



# **Surf House Weekly AMTS Monitoring Report**

**For Fort Partners**

**07/31/2023 to 08/07/2023**

# Project Narrative

## PROJECT INFORMATION

The project consists of the construction of a 12-level condominium structure. The new development will have a footprint of about 65 by 180 feet, and will rise to a maximum elevation of +140 feet NGVD. A single level basement is also planned for the development, with an anticipated finished floor elevation of -6' 8" feet NGVD. The underground parking garage will have approximate measurements of 206 feet in the east-west direction, and up to 65 feet in the north-south direction. The footprint of the garage structure is anticipated to be roughly 13,600 square feet. The garage will be accessed on the North side by car lifts. The eastern portion of the undeveloped land will include a pool and garden for the residents.

## AUTOMATED TOTAL STATION MONITORING

A total of four (4) have been installed at this time. The system collects readings every hour on the monitoring points on the Arte 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
7/14/2023	AMTS/Logger Enclosure/Solar Panel	Roof of Four Seasons Hotel
7/14/2023	Monitoring Points: Arte 1, Arte 4 (Arte 4 added to readings on 7/19/2023)	Roof of Arte, 10 floor level – east side of slab edge
7/19/2023	Monitoring Points: Arte 2, Arte 3	Roof of Arte, east and west sides of roof slab

## 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 east/west direction. Positive readings indicate movement to the east, negative readings indicate movement to the west.
- Y axis: Lateral movement in the north/south direction. Positive readings indicate movement to the north, negative readings indicate movement to the south.
- 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	AMTS System
------	-------------

#### DATES WHEN TOTAL STATION READINGS WERE NOT RECORDED

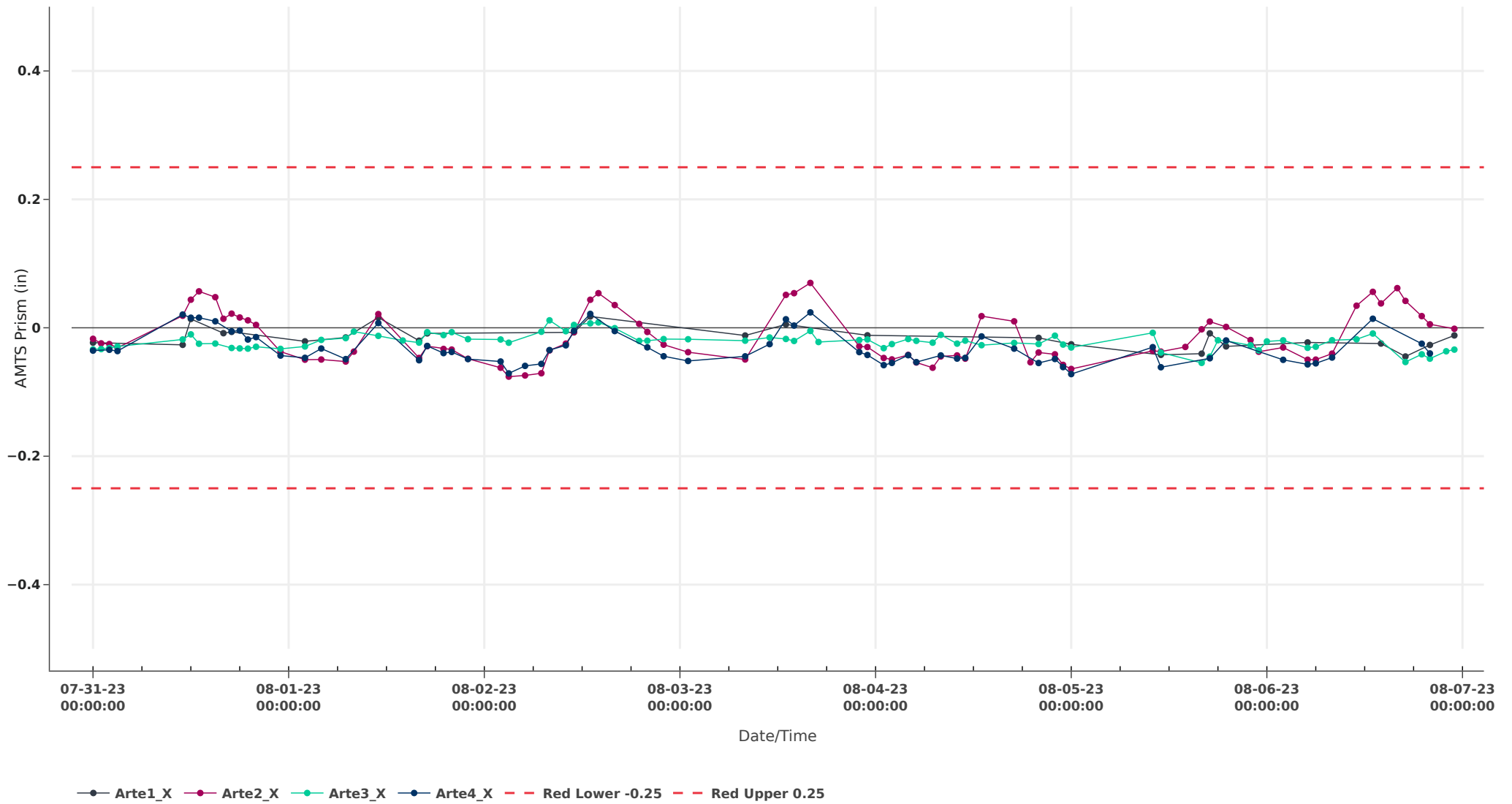
Below is a table of dates when readings were not recorded on the total station system, along with the cause of the reason for each occurrence.

Date	AMTS System
------	-------------

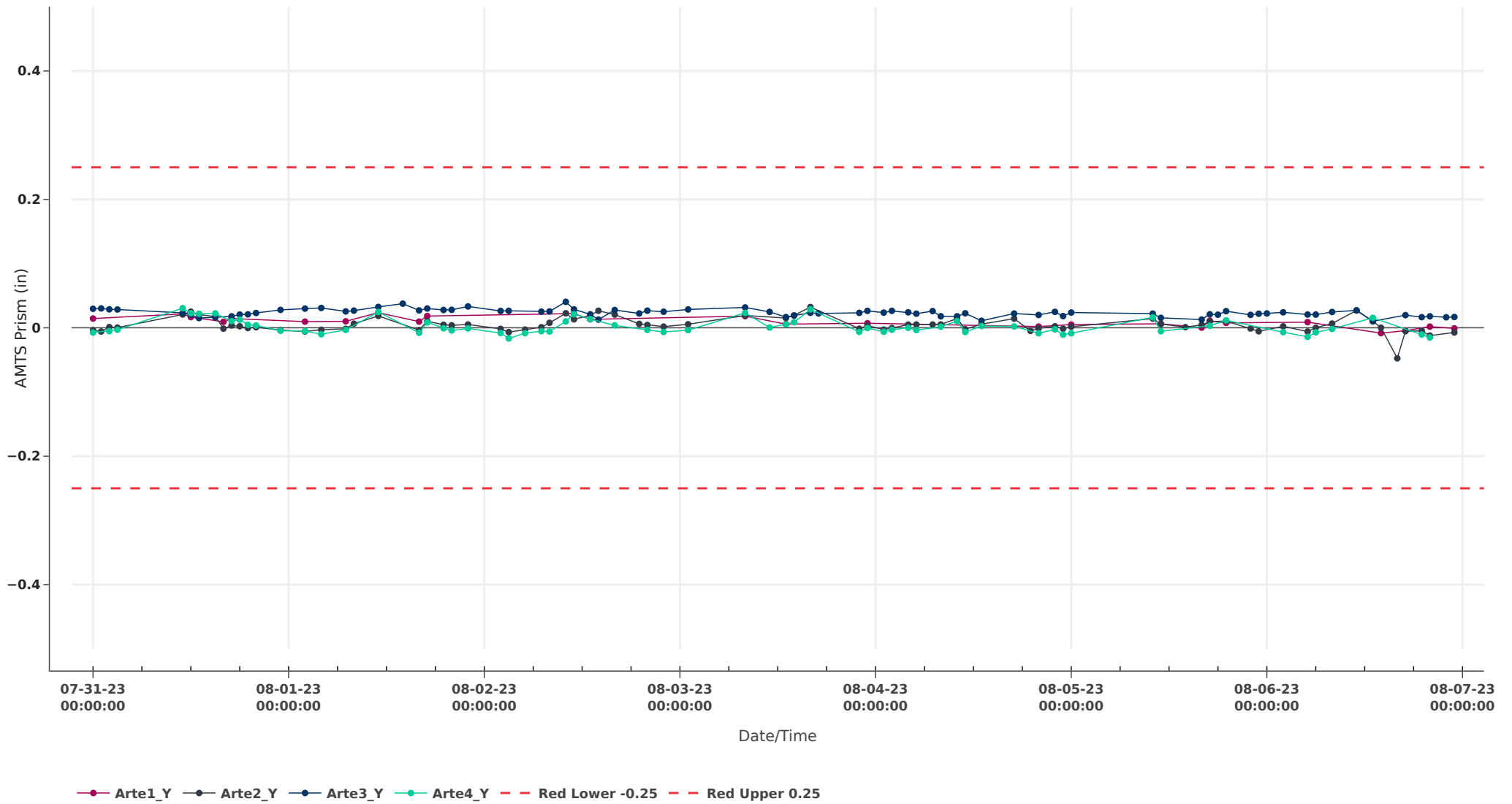
## Report AMTS View



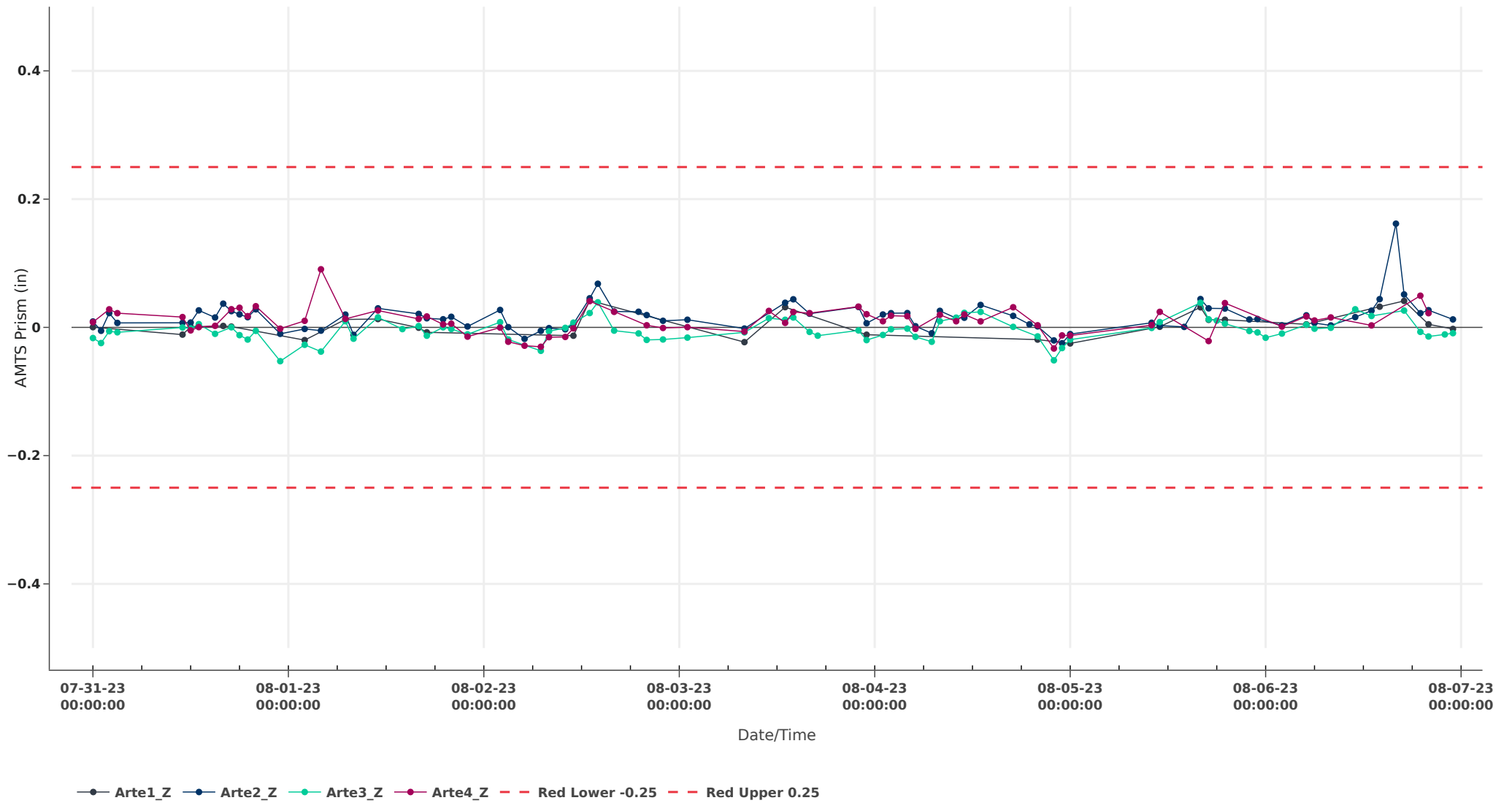
## AMTS X-axis



## AMTS Y-axis



# AMTS Z-axis



AMTS X-Axis Readings - Average Daily Values (Change in Inches)				
Date	Arte1	Arte2	Arte3	Arte4
7/15/2023	-0.026			
7/16/2023	-0.017			
7/17/2023	-0.025			
7/18/2023	-0.021			
7/19/2023	-0.007	0.024	-0.025	-0.005
7/20/2023	0.007	0.021	-0.024	0.003
7/21/2023	-0.007	0.008	-0.031	-0.008
7/22/2023	-0.006	-0.005	-0.033	-0.016
7/23/2023	-0.007	0.004	-0.032	-0.006
7/24/2023	-0.017	0.004	-0.036	-0.008
7/25/2023	-0.007	0.002	-0.026	-0.005
7/26/2023	-0.018	-0.039	-0.018	-0.034
7/27/2023	-0.013	-0.026	-0.008	-0.038
7/28/2023	-0.013	-0.029	-0.014	-0.035
7/29/2023	0.003	-0.007	-0.018	-0.029
7/30/2023	-0.012	-0.011	-0.031	-0.029
7/31/2023	-0.010	0.007	-0.028	-0.011
8/1/2023	-0.010	-0.036	-0.015	-0.036
8/2/2023	0.005	-0.019	-0.007	-0.033
8/3/2023	-0.006	0.004	-0.017	-0.020
8/4/2023	-0.016	-0.040	-0.022	-0.046
8/5/2023	-0.029	-0.024	-0.031	-0.046
8/6/2023	-0.026	0.007	-0.030	-0.037

AMTS Y-Axis Readings - Average Daily Values (Change in Inches)				
Date	Arte1	Arte2	Arte3	Arte4
7/15/2023	-0.005			
7/16/2023	-0.012			
7/17/2023	-0.014			
7/18/2023	-0.011			
7/19/2023	-0.015	-0.018	-0.004	-0.020
7/20/2023	-0.006	-0.008	0.004	-0.006
7/21/2023	-0.005	-0.013	0.007	-0.010
7/22/2023	0.002	-0.010	0.013	-0.014
7/23/2023	-0.001	-0.015	0.011	-0.018
7/24/2023	-0.002	-0.018	0.009	-0.019
7/25/2023	0.003	-0.002	0.016	-0.005
7/26/2023	0.005	0.004	0.023	-0.005
7/27/2023	0.003	0.012	0.023	0.002
7/28/2023	0.001	0.000	0.015	-0.002
7/29/2023	0.010	0.010	0.027	-0.002
7/30/2023	0.010	0.003	0.028	-0.002
7/31/2023	0.013	0.007	0.020	0.012
8/1/2023	0.014	0.003	0.030	0.000
8/2/2023	0.018	0.009	0.026	-0.001
8/3/2023	0.010	0.013	0.024	0.007
8/4/2023	0.002	0.003	0.021	-0.002
8/5/2023	0.006	0.005	0.020	0.003
8/6/2023	-0.001	-0.003	0.020	-0.006

AMTS Z-Axis Readings - Average Daily Values (Change in Inches)				
Date	Arte1	Arte2	Arte3	Arte4
7/15/2023	0.001			
7/16/2023	0.001			
7/17/2023	0.000			
7/18/2023	0.018			
7/19/2023	0.002	0.020	0.004	0.008
7/20/2023	0.017	0.013	-0.005	0.017
7/21/2023	0.008	0.015	-0.008	0.011
7/22/2023	0.010	0.019	-0.007	0.014
7/23/2023	0.009	0.020	-0.009	0.016
7/24/2023	0.003	0.026	0.000	0.016
7/25/2023	0.011	0.029	-0.005	0.006
7/26/2023	-0.008	0.018	-0.015	-0.008
7/27/2023	-0.005	0.021	-0.002	-0.007
7/28/2023	-0.010	0.014	-0.003	-0.003
7/29/2023	0.027	0.016	-0.005	0.004
7/30/2023	0.000	0.016	-0.004	0.003
7/31/2023	-0.001	0.015	-0.012	0.015
8/1/2023	-0.001	0.010	-0.008	0.019
8/2/2023	0.014	0.015	-0.003	-0.004
8/3/2023	-0.001	0.022	-0.003	0.016
8/4/2023	-0.019	0.009	-0.006	0.008
8/5/2023	0.006	0.014	0.005	0.006
8/6/2023	0.016	0.033	0.001	0.017