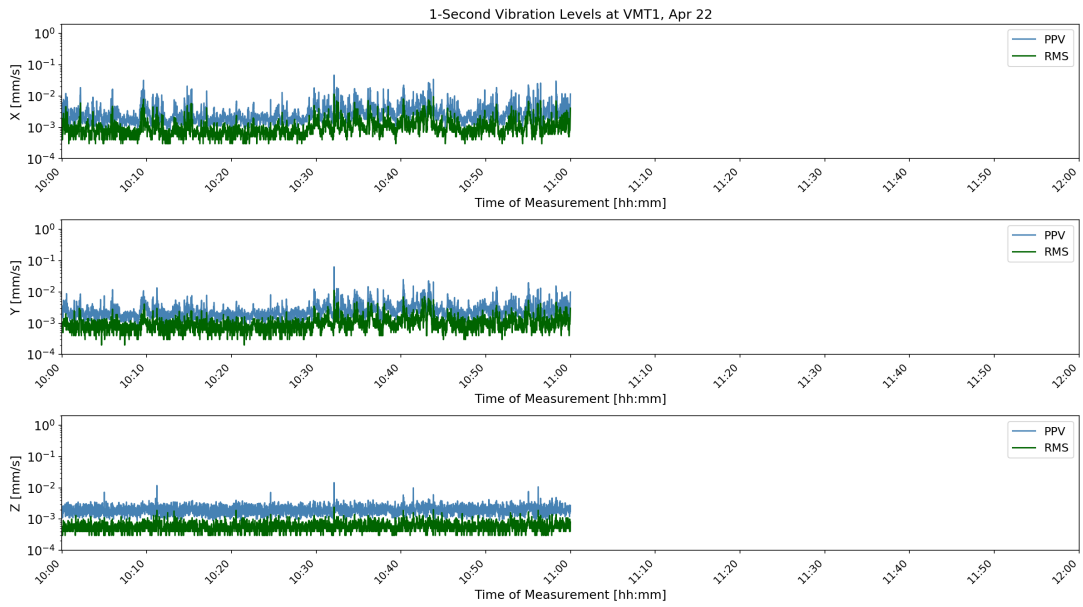


Figure D-29: VMT1 1-Second Velocity History Apr 22 10:00



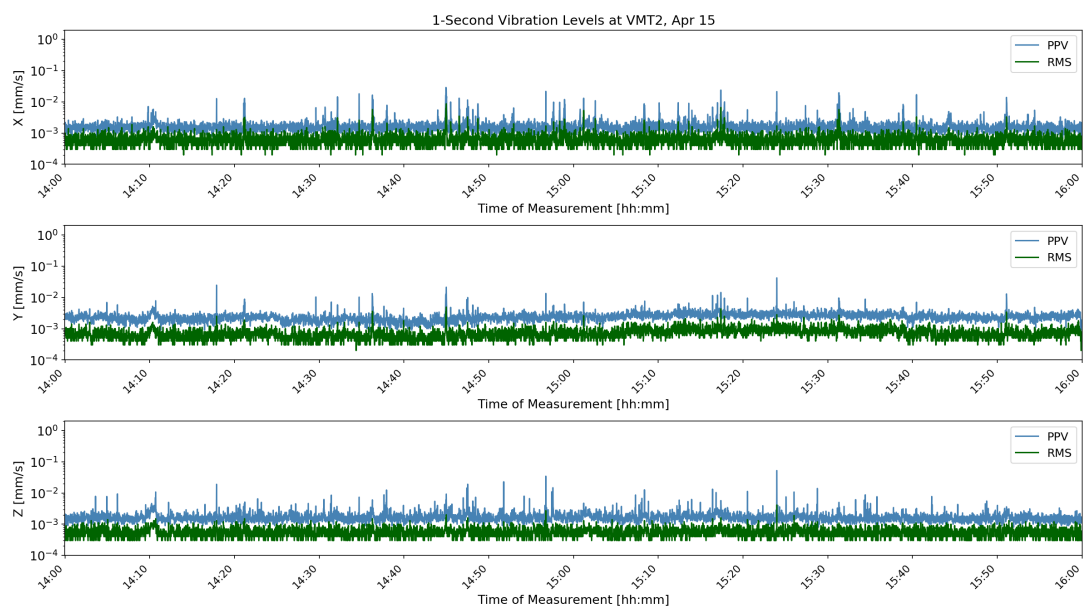
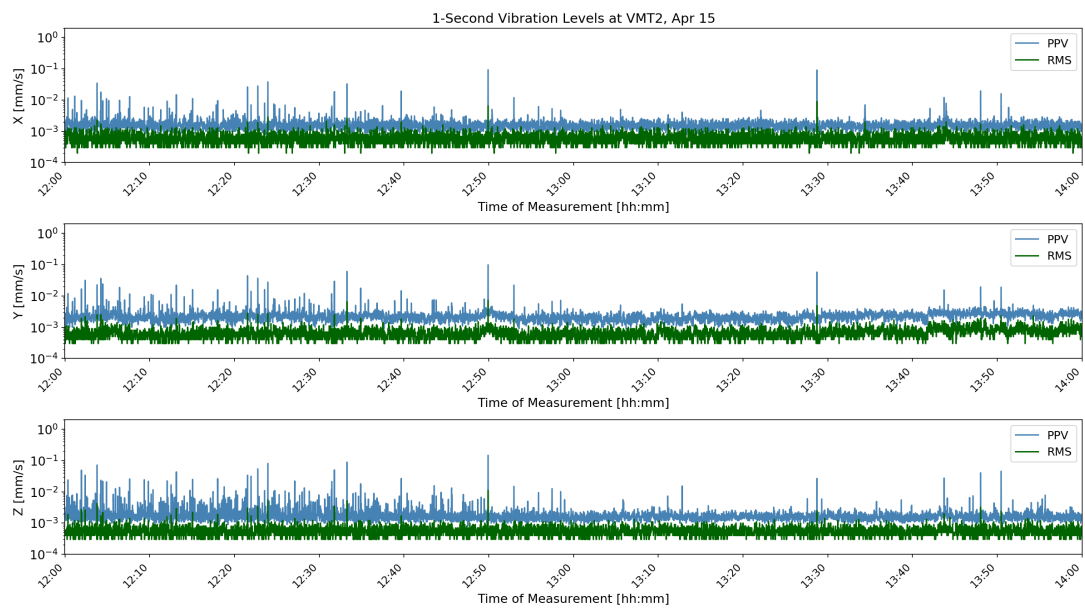
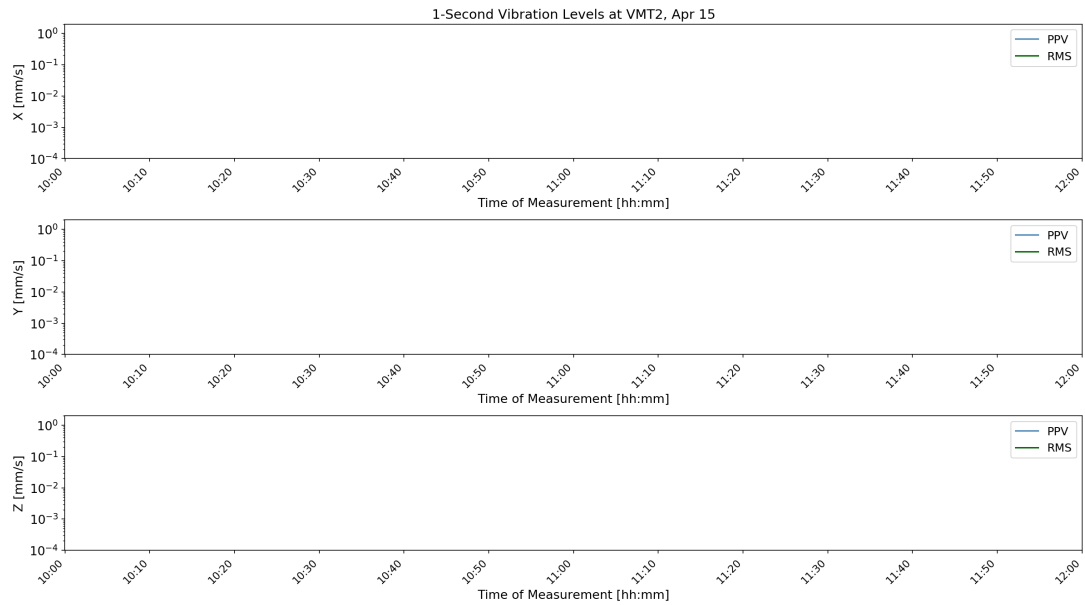


Figure D-30: VMT2 1-Second Velocity History Apr 15 10:00



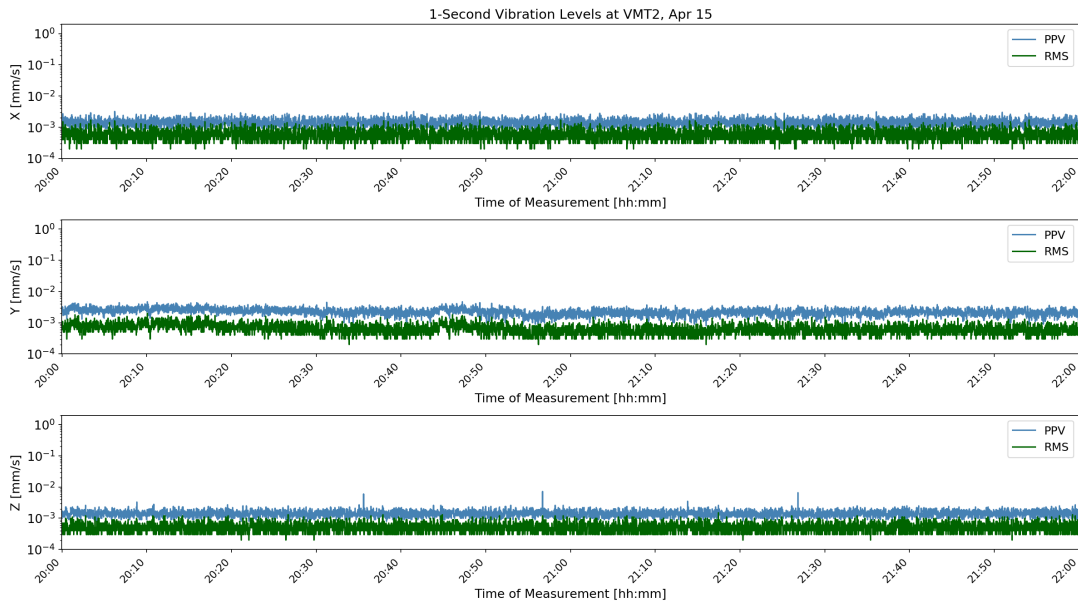
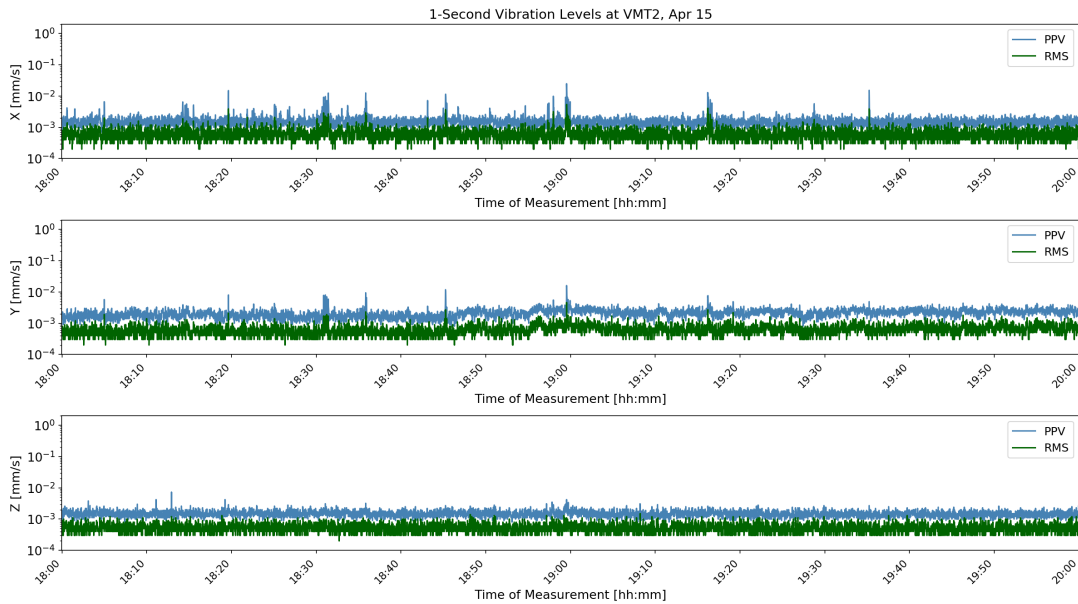
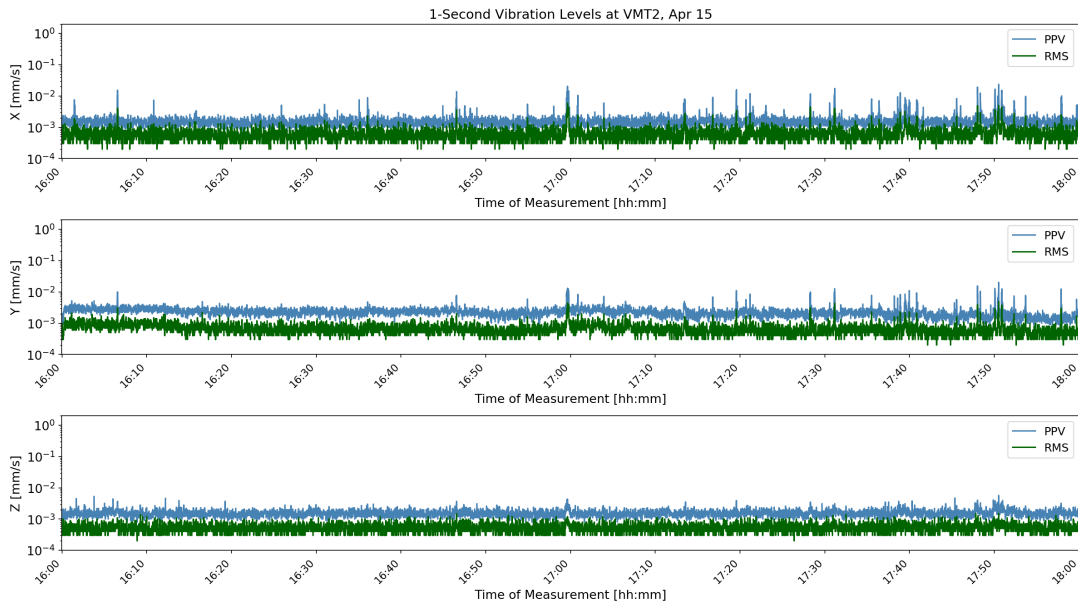


Figure D-31: VMT2 1-Second Velocity History Apr 15 16:00



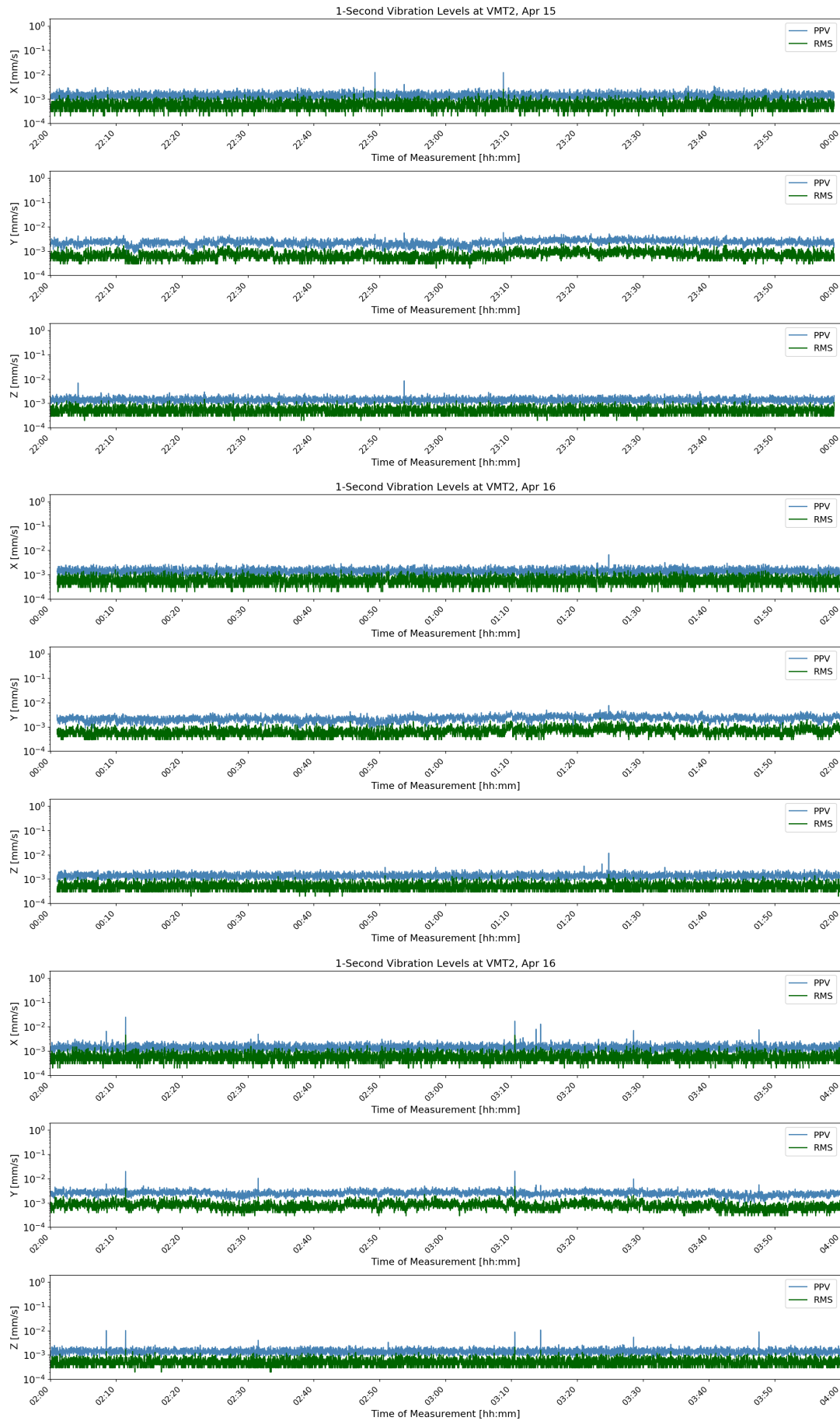


Figure D-32: VMT2 1-Second Velocity History Apr 16 22:00



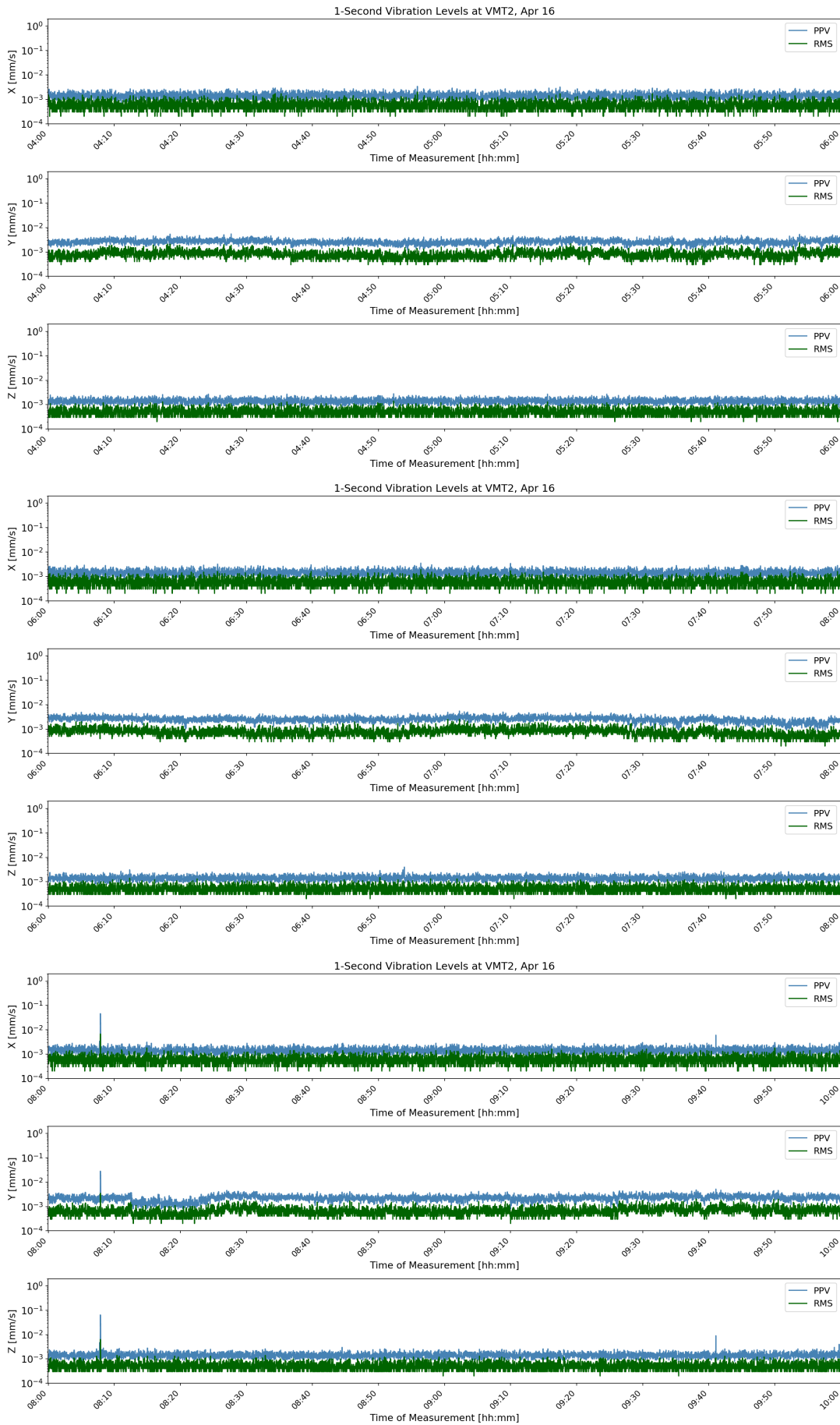


Figure D-33: VMT2 1-Second Velocity History Apr 16 04:00



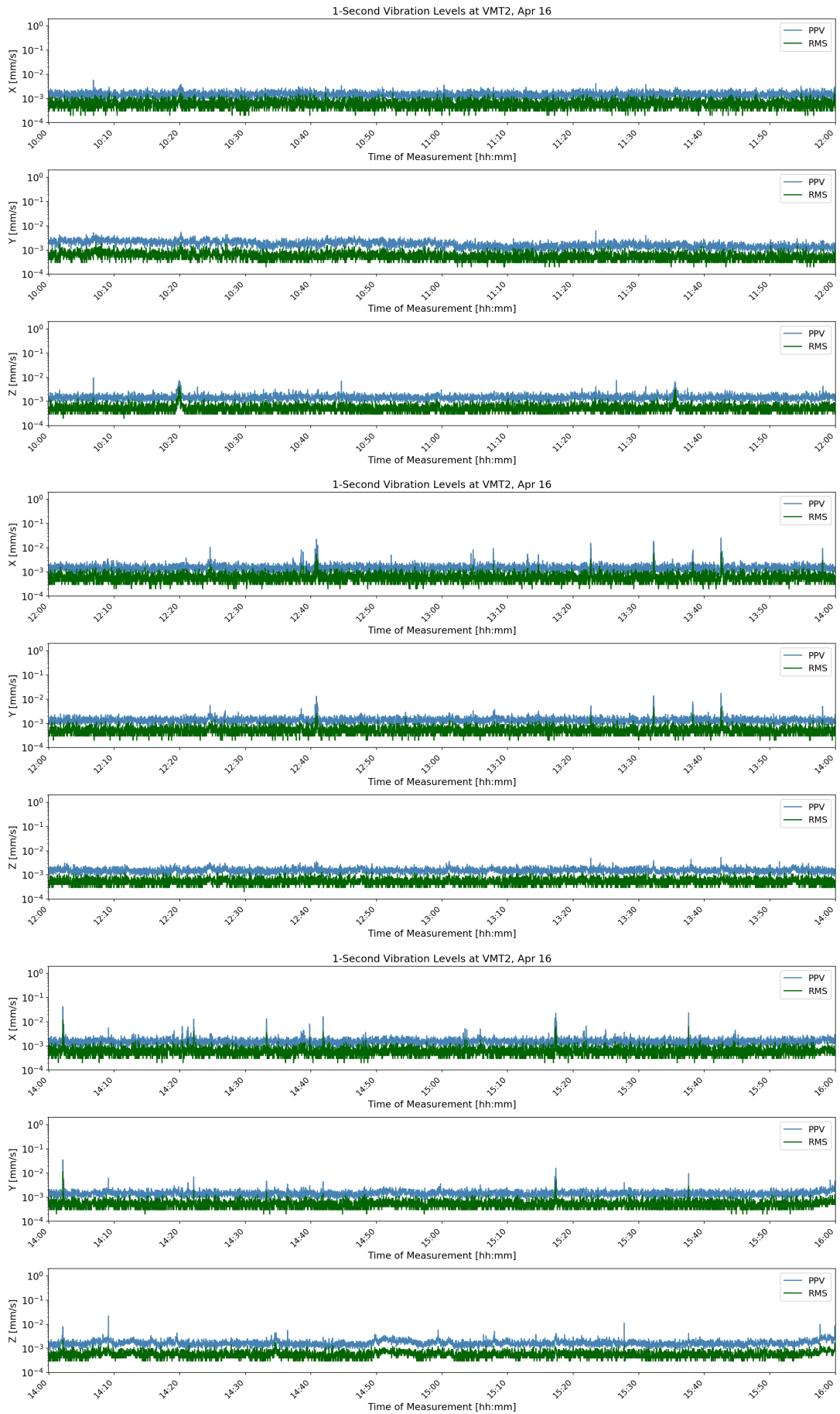
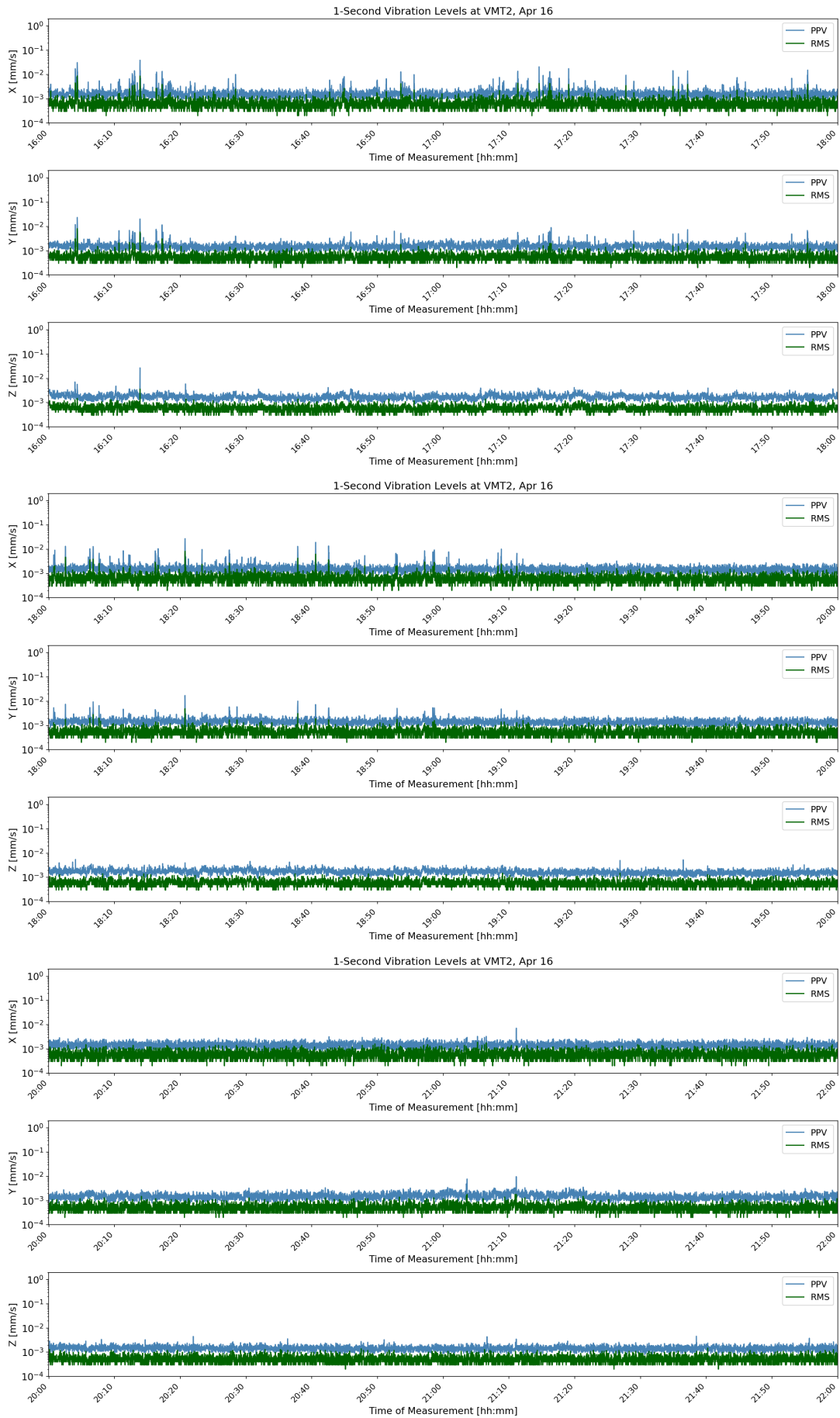


Figure D-34: VMT2 1-Second Velocity History Apr 16 10:00





**Figure D-35: VMT2 1-Second Velocity History Apr 16 16:00**



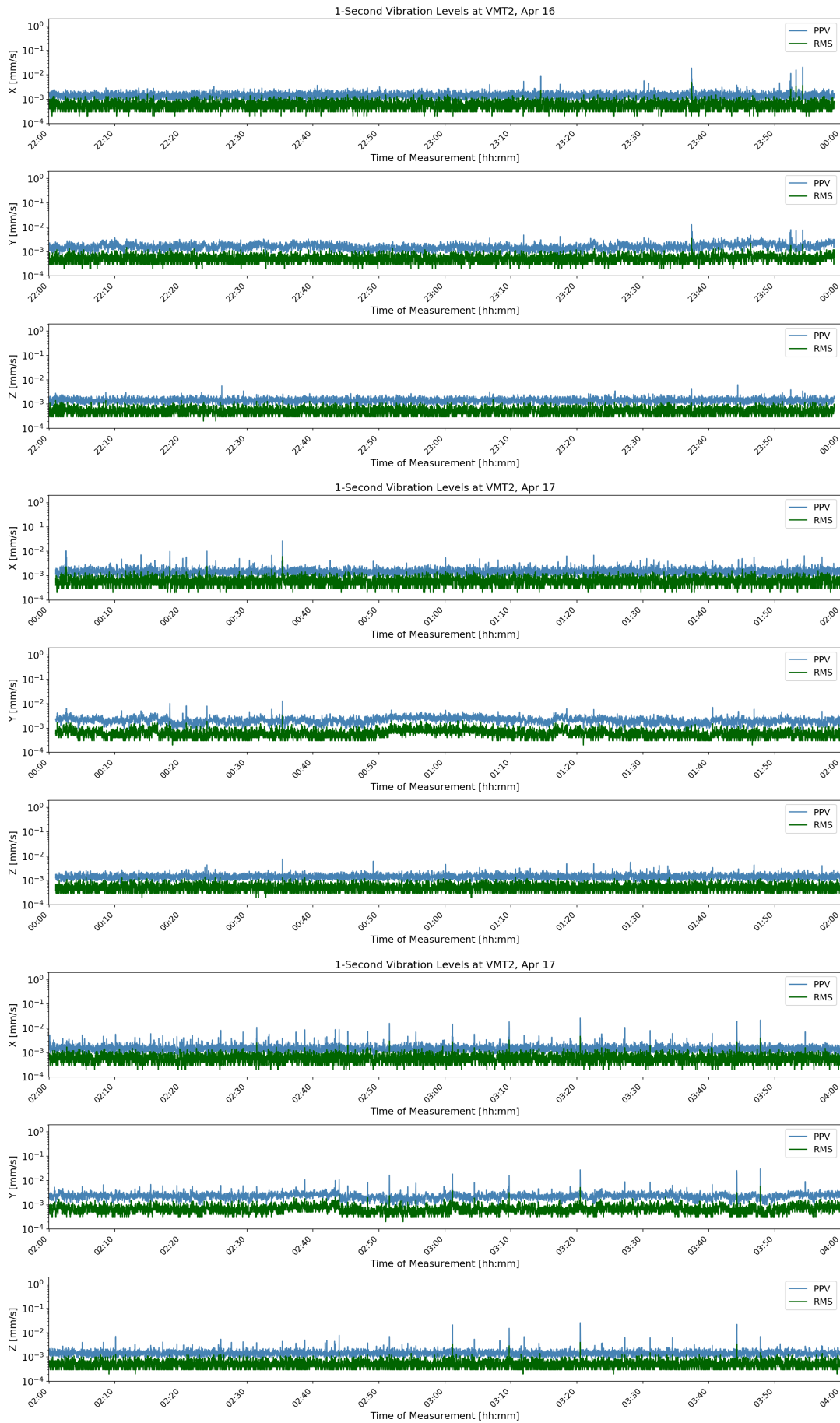


Figure D-36: VMT2 1-Second Velocity History Apr 17 22:00



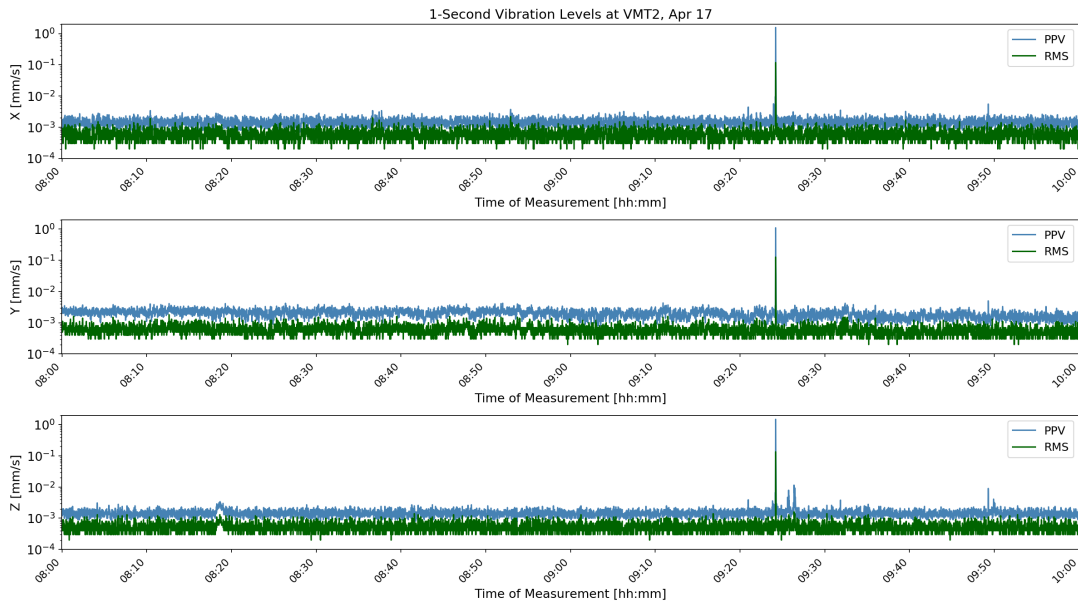
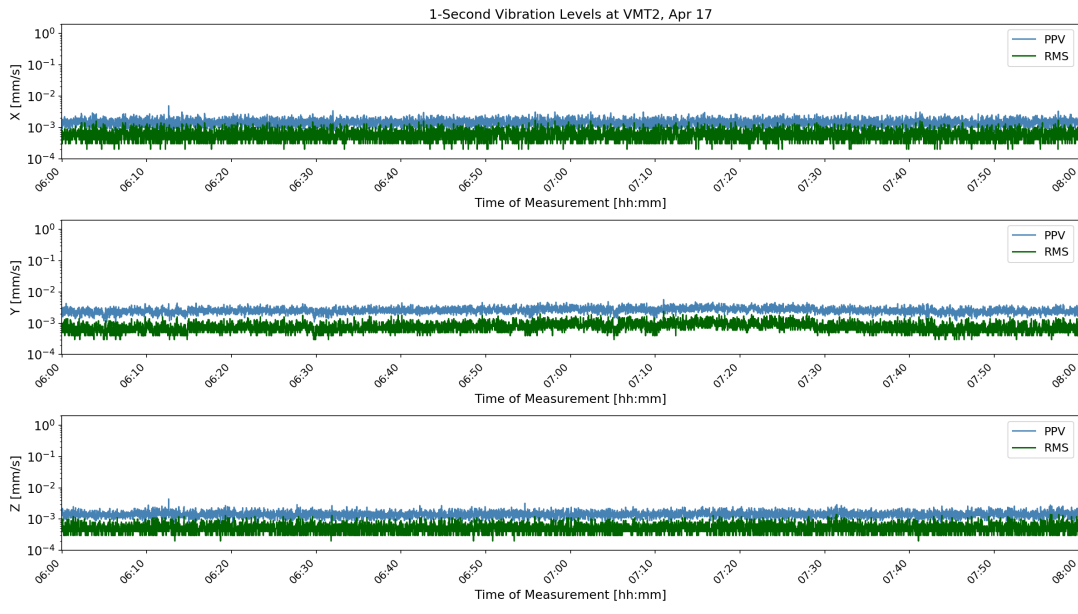
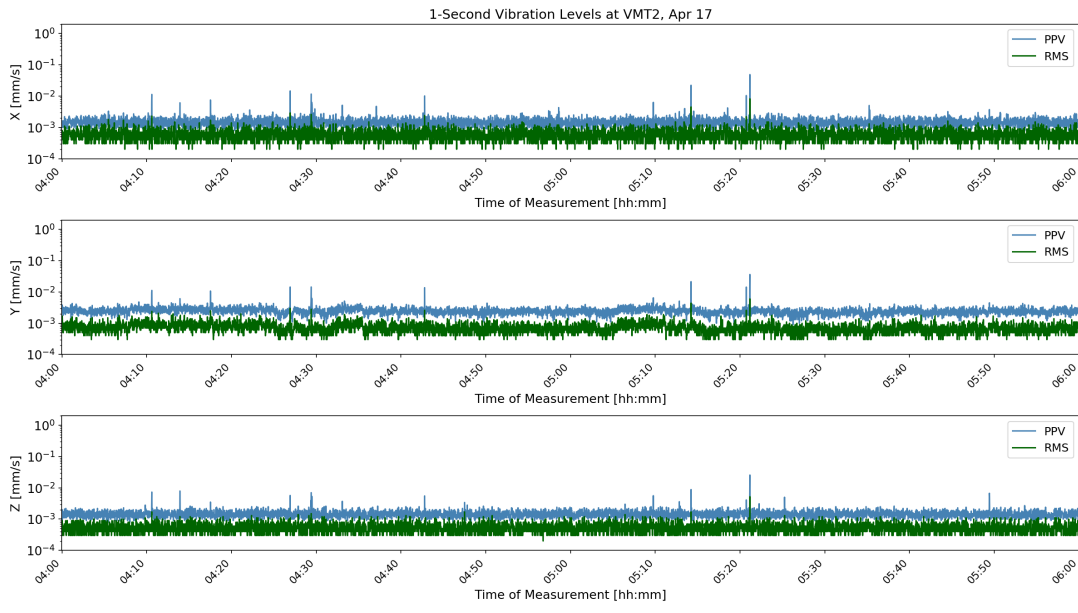


Figure D-37: VMT2 1-Second Velocity History Apr 17 04:00



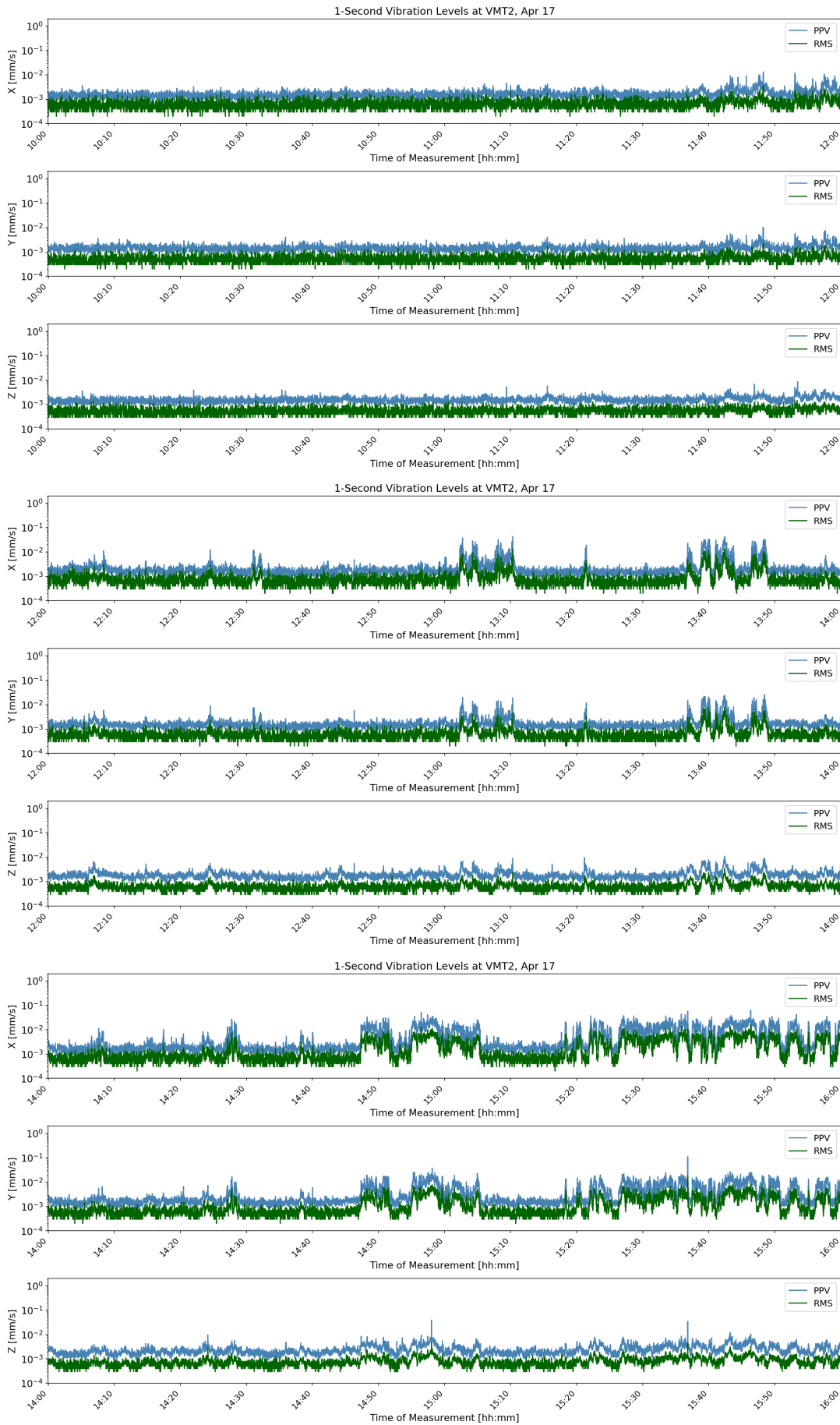


Figure D-38: VMT2 1-Second Velocity History Apr 17 10:00



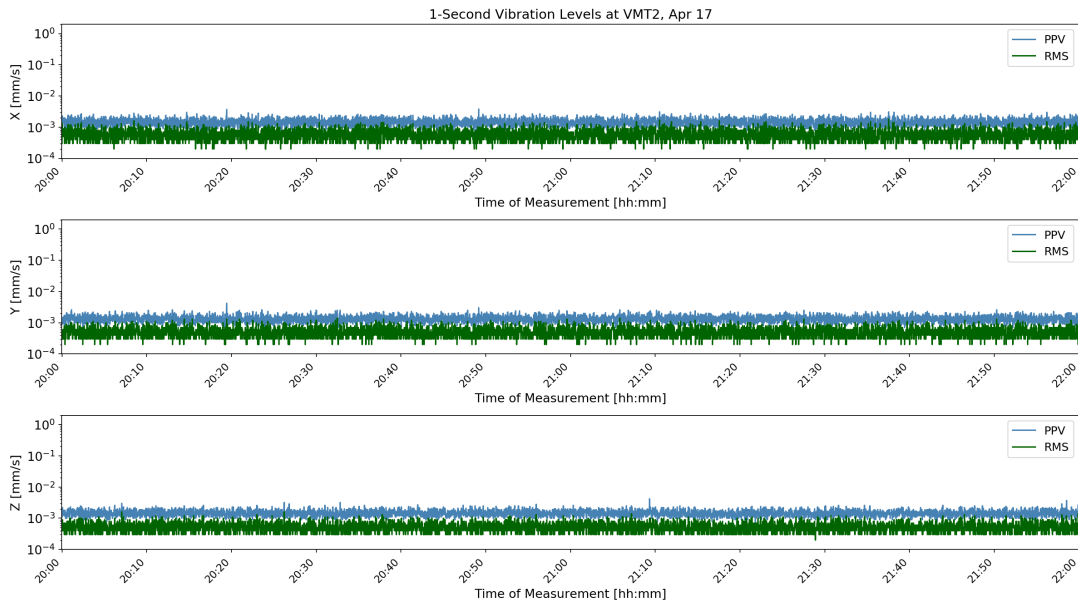
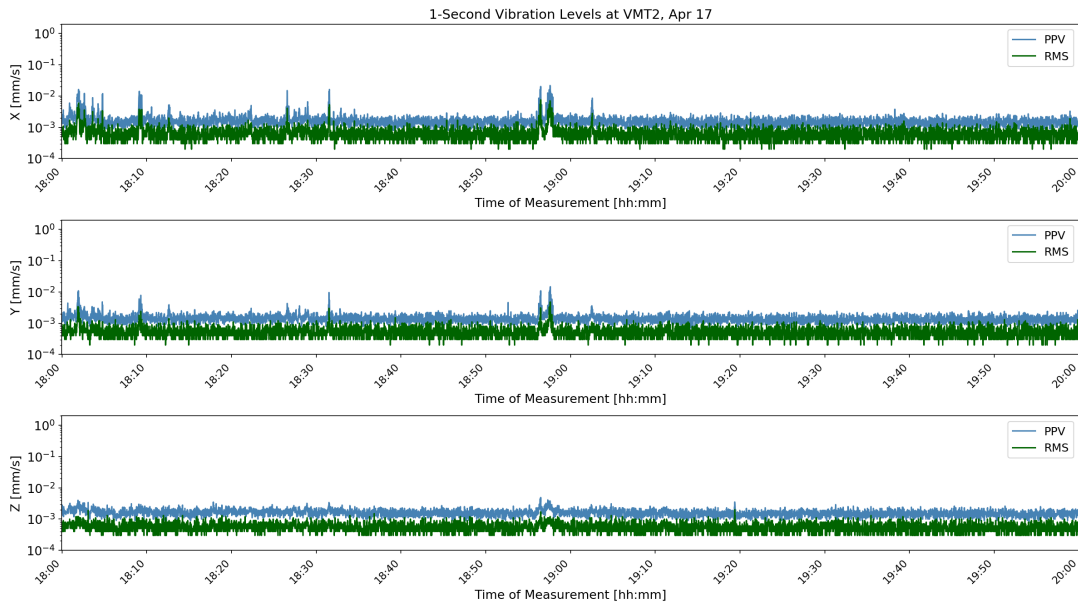
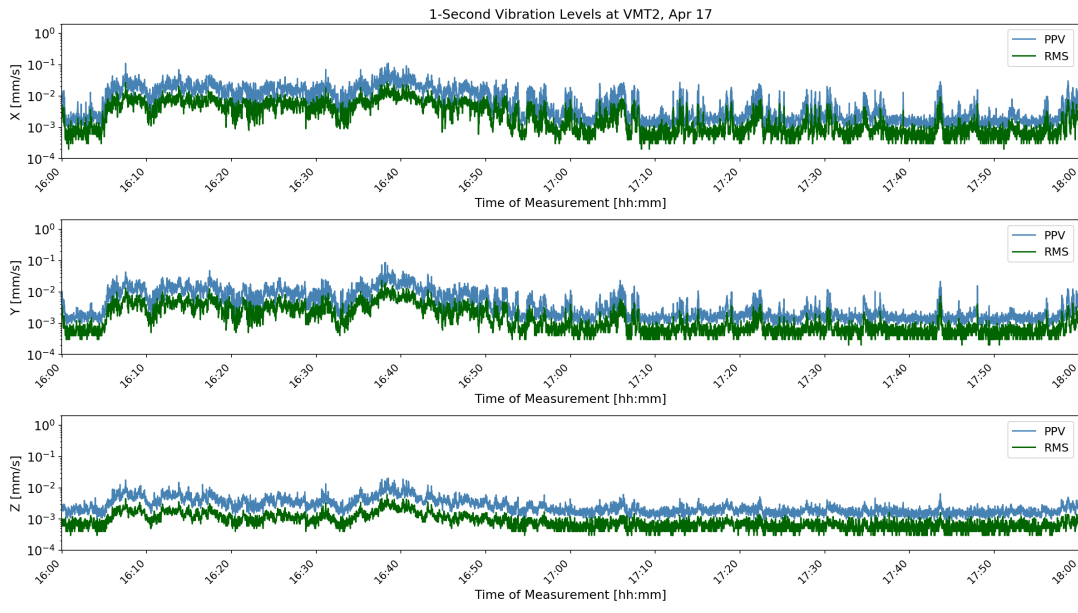


Figure D-39: VMT2 1-Second Velocity History Apr 17 16:00



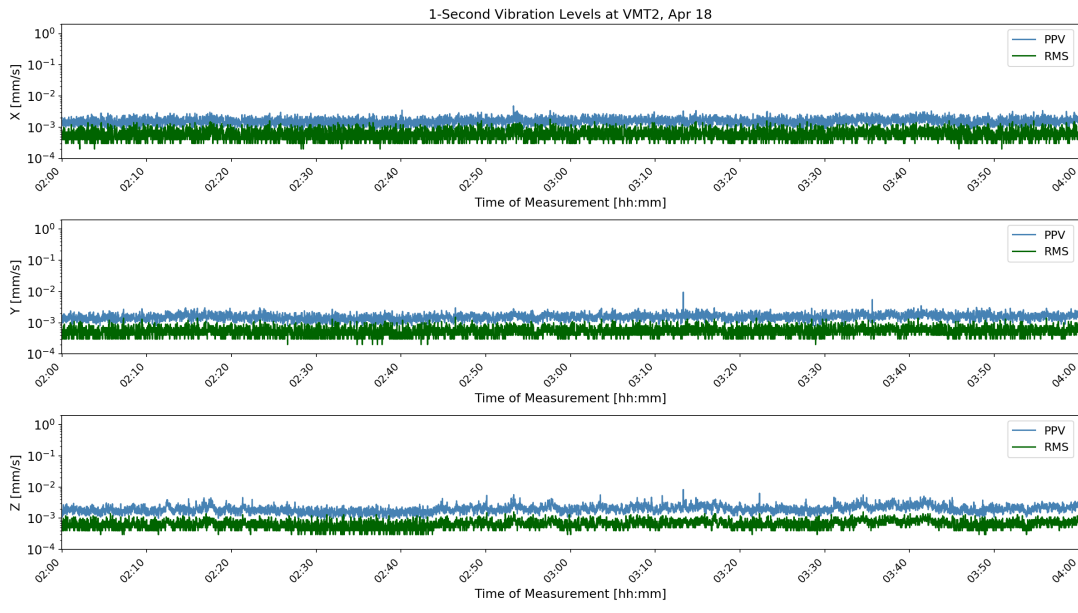
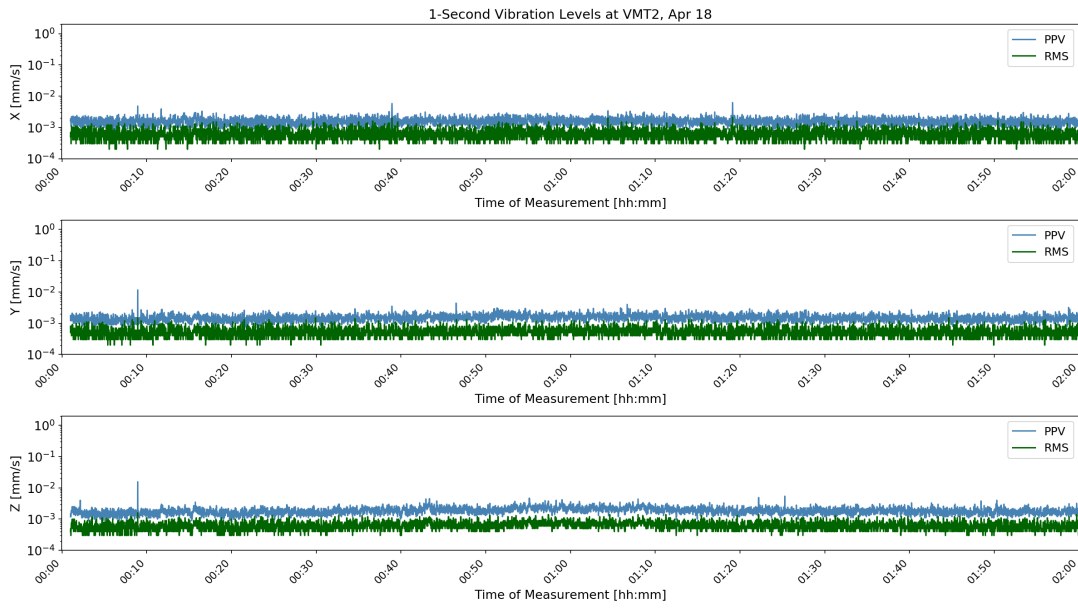
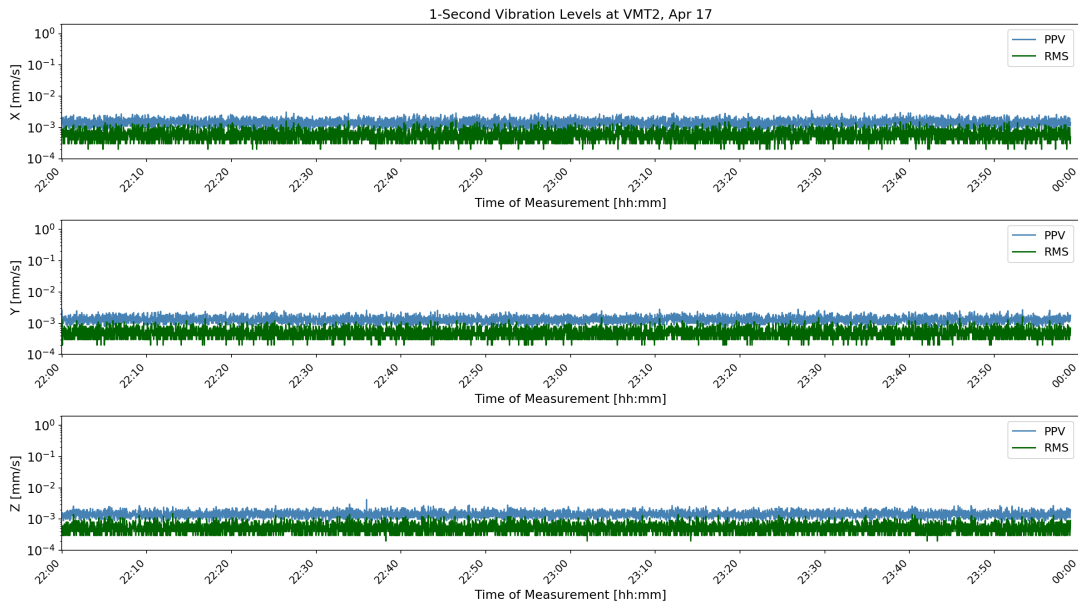


Figure D-40: VMT2 1-Second Velocity History Apr 18 22:00



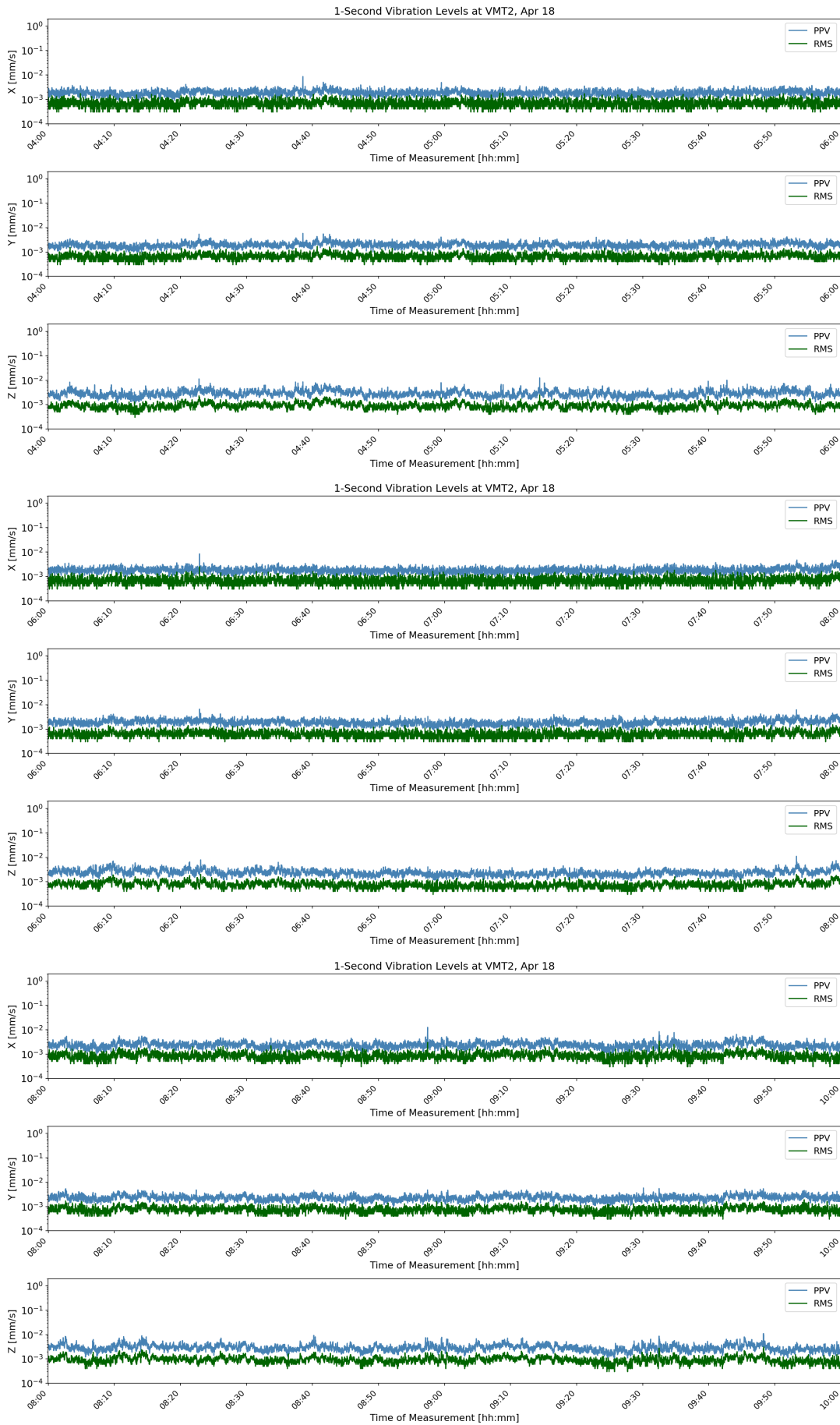


Figure D-41: VMT2 1-Second Velocity History Apr 18 04:00



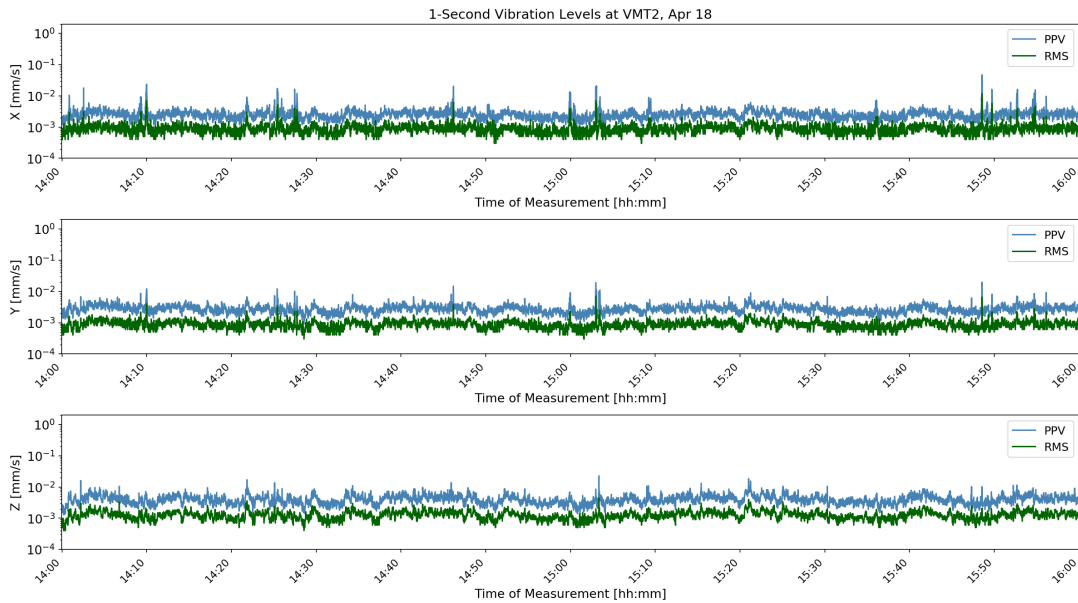
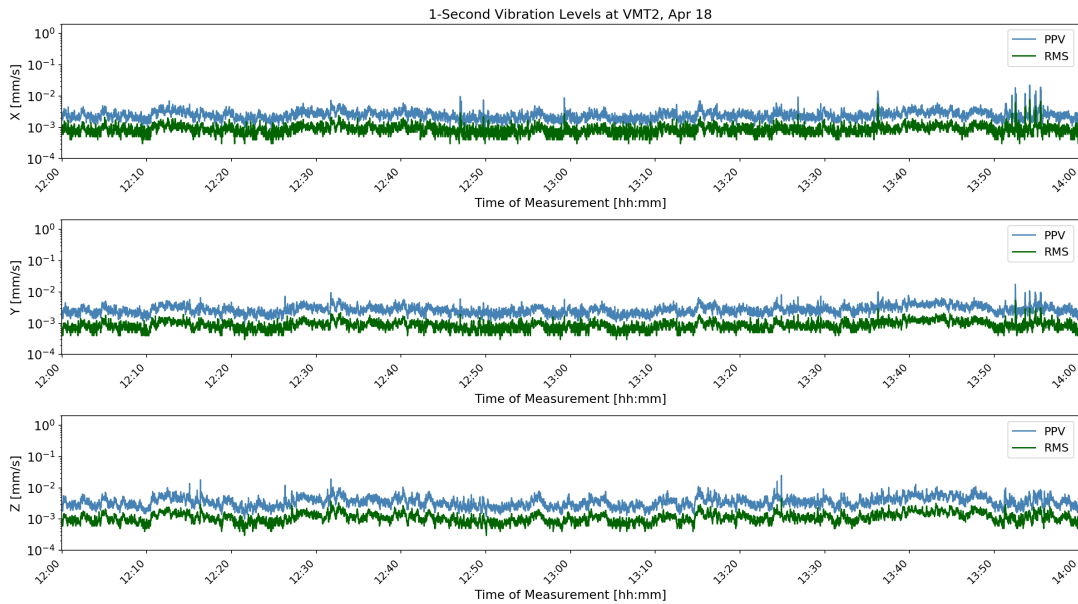
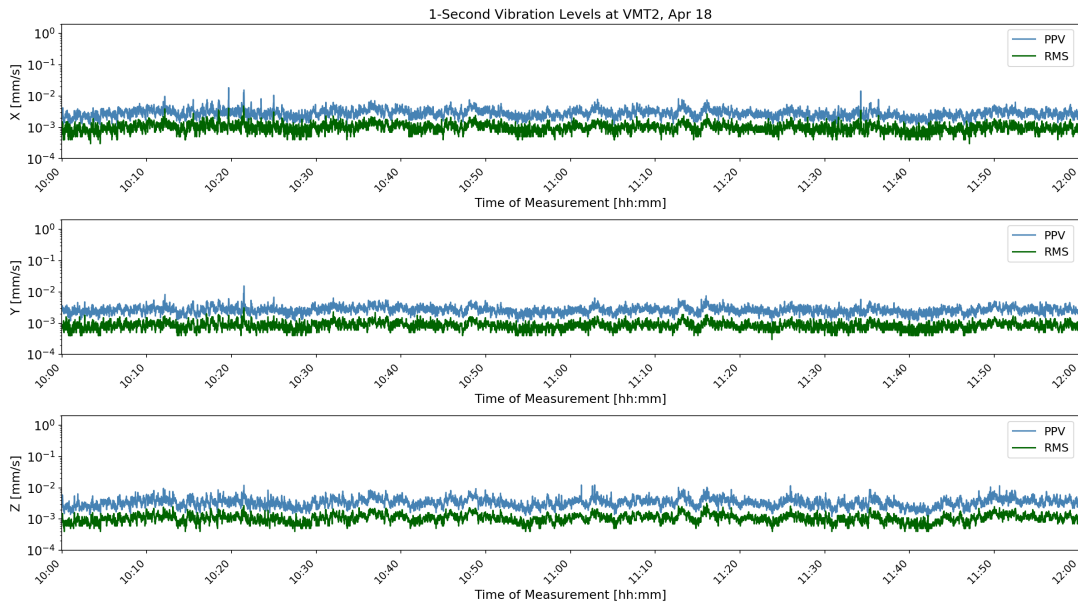


Figure D-42: VMT2 1-Second Velocity History Apr 18 10:00



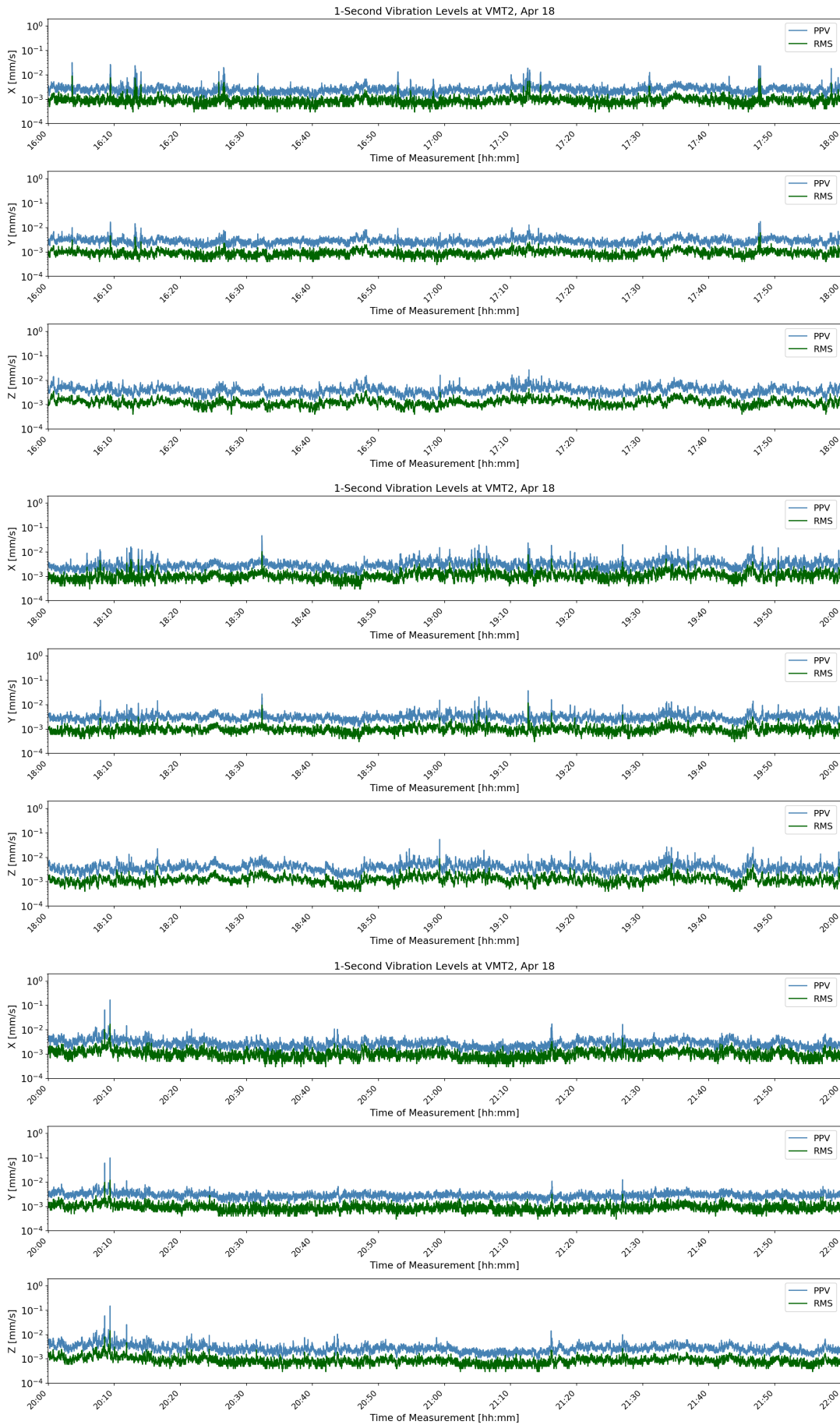


Figure D-43: VMT2 1-Second Velocity History Apr 18 16:00



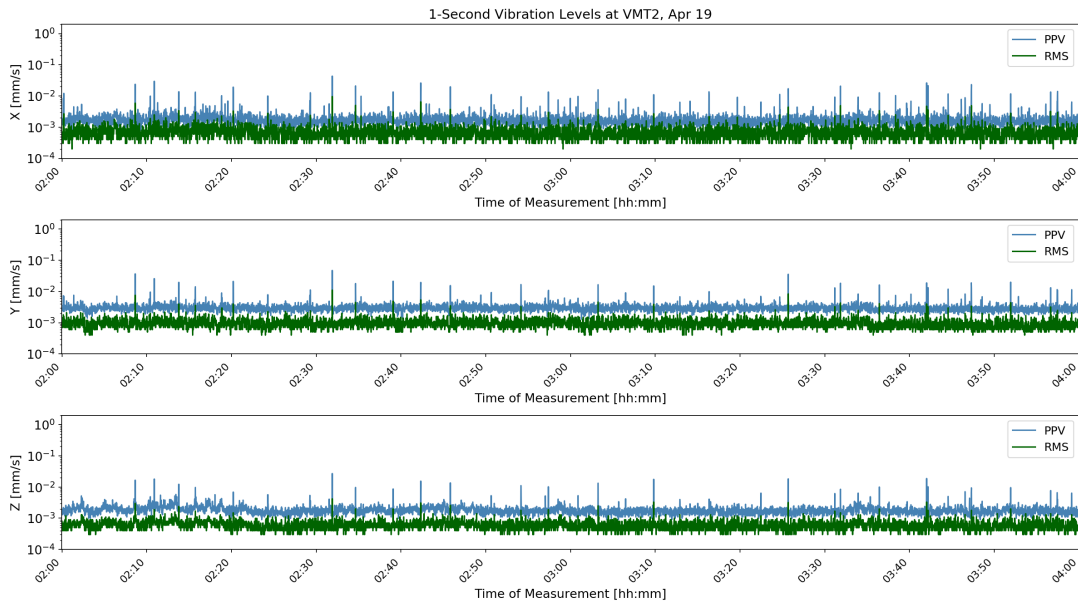
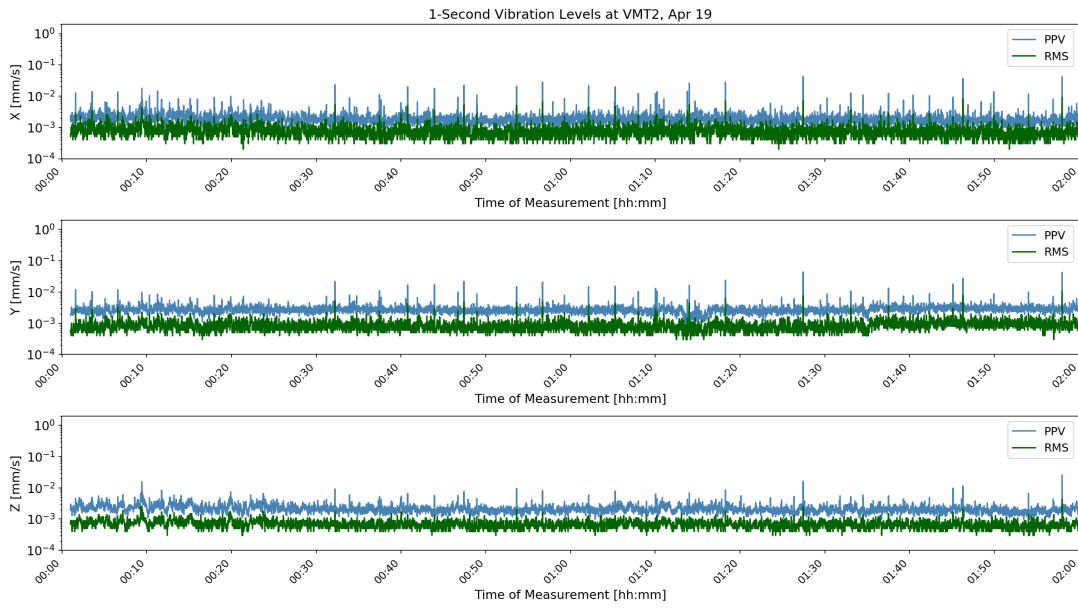
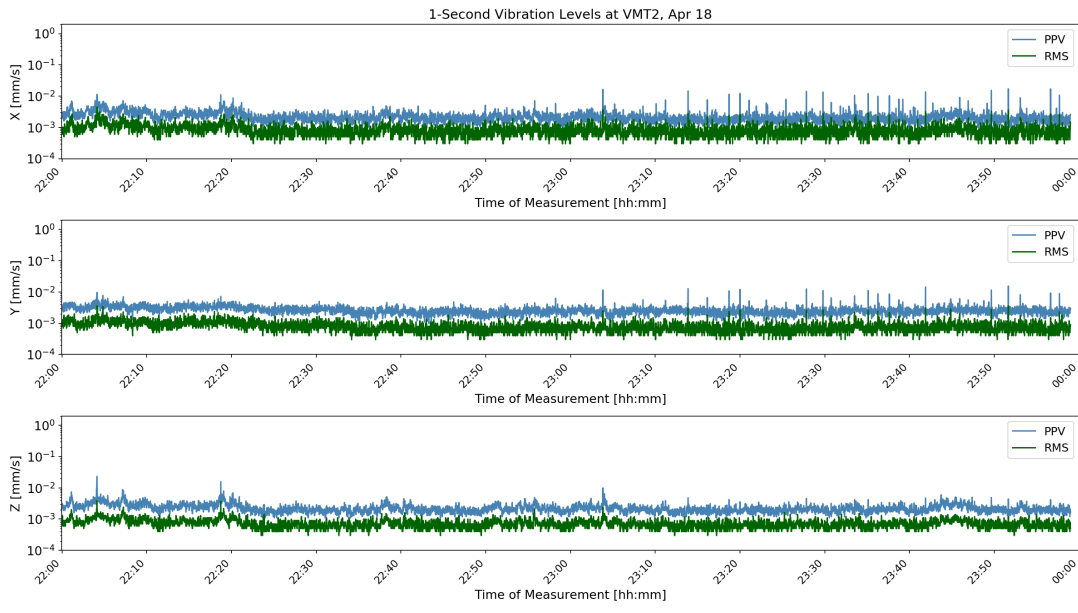


Figure D-44: VMT2 1-Second Velocity History Apr 19 22:00



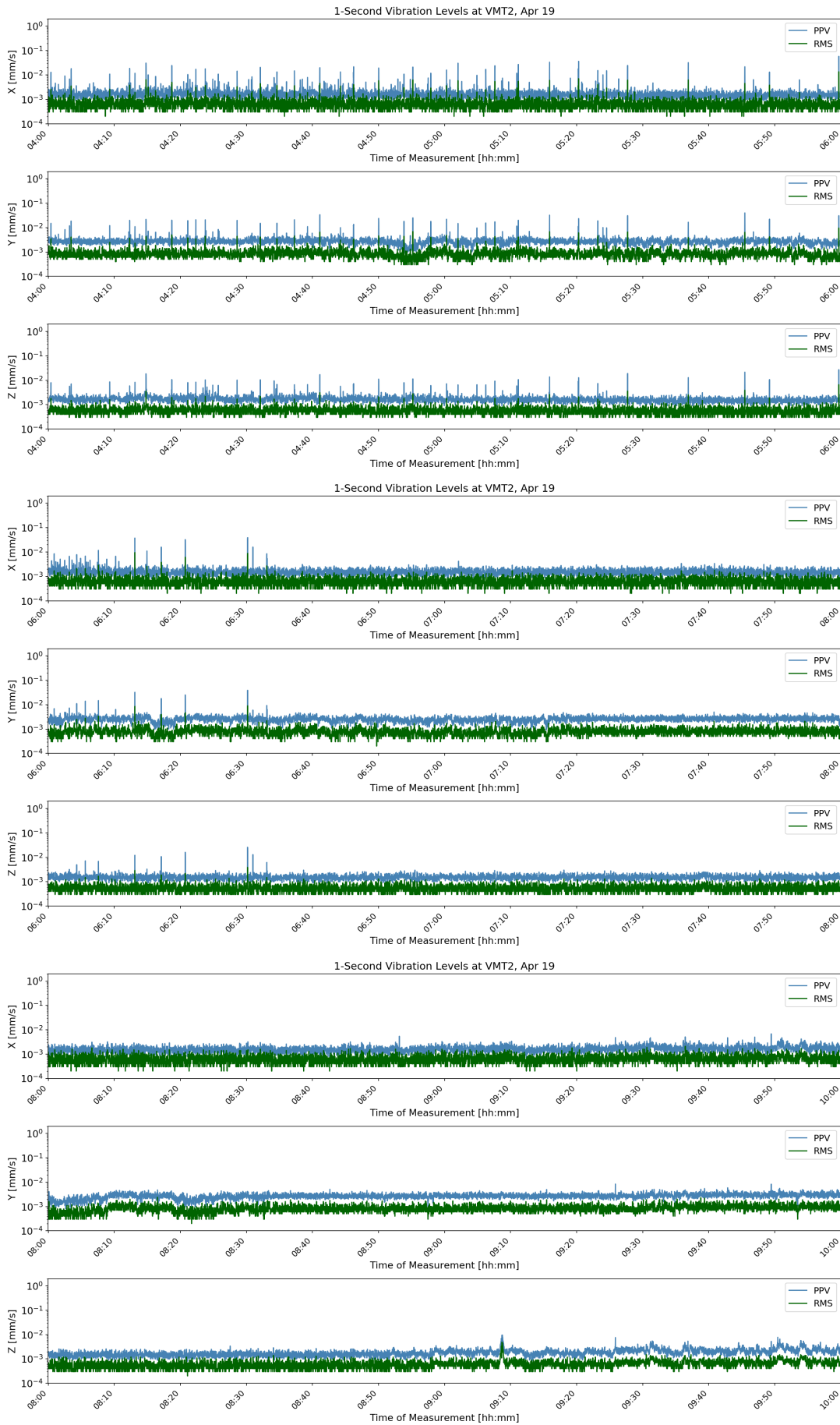


Figure D-45: VMT2 1-Second Velocity History Apr 19 04:00



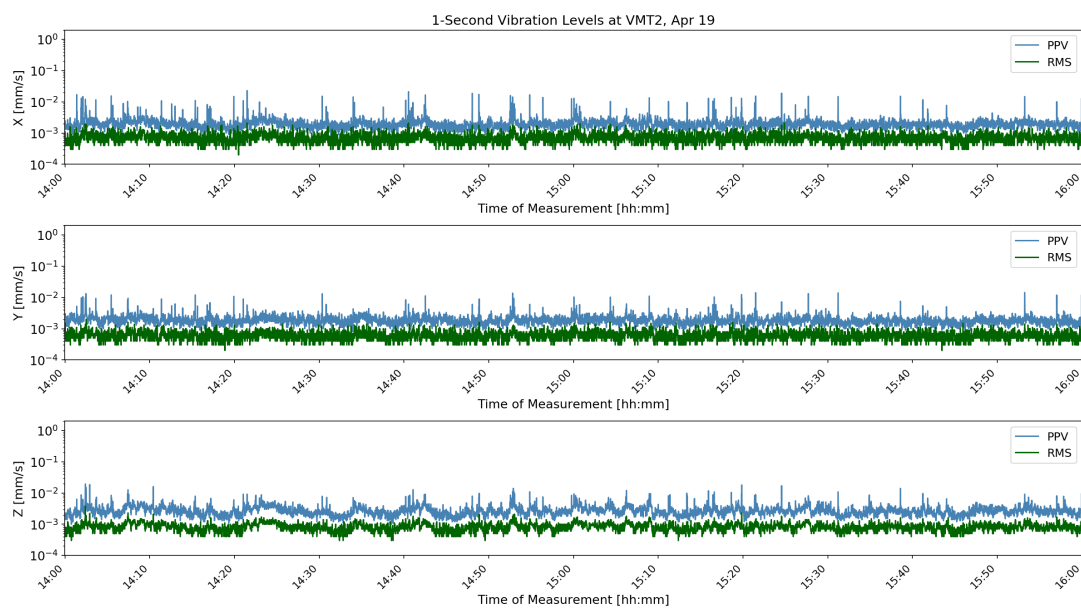
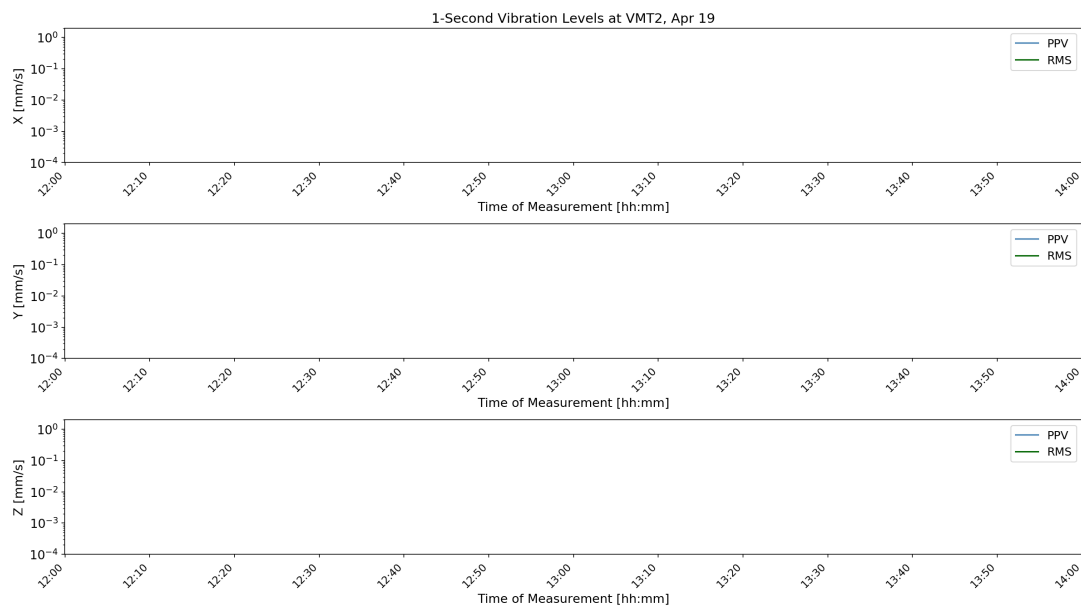
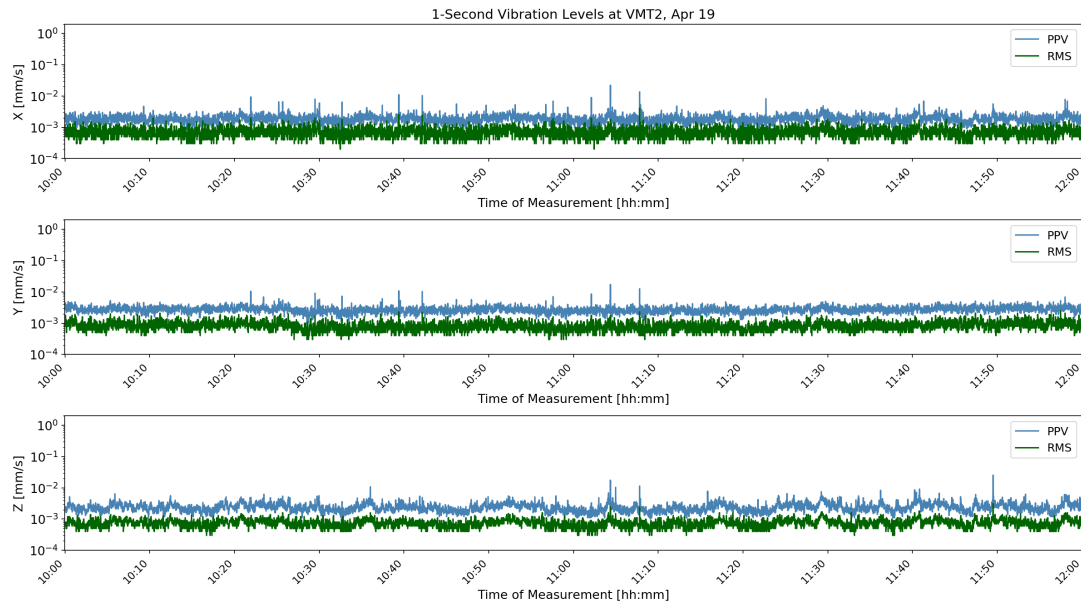


Figure D-46: VMT2 1-Second Velocity History Apr 19 10:00



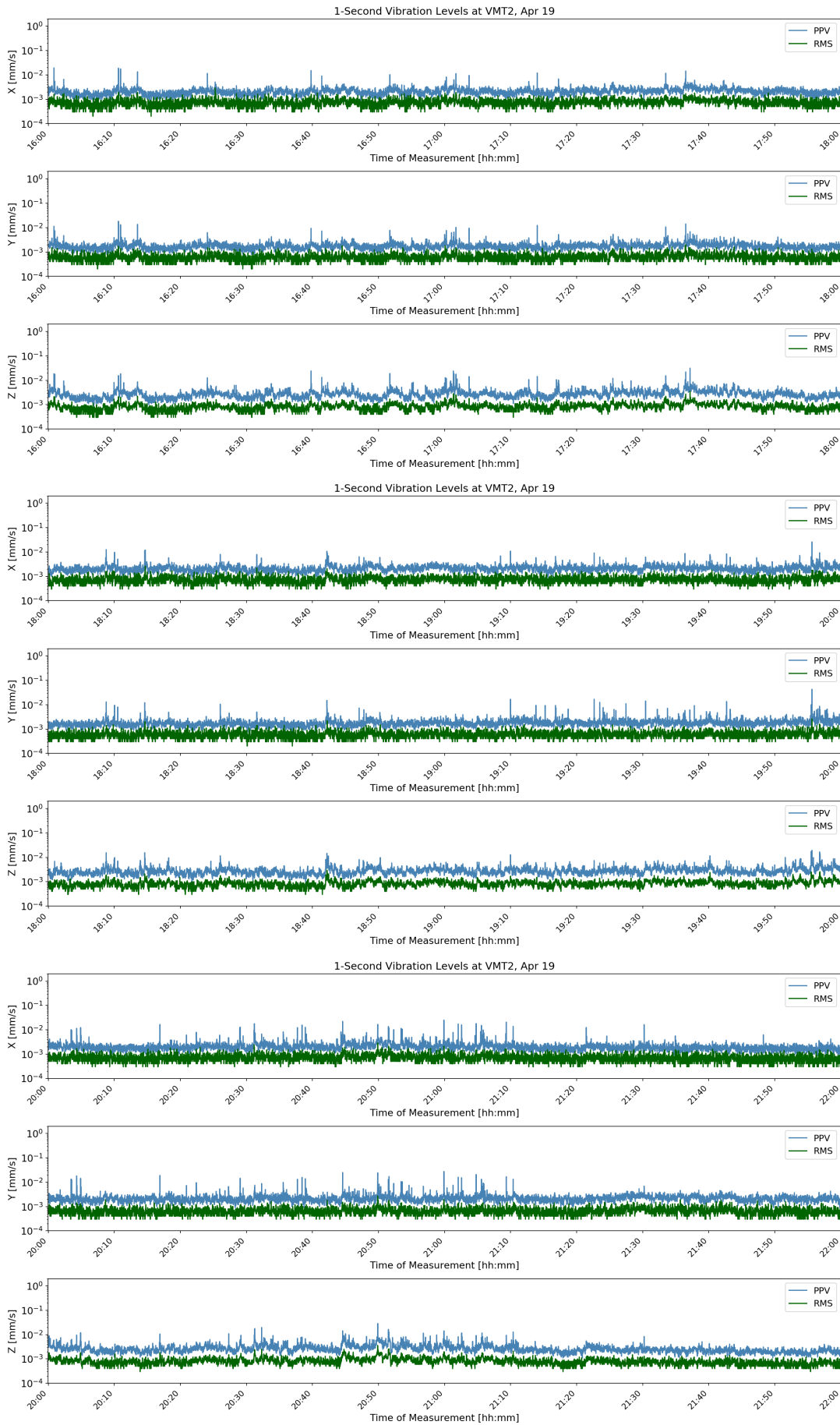


Figure D-47: VMT2 1-Second Velocity History Apr 19 16:00



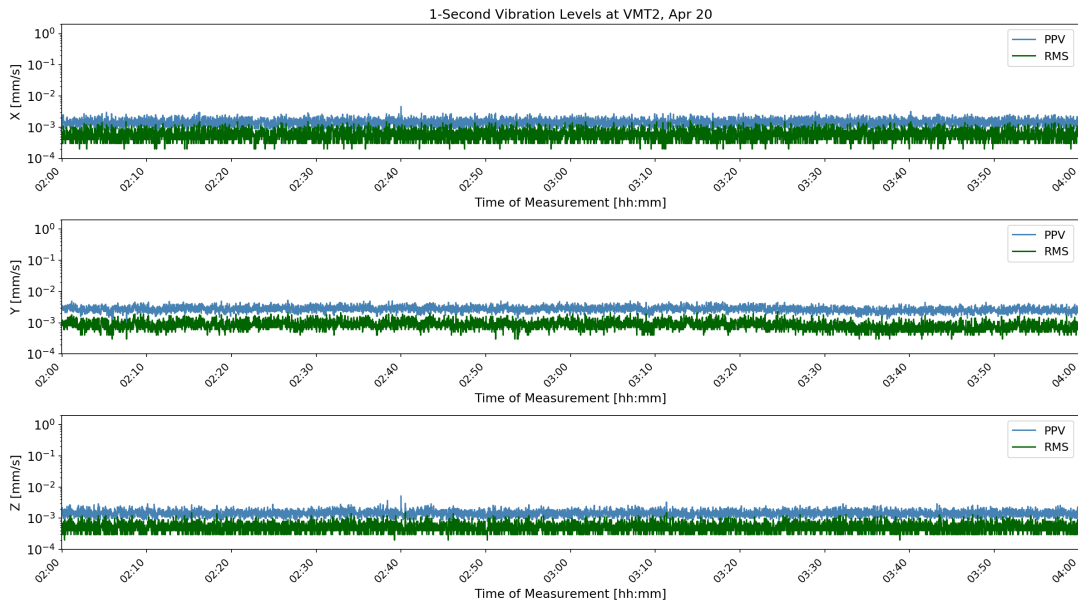
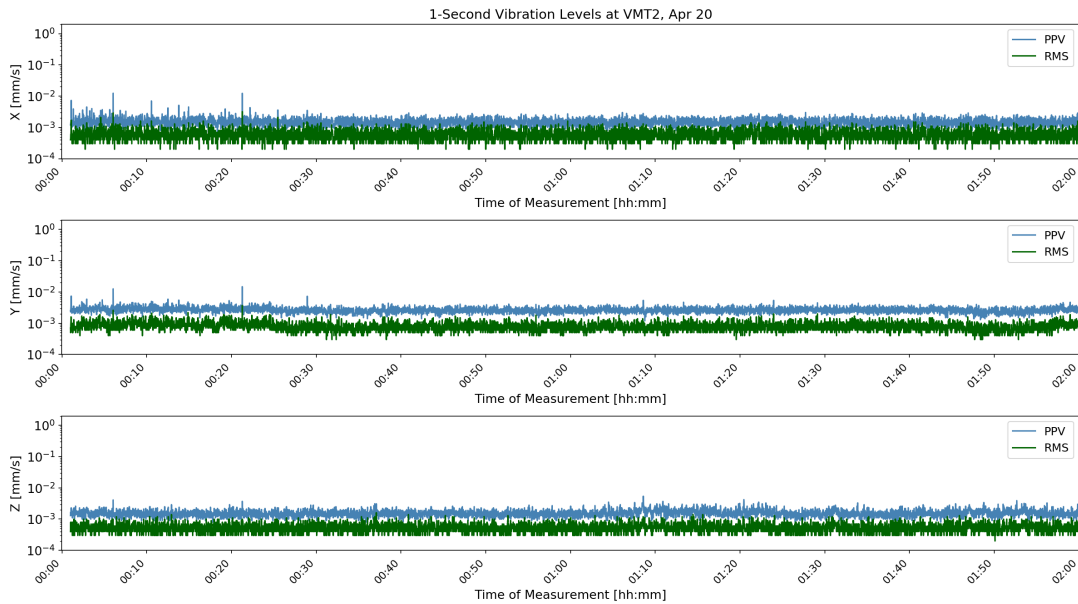
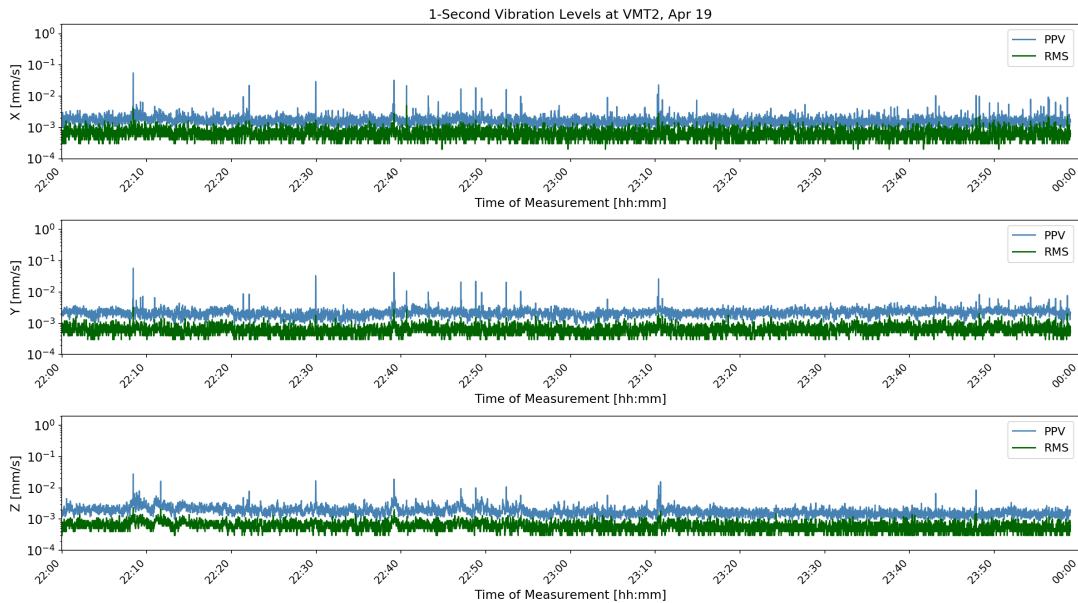


Figure D-48: VMT2 1-Second Velocity History Apr 20 22:00



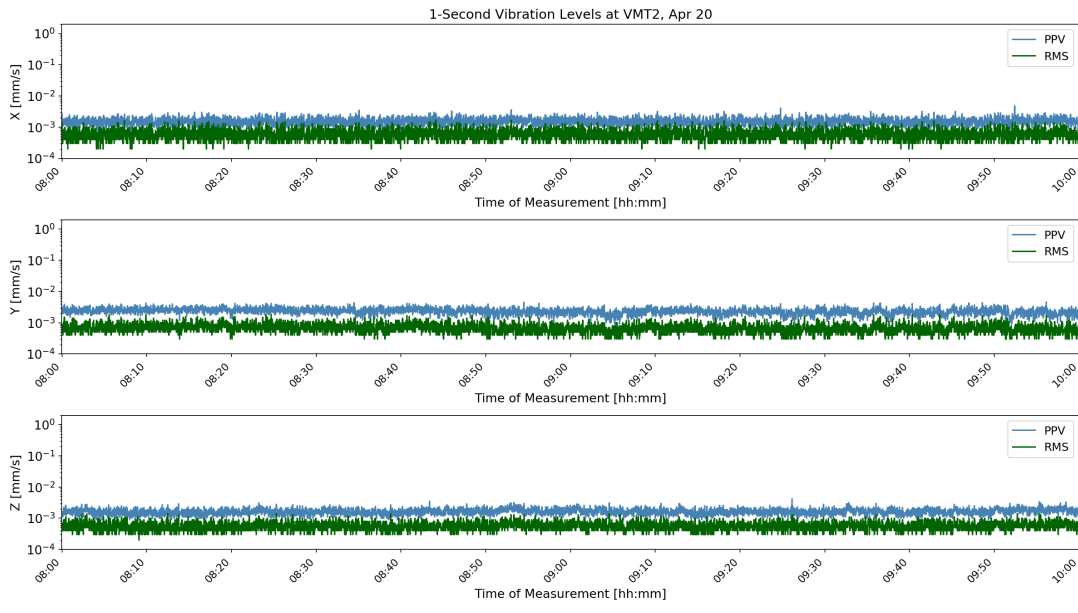
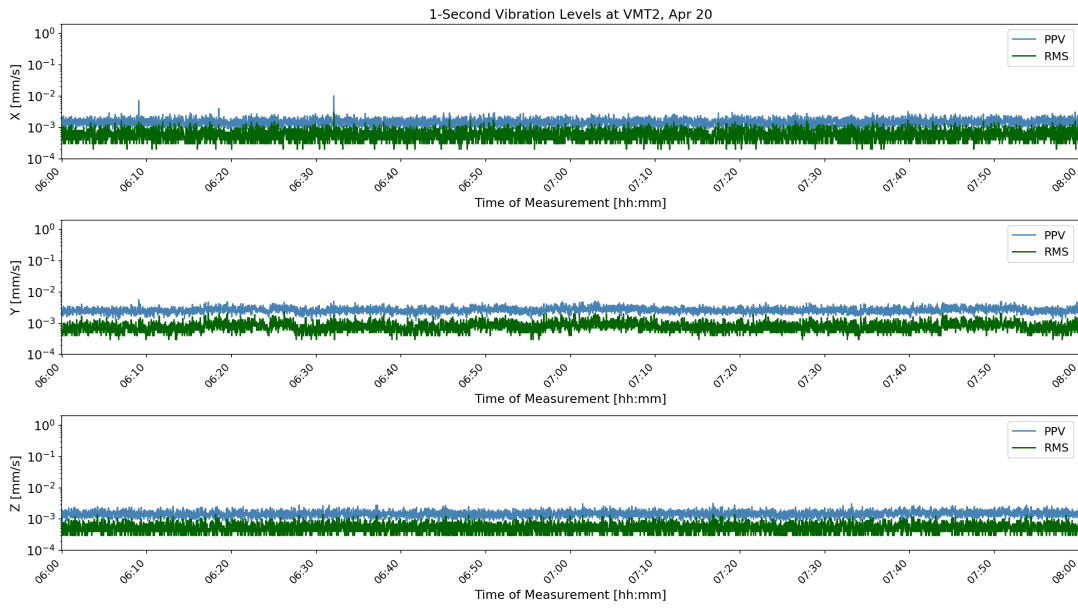
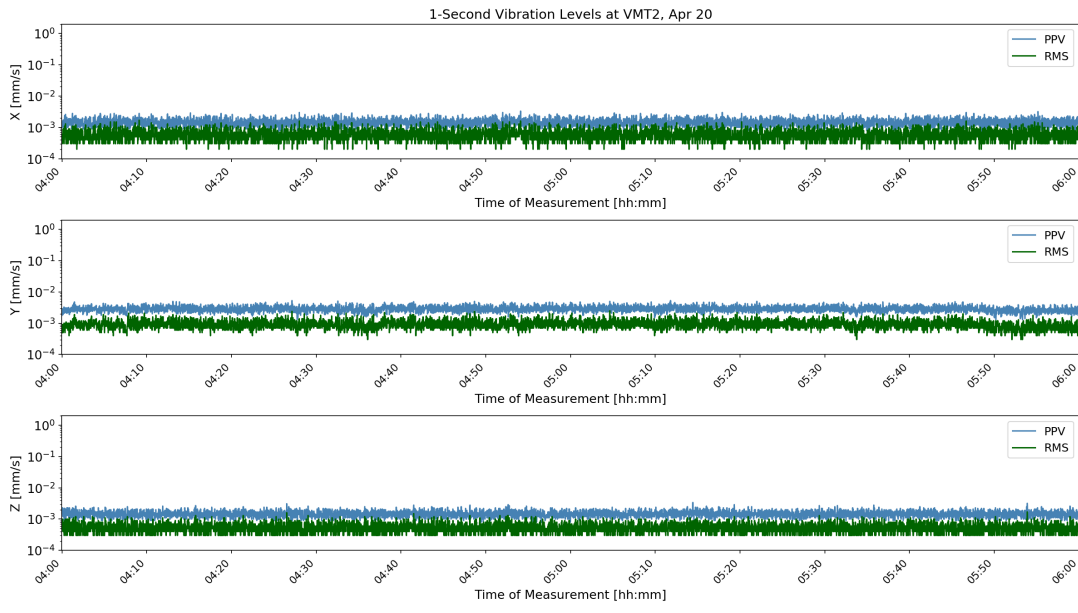


Figure D-49: VMT2 1-Second Velocity History Apr 20 04:00



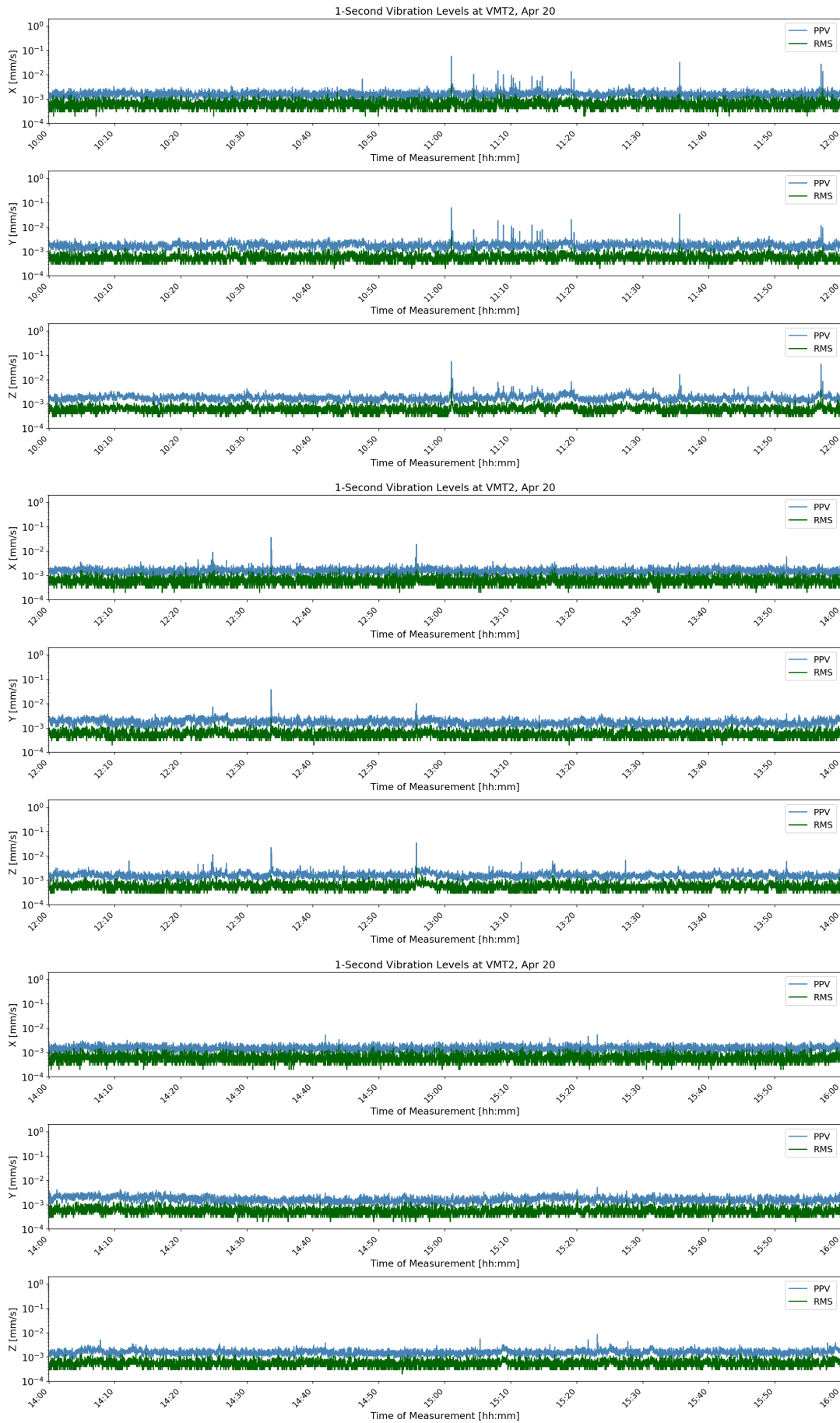
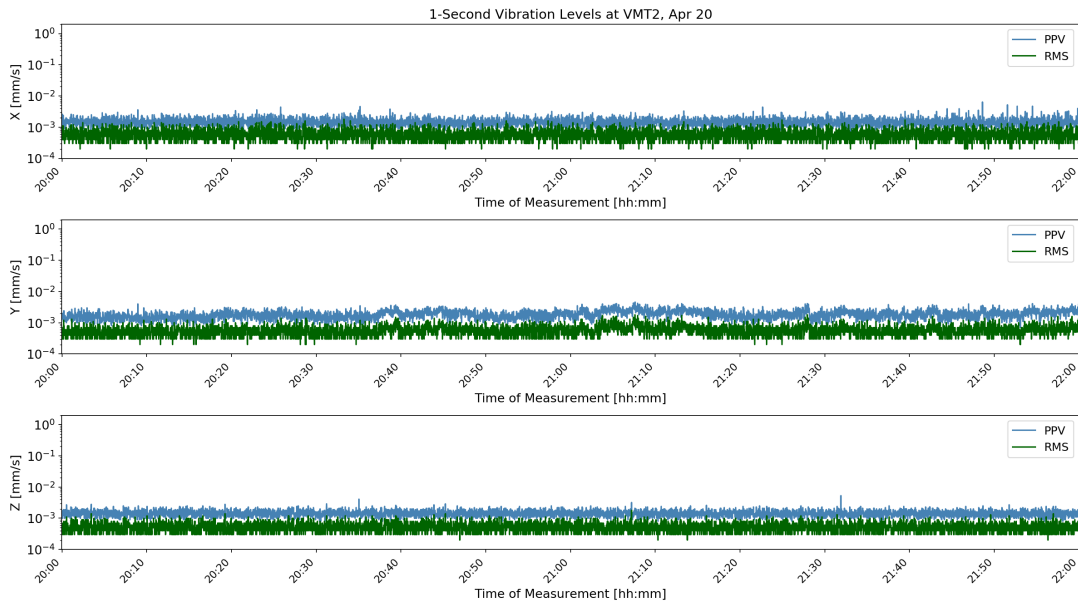
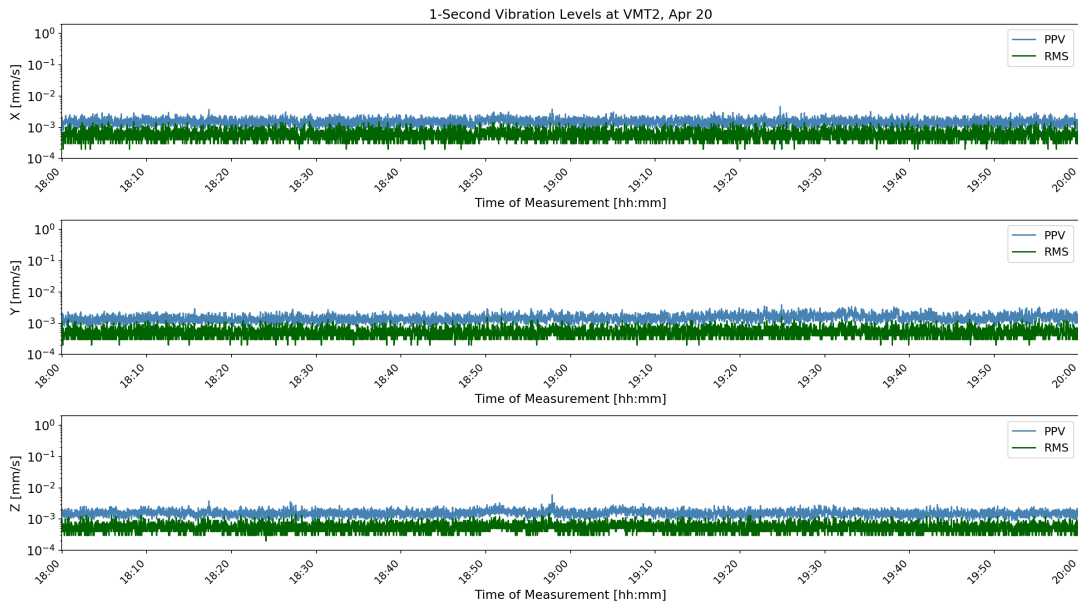
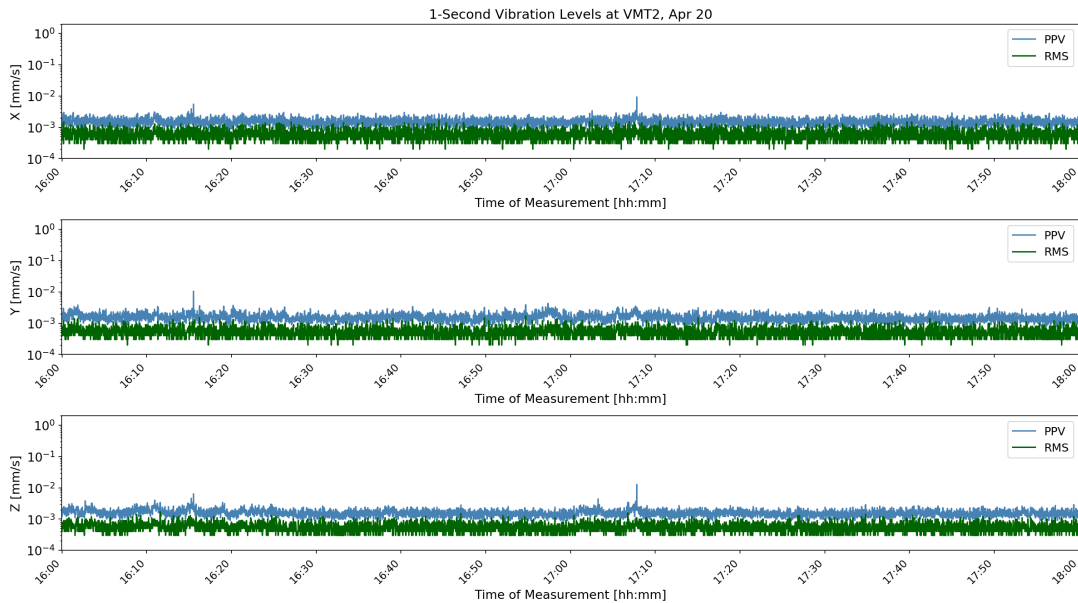


Figure D-50: VMT2 1-Second Velocity History Apr 20 10:00





**Figure D-51: VMT2 1-Second Velocity History Apr 20 16:00**



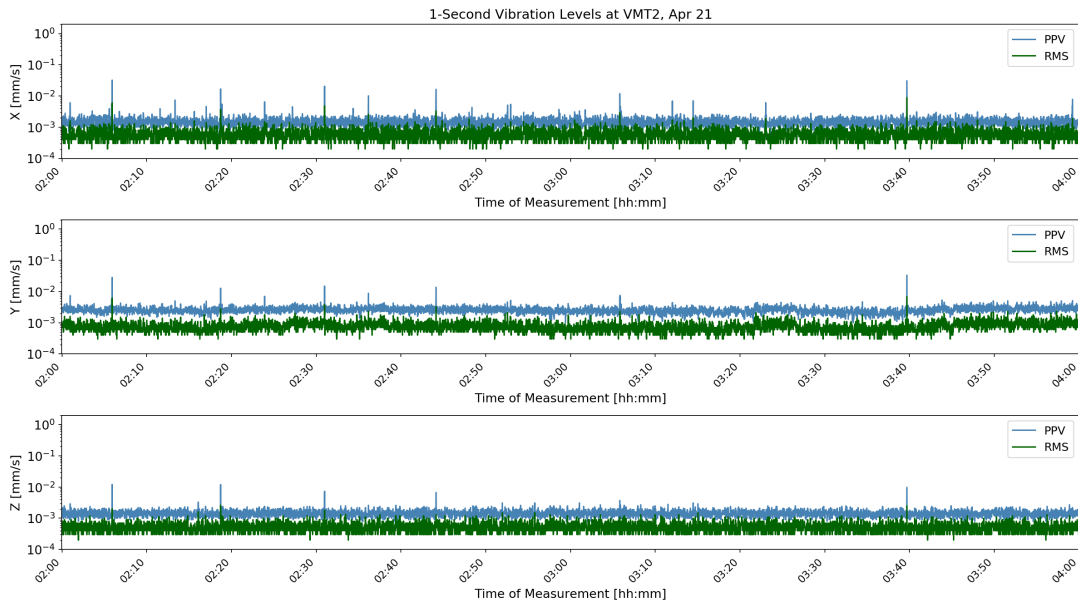
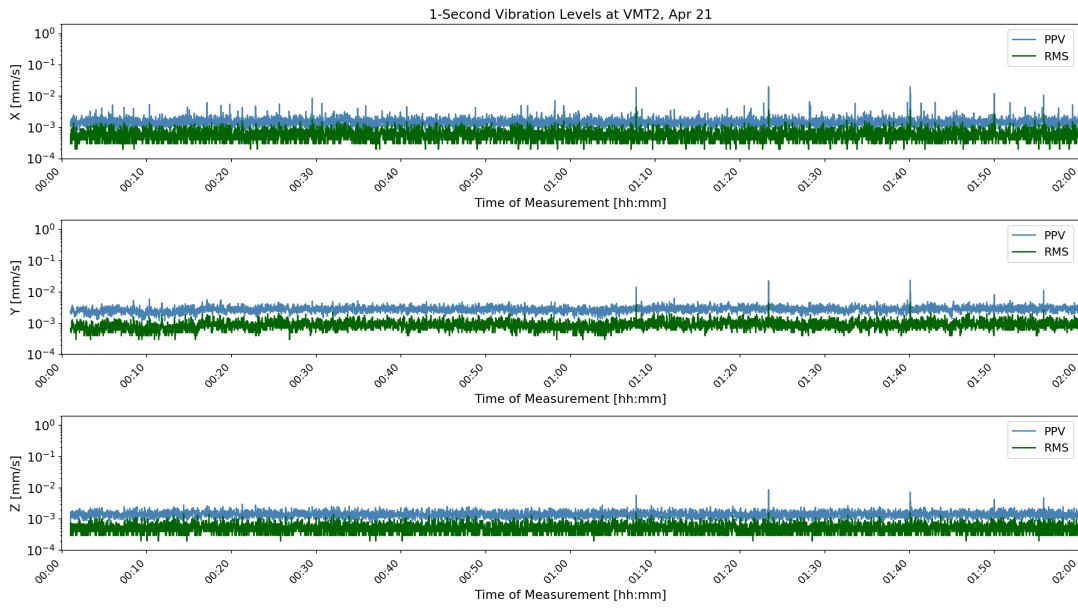
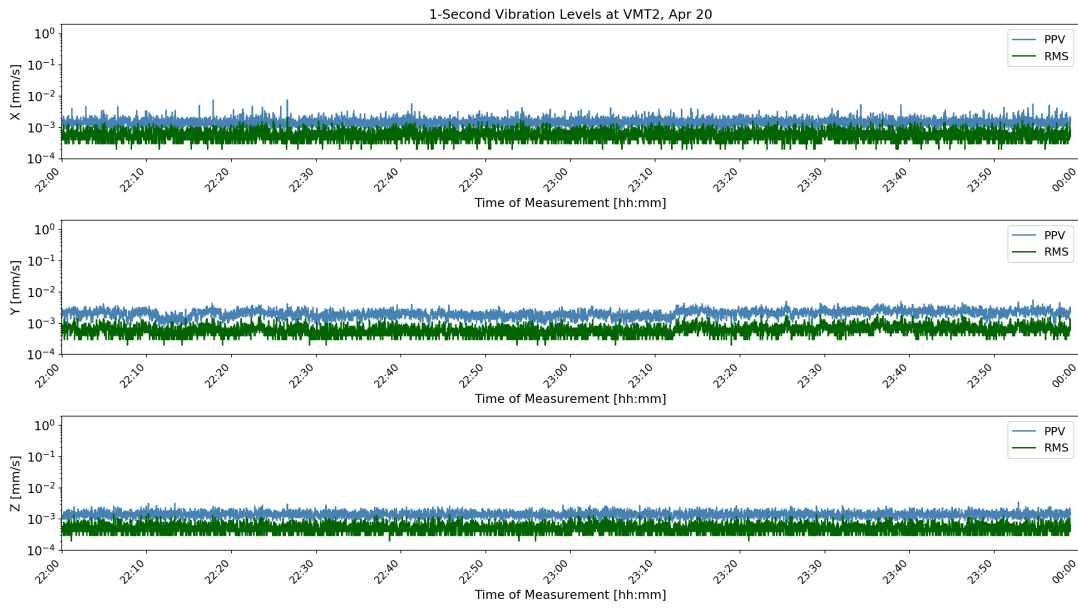


Figure D-52: VMT2 1-Second Velocity History Apr 21 22:00



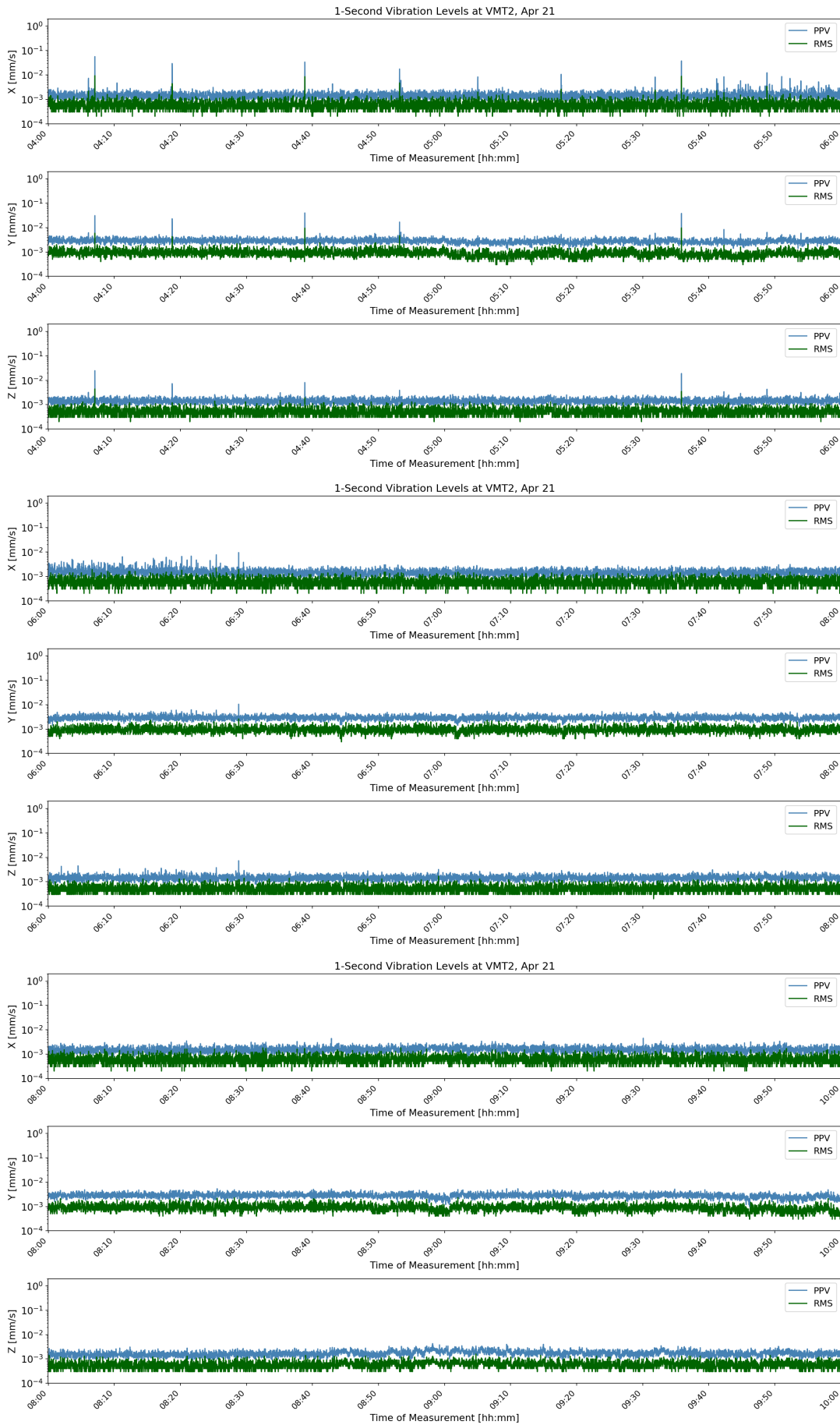


Figure D-53: VMT2 1-Second Velocity History Apr 21 04:00



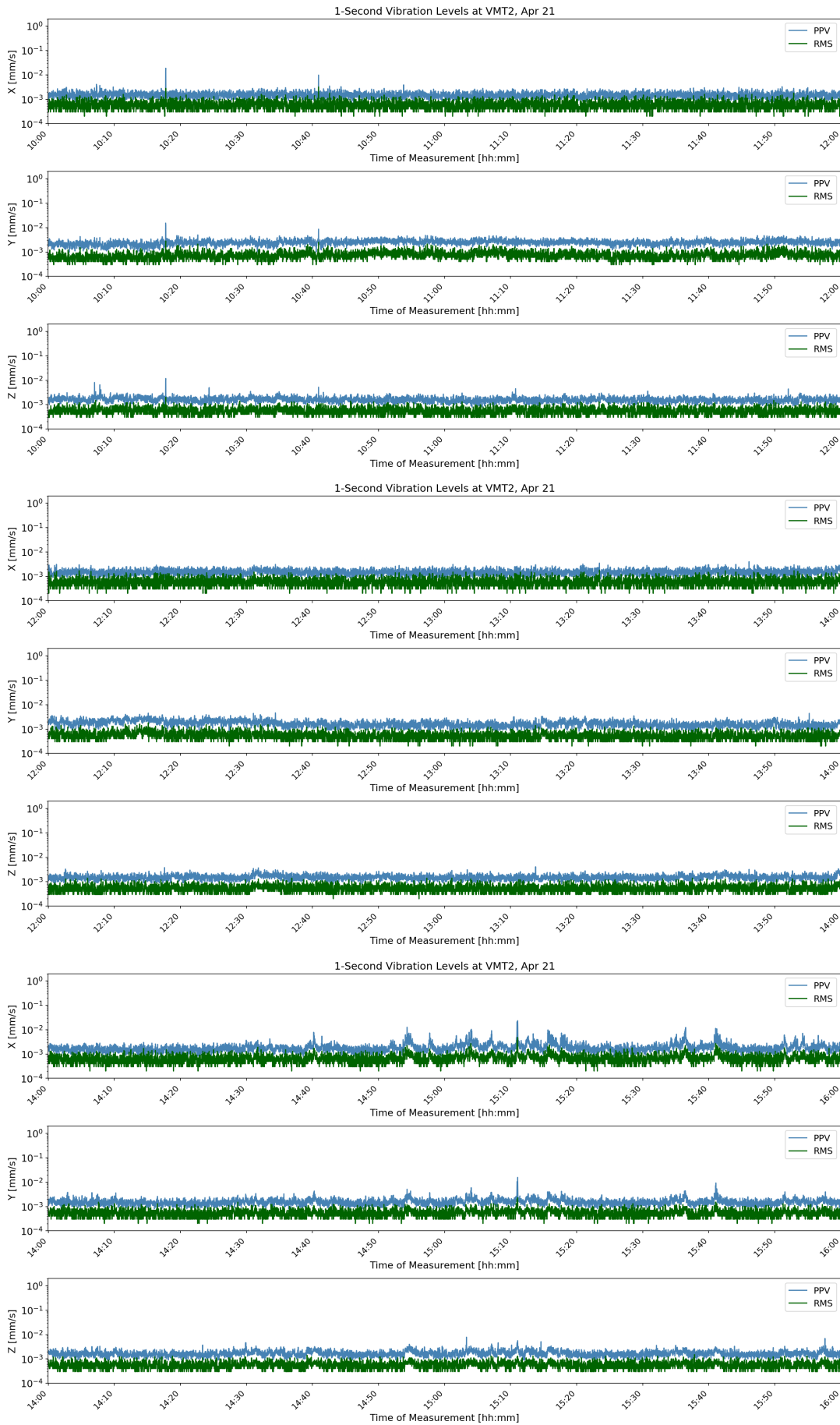


Figure D-54: VMT2 1-Second Velocity History Apr 21 10:00



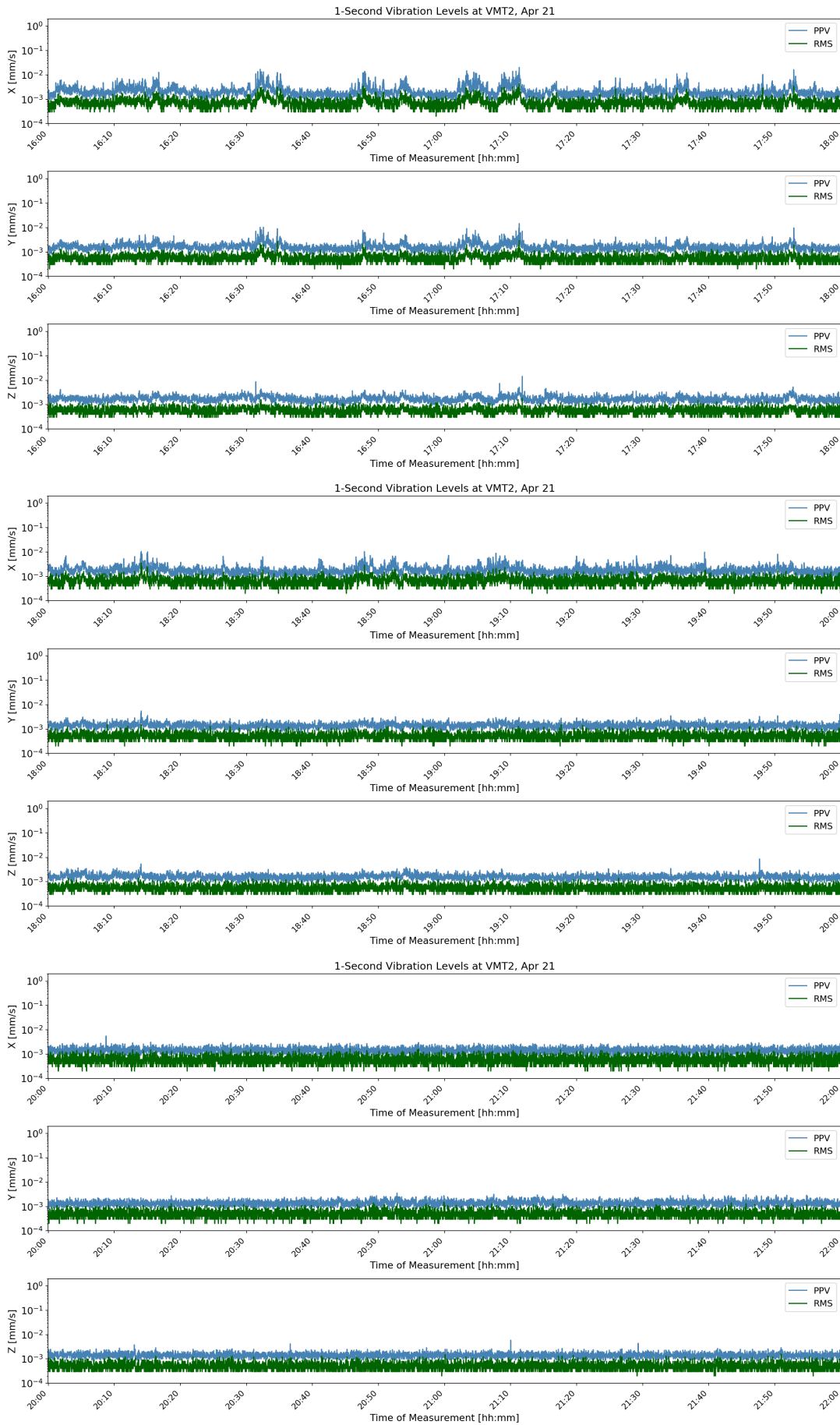


Figure D-55: VMT2 1-Second Velocity History Apr 21 16:00



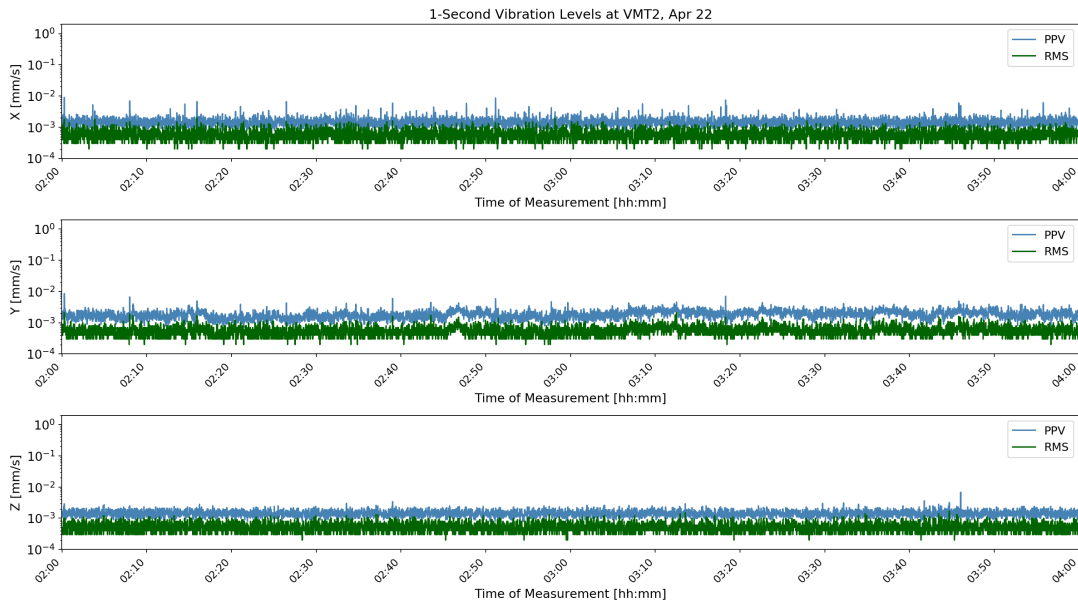
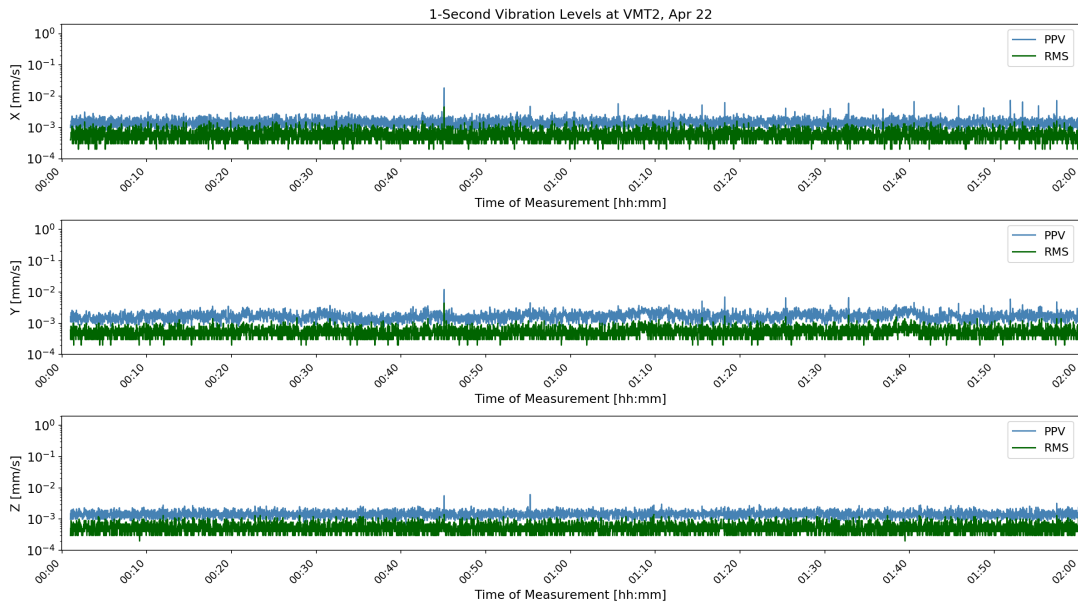
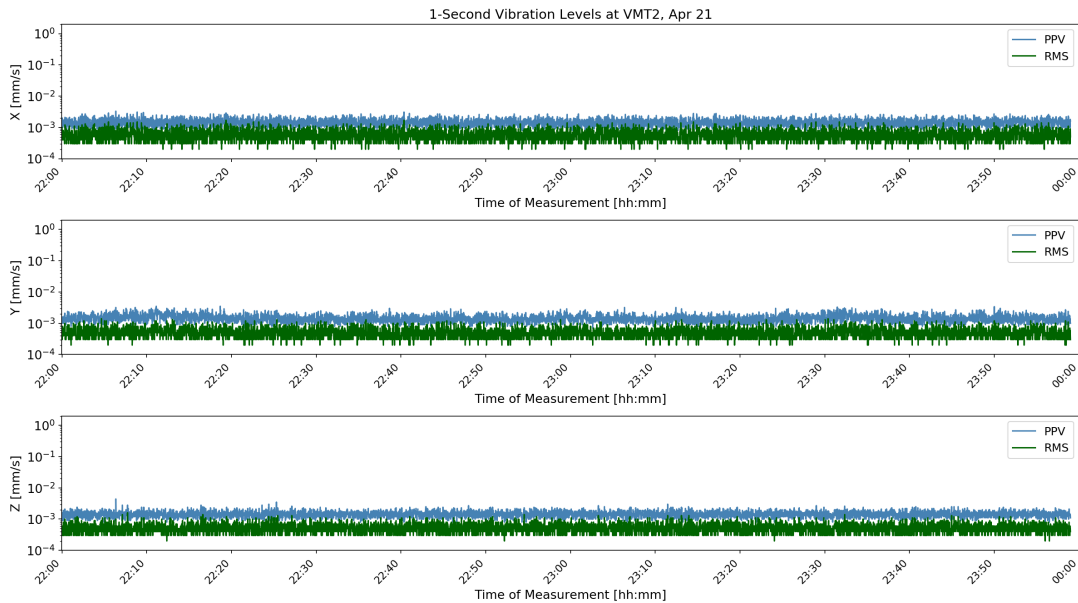


Figure D-56: VMT2 1-Second Velocity History Apr 22 22:00



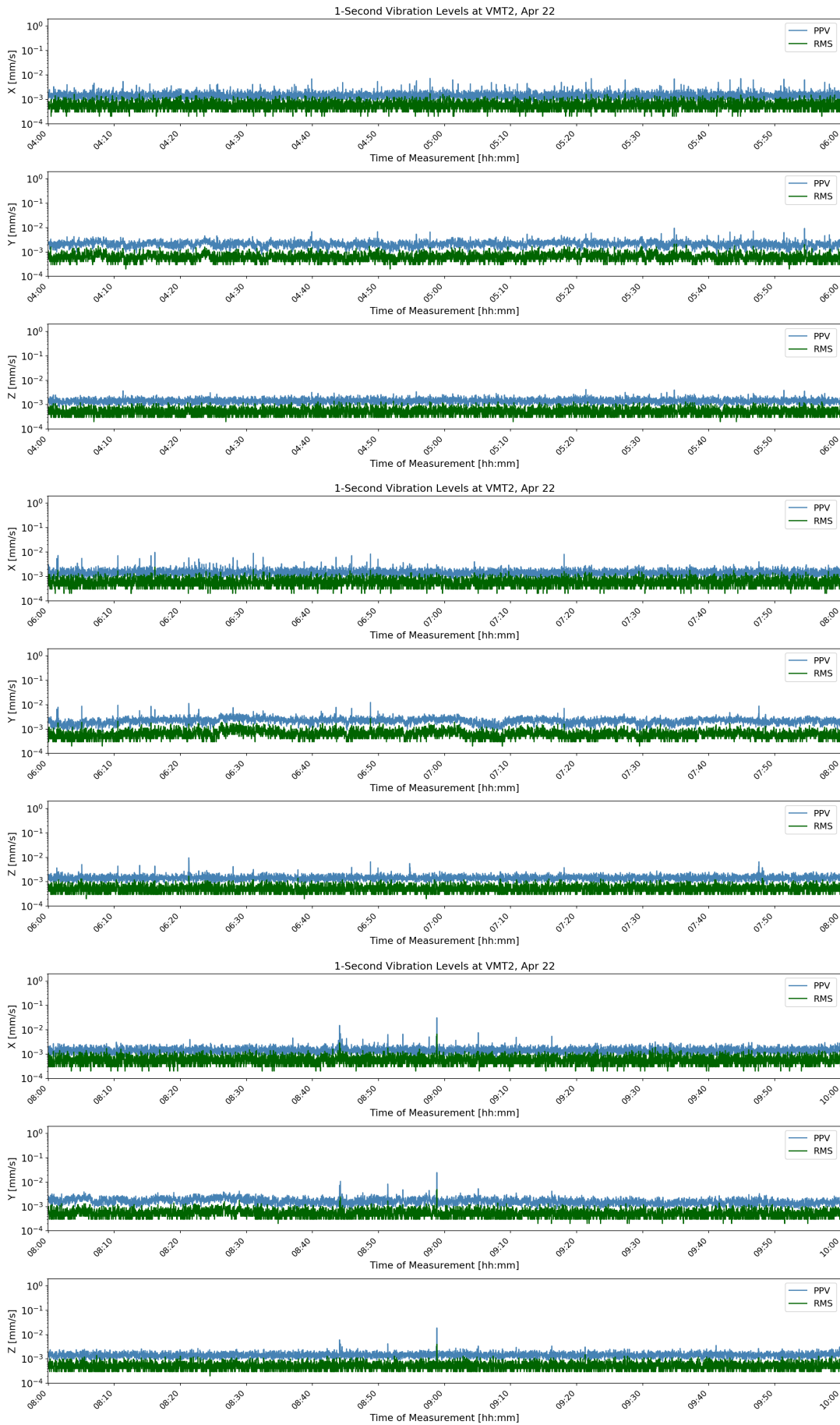


Figure D-57: VMT2 1-Second Velocity History Apr 22 04:00



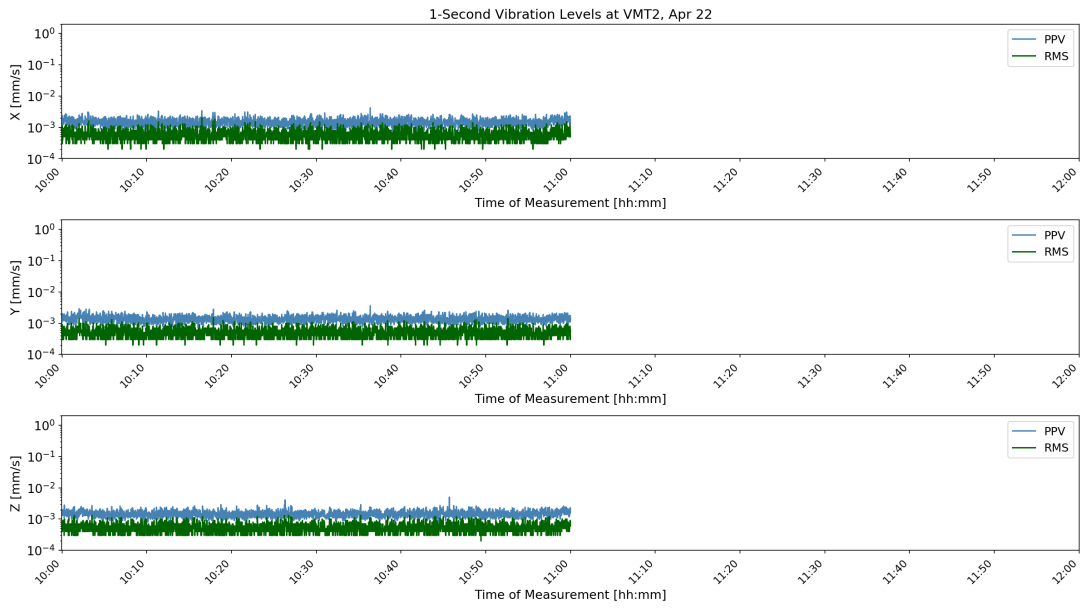


Figure D-58: VMT2 1-Second Velocity History Apr 22 10:00

