



Training Course Agenda-Draft

Monday Evening - 10/10/2011

Check in at BML Housing Complex (14:00-16:30)

(38.317449°, -123.058067°)

17:00-19:00 Ice Breaker Hosted by CODAR

(at the home of Bruce Nyden, 1909 Bay Flat Road, Phone: +1 707 494 6693)

Tuesday - 10/11/2011

7:30-9:00 Breakfast (on your own - hotel cafe/restaurant)

BML Public Education Room

(38.318049°, -123.071624°)

9:00-10:00

1.1 Introductions and Course Overview

Brief self-introductions by attendees

Course Overview and logistics

HF Radar and SeaSonde Terminology

What is CODAR Support: How to get answers from CODAR Support

10:00-11:00

1.2 SeaSonde Overview - "What We Make and What is Measured"

Overview and Operation of a SeaSonde HF Radar Network

Differences Between SeaSonde Models -

CODAR Company Overview -

System Hardware Deployments Worldwide -

11:00-11:15 Break

11:15-12:00

1.3 Site Selection Review

Optimizing Performance and Data Quality With Good Site Choices

Environmental Factors

Interference Issues

Frequency Selection and Permits

Lunch Hosted by CODAR

12:00-13:30

(Patio Overlooking Whale Cove)

13:30-14:15

1.4 SeaSonde Release 6 Webserver with PC and “smart phone” compatibility

14:15-15:00

1.5 SeaSonde10 Release 6 Universal Software Overview

Overview

CODAR Software and File Directory

Documentation - where to Find the Answers

SeaSondeRadialSetup

Property lists

Sentinel

SeaSondeController (Monitor & Standard Controller Menus)

SeaSondeAcquisition

CSPro

Terminal Shell Programs (SpectraAnalysis Suite)

Archivalist

Break

15:00-15:15

15:15-16:00 **ON THE BEACH**

1.6 System Setup, Startup and Checks for Proper Operation

Exercise: Startup of a new 13, 25 or 42MHz Combine type SeaSonde antenna

SeaSondeController (Transmit Monitor & Advanced Controller Menu)

Sentinel (Status Window Checks)

Terminal Window (Error Message Checks)

Automated Start-up with Sentinel login

16:00-16:30

1.7 Evaluating Cross Spectra : The Basic Unit of SeaSonde Data

Definition

Description

Characteristic features and differences between systems

Unusual spectra features

CODAR Ocean Sensors, Ltd. Fall 2011 Training Course

Identifying "problem" features

Exercises: Using SpectraPlotterMap and DiagDisplay to Evaluate Spectra and Radial Data

16:30-17:00

1.8 Simulated Processing and Radial Site Setup Modifications

17:00-17:30

1.9 Using DiagDisplay for Setting Phases and Troubleshooting

Setting Phases From Sea Echo and Re-Processed CSS Files

Setting Phases From Pattern Measurements

Exercises: Estimating phases and Re-processing Cross Spectra

Barbecue Dinner Hosted by CODAR

17:30-18:30

Presentation

18:30-20:30

The History of HF Radar and CODAR Ocean Sensors, Ltd.

Wednesday - 10/12/2011

7:30-9:00 Breakfast (on your own - hotel cafe/restaurant)

10:00-11:00AM **ON THE BEACH**

Session 2.1: 5MHz SeaSonde Setup, Startup, Checks for Proper Operation & Troubleshooting

Exercise: Setup and startup 5MHz SeaSondes at Long Marine Lab

Evaluate Site for Appropriateness of Wave Measurements

Configuring the Wave Parameters with RadialSiteSetup

11:00-12:00 **ON THE BEACH**

Session 2.2: 25MHz Combine-RxTx SeaSonde Setup, Startup, Checks for Proper Operation & Troubleshooting

Exercise: Setup and startup 25MHz SeaSondes at Long Marine Lab

Evaluate Site for Appropriateness of Wave Measurements

Configuring the Wave Parameters with RadialSiteSetup

Lunch Hosted by CODAR

12:00-13:00

(Patio Overlooking Whale Cove)

13:00-15:00PM **ON THE BEACH**

Session 2.3: Hardware Overview, APM Setup and Data Collection

Exercise: Conduct Walking APMs for 5MHz & 25MHz SeaSondes

Thursday - 10/13/2011

7:30-8:30 Breakfast (on your own)

9:00-10:00

3.1 Review: Question and Answer Session from Days 1 & 2

RadialSiteSetup

10:00-10:30

3.2 Introduction to First Order Lines

Exercise: Using SpectraPlotterMap to Evaluate/Set First Order Lines

10:30-11:00

3.3 Configuring Wave Software for Wave Processing

System limitations

Evaluating Site for Appropriateness of Wave Measurements

Configuring the Wave Parameters with RadialSiteSetup

Theory of Operation

Using Wave Display

11:00-11:30

3.4 Antenna Pattern Measurement Techniques - Review

SeaSondeController (Transponder Controller Menu)

Antenna Pattern Measurement Setup

11:30-12:00

3.5 Timbuktu 8.8 (TB2) and Apple Remote Desktop (ARD) for Remote Control

Configuring Mac computers to communicate with Timbuktu

Connecting to a Site a Control Session

Initiating an Exchange Session to Transfer files

Favorite Timbuktu Tricks & Common Problems Encountered

Using ARD and ScreenShare application

Timbuktu Practice (between computers)

Lunch Hosted by CODAR
(Patio Overlooking Whale Cove)

13:00-13:45

3.6 Communications and File Transfers -

Combine Site File Transfers

Communications Hardware

Configuring File Transfers

Using rsync for command-line transfers

Exercise: Configuring file transfers with FileExchange and rsync

Break

13:45 -14:00

14:00-14:15

3.7 Release7 Combine Site Software Overview -

SeaDisplaySetup

SeaDisplay

CombineSiteSetup

Sentinel

Terminal Shell

Archivalist

FileExchange

14:15-15:30

3.8 Creating Grid Files

SeaDisplay - Release7 for Combine

SDSetup - Release7

CombineSiteSetup

Exercise: Creating Grid Files for Total Vectors

15:30-16:00

3.9 How to Re-Process Total Vectors Using Alternative Parameters -

Data Troubleshooting From Total Vectors Backwards to the Problem Source

16:00-16:30

3.10 File Management and Archiving -

How to contact "Support" and what's required

- Screen shots

- Diagnostic files

- Sample data files (compressed)

Configuring Archivalist to Optimize Disk Space

Re-processing Data From Archives

The Importance of Desktop Log Files

16:30-17:00

3.12 Introduction to SeaDrift

