



## **Hillcrest Weekly AMTS Report**

**For Fort Partners**

**06/19/2023 to 06/26/2023**

# 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 five (5) 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: MPWB*, 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.

\* Note – Due to the angle of the prism at the time of installation, readings on this point have been inconsistent. Readings are still collected periodically during the monitoring period.

## 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 WERE NOT RECORDED

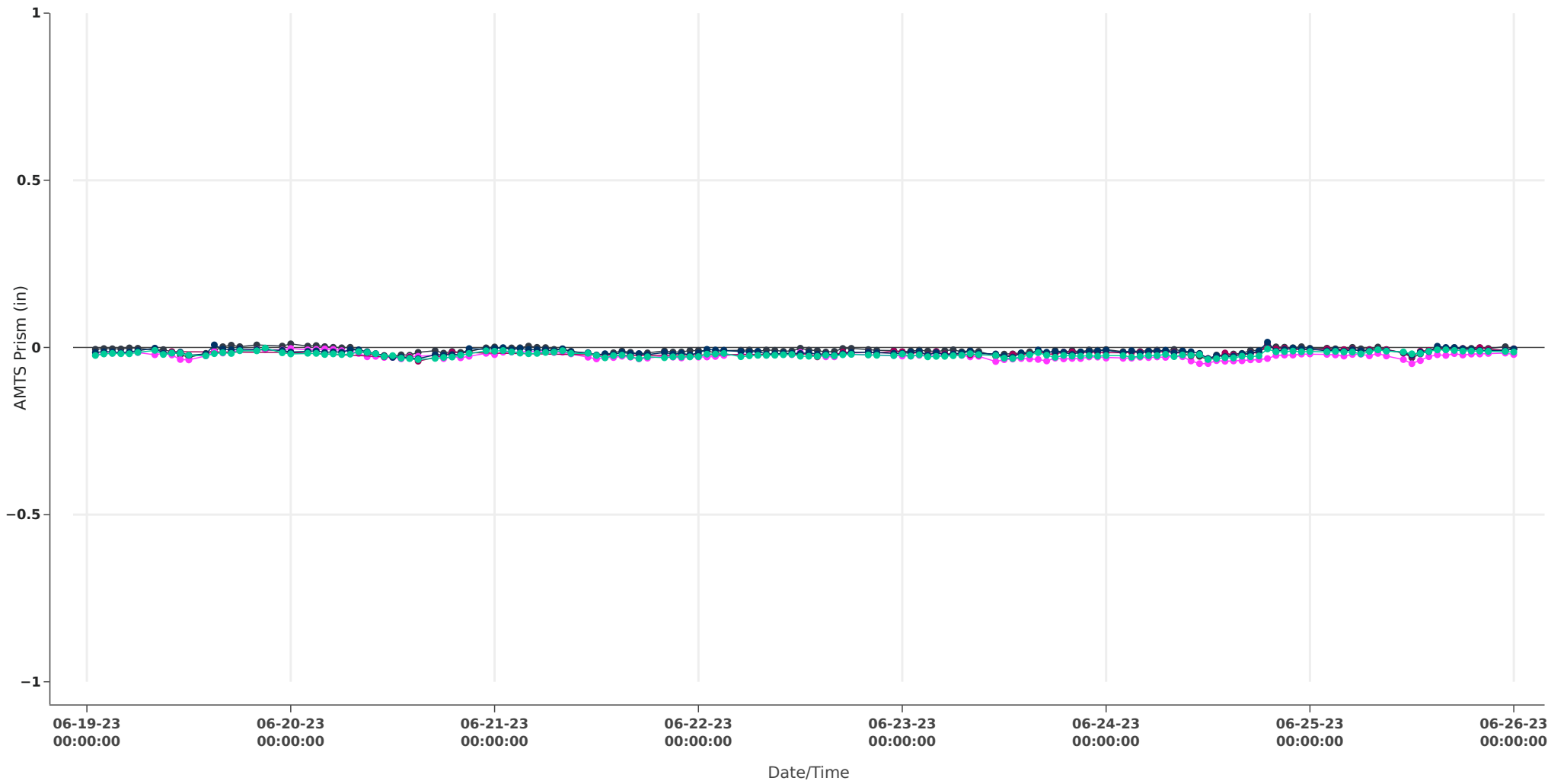
Below is a table of dates when readings were not recorded on the total station system, along with the cause of the reason for each occurrence.

Date	AMTS System
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# AMTS Labels

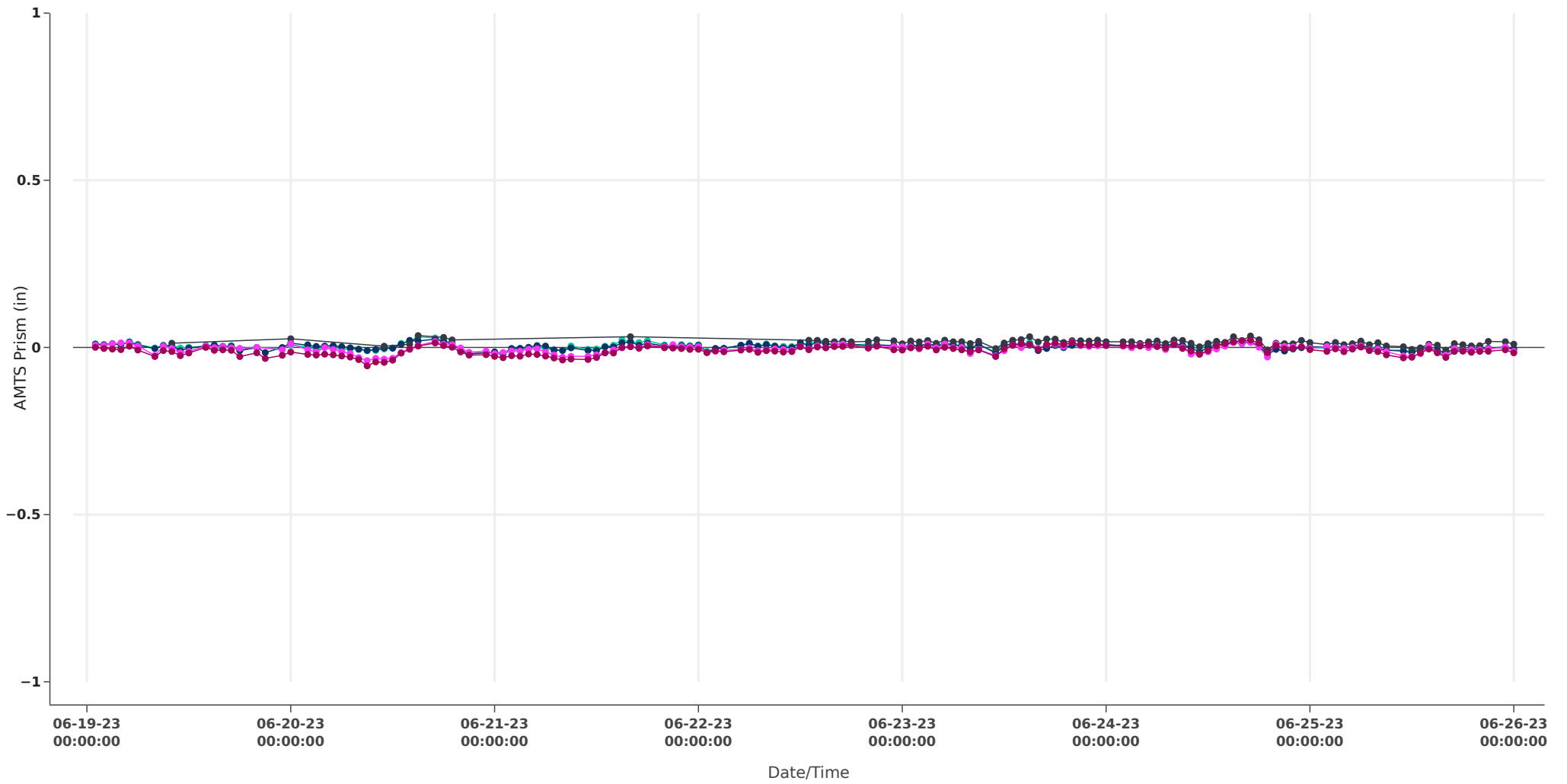


# 9165 Collins AMTS X-axis



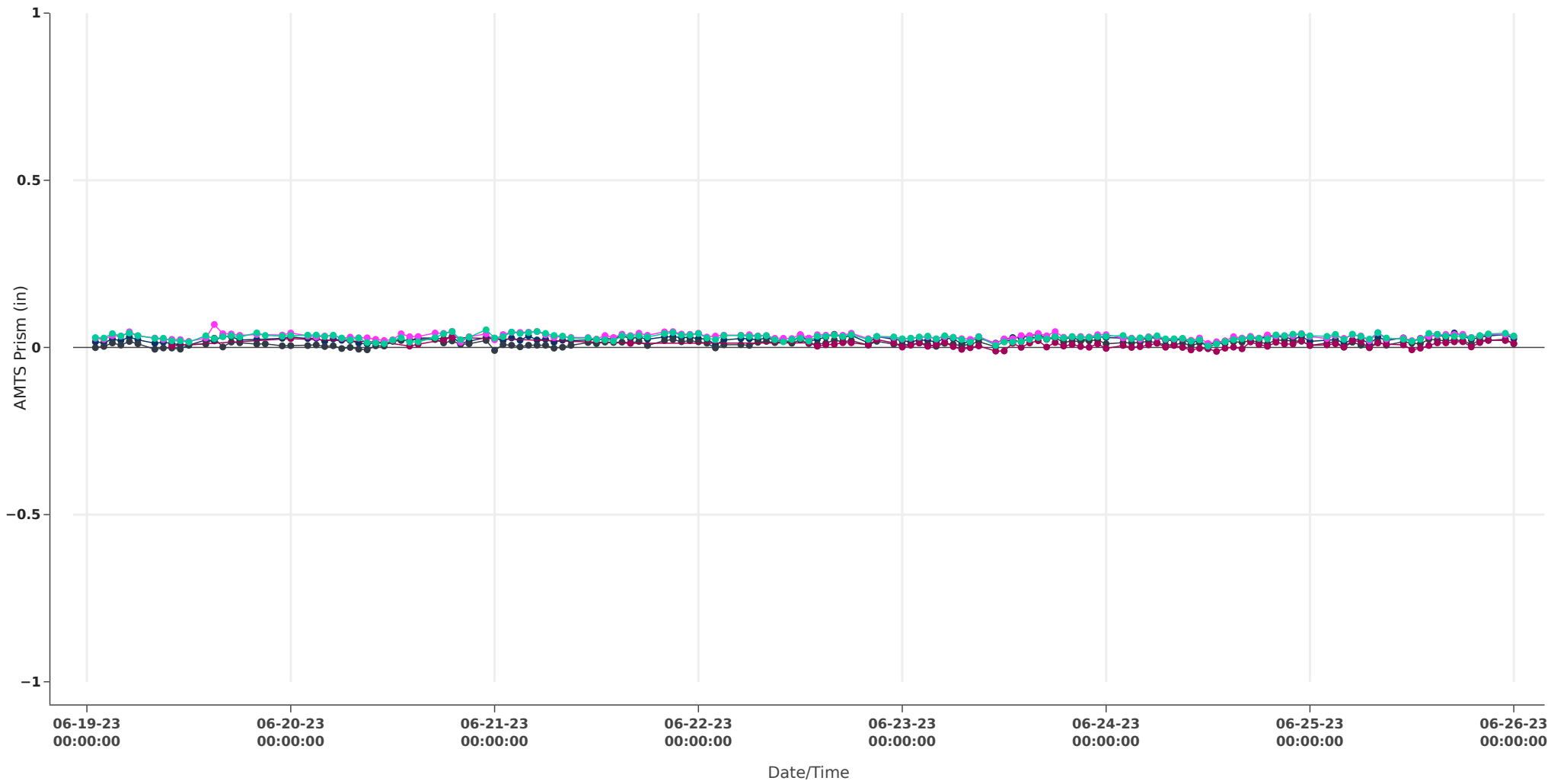
—●— MPEM\_X —●— MPET\_X —●— MPWB\_X —●— MPWM X —●— MPWT X

# 9165 Collins AMTS Y-axis



—●— MPEM\_Y —●— MPET\_Y —●— MPWB\_Y —●— MPWM\_Y —●— MPWT\_Y

# 9165 Collins AMTS Z-axis



—●— MPEM\_Z —●— MPET\_Z —●— MPWB\_Z —●— MPWM\_Z —●— MPWT\_Z

AMTS X-Axis Readings - Average Daily Values (Change in Inches)					
Date	MPEM	MPET	MPWB	MPWM	MPWT
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



AMTS X-Axis Readings - Average Daily Values (Change in Inches)					
Date	MPEM	MPET	MPWB	MPWM	MPWT
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

AMTS X-Axis Readings - Average Daily Values (Change in Inches)					
Date	MPEM	MPET	MPWB	MPWM	MPWT
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