



ROCKLAND
SCIENTIFIC

VMP-250 WebLive Workshop Schedule, 2020 May 18 - 22 (ALL TIMES IN PDT) details subject to change

	Monday 18th	Tuesday 19th	Wednesday 20th	Thursday 21st	Friday 22nd			
	Classroom	Classroom	Field Deployment Day	Classroom	Classroom			
Morning	8:00 Welcome, Introductions & Housekeeping <i>Introductions, Review MS Teams WeLive Platform Capabilities, Short presentation about Rockland, Review Schedule etc.</i> (Evan 30 min)	8:00 Theory -- Ocean Turbulence <i>Velocity and shear spectra in the ocean, relevant length scales , common models and their assumptions</i> (Justine 60 min)	9:00 Coffee Social <i>If you are not making a deployment, please Join Rockland instructors and other participants in a social hour. Bring your own coffee.</i>	8:00 Software -- Intro to ODAS library <i>Useful tools to get started using the ODAS Matlab Library</i> (Justine 60 min)	8:00 Data Processing Methods -- Signal Processing and Quality Control <i>Advanced topics including: Pre-emphasis, Goodman coherent-noise removal, sensor matching</i> (Justine 60 min)			
	8:30 Theory -- Intro to Turbulence <i>Basic Properties of Turbulence and the Energy Cascade</i> (Justine 30 min)		Field Deployment to be arranged by individual groups at their location. Rockland staff will be available by Phone / Email / Chat group between 7 am to 6 pm PST. Don't forget to stay safe, put on sunscreen, stay 6 ft apart, wear a mask, wash your hands, drink water and also have fun. If you are not able to organize a deployment Rockland will provide stock data.	9:00 Data Processing Methods -- Quick_look <i>Visualizing the data with quick look, in situ temperature calibrations</i> (Justine 60 min)	9:00 Data Processing Tutorial -- Estimating Diffusivity <i>CT sensor processing to determine buoyancy frequency and using it to compute diffusivity.</i> (Justine 60 min).			
	9:00 Instrumentation -- Microstructure Sensors <i>Description and Calibration</i> (Evan 60 min)					9:00 Data Processing Methods -- Time Series Analysis and Spectra <i>Computing spectra from turbulence data (theory and methods)</i> (Justine 60 min)	10:00 Data Processing Tutorial -- Quick_look <i>Hands on exercise working with the data and the ODAS Matlab Library</i> (Justine 60 min)	10:00 Data Processing Tutorial -- Estimating Diffusivity <i>CT sensor processing to determine buoyancy frequency and using it to compute diffusivity.</i> (Justine 60 min).
	10:00 Instrumentation -- Intro to Vertical Microstructure Profilers <i>Physics and design of free-falling vertical profilers</i> (Evan 60 min)					10:00 Data Processing Tutorial -- Time Series Analysis and Spectra <i>Computing spectra from turbulence data (application)</i> (Justine 60 min)	10:00 Data Processing Tutorial -- Quick_look <i>Hands on exercise working with the data and the ODAS Matlab Library</i> (Justine 60 min)	10:00 Data Processing - TBD (Justine 60 min)
11:00-12:00	11:00 Lunch	11:00 Lunch		11:00 Lunch	11:00 Lunch			
Afternoon	12:00 Instrumentation (part 1) -- Data Acquisition Software & Instrument Communication <i>Installing Software, Establishing Communication, ODASSIR commands.</i> (Evan 60 min)	12:00 Software -- Zissou Essentials Introduction <i>Using Zissou Essentials to check data. Reviewing a stock profile in preparation for deployment day.</i> (Evan 60 min)	Special note on time zone: All Schedule times are in Pacific Daylight Time (PDT), add 3 hours for Eastern Daylight Time (EDT).	12:00 Data Processing Methods -- Estimating TKE Dissipation Rate <i>Estimating dissipation rate from the shear spectrum (theory and method)</i> (Justine 60 min)	12:00 Instrumentation -- Maintenance <i>Pre and Post cruise maintenance, long term storage.</i> (Evan 60 min)			
	13:00 Instrumentation (part 2) -- Data Acquisition Software & Instrument Communication <i>Setup.cfg files, RSILink, Calibration certificates.</i> (Evan 60 min)	13:00 Instrumentation -- Pre-Deployment Checks and Winch Operations <i>Mechanical Checks, aligning probes, communicating with ship crew, pre-deployment check list, tether termination, connectors. Winch Operations, Winch Maintenance.</i> (Evan 60 min)		13:00 Data Processing Tutorial -- Estimating TKE Dissipation Rate <i>Estimating dissipation rate from the shear spectrum (application)</i> (Justine 60 min)	13:00 Instrumentation -- Technical Troubleshooting <i>Assessing Probe Health on Land and Sea</i> (Evan 60 min)			
	14:00 Instrumentation -- Bench Testing <i>Installing Software, Establishing Communication, ODASSIR commands, Setup.cfg files, RSILink, Calibrate all. Calibration certificates.</i> (Evan 60 min)	14:00 Instrumentation -- Deployment Techniques and Equipment <i>Deployment techniques, winch operations, environmental considerations, vessel considerations, deployment options.</i> (Evan 60 min)		14:00 Data Processing Tutorial -- Beyond Quick_look <i>Despiking signals and working with the processed data</i> (Justine 60 min)	14:00 Rockland Web Resources <i>Accessing Support, Closing announcements and Group Photos</i> (Evan 30 min)			
	15:00 Day 1 complete	15:00 Day 2 complete		15:00 Day 4 compete	14:30 Workshop Closing <i>Final questions, comments and discussion</i>			
					15:00 Workshop Complete			
Evening	Assignment: Install Instrument Software and read History of Turbulence Profilers	Assignment: Prep for Deployment Day	Assignment: Have a look at your or stock data using Zissou Essentials or the ODAS Matlab Library	16:00 Virtual Happy Hour: Please join the group online for a social happy hour to get to know the other participants. Bring your own drink. This is optional for all participants.				