Categorization acoustic wideband data with LSSS-2.16.0

Institute of Marine Research and MAREC arrange a training course in processing and scrutinizing acoustic wideband data (from EK80). The training course is intended for scientists and technicians.

LSSS drawing-tools used during categorization and automatic drawing of bottom will be demonstrated, as well as export of data for abundance estimation, use of color-scales and use of survey-local database. LSSS is being continually developed, so new functionality is added continuously. Special focus this time is how to handle and analyze the enormous amounts of data from the EK80 wideband echosounder (250 times more data than EK60).

The LSSS pre-processor toolbox KORONA makes categorization more objective and speeds up categorization. With the introduction of wideband data, the use of KORONA is even more important to get the full benefit out of the data. Wideband tools are demonstrated and used during exercises. Automatic categorization ("species identification") of multifrequency and wideband data is studied.

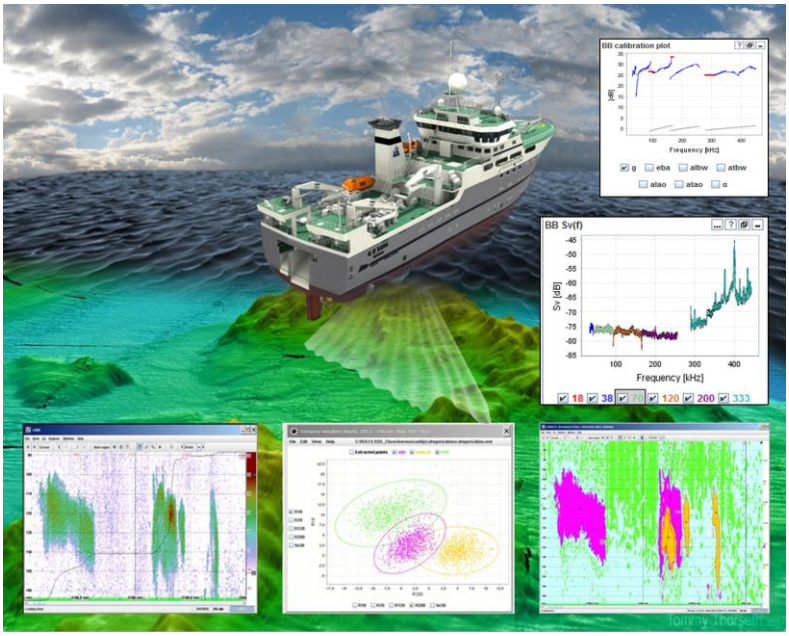
Content

Installation: LSSS, library, …

Basic use of LSSS:
- Basic design
- Setup and data organizing
- Data interpretation tools
- Analysis of survey data
- Work files
- Database
- Data export and data copying
- Wideband functionality
- Deep Vision functionality

Theory:
- Introduction to wideband
- Splitting data

Using preprocessor KORONA:
- Preprocessor design
- Wideband functionality
- The acoustic feature library
- Data improvement trough preprocessing
- Automatic categorization ("species identification")
- Training the library
- How to use (or not use) preprocessor results



Remote control:
- The LSSS API

Scrutiny workshop – scrutinize:
- Best quality of scrutiny in short time

Course material: Course material available ~ a week prior to the course at ftp://lsss@ftp.imr.no.
Please use an ftp-client to download, e.g. FileZilla.

Dates: Monday – Friday (5 days), February 19 – 23, 2024

Schedule:

Monday	9:00 – 10:00	Installation help
Monday	10:00 – 15:45	Basic: first-time setup, database, basic tools
Tuesday	9:00 – 15:45	Basic: creating survey, scrutinize, DB-reports
Wednesday	9:00 – 15:45	Advanced: preprocessor use, broadband, MS70
Thursday	9:00 – 15:45	Advanced: preprocessor feature library, remote control, etc.
Friday	9:00 – 15:45	Scrutiny workshop – teams of two

Location: Institute of Marine Research, Nordnes, Bergen, Norway, room "Pynten"

Registration: Registration continues until the course is full.
- *IMR:* Please register at Havforskningsakademiet
- *International:* Please register to: info@marec.no

Laptop: We ask you to kindly bring your own laptop computer with 64-bits operating system and preferably 32 GB RAM or more.

Lecturers: Rolf J. Korneliussen (Head of Research), Institute of Marine Research.
Inge Eliassen (Senior scientist), NORCE / MAREC (if participants outside IMR)