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-On Program)

Springpole Gold Project

First Mining Gold Corp.

ONS2104

Prepared by:
WSP Canada Inc.

October 2024

2021 Sound and Vibration Baseline Report (Leaves-On Program) Springpole Gold Project

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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 second of two baseline monitoring field programs, conducted from June 22 to June 29, 2021, timed for when leaves were on the trees to represent the acoustic environment when sounds due to nature are expected to be at a maximum. The first baseline monitoring program was 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 and is summarized in a separate report (Appendix H-1 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-on 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 55 A-weighted decibels (dBA) and L_n nose levels under 40 dBA. The average L_{dn} levels at the monitoring locations were found to be lower than 55 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 at one of the monitoring locations (VMT1). The 95th percentile of measured V_{PPV} values is approximately 0.2 mm/s at the other location (VMT2). The average V_{RMS} is approximately 0.001 mm/s at both monitoring locations.

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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 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 1-1).

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 will be 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:

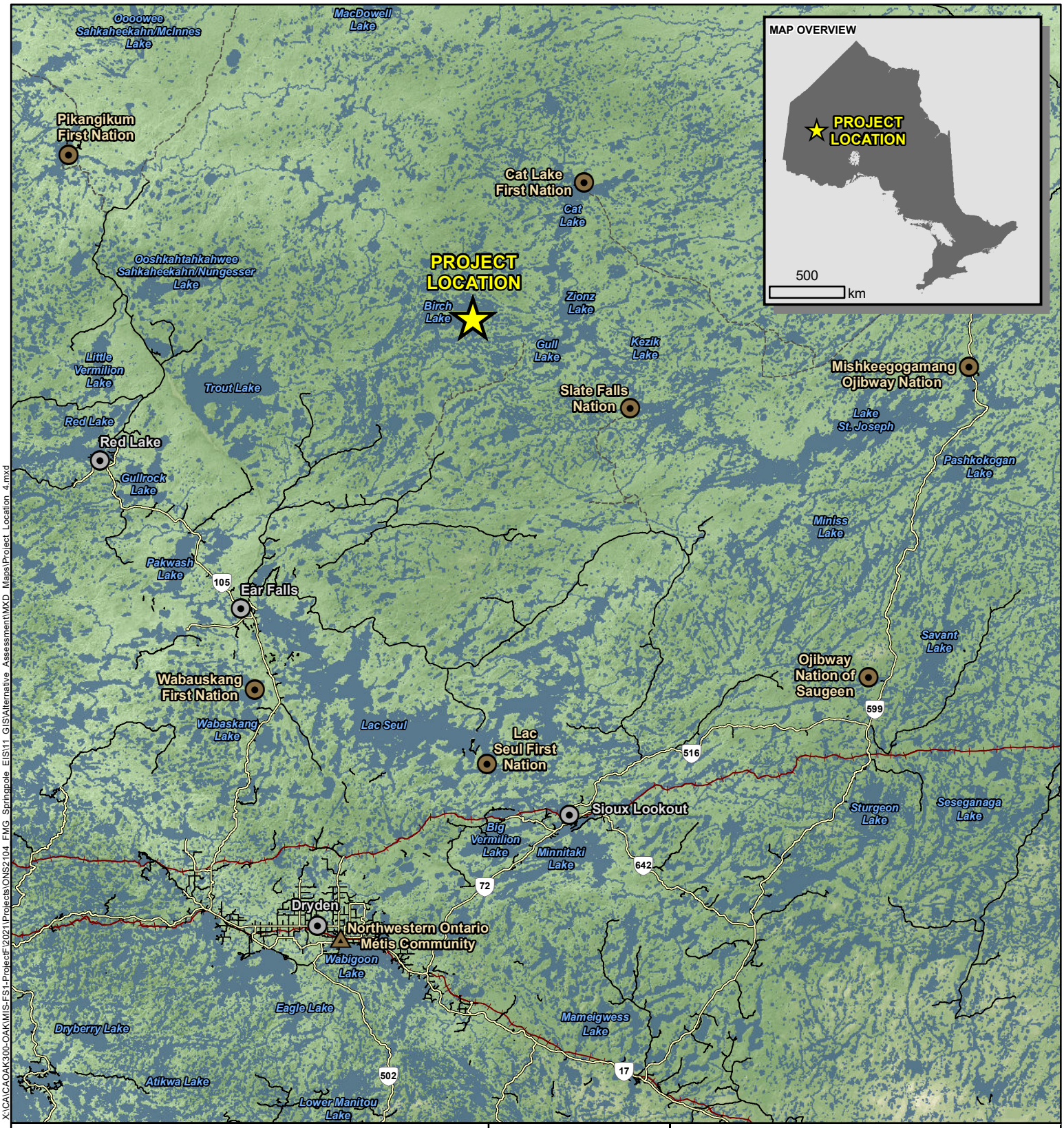
- The Ministry of Environment, Conservation and Parks (MECP) stated that the minimum hourly noise levels should be provided for each period of evaluation and that arithmetic averages should not be considered. The applicable periods of evaluation from the MECP are daytime (07:00 to 19:00), evening (19:00 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 second of two baseline monitoring field programs, conducted from June 22 to June 29, 2021, timed for when leaves were on the trees to represent the acoustic environment when sounds due to nature are expected to be at a maximum (e.g., leaves rustling). The first baseline monitoring program was 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 and is summarized in a separate report (Appendix H-1 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 monitoring program, outlines the baseline data collection method, 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 Appendices C and D, respectively.



LEGEND

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

0 12.5 25 50 75 100 Kilometres

NOTES:
- Topographic information extracted from LIO, MNRF.

Datum: NAD83
Projection: UTM Zone 15N

N W E S

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SPRINGPOLE GOLD PROJECT

Project Location

PROJECT N°: ONS2104	**FIGURE: 1-1**
SCALE: 1:1,500,000	DATE: September 2024

2 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 By Law Procedures, Publication NPC-103 (NPC 103);
- Health Canada (2017) *Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise* (Health Canada Noise Guidance);
- MECP (1978b) Model Municipal Noise Control By Law Blasting, Publication NPC-119 (NPC 119); and
- California Department of Transportation *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020).

3 BASELINE MONITORING PROGRAM

The leaves-on baseline sound and vibration monitoring field program was conducted in June 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 locations SP1 and SP2 were located in the same general areas as for the leaves-off monitoring program, however the exact monitoring locations were offset from the locations monitored in the leaves-off program due to constraints of access during the field work. Monitoring location SP1 was located adjacent to Birch Lake and trees, as shown in Photo 3-1. SP1 was located 500 m north of the Project. Monitoring location SP2 was located adjacent to Springpole Lake and was surrounded by 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 waves and rustling leaves). There were no substantial existing sources of vibration.

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

Monitoring Location [1]	Monitoring Station Identifier	Start Date	End Date	UTM Coordinates [2]	
				Easting (m)	Northing (m)
SP1	NMT1	June 22, 2021	June 29, 2021	547291	5695449
	VMT1	June 22, 2021	June 29, 2021	547291	5695449
SP2	NMT2	June 22, 2021	June 29, 2021	549605	5690918
	VMT2	June 22, 2021	June 29, 2021	549605	5690918

Notes:
(1) The exact monitoring locations were offset from the locations monitored in the leaves-off program due to constraints of access during the field work.
(2) All coordinates are in UTM coordinate system Zone 15N (NAD83).
NAD = North American Datum; NMT = noise monitoring terminal; VMT = vibration monitoring terminal.

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LEGEND

- Project Location
- Sound and Vibration Monitoring Locations
- Watercourse

0 250 500 1,000 1,500 2,000 Metres

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

Datum: NAD83
Projection: UTM Zone 15N

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SPRINGPOLE GOLD PROJECT

Baseline Sound and Vibration Monitoring Locations

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 MEASUREMENT METHODS

4.1 Sound Monitoring

The equipment at each sound monitoring location included a Brüel & Kjær Type (B&K) 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 effects 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 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 ±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 [°C] to +50°C).

FMG operates a meteorological station at the existing 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 programed 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 Type 2250 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 the vertical axis[1]. Each of the vibration monitor systems was fitted with a PCB Piezotronics accelerometer. At each of the vibration monitoring locations, the accelerometer was securely installed on the ground by use of a four-pronged plate 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 June 25 and June 27, 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.

1 Only the vertical axis was monitored during the leaves-on program as compared to the three orthogonal axes (transverse, longitudinal [geographic north], vertical) during the leaves-off program. This was due to the equipment capability and availability for the monitoring timeframe. Data recorded during the leaves-off program on the three orthogonal axes did not suggest major sources of vibration nor major differences of the vibration levels on the three orthogonal axes, and the transverse and longitudinal baseline vibration levels are not expected to display significant seasonal variations.

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	3004114	Jan. 13, 2020
		Pre-amplifier	B&K ZC-0032	19390	Jan. 13, 2020
		Microphone	B&K 4189	2877058	Jan. 13, 2020
SP2	NMT2	Sound level meter	B&K 2250	3011887	Feb. 21, 2020
		Pre-amplifier	B&K ZC-0032	27164	Feb. 21, 2020
		Microphone	B&K 4189	3130964	Feb. 21, 2020
n/a	n/a	Acoustical calibrator	B&K 4231	2094474	Jun. 9, 2021

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 2250	3004786	n/a (1)
		Accelerometer	PCB 393B04	53563	Oct. 23, 2018 (2)
SP2	VMT2	Vibration analyzer	B&K 2250	2575763	n/a (1)
		Accelerometer	PCB 393B04	53562	Oct. 23, 2018 (2)

Notes:
(1) The vibration analyzer, a B&K Type 2250, is compatible with various types of transducers, and the calibration certificates provided by the equipment vendor are not specific to the listed accelerometer.
(2) The accelerometers were also calibrated by use of a portable vibration calibrator from B&K (Type 4294) by the equipment vendor prior to shipment.
n/a = not applicable.

5 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 June 22 (installation date) at approximately 10 a.m. (10:00) to June 29, 2021 (removal date) at approximately 10 a.m. (10:00) 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 both 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[2] 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 at NMT1 with the average hourly L_{Aeq} of 46 A-weighted decibels (dBA) during the daytime, 37 dBA during the evening and 36 dBA during the nighttime and higher background sound levels at NMT2 of 54 dBA during the daytime, 42 dBA during the evening and 40 dBA during the nighttime. 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 (52 dBA versus 45 dBA at NMT1) and a greater value range.

5.2 Vibration Monitoring Results

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 A

Vibration monitoring took place from June 22 (installation date) at approximately 10 a.m. (10:00) to June 29, 2021 (removal date) at approximately 10 a.m. (10:00) at the two locations (SP1 and SP2) identified in Table 3-1 and Figure 3-1.

2 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.

Vibration monitoring data are presented in terms of the V_{PPV} and V_{RMS} metrics recorded for one-second intervals along the vertical axis. 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 95th 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.
- **The V_{RMS} metric for potential human annoyance:** The arithmetic average of the V_{RMS} values.

5.2.1 Vibration Levels

A summary of the collected vibration data is presented in Table 5-4. For VMT1, the background V_{PPV} values are under 0.01 mm/s for more than 95% of the data collected. For VMT2, potential wildlife activities were identified[3] and the 95th percentile of the measured V_{PPV} values is approximately 0.2 mm/s, which is notably higher than that measured at VMT1. The average V_{RMS} at VMT2 is slightly higher than that measured at VMT1 with the value rounded to 0.001 mm/s for both locations.

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 for both VMT1 and VMT2.

It was observed that more than 95% of the V_{PPV} values at VMT1 were recorded at a constant value (0.006 mm/s when rounded to three decimal places) and, similarly, the percentage is more than 50% at VMT2. This constant value is considered the lower measurement range of the instrument for V_{PPV} recording, and levels under range were recorded at the constant value. A review of the results also suggests that the vibration levels measured at VMT2 are in general higher than those measured at VMT1 and with greater level variation.

Table 5-1: One-Hour Sound Levels Summary

Monitoring Station	Number of Hourly Records (1)		Sound Metrics Collected (1-hour) (2,3)											
			Daytime (07:00–19:00)				Evening (19:00–23:00)				Nighttime (23:00–07:00)			
	Total	Inclement Weather	L_{ASmin}	Min L_{Aeq}	L_{Aeq}	L_{ASmax}	L_{ASmin}	Min L_{Aeq}	L_{Aeq}	L_{ASmax}	L_{ASmin}	Min L_{Aeq}	L_{Aeq}	L_{ASmax}
NMT1	164	23	18	24	46	76	18	22	37	64	17	20	36	66
NMT2	166	23	20	27	54	83	19	23	42	59	18	19	40	73

Notes:
(1) 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.
(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_{ASmin} denotes the minimum of the one-hour L_{ASmin} collected.
Min L_{Aeq} denotes the minimum of the one-hour L_{Aeq} collected
L_{Aeq} denotes the logarithmic average of the one-hour L_{Aeq} collected.
L_{ASmax} denotes the maximum of the one-hour L_{ASmax} collected.
(3) 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).

3 During the site inspection on June 25, 2021, it was discovered that the protective hood of the vibration instrument at VMT2 was uncovered and the presence of bears was suspected. A review of the recorded vibration time histories and sound recordings from the NMT2 instrument also suggested potential wildlife activities in vicinity of the monitoring location.

Table 5-2: Day-Night Sound Levels Summary

Monitoring Station	Sound Metrics Collected (1,2,3)								
	L_d (07:00–22:00)			L_n (22:00–07:00)			L_{dn}		
	Min.	Avg.	Max.	Min.	Avg.	Max.	Min.	Avg.	Max.
NMT1	34	45	51	24	36	38	34	45	49
NMT2	40	53	61	24	40	54	40	52	62

Notes:
(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_d denotes the daytime equivalent sound level from 07:00 to 22:00.

L_n denotes the nighttime equivalent sound level from 22:00 to 07:00.

L_{dn} denotes the day-night sound level for a 24-hour period, with the nighttime contributions adjusted by +10 dB.

(2) Metrics presented: maximum, logarithmic average, and minimum.
(3) Daytime (07:00 to 22:00) and nighttime (22:00 to 07:00) periods as defined by Health Canada (Health Canada 2017).

Table 5-3: Detailed Day-Night Sound Levels

Monitoring Period	Sound Metrics Collected (1)					
	NMT1			NMT2		
	L_d	L_n	L_{dn}	L_d	L_n	L_{dn}
Tue, 2021-06-22	39	32	40	48	47	54
Wed, 2021-06-23	51	31	49	61	54	62
Thu, 2021-06-24	48	32	47	50	24	48
Fri, 2021-06-25	39	38	44	51	35	49
Sat, 2021-06-26	38	32	40	40	30	40
Sun, 2021-06-27	34	24	34	44	29	43
Mon, 2021-06-28	43	36	44	40	33	42
Tue, 2021-06-29	37	38	44	50	32	49

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_d denotes the daytime equivalent sound level from 07:00 to 22:00.

L_n denotes the nighttime equivalent sound level from 22:00 to 07:00.

L_{dn} denotes the day-night sound level for a 24 hr period, with the nighttime contributions adjusted by +10 dB.

Table 5-4: Vibration Levels Summary

Monitoring Station	Total Number of 1-Second Records (1)	Vibration Metrics Collected (1-second) (2, 3)	
		PPV (mm/s)	RMS (mm/s)
VMT1	594,000	0.006	0.001
VMT2	597,737	0.193	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 95th percentile value of PPV from all monitoring data along the vertical axis.
RMS denotes the arithmetic average of RMS velocity from all monitoring data along the vertical axis.
(3) The values presented are rounded to 3 decimal places.

Table 5-5: Vibration Levels Statistical Summary

Vibration Levels (1)	Vibration Metrics Collected (1-second) (2, 3)			
	VMT1		VMT2	
	PPV (mm/s)	RMS (mm/s)	PPV (mm/s)	RMS (mm/s)
Max	0.100	0.024	25.119	2.193
95%	0.006	0.001	0.193	0.004
75%	0.006	0.001	0.008	0.001
Mean	0.006	0.001	0.042	0.001
Median	0.006	<0.001	0.006	0.001
25%	0.006	<0.001	0.006	<0.001
5%	0.006	<0.001	0.006	<0.001
Min	0.006	<0.001	0.006	<0.001

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

6 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.

Original signed ***Original signed***

Shira Daltrop, M.A.Sc. Daniel Corkery
Noise Specialist Principal Blasting/Vibration Consultant

Original signed

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

7 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, D.C.: ANSI.

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Attachment A Technical Terms and Acoustical Descriptors

Technical Terms and Acoustical Descriptors

Frequency	Typically the rate in hertz (Hz) - previously denoted cycles per second, at which an event is repeated. Normal human hearing extends over a range of frequencies from about 15 Hz to about 15 kilohertz (kHz).
A-Weighting Network	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.
Z-Weighting Network	Z for "Zero" frequency weighting, which implies no frequency weighting. In reality the range is 10 Hz to 20 kHz ±1.5 dB. Introduced (IEC 61672 2003) to replace the Flat or Linear Filters. Written as dB(Z) or dBZ
Exponential Averaging	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.
Time Constants or Time Weightings	Time constants used for exponential averaging. Three time constants can be used and are defined as follows: • Fast "F" time constant corresponds to 125 milliseconds (ms). • Slow "S" time constant corresponds to 1 second. • Impulse "I" time constant corresponding to 35 ms while the signal level is increasing and 1,500 ms while the signal level is decreasing.
Sound Pressure Level (SPL)	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 (µPa) (0 dB).

$L_{xeq}(T)$ – Equivalent continuous sound level with a frequency weighting, x	The equivalent continuous sound level (also called time-average sound level), $L_{xeq}(T)$, is defined as 20 times the logarithm to base ten of the ratio of a 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.
$L_{xymax}(T)$ – Maximum sound level, with a frequency weighting, x, and with a time-weighting, y	The maximum time-weighted sound level, $L_{xymax}(T)$, 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.
$L_{xymin}(T)$ – Minimum sound level, with a frequency weighting, x, and with a time-weighting, y	The minimum time-weighted sound level, $L_{xymin}(T)$, 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.
1/N Octave Band	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.
Velocity	Rate of change in position, measured in distance per unit of time. When measuring vibration signals, velocity represents the rate of change in displacement. Units: millimetres per second (mm/s).
Peak Particle Velocity (PPV)	Highest particle velocity which is recorded during a particular vibration event. Unit: millimetres per second (mm/s).
Root Mean Square (RMS) Velocity	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

Brüel & Kjær
North America Inc.

The Brüel & Kjær Calibration Laboratory
3079 Premiere Parkway Suite 120
Duluth, GA 30097
Telephone: 770/209-6907
Fax: 770/447-4033
Web site address: http://www.bkhome.com

ACCREDITED
Calibration Certificate Number 1568.01

CERTIFICATE OF CALIBRATION

Certificate No: CAS-436568-Z1G7P5-301

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
_X_ Received in good condition
___ Damaged - See attached report

As Received Data
___ Within acceptance criteria
___ Outside acceptance criteria
_X_ Inoperative
___ Data not taken

Final Data
_X_ Within acceptance criteria
___ Limited test - See attached details

Date of Calibration: 21 Feb. 2020

Certificate issued: 24 Feb. 2020

Kyle Chancey

Calibration Technician

John Attilio

Quality Representative

Brüel & Kjær
North America Inc.

The Brüel & Kjær Calibration Laboratory
3079 Premiere Parkway Suite 120
Duluth, GA 30097
Telephone: 770/209-6907
Fax: 770/447-4033
Web site address: http://www.bkhome.com

ACCREDITED
Calibration Certificate Number 1568.01

CERTIFICATE OF CALIBRATION

Certificate No: CAS-428360-H0R5F9-302

CALIBRATION OF:

Sound Level Meter:	Brüel & Kjær	2250	Serial No: 3004114
Microphone:	Brüel & Kjær	4189	Serial No: 2877058
Preamplifier:	Brüel & Kjær	ZC-0032	Serial No: 19390
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 ± 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
_X_ Received in good condition	_X_ Within acceptance criteria	_X_ Within acceptance criteria
___ Damaged - See attached report	___ Outside acceptance criteria	___ Limited test - See attached details
	___ Inoperative	
	___ Data not taken	

Date of Calibration: 13 Jan. 2020

Certificate issued: 13 Jan. 2020

Kyle Chancey
Calibration Technician

Quality Representative

The Hottinger Brüel & Kjær Inc. Calibration Laboratory
3079 Premiere Parkway Suite 120
Duluth, GA 30097
Telephone: 770-209-6907
Fax: 770-447-4033
Web site address: http://www.hbkworld.com

Calibration Certificate # 1568.01

CERTIFICATE OF CALIBRATION

No.: CAS-519448-Y6C1R9-401

CALIBRATION OF:

Calibrator:	Brüel & Kjær	Type 4231 IEC Class: 1		Serial No.:	2094474

CUSTOMER:

Xscala Rental Instruments Inc.
4819-3151 Lakeshore Rd
Kelowna, BC V1W 3S9
Canada

CALIBRATION CONDITIONS:

Environment conditions:	Air temperature:	23	°C
	Air pressure:	98.379	kPa
	Relative Humidity:	52	%RH

SPECIFICATIONS:

This document certifies that the acoustic calibrator as listed under "Type" has been calibrated and unless otherwise indicated under "Final Data", meets acceptance criteria as prescribed by the referenced Procedure. Statements of compliance, where applicable, are based on calibration results falling within specified criteria with no reduction by the uncertainty of the measurements. The calibration of the listed transducer was accomplished using a test system which conforms to the requirements of ISO/IEC 17025, ANSI/NCSL Z540-1, and guidelines of ISO 10012-1. For "as received" and "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 written approval of the Hottinger Brüel & Kjær Inc. Calibration Laboratory-Duluth, GA. Results relate only to the items tested. The transducer 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. The acoustic calibrator has been calibrated in accordance with the requirements as specified in IEC60942.

PROCEDURE:

The measurements have been performed with the assistance of Hottinger Brüel & Kjær Inc. acoustic calibrator calibration application
Software version 2.3.4 Type 7794 using calibration procedure 4231 Complete

RESULTS:

- [X] "As Received" Data: Within Acceptance Criteria
- [ ] "As Received" Data: Outside Acceptance Criteria
- [X] "Final" Data : Within Acceptance Criteria
- [ ] "Final" Data : Outside Acceptance Criteria

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%. The uncertainty evaluation has been carried out in accordance with EA-4/02from elements originating from the standards, calibration method, effect of environmental conditions and any short time contribution from the calibrator under calibration.

Date of Calibration: June 9, 2021
Meshaun Hobbs

Calibration Technician

Certificate issued: June 9, 2021

Harold Williams

Harold Williams
Quality Representative

Sound Pressure Levels

All stated values are valid at environmental reference conditions

Nominal Level [dB]	Accept Limit Lower [dB]	Accept Limit Upper [dB]	Measured Level [dB]	Measurement Uncertainty [dB]
94	93.80	94.20	94.00	0.12
114	113.80	114.20	114.02	0.12

Frequency

Nominal Frequency [Hz]	Accept Limit Lower [Hz]	Accept Limit Upper [Hz]	Measured Frequency [Hz]	Measurement Uncertainty [Hz]
1000	999.00	1001.00	999.81	0.10

Total Distortion*

Distortion mode: [X] TD* [ ] THD*

Calibration Level [dB]*	Accept Limit [%]*	Measured Distortion [%]*	Measurement Uncertainty [%]*
94	1.00	0.37	0.13
114	1.00	0.16	0.13

Environmental Reference Conditions:

Pressure: 101.3 kPa, Temperature: 23 °C, Relative Humidity: 50%

Instrument List

Type	Description	Serial no	Cal. date	Due date	Calibrated by	Trace number
3560	PULSE Analyzer	2723320	2020-10-20	2021-10-20	JCA	CAS-475391-Q6N6H0-103
9545	Transfer Microphone	3	2020-10-21	2021-10-21	MH	CAS-475391-Q6N6H0-404
4228	Reference Sound Source	1618502	2021-04-30	2023-04-30	M. Hobbs	CAS-512601-T0X4B1-402

During the calibration the calibrator has been loaded by the load volume of the Transfer Microphone. The load volumes for a number of different types of Transfer Microphones are listed in the table below.
For Brüel & Kjær Pistonphones types 4220 and 4228 the result of the SPL calibration has been corrected to be valid for a load volume of 1333 mm^3 . For all other types the result is valid with the actual load volume.

Transfer Microphone Type	Fulfils standard IEC 61094-1 LS	Fulfils standard IEC 61094-4 WS	Load Volume 1" (1/2" mic including DP-0776)	Load Volume 1/2"
4180	yes	yes	1126 mm^3	43 mm^3
4192	-	yes	1273 mm^3	190 mm^3
9545	-	-	1333 mm^3	-

Condition "As Received":

Good

Comments

Brüel & Kjær
North America Inc.
The Brüel & Kjær Calibration Laboratory
2815 Colonnades Court
Norcross, GA 30071-1588
Telephone: 770/209-6907
Fax: 770/447-4033
Web site address: http://www.bkhome.com

ACCREDITED
Calibration Certificate Number 1568.01

CERTIFICATE OF CALIBRATION

Certificate No: 1-263575881-801

CALIBRATION OF:

Sound Level Meter:	Brüel & Kjær	2250	Serial No: 2575763
Microphone:	Brüel & Kjær	4189	Serial No: 2441206
Preamplifier:	Brüel & Kjær	ZC-0032	Serial No: 15389
Supplied Calibrator:	Brüel & Kjær	4231	Serial No: 2053018
Software version:	BZ7222 Version 3.4.3	Instruction manual:	BE1713-23

CLIENT:

XSCALA Rental Instruments
234-5149 Country Hills Blvd. NW
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-Norcross, 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 4.3 - DB: 4.33 Test Collection 2250-4189.

RESULTS:

As Received Condition	As Received Data	Final Data
_X__ Received in good condition	_X__ Within acceptance criteria	_X__ Within acceptance criteria
___ Damaged - See attached report	___ Outside acceptance criteria	___ Limited test - See attached details
	___ Inoperative	
	___ Data not taken	

Date of Calibration: 27 Jul. 2011

Debra Wilson

Calibration Technician

Certificate issued: 27 Jul. 2011

John Astolfi

Quality Representative

Brüel & Kjær
North America Inc.

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Telephone: 770/209-6907
Fax: 770/447-4033
Web site address: http://www.bkhome.com

A2LA ACCREDITED
Calibration Certificate Number 1568.01

CERTIFICATE OF CALIBRATION

Certificate No: CAS-428360-H0R5F9-304

CALIBRATION OF:

Sound Level Meter:	Brüel & Kjær	2250	Serial No: 3004786
Microphone:	Brüel & Kjær	4189	Serial No: 2888637
Preamplifier:	Brüel & Kjær	ZC-0032	Serial No: 20299
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 ± 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
_X_ Received in good condition	_X_ Within acceptance criteria	_X_ Within acceptance criteria
___ Damaged - See attached report	___ Outside acceptance criteria	___ Limited test - See attached details
	___ Inoperative	
	___ Data not taken	

Date of Calibration: 13 Jan. 2020

Certificate issued: 13 Jan. 2020

Kyle Chancey

Calibration Technician

Quality Representative

~ Calibration Certificate ~

Per ISO 16063-21

Model Number: 393B04

Serial Number: 53562

Description: ICP® Accelerometer

Manufacturer: PCB

Method: Back-to-Back Comparison AT401-12

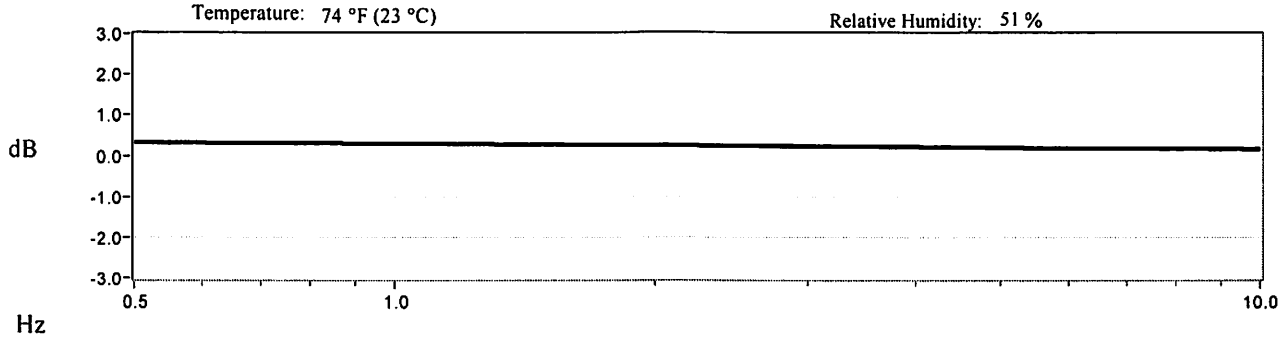
Calibration Data

Sensitivity @ 100 Hz **1005 mV/g**

(102.4 mV/m/s²)

Sensitivity Plot

Temperature: 74 °F (23 °C) Relative Humidity: 51 %



Data Points

Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)
0.5	3.8	10	1.7
1	3.4		
2	2.9		
5	2.2		
7	2.0		

Mounting Surface: Stainless Steel w/Silicone Grease Fastener: 10-32 Female Fixture Orientation: Vertical
Acceleration Level (pk)[1]: 1.00 g (9.81 m/s²)
[1]The acceleration level may be limited by shaker displacement at low frequencies. If the listed level cannot be obtained, the calibration system uses the following formula to set the vibration amplitude; Acceleration Level (g) = 0.207 x (freq)². [2]The gravitational constant used for calculations by the calibration system is: 1 g = 9.80665 m/s².

Condition of Unit

As Found: n/a

As Left: New Unit, In Tolerance

Notes

1. Calibration is traceable to one or more of the following; PTB 10065, PTB 10066 and NIST 683/283498.
2. This certificate shall not be reproduced, except in full, without written approval from PCB Piezotronics, Inc.
3. Calibration is performed in compliance with ISO 10012-1, ANSI Z540.3 and ISO 17025.
4. See Manufacturer's Specification Sheet for a detailed listing of performance specifications.
5. Measurement uncertainty (95% confidence level with coverage factor of 2) for frequency ranges tested during calibration are as follows: 0.5-0.99 Hz; +/- 1.8%, 1-30 Hz; +/- 1.0%, 30.01-199 Hz; +/- 1.5%, 200-1 kHz; +/- 3.0%.

Technician: Donald Whalen Date: 10/23/2018

ACCREDITED
CALIBRATION CERT #1862.02

PCB PIEZOTRONICS
VIBRATION DIVISION
Headquarters: 3425 Walden Avenue, Depew, NY 14043
Calibration Performed at: 10869 Highway 903, Halifax, NC 27839
TEL: 888-684-0013 · FAX: 716-685-3886 · www.pcb.com

CAL57-3623144012.863+0

ACS-4

~ Calibration Certificate ~

Per ISO 16063-21

Model Number: 393B04

Serial Number: 53563

Description: ICP® Accelerometer

Manufacturer: PCB

Method: Back-to-Back Comparison AT401-12

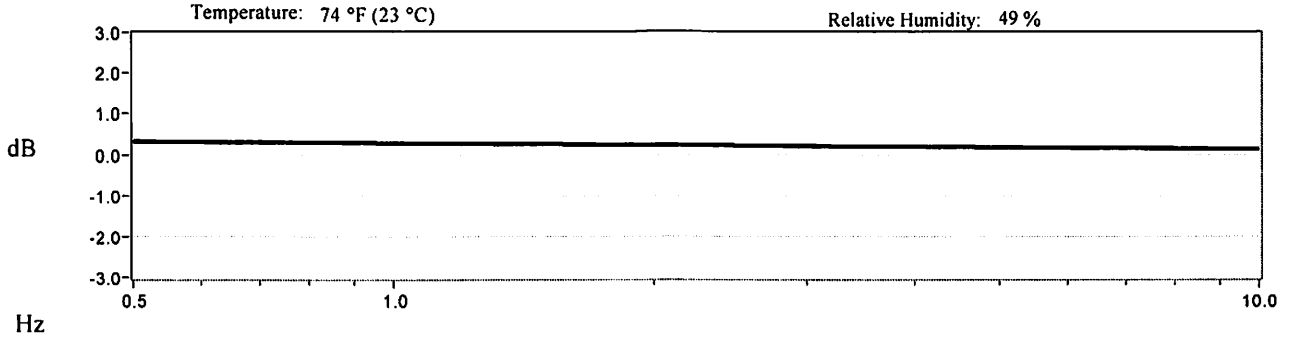
Calibration Data

Sensitivity @ 100 Hz **998 mV/g**

(101.8 mV/m/s²)

Sensitivity Plot

Temperature: 74 °F (23 °C) Relative Humidity: 49 %



Data Points

Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)
0.5	3.8	10	1.6
1	3.3		
2	2.8		
5	2.1		
7	1.9		

Mounting Surface: Stainless Steel w/Silicone Grease Fastener: 10-32 Female Fixture Orientation: Vertical
Acceleration Level (pk)[1]: 1.00 g (9.81 m/s²)
[1]The acceleration level may be limited by shaker displacement at low frequencies. If the listed level cannot be obtained, the calibration system uses the following formula to set the vibration amplitude; Acceleration Level (g) = 0.207 x (freq)². [2]The gravitational constant used for calculations by the calibration system is: 1 g = 9.80665 m/s².

Condition of Unit

As Found: n/a

As Left: New Unit, In Tolerance

Notes

1. Calibration is traceable to one or more of the following; PTB 10065, PTB 10066 and NIST 683/283498.
2. This certificate shall not be reproduced, except in full, without written approval from PCB Piezotronics, Inc.
3. Calibration is performed in compliance with ISO 10012-1, ANSI Z540.3 and ISO 17025.
4. See Manufacturer's Specification Sheet for a detailed listing of performance specifications.
5. Measurement uncertainty (95% confidence level with coverage factor of 2) for frequency ranges tested during calibration are as follows: 0.5-0.99 Hz; +/- 1.8%, 1-30 Hz; +/- 1.0%, 30.01-199 Hz; +/- 1.5%, 200-1 kHz; +/- 3.0%.

Technician: Donald Whalen Date: 10/23/2018

ACCREDITED
CALIBRATION CERT #1862.02

PCB PIEZOTRONICS
VIBRATION DIVISION
Headquarters: 3425 Walden Avenue, Depew, NY 14043
Calibration Performed at: 10869 Highway 903, Halifax, NC 27839
TEL: 888-684-0013 · FAX: 716-685-3886 · www.pcb.com

CAL57-3623145632.570+0

ACS-4

Attachment C Sound Monitoring Results

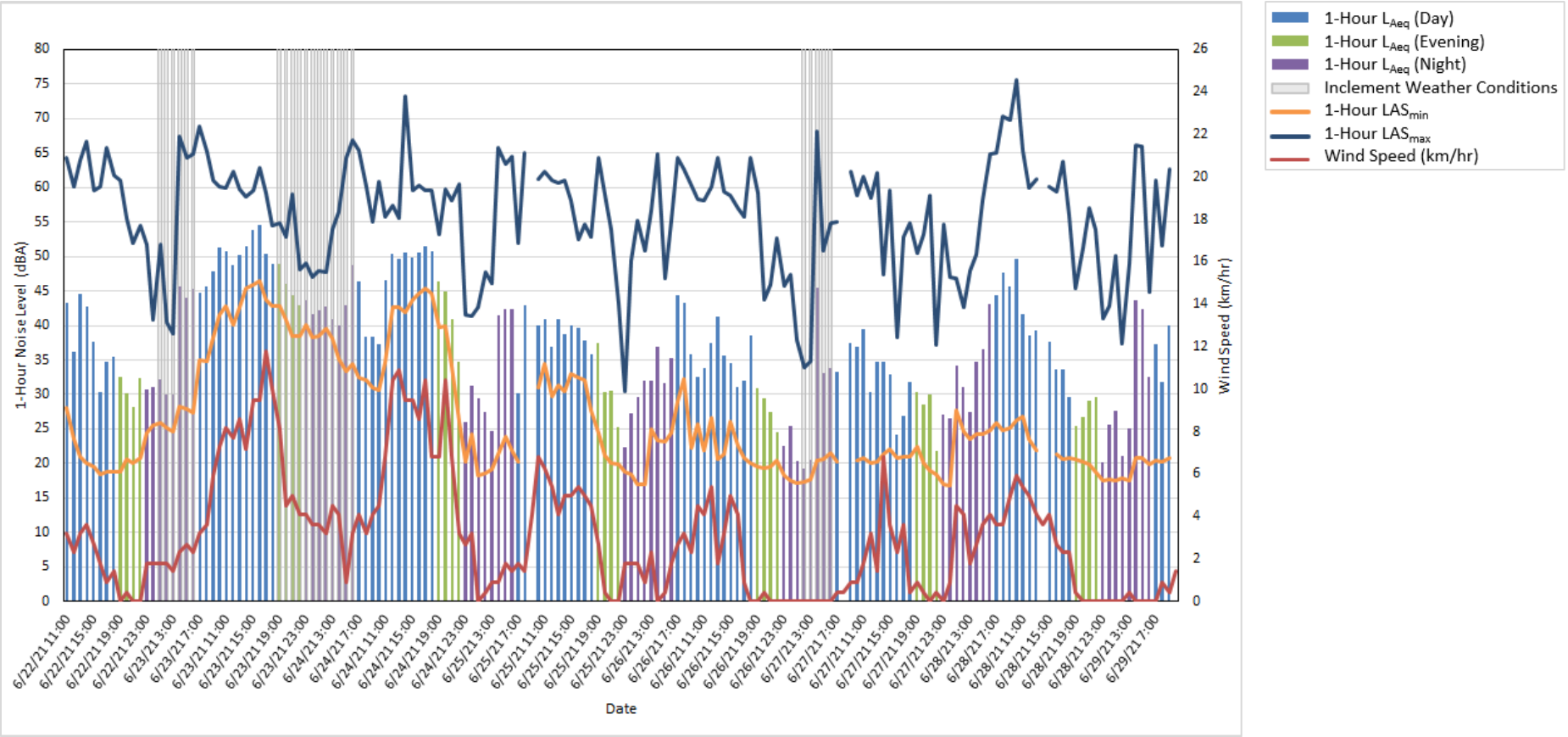


Figure C-1: Sound Levels at NMT1 (1-hour L_{Aeq})

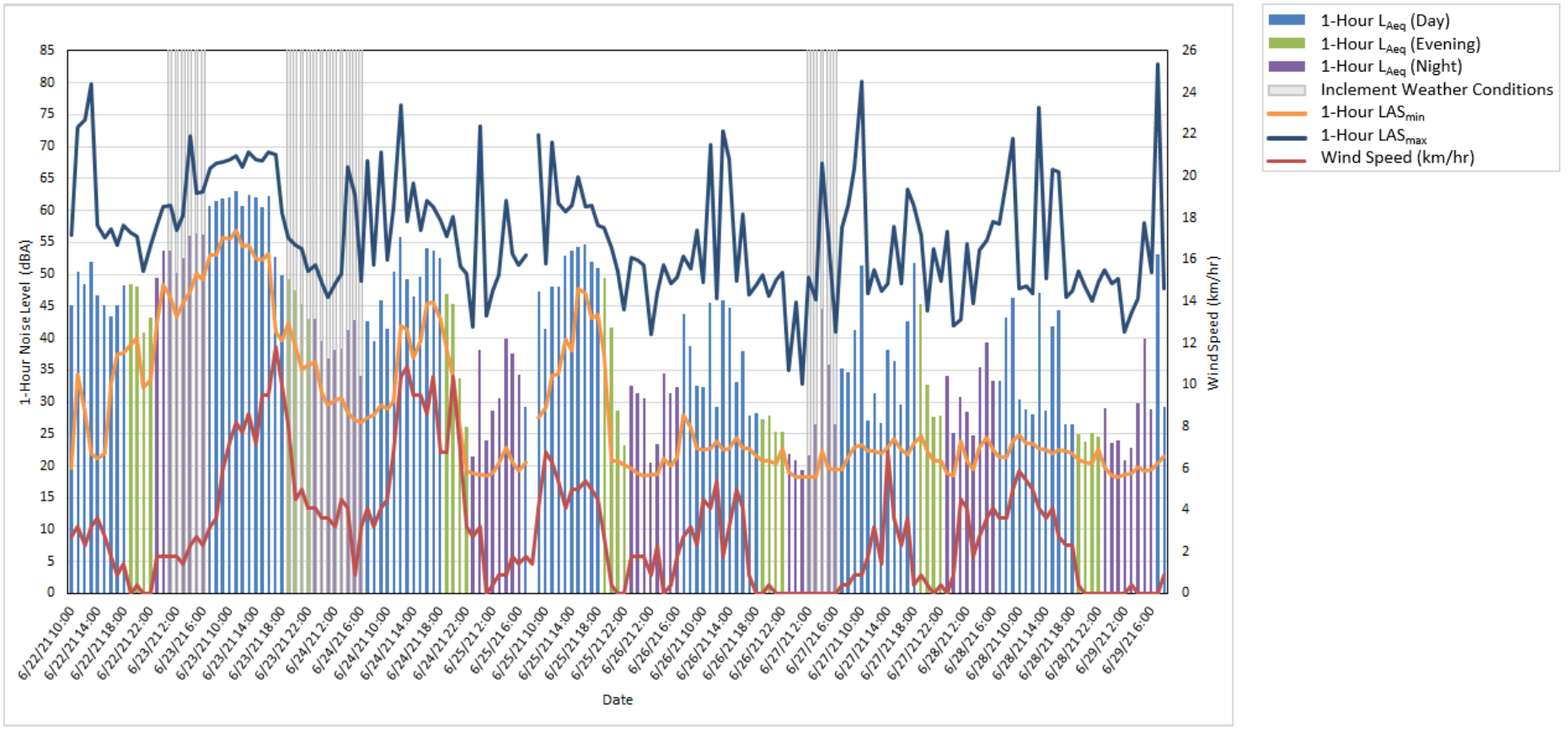


Figure C-2: Sound Levels at NMT2 (1-hour L_{Aeq})

Sound Monitoring Results at NMT1

Date	Start Time	Meteorological Data				INCLEMENT WEATHER CONDITIONS	Sound Level Data			Notes on Measurements
		Wind Speed [km/h]	Temp. [°C]	Humidity [%]	Precipitation [Y/N]		1 Hour LAeq [dBA]	1 Hour LASmin [dBA]	1 Hour LASmax [dBA]	. Not Available (loss of power, equipment error) . Incomplete dataset (less than one hour) . Data discarded due to inspection interruption
Tue - Jun 22, 2021	10:00	2.7	14.1	47.8	N	NO	-	-	-	Incomplete dataset (less than one hour)
Tue - Jun 22, 2021	11:00	3.2	15.5	44.9	N	NO	43.2	28.1	64.3	-
Tue - Jun 22, 2021	12:00	2.3	15.5	48.5	N	NO	36.2	23.5	60.1	-
Tue - Jun 22, 2021	13:00	3.2	16.7	45.4	N	NO	44.6	20.9	63.9	-
Tue - Jun 22, 2021	14:00	3.6	17.6	42.4	N	NO	42.7	20.1	66.7	-
Tue - Jun 22, 2021	15:00	2.7	17.9	43.8	N	NO	37.7	19.6	59.5	-
Tue - Jun 22, 2021	16:00	1.8	17.9	43.1	N	NO	30.4	18.4	60.1	-
Tue - Jun 22, 2021	17:00	0.9	17.3	45.7	N	NO	34.8	18.7	65.8	-
Tue - Jun 22, 2021	18:00	1.4	17.8	44.3	N	NO	35.4	18.8	61.8	-
Tue - Jun 22, 2021	19:00	0.0	16.6	52.4	N	NO	32.5	18.7	61.0	-
Tue - Jun 22, 2021	20:00	0.4	14.1	63.0	N	NO	30.2	20.6	55.6	-
Tue - Jun 22, 2021	21:00	0.0	11.5	76.3	N	NO	28.2	20.1	52.0	-
Tue - Jun 22, 2021	22:00	0.0	10.3	84.9	N	NO	32.4	20.8	54.4	-
Tue - Jun 22, 2021	23:00	1.8	10.5	88.2	N	NO	30.8	24.5	51.7	-
Wed - Jun 23, 2021	0:00	1.8	10.6	88.9	N	NO	31.0	25.5	40.9	-
Wed - Jun 23, 2021	1:00	1.8	10.4	90.2	N	YES	32.1	25.8	51.8	-
Wed - Jun 23, 2021	2:00	1.8	10.3	91.5	N	YES	29.9	25.1	40.5	-
Wed - Jun 23, 2021	3:00	1.4	10.7	91.6	N	YES	30.0	24.7	38.9	-
Wed - Jun 23, 2021	4:00	2.3	10.5	92.2	N	YES	45.6	28.2	67.4	-
Wed - Jun 23, 2021	5:00	2.7	11.3	91.5	N	YES	44.0	27.9	64.4	-
Wed - Jun 23, 2021	6:00	2.3	12.6	90.2	N	YES	45.3	27.3	64.9	-
Wed - Jun 23, 2021	7:00	3.2	15.4	77.9	N	NO	44.7	35.0	68.8	-
Wed - Jun 23, 2021	8:00	3.6	17.4	69.6	N	NO	45.6	34.8	65.2	-
Wed - Jun 23, 2021	9:00	5.9	19.7	61.2	N	NO	47.8	38.3	61.0	-
Wed - Jun 23, 2021	10:00	7.3	21.9	52.7	N	NO	51.3	41.5	60.2	-
Wed - Jun 23, 2021	11:00	8.2	23.4	46.9	N	NO	50.8	42.8	59.9	-
Wed - Jun 23, 2021	12:00	7.7	23.6	47.1	N	NO	48.7	40.1	62.3	-
Wed - Jun 23, 2021	13:00	8.6	25.0	45.4	N	NO	50.2	42.6	59.7	-
Wed - Jun 23, 2021	14:00	7.2	27.9	39.9	N	NO	51.5	45.4	58.6	-
Wed - Jun 23, 2021	15:00	9.5	28.1	37.4	N	NO	53.8	46.0	59.5	-
Wed - Jun 23, 2021	16:00	9.5	23.2	53.8	N	NO	54.5	46.4	62.9	-
Wed - Jun 23, 2021	17:00	11.8	20.9	64.1	N	NO	50.4	43.7	59.2	-
Wed - Jun 23, 2021	18:00	10.0	17.0	84.3	N	NO	49.0	42.9	54.5	-
Wed - Jun 23, 2021	19:00	8.1	15.8	92.5	N	YES	49.0	42.9	54.9	-
Wed - Jun 23, 2021	20:00	4.5	15.4	96.8	N	YES	46.0	40.9	52.9	-
Wed - Jun 23, 2021	21:00	5.0	14.5	97.6	N	YES	44.3	38.5	59.1	-
Wed - Jun 23, 2021	22:00	4.1	13.9	98.4	N	YES	42.9	38.4	48.1	-
Wed - Jun 23, 2021	23:00	4.1	13.3	98.7	N	YES	43.7	40.1	49.1	-
Thu - Jun 24, 2021	0:00	3.6	12.7	98.8	N	YES	41.6	38.2	47.1	-
Thu - Jun 24, 2021	1:00	3.6	12.3	98.9	N	YES	42.2	38.5	47.9	-
Thu - Jun 24, 2021	2:00	3.2	12.1	98.8	N	YES	42.7	39.5	47.8	-
Thu - Jun 24, 2021	3:00	4.5	11.9	98.3	N	YES	40.9	38.1	53.9	-
Thu - Jun 24, 2021	4:00	4.1	11.4	98.2	N	YES	40.0	35.2	56.5	-
Thu - Jun 24, 2021	5:00	0.9	10.8	99.3	N	YES	42.9	33.4	64.4	-

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]	. Not Available (loss of power, equipment error) . Incomplete dataset (less than one hour) . Data discarded due to inspection interruption
Thu - Jun 24, 2021	6:00	3.2	11.7	97.4	N	YES	48.7	34.4	66.9	-
Thu - Jun 24, 2021	7:00	4.1	14.5	88.7	N	NO	46.3	32.4	65.5	-
Thu - Jun 24, 2021	8:00	3.2	16.1	81.0	N	NO	38.3	32.1	60.1	-
Thu - Jun 24, 2021	9:00	4.1	17.3	71.5	N	NO	38.3	31.0	55.1	-
Thu - Jun 24, 2021	10:00	4.5	18.4	67.5	N	NO	37.2	30.6	60.8	-
Thu - Jun 24, 2021	11:00	6.8	20.8	57.2	N	NO	46.6	34.7	55.8	-
Thu - Jun 24, 2021	12:00	10.4	20.1	52.8	N	NO	50.3	42.6	57.4	-
Thu - Jun 24, 2021	13:00	10.9	21.2	47.7	N	NO	49.6	42.7	55.5	-
Thu - Jun 24, 2021	14:00	9.5	21.4	46.8	N	NO	50.6	42.0	73.3	-
Thu - Jun 24, 2021	15:00	9.5	23.3	42.9	N	NO	49.8	43.8	59.6	-
Thu - Jun 24, 2021	16:00	8.6	22.4	43.3	N	NO	50.6	44.7	60.3	-
Thu - Jun 24, 2021	17:00	10.4	22.5	41.1	N	NO	51.4	45.3	59.5	-
Thu - Jun 24, 2021	18:00	6.8	21.3	45.2	N	NO	50.7	44.7	59.5	-
Thu - Jun 24, 2021	19:00	6.8	20.7	47.0	N	NO	46.4	39.7	53.3	-
Thu - Jun 24, 2021	20:00	10.4	19.4	46.3	N	NO	45.0	39.9	59.8	-
Thu - Jun 24, 2021	21:00	6.8	16.9	49.8	N	NO	41.0	34.1	58.1	-
Thu - Jun 24, 2021	22:00	3.2	14.8	54.8	N	NO	34.8	26.1	60.5	-
Thu - Jun 24, 2021	23:00	2.7	13.7	58.8	N	NO	25.9	20.3	41.5	-
Fri - Jun 25, 2021	0:00	3.2	12.7	63.5	N	NO	31.2	24.3	41.4	-
Fri - Jun 25, 2021	1:00	0.0	11.2	71.1	N	NO	29.4	18.3	42.6	-
Fri - Jun 25, 2021	2:00	0.4	10.5	75.4	N	NO	27.4	18.6	47.7	-
Fri - Jun 25, 2021	3:00	0.9	10.0	80.9	N	NO	24.7	19.2	46.2	-
Fri - Jun 25, 2021	4:00	0.9	9.5	85.5	N	NO	41.4	21.4	65.7	-
Fri - Jun 25, 2021	5:00	1.8	9.9	85.7	N	NO	42.3	23.8	63.5	-
Fri - Jun 25, 2021	6:00	1.4	12.0	82.6	N	NO	42.4	21.9	64.5	-
Fri - Jun 25, 2021	7:00	1.8	16.4	69.9	N	NO	30.2	20.3	52.0	-
Fri - Jun 25, 2021	8:00	1.4	19.0	59.3	N	NO	42.9	20.1	65.0	-
Fri - Jun 25, 2021	9:00	4.1	21.3	47.3	N	NO	-	-	-	Incomplete dataset (less than one hour)
Fri - Jun 25, 2021	10:00	6.8	23.2	41.9	N	NO	40.0	31.0	61.2	-
Fri - Jun 25, 2021	11:00	6.3	24.7	38.3	N	NO	40.9	34.5	62.4	-
Fri - Jun 25, 2021	12:00	5.4	25.6	33.7	N	NO	36.9	29.8	61.0	-
Fri - Jun 25, 2021	13:00	4.1	26.7	32.9	N	NO	40.9	31.4	60.7	-
Fri - Jun 25, 2021	14:00	5.0	27.3	32.3	N	NO	38.7	30.4	61.0	-
Fri - Jun 25, 2021	15:00	5.0	28.0	31.3	N	NO	40.0	33.0	58.2	-
Fri - Jun 25, 2021	16:00	5.4	28.0	30.6	N	NO	39.7	32.4	52.5	-
Fri - Jun 25, 2021	17:00	5.0	27.7	29.9	N	NO	37.8	32.0	54.7	-
Fri - Jun 25, 2021	18:00	4.5	27.1	28.8	N	NO	35.9	27.7	52.9	-
Fri - Jun 25, 2021	19:00	2.7	24.7	30.6	N	NO	37.5	24.4	64.4	-
Fri - Jun 25, 2021	20:00	0.4	21.9	38.0	N	NO	30.4	21.2	59.1	-
Fri - Jun 25, 2021	21:00	0.0	18.9	43.3	N	NO	30.6	20.0	53.9	-
Fri - Jun 25, 2021	22:00	0.0	17.8	49.9	N	NO	25.3	19.9	43.2	-
Fri - Jun 25, 2021	23:00	1.8	17.8	56.9	N	NO	22.4	18.7	30.4	-
Sat - Jun 26, 2021	0:00	1.8	17.2	63.8	N	NO	27.3	18.4	49.3	-
Sat - Jun 26, 2021	1:00	1.8	16.2	70.4	N	NO	29.6	16.9	55.2	-

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]	. Not Available (loss of power, equipment error) . Incomplete dataset (less than one hour) . Data discarded due to inspection interruption
Sat - Jun 26, 2021	2:00	0.9	15.4	76.6	N	NO	32.0	16.9	50.9	-
Sat - Jun 26, 2021	3:00	2.3	15.6	78.9	N	NO	32.0	24.9	56.6	-
Sat - Jun 26, 2021	4:00	0.0	15.2	81.1	N	NO	37.0	23.4	64.9	-
Sat - Jun 26, 2021	5:00	0.4	15.1	84.4	N	NO	31.7	23.1	46.9	-
Sat - Jun 26, 2021	6:00	1.8	16.0	84.7	N	NO	35.2	24.4	55.3	-
Sat - Jun 26, 2021	7:00	2.7	18.2	80.0	N	NO	44.3	29.0	64.3	-
Sat - Jun 26, 2021	8:00	3.2	20.3	73.5	N	NO	43.2	32.2	62.6	-
Sat - Jun 26, 2021	9:00	2.3	22.2	68.1	N	NO	35.8	22.2	60.4	-
Sat - Jun 26, 2021	10:00	4.5	24.8	57.2	N	NO	32.5	25.7	58.4	-
Sat - Jun 26, 2021	11:00	4.1	26.7	49.1	N	NO	33.8	21.8	58.2	-
Sat - Jun 26, 2021	12:00	5.4	26.4	41.9	N	NO	37.4	26.6	60.2	-
Sat - Jun 26, 2021	13:00	1.8	25.8	45.0	N	NO	41.2	20.6	64.3	-
Sat - Jun 26, 2021	14:00	3.2	25.9	42.8	N	NO	35.6	21.4	59.4	-
Sat - Jun 26, 2021	15:00	5.0	26.4	42.3	N	NO	34.5	26.0	58.8	-
Sat - Jun 26, 2021	16:00	4.1	28.1	38.0	N	NO	31.1	22.6	57.1	-
Sat - Jun 26, 2021	17:00	0.9	25.8	43.6	N	NO	32.0	20.7	55.7	-
Sat - Jun 26, 2021	18:00	0.0	25.9	43.8	N	NO	38.6	20.1	64.3	-
Sat - Jun 26, 2021	19:00	0.0	23.6	48.7	N	NO	30.9	19.5	59.2	-
Sat - Jun 26, 2021	20:00	0.4	21.0	58.4	N	NO	29.5	19.3	43.7	-
Sat - Jun 26, 2021	21:00	0.0	19.9	60.2	N	NO	27.4	19.6	46.0	-
Sat - Jun 26, 2021	22:00	0.0	18.3	67.4	N	NO	24.6	20.5	52.6	-
Sat - Jun 26, 2021	23:00	0.0	16.6	77.8	N	NO	22.6	18.2	45.8	-
Sun - Jun 27, 2021	0:00	0.0	16.1	84.3	N	NO	25.4	17.6	47.3	-
Sun - Jun 27, 2021	1:00	0.0	15.1	89.6	N	NO	20.4	17.1	38.0	-
Sun - Jun 27, 2021	2:00	0.0	14.2	94.2	N	YES	19.2	17.3	33.9	-
Sun - Jun 27, 2021	3:00	0.0	13.6	97.1	N	YES	20.6	17.7	34.9	-
Sun - Jun 27, 2021	4:00	0.0	13.0	98.5	N	YES	45.5	20.5	68.2	-
Sun - Jun 27, 2021	5:00	0.0	12.9	99.0	N	YES	33.1	20.6	50.9	-
Sun - Jun 27, 2021	6:00	0.0	14.3	99.0	N	YES	33.9	21.6	54.8	-
Sun - Jun 27, 2021	7:00	0.4	18.9	86.4	N	NO	33.2	20.2	55.0	-
Sun - Jun 27, 2021	8:00	0.4	22.2	70.8	N	NO	-	-	-	Data discarded due to inspection interruption
Sun - Jun 27, 2021	9:00	0.9	24.2	62.3	N	NO	37.5	20.0	62.4	-
Sun - Jun 27, 2021	10:00	0.9	26.2	51.8	N	NO	36.9	20.5	58.8	-
Sun - Jun 27, 2021	11:00	1.8	28.1	36.7	N	NO	39.4	20.7	61.6	-
Sun - Jun 27, 2021	12:00	3.2	28.1	35.1	N	NO	30.4	20.1	58.5	-
Sun - Jun 27, 2021	13:00	1.4	28.3	33.2	N	NO	34.8	20.3	62.1	-
Sun - Jun 27, 2021	14:00	6.8	27.7	36.8	N	NO	34.7	21.3	47.3	-
Sun - Jun 27, 2021	15:00	3.6	26.0	43.3	N	NO	32.9	22.1	59.5	-
Sun - Jun 27, 2021	16:00	2.3	25.6	46.4	N	NO	24.2	20.8	38.3	-
Sun - Jun 27, 2021	17:00	3.6	28.8	34.6	N	NO	26.9	20.9	52.8	-
Sun - Jun 27, 2021	18:00	0.4	26.8	38.6	N	NO	31.8	20.9	54.8	-
Sun - Jun 27, 2021	19:00	0.9	22.2	52.2	N	NO	30.4	22.5	50.5	-
Sun - Jun 27, 2021	20:00	0.4	21.4	55.8	N	NO	28.5	20.0	53.2	-
Sun - Jun 27, 2021	21:00	0.0	19.2	68.1	N	NO	29.9	18.9	58.9	-

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]	. Not Available (loss of power, equipment error) . Incomplete dataset (less than one hour) . Data discarded due to inspection interruption
Sun - Jun 27, 2021	22:00	0.4	18.4	73.8	N	NO	21.8	18.4	37.2	-
Sun - Jun 27, 2021	23:00	0.0	17.3	79.7	N	NO	27.1	16.9	54.7	-
Mon - Jun 28, 2021	0:00	0.9	16.4	84.1	N	NO	26.6	16.8	47.1	-
Mon - Jun 28, 2021	1:00	4.5	17.2	71.6	N	NO	34.1	27.8	46.8	-
Mon - Jun 28, 2021	2:00	4.1	16.4	75.9	N	NO	31.0	24.6	42.7	-
Mon - Jun 28, 2021	3:00	1.8	15.1	82.3	N	NO	27.5	23.6	48.0	-
Mon - Jun 28, 2021	4:00	2.7	14.4	87.5	N	NO	34.8	24.3	50.3	-
Mon - Jun 28, 2021	5:00	3.6	14.2	88.9	N	NO	36.5	24.3	58.2	-
Mon - Jun 28, 2021	6:00	4.1	14.5	88.7	N	NO	43.1	24.8	64.8	-
Mon - Jun 28, 2021	7:00	3.6	16.2	83.0	N	NO	44.4	25.8	65.1	-
Mon - Jun 28, 2021	8:00	3.6	17.9	75.8	N	NO	47.6	24.8	70.4	-
Mon - Jun 28, 2021	9:00	5.0	19.6	68.9	N	NO	45.6	25.1	69.8	-
Mon - Jun 28, 2021	10:00	5.9	21.2	63.8	N	NO	49.6	26.2	75.7	-
Mon - Jun 28, 2021	11:00	5.4	23.1	56.8	N	NO	41.6	26.8	65.5	-
Mon - Jun 28, 2021	12:00	5.0	24.1	51.4	N	NO	38.5	23.5	60.0	-
Mon - Jun 28, 2021	13:00	4.1	25.0	46.6	N	NO	39.2	21.8	61.3	-
Mon - Jun 28, 2021	14:00	3.6	26.0	43.2	N	NO	-	-	-	Incomplete dataset (less than one hour)
Mon - Jun 28, 2021	15:00	4.1	26.4	40.4	N	NO	37.7	21.3	60.2	-
Mon - Jun 28, 2021	16:00	2.7	26.7	38.6	N	NO	33.6	21.3	59.4	-
Mon - Jun 28, 2021	17:00	2.3	26.7	36.8	N	NO	33.6	20.6	63.7	-
Mon - Jun 28, 2021	18:00	2.3	26.4	34.6	N	NO	29.6	20.8	56.0	-
Mon - Jun 28, 2021	19:00	0.4	23.7	35.4	N	NO	25.4	20.6	45.3	-
Mon - Jun 28, 2021	20:00	0.0	21.1	44.2	N	NO	26.8	20.2	51.3	-
Mon - Jun 28, 2021	21:00	0.0	18.6	50.4	N	NO	29.0	19.8	57.1	-
Mon - Jun 28, 2021	22:00	0.0	16.5	59.2	N	NO	29.6	18.8	54.0	-
Mon - Jun 28, 2021	23:00	0.0	15.2	64.2	N	NO	20.1	17.6	41.0	-
Tue - Jun 29, 2021	0:00	0.0	14.1	73.8	N	NO	25.6	17.7	42.9	-
Tue - Jun 29, 2021	1:00	0.0	13.2	74.6	N	NO	27.6	17.6	50.2	-
Tue - Jun 29, 2021	2:00	0.0	12.5	75.0	N	NO	21.0	17.9	37.3	-
Tue - Jun 29, 2021	3:00	0.4	12.4	74.0	N	NO	25.0	17.6	49.1	-
Tue - Jun 29, 2021	4:00	0.0	11.1	83.2	N	NO	43.7	20.7	66.1	-
Tue - Jun 29, 2021	5:00	0.0	10.8	89.6	N	NO	42.3	20.8	66.0	-
Tue - Jun 29, 2021	6:00	0.0	12.5	89.0	N	NO	32.5	19.8	44.8	-
Tue - Jun 29, 2021	7:00	0.0	18.2	73.9	N	NO	37.2	20.4	61.0	-
Tue - Jun 29, 2021	8:00	0.9	21.1	59.4	N	NO	31.8	20.3	51.5	-
Tue - Jun 29, 2021	9:00	0.4	23.9	52.8	N	NO	40.0	20.8	62.7	-
Tue - Jun 29, 2021	10:00	1.4	24.1	46.8	N	NO	-	-	-	Incomplete dataset (less than one hour)

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]	. Not Available (loss of power, equipment error) . Incomplete dataset (less than one hour) . Data discarded due to inspection interruption
Tue - Jun 22, 2021	9:00	1.8	13.7	50.2	N	NO	-	-	-	Incomplete dataset (less than one hour)
Tue - Jun 22, 2021	10:00	2.7	14.1	47.8	N	NO	45.1	19.7	56.1	-
Tue - Jun 22, 2021	11:00	3.2	15.5	44.9	N	NO	50.5	34.3	73.0	-
Tue - Jun 22, 2021	12:00	2.3	15.5	48.5	N	NO	48.5	28.3	74.2	-
Tue - Jun 22, 2021	13:00	3.2	16.7	45.4	N	NO	52.0	21.9	79.8	-
Tue - Jun 22, 2021	14:00	3.6	17.6	42.4	N	NO	46.8	21.2	57.7	-
Tue - Jun 22, 2021	15:00	2.7	17.9	43.8	N	NO	45.1	21.9	55.8	-
Tue - Jun 22, 2021	16:00	1.8	17.9	43.1	N	NO	43.5	32.8	57.2	-
Tue - Jun 22, 2021	17:00	0.9	17.3	45.7	N	NO	45.1	37.5	54.5	-
Tue - Jun 22, 2021	18:00	1.4	17.8	44.3	N	NO	48.2	37.6	57.6	-
Tue - Jun 22, 2021	19:00	0.0	16.6	52.4	N	NO	48.5	39.1	56.5	-
Tue - Jun 22, 2021	20:00	0.4	14.1	63.0	N	NO	48.1	40.0	56.0	-
Tue - Jun 22, 2021	21:00	0.0	11.5	76.3	N	NO	40.8	32.3	50.6	-
Tue - Jun 22, 2021	22:00	0.0	10.3	84.9	N	NO	43.3	33.5	54.5	-
Tue - Jun 22, 2021	23:00	1.8	10.5	88.2	N	NO	49.5	42.3	57.6	-
Wed - Jun 23, 2021	0:00	1.8	10.6	88.9	N	NO	53.8	48.4	60.7	-
Wed - Jun 23, 2021	1:00	1.8	10.4	90.2	N	YES	53.7	46.5	60.8	-
Wed - Jun 23, 2021	2:00	1.8	10.3	91.5	N	YES	50.3	43.3	56.9	-
Wed - Jun 23, 2021	3:00	1.4	10.7	91.6	N	YES	52.6	45.5	59.3	-
Wed - Jun 23, 2021	4:00	2.3	10.5	92.2	N	YES	56.1	47.4	71.7	-
Wed - Jun 23, 2021	5:00	2.7	11.3	91.5	N	YES	56.4	50.1	62.8	-
Wed - Jun 23, 2021	6:00	2.3	12.6	90.2	N	YES	56.2	49.2	62.9	-
Wed - Jun 23, 2021	7:00	3.2	15.4	77.9	N	NO	60.8	53.0	66.6	-
Wed - Jun 23, 2021	8:00	3.6	17.4	69.6	N	NO	61.5	53.0	67.4	-
Wed - Jun 23, 2021	9:00	5.9	19.7	61.2	N	NO	61.8	55.8	67.6	-
Wed - Jun 23, 2021	10:00	7.3	21.9	52.7	N	NO	62.0	55.6	67.9	-
Wed - Jun 23, 2021	11:00	8.2	23.4	46.9	N	NO	63.0	57.0	68.5	-
Wed - Jun 23, 2021	12:00	7.7	23.6	47.1	N	NO	60.8	54.3	66.8	-
Wed - Jun 23, 2021	13:00	8.6	25.0	45.4	N	NO	62.5	54.6	69.2	-
Wed - Jun 23, 2021	14:00	7.2	27.9	39.9	N	NO	62.0	52.4	68.0	-
Wed - Jun 23, 2021	15:00	9.5	28.1	37.4	N	NO	60.6	52.3	67.8	-
Wed - Jun 23, 2021	16:00	9.5	23.2	53.8	N	NO	62.3	53.3	69.1	-
Wed - Jun 23, 2021	17:00	11.8	20.9	64.1	N	NO	52.7	40.9	68.7	-
Wed - Jun 23, 2021	18:00	10.0	17.0	84.3	N	NO	49.8	39.7	59.6	-
Wed - Jun 23, 2021	19:00	8.1	15.8	92.5	N	YES	49.2	42.3	55.7	-
Wed - Jun 23, 2021	20:00	4.5	15.4	96.8	N	YES	47.5	38.6	54.5	-
Wed - Jun 23, 2021	21:00	5.0	14.5	97.6	N	YES	45.4	35.2	54.1	-
Wed - Jun 23, 2021	22:00	4.1	13.9	98.4	N	YES	43.1	35.7	50.5	-
Wed - Jun 23, 2021	23:00	4.1	13.3	98.7	N	YES	43.1	36.4	51.4	-
Thu - Jun 24, 2021	0:00	3.6	12.7	98.8	N	YES	39.6	31.5	48.7	-
Thu - Jun 24, 2021	1:00	3.6	12.3	98.9	N	YES	36.9	29.6	46.4	-
Thu - Jun 24, 2021	2:00	3.2	12.1	98.8	N	YES	38.2	30.2	48.6	-
Thu - Jun 24, 2021	3:00	4.5	11.9	98.3	N	YES	38.3	30.7	50.2	-
Thu - Jun 24, 2021	4:00	4.1	11.4	98.2	N	YES	41.3	28.3	66.8	-

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]	. Not Available (loss of power, equipment error) . Incomplete dataset (less than one hour) . Data discarded due to inspection interruption
Thu - Jun 24, 2021	5:00	0.9	10.8	99.3	N	YES	42.8	27.2	62.3	-
Thu - Jun 24, 2021	6:00	3.2	11.7	97.4	N	YES	34.1	26.8	48.9	-
Thu - Jun 24, 2021	7:00	4.1	14.5	88.7	N	NO	42.7	27.6	67.8	-
Thu - Jun 24, 2021	8:00	3.2	16.1	81.0	N	NO	39.5	27.9	51.4	-
Thu - Jun 24, 2021	9:00	4.1	17.3	71.5	N	NO	45.9	29.5	69.2	-
Thu - Jun 24, 2021	10:00	4.5	18.4	67.5	N	NO	41.5	29.0	52.2	-
Thu - Jun 24, 2021	11:00	6.8	20.8	57.2	N	NO	50.4	30.1	60.5	-
Thu - Jun 24, 2021	12:00	10.4	20.1	52.8	N	NO	55.9	42.0	76.5	-
Thu - Jun 24, 2021	13:00	10.9	21.2	47.7	N	NO	49.3	41.4	58.3	-
Thu - Jun 24, 2021	14:00	9.5	21.4	46.8	N	NO	46.6	36.9	64.3	-
Thu - Jun 24, 2021	15:00	9.5	23.3	42.9	N	NO	49.7	39.6	57.0	-
Thu - Jun 24, 2021	16:00	8.6	22.4	43.3	N	NO	54.1	45.4	61.5	-
Thu - Jun 24, 2021	17:00	10.4	22.5	41.1	N	NO	53.7	45.7	60.7	-
Thu - Jun 24, 2021	18:00	6.8	21.3	45.2	N	NO	52.5	42.9	58.5	-
Thu - Jun 24, 2021	19:00	6.8	20.7	47.0	N	NO	47.0	38.3	56.0	-
Thu - Jun 24, 2021	20:00	10.4	19.4	46.3	N	NO	45.4	34.0	59.0	-
Thu - Jun 24, 2021	21:00	6.8	16.9	49.8	N	NO	33.7	25.7	51.2	-
Thu - Jun 24, 2021	22:00	3.2	14.8	54.8	N	NO	26.1	19.3	50.1	-
Thu - Jun 24, 2021	23:00	2.7	13.7	58.8	N	NO	21.5	18.9	41.7	-
Fri - Jun 25, 2021	0:00	3.2	12.7	63.5	N	NO	38.2	18.6	73.3	-
Fri - Jun 25, 2021	1:00	0.0	11.2	71.1	N	NO	24.0	18.4	43.6	-
Fri - Jun 25, 2021	2:00	0.4	10.5	75.4	N	NO	28.7	18.8	47.4	-
Fri - Jun 25, 2021	3:00	0.9	10.0	80.9	N	NO	30.6	20.3	49.9	-
Fri - Jun 25, 2021	4:00	0.9	9.5	85.5	N	NO	39.9	22.9	61.6	-
Fri - Jun 25, 2021	5:00	1.8	9.9	85.7	N	NO	37.6	20.6	53.2	-
Fri - Jun 25, 2021	6:00	1.4	12.0	82.6	N	NO	34.2	19.3	51.5	-
Fri - Jun 25, 2021	7:00	1.8	16.4	69.9	N	NO	29.3	20.6	53.1	-
Fri - Jun 25, 2021	8:00	1.4	19.0	59.3	N	NO	-	-	-	Incomplete dataset (less than one hour)
Fri - Jun 25, 2021	9:00	4.1	21.3	47.3	N	NO	47.3	27.5	71.8	-
Fri - Jun 25, 2021	10:00	6.8	23.2	41.9	N	NO	41.4	29.2	51.7	-
Fri - Jun 25, 2021	11:00	6.3	24.7	38.3	N	NO	48.0	34.2	70.8	-
Fri - Jun 25, 2021	12:00	5.4	25.6	33.7	N	NO	48.0	34.4	61.1	-
Fri - Jun 25, 2021	13:00	4.1	26.7	32.9	N	NO	52.9	39.8	59.8	-
Fri - Jun 25, 2021	14:00	5.0	27.3	32.3	N	NO	53.8	38.1	60.8	-
Fri - Jun 25, 2021	15:00	5.0	28.0	31.3	N	NO	54.3	47.7	65.2	-
Fri - Jun 25, 2021	16:00	5.4	28.0	30.6	N	NO	54.6	47.0	60.7	-
Fri - Jun 25, 2021	17:00	5.0	27.7	29.9	N	NO	51.9	43.2	60.9	-
Fri - Jun 25, 2021	18:00	4.5	27.1	28.8	N	NO	51.0	43.8	57.6	-
Fri - Jun 25, 2021	19:00	2.7	24.7	30.6	N	NO	49.5	37.5	57.3	-
Fri - Jun 25, 2021	20:00	0.4	21.9	38.0	N	NO	41.6	20.8	54.2	-
Fri - Jun 25, 2021	21:00	0.0	18.9	43.3	N	NO	28.6	20.7	50.5	-
Fri - Jun 25, 2021	22:00	0.0	17.8	49.9	N	NO	23.3	20.2	44.5	-
Fri - Jun 25, 2021	23:00	1.8	17.8	56.9	N	NO	32.6	19.6	52.6	-
Sat - Jun 26, 2021	0:00	1.8	17.2	63.8	N	NO	31.4	18.8	52.3	-

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]	. Not Available (loss of power, equipment error) . Incomplete dataset (less than one hour) . Data discarded due to inspection interruption
Sat - Jun 26, 2021	1:00	1.8	16.2	70.4	N	NO	30.5	18.4	51.4	-
Sat - Jun 26, 2021	2:00	0.9	15.4	76.6	N	NO	20.5	18.6	40.5	-
Sat - Jun 26, 2021	3:00	2.3	15.6	78.9	N	NO	23.4	18.7	47.2	-
Sat - Jun 26, 2021	4:00	0.0	15.2	81.1	N	NO	34.5	21.1	51.4	-
Sat - Jun 26, 2021	5:00	0.4	15.1	84.4	N	NO	31.4	19.9	48.6	-
Sat - Jun 26, 2021	6:00	1.8	16.0	84.7	N	NO	32.4	21.4	49.5	-
Sat - Jun 26, 2021	7:00	2.7	18.2	80.0	N	NO	43.8	27.9	52.9	-
Sat - Jun 26, 2021	8:00	3.2	20.3	73.5	N	NO	38.7	26.1	50.9	-
Sat - Jun 26, 2021	9:00	2.3	22.2	68.1	N	NO	32.6	22.8	57.0	-
Sat - Jun 26, 2021	10:00	4.5	24.8	57.2	N	NO	32.4	22.6	48.8	-
Sat - Jun 26, 2021	11:00	4.1	26.7	49.1	N	NO	45.5	22.7	70.4	-
Sat - Jun 26, 2021	12:00	5.4	26.4	41.9	N	NO	29.3	23.9	46.2	-
Sat - Jun 26, 2021	13:00	1.8	25.8	45.0	N	NO	46.0	22.5	72.4	-
Sat - Jun 26, 2021	14:00	3.2	25.9	42.8	N	NO	44.8	22.7	68.0	-
Sat - Jun 26, 2021	15:00	5.0	26.4	42.3	N	NO	33.1	24.4	49.0	-
Sat - Jun 26, 2021	16:00	4.1	28.1	38.0	N	NO	37.9	22.8	59.4	-
Sat - Jun 26, 2021	17:00	0.9	25.8	43.6	N	NO	27.9	22.8	46.9	-
Sat - Jun 26, 2021	18:00	0.0	25.9	43.8	N	NO	28.2	21.5	48.3	-
Sat - Jun 26, 2021	19:00	0.0	23.6	48.7	N	NO	27.2	20.8	50.0	-
Sat - Jun 26, 2021	20:00	0.4	21.0	58.4	N	NO	27.9	20.7	46.7	-
Sat - Jun 26, 2021	21:00	0.0	19.9	60.2	N	NO	25.3	20.4	49.2	-
Sat - Jun 26, 2021	22:00	0.0	18.3	67.4	N	NO	25.3	22.7	50.4	-
Sat - Jun 26, 2021	23:00	0.0	16.6	77.8	N	NO	21.9	19.0	35.0	-
Sun - Jun 27, 2021	0:00	0.0	16.1	84.3	N	NO	20.9	18.3	45.6	-
Sun - Jun 27, 2021	1:00	0.0	15.1	89.6	N	NO	19.3	18.3	32.8	-
Sun - Jun 27, 2021	2:00	0.0	14.2	94.2	N	YES	21.6	18.3	49.6	-
Sun - Jun 27, 2021	3:00	0.0	13.6	97.1	N	YES	26.5	18.3	46.1	-
Sun - Jun 27, 2021	4:00	0.0	13.0	98.5	N	YES	44.6	22.3	67.4	-
Sun - Jun 27, 2021	5:00	0.0	12.9	99.0	N	YES	35.9	19.6	56.0	-
Sun - Jun 27, 2021	6:00	0.0	14.3	99.0	N	YES	26.6	19.5	40.9	-
Sun - Jun 27, 2021	7:00	0.4	18.9	86.4	N	NO	35.3	19.5	57.3	-
Sun - Jun 27, 2021	8:00	0.4	22.2	70.8	N	NO	34.7	21.3	60.9	-
Sun - Jun 27, 2021	9:00	0.9	24.2	62.3	N	NO	41.3	22.9	66.7	-
Sun - Jun 27, 2021	10:00	0.9	26.2	51.8	N	NO	51.4	23.3	80.3	-
Sun - Jun 27, 2021	11:00	1.8	28.1	36.7	N	NO	27.1	22.3	47.1	-
Sun - Jun 27, 2021	12:00	3.2	28.1	35.1	N	NO	31.4	22.4	50.7	-
Sun - Jun 27, 2021	13:00	1.4	28.3	33.2	N	NO	26.7	21.9	47.4	-
Sun - Jun 27, 2021	14:00	6.8	27.7	36.8	N	NO	38.1	22.9	48.6	-
Sun - Jun 27, 2021	15:00	3.6	26.0	43.3	N	NO	36.4	24.2	57.5	-
Sun - Jun 27, 2021	16:00	2.3	25.6	46.4	N	NO	29.6	22.6	48.5	-
Sun - Jun 27, 2021	17:00	3.6	28.8	34.6	N	NO	42.7	21.8	63.4	-
Sun - Jun 27, 2021	18:00	0.4	26.8	38.6	N	NO	51.7	23.4	60.8	-
Sun - Jun 27, 2021	19:00	0.9	22.2	52.2	N	NO	45.3	24.7	56.2	-
Sun - Jun 27, 2021	20:00	0.4	21.4	55.8	N	NO	32.8	22.4	44.3	-

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]	. Not Available (loss of power, equipment error) . Incomplete dataset (less than one hour) . Data discarded due to inspection interruption
Sun - Jun 27, 2021	21:00	0.0	19.2	68.1	N	NO	27.6	20.8	54.1	-
Sun - Jun 27, 2021	22:00	0.4	18.4	73.8	N	NO	27.8	20.7	48.9	-
Sun - Jun 27, 2021	23:00	0.0	17.3	79.7	N	NO	34.1	18.9	56.8	-
Mon - Jun 28, 2021	0:00	0.9	16.4	84.1	N	NO	25.2	18.4	42.0	-
Mon - Jun 28, 2021	1:00	4.5	17.2	71.6	N	NO	30.7	23.9	43.0	-
Mon - Jun 28, 2021	2:00	4.1	16.4	75.9	N	NO	28.5	20.7	54.8	-
Mon - Jun 28, 2021	3:00	1.8	15.1	82.3	N	NO	24.8	19.4	45.4	-
Mon - Jun 28, 2021	4:00	2.7	14.4	87.5	N	NO	35.4	23.0	53.8	-
Mon - Jun 28, 2021	5:00	3.6	14.2	88.9	N	NO	39.3	24.4	55.4	-
Mon - Jun 28, 2021	6:00	4.1	14.5	88.7	N	NO	33.3	22.5	58.2	-
Mon - Jun 28, 2021	7:00	3.6	16.2	83.0	N	NO	33.4	21.4	57.9	-
Mon - Jun 28, 2021	8:00	3.6	17.9	75.8	N	NO	43.2	21.4	64.8	-
Mon - Jun 28, 2021	9:00	5.0	19.6	68.9	N	NO	46.3	23.9	71.3	-
Mon - Jun 28, 2021	10:00	5.9	21.2	63.8	N	NO	30.3	24.9	47.8	-
Mon - Jun 28, 2021	11:00	5.4	23.1	56.8	N	NO	28.8	23.4	48.2	-
Mon - Jun 28, 2021	12:00	5.0	24.1	51.4	N	NO	28.1	23.5	47.1	-
Mon - Jun 28, 2021	13:00	4.1	25.0	46.6	N	NO	47.1	22.7	76.1	-
Mon - Jun 28, 2021	14:00	3.6	26.0	43.2	N	NO	28.6	22.6	49.3	-
Mon - Jun 28, 2021	15:00	4.1	26.4	40.4	N	NO	41.8	22.0	66.4	-
Mon - Jun 28, 2021	16:00	2.7	26.7	38.6	N	NO	44.4	22.6	66.1	-
Mon - Jun 28, 2021	17:00	2.3	26.7	36.8	N	NO	26.5	22.4	46.4	-
Mon - Jun 28, 2021	18:00	2.3	26.4	34.6	N	NO	26.6	21.9	47.4	-
Mon - Jun 28, 2021	19:00	0.4	23.7	35.4	N	NO	25.0	21.0	50.5	-
Mon - Jun 28, 2021	20:00	0.0	21.1	44.2	N	NO	23.7	20.5	48.1	-
Mon - Jun 28, 2021	21:00	0.0	18.6	50.4	N	NO	25.2	20.4	45.9	-
Mon - Jun 28, 2021	22:00	0.0	16.5	59.2	N	NO	24.6	22.7	48.8	-
Mon - Jun 28, 2021	23:00	0.0	15.2	64.2	N	NO	29.0	19.8	50.7	-
Tue - Jun 29, 2021	0:00	0.0	14.1	73.8	N	NO	23.5	18.4	48.6	-
Tue - Jun 29, 2021	1:00	0.0	13.2	74.6	N	NO	23.9	18.2	49.3	-
Tue - Jun 29, 2021	2:00	0.0	12.5	75.0	N	NO	20.9	18.6	40.9	-
Tue - Jun 29, 2021	3:00	0.4	12.4	74.0	N	NO	22.8	18.9	44.1	-
Tue - Jun 29, 2021	4:00	0.0	11.1	83.2	N	NO	29.9	19.8	46.2	-
Tue - Jun 29, 2021	5:00	0.0	10.8	89.6	N	NO	39.9	19.3	58.1	-
Tue - Jun 29, 2021	6:00	0.0	12.5	89.0	N	NO	28.9	19.5	50.4	-
Tue - Jun 29, 2021	7:00	0.0	18.2	73.9	N	NO	53.2	20.3	83.0	-
Tue - Jun 29, 2021	8:00	0.9	21.1	59.4	N	NO	29.2	21.5	47.8	-
Tue - Jun 29, 2021	9:00	0.4	23.9	52.8	N	NO	-	-	-	Data discarded due to inspection interruption

Attachment D Vibration Monitoring Results

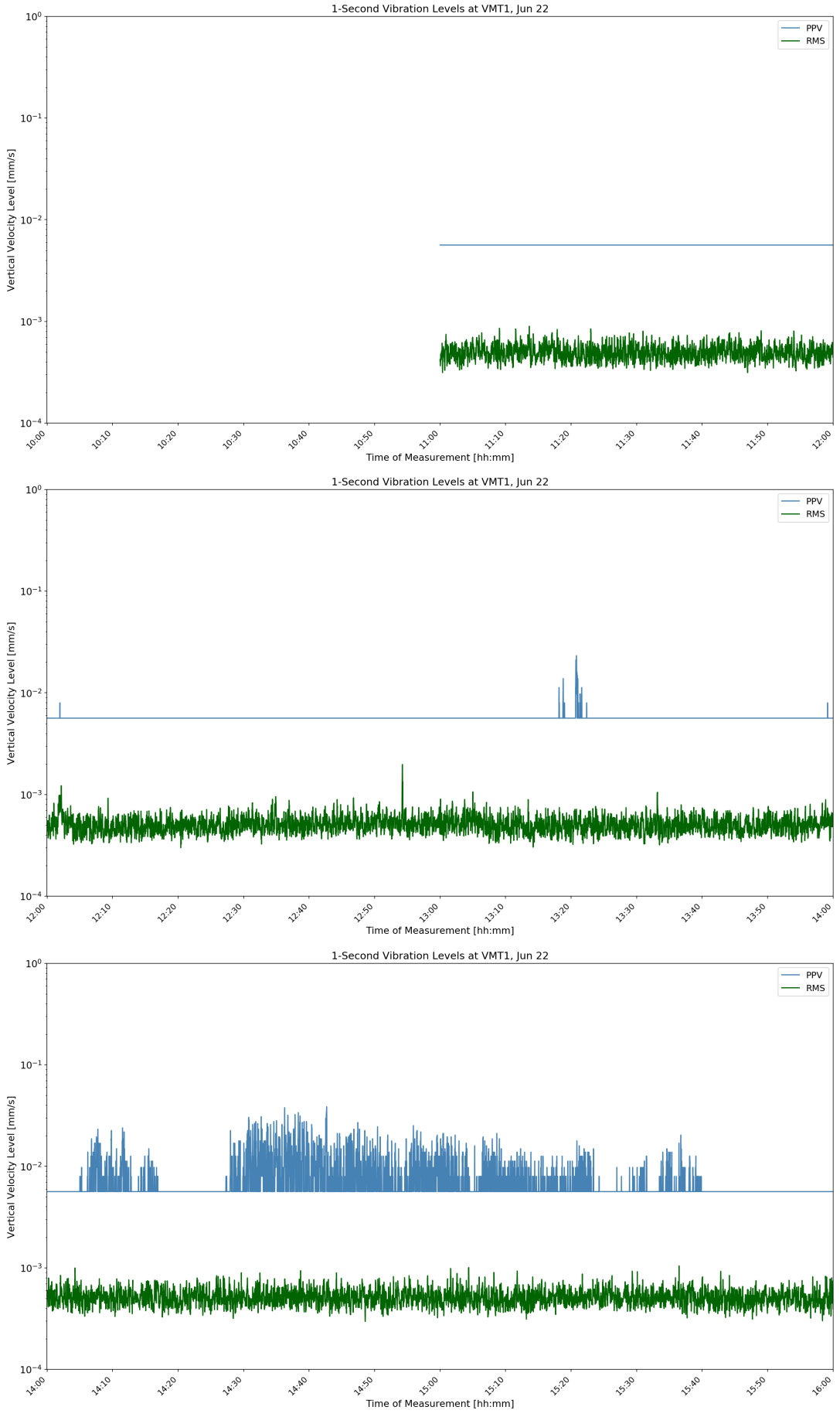


Figure D-1: VMT1 1-Second Velocity History Jun 22 10:00

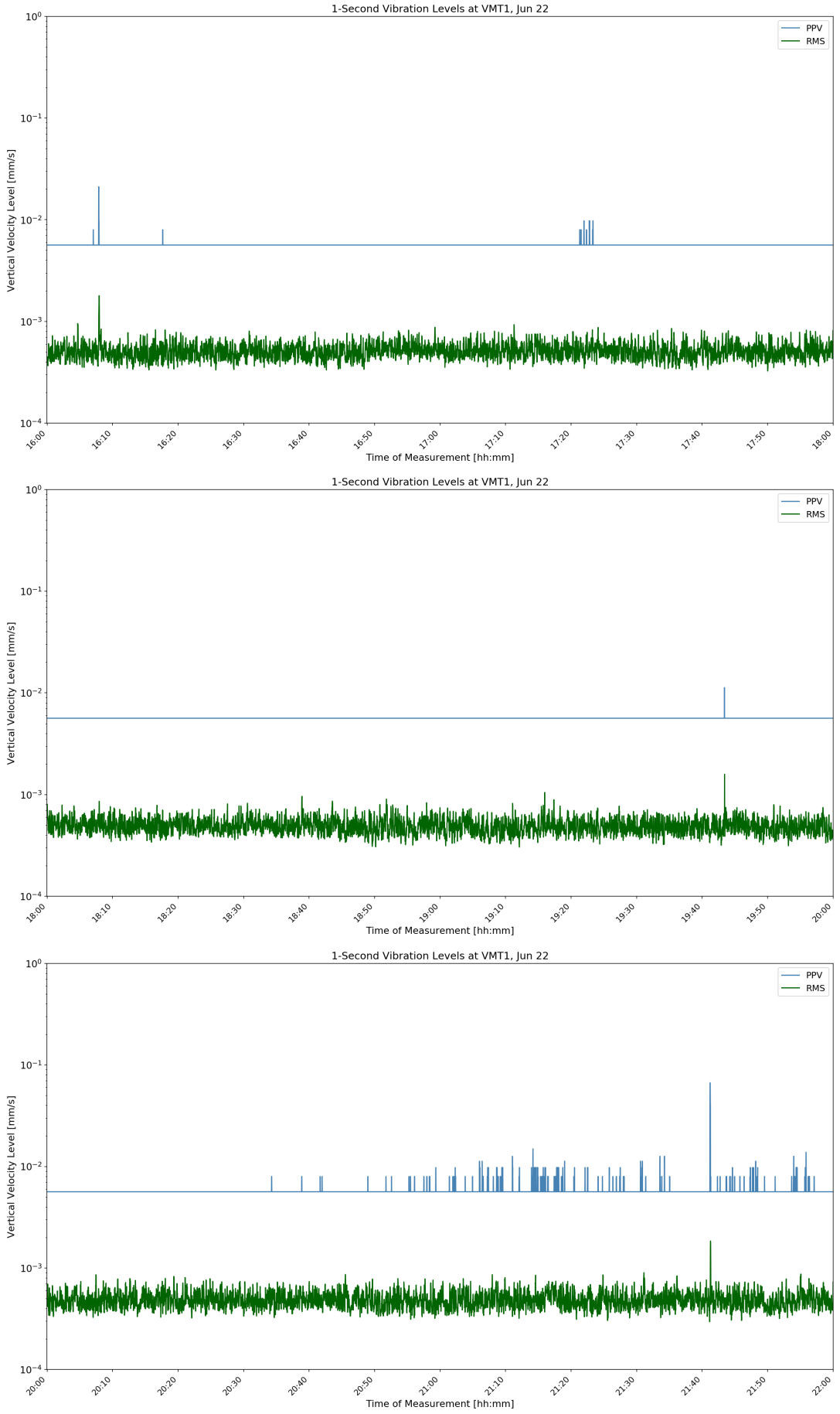
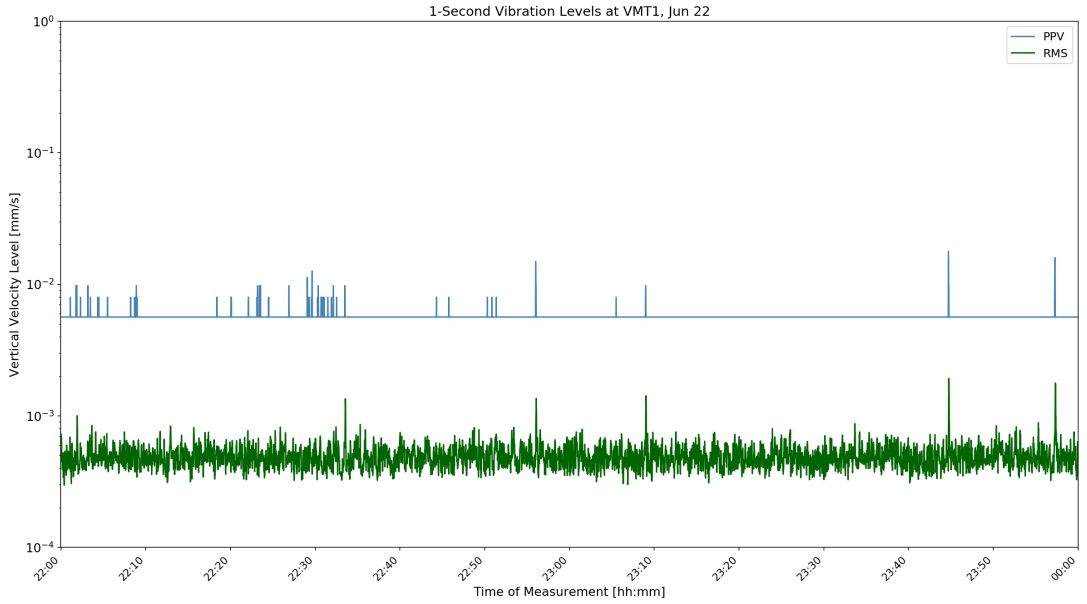
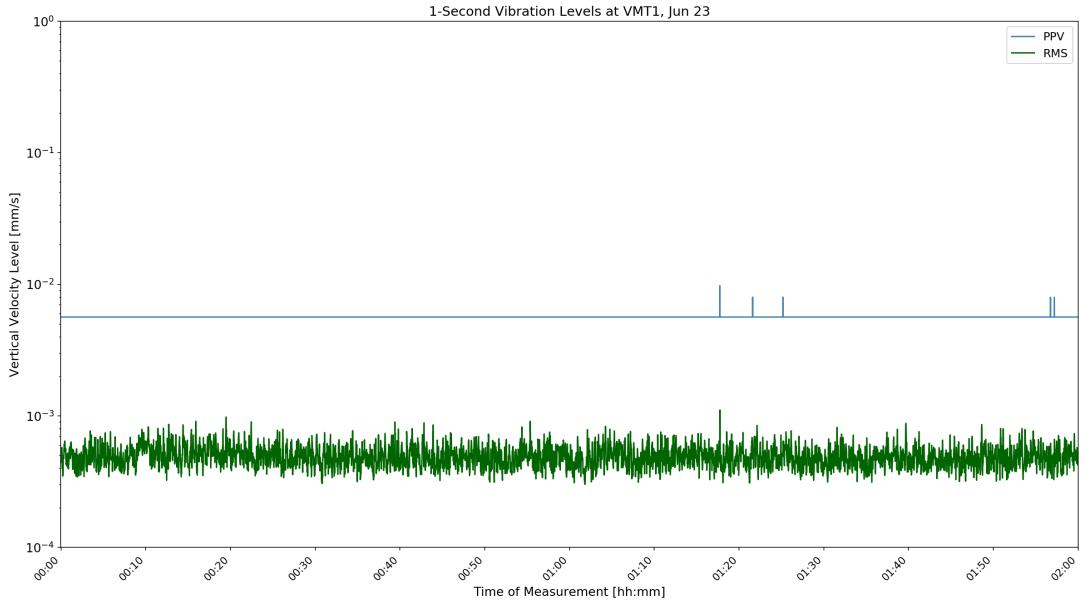


Figure D-2: VMT1 1-Second Velocity History Jun 22 16:00





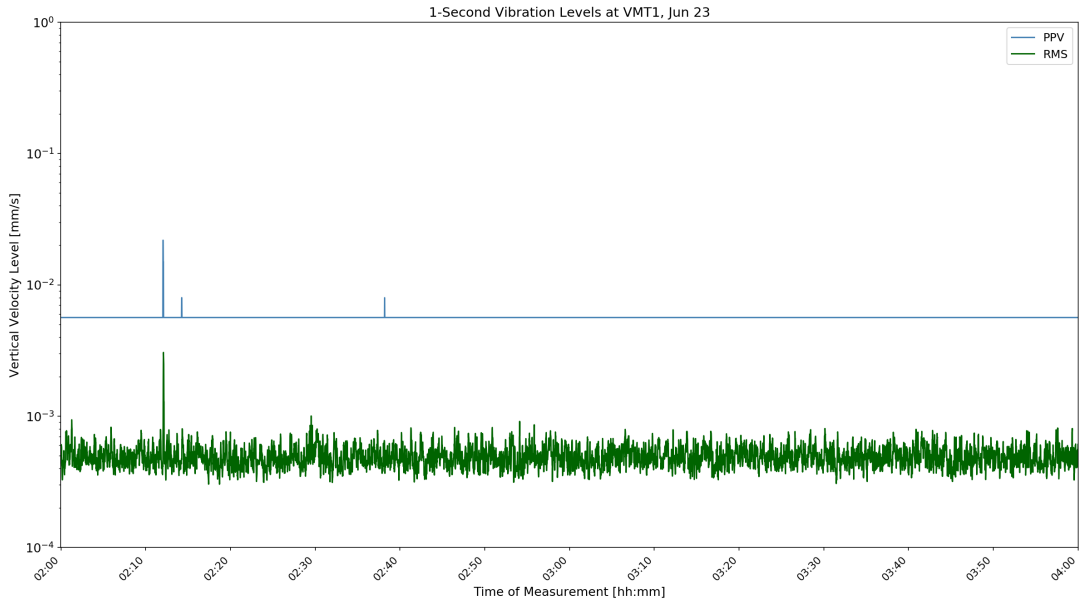


Figure D-3: VMT1 1-Second Velocity History Jun 23 22:00

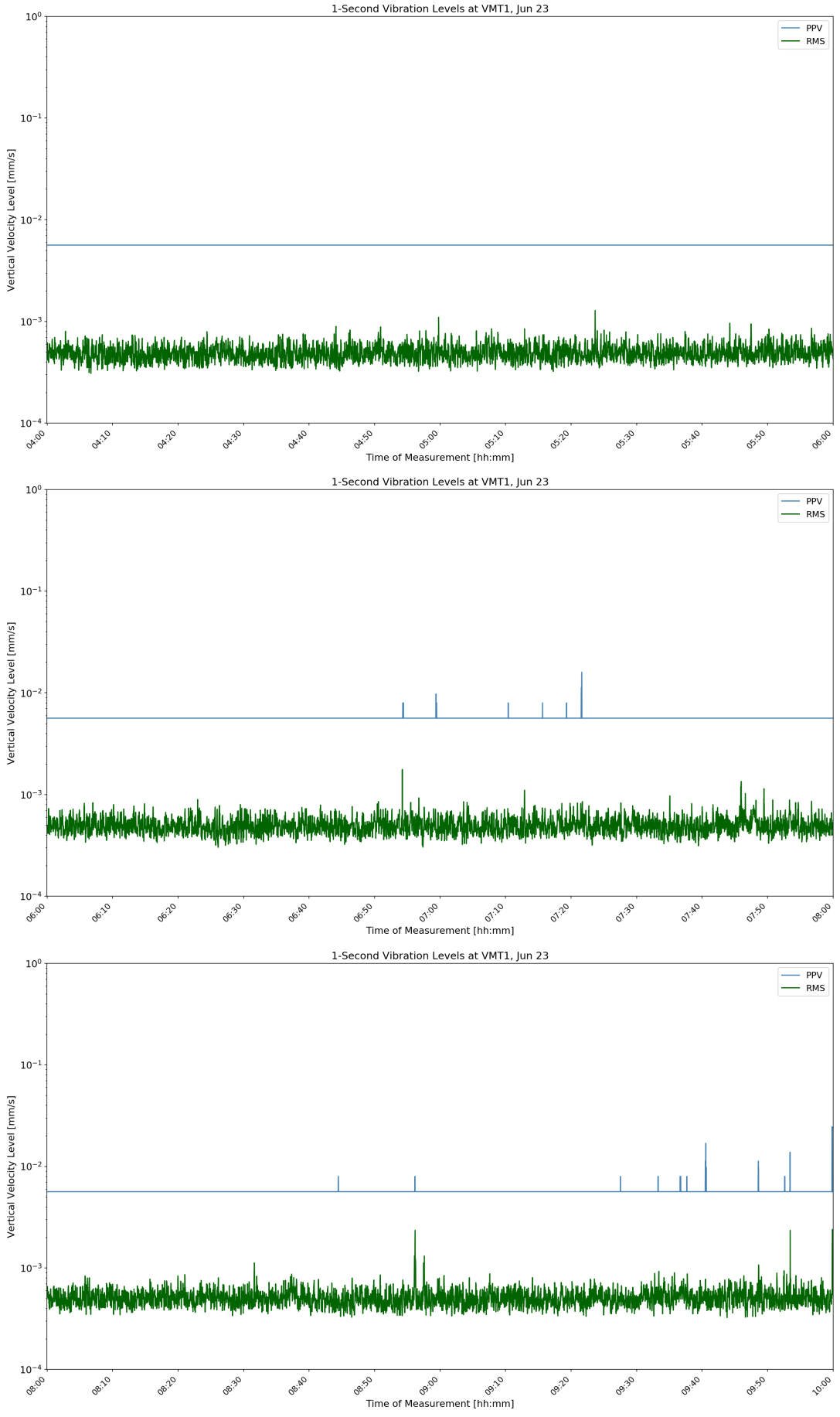


Figure D-4: VMT1 1-Second Velocity History Jun 23 04:00

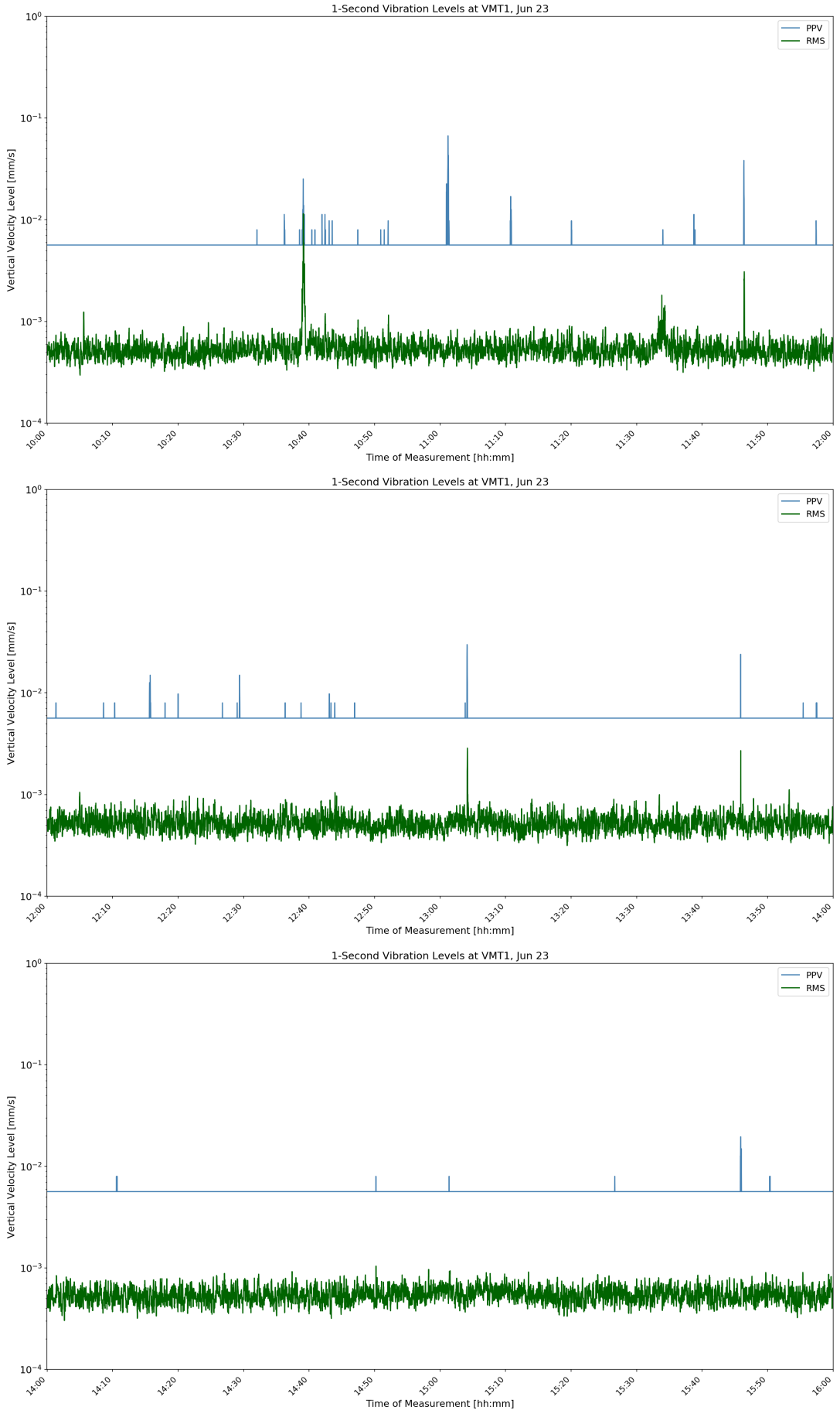


Figure D-5: VMT1 1-Second Velocity History Jun 23 10:00

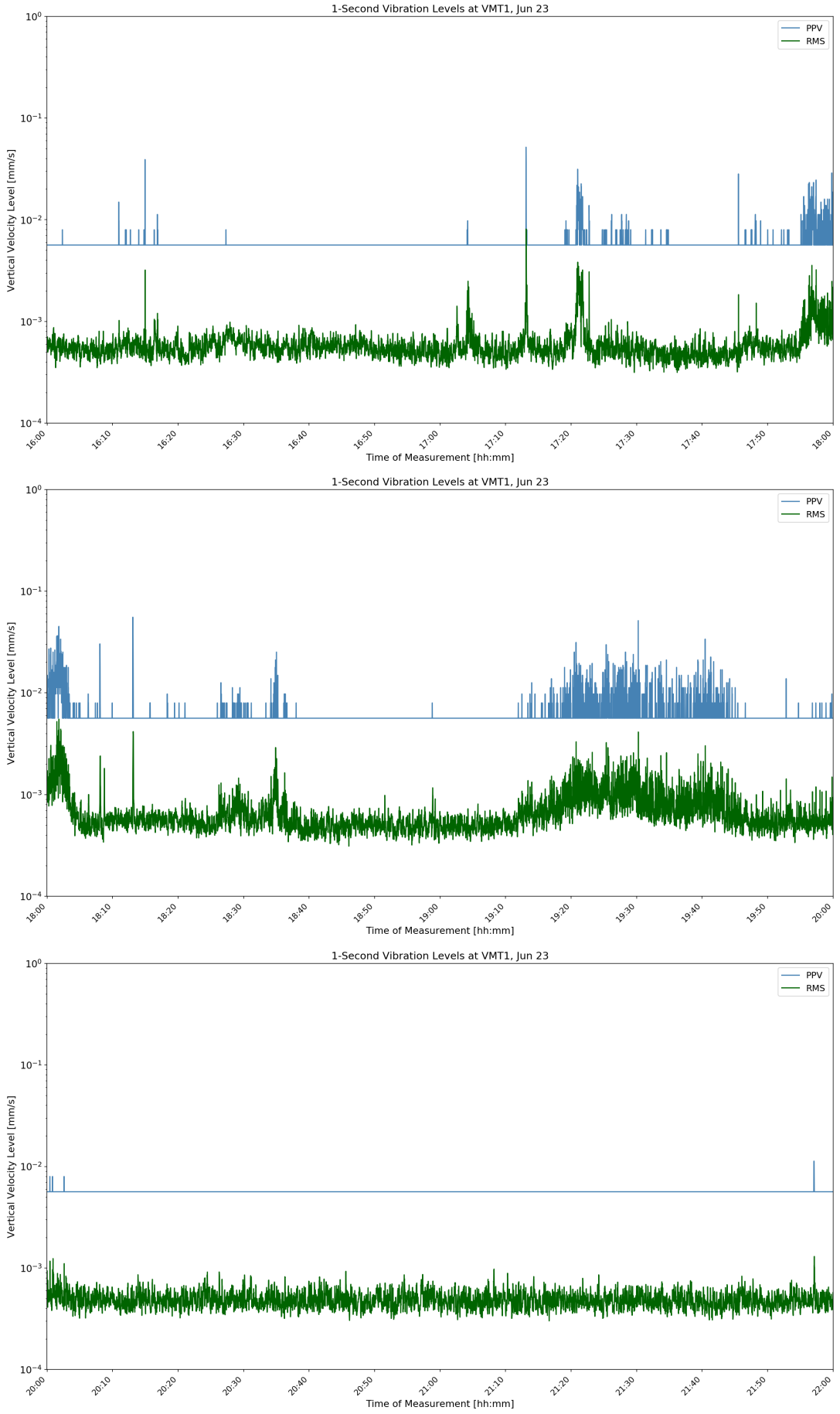


Figure D-6: VMT1 1-Second Velocity History Jun 23 16:00

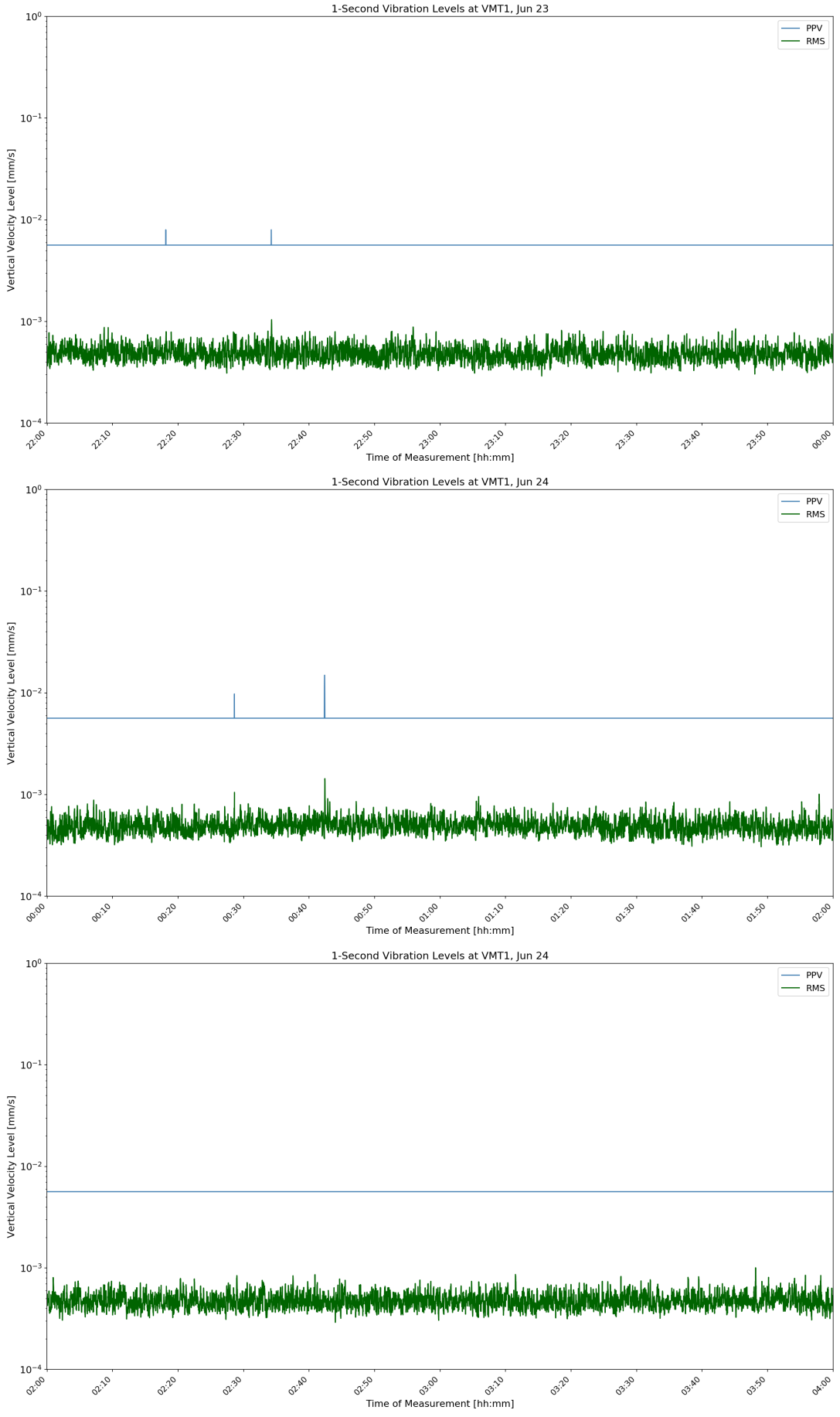


Figure D-7: VMT1 1-Second Velocity History Jun 24 22:00

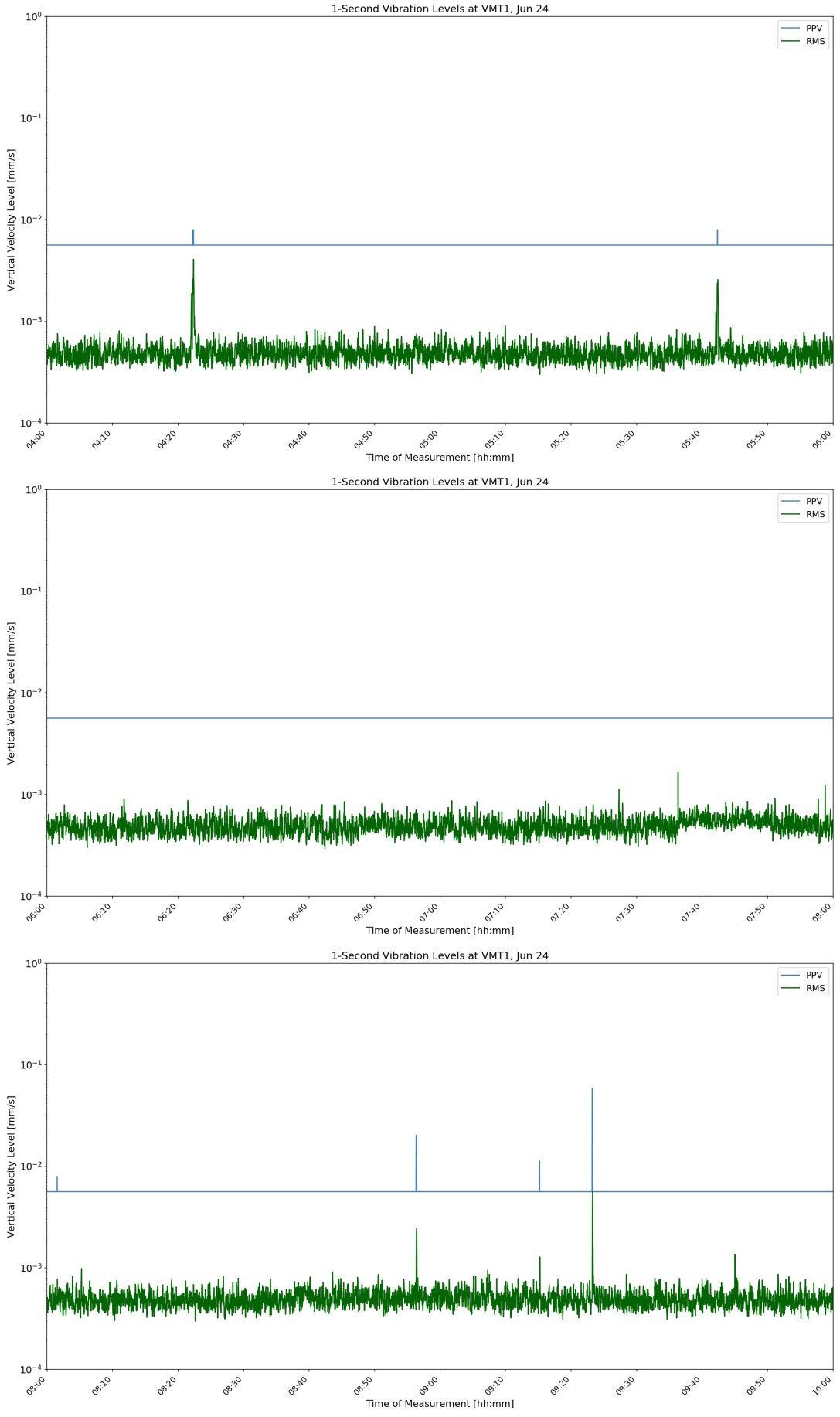


Figure D-8: VMT1 1-Second Velocity History Jun 24 04:00

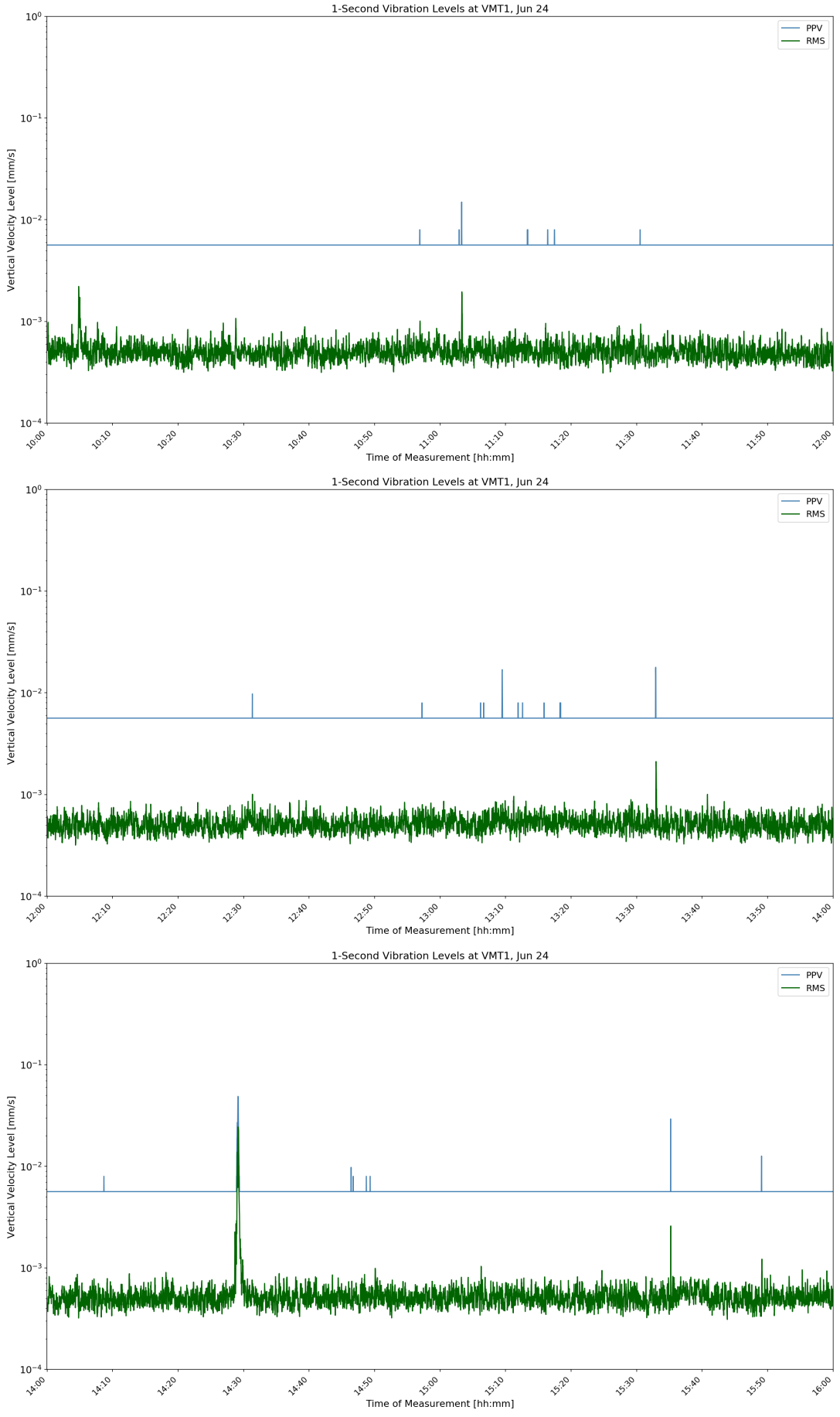


Figure D-9: VMT1 1-Second Velocity History Jun 24 10:00

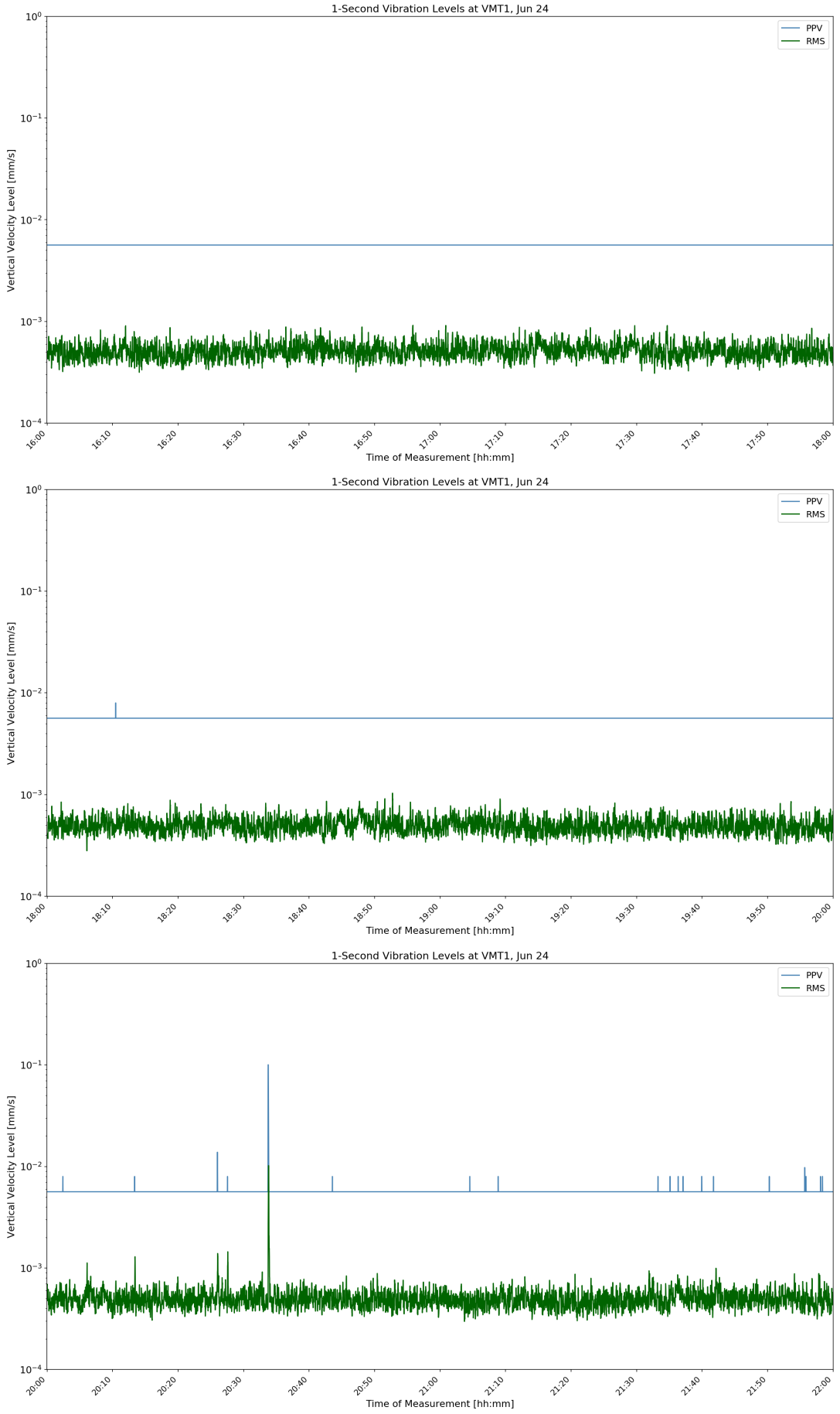


Figure D-10: VMT1 1-Second Velocity History Jun 24 16:00

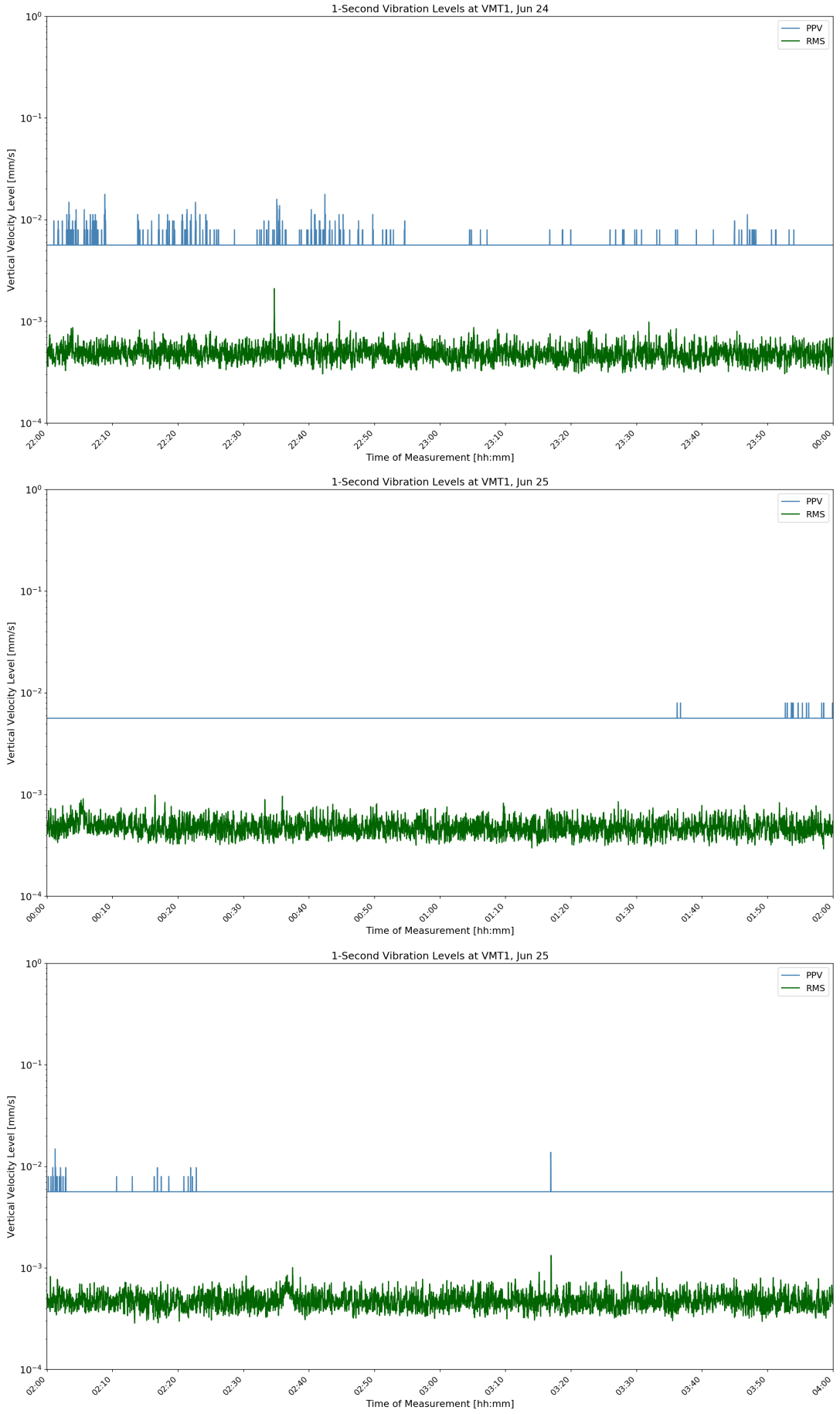


Figure D-11: VMT1 1-Second Velocity History Jun 25 22:00

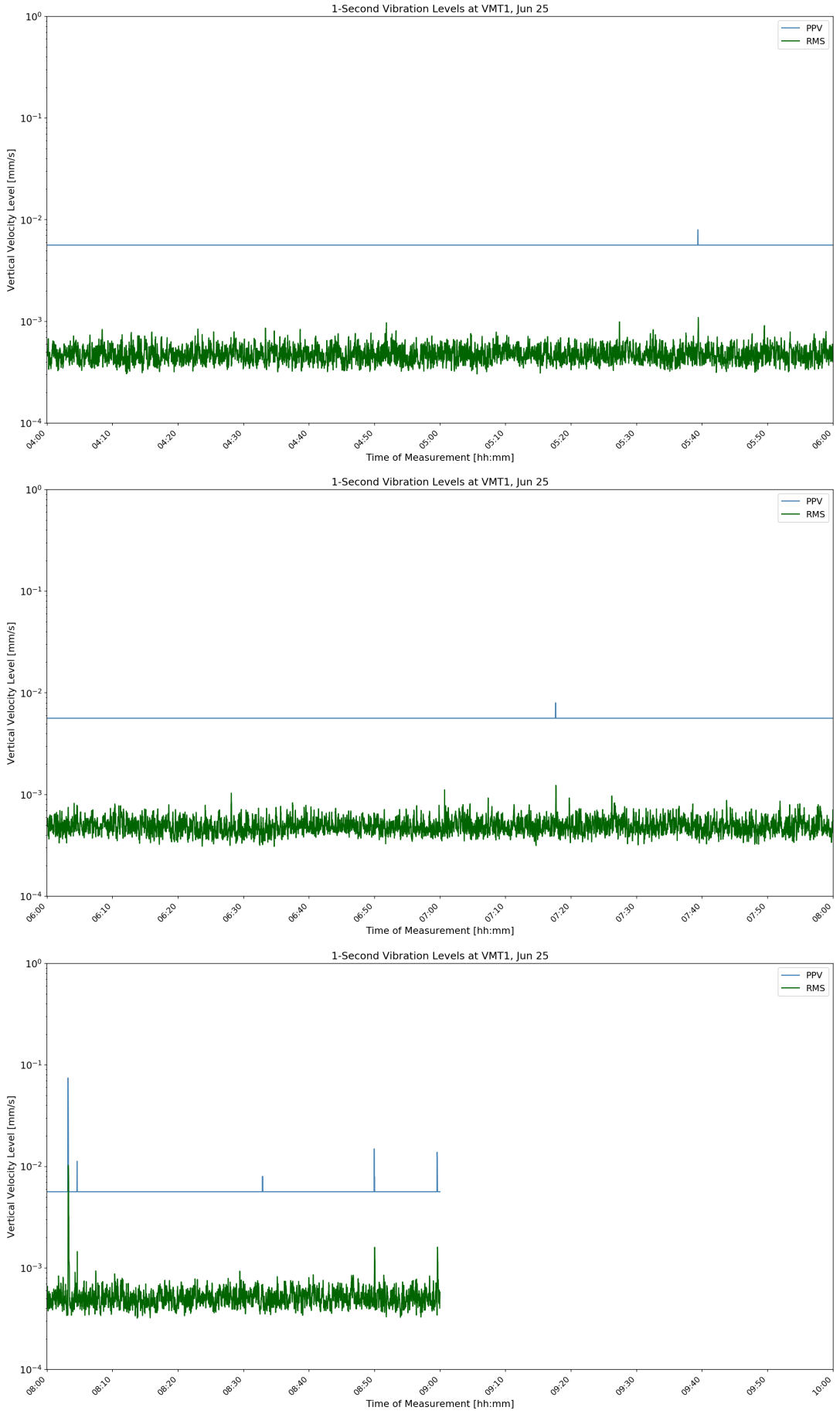


Figure D-12: VMT1 1-Second Velocity History Jun 25 04:00

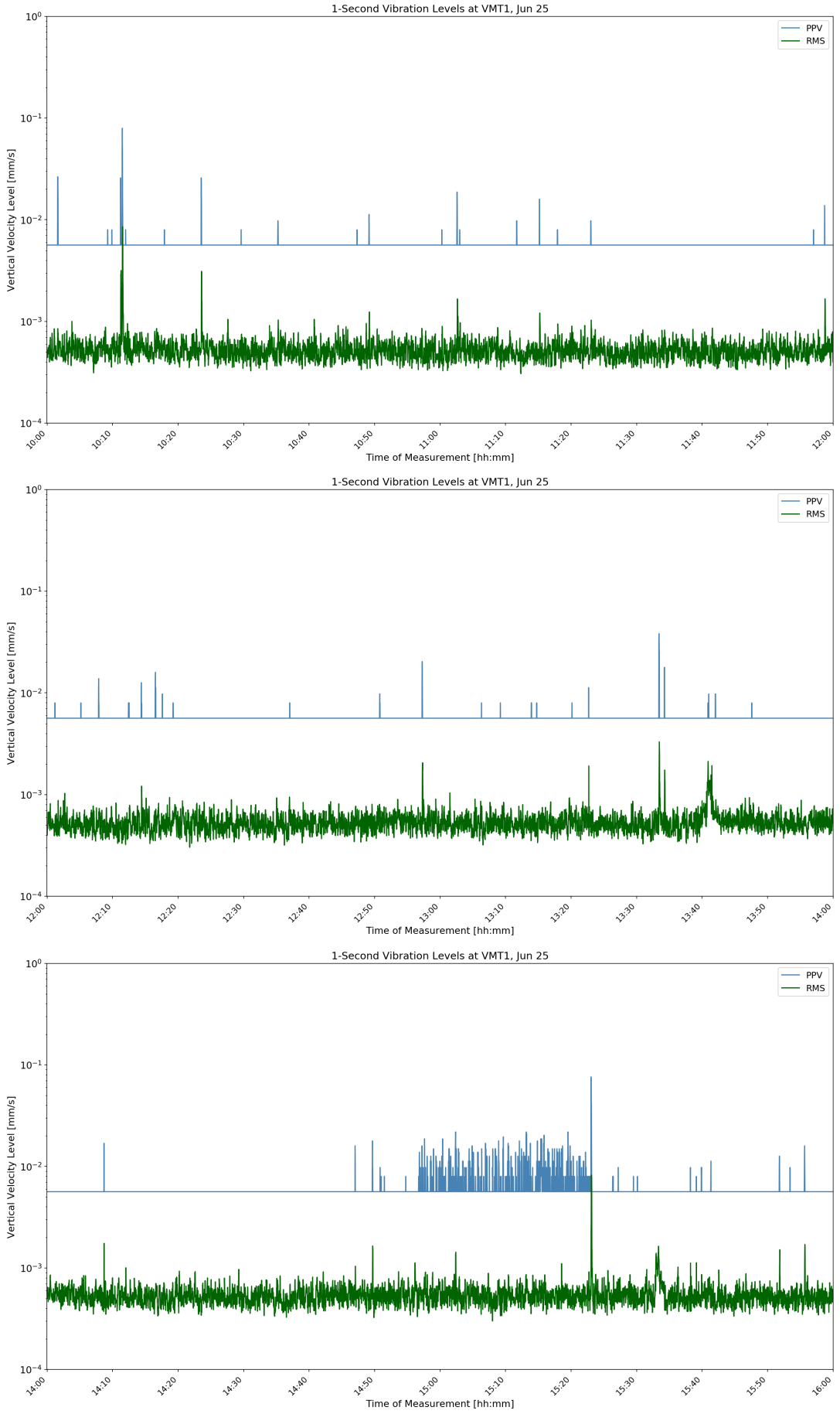


Figure D-13: VMT1 1-Second Velocity History Jun 25 10:00

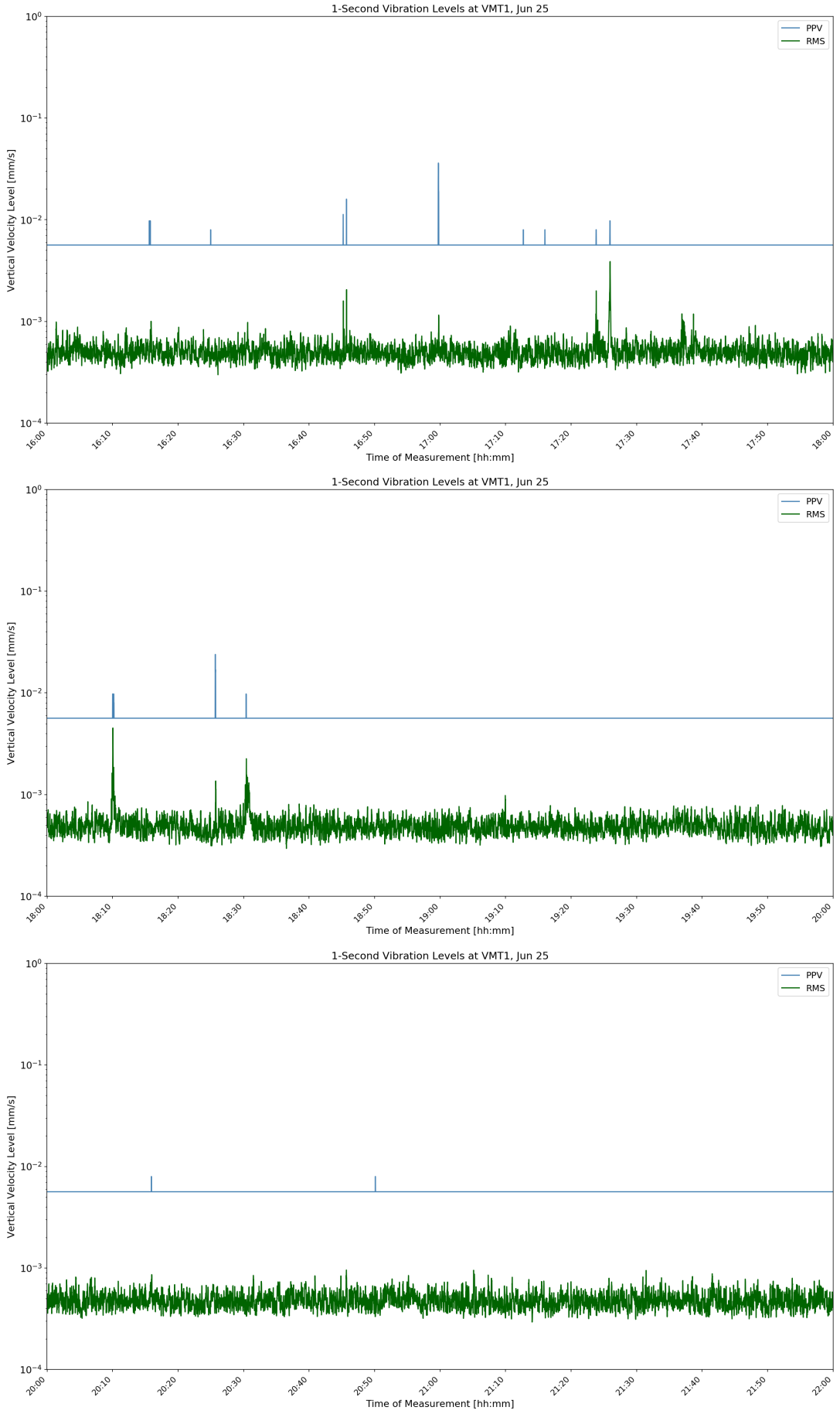


Figure D-14: VMT1 1-Second Velocity History Jun 25 16:00

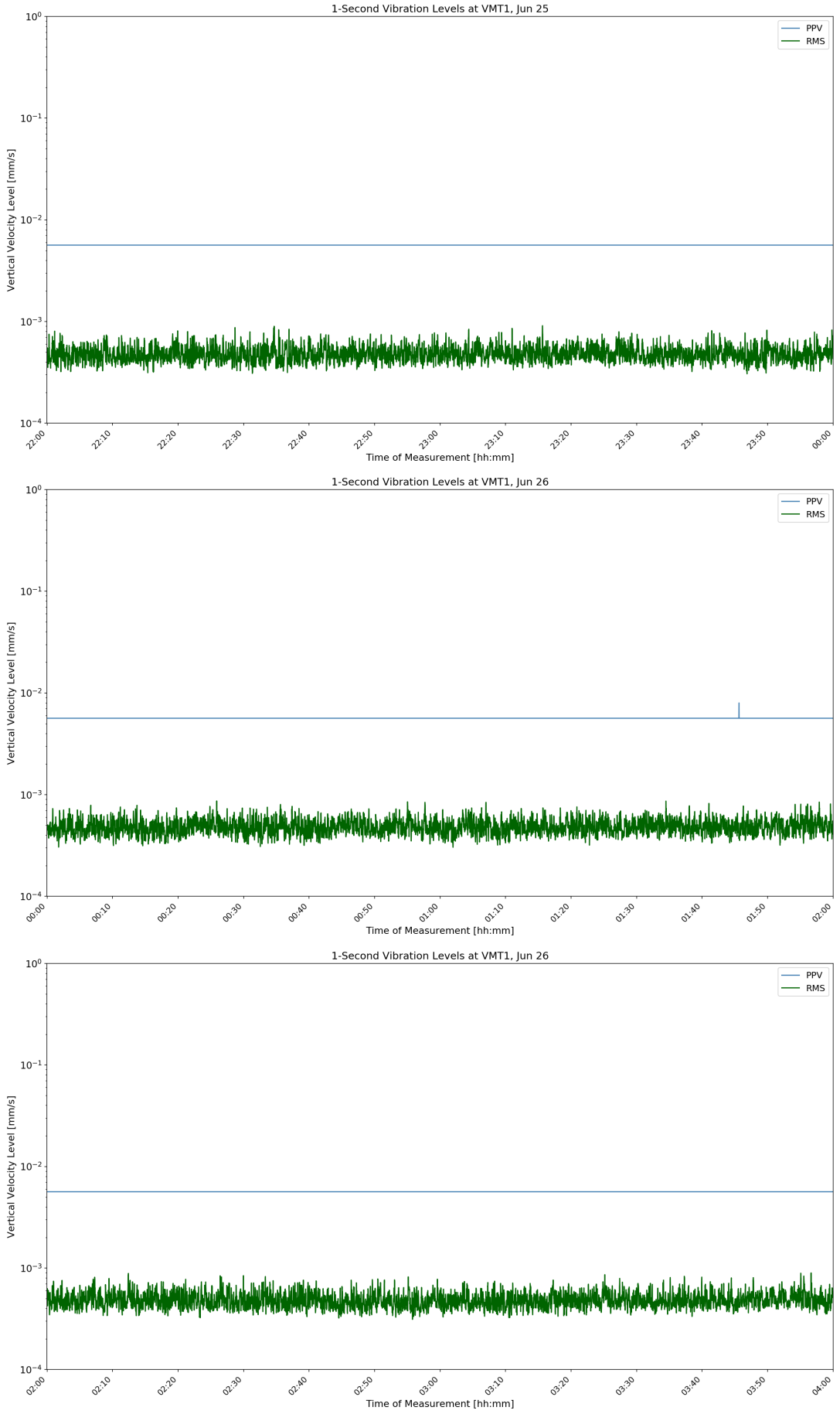


Figure D-15: VMT1 1-Second Velocity History Jun 26 22:00

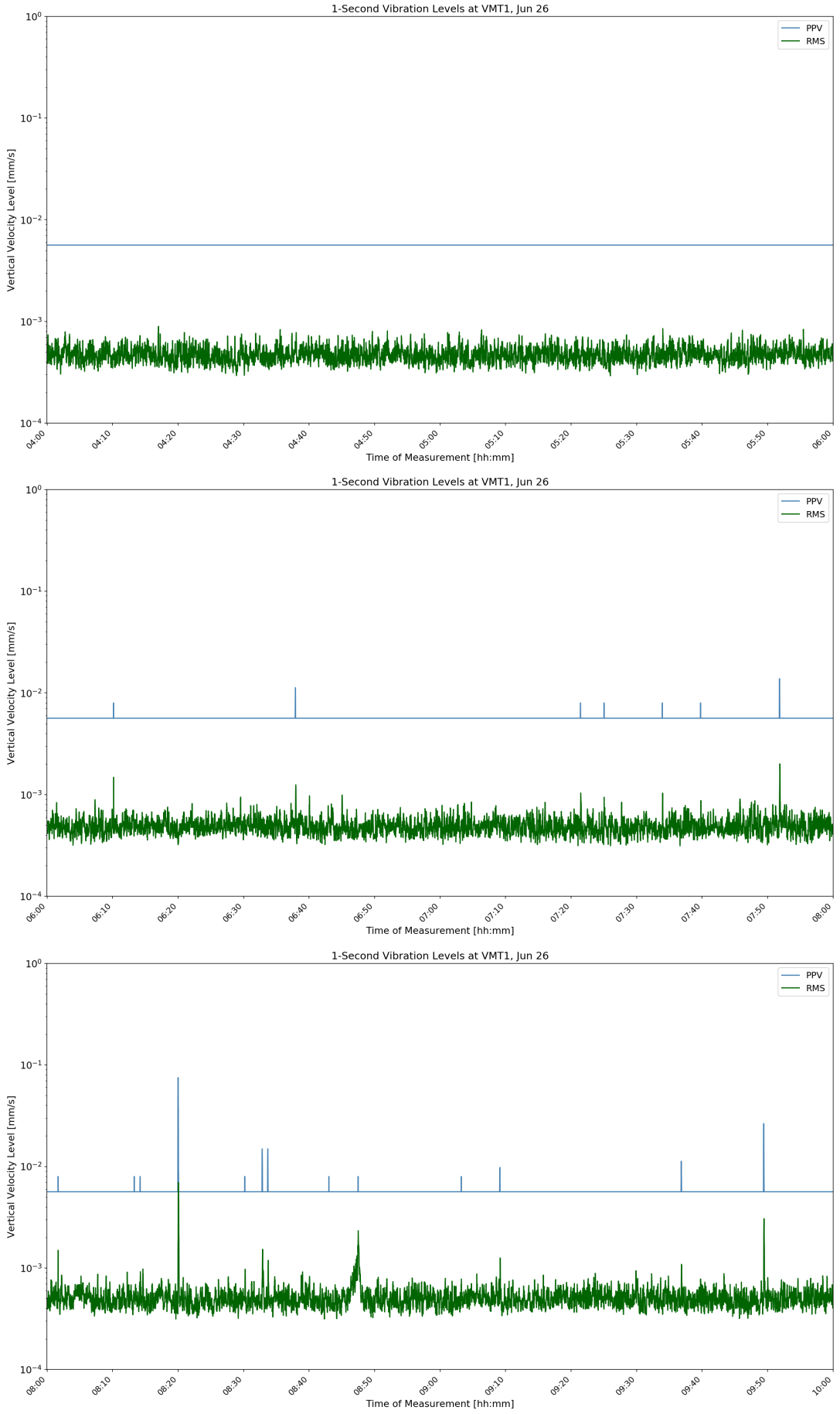


Figure D-16: VMT1 1-Second Velocity History Jun 26 04:00

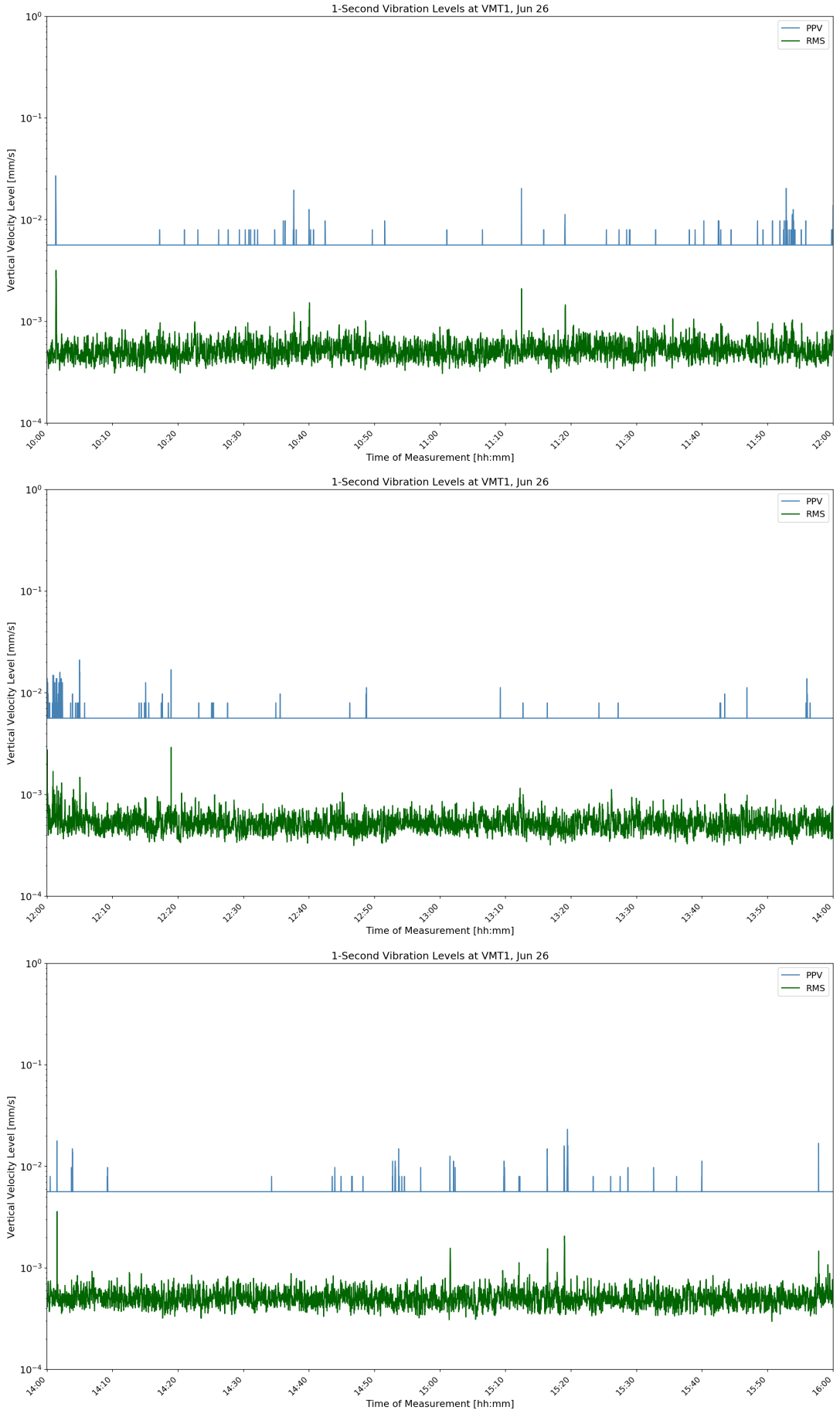


Figure D-17: VMT1 1-Second Velocity History Jun 26 10:00

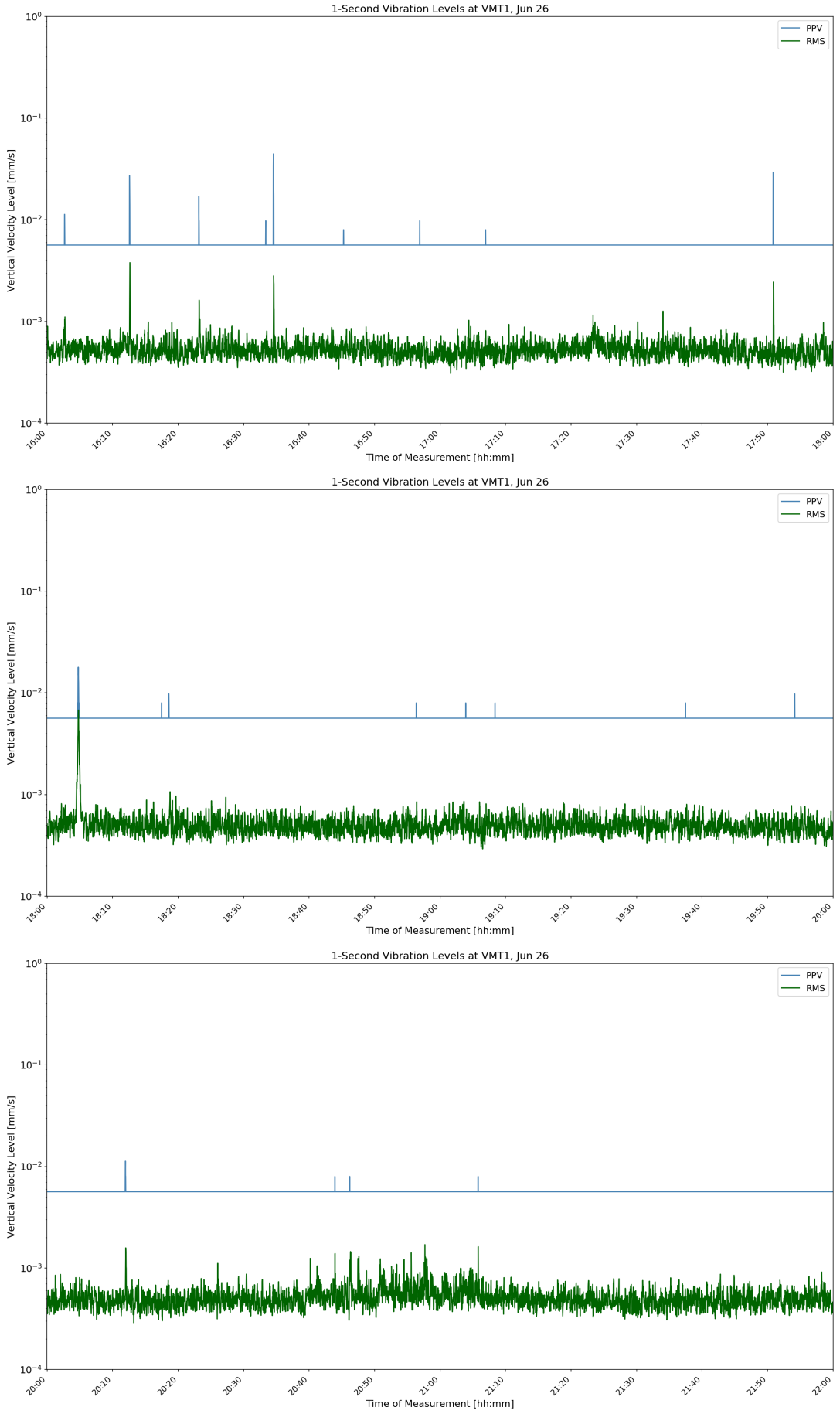


Figure D-18: VMT1 1-Second Velocity History Jun 26 16:00

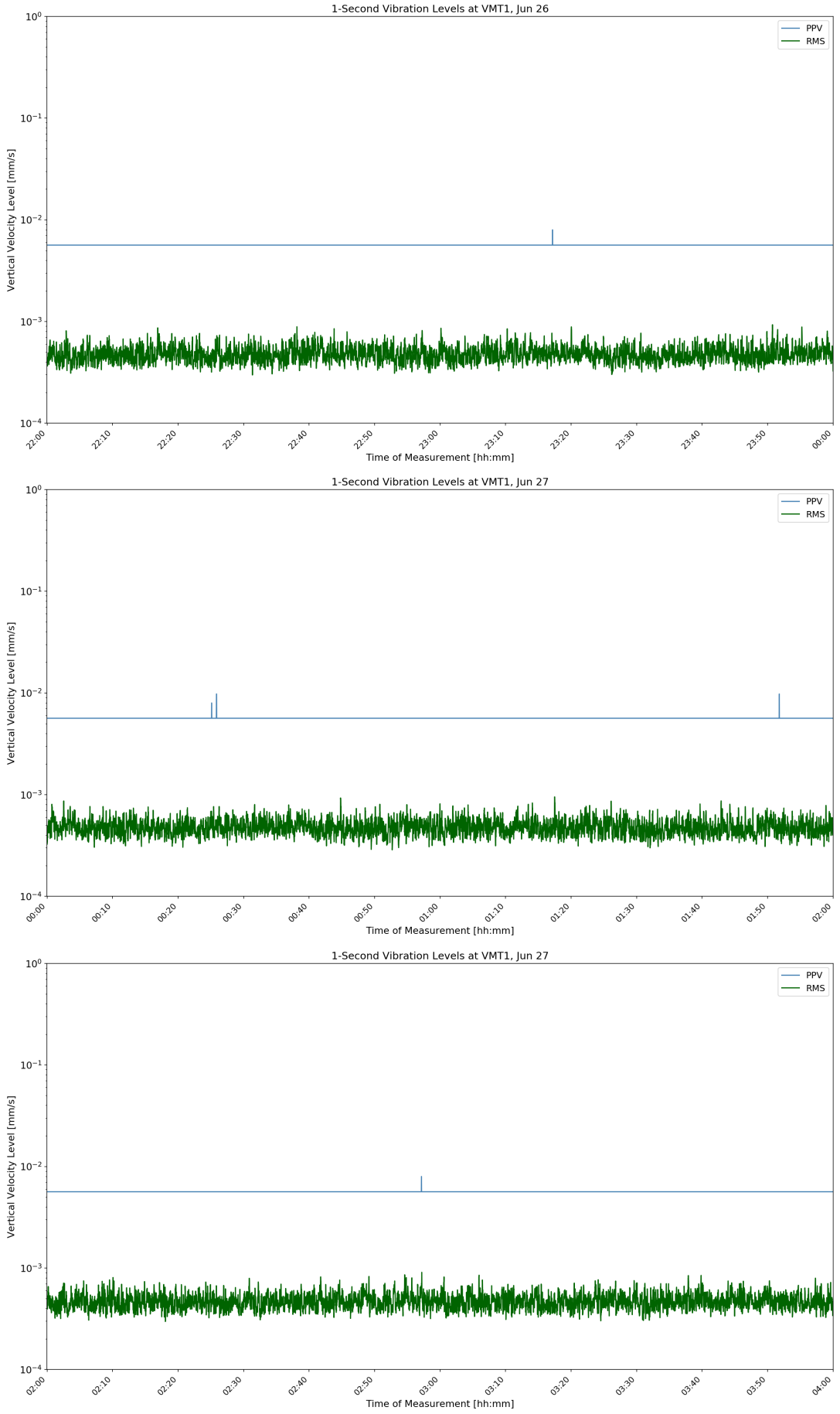


Figure D-19: VMT1 1-Second Velocity History Jun 27 22:00

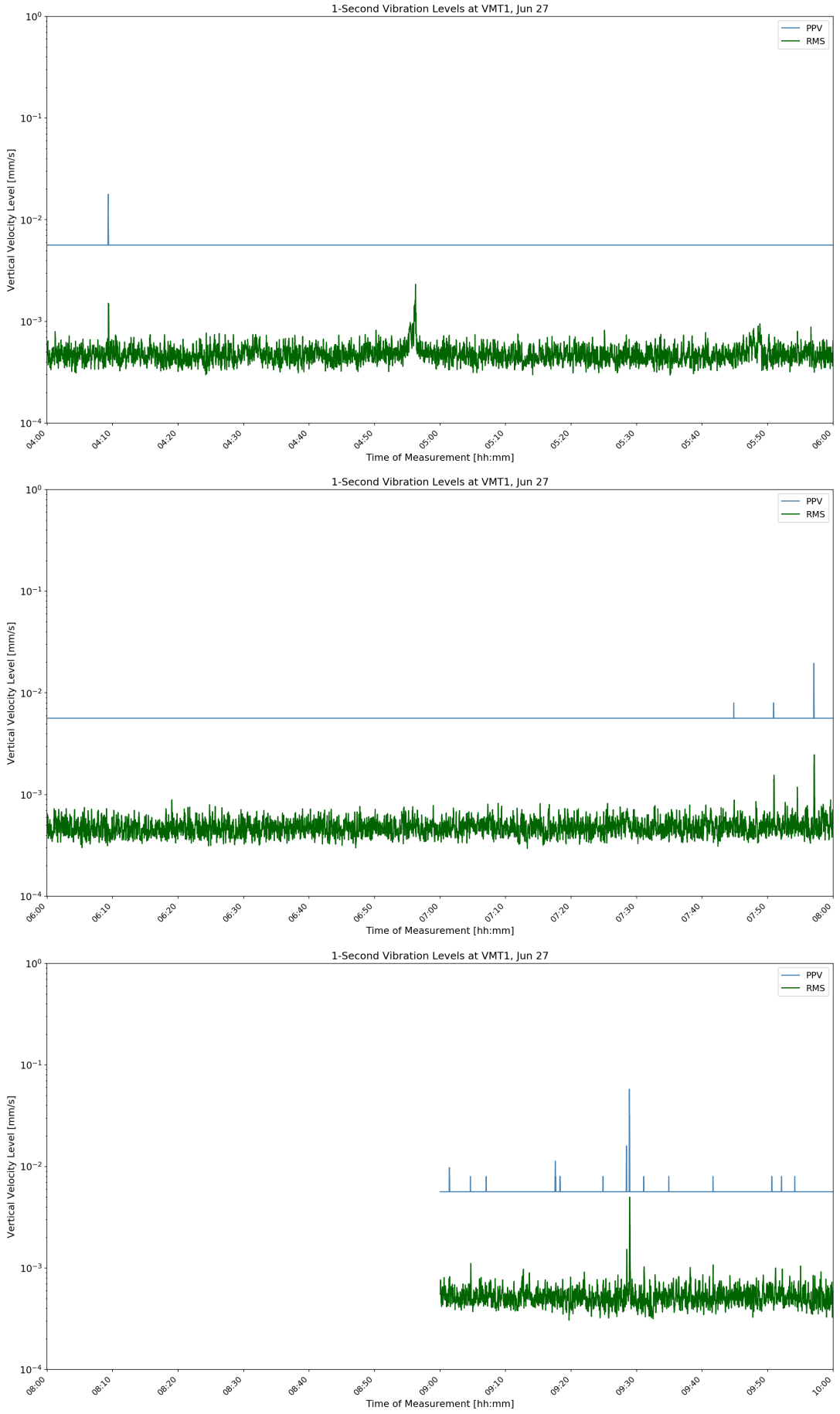


Figure D-20: VMT1 1-Second Velocity History Jun 27 04:00

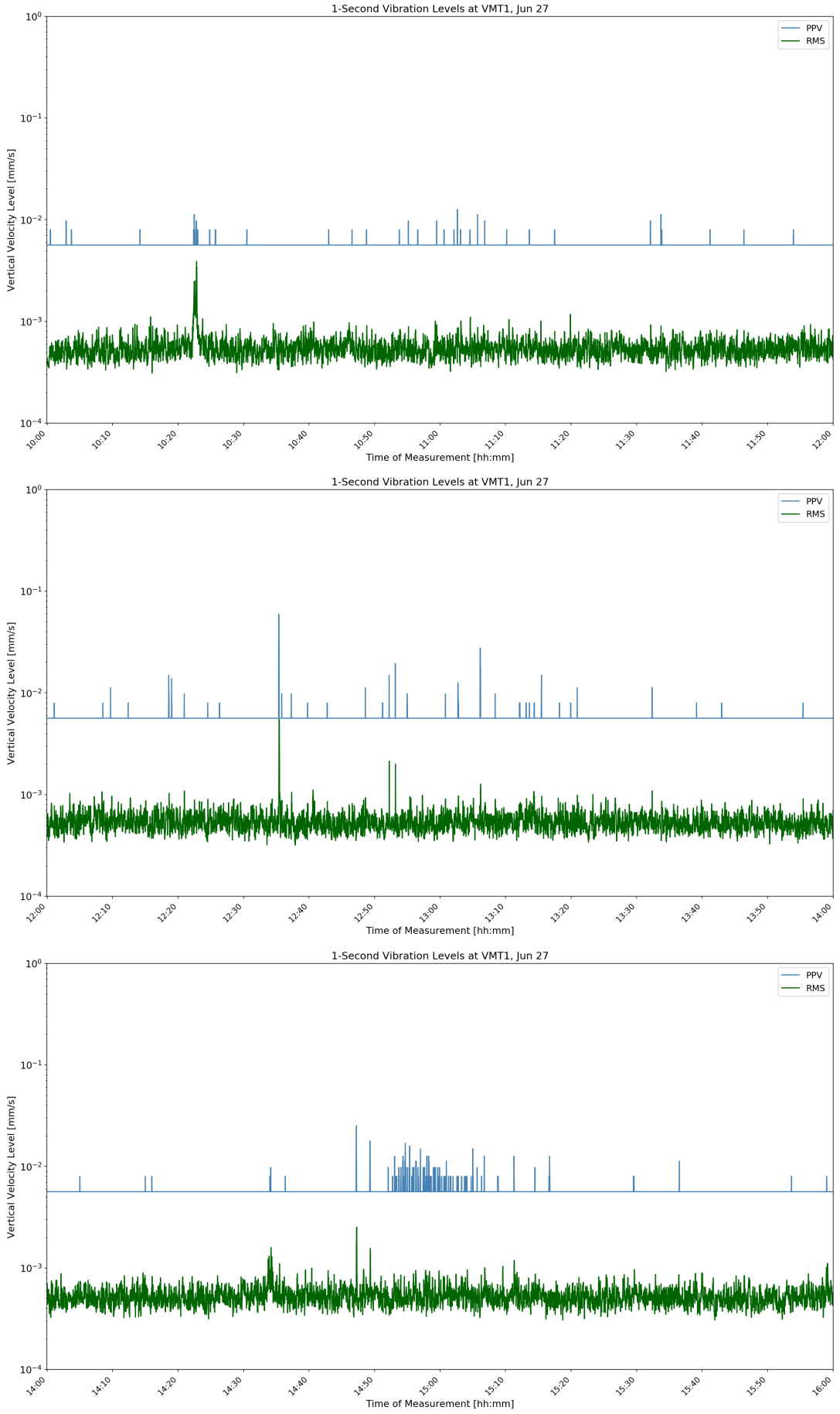


Figure D-21: VMT1 1-Second Velocity History Jun 27 10:00

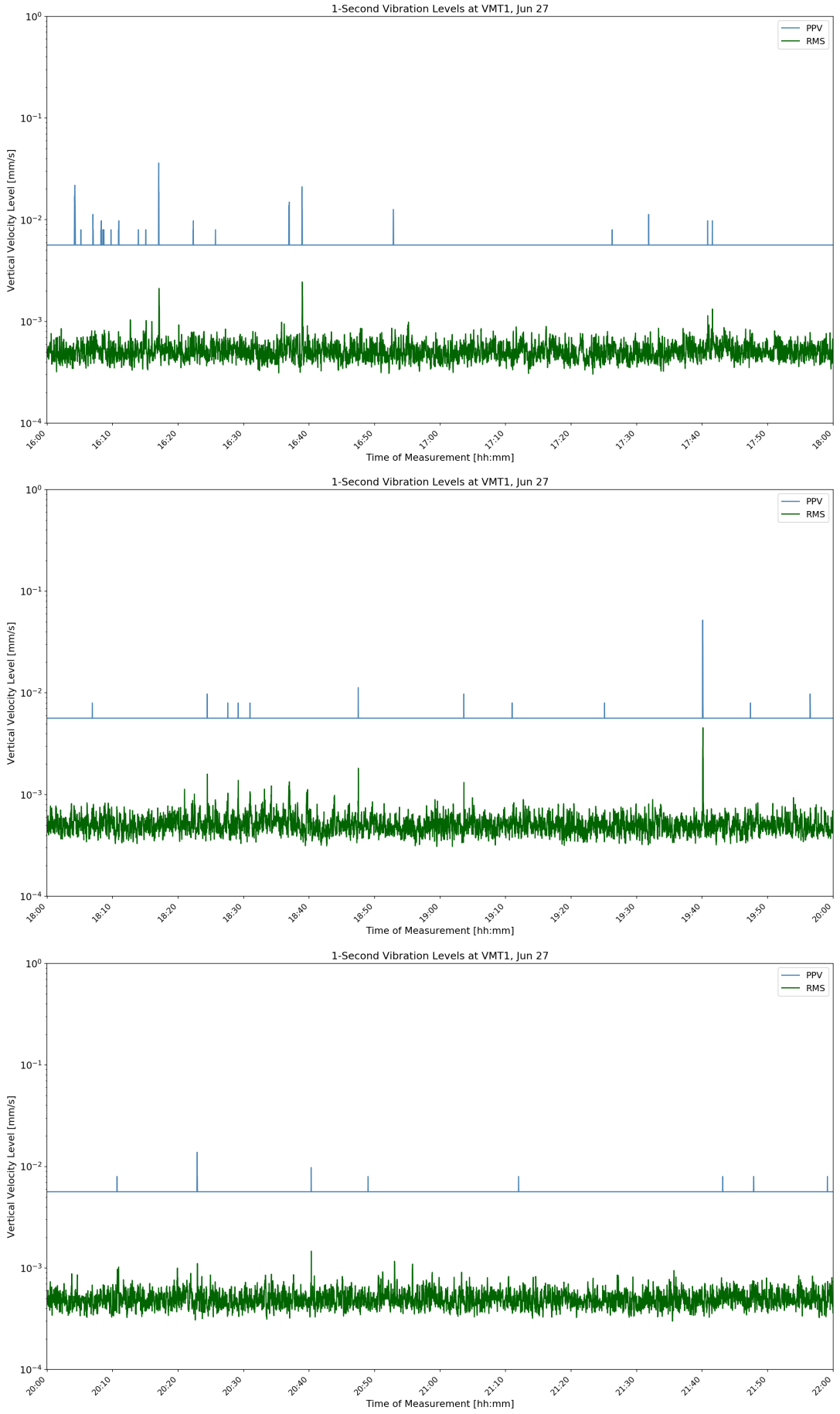


Figure D-22: VMT1 1-Second Velocity History Jun 27 16:00

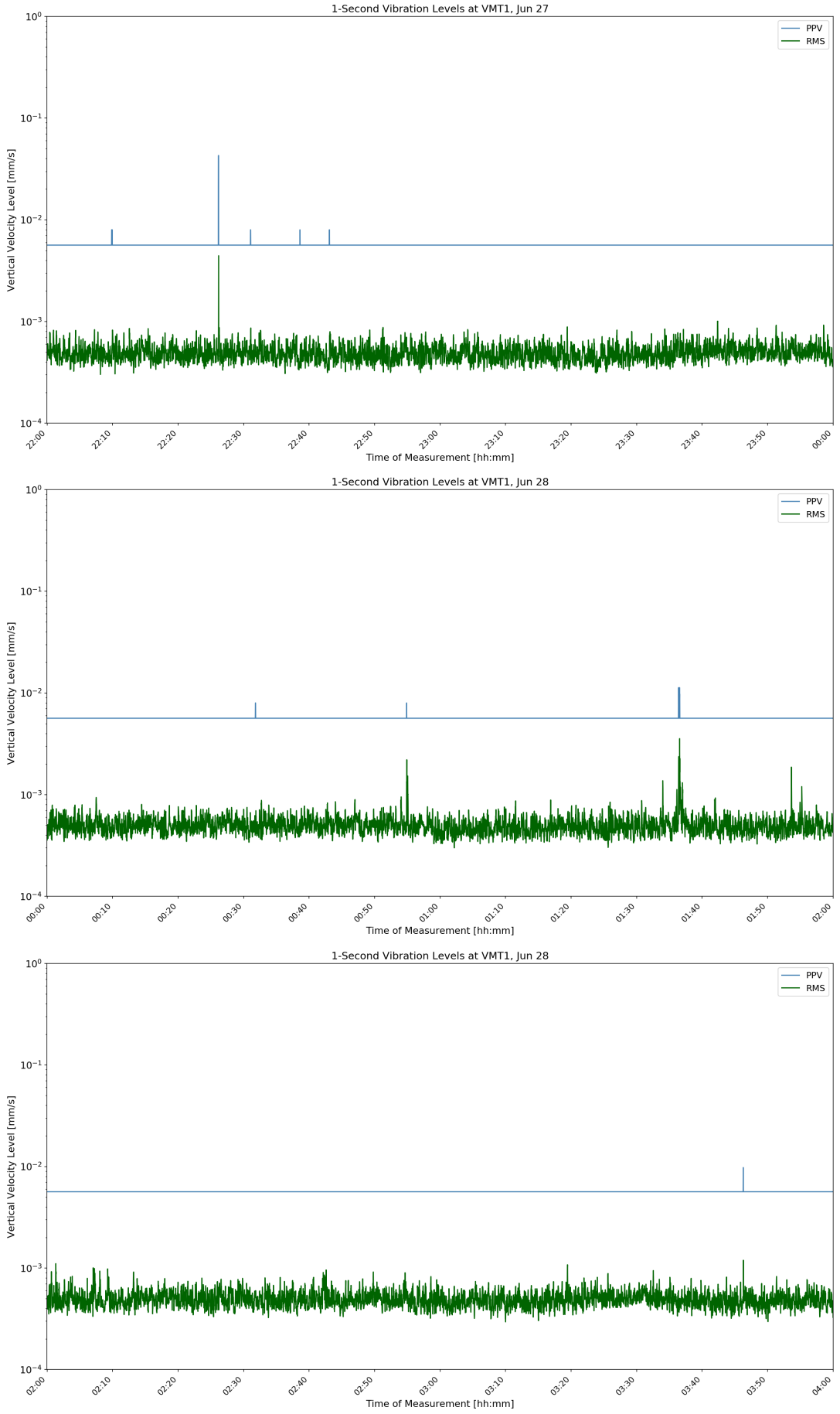


Figure D-23: VMT1 1-Second Velocity History Jun 28 22:00

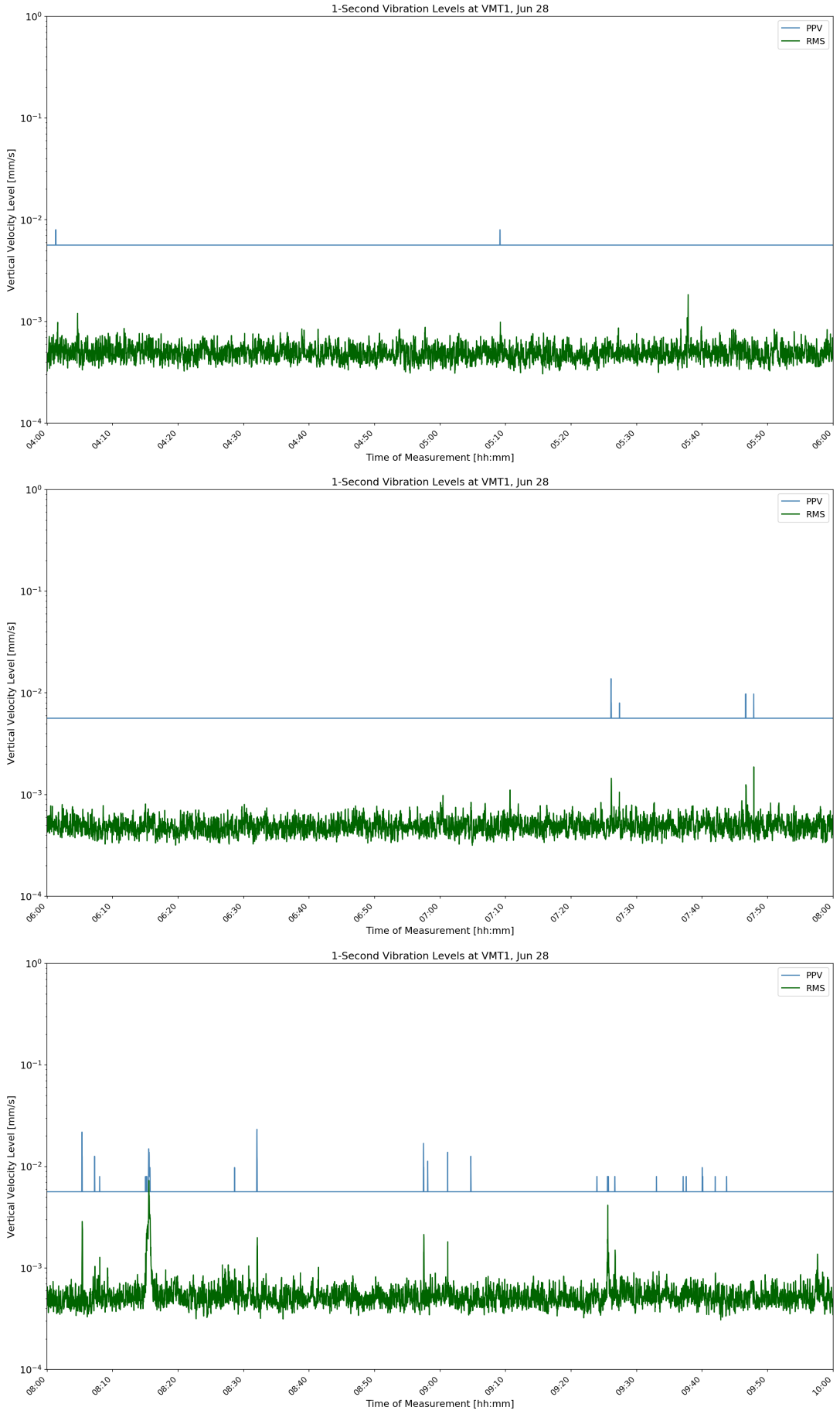


Figure D-24: VMT1 1-Second Velocity History Jun 28 04:00

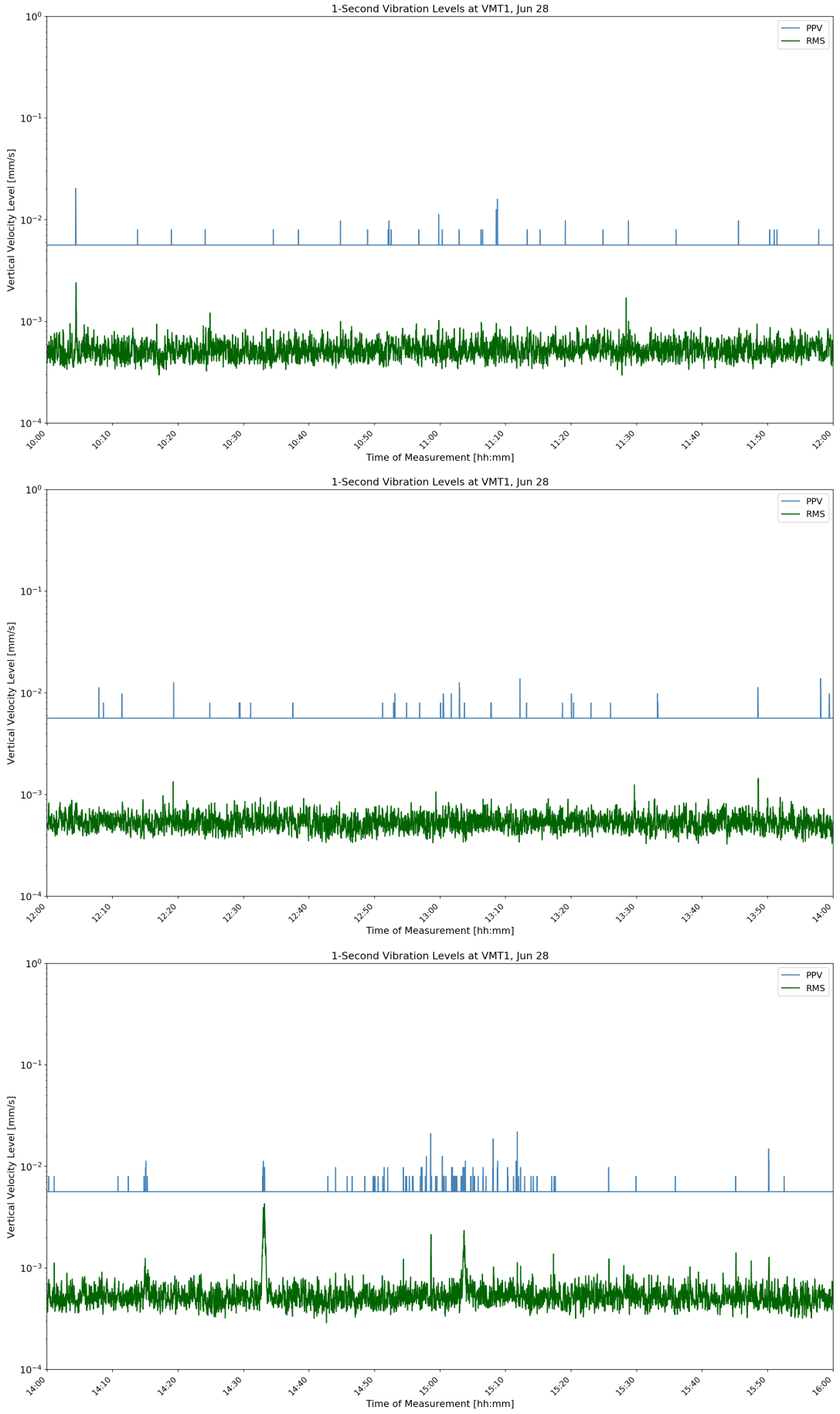


Figure D-25: VMT1 1-Second Velocity History Jun 28 10:00

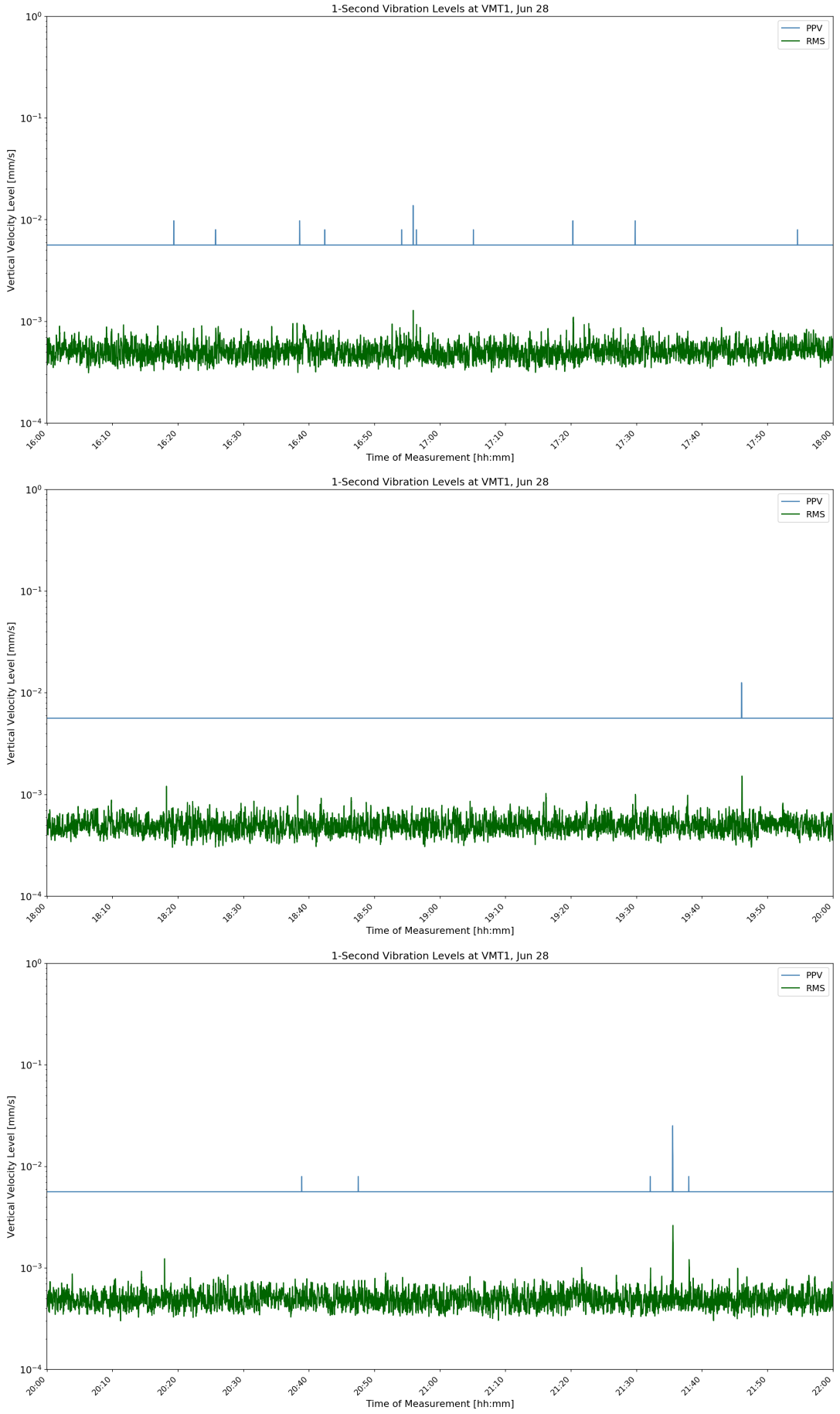


Figure D-26: VMT1 1-Second Velocity History Jun 28 16:00

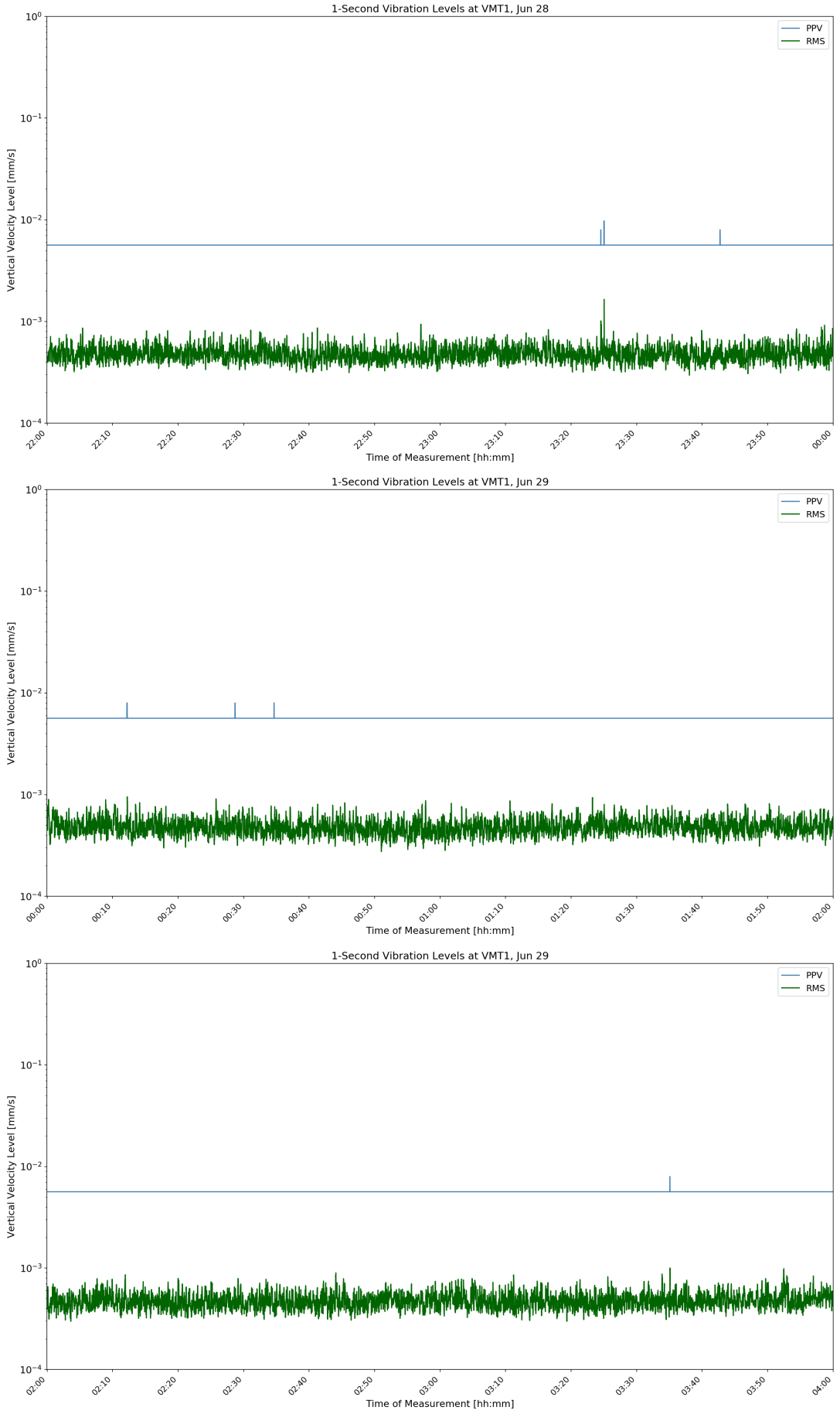


Figure D-27: VMT1 1-Second Velocity History Jun 29 22:00

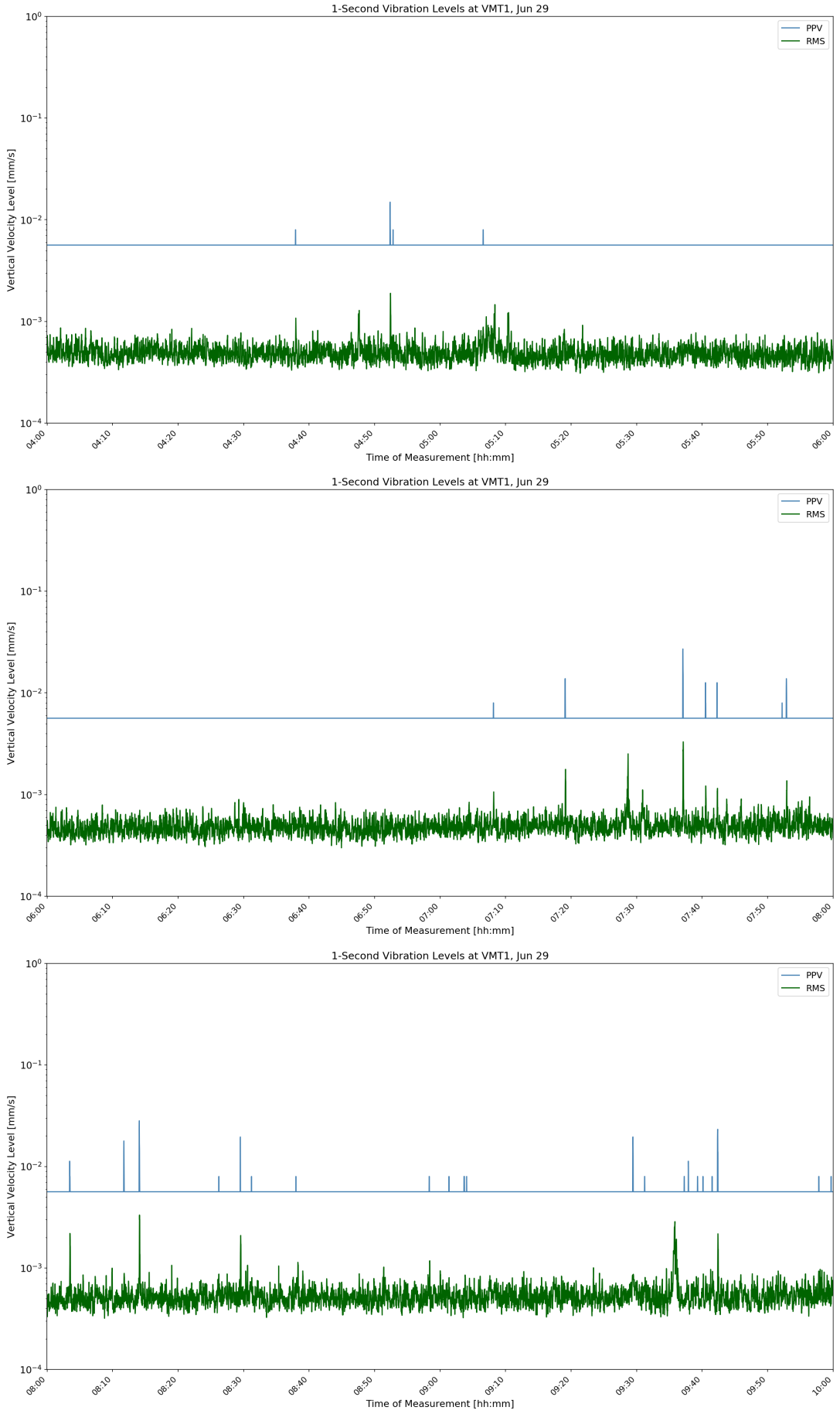


Figure D-28: VMT1 1-Second Velocity History Jun 29 04:00

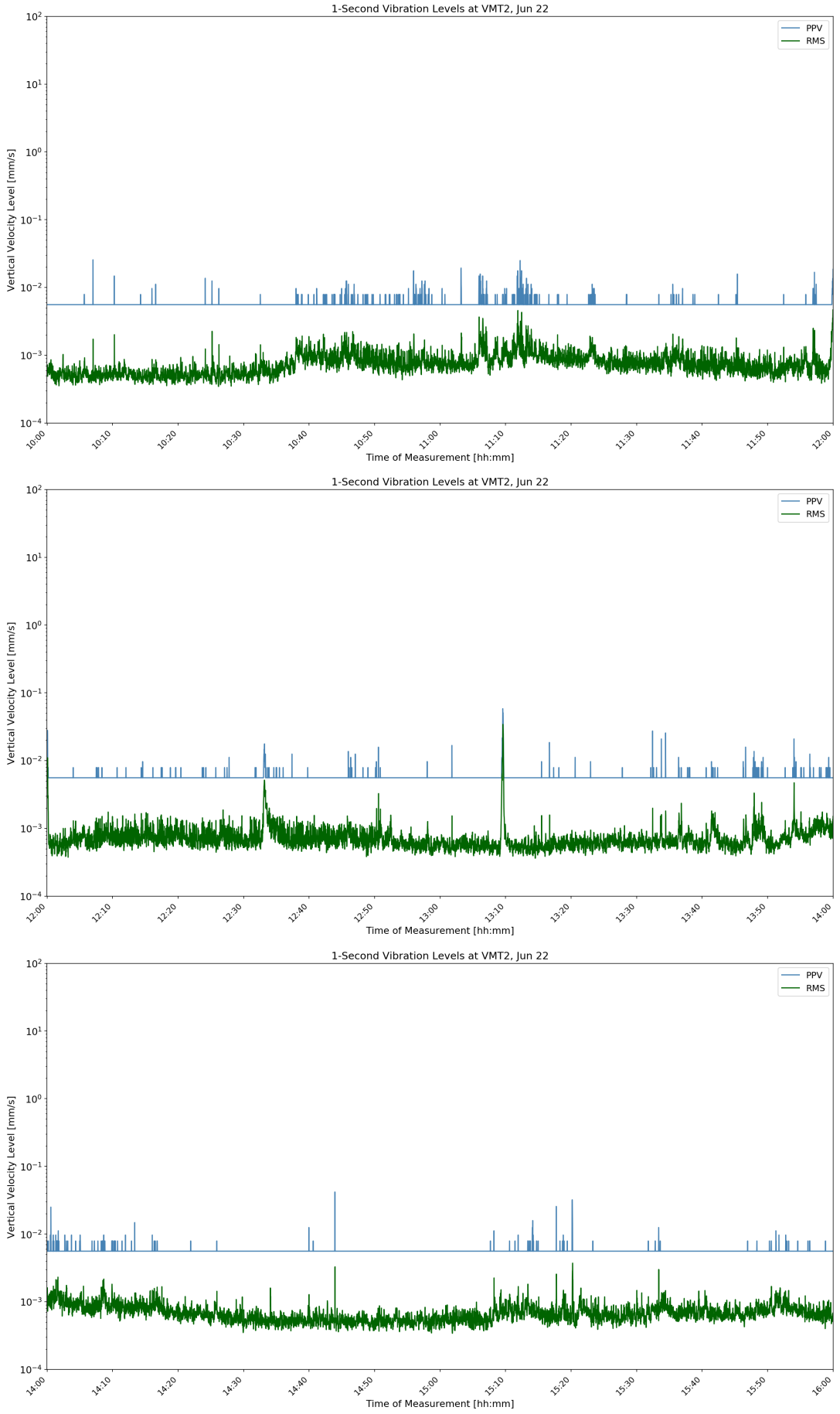


Figure D-29: VMT2 1-Second Velocity History Jun 22 10:00

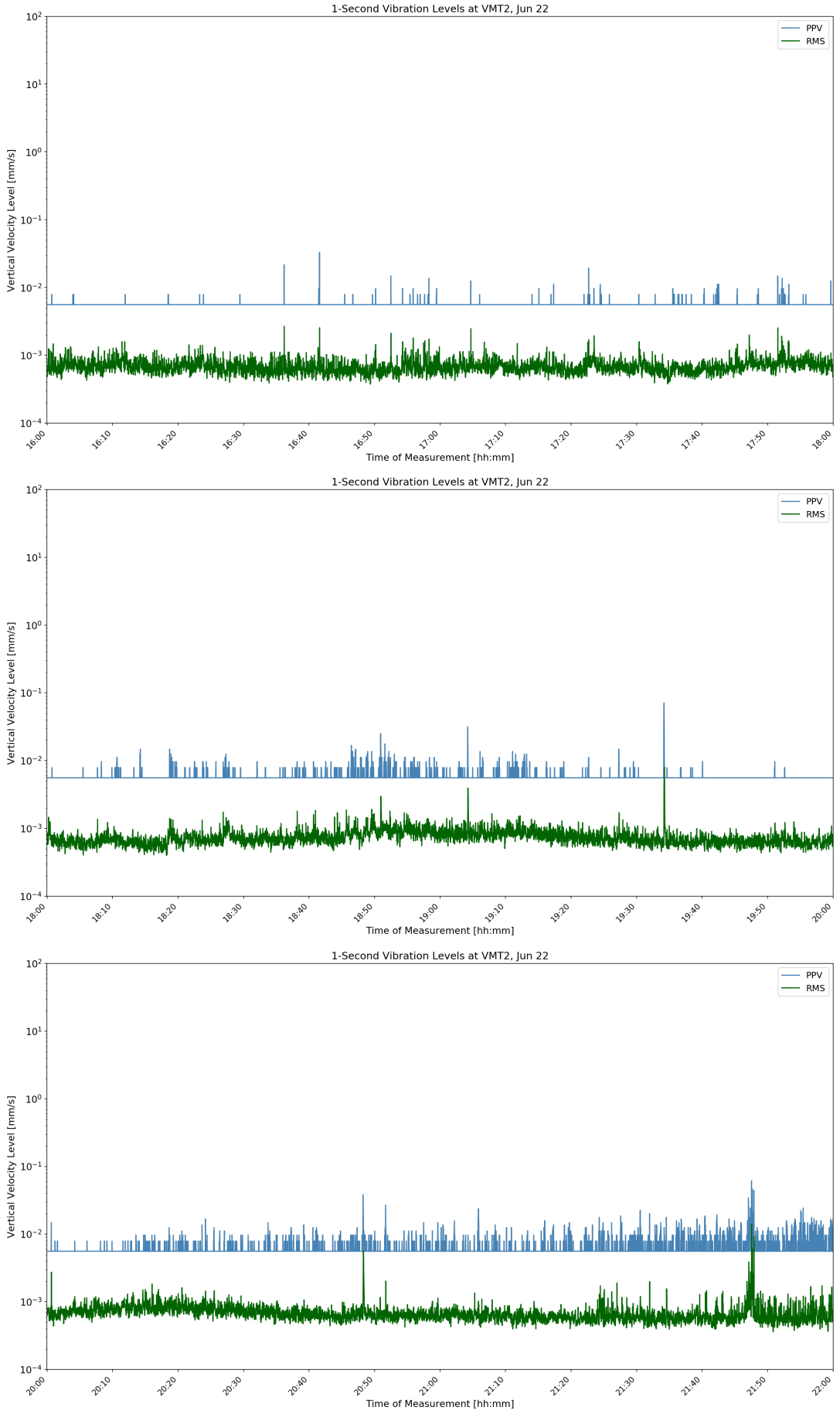


Figure D-30: VMT2 1-Second Velocity History Jun 22 16:00

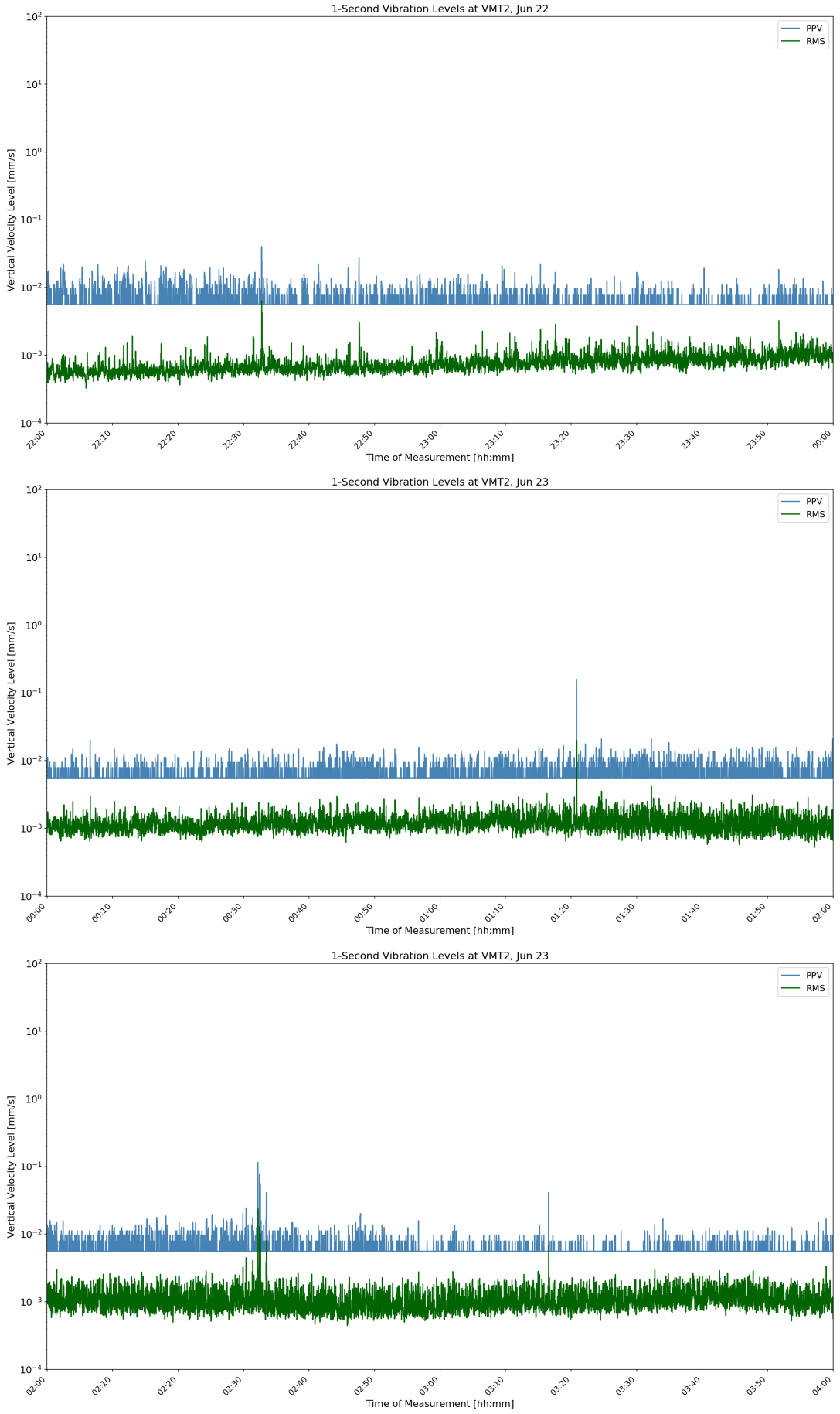


Figure D-31: VMT2 1-Second Velocity History Jun 23 22:00

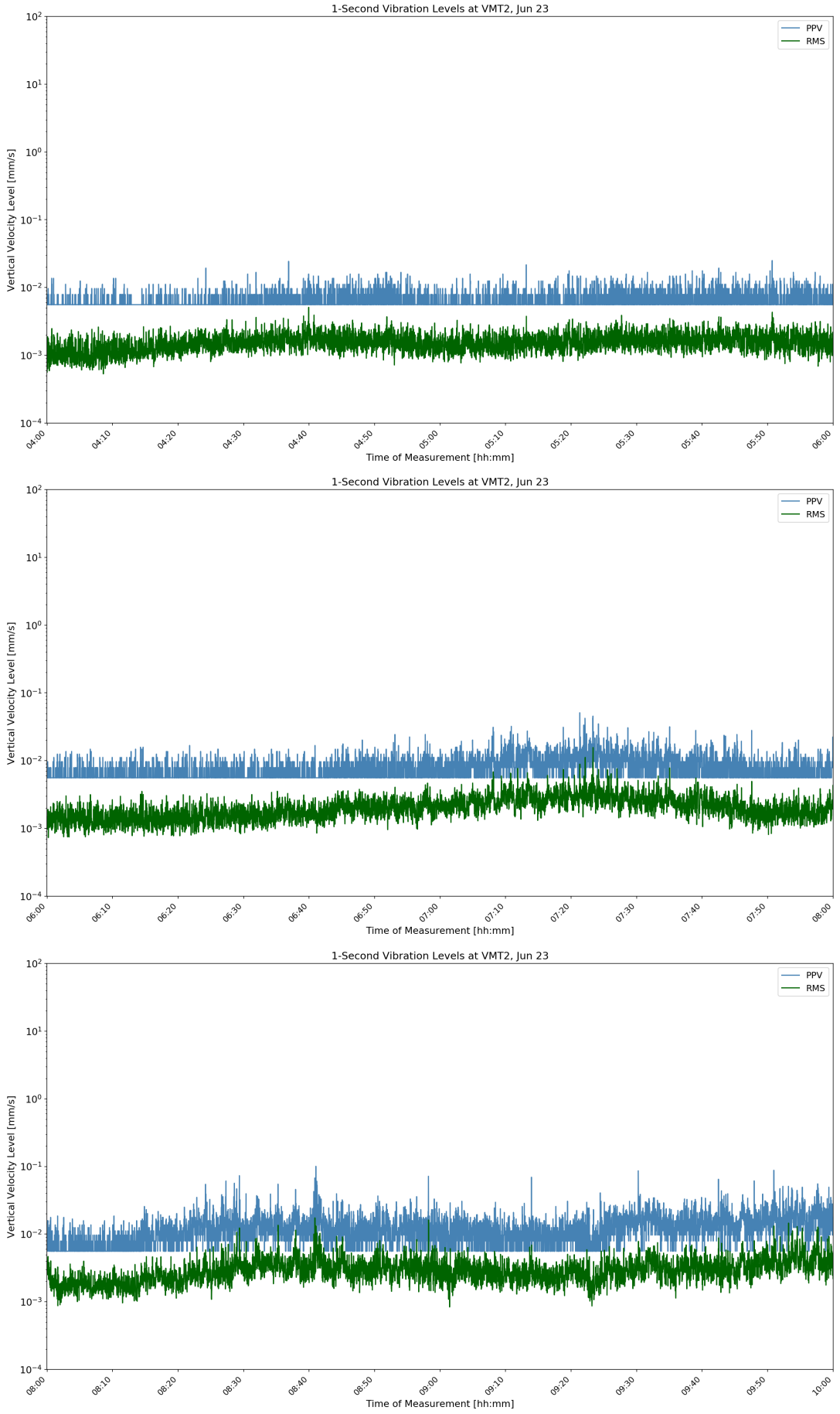


Figure D-32: VMT2 1-Second Velocity History Jun 23 04:00

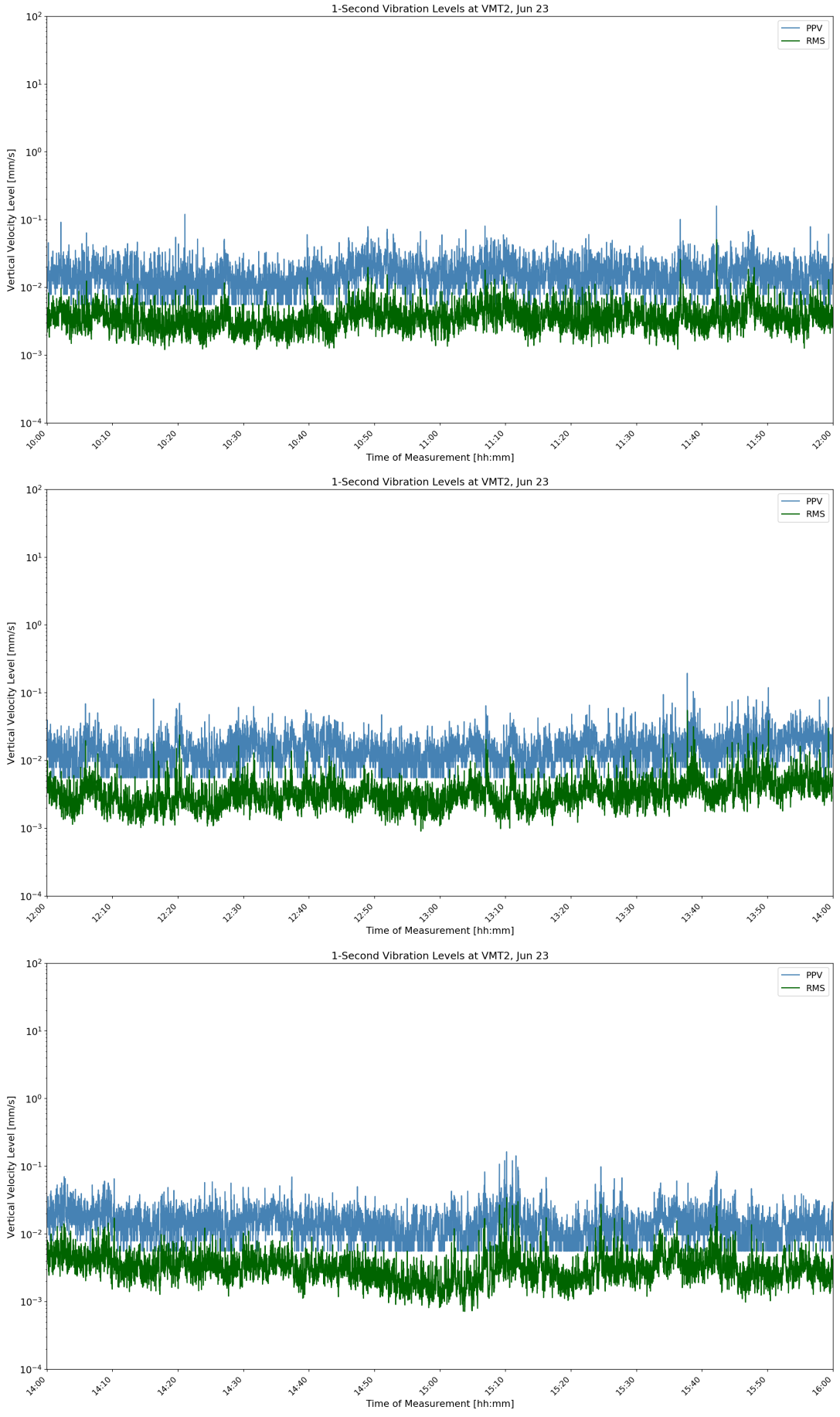


Figure D-33: VMT2 1-Second Velocity History Jun 23 10:00

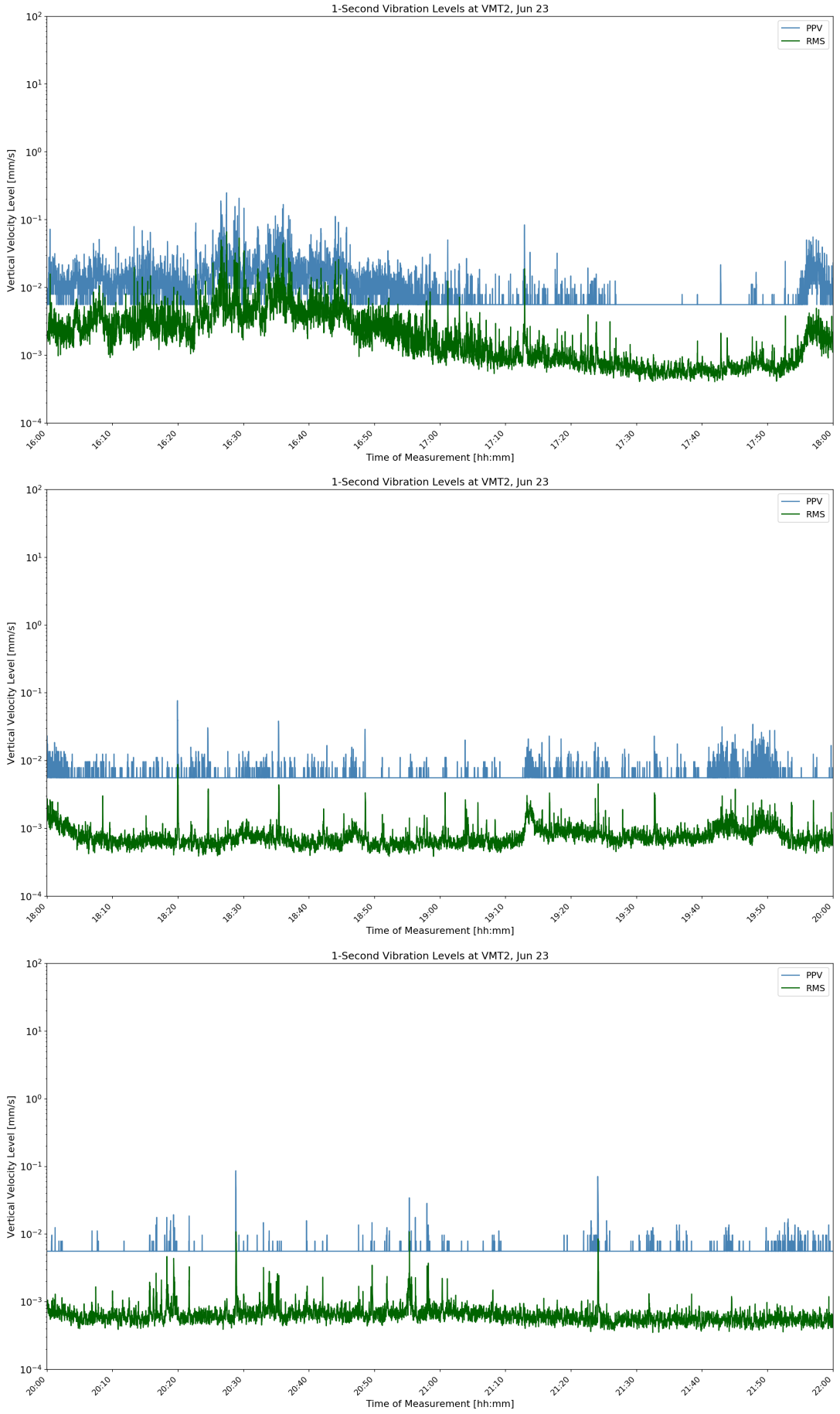


Figure D-34: VMT2 1-Second Velocity History Jun 23 16:00

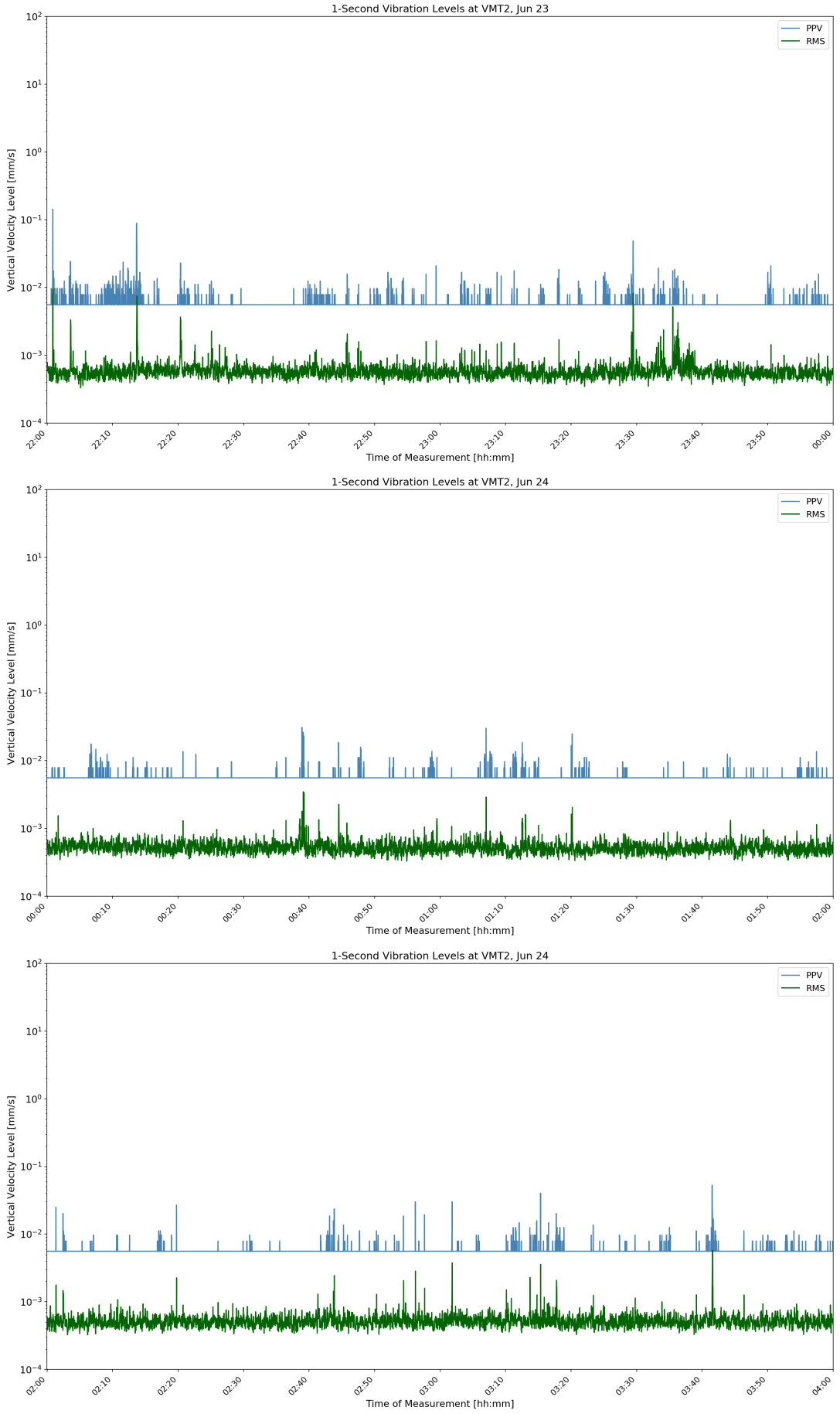


Figure D-35: VMT2 1-Second Velocity History Jun 24 22:00

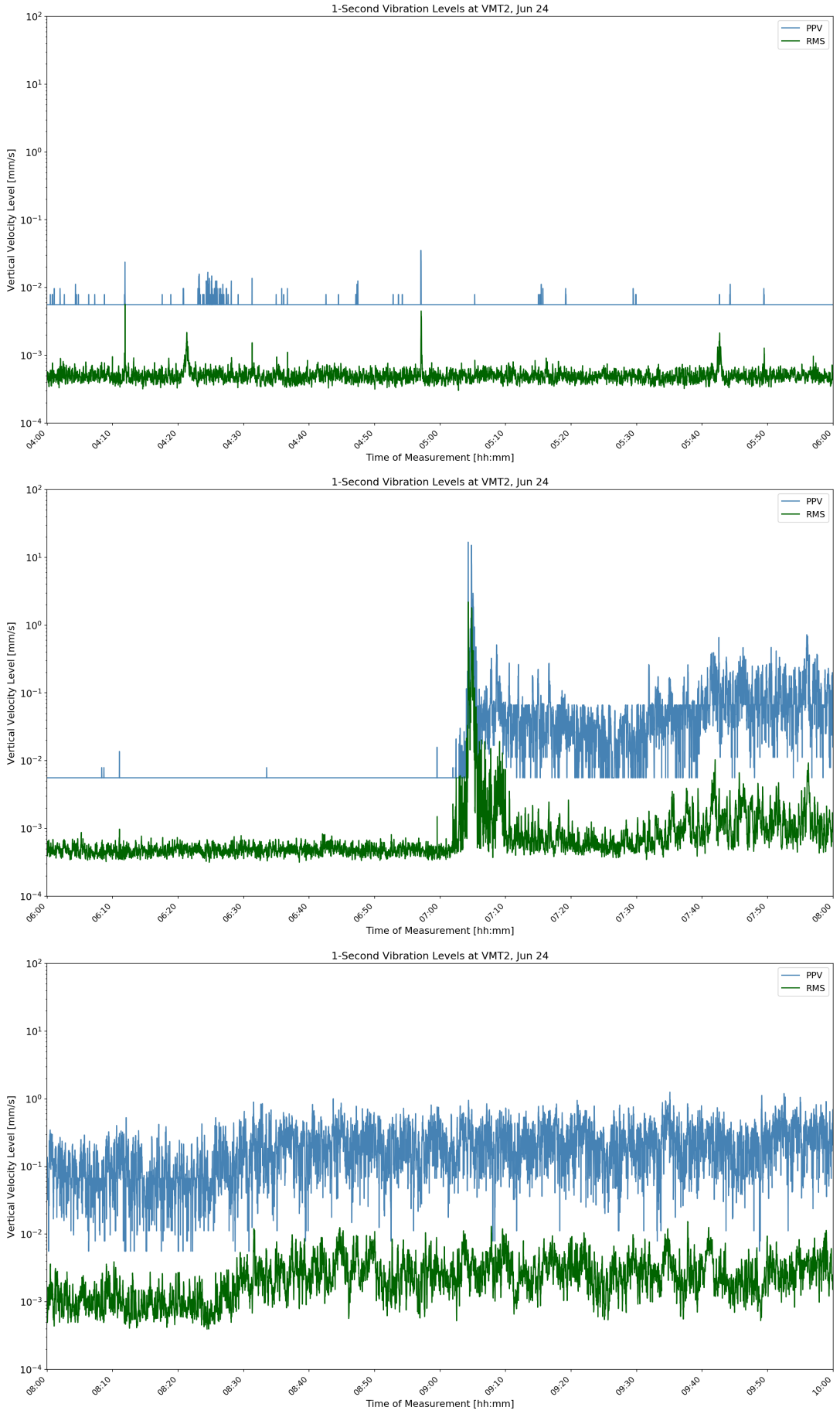


Figure D-36: VMT2 1-Second Velocity History Jun 24 04:00

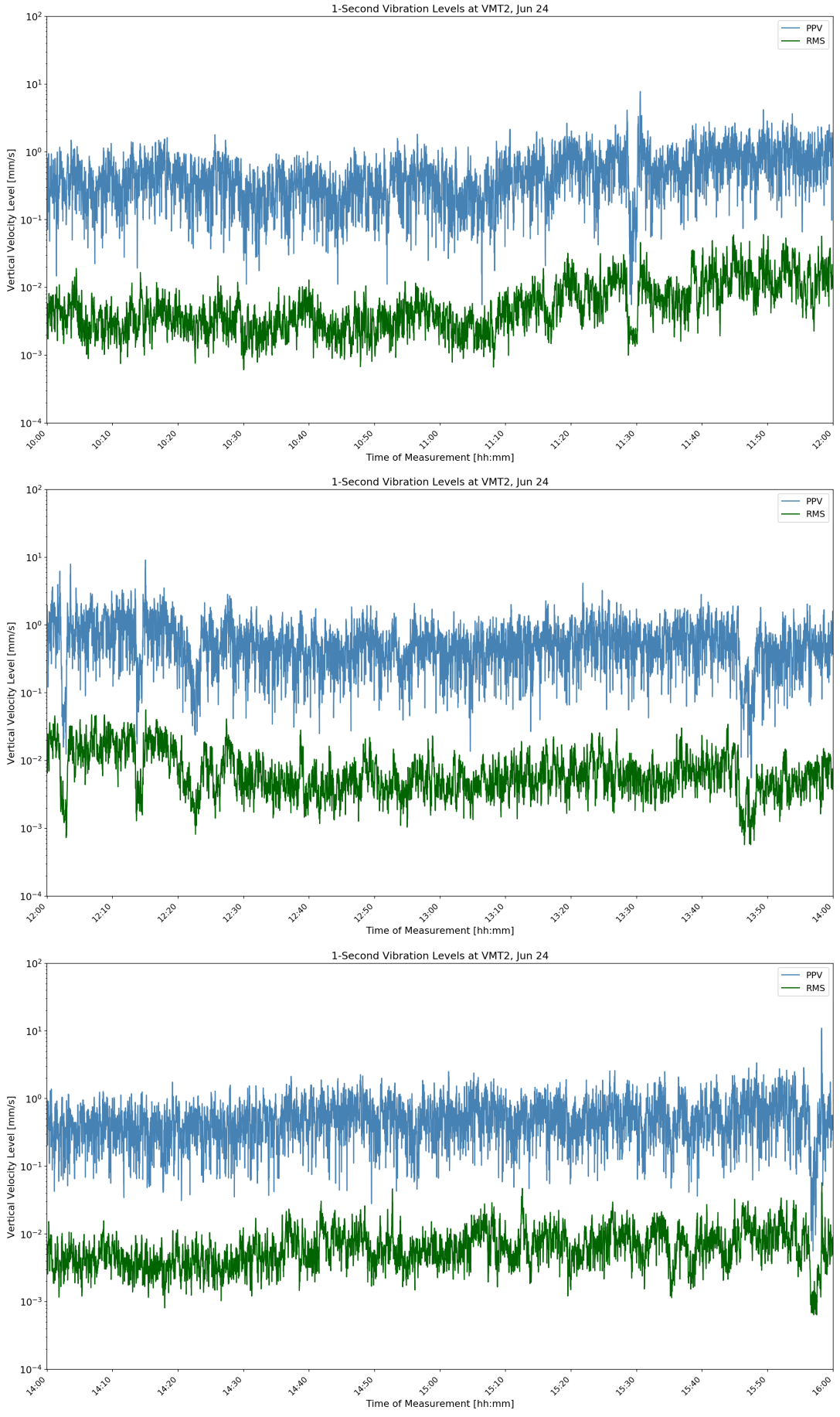


Figure D-37: VMT2 1-Second Velocity History Jun 24 10:00

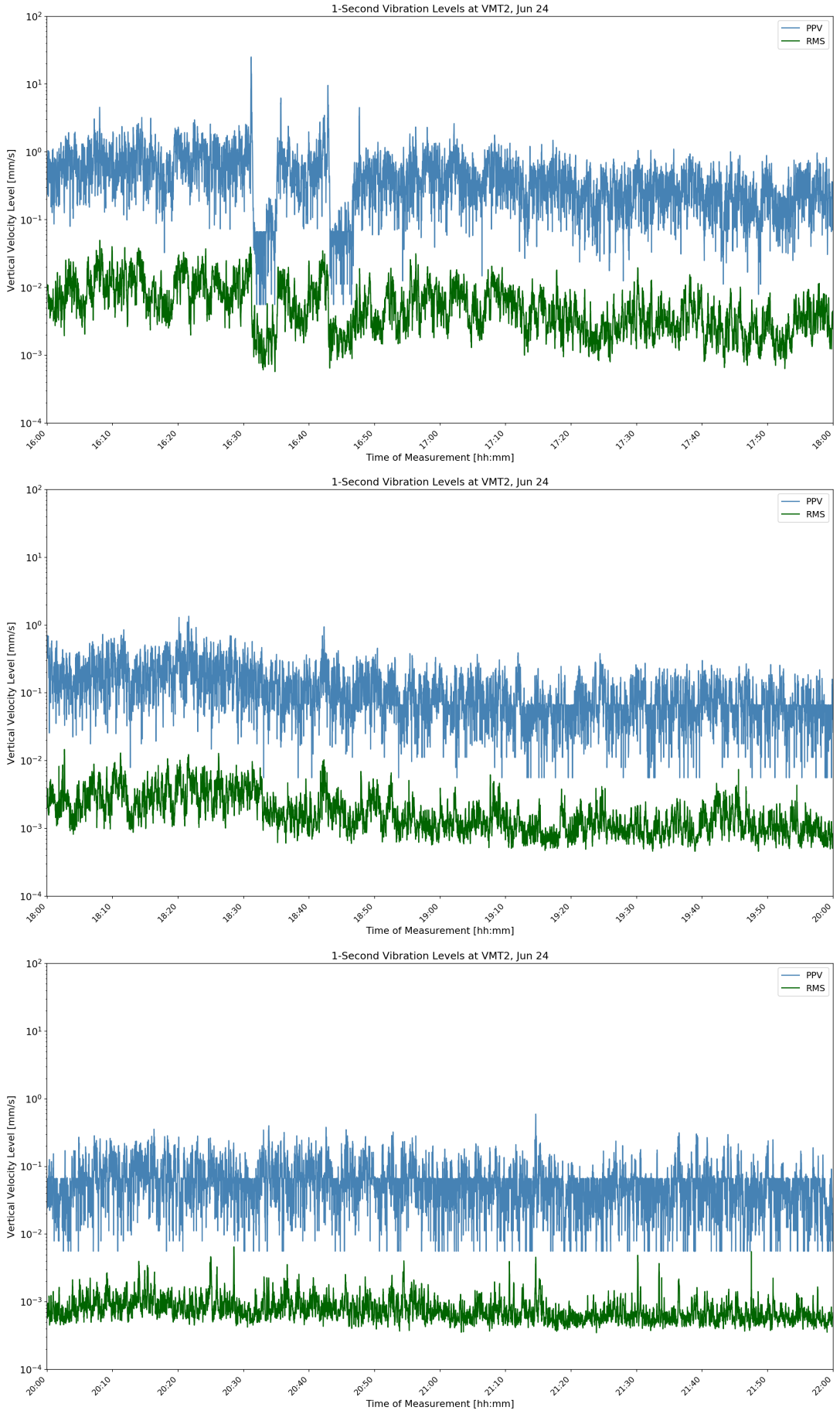


Figure D-38: VMT2 1-Second Velocity History Jun 24 16:00

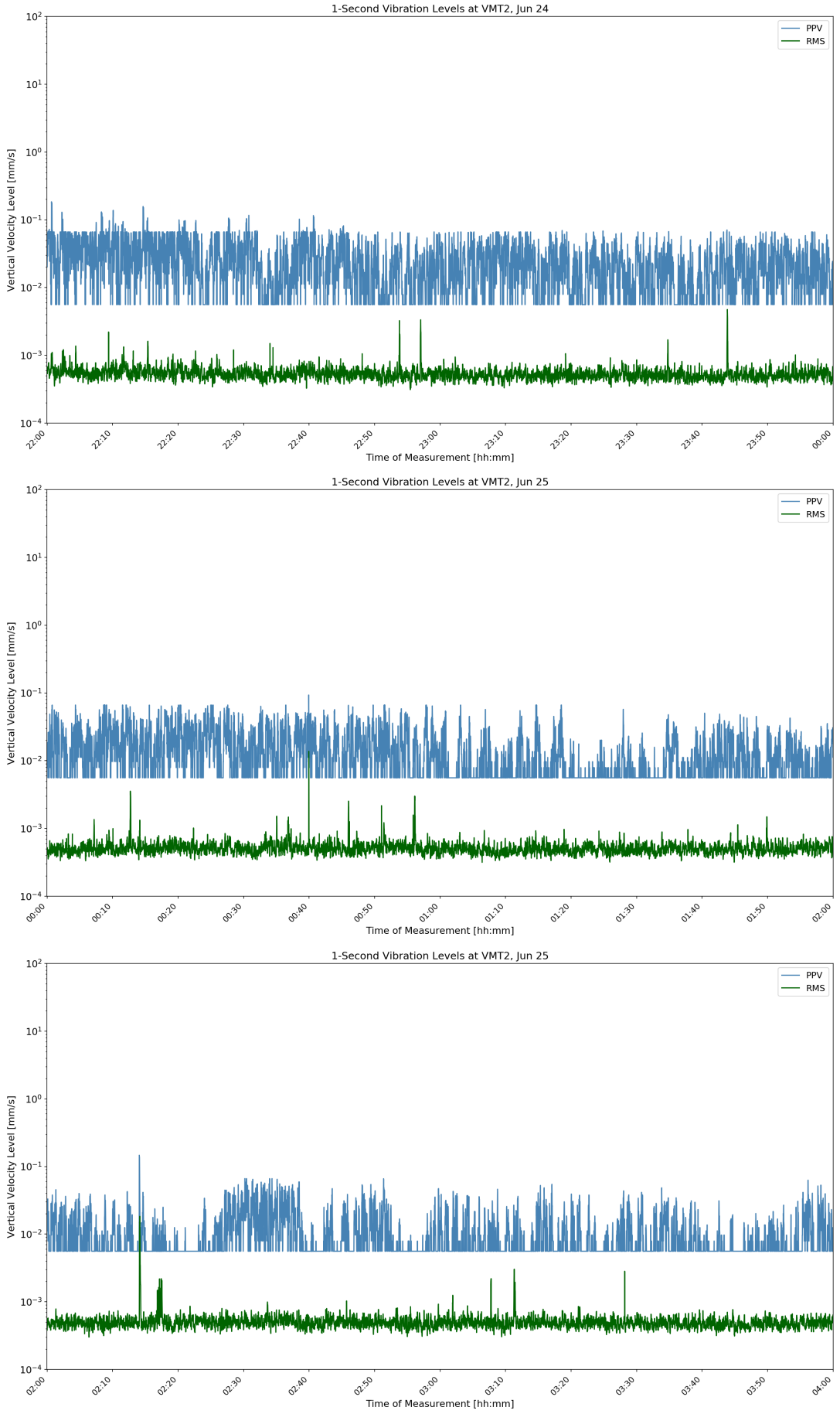


Figure D-39: VMT2 1-Second Velocity History Jun 25 22:00

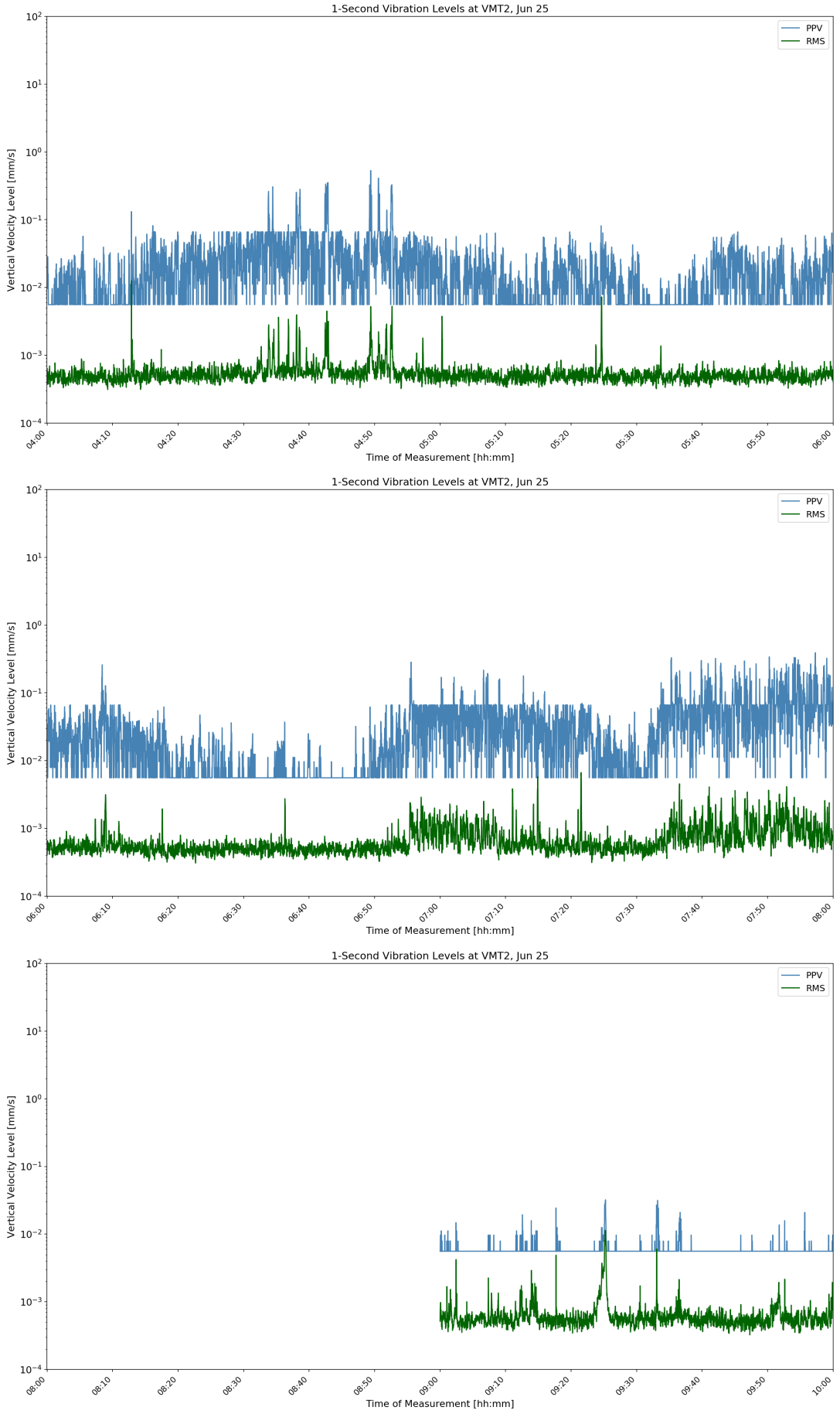


Figure D-40: VMT2 1-Second Velocity History Jun 25 04:00

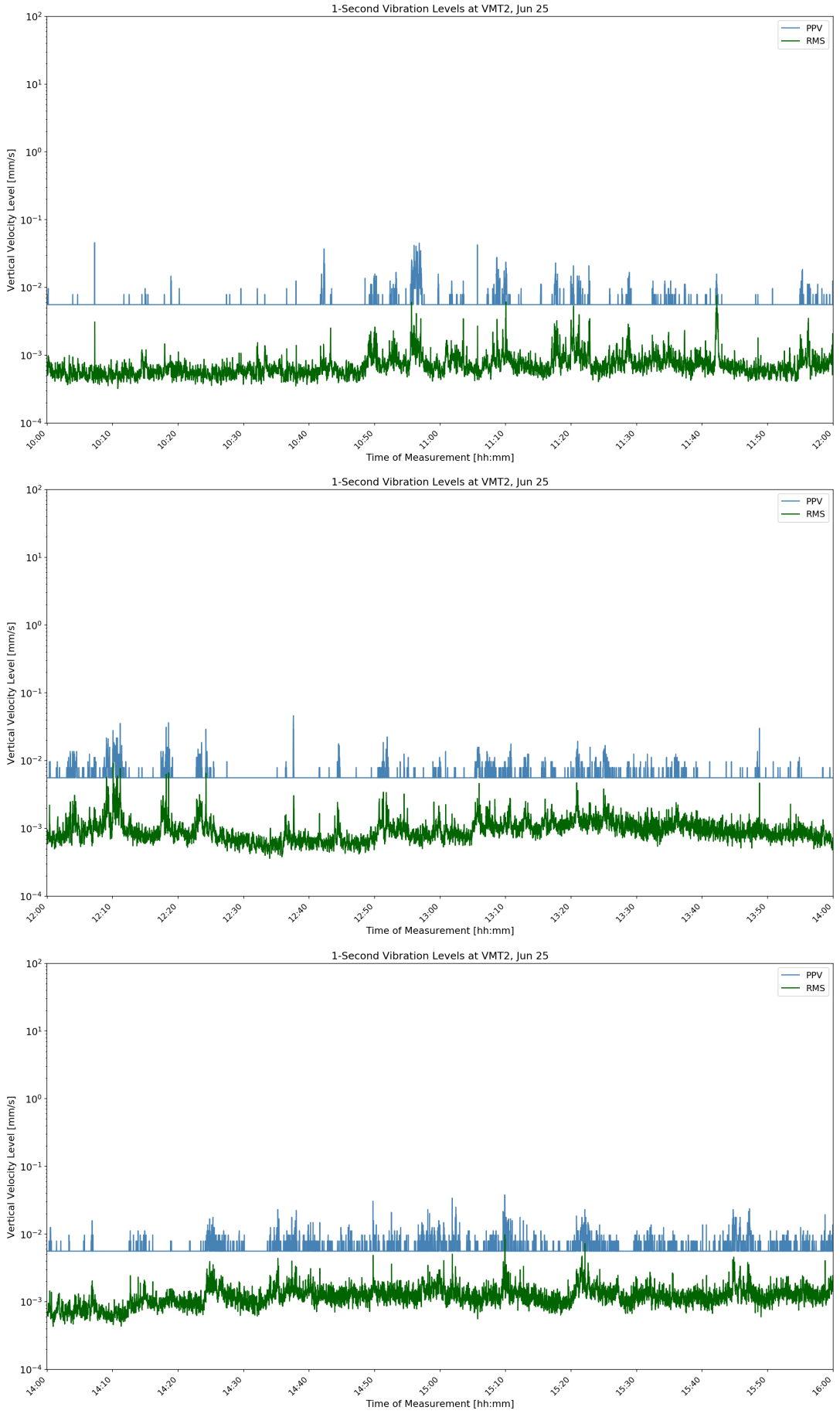


Figure D-41: VMT2 1-Second Velocity History Jun 25 10:00

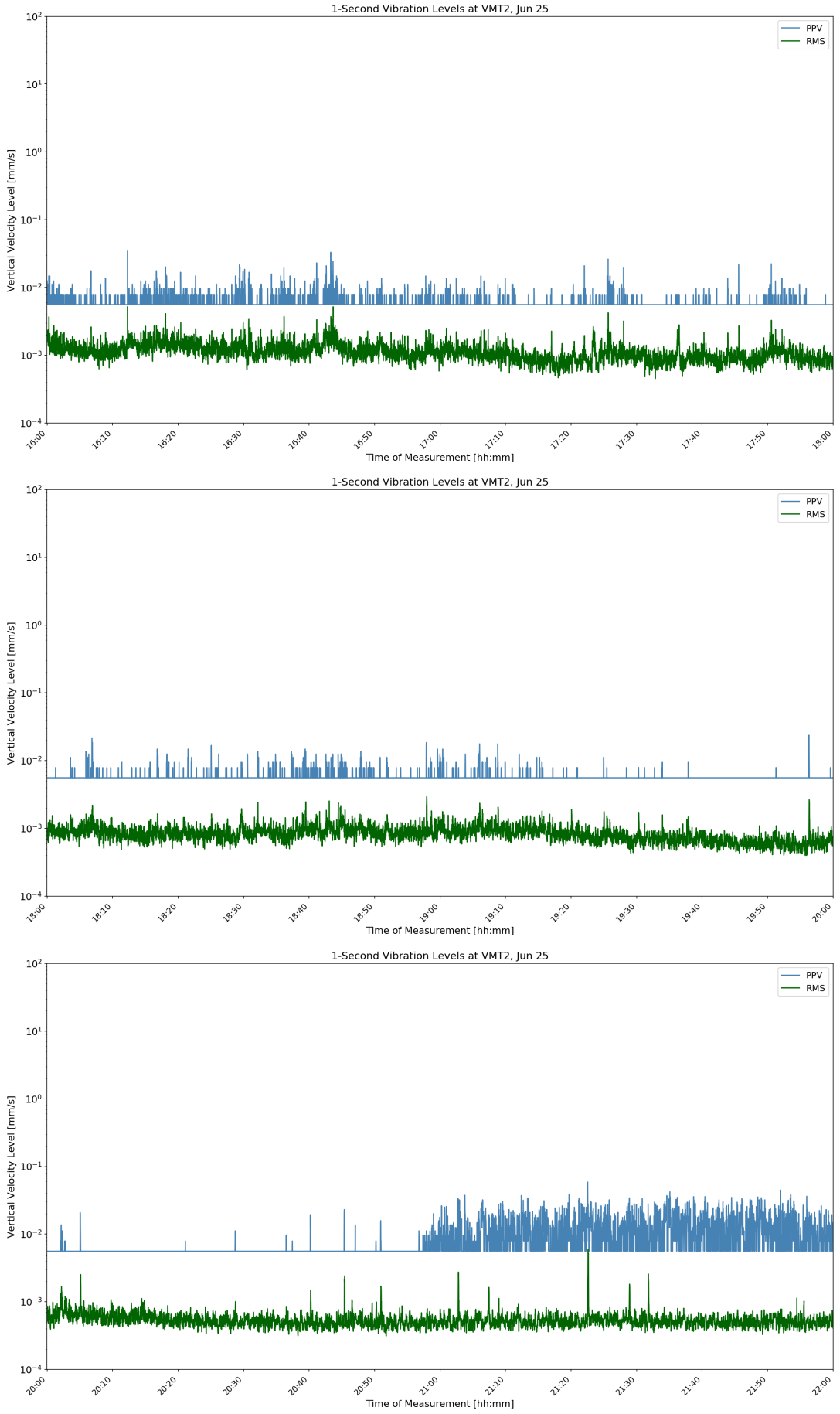


Figure D-42: VMT2 1-Second Velocity History Jun 25 16:00

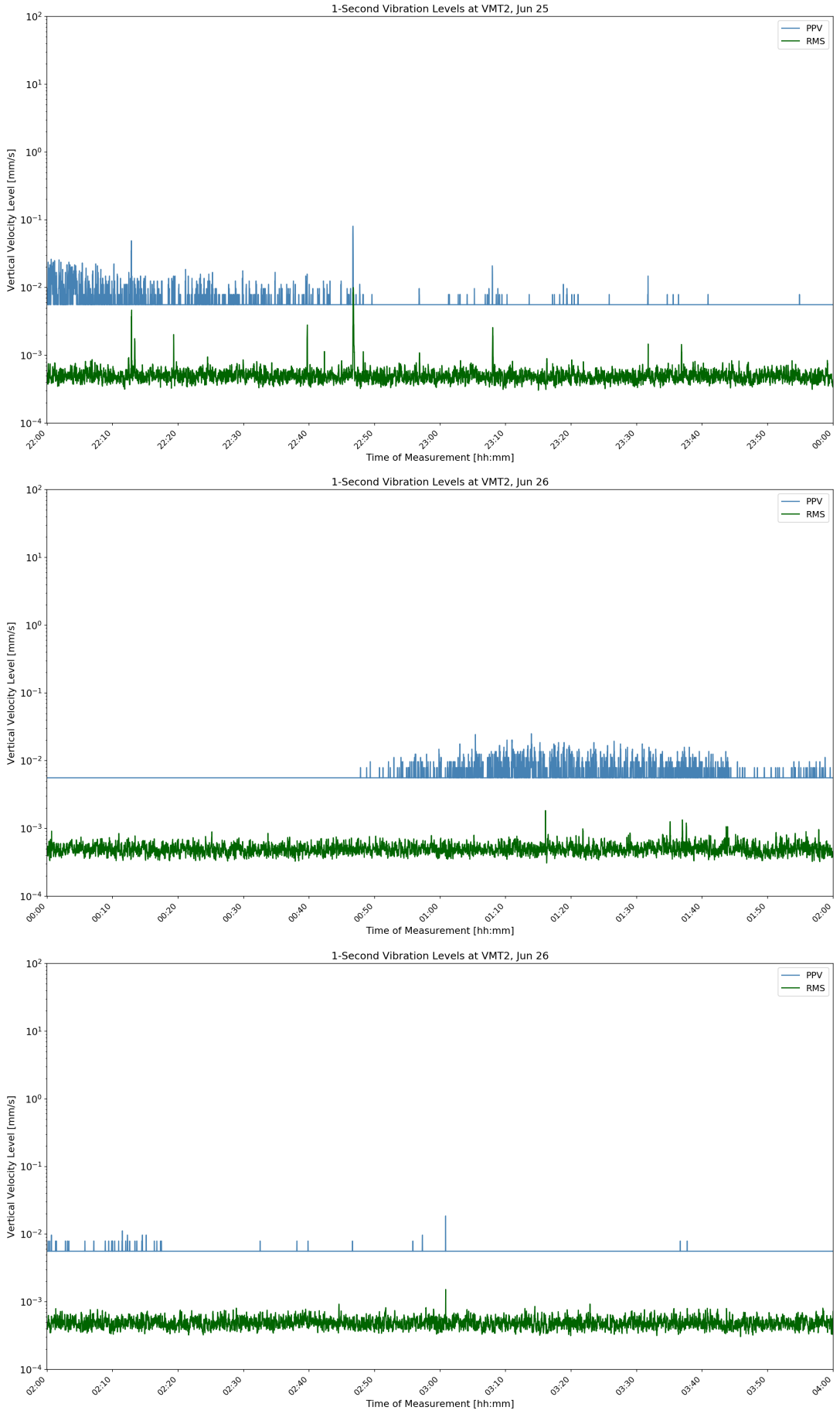


Figure D-43: VMT2 1-Second Velocity History Jun 26 22:00

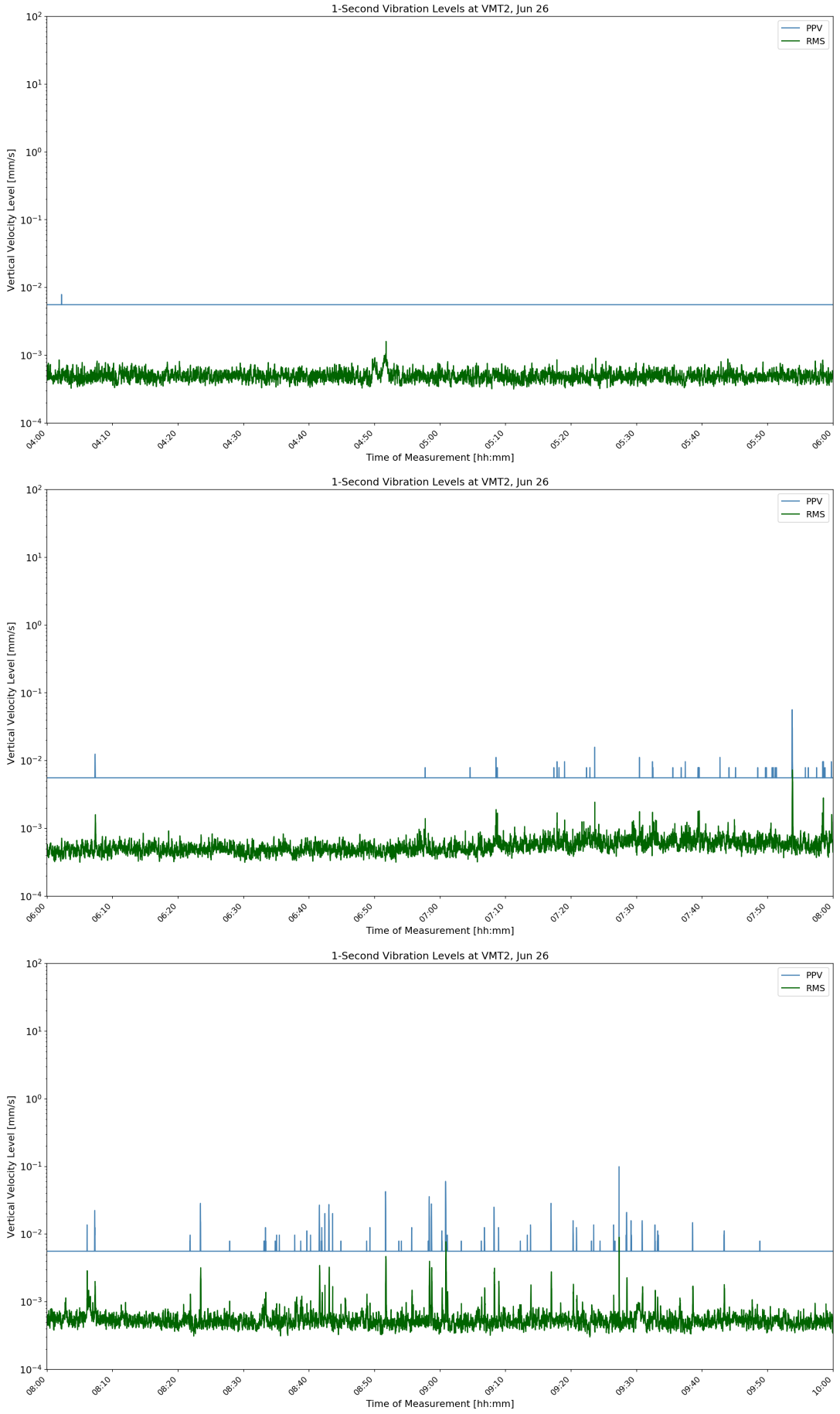


Figure D-44: VMT2 1-Second Velocity History Jun 26 04:00

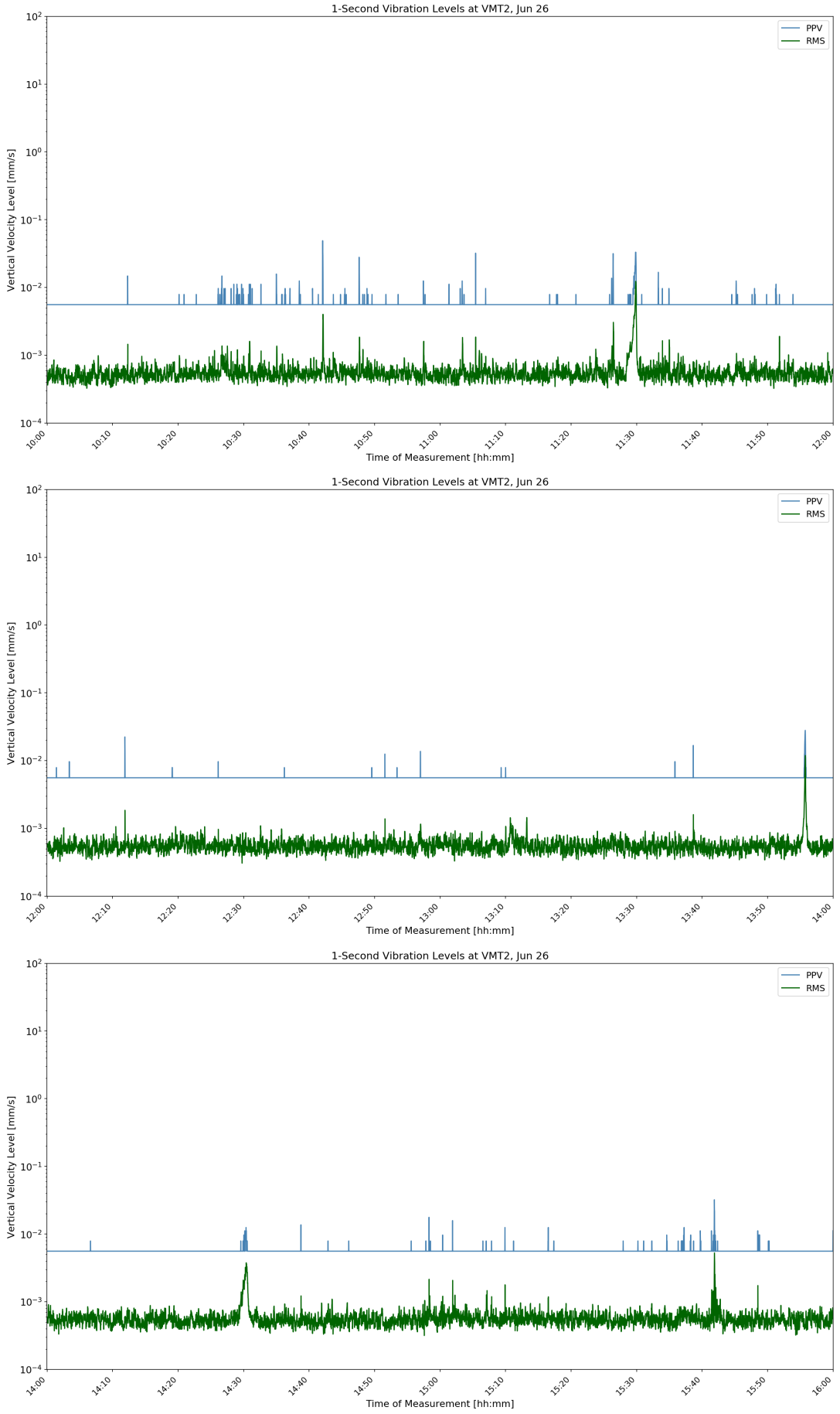


Figure D-45: VMT2 1-Second Velocity History Jun 26 10:00

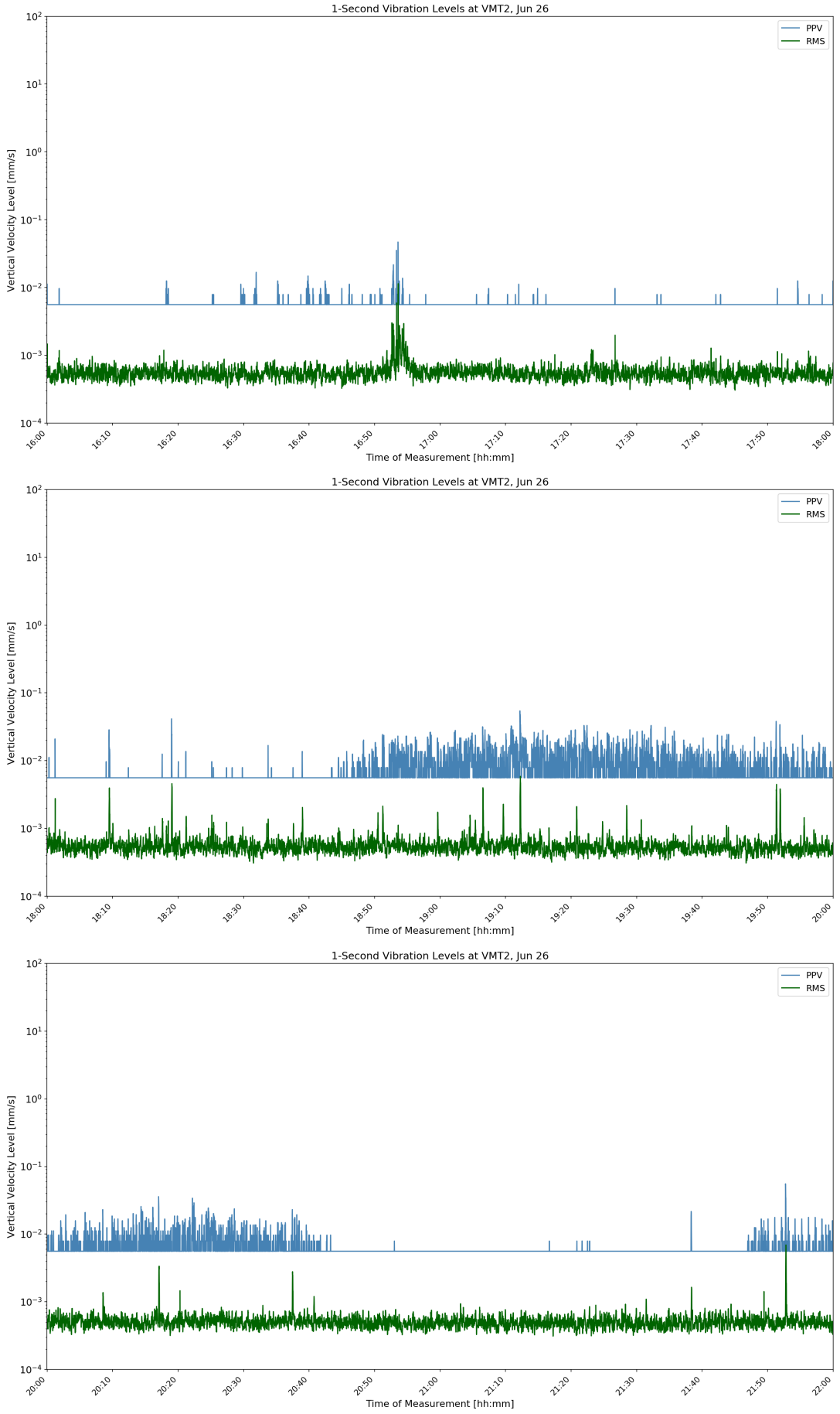


Figure D-46: VMT2 1-Second Velocity History Jun 26 16:00

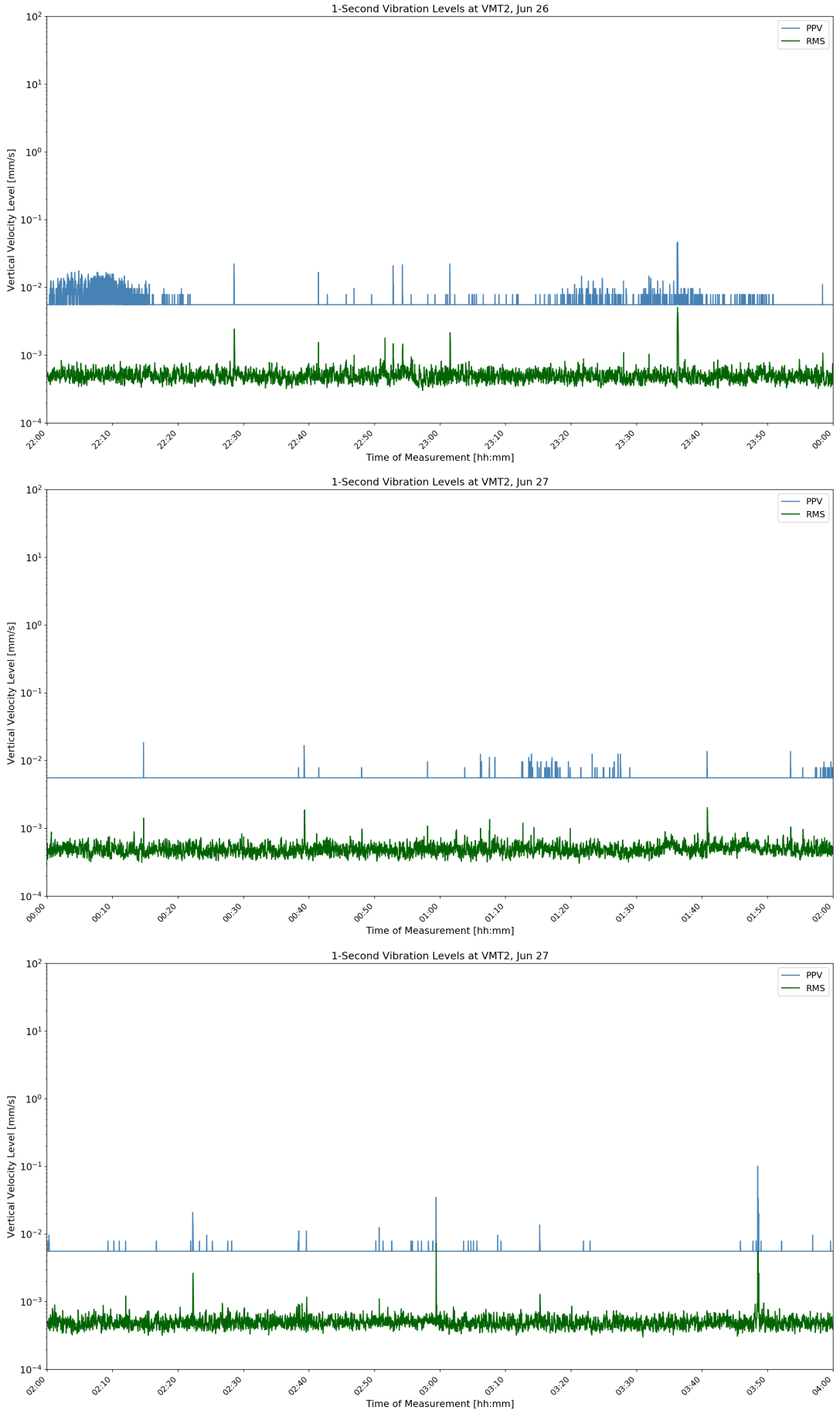


Figure D-47: VMT2 1-Second Velocity History Jun 27 22:00

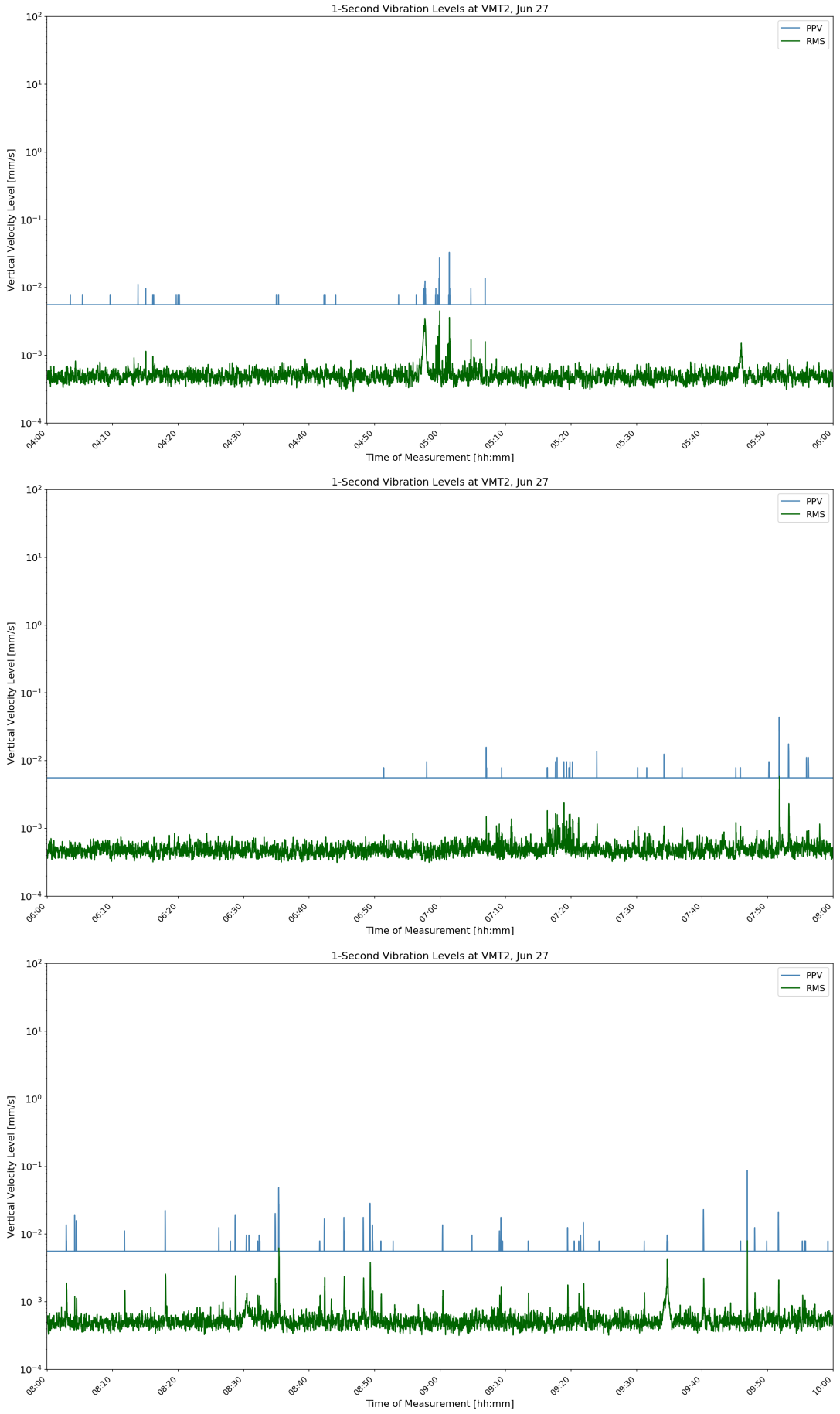


Figure D-48: VMT2 1-Second Velocity History Jun 27 04:00

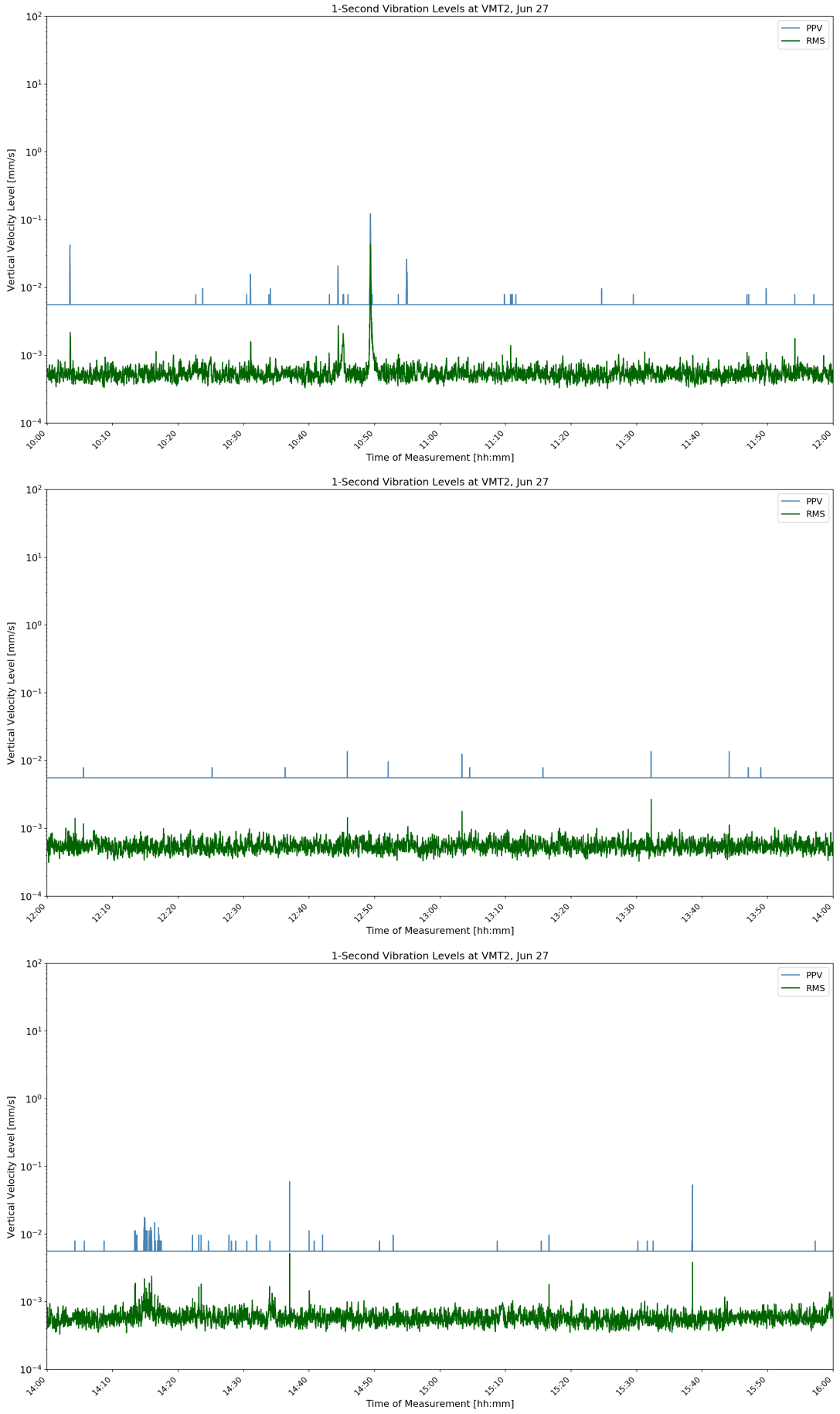


Figure D-49: VMT2 1-Second Velocity History Jun 27 10:00

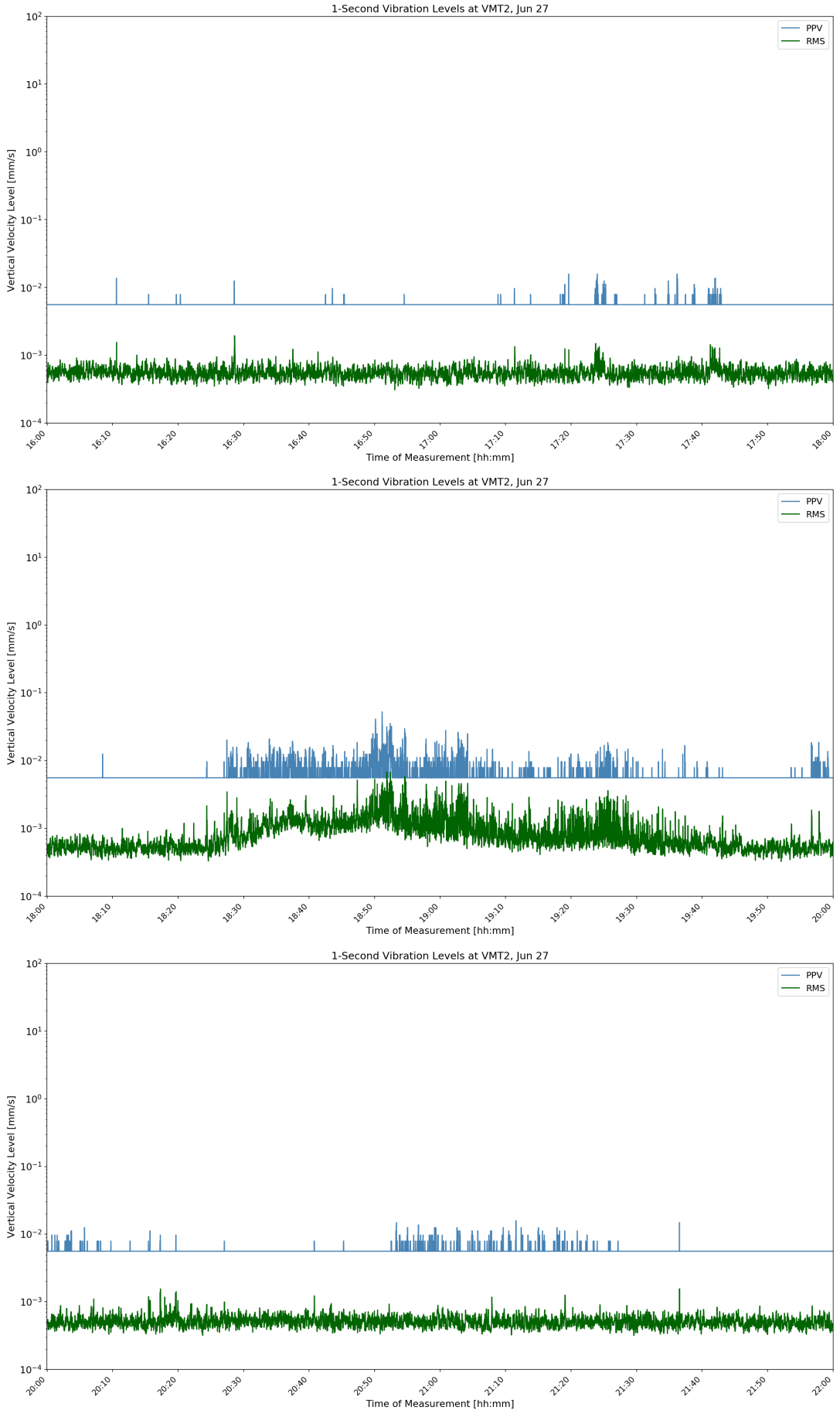


Figure D-50: VMT2 1-Second Velocity History Jun 27 16:00

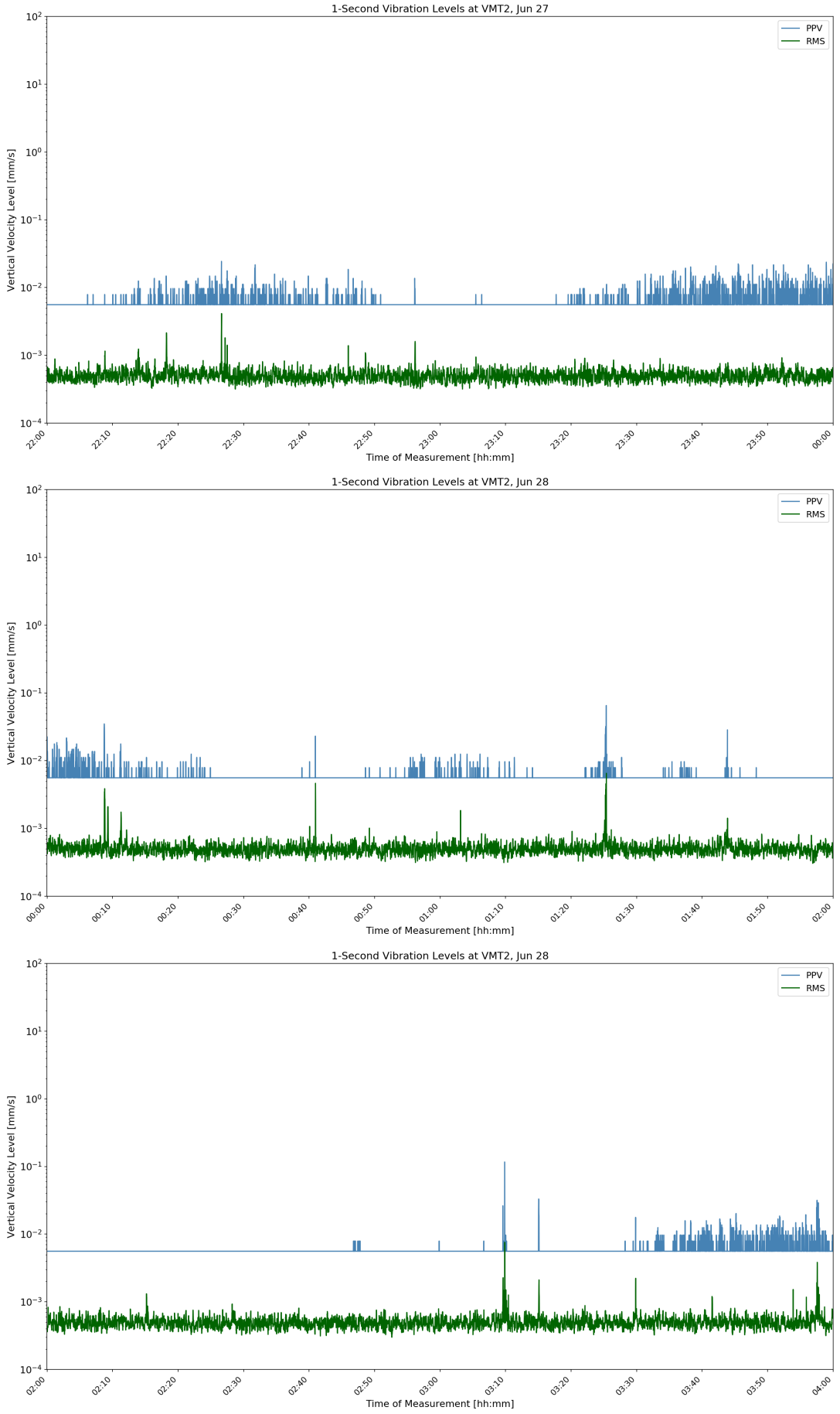


Figure D-51: VMT2 1-Second Velocity History Jun 28 22:00

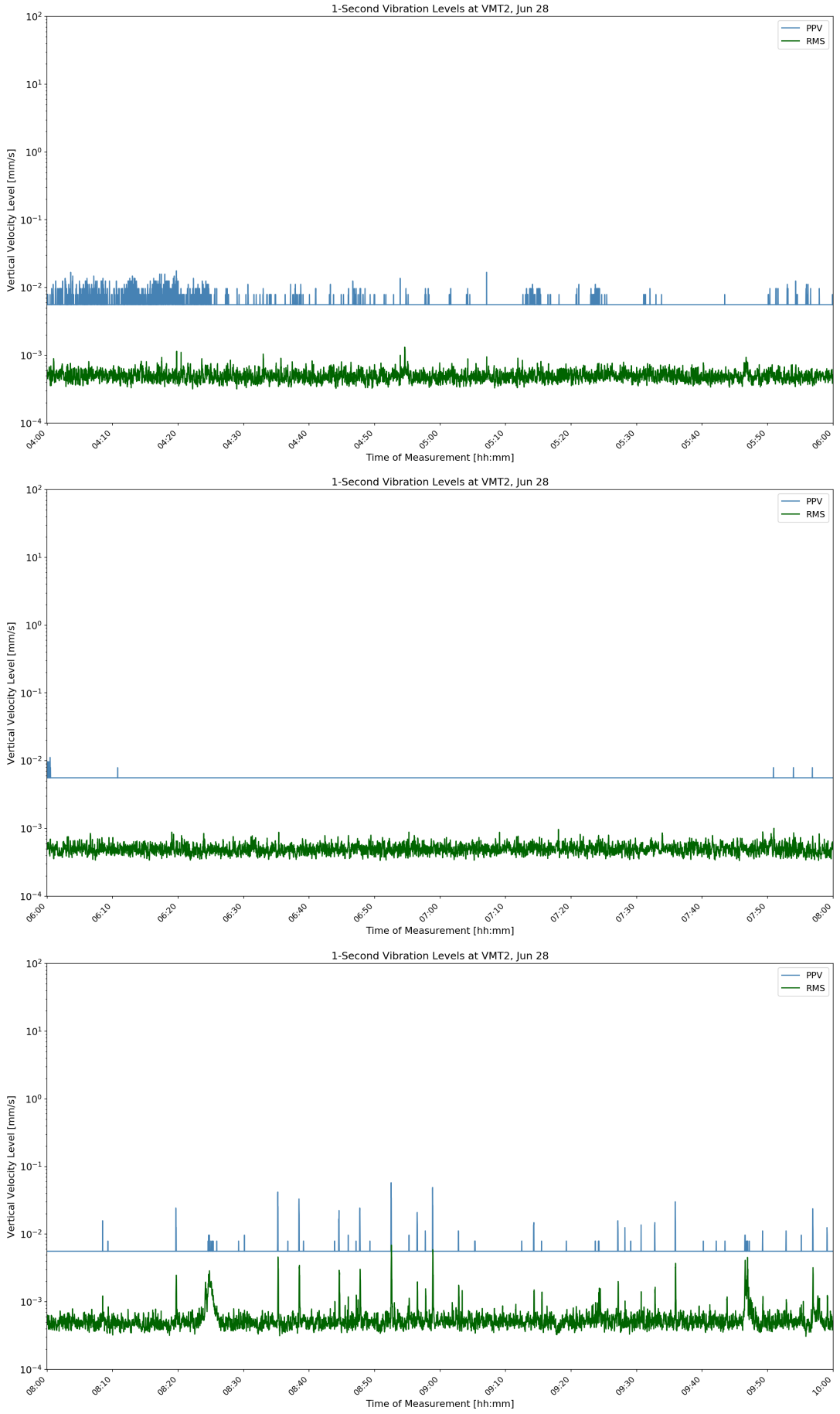


Figure D-52: VMT2 1-Second Velocity History Jun 28 04:00

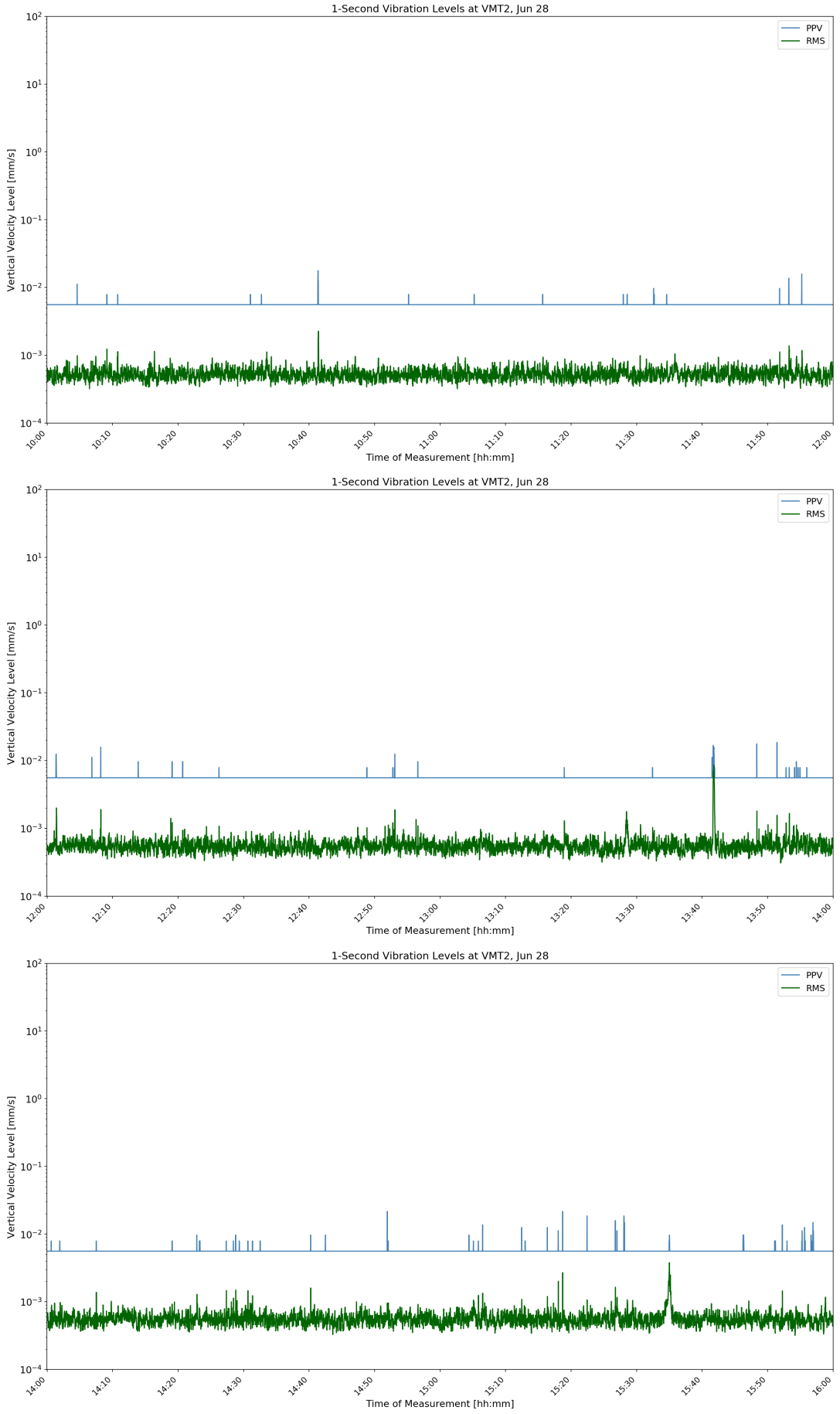


Figure D-53: VMT2 1-Second Velocity History Jun 28 10:00

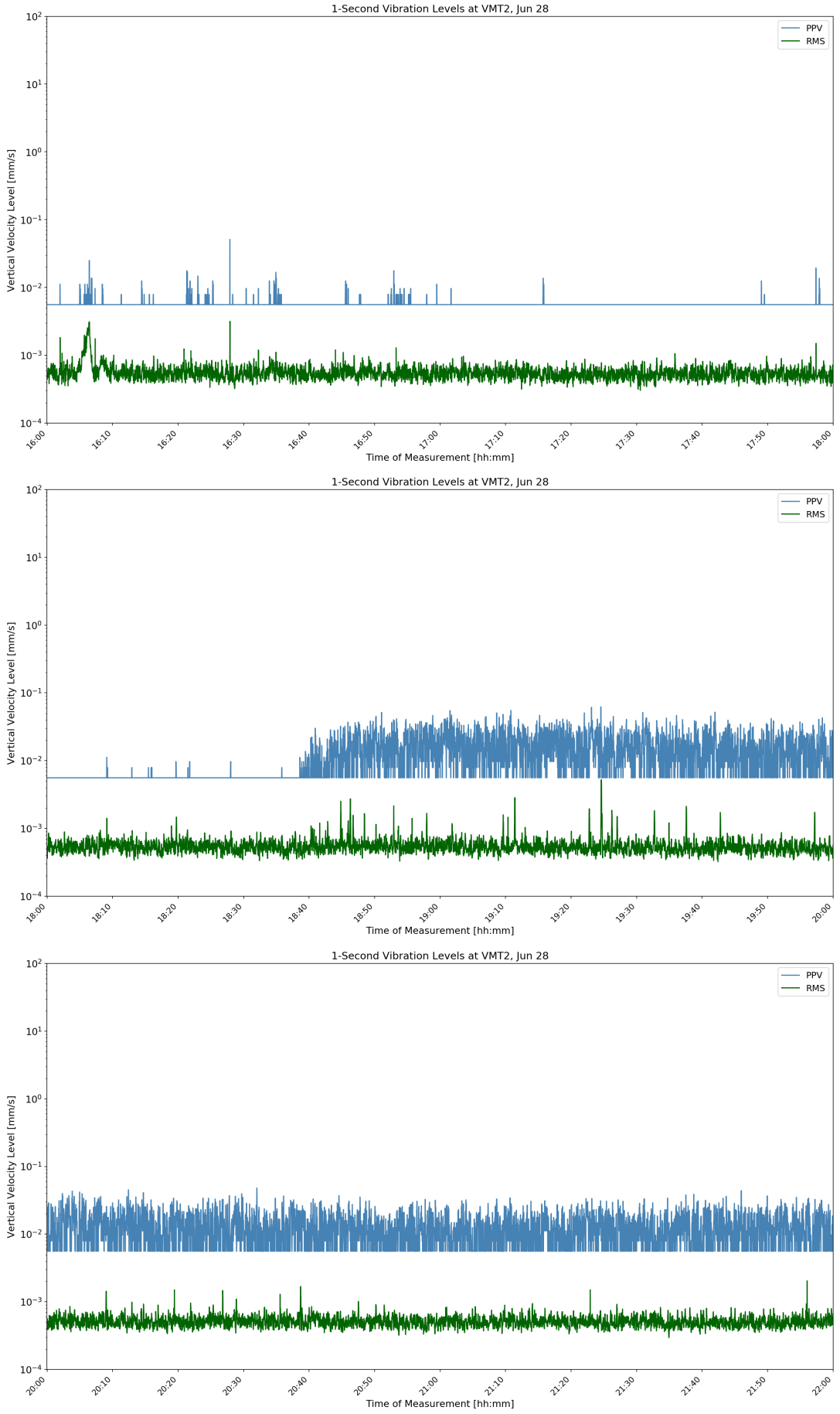


Figure D-54: VMT2 1-Second Velocity History Jun 28 16:00

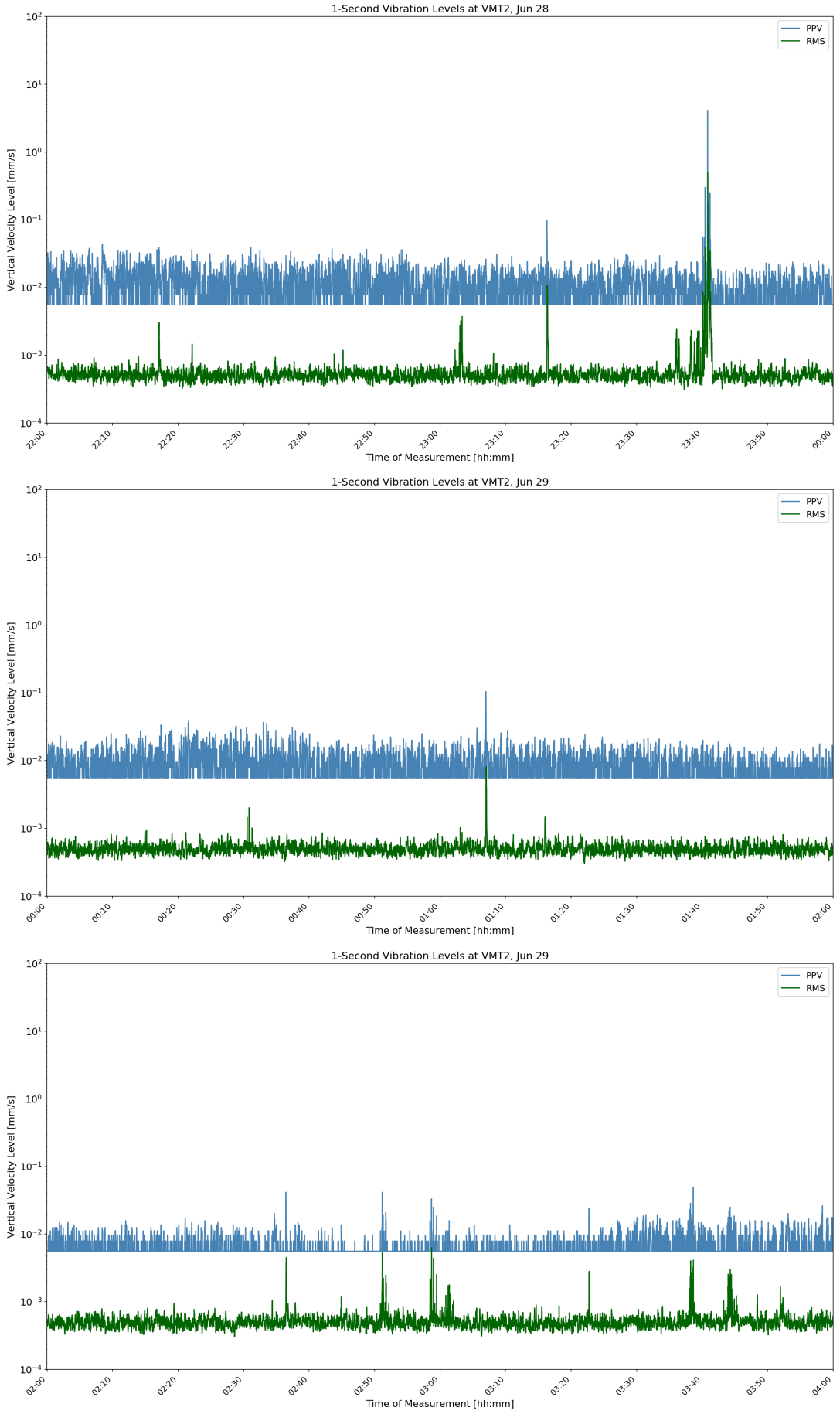


Figure D-55: VMT2 1-Second Velocity History Jun 29 22:00

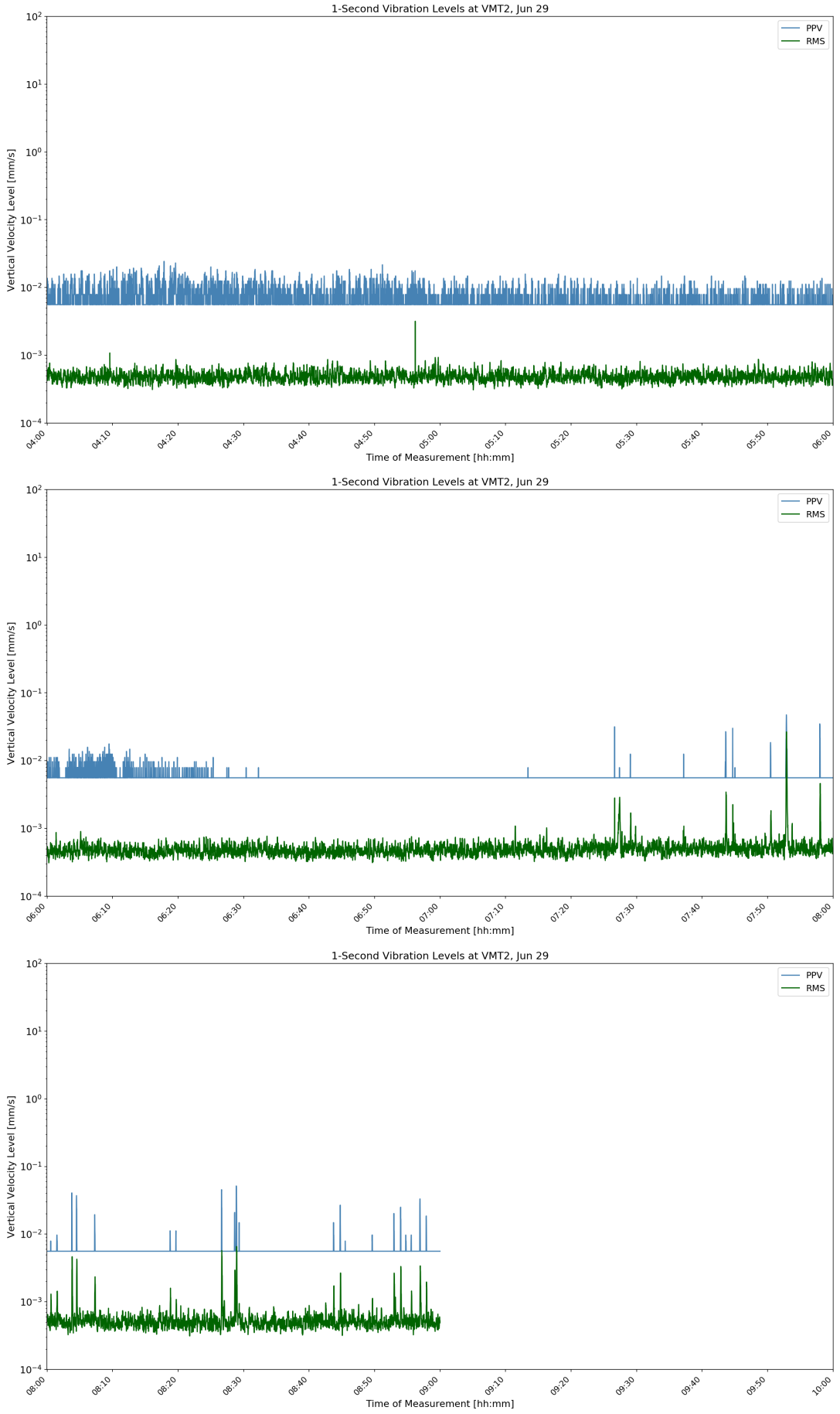


Figure D-56: VMT2 1-Second Velocity History Jun 29 04:00