

Monday Evening

4/28/2008

16:00-18:00 PM

Registration at Santa Cruz Best Western (500 Ocean Street, Santa Cruz, CA)

Questions/Problems:

Bruce Nyden +17074946693 Mobile

18:00 PM

Happy Hour: Dinner and Drinks at Las Olitas on the Santa Cruz Pier (Hosted by COS)

Tuesday

4/29/2008

UC Santa Cruz - Long Marine Lab La Feliz Room
Santa Cruz, CA

7:30-8:15 AM Breakfast (on your own)

9:30-10:00 AM

1.1 Introductions and Course Overview

Brief self-introductions by attendees

Brief introductions of COS staff

COS Company Overview

Course Overview and logistics

Questions/Problems: How to get answers from Support

10:00-10:30 AM

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

HF Radar and SeaSonde Terminology

Overview and Operation of a SeaSonde HF Radar Network

Differences Between Systems (Hardware and Software)

System Hardware Show and Tell

10:30-11:00 AM

1.3 Site Selection

Optimizing Performance and Data Quality With Good Site Choices

Environmental Factors

Interference Issues

Frequency Selection and Permits

11:00-11:45 AM

1.4 Introduction to the SeaSonde Macintosh

Intro to Mac OS X and Apple Macintosh Computers

Standard COS Macintosh Installation

Lunch (Catered by COS - La Feliz Room)
12:00-12:45 PM

12:45-13:30 AM Reserve Hike/Walk and/or Interpretive Center Visit

13:30-14:00 PM

1.5 Creating a Site File for a Radial Site

14:00-14:30 PM

1.6 SeaSonde10 Release 5 Universal Software Overview

Overview

CODAR Software and File Directory

Documentation - where to Find the Answers

Sentinel

SeaSondeController (Monitor & Standard Controller Menus)

SeaSondeAcquisition

CSPRO

Terminal Shell Programs (SpectraAnalysis Suite)

Archivalist

14:30-14:45 PM

Break

14:45 -15:30 PM

1.7 System Setup, Startup and Checks for Proper Operation

Exercise: Setup and startup of a 25MHz SeaSonde

SeaSondeController (Transmit Monitor & Advanced Controller Menu)

Sentinel (Status Window Checks)

Terminal Window (Error Message Checks)

Automated Start-up with Sentinel login

15:30-16:00 PM

1.8 Evaluating Cross Spectra : The Basic Unit of SeaSonde Data

Definition

Description

Characteristic features and differences between systems

Unusual spectra features

Identifying "problem" features

Exercises: Using SpectraPlotterMap, SpectraPlotter, SpectraPlotter3D, SpectraSlicer, SpectraShortener and DiagDisplay to Evaluate Spectra Data

16:00-16:30 PM

1.9 Simulated Processing and Radial Site Setup Modifications

16:30-17:30 PM

1.10 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

18:00-19:30 PM

1.11 History of HF Radar - Don Barrick,

Wednesday

UC Santa Cruz - Long Marine Lab La Feliz Room

Santa Cruz, CA

4/30/2008

7:30-8:15 AM Breakfast (on your own)

09:00-9:30 AM Hardware Show and Tell

9:30-10:30 AM

2.1 System Setup, Startup, Checks for Proper Operation, Troubleshooting

Exercise: Setup and startup of a 12MHz Combine-type SeaSonde

SeaSondeController (Transmit Monitor & Advanced Controller Menu)

Sentinel (Status Window Checks)

Terminal Window (Error Message Checks)

Automated Start-up with Sentinel login

10:30-11:00 AM

2.2 Introduction to First Order Lines

Exercise: Using SpectraPlotterMap to Evaluate/Set First Order Lines

2.3 How to Re-Process Radial Data

RadialSiteSetup

11:00-11:30 AM

2.4 Antenna Pattern Measurement Techniques

SeaSondeController (Transponder Controller Menu)

Antenna Pattern Measurement Setup

11:30-12:15PM

2.5 Processing Pattern Files

Lunch (Hosted by COS)
12:15-14:00PM

14:00-14:45 PM

2.6 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

14:45-15:15 PM

2.7 Overview of SeaSonde Software Utilities

15:15 -15:30 PM

Break

15:30-16:00 PM

2.8 Combine Site Software Overview

CombineSite Installation

Sentinel

FileExchange

Terminal Shell

Archivalist

CombineSiteSetup

16:00-17:00 PM

2.8 Creating Grid Files

SeaDisplay

SDSetup

16:30-17:00 PM

2.9 How to Re-Process Total Vectors Using Alternative Parameters

CombineSiteSetup

Exercise: Creating Grid Files for Total Vectors

17:00-17:30 PM

2.10 Data Troubleshooting From Total Vectors Backwards to the Problem Source

Exercise: Troubleshooting "Bogus" Totals to the Problem Radial(s) and Troubleshooting Problem Radials to problem Cross Spectra (CSS)

Dinner in Downtown Santa Cruz (on your own)

Thursday

UC Santa Cruz - Long Marine Lab La Feliz Room
Santa Cruz, CA
5/1/2008

7:30-8:15 AM Breakfast (on your own)

8:30 AM - 12:30 PM

3.1 12MHz System Setup, Startup, Checks for Proper Operation, Troubleshooting

Exercises: Field Setup 12Mhz SeaSondes, system startup and checks for proper operation, Problem Solving

3.2 5MHz or 12MHz APMs *Walking APM for LR or SR System*

Lunch (Catered by COS - La Feliz Room)

14:00-14:30 PM

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

14:30-15:00 PM

3.4 Processing APM Data

15:00-15:45 PM

3.5 Cable Repairs - TBD

15:45-16:00 PM

Break

16:00-16:30 PM

3. 6 Troubleshooting Systems with Timbuktu and SSH

16:30-17:30 PM

3.7 Review Sessions - Participants Choice - TBD

19:00 Graduation Dinner in Downtown Santa Cruz

(Hosted by COS)

Friday

5/2/2008

Codar Ocean Sensors, Ltd. Spring Training Course (April 28-May 2, 2008)

UC Santa Cruz - Long Marine Lab La Feliz Room
Santa Cruz, CA

7:30-8:15 AM Breakfast (on your own)

9:00-09:45 AM

5MHz Antenna Setup

09:45-10:15 AM

4.1 Frequency Management

How SHARES (GPS Timing Works)

Considerations for Setting Up a Synchronized Network

Demonstration of Bistatic

Identifying and Troubleshooting SHARES Synchronization Problems

Exercise: GPS System Startup and Setup, Setting GPS Timing Offsets With SeaSondeController and Troubleshooting GPS

10:15-10:45 AM

Break

10:45-11:30 AM

4.2 Customizing w/ Command Line Tasks and Perl Scripts

4.3 File Management and Archiving

How to contact "Support" and what's required

- Screen shots
- Diagnostic files
- Sample data files (compressed)

The Importance of Desktop Log Files

Configuring Archivalist to Optimize Disk Space

Re-processing Data From Archives

11:30- 12:00 AM

4.4 Data QAQC

Lunch (Catered by COS - La Feliz Room)

Course Wrap-up (NOON)