UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

ROCKLAND SCIENTIFIC

OCEAN TURBULENCE WORKSHOP

PRESENTED BY

ENVIRONMENTAL FLUID MECHANICS LAB, UKZN

IN COLLABORATION WITH

ROCKLAND SCIENTIFIC, VICTORIA, CANADA

Ocean mixing controls the distribution of heat and momentum and other quantities in the oceans. It can be quantified by measuring ocean microstructure in the form of small scale variations in velocity and temperature. Modern fast response, high resolution shear and temperature sensors can now be deployed on vertical profilers and glider platforms to directly estimate diffusivities and associated irreversible mixing. In this workshop these measurements and their background are discussed in detail to help build capacity within South Africa for exploring mixing in our regional oceans.

Local Facilitators: Prof Derek Stretch, Dr Katrin Tirok (UKZN EFML)
International Presenters: Dr Rolf Lueck, Evan Cervelli (Rockland Scientific)
Dates: January 22 – 26, 2018 (5-days)
Location: UKZN Centenary Bldg, Howard College Campus, Durban
Cost: A nominal registration fee of R500. There is limited student support available on application.
Max no of delegates: 30
Accommodation options: (refer web site for options)
Additional online information and registration: https://katrintirok.github.io/TurbulenceWorkshop/

Overview – Daily Learning Program

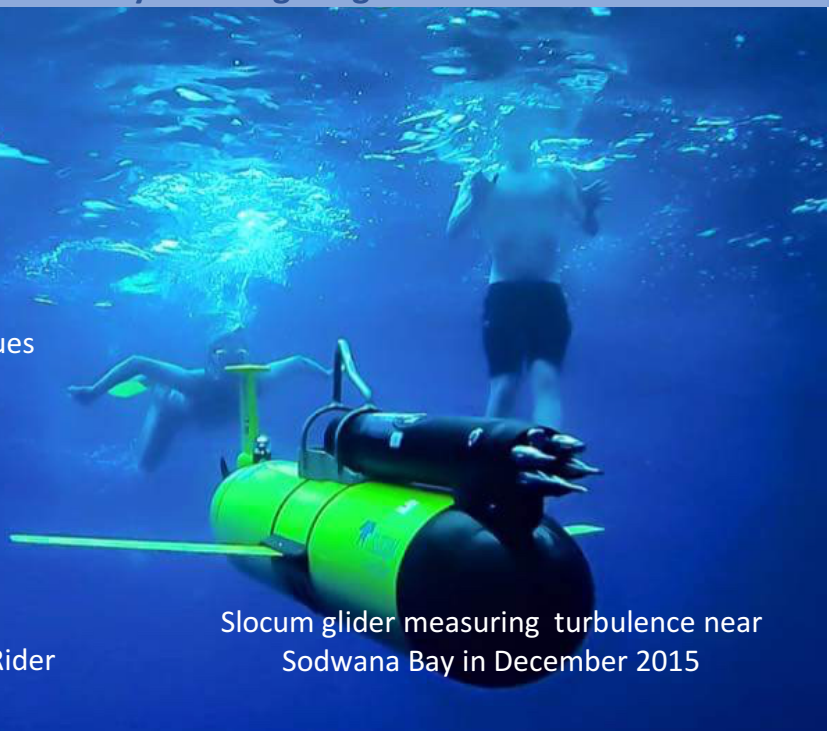
Day 1 Introduction
1. Fundamentals of turbulence
2. Ocean Turbulence

Day 2 Microstructure measurements
3. Introduction to the VMP-250
4. Data Acquisition Software (ODAS)
5. Pre-deployment Checks

Day 3 (field trip - deployments)
6. Turbulence Measurement Techniques
7. Turbulence Measurement Sensors
8. VMP-250 Deployment

Day 4 Data processing
9. VMP-250 Maintenance
10. Data Conversion & Processing
11. Signal Conditioning

Day 5 Special topics
12. Glider measurements with MicroRider



Slocum glider measuring turbulence near Sodwana Bay in December 2015