VM-ADCP
Standard Operating Procedures (SOP)

QUICK GUIDE

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Routine Operating Procedures for the VM-ADCP

1) The VM-ADCP is controlled from PCLAB02. First make a new data directory under 'c:OCEANO/RDI/DATA', for example 'c:OCEANO/RDI/DATA/SocibRadMed March2013/'. This is where the VmDAS software will be pointed to write the collected data files.

2) Locate the water track and bottom track initialisation files, 'RadMedFeb13WT8m.ini' and 'RadMedFeb13BT8m.ini' in directory 'c:OCEANO/RDI/OS150 Khz Confuguration files'. These initialisation files are preset to :-

Transducer depth = 2 m
Blank beyond Transmit = 8 m (As determined in the acceptance trials)
Number of bins = 50
Bin Thickness = 8 m
Lo-Res long range (narrowband) mode
Bottom tracking = on (Bottom tracking = off in 'RadMedFeb13WT8m.ini' file)
Maximum bottom track distance = 400 m (N/A in 'RadMedFeb13WT8m.ini' file)
Ping as fast as possible

EA Heading alignment set to -45.5 as had been determined on cruises during 2013/14/15.

Velocity Scale Factor set to 1.0080 as had been determined on cruises during 2014/15.

STA files = 120 second ensembles
LTA files = 600 second ensembles

3) There is no requirement for bottom track recording of data at every opportunity, but once a day or 2 or 3 times during the cruise over long flat < 200 m continental shelves (in this region of the Mediterranean ~100 m more likely) would be desirable.

4) The VM-ADCP deck unit is in the computer racking on the 'dry' port side of the laboratory. The VM-ADCP is turned on by flipping the white switch on the left hand side of the RDI deck unit.

5) On PCLAB02, the VmDAS software should be started by clicking on the screen icon. Select 'collect data' under the 'File' menu item. 'Load' the required initialisation file (see **2**). 'Edit data options' operates on the initialisation settings, change the 'recording' options, choosing a file name format and browsing for the new data directory that you have setup under **1**. Make sure the sequential file number is either 1 for the first file in a cruise or the next sequential number if restarting data recording manually. Note, if you have not changed the initialisation file and are simply restarting recording this sequential number will have automatically updated by 1. To begin data recording close the edit windows, save a copy of the initialisation if wished, then under 'control' choose 'go'. Choosing 'stop' under the 'control' option will stop data recording and choosing 'go' again will restart data recording with the sequential file number incremented by 1.

6) Real-time WinADCP visualisation can be achieved by clicking on the WinADCP icon, selecting the currently recording file ending with .STA, .LTA, or .ENX, and selecting 'monitor'. If this is required I would suggest using a monitoring time interval of 120 seconds rather than the default 5 seconds.

7) When not in 'monitor' mode, WinADCP ancillary data output in ascii format can be selected to produce a .txt file of navigation, bottom track and bottom depth data. Selected bottom track data can then be entered into the attached example excel calibration spreadsheet, and the VM-ADCP calibration parameters can then be checked.

Please give me a call, or send me an email if there is anything you would like me to check or explain further. (john@vectisenvironmental.com), +44 78 01 35 06 37