



Gulf Stream Test

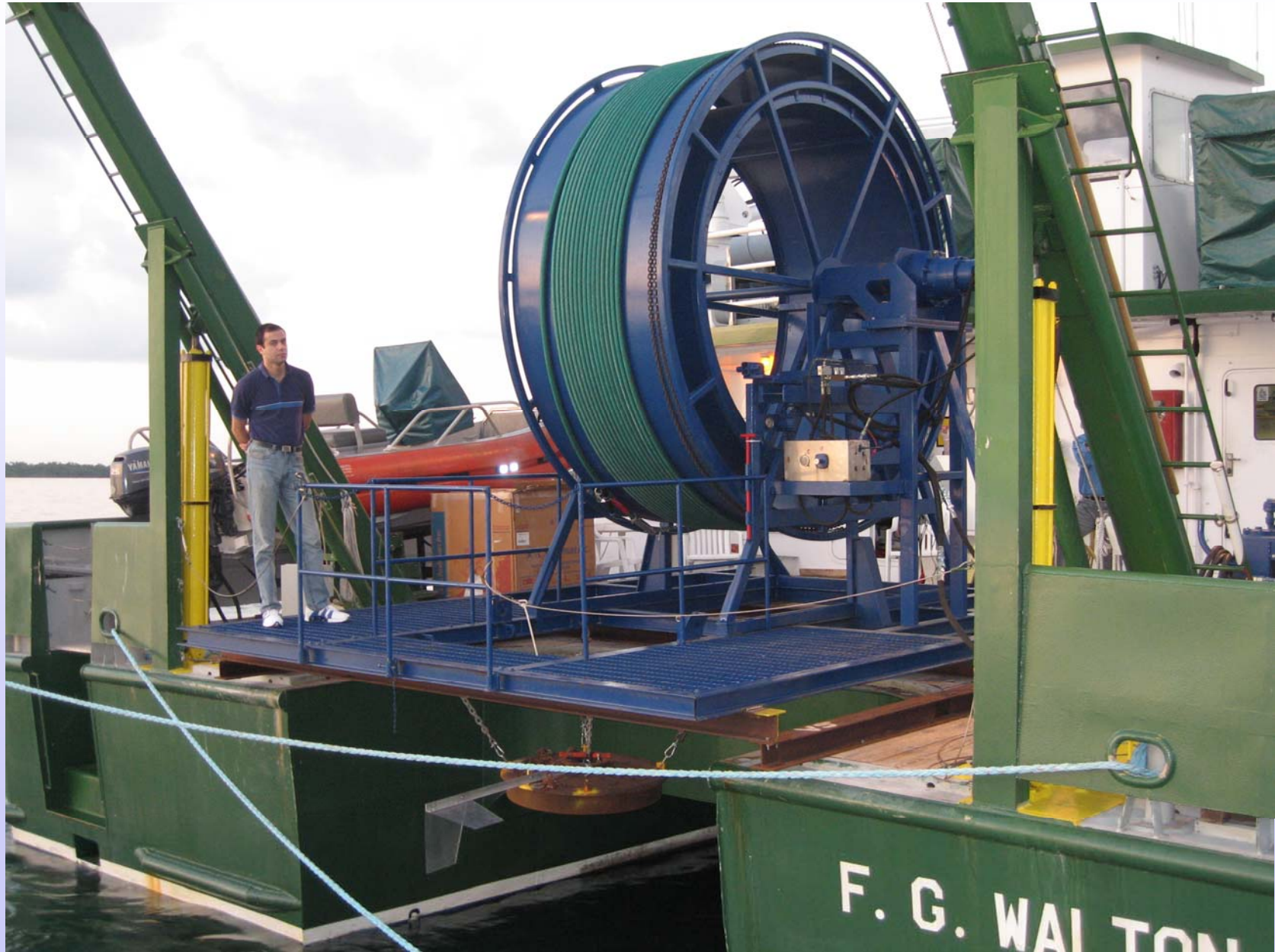
MIT/DeepStar

October 18-27, 2006

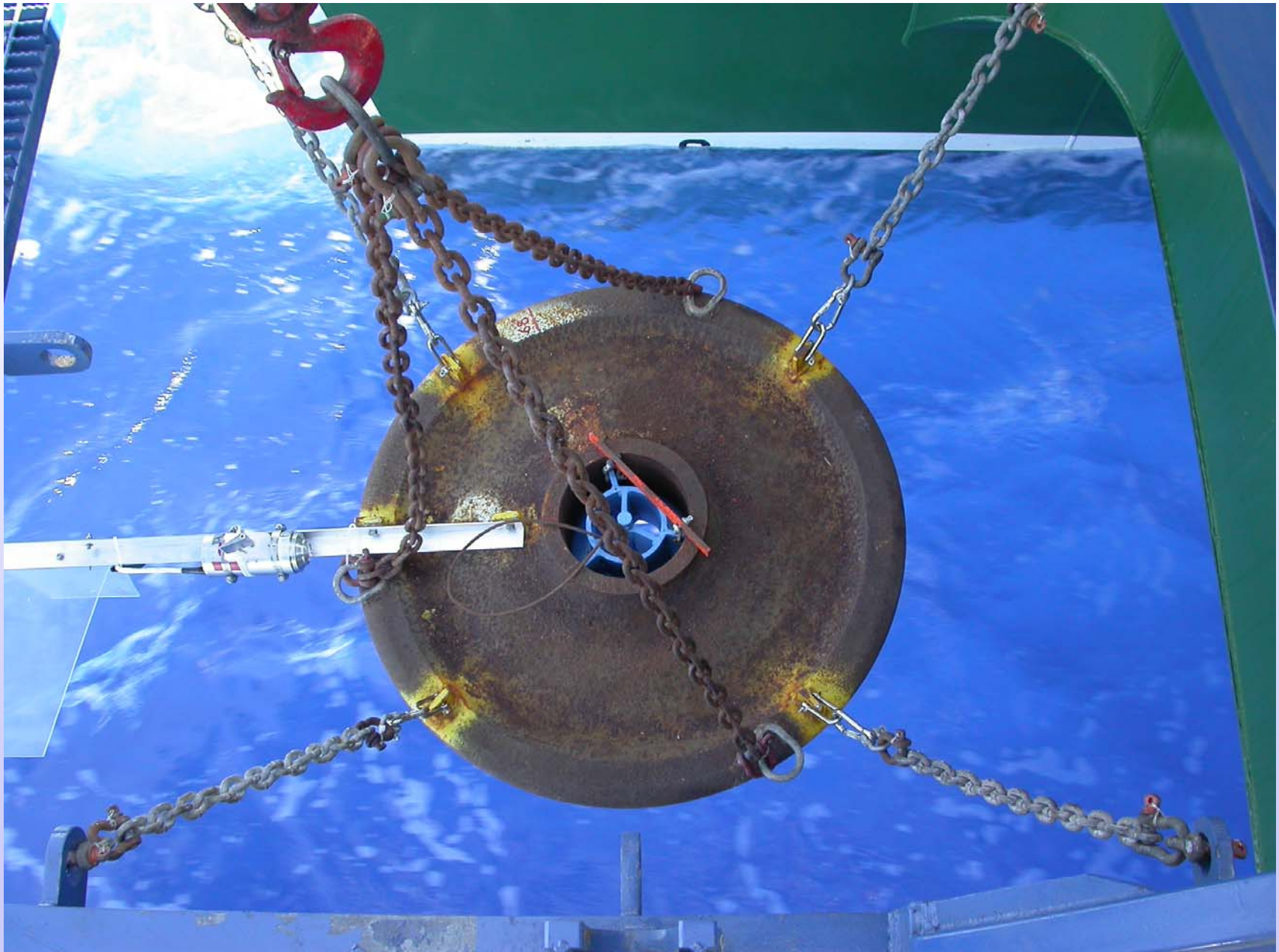
The F.G. Walton Smith



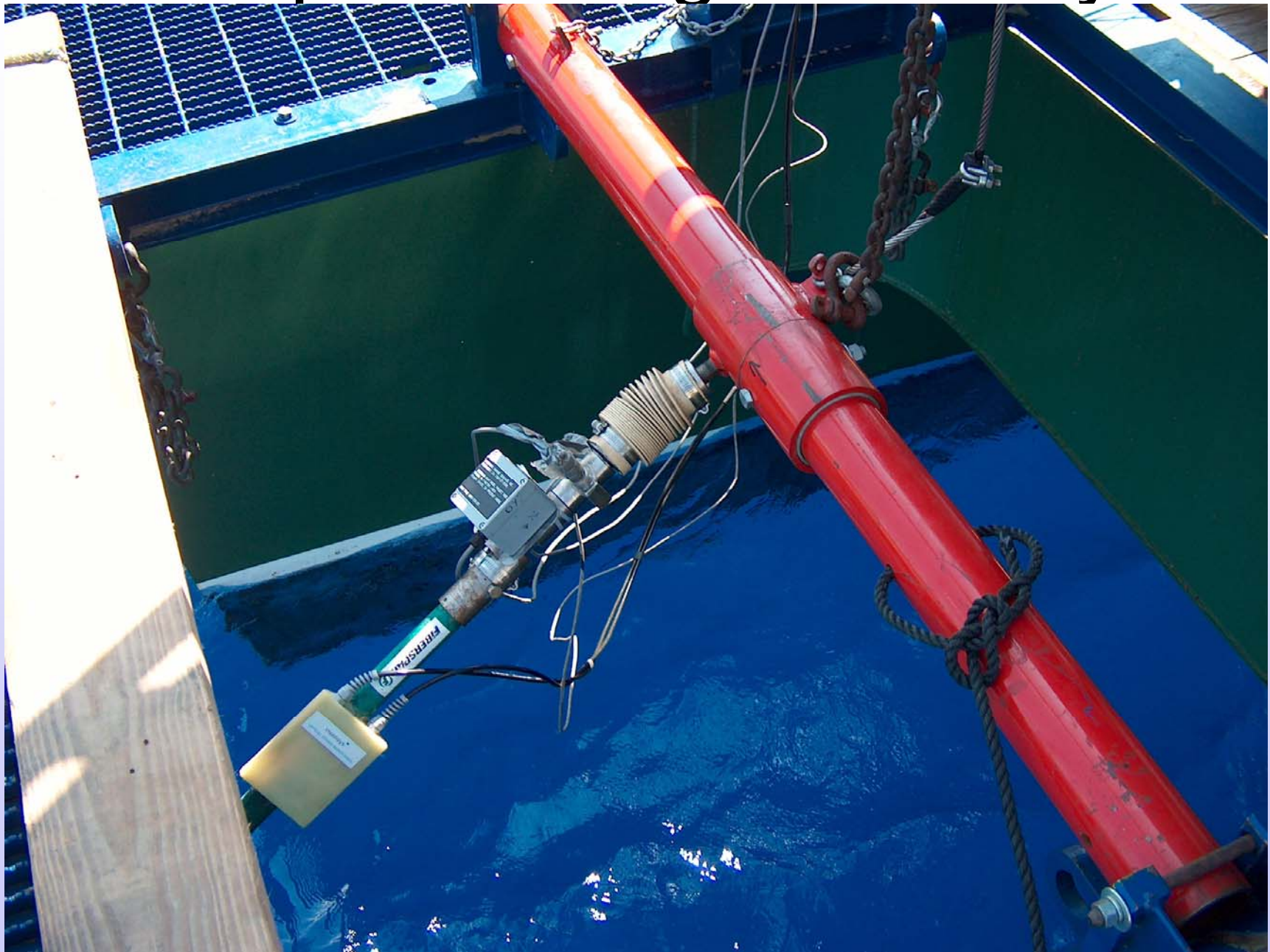
Spooler with Pipe



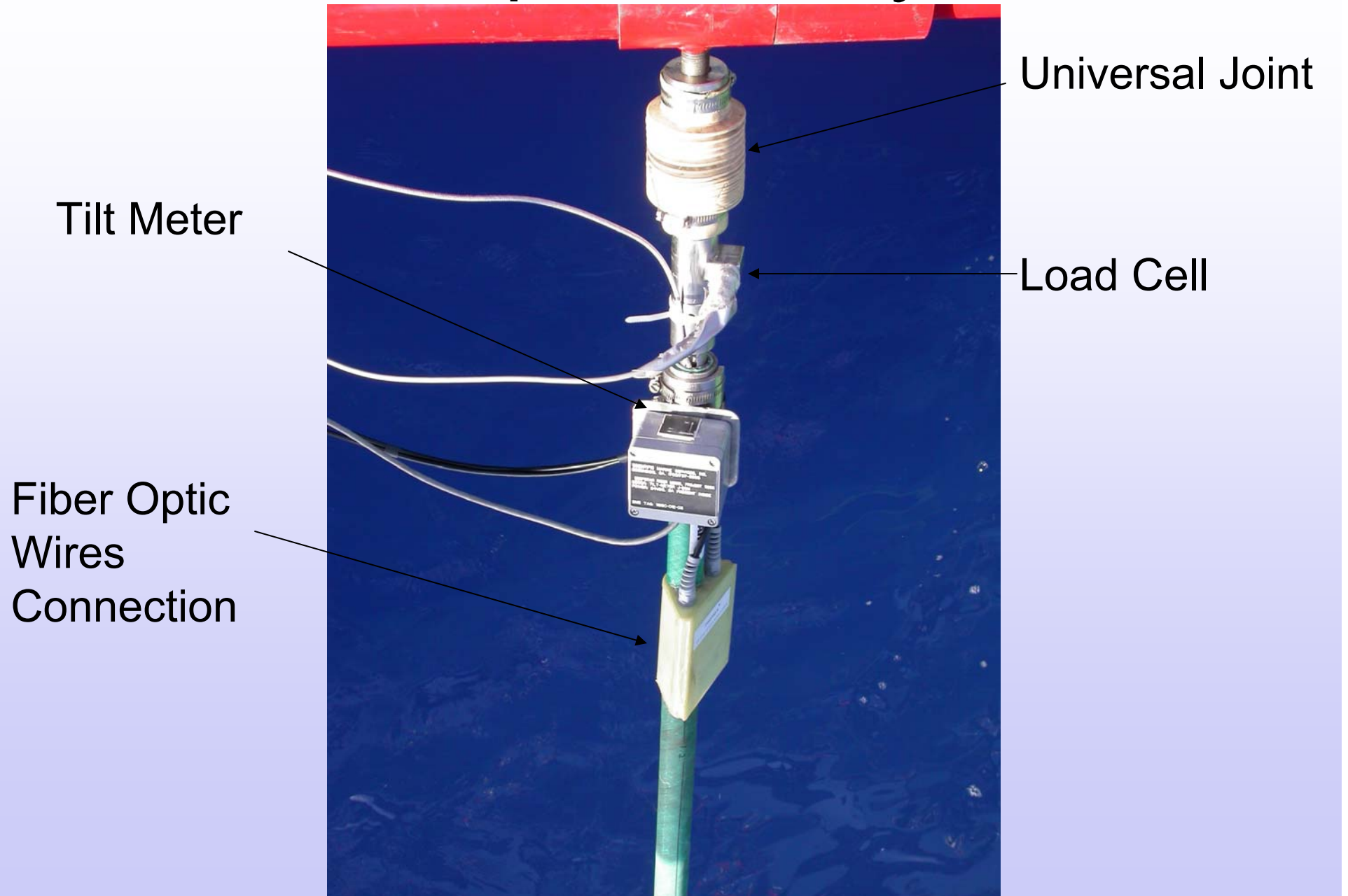
Bottom Railroad Wheel for Tension



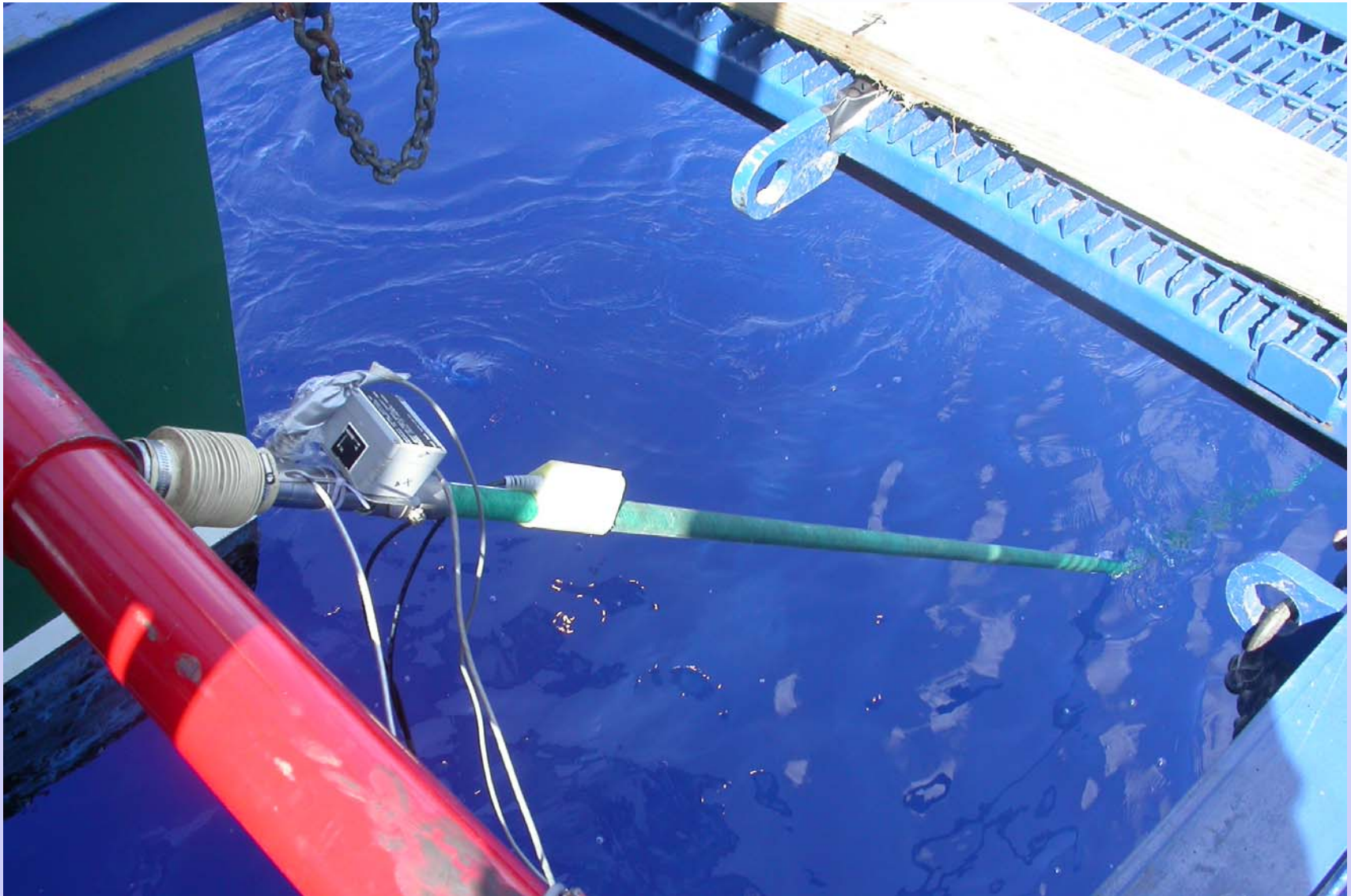
Top Mounting Assembly



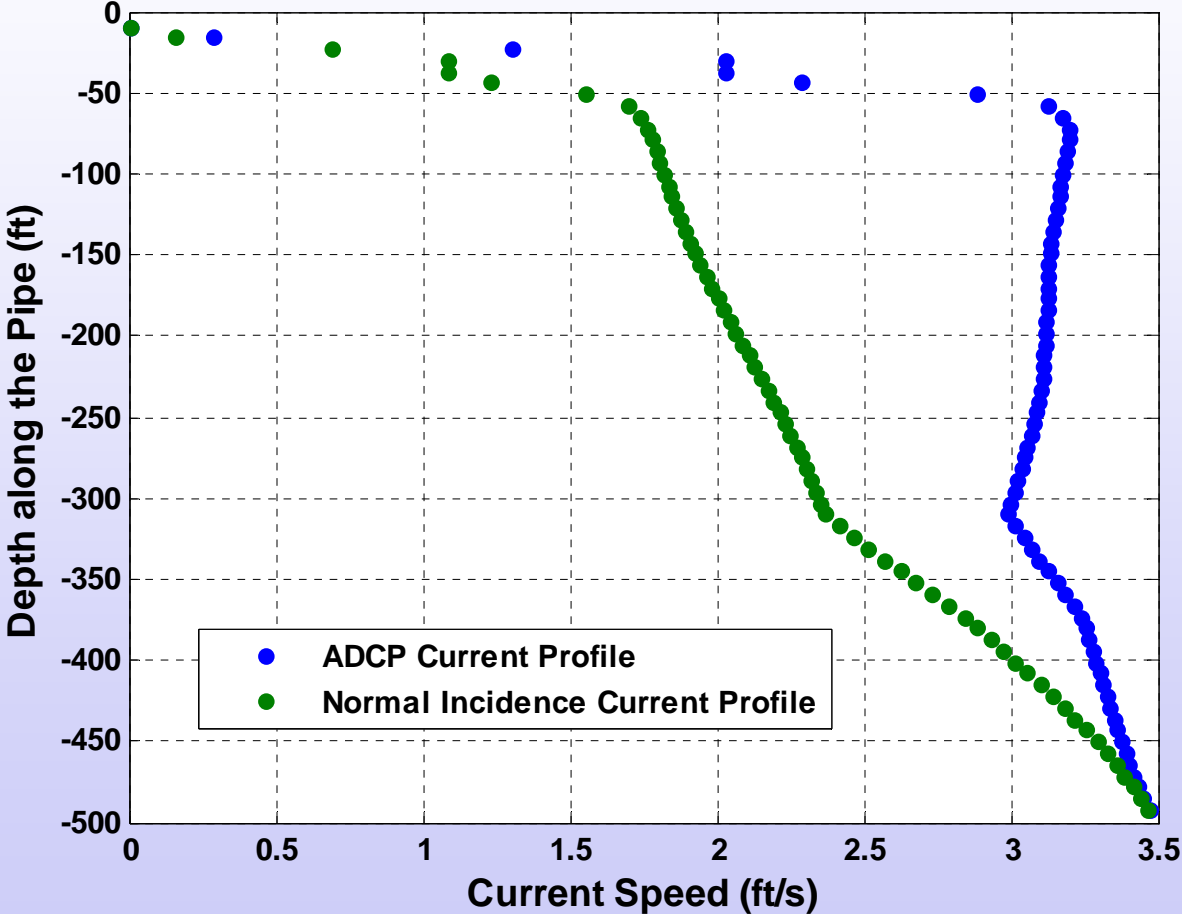
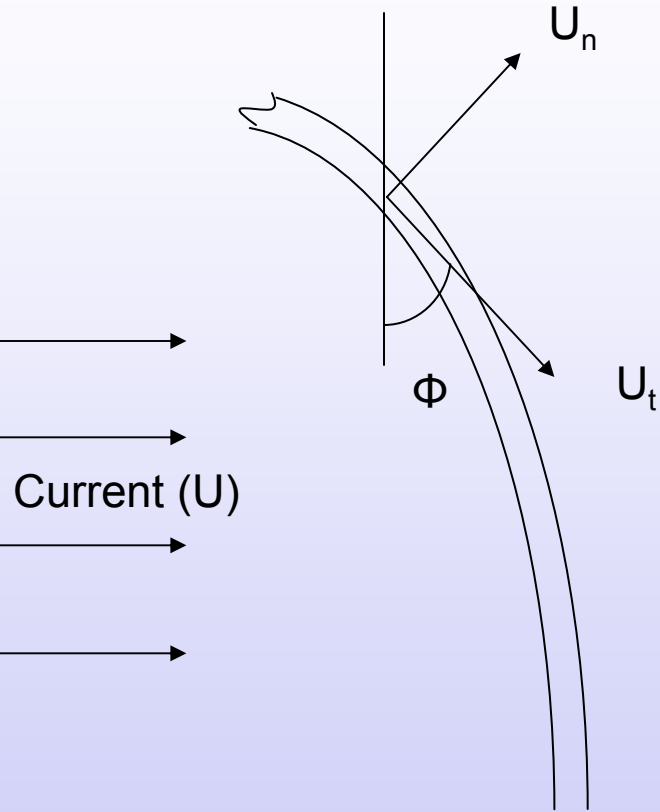
Top Assembly



Pipe Deployed in the Water

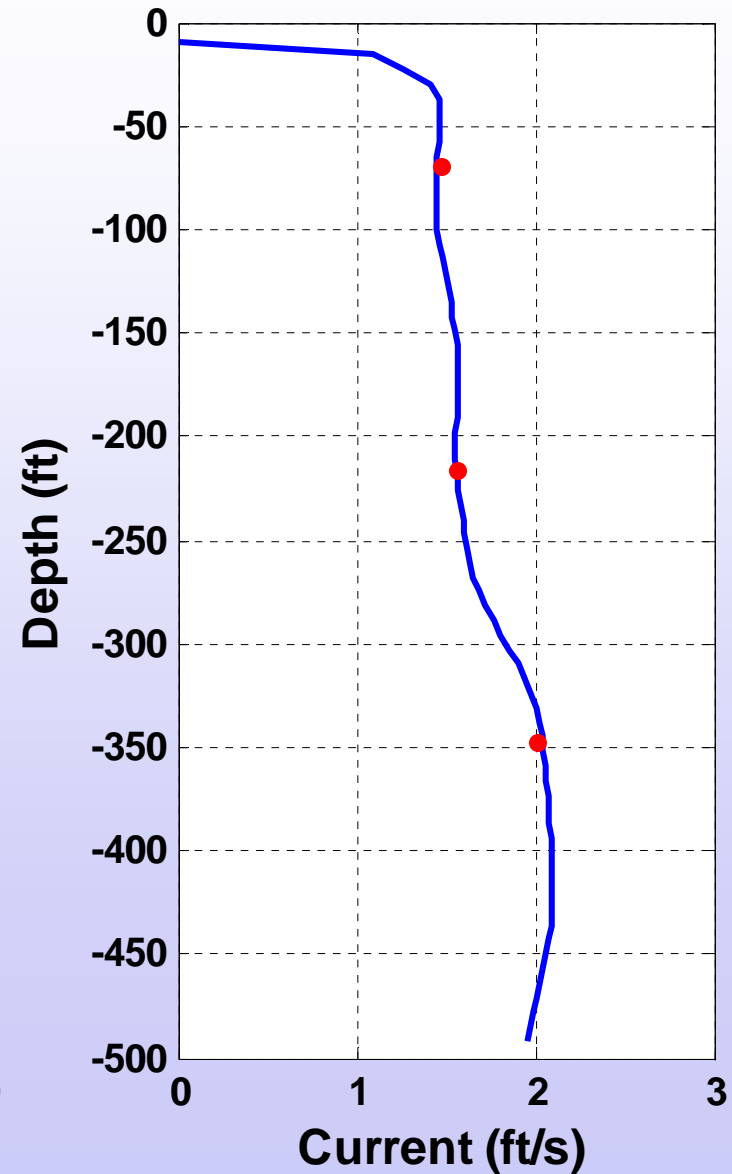
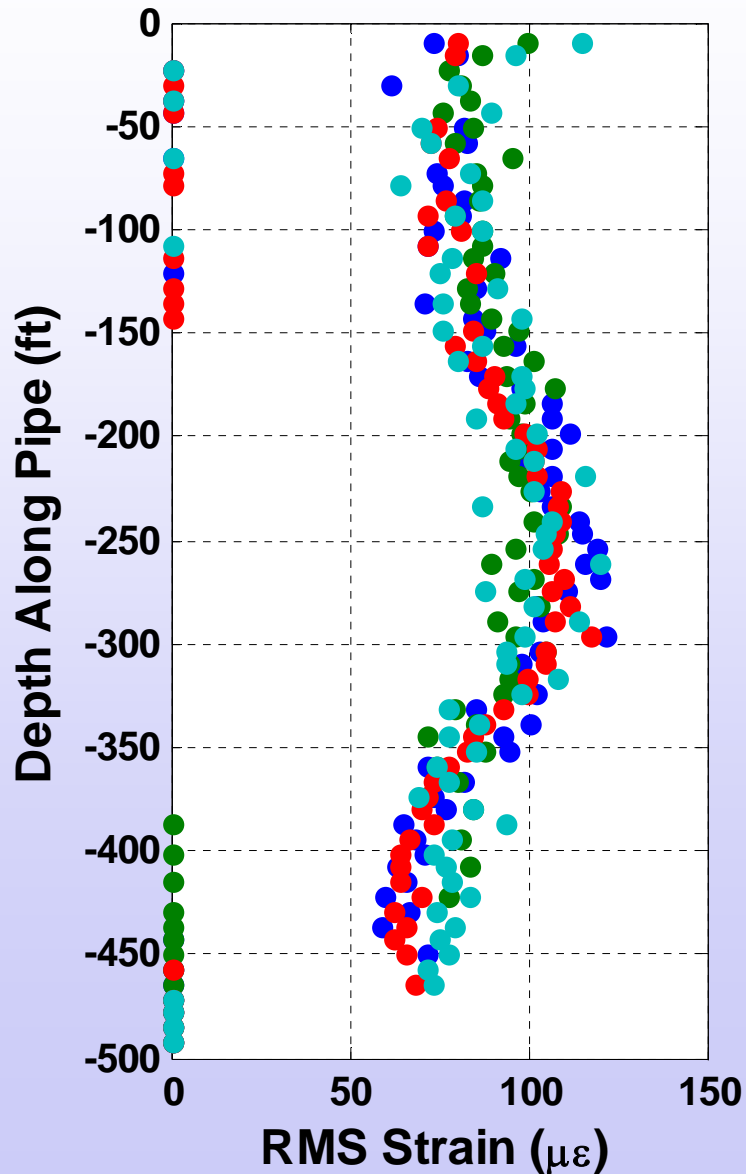


Normal Incidence Current Profile



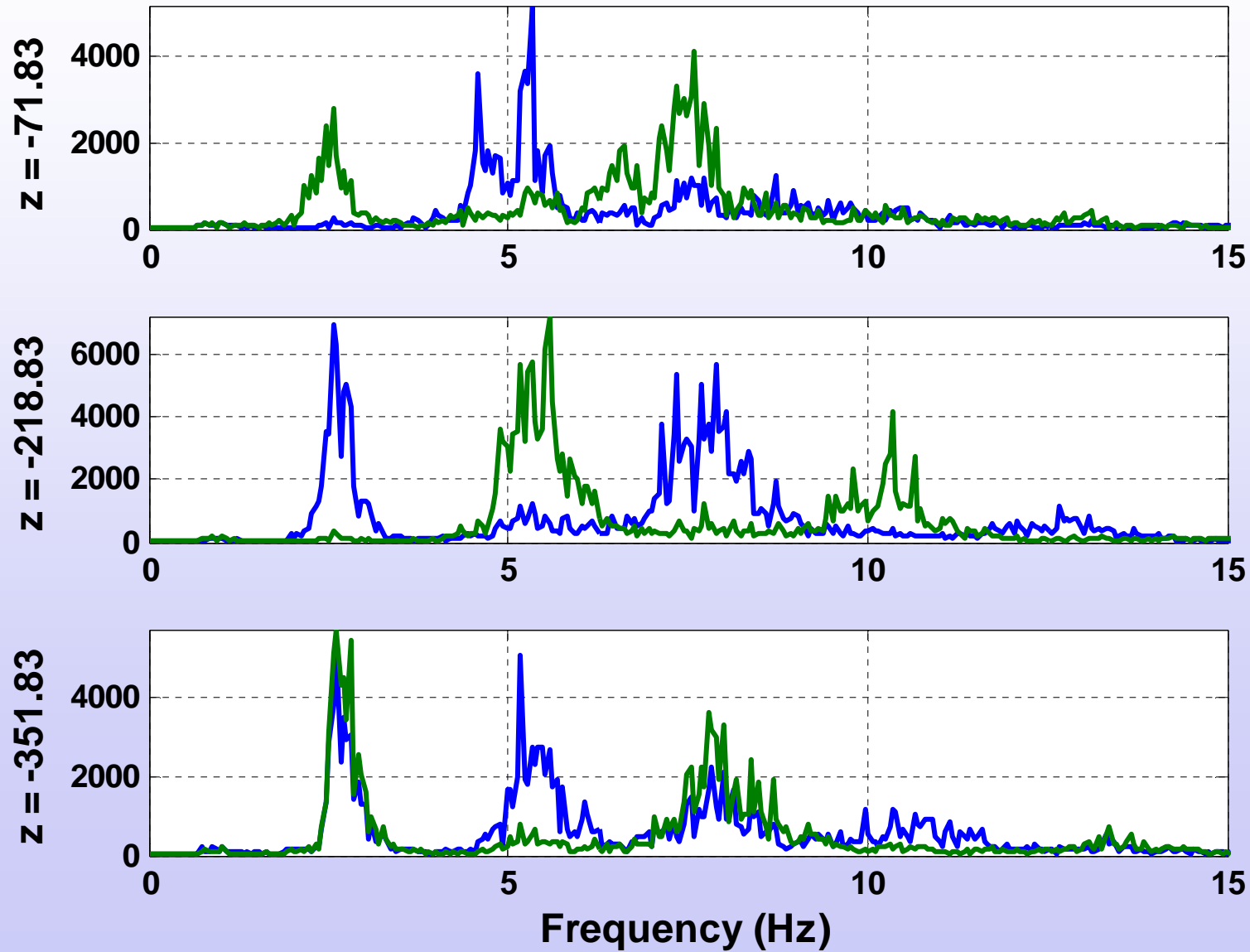
Typical Bare Pipe Experiment

Quadrant Strain for 20061020171303



PSD of of Bare Case

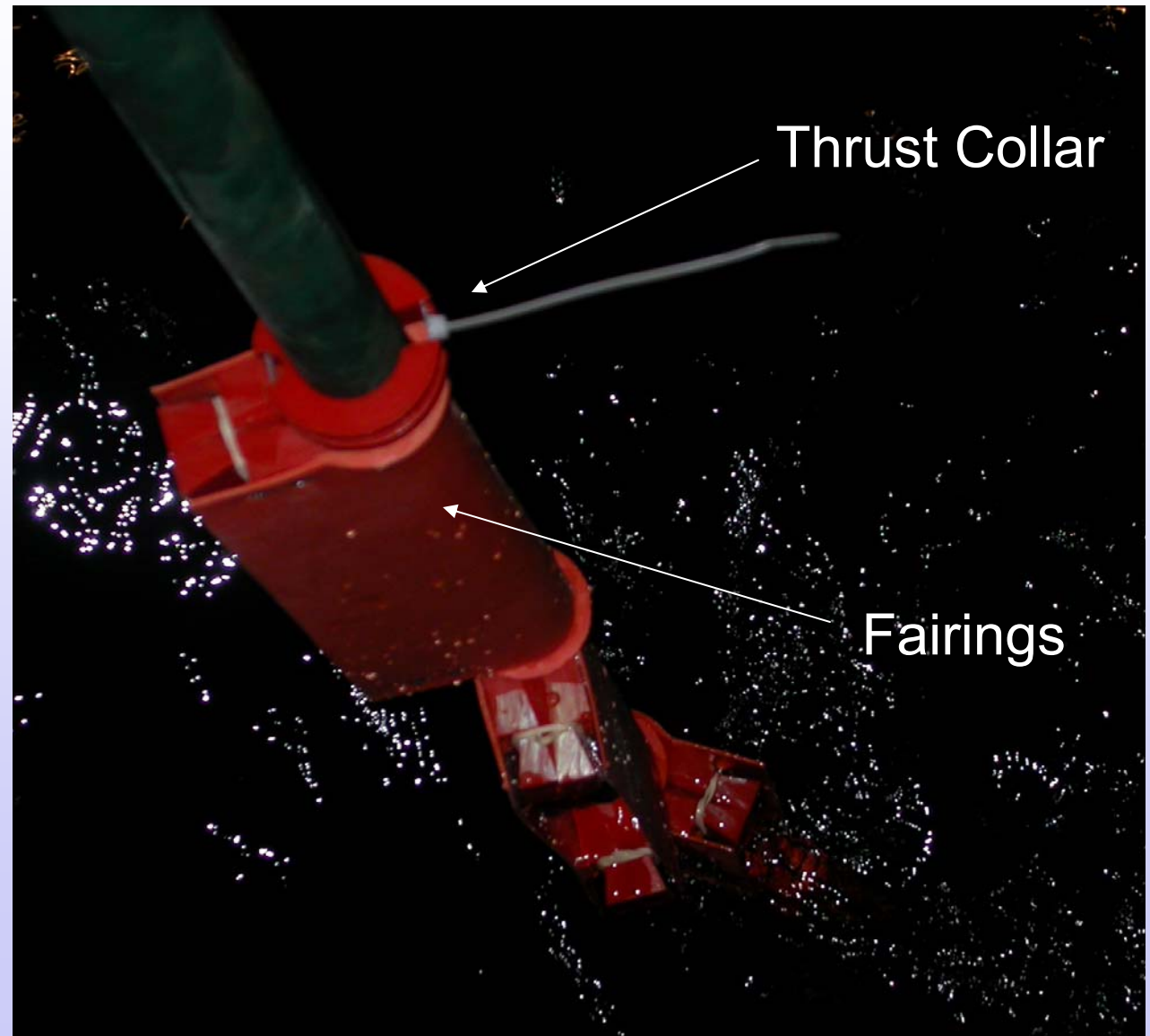
PSD for 20061020171303



Fairing Tests

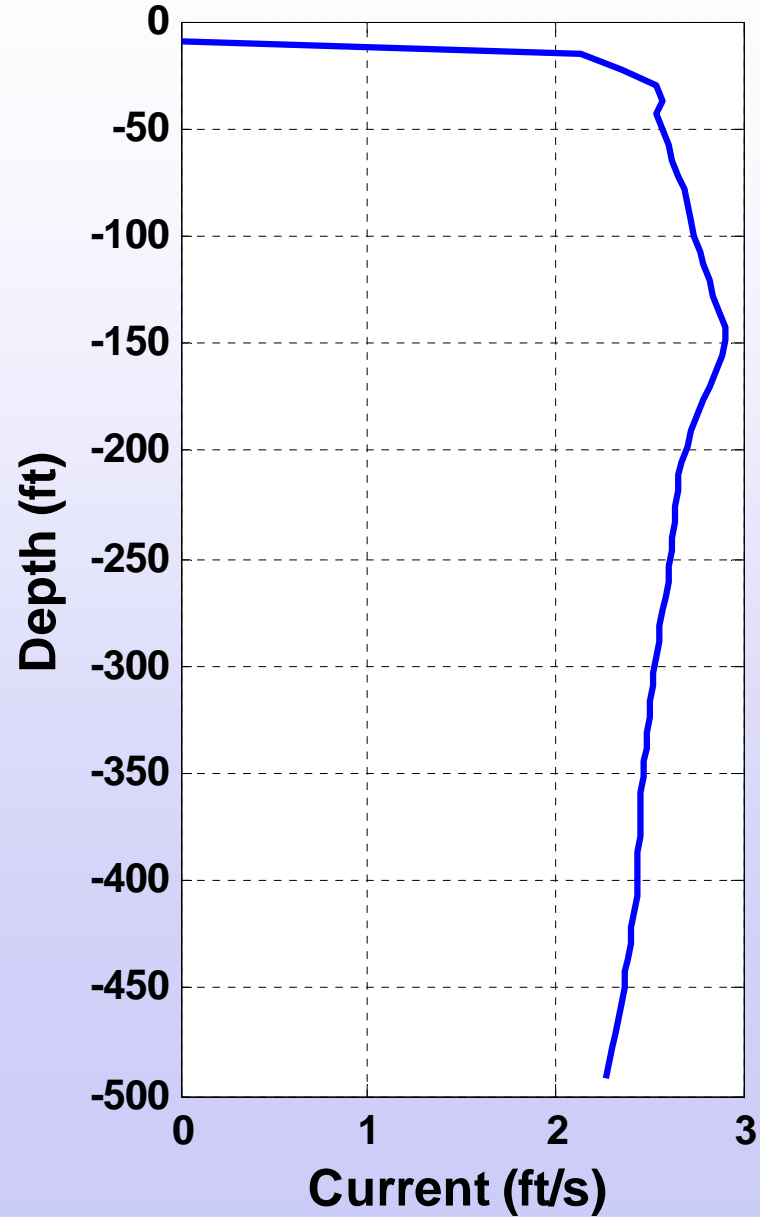
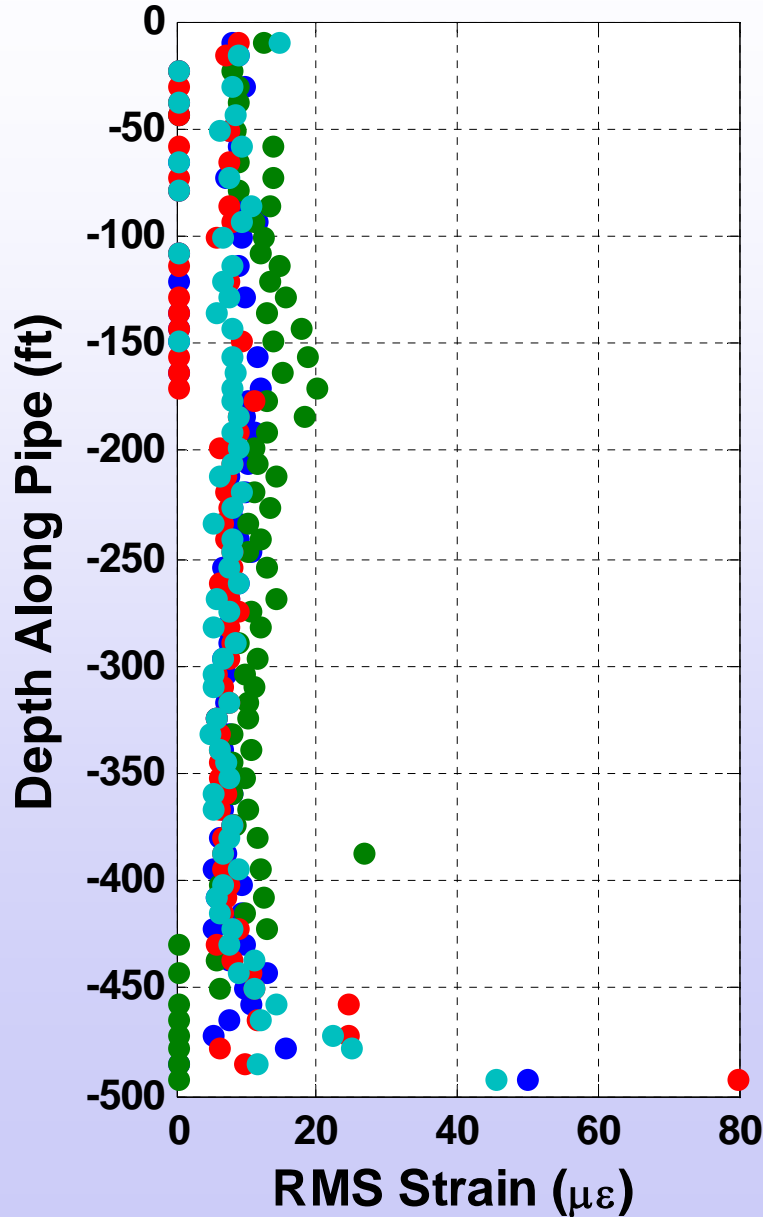
- 84% Coverage (Industry Full Coverage)
- 50% Staggered Coverage
- 40% Bottom Coverage
- 40% Bottom Coverage with Transition

Fairings by AIMS International



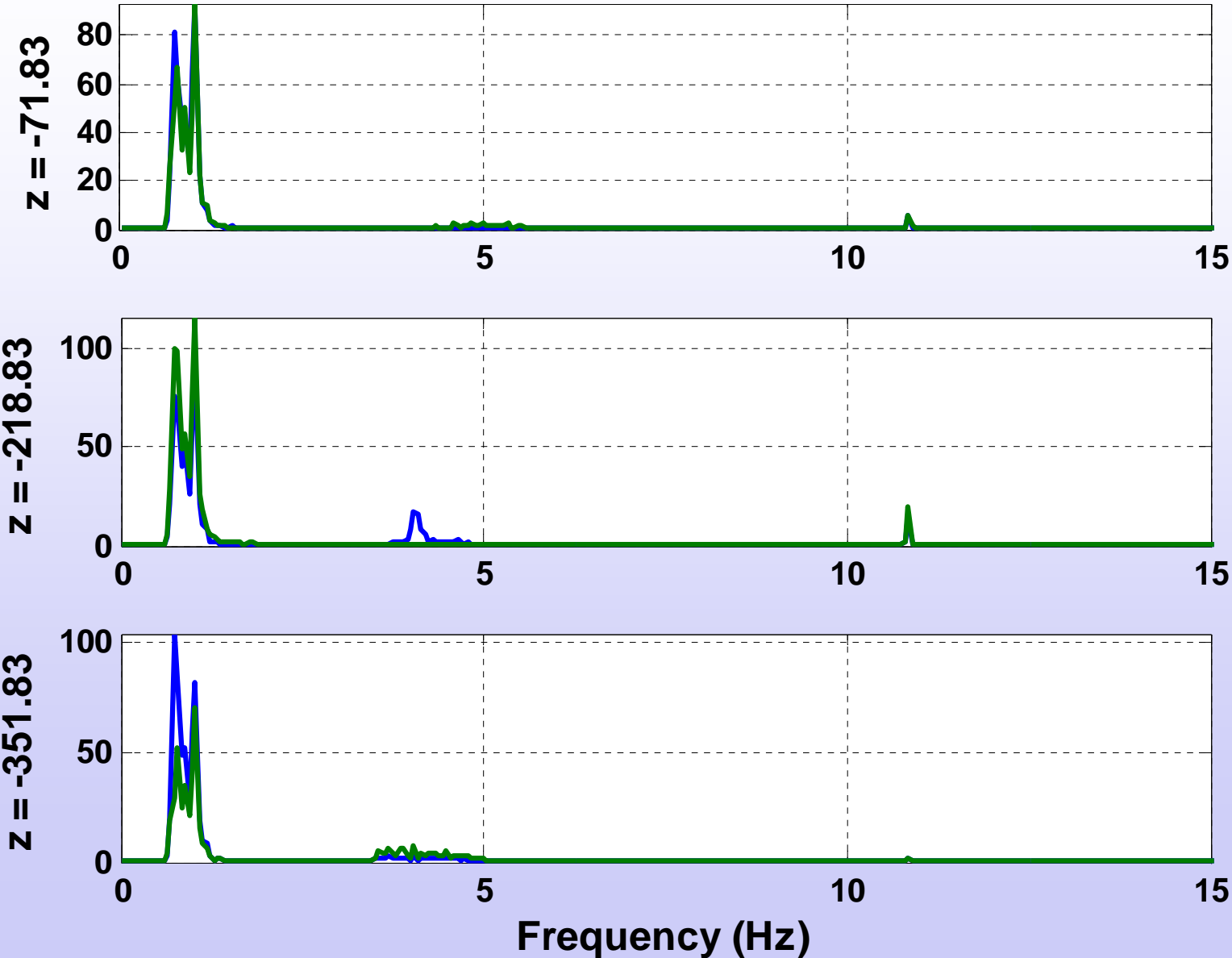
84% Fairing Coverage

Quadrant Strain for 20061021034636



PSD of 84% Fairing Coverage

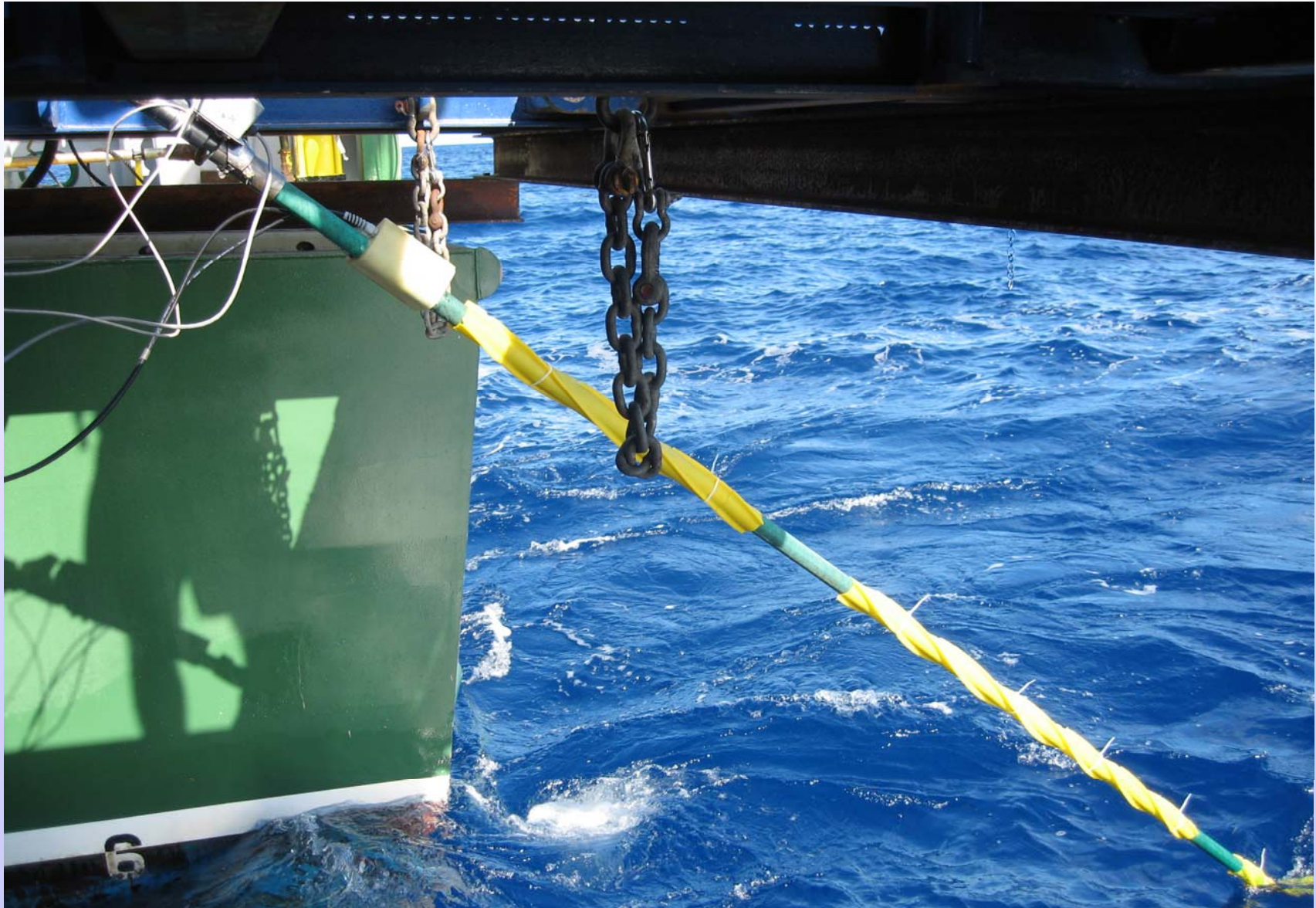
PSD for 20061021034636



Strake Tests

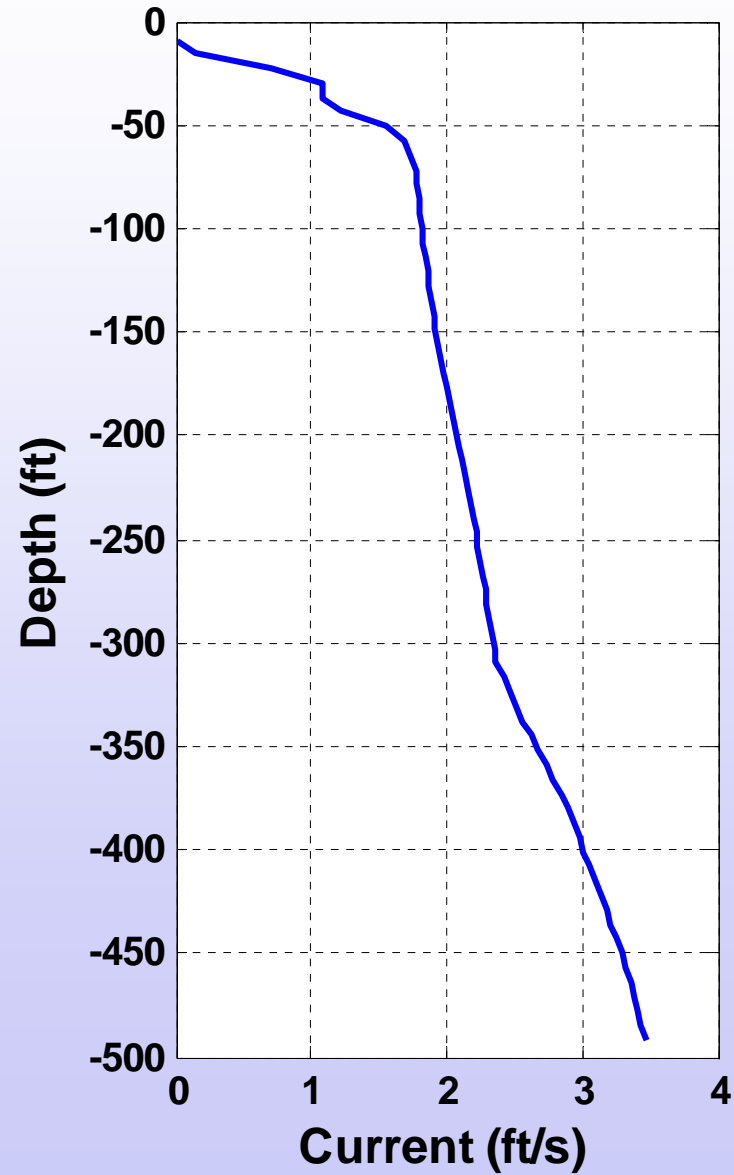
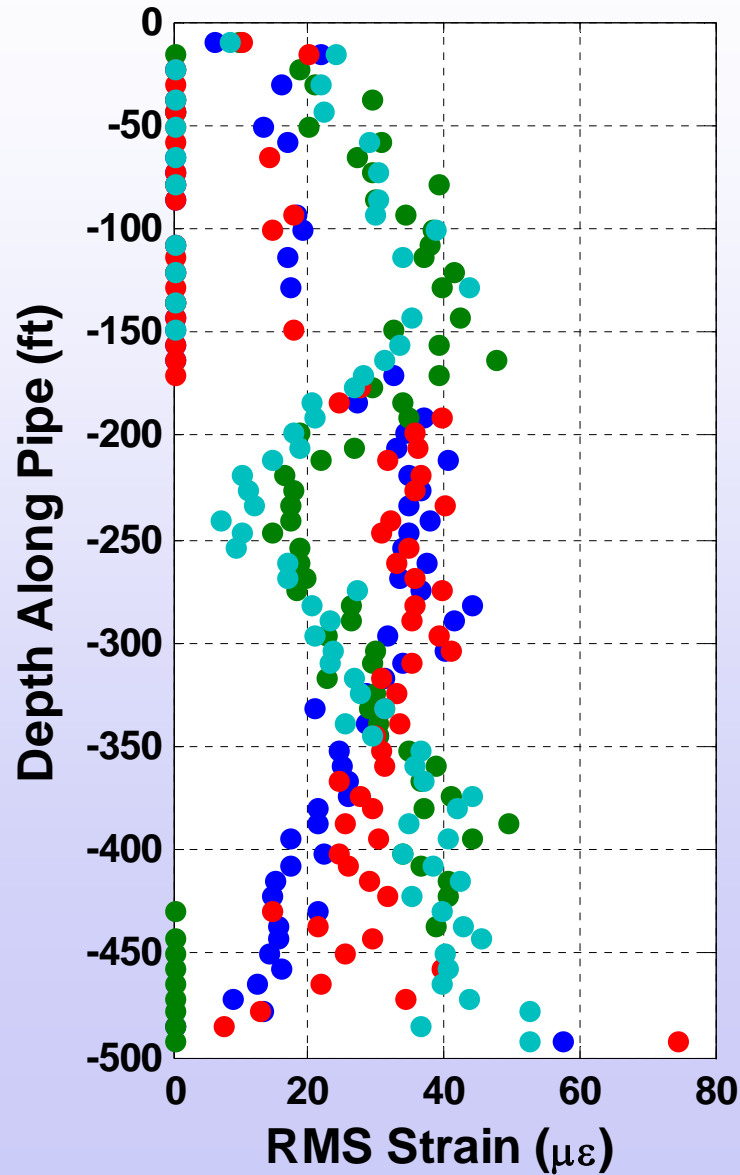
- 62% Staggered Coverage
- 50% Staggered Coverage
- 40% Bottom Coverage
- 40% Bottom Coverage with Transition
- 25% Coverage at both ends
- 50% Coverage in the Middle

Strakes by AIMS International



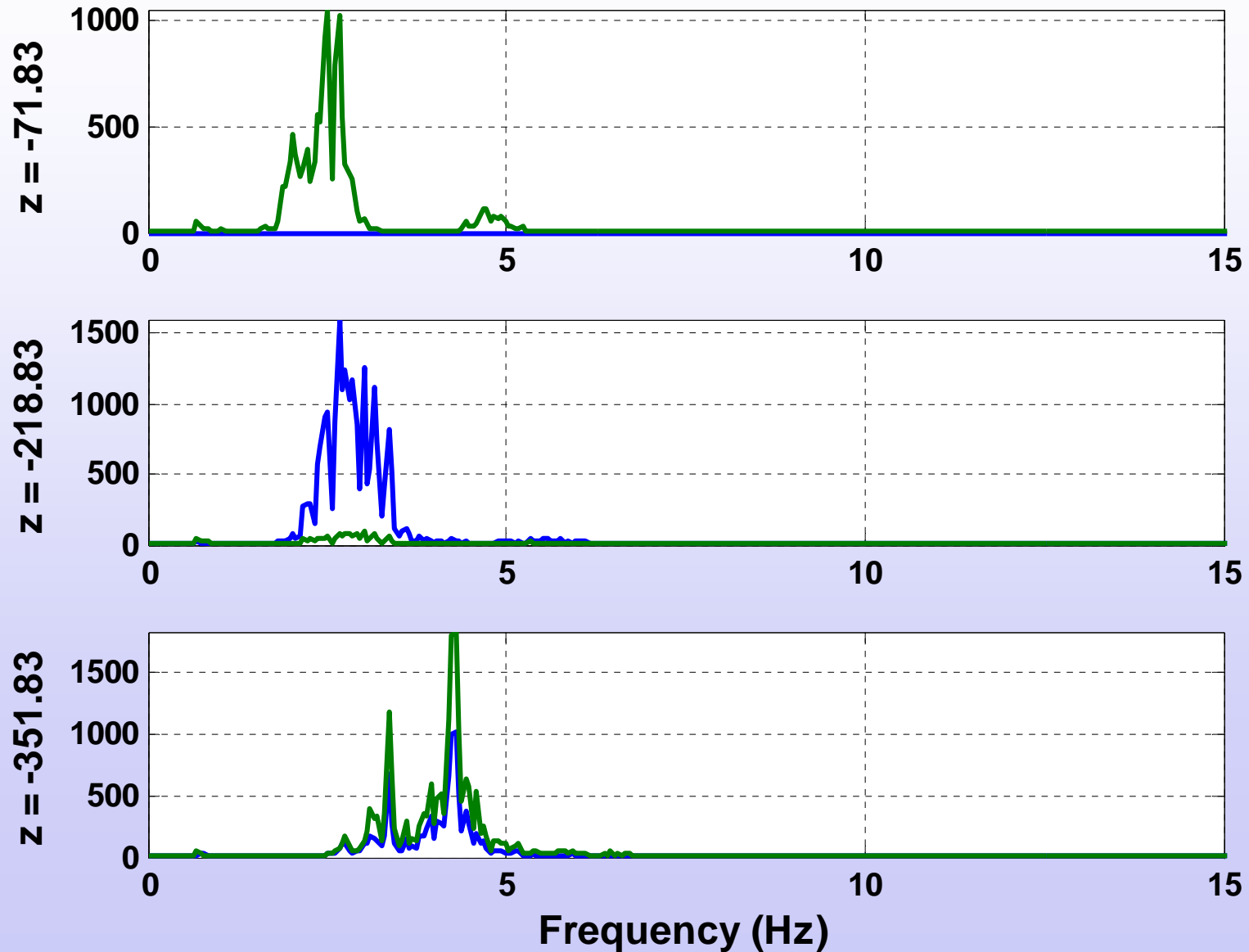
62% Staggered Strake Coverage

Quadrant Strain for 20061022183542



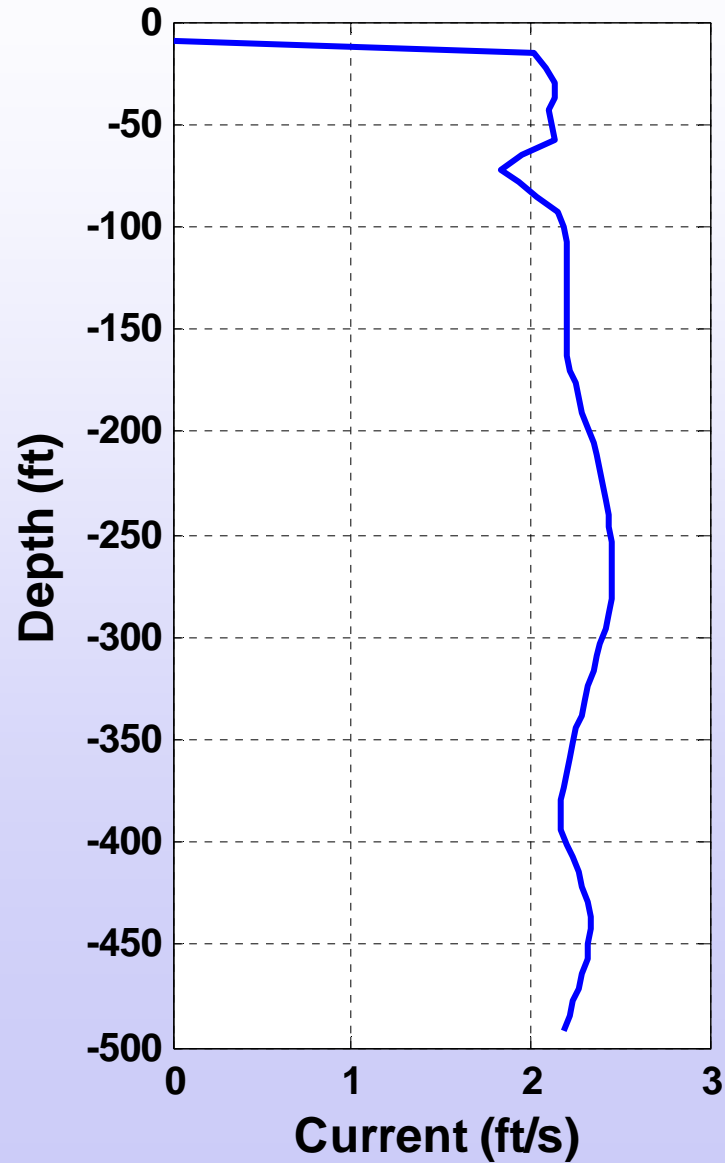
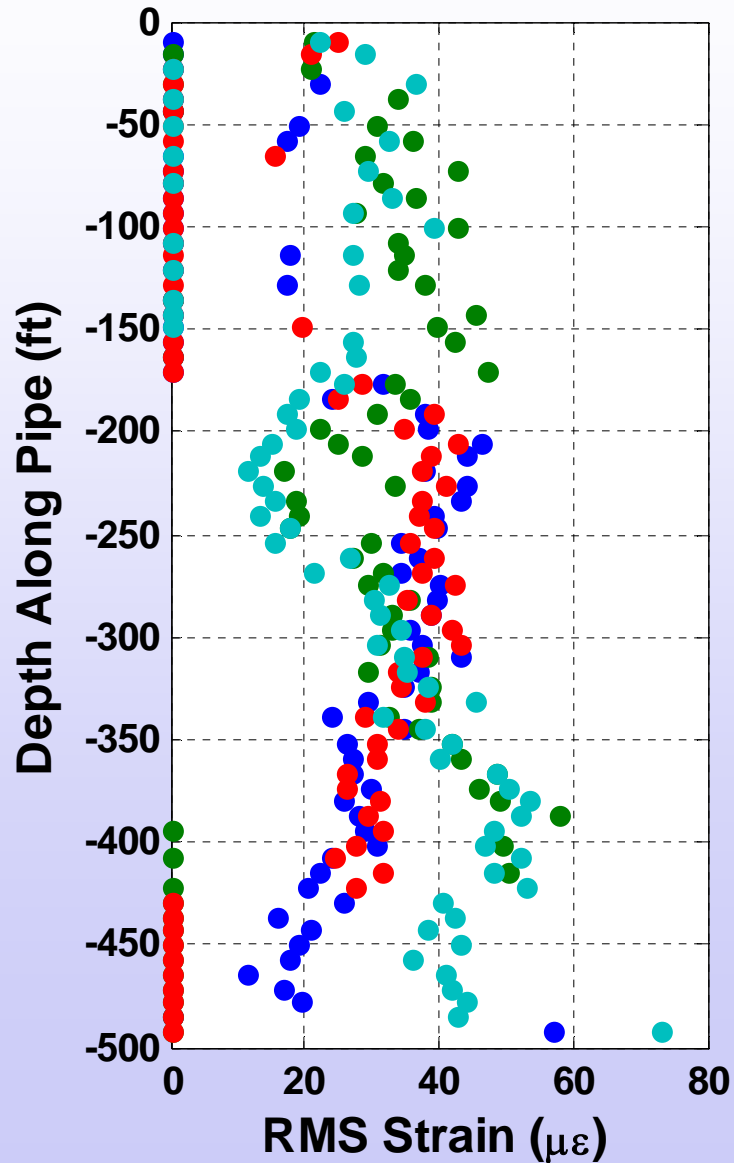
PSD of 62% Staggered Strakes

PSD for 20061022183542



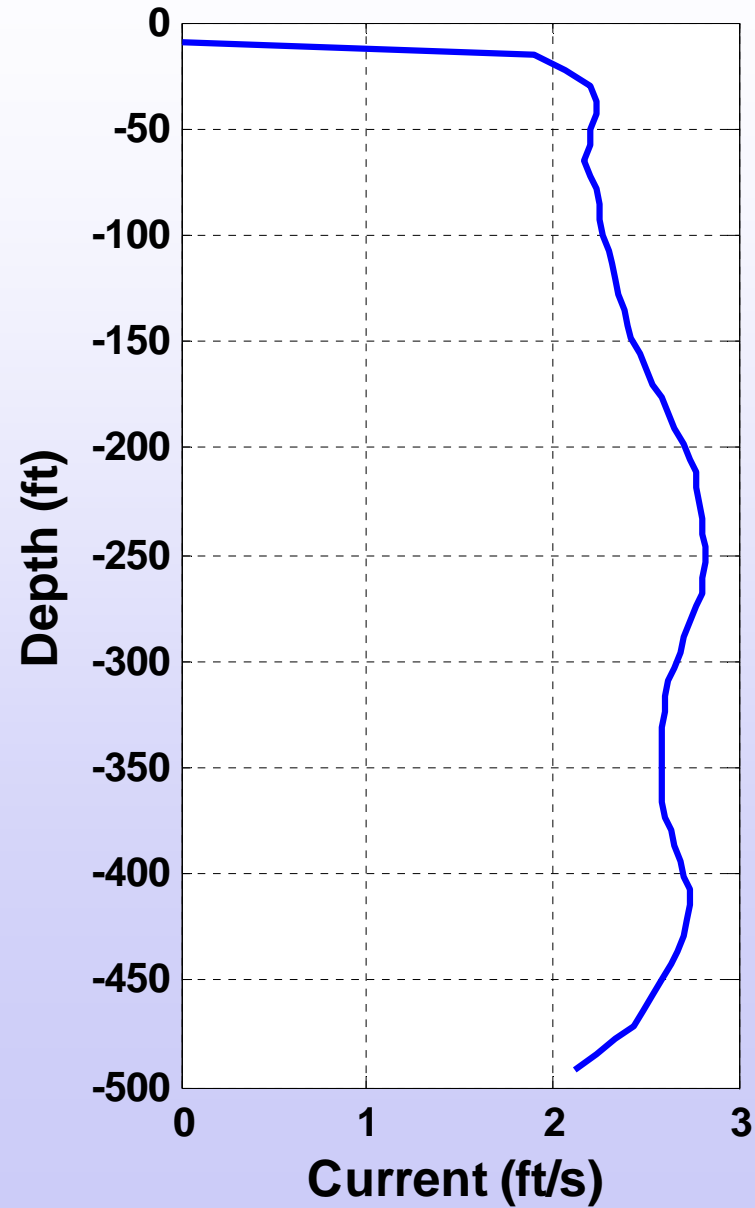
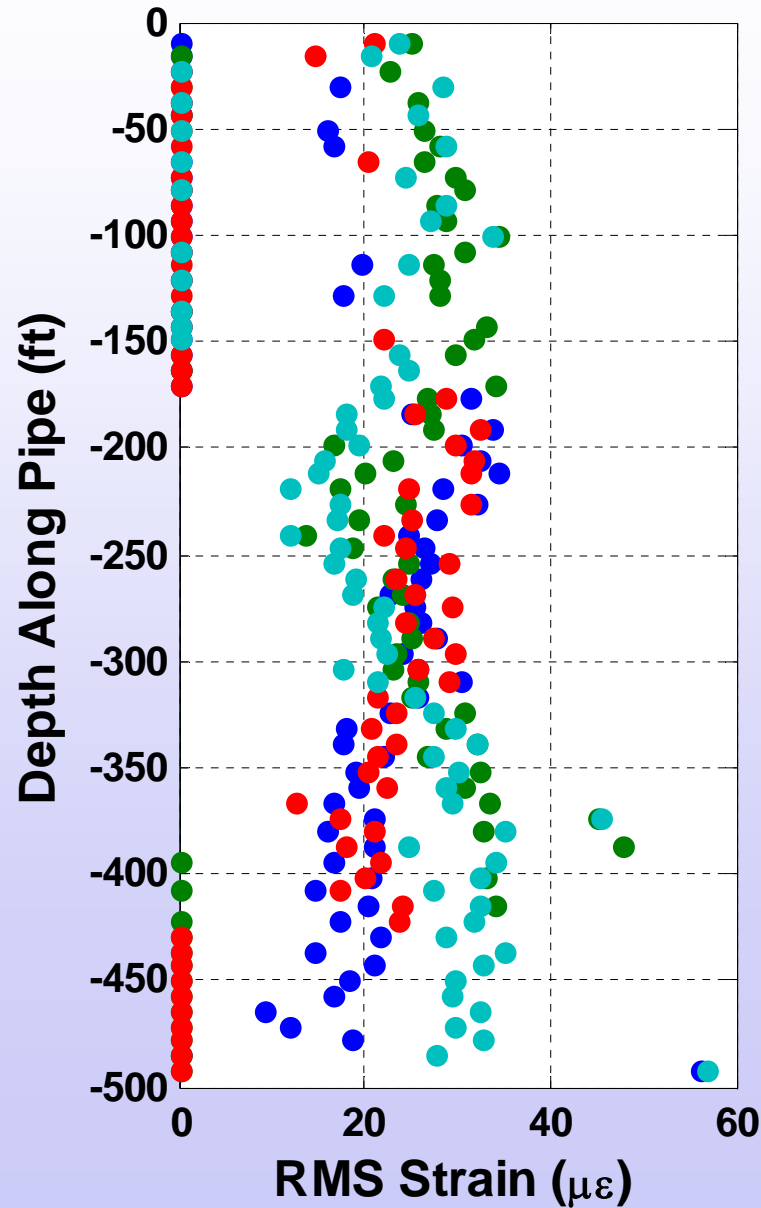
50% Strake Coverage

Quadrant Strain for 20061026151641

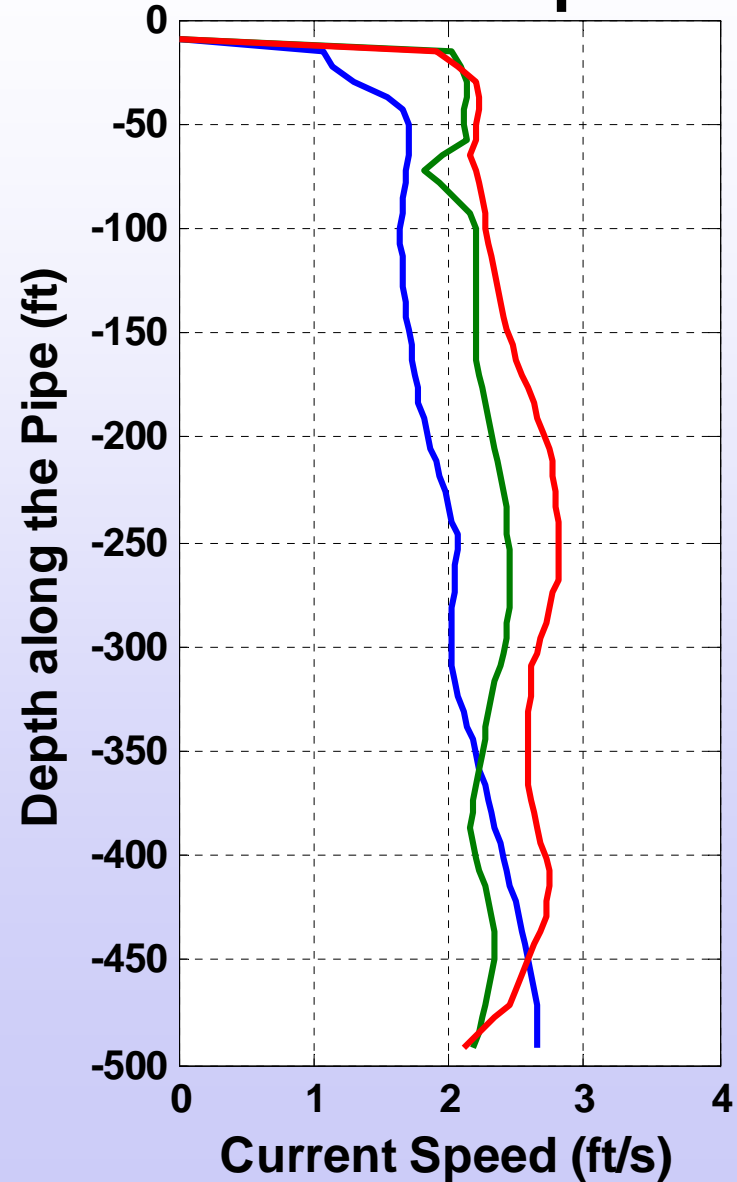
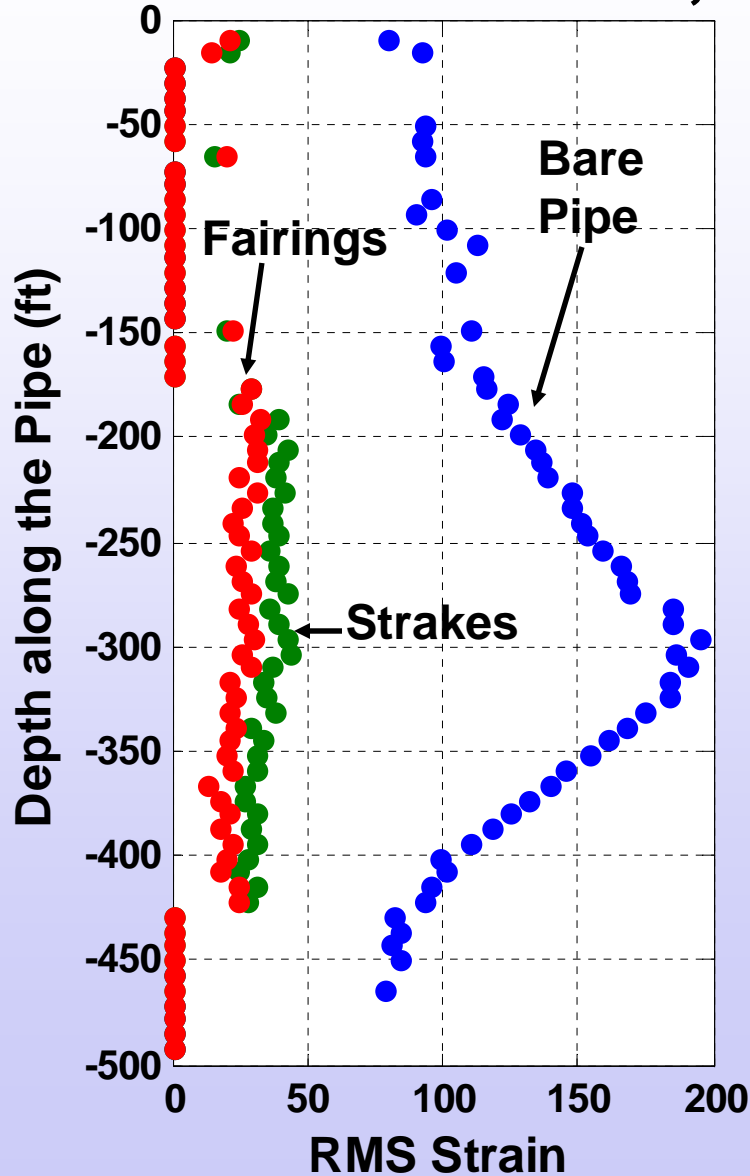


50% Fairing Coverage

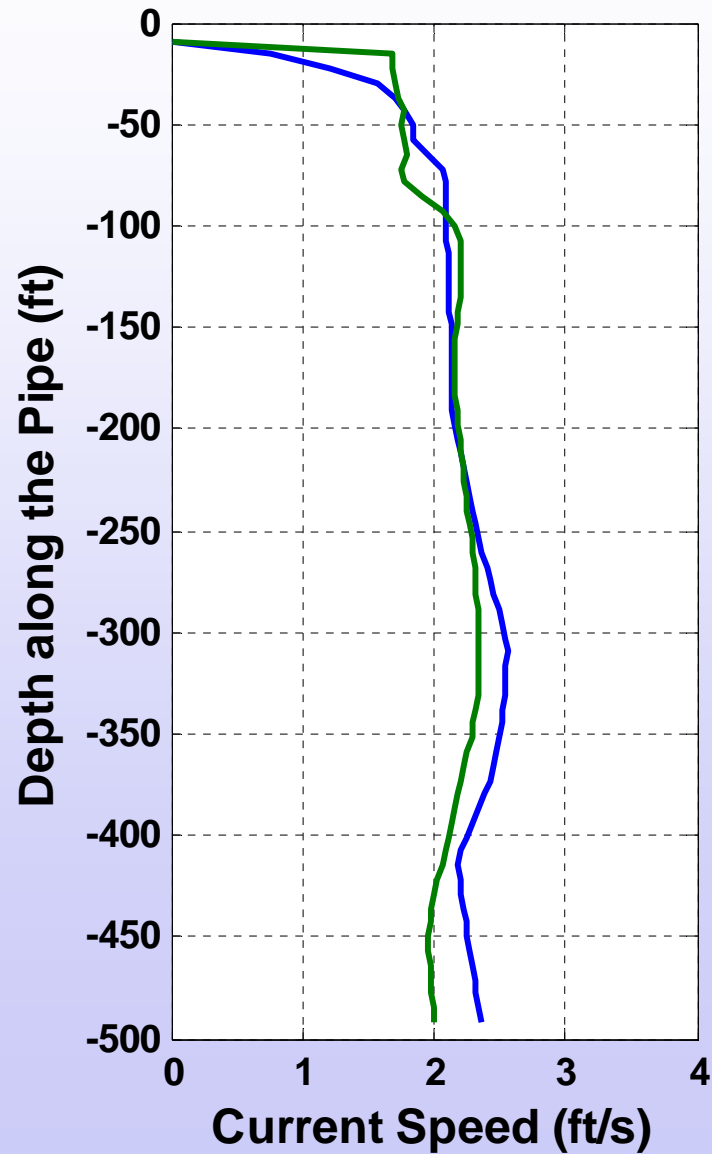
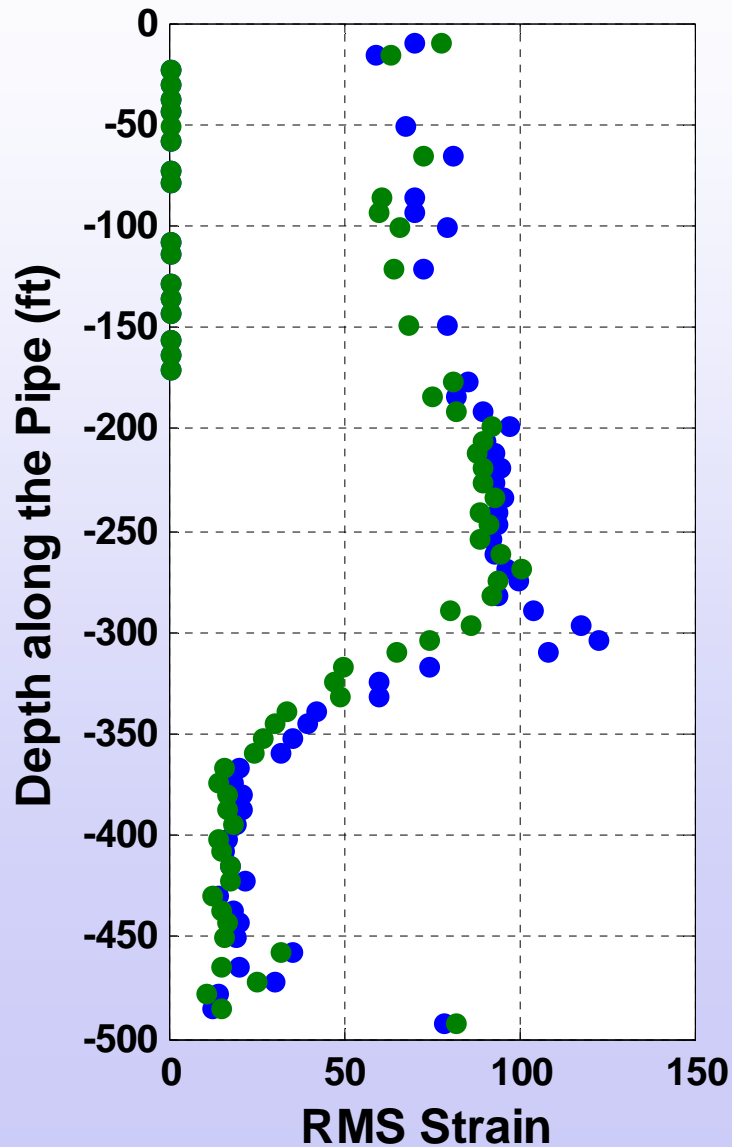
Quadrant Strain for 20061026180512



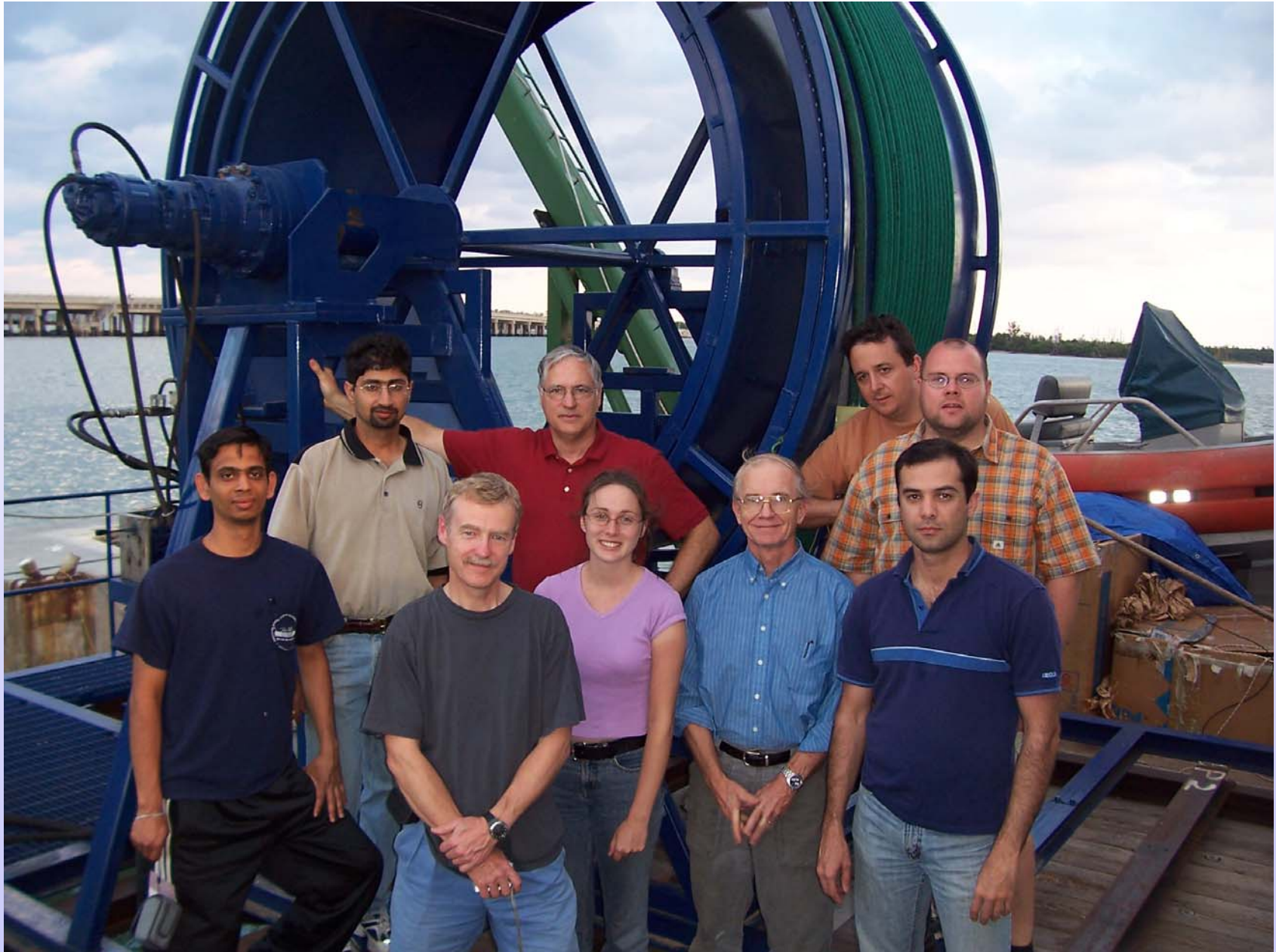
Comparison of 50% Fairing, 50% Strake, and Bare Pipe



Compare 40% Strakes with and without Transition



DeepStar/MIT Team



This Experiment Powered By Graduate Students



Acknowledgements

- DeepStar and Dr. Owen Oakley
- Hayden Marcollo of AMOG Consulting
- AIMS International and Rodney Masters
- Insensys