2023 Hampton Beach Weather Station Deployment

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Background

- Hampton Beach, NH, currently experiences frequent flooding events such as high tide flooding and sunny day flooding caused by the king tides.

- Most changes to prevent significant damage to infrastructure in the area rely heavily on data about the flooding cycle that the local population does not have access to.

- The severity of the weather conditions greatly impacts the observed king tides in comparison to the predicted tides.

Objectives

- To develop and utilize an affordable weather station which can be quickly and easily deployed

- To collect meteorological data during King Tide at Hampton Beach.

- To further develop the weather station for next year's Weather Station group.
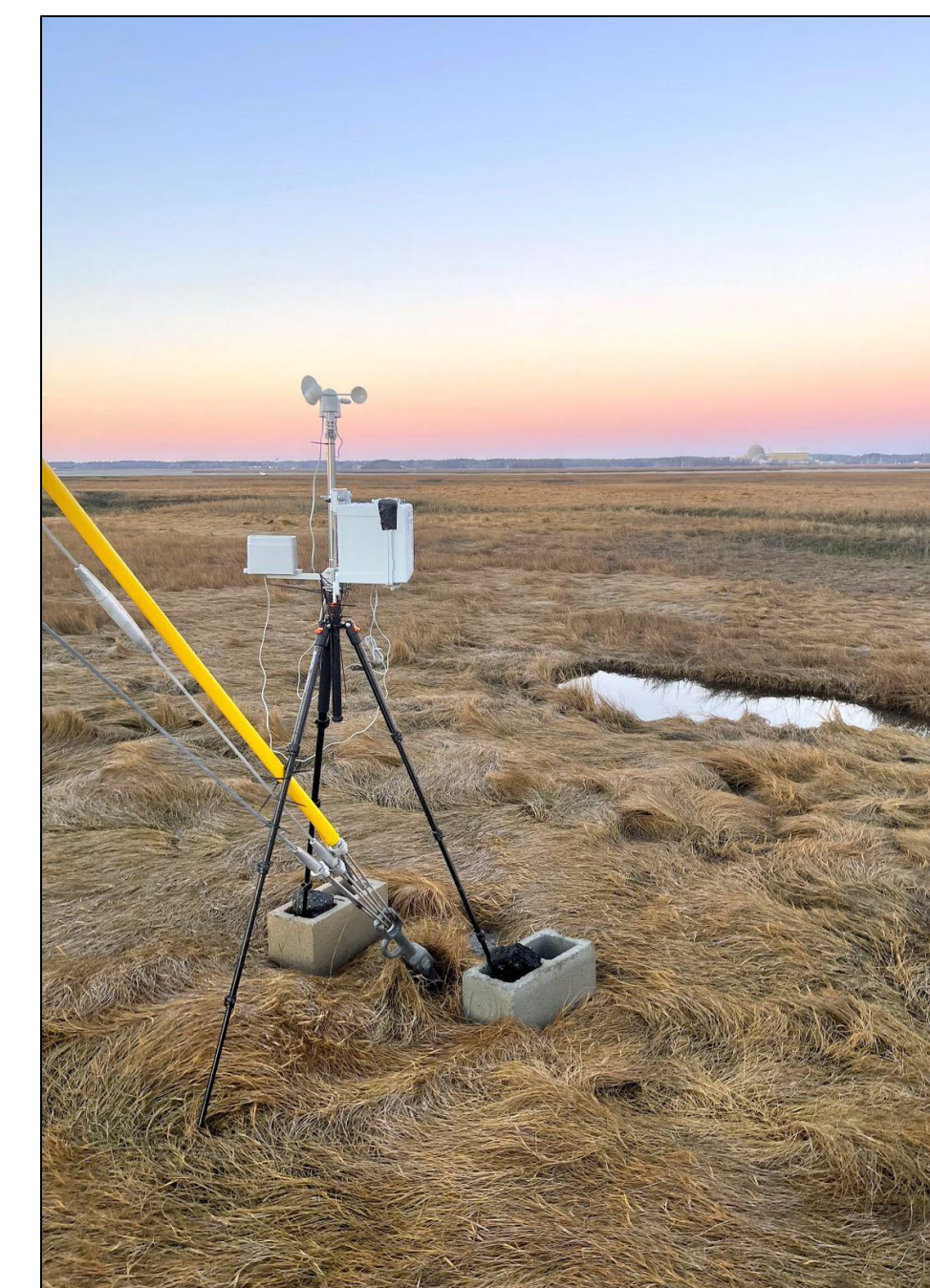
Methods & Preparation

- Errors in code
- Where we deployed
- King tide deployment
- Regular tide deployment
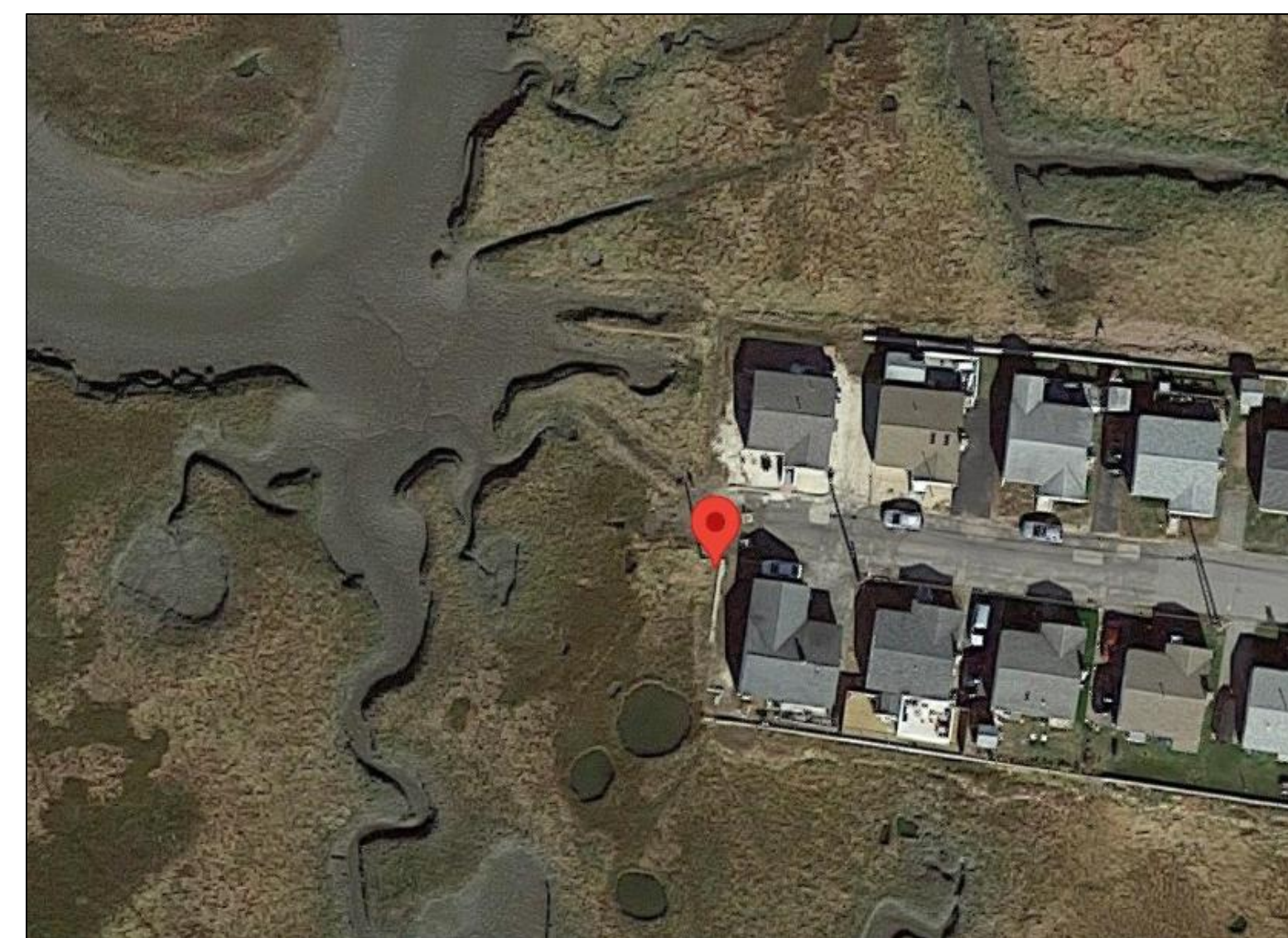
42°54'29.3"N 70°49'00.1"W

Deployment

- Primary deployment window from March 11th-13th
- March 12th around 6:00, wind speed and temperature spiked

Conclusion & Next Steps

- Successfully tracked weather patterns
- Going forward, future weather station groups to deploy during King Tide

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Results