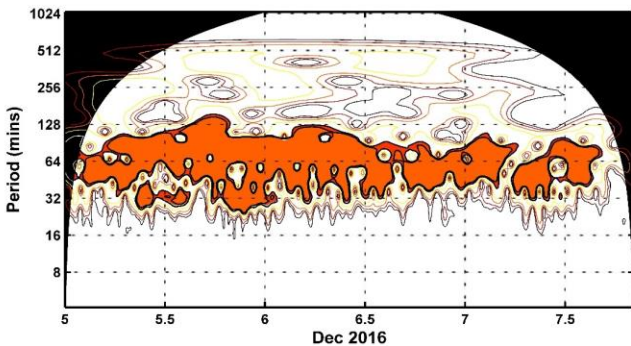
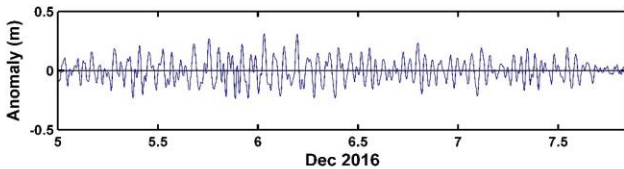
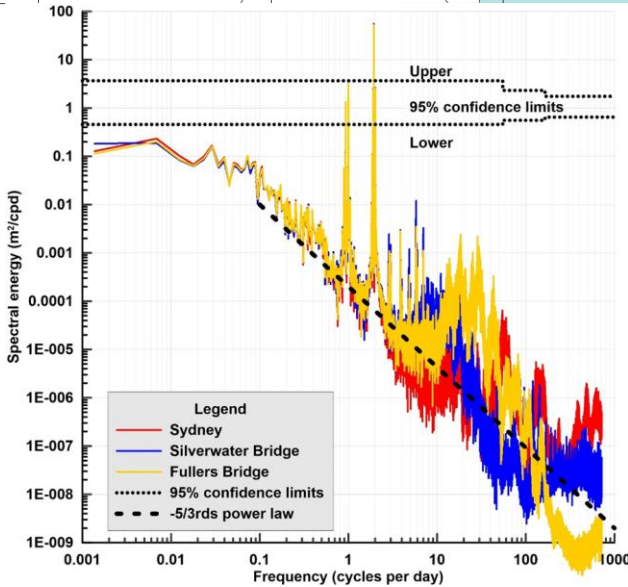
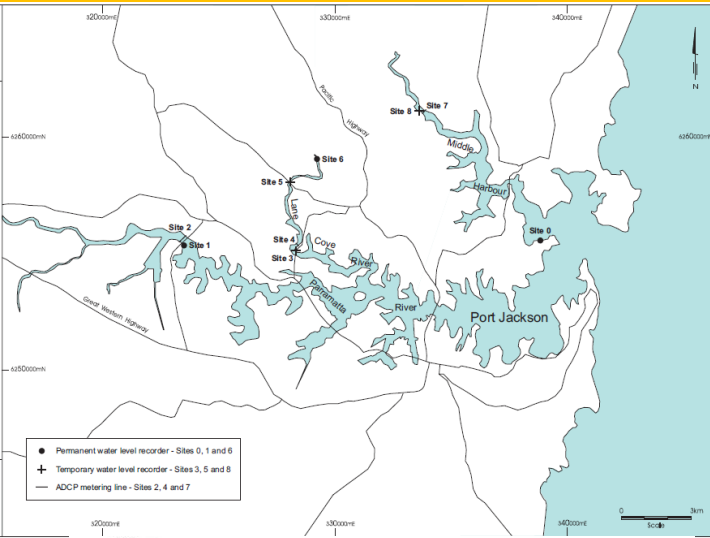




TIDES in SYDNEY HARBOUR - Data Analysis and Interpretation.

Monitoring program design
Data analysis and near field modelling
Interpretation and reporting

Client: Manly Hydraulics Laboratory
Dates: October 2020 to January 2021



Project Description:

Water level and discharge (via ADCP transects) data were collected to better understand the hydraulic processes operating in Sydney Harbour. WQ Data was engaged to undertake a detailed statistical analysis and interpretation of the data, with particular emphasis on high frequency fluctuations.

Work undertaken by WQ Data:

- Harmonic analysis of water level.
- Spectral and wavelet analysis of water level and discharge data.
- Assessment of high frequency oscillations in both water level and discharge. Comparison with theoretical values for seicheing.

Project outcomes:

- An assessment of water level and discharge at selected locations in Sydney Harbour.
- Characterising of seicheing at the different locations and comparison with theoretical analyses.
- The influence of maritime activity on high frequency oscillations in water level.
- Technical report detailing the results.
- Identification of areas for further investigation.