



Hillcrest Weekly AMTS Report

For Fort Partners

07/31/2023 to 08/07/2023

Project Narrative

PROJECT INFORMATION

The project consists of the construction of a 10-level condominium structure. The new development will have a footprint of about 75 by 180 feet, and will rise to a maximum elevation of +158 feet NGVD. A single level basement is also planned for the development, with an anticipated finished floor elevation of 14'-2" feet NGVD. The underground parking garage will have approximate measurements of 246 feet in the east-west direction, and up to 94 feet in the north-south direction. The footprint of the garage structure is anticipated to be roughly 22,000 square feet. The new structure will be constructed about 20 feet south of the northern boundary of the site. The southern portion of the undeveloped land will include a lap pool, while the northwest portion will provide access to underground parking.

AUTOMATED TOTAL STATION MONITORING

A total of eight (8) have been installed at this time. The system collects readings every hour on the monitoring points on the Carlisle building. The location and identification of each device is presented in the table below and shown graphically on the map. A graph will be displayed for each monitor showing the data points collected during the specified time period. This report will display the average daily data collected from the week of this report.

The automated total station monitoring equipment was installed on the dates as listed in the table below:

Installation Date	Components Installed	Location
5/18/2023	AMTS/Logger Enclosure/Solar Panel	Roof of Seaway building
5/19/2023	Monitoring Points: MPWM, MPWT	West side of south façade of Carlisle building.
5/24/2023	Monitoring Points: MPEB (Installed but omitted from monitoring), MPEM, MPET	East side of south façade of Carlisle building.
7/19/2023	Monitoring Points: MPEB, RW1, RW2	East side of south façade of Carlisle building, seawall at either side of retaining wall.

REVIEW OF TOTAL STATION MONITORING DATA

The following definitions identify the wording that will be used in the report to describe the vibration readings:

- Deflection: a lateral movement of the structure in the X or Y Axis (back and forth, side to side).
- Settlement: a vertical movement downward.

- Heave: a vertical movement upward.

The following is a description of the orientation of the X, Y, and Z axes used to identify movement of the structure.

- X axis: Lateral movement in the north/south direction. Positive readings indicate movement to the north, negative readings indicate movement to the south.
- Y Axis: Lateral movement in the east/west direction. Positive readings indicate movement to the west, negative readings indicate movement to the east.
- Z Axis: Vertical movement up/down. Positive readings indicate heave, negative readings indicate settlement.

DATES WHEN TOTAL STATION READINGS EXCEEDED THRESHOLD VALUES

Below is a table of dates when readings exceeded threshold values on the total station system, along with the cause of the reason for each occurrence. Please note that readings may show periodic variations during the reporting period, which may be due to temperature, weather conditions, sun glare, etc. These may occur on a daily basis (such as due to temperature) or in individual data sets (such poor weather conditions). All exceedances above the threshold will be noted below.

Date	Monitoring Point(s)	Reading
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DATES WHEN TOTAL STATION READINGS WERE NOT RECORDED

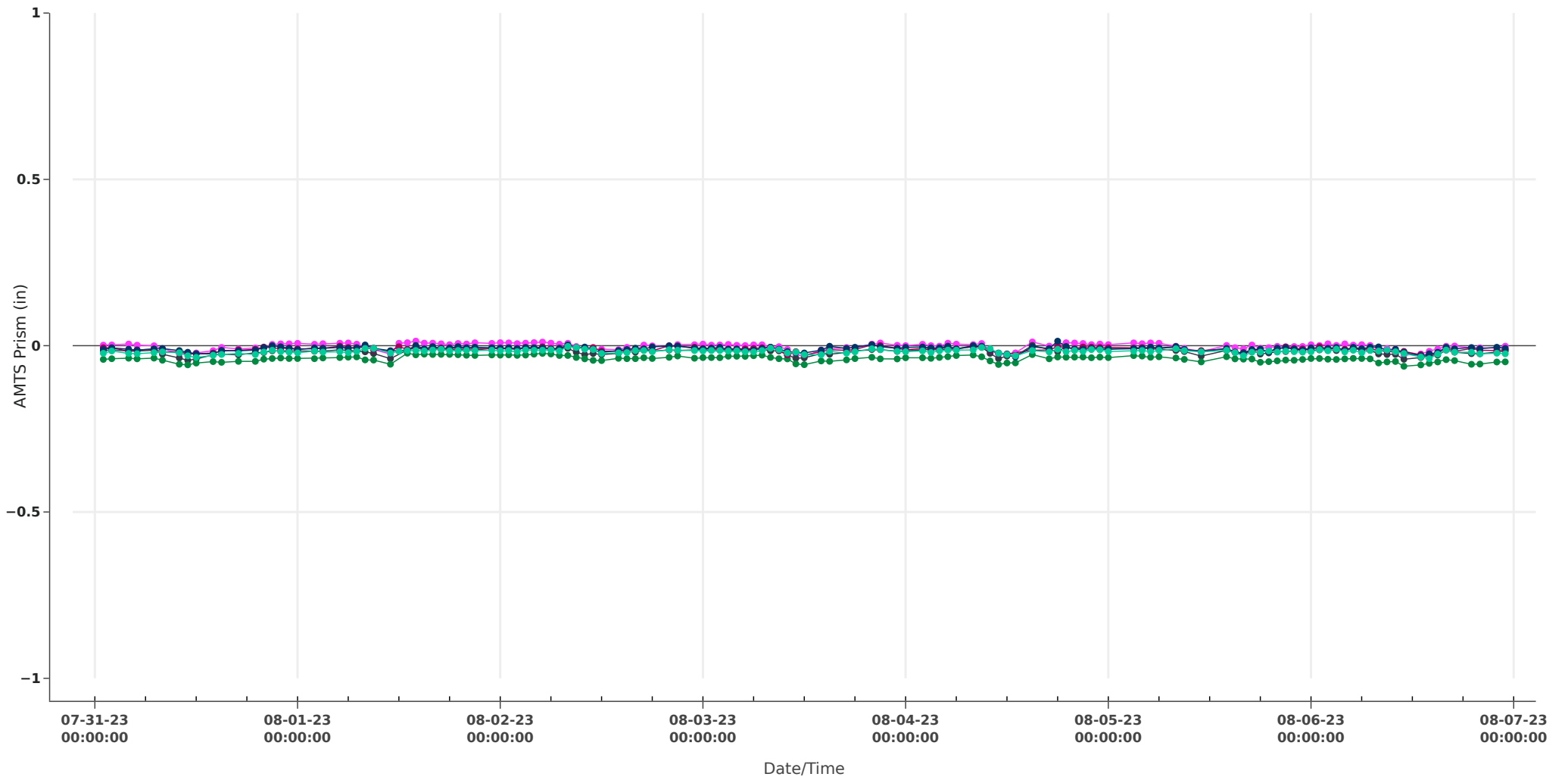
Below is a table of dates when readings were not recorded on the total station system, along with the cause of the reason for each occurrence.

Date	AMTS System
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AMTS Labels

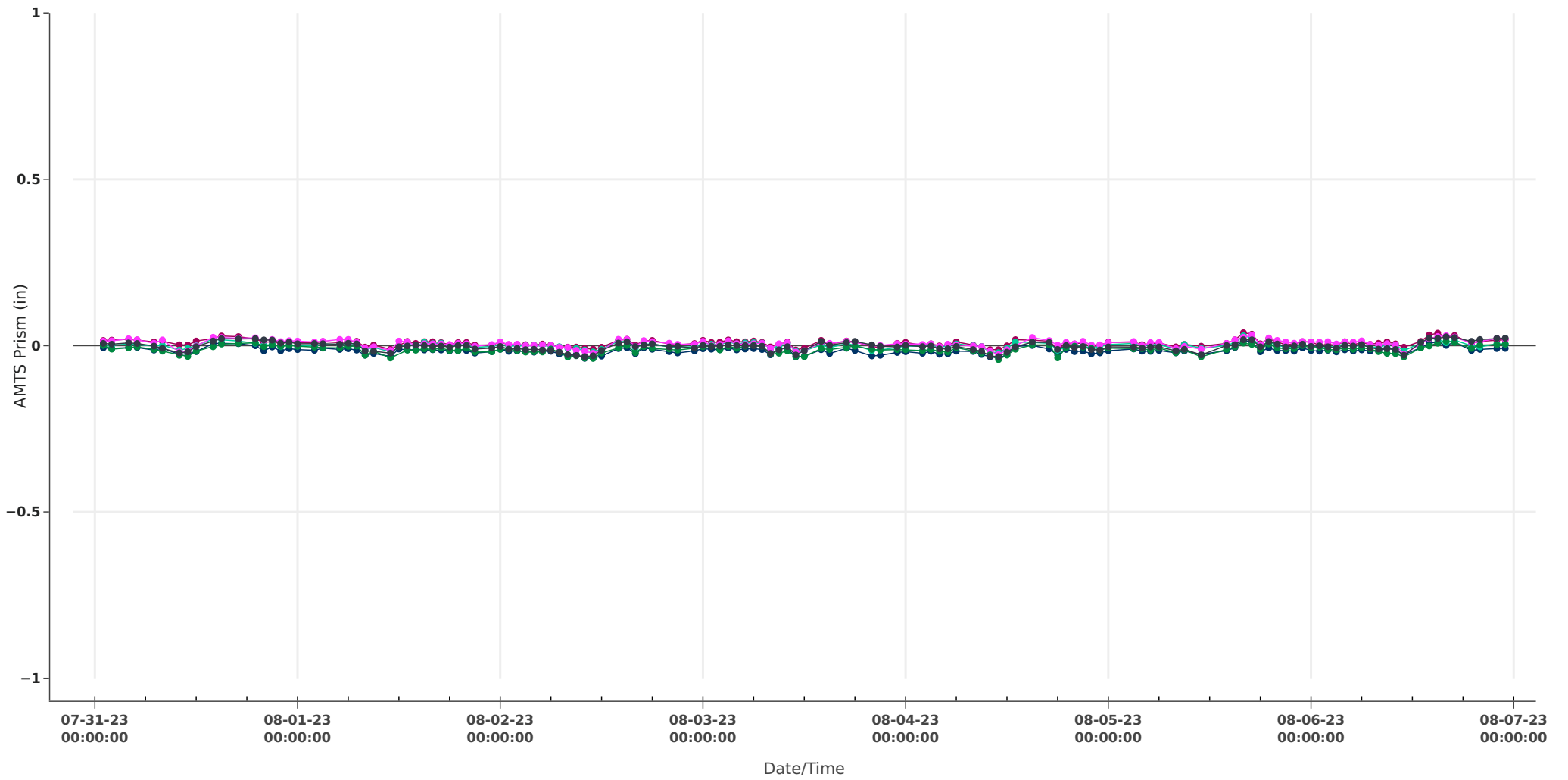


9165 Collins AMTS X-axis



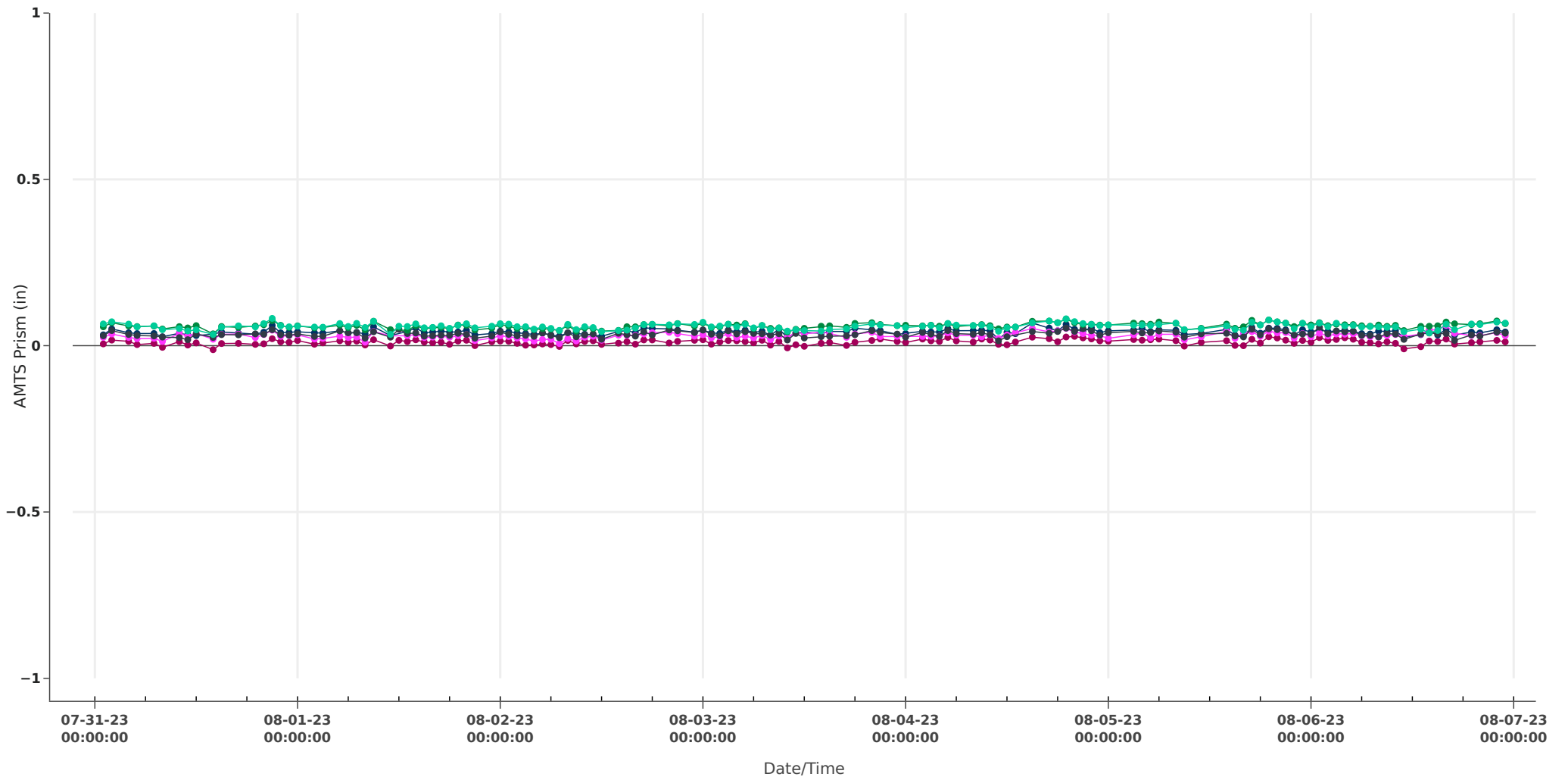
—●— MPEB_X —●— MPEM_X —●— MPET_X —●— MPWB_X —●— MPWM X —●— MPWT X

9165 Collins AMTS Y-axis



—●— MPEB_Y —●— MPEM_Y —●— MPET_Y —●— MPWB_Y —●— MPWM_Y —●— MPWT_Y

9165 Collins AMTS Z-axis

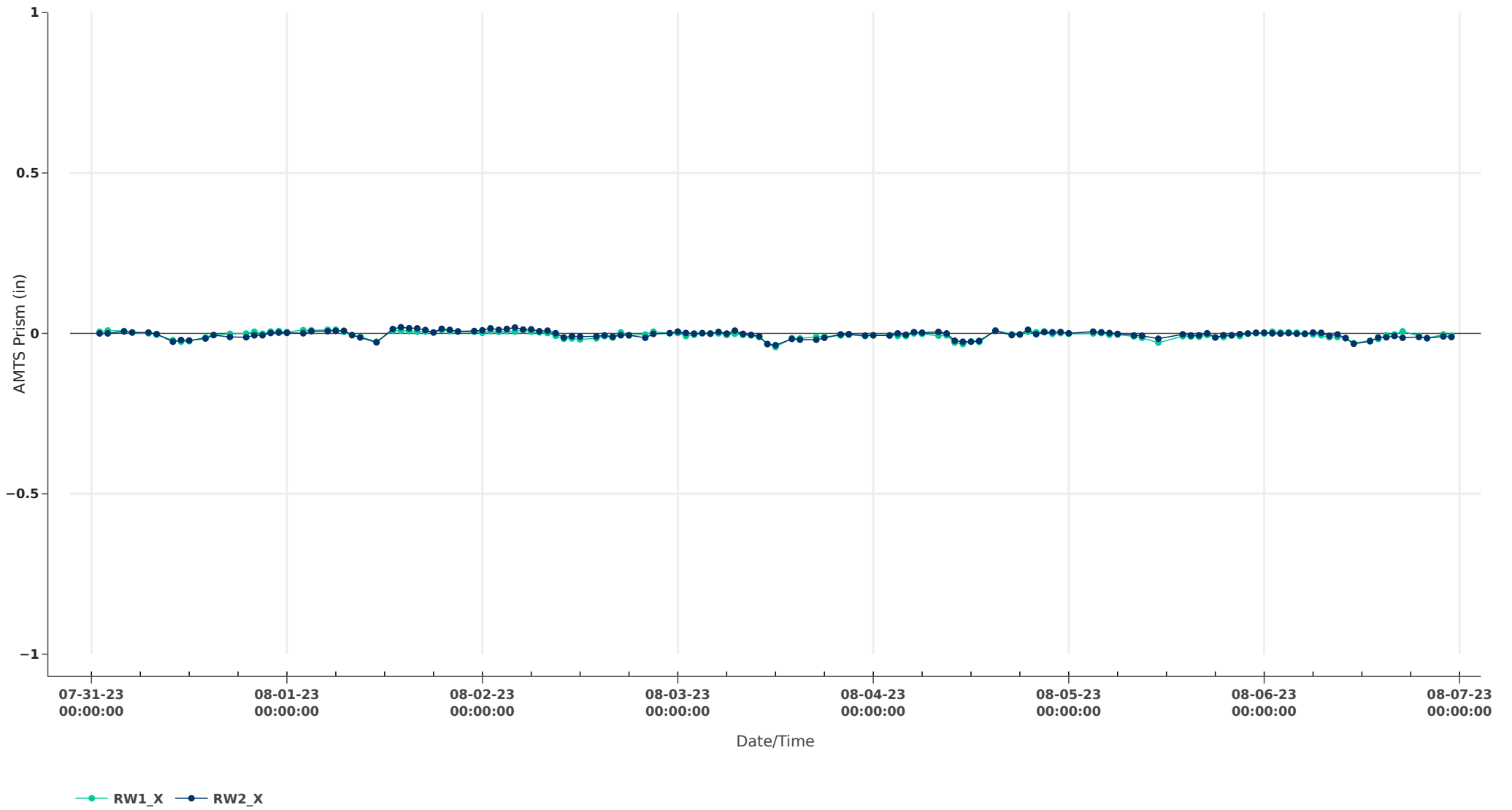


—●— MPEB_Z —●— MPEM_Z —●— MPET_Z —●— MPWB_Z —●— MPWM_Z —●— MPWT_Z

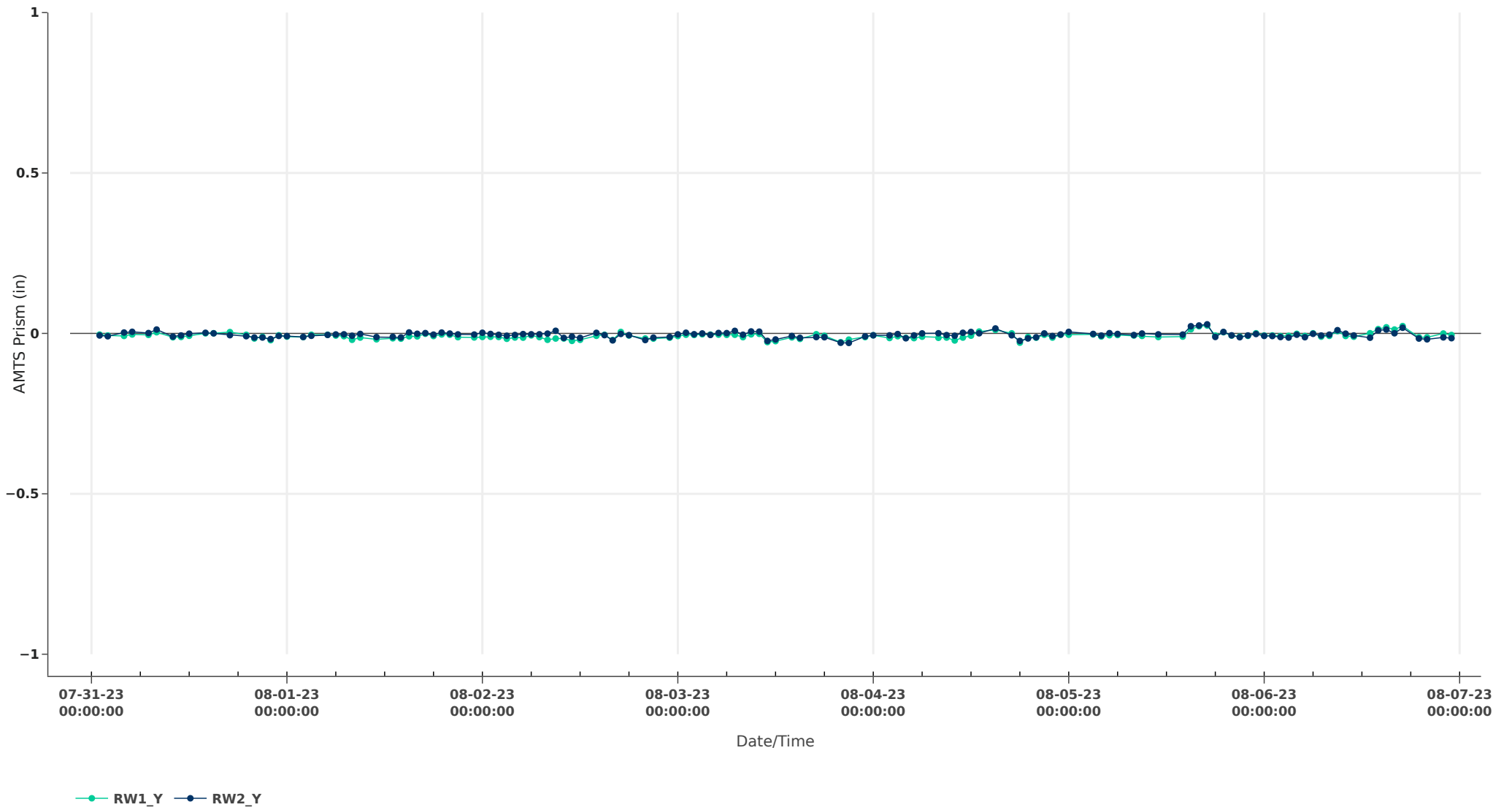
AMTS Retaining Wall Labels



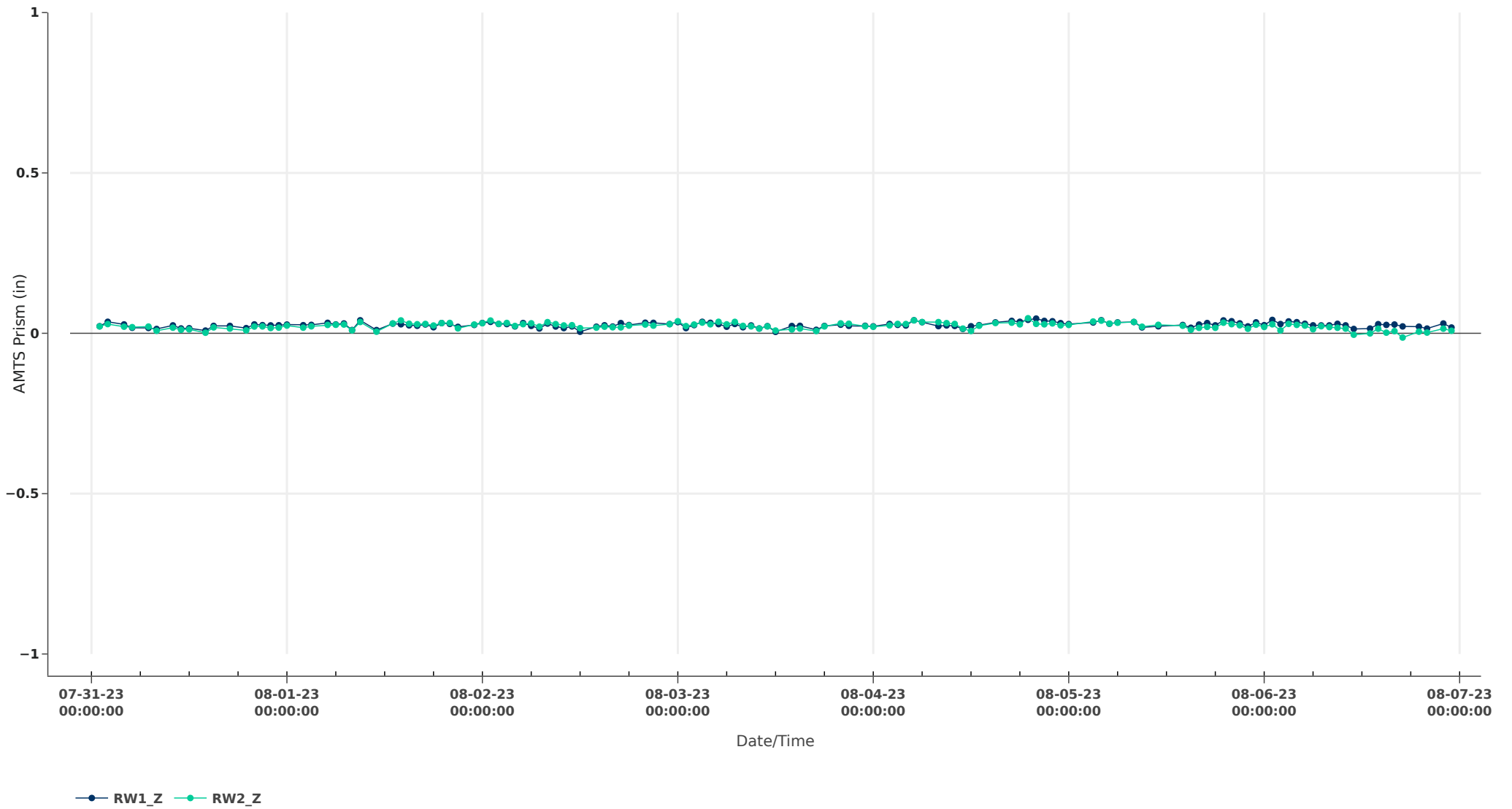
Retaining Wall AMTS X-axis



Retaining Wall AMTS Y-axis



Retaining Wall AMTS Z-axis



AMTS X-Axis Readings - Average Daily Values (Change in Inches)								
Date	MPEB	MPEM	MPET	MPWB	MPWM	MPWT	RW1	RW2
5/19/2023					0.003	-0.003		
5/20/2023					0.000	-0.005		
5/21/2023					0.001	-0.006		
5/22/2023					0.005	-0.002		
5/23/2023					0.005	-0.004		
5/24/2023		0.003	0.002		0.003	-0.014		
5/25/2023		-0.004	0.000	-0.009	-0.005	-0.022		
5/26/2023		-0.010	-0.004		-0.011	-0.028		
5/27/2023		-0.010	-0.008		-0.016	-0.029		
5/28/2023		-0.002	-0.012		-0.013	-0.022		
5/29/2023		0.009	-0.010	0.000	-0.009	-0.017		
5/30/2023		0.008	-0.013		-0.008	-0.018		
5/31/2023		-0.005	-0.025		-0.020	-0.033		
6/1/2023		-0.006	-0.024	-0.035	-0.021	-0.035		
6/2/2023		-0.003	-0.018		-0.018	-0.037		
6/3/2023		-0.004	-0.020		-0.020	-0.038		
6/4/2023		0.002	-0.013		-0.016	-0.032		
6/5/2023		-0.008	-0.026		-0.010	-0.017		
6/6/2023		-0.002	-0.018		-0.010	-0.016		
6/7/2023		-0.011	-0.027		-0.013	-0.019		
6/8/2023		-0.009	-0.028	-0.020	-0.013	-0.018		
6/9/2023		-0.011	-0.028	-0.019	-0.015	-0.020		
6/10/2023		-0.015	-0.032	-0.008	-0.012	-0.018		
6/11/2023		-0.018	-0.038	-0.014	-0.015	-0.028		
6/12/2023		-0.017	-0.039	-0.010	-0.014	-0.024		
6/13/2023		-0.016	-0.035	-0.020	-0.014	-0.021		
6/14/2023		-0.019	-0.043	-0.013	-0.016	-0.028		
6/15/2023		-0.018	-0.042	-0.012	-0.013	-0.024		
6/16/2023		-0.018	-0.043	-0.005	-0.009	-0.020		
6/17/2023		-0.013	-0.036	-0.011	-0.009	-0.019		
6/18/2023		-0.006	-0.022	-0.009	-0.012	-0.017		
6/19/2023		-0.006	-0.018	-0.013	-0.011	-0.018		
6/20/2023		-0.010	-0.020	-0.025	-0.018	-0.023		
6/21/2023		-0.010	-0.023	-0.024	-0.013	-0.021		
6/22/2023		-0.009	-0.023	-0.018	-0.016	-0.023		
6/23/2023		-0.013	-0.030	-0.018	-0.017	-0.025		
6/24/2023		-0.012	-0.033	-0.015	-0.013	-0.023		
6/25/2023		-0.006	-0.024	-0.008	-0.008	-0.012		
6/26/2023		-0.012	-0.029	-0.011	-0.011	-0.017		
6/27/2023		-0.014	-0.035	-0.014	-0.015	-0.022		
6/28/2023		-0.017	-0.043	-0.015	-0.014	-0.024		
6/29/2023		-0.013	-0.041	-0.012	-0.011	-0.020		
6/30/2023		-0.010	-0.035	-0.012	-0.014	-0.018		

AMTS X-Axis Readings - Average Daily Values (Change in Inches)								
Date	MPEB	MPER	MPET	MPWB	MPWM	MPWT	RW1	RW2
7/1/2023		-0.008	-0.031	-0.012	-0.013	-0.015		
7/2/2023		-0.012	-0.036	-0.014	-0.014	-0.019		
7/3/2023		-0.013	-0.040	-0.015	-0.016	-0.021		
7/4/2023			-0.042	-0.012	-0.011	-0.021		
7/5/2023		-0.012	-0.046	-0.012	-0.013	-0.023		
7/6/2023		-0.009	-0.048	-0.014	-0.016	-0.026		
7/7/2023		-0.001	-0.036	-0.013	-0.014	-0.022		
7/8/2023		-0.008	-0.038	-0.016	-0.015	-0.020		
7/9/2023		-0.013	-0.041	-0.018	-0.020	-0.025		
7/10/2023		-0.022	-0.050	-0.017	-0.019	-0.028		
7/11/2023		-0.018	-0.049	-0.013	-0.015	-0.026		
7/12/2023		-0.021	-0.054	-0.010	-0.011	-0.024		
7/13/2023		-0.019	-0.054	-0.013	-0.014	-0.027		
7/14/2023		-0.015	-0.050	-0.010	-0.012	-0.024		
7/15/2023		-0.010	-0.044	-0.012	-0.014	-0.022		
7/16/2023		-0.013	-0.043	-0.016	-0.016	-0.025		
7/17/2023		-0.008	-0.034	-0.012	-0.012	-0.020		
7/18/2023		-0.007	-0.033	-0.012	-0.013	-0.020		
7/19/2023	0.003	-0.011	-0.038	-0.014	-0.015	-0.024	0.011	0.006
7/20/2023	0.004	-0.011	-0.038	-0.011	-0.012	-0.022	0.007	0.001
7/21/2023	0.002	-0.016	-0.042	-0.014	-0.012	-0.025	0.007	-0.002
7/22/2023	0.000	-0.019	-0.044	-0.010	-0.008	-0.017	0.007	-0.004
7/23/2023	0.000	-0.021	-0.046	-0.008	-0.008	-0.018	0.006	-0.007
7/24/2023	0.002	-0.018	-0.044	-0.011	-0.010	-0.020	0.009	-0.004
7/25/2023	0.006	-0.011	-0.039	-0.004	-0.004	-0.015	0.010	0.003
7/26/2023	0.009	-0.006	-0.032	-0.006	-0.002	-0.011	0.016	0.009
7/27/2023	0.007	-0.007	-0.028	-0.005	-0.003	-0.009	0.006	0.005
7/28/2023	0.002	-0.010	-0.029	-0.008	-0.007	-0.014	0.002	0.002
7/29/2023	-0.003	-0.016	-0.034	-0.008	-0.010	-0.017	0.000	-0.003
7/30/2023	-0.003	-0.017	-0.039	-0.012	-0.013	-0.021	0.000	-0.004
7/31/2023	-0.006	-0.023	-0.044	-0.013	-0.012	-0.023	-0.003	-0.007
8/1/2023	0.004	-0.015	-0.033	-0.008	-0.007	-0.015	0.004	0.005
8/2/2023	0.000	-0.014	-0.034	-0.008	-0.008	-0.014	-0.002	0.001
8/3/2023	-0.004	-0.018	-0.039	-0.011	-0.010	-0.017	-0.009	-0.007
8/4/2023	-0.001	-0.014	-0.038	-0.009	-0.008	-0.016	-0.007	-0.004
8/5/2023	-0.002	-0.016	-0.040	-0.011	-0.011	-0.018	-0.007	-0.003
8/6/2023	-0.005	-0.020	-0.047	-0.014	-0.011	-0.020	-0.007	-0.008

AMTS Y-Axis Readings - Average Daily Values (Change in Inches)								
Date	MPEB	MPEM	MPET	MPWB	MPWM	MPWT	RW1	RW2
5/19/2023					0.007	0.004		
5/20/2023					0.001	0.002		
5/21/2023					0.005	0.004		
5/22/2023					0.004	0.004		
5/23/2023					0.008	0.009		
5/24/2023		-0.005	0.001		0.003	-0.002		
5/25/2023		-0.001	0.004	-0.014	0.003	-0.006		
5/26/2023		-0.001	0.006		-0.003	-0.009		
5/27/2023		-0.001	0.003		-0.007	-0.013		
5/28/2023		0.008	0.016		0.003	0.005		
5/29/2023		0.004	0.016	0.000	0.004	0.007		
5/30/2023		0.006	0.019		0.004	0.005		
5/31/2023		-0.002	0.009		-0.002	-0.004		
6/1/2023		0.004	0.013	-0.008	0.002	0.000		
6/2/2023		0.005	0.016		0.004	-0.003		
6/3/2023		0.013	0.023		0.002	-0.003		
6/4/2023		0.017	0.024		0.005	0.000		
6/5/2023		0.004	0.000		-0.014	-0.027		
6/6/2023		0.005	0.000		-0.011	-0.027		
6/7/2023		0.006	0.003		-0.010	-0.024		
6/8/2023		0.005	0.001	0.005	-0.011	-0.023		
6/9/2023		0.010	0.007	0.011	-0.010	-0.022		
6/10/2023		0.005	0.004	-0.008	-0.011	-0.026		
6/11/2023		0.010	0.008	0.000	-0.006	-0.012		
6/12/2023		0.009	0.007	0.017	-0.004	-0.009		
6/13/2023		0.007	0.005	0.008	-0.005	-0.015		
6/14/2023		0.018	0.012	0.018	0.010	0.008		
6/15/2023		0.012	0.005	0.018	0.002	-0.001		
6/16/2023		0.020	0.012	0.033	0.011	0.012		
6/17/2023		0.018	0.013	0.021	0.013	0.009		
6/18/2023		0.009	0.009	0.022	0.008	-0.004		
6/19/2023		0.004	0.004	0.013	0.001	-0.011		
6/20/2023		0.002	0.003	0.021	-0.011	-0.020		
6/21/2023		0.001	0.000	0.032	-0.009	-0.018		
6/22/2023		0.006	0.005	0.019	-0.002	-0.006		
6/23/2023		0.007	0.004	0.018	0.001	0.000		
6/24/2023		0.005	0.003	0.016	0.000	0.003		
6/25/2023		-0.005	-0.004	0.008	-0.008	-0.013		
6/26/2023		-0.003	-0.005	0.004	-0.015	-0.017		
6/27/2023		0.008	0.002	0.016	-0.002	-0.001		
6/28/2023		0.008	0.000	0.015	-0.002	0.005		
6/29/2023		0.007	-0.001	0.013	-0.002	0.004		
6/30/2023		0.004	0.000	0.009	-0.001	0.001		

AMTS Y-Axis Readings - Average Daily Values (Change in Inches)								
Date	MPEB	MPEM	MPET	MPWB	MPWM	MPWT	RW1	RW2
7/1/2023		0.006	0.000	0.010	0.001	-0.001		
7/2/2023		0.008	-0.003	0.010	-0.002	0.004		
7/3/2023		0.008	-0.004	0.010	-0.001	0.009		
7/4/2023			-0.006	0.015	-0.001	0.014		
7/5/2023		0.017	-0.008	0.015	0.002	0.016		
7/6/2023		0.019	-0.003	0.017	0.006	0.019		
7/7/2023		0.012	-0.004	0.010	0.000	0.008		
7/8/2023		0.013	0.002	0.009	-0.004	0.004		
7/9/2023		0.020	0.007	0.007	-0.001	0.004		
7/10/2023		0.021	0.007	0.011	0.000	0.014		
7/11/2023		0.018	0.002	0.018	0.004	0.020		
7/12/2023		0.019	0.000	0.013	-0.001	0.021		
7/13/2023		0.026	0.005	0.013	0.002	0.024		
7/14/2023		0.025	0.001	0.012	0.002	0.021		
7/15/2023		0.028	0.006	0.008	-0.001	0.013		
7/16/2023		0.027	0.009	0.009	-0.005	0.014		
7/17/2023		0.022	0.009	0.005	-0.007	0.005		
7/18/2023		0.018	0.006	0.007	-0.007	0.005		
7/19/2023	-0.001	0.026	0.006	0.018	0.004	0.013	0.000	0.003
7/20/2023	-0.005	0.021	0.001	0.016	0.002	0.011	-0.007	-0.003
7/21/2023	-0.002	0.023	0.002	0.017	0.001	0.017	-0.004	-0.003
7/22/2023	-0.005	0.021	0.001	0.013	-0.005	0.013	-0.004	-0.005
7/23/2023	-0.005	0.021	0.002	0.013	-0.004	0.017	-0.004	-0.006

AMTS Z-Axis Readings - Average Daily Values (Change in Inches)								
Date	MPEB	MPEM	MPET	MPWB	MPWM	MPWT	RW1	RW2
5/19/2023					0.003	0.004		
5/20/2023					0.003	0.008		
5/21/2023					0.009	0.011		
5/22/2023					0.017	0.021		
5/23/2023					0.023	0.025		
5/24/2023		0.010	0.000		0.023	0.022		
5/25/2023		0.017	0.004	-0.017	0.024	0.020		
5/26/2023		0.013	0.001		0.027	0.020		
5/27/2023		0.016	0.006		0.034	0.028		
5/28/2023		0.010	0.004		0.030	0.021		
5/29/2023		0.011	0.002	0.000	0.027	0.026		
5/30/2023		0.010	-0.002		0.032	0.029		
5/31/2023		0.011	-0.003		0.030	0.028		
6/1/2023		0.008	0.000	-0.026	0.027	0.021		
6/2/2023		0.012	-0.003		0.031	0.026		
6/3/2023		0.012	-0.004		0.033	0.024		
6/4/2023		0.012	-0.004		0.037	0.028		
6/5/2023		0.014	-0.001		0.033	0.026		
6/6/2023		0.022	0.008		0.039	0.036		
6/7/2023		0.023	0.008		0.035	0.028		
6/8/2023		0.025	0.008	0.012	0.033	0.030		
6/9/2023		0.021	0.007	0.005	0.034	0.029		
6/10/2023		0.024	0.012	0.014	0.038	0.033		
6/11/2023		0.021	0.008	0.015	0.034	0.028		
6/12/2023		0.021	0.009	0.012	0.029	0.028		
6/13/2023		0.020	0.009	0.001	0.029	0.025		
6/14/2023		0.014	0.005	0.006	0.023	0.018		
6/15/2023		0.010	0.003	0.000	0.024	0.020		
6/16/2023		0.012	0.008	0.004	0.027	0.025		
6/17/2023		0.013	0.004	-0.014	0.025	0.026		
6/18/2023		0.021	0.011	-0.001	0.032	0.037		
6/19/2023		0.020	0.007	0.005	0.034	0.031		
6/20/2023		0.022	0.010	0.018	0.033	0.029		
6/21/2023		0.026	0.010	0.012	0.037	0.035		
6/22/2023		0.025	0.013	0.012	0.034	0.030		
6/23/2023		0.025	0.016	0.005	0.031	0.026		
6/24/2023		0.024	0.015	0.004	0.029	0.027		
6/25/2023		0.027	0.015	0.010	0.033	0.033		
6/26/2023		0.028	0.017	0.013	0.034	0.030		
6/27/2023		0.029	0.020	0.017	0.039	0.034		
6/28/2023		0.026	0.015	0.013	0.038	0.037		
6/29/2023		0.023	0.012	0.015	0.038	0.039		
6/30/2023		0.023	0.017	0.014	0.038	0.038		

AMTS Z-Axis Readings - Average Daily Values (Change in Inches)								
Date	MPEB	MPEM	MPET	MPWB	MPWM	MPWT	RW1	RW2
7/1/2023		0.025	0.013	0.014	0.038	0.041		
7/2/2023		0.025	0.015	0.015	0.039	0.039		
7/3/2023		0.024	0.016	0.013	0.039	0.038		
7/4/2023			0.015	0.014	0.039	0.039		
7/5/2023		0.026	0.017	0.016	0.041	0.040		
7/6/2023		0.024	0.014	0.016	0.041	0.043		
7/7/2023		0.028	0.014	0.017	0.038	0.041		
7/8/2023		0.027	0.015	0.016	0.039	0.044		
7/9/2023		0.025	0.012	0.013	0.040	0.044		
7/10/2023		0.022	0.012	0.014	0.042	0.047		
7/11/2023		0.024	0.013	0.015	0.044	0.052		
7/12/2023		0.026	0.013	0.018	0.044	0.053		
7/13/2023		0.023	0.010	0.011	0.041	0.050		
7/14/2023		0.027	0.014	0.017	0.045	0.054		
7/15/2023		0.023	0.004	0.015	0.046	0.058		
7/16/2023		0.022	0.007	0.013	0.042	0.051		
7/17/2023		0.028	0.013	0.019	0.047	0.056		
7/18/2023		0.033	0.019	0.021	0.047	0.058		
7/19/2023	0.001	0.033	0.024	0.027	0.055	0.062	0.010	0.003
7/20/2023	0.001	0.033	0.023	0.026	0.055	0.061	0.009	0.004
7/21/2023	0.000	0.031	0.022	0.023	0.052	0.058	0.008	0.002
7/22/2023	-0.002	0.029	0.016	0.019	0.050	0.055	0.009	0.000
7/23/2023	-0.005	0.026	0.016	0.018	0.048	0.055	0.005	-0.002