Universität Bremen

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Vehicle data description sheet

ROV Quest 4000

Vessel R/V Meteor
Cruise M114
Chief Scientist Prof. Dr. Gerhard Bohrmann
Dive No. 357

Deployment position
Latitude 22° 1,35 N
Longitude 93° 26,15 W

Notes

Positioning data are unfiltered raw data output from the USBL system. Thus, they may contain deviation from the real track.

Data content

Folder ***config*** – general documentation of dive management and configuration

> ***dive map*** – maps used for navigation on this dive are stored here
> ***dive plan*** – target description as provided by the scientist party

Folder ***data*** – data being produced during dive

> ***dbexport*** – extract from the ROV Quest Data base, see description below
> ***sonar*** – images and recorded data from forward looking sonar
> ***templogger*** – logged Temperature data

Folder ***digital_photos*** – pictures from digital still cameras

> ***digstill_pantilt_lwr*** – pictures from camera on lower pan/tilt-head
> ***digstill_toolskid_vertical*** – pictures from vertical looking camera on tool skid

Folder ***digital_videos*** – camera video recording and corresponding frame shots

cam_pantilt_lwr – pilot camera on lower pan/tilt-head
cam_toolskid_vertical – vertical looking camera on tool skid
pilotscreen – overview of camera tiling as seen on the screen in control van
data_unpublish – asset in this folder must not be published or copied without permission of MARUM. See Copyright-Conditions!

cam_zeus_toolskid_front – HD camera Zeus, tool skid, front-looking
scorpio_original – Pictures from the lower pan/tilt camera without Marum-Logo embossed

Description of database extract – dbexport

Tab-delimited ASCII-Format, contains the following fields:

Vessel Latitude, Vessel Longitude – position of the ship as provided by ships database

DVLNav Latitude, DVLNav Longitude – positioning data from Doppler Velocity Log (DVL), only valid as long as the vehicle is at an altitude of less than 30 m above ground. The DVL data is relative to the USBL position that is taken at a reset point on a regular base.

Quest Depth – reading of the vehicles depth sensor

USBL_ROV Latitude, USBL_ROV Longitude – ROV position data from Ultra Short Baseline System (USBL)

Quest Altitude – Altitude above ground provided by Doppler Velocity Log (DVL)

Quest Heading – vehicle compass data

Quest Pitch, Roll – pitch and roll angles from the Motion reference Unit (MRU)

Quest BottomVelX – Velocity in X Direction

Quest BottomVelY – Velocity in Y Direction

Quest BottomVelZ – Velocity in Z Direction

Quest PanTilt1Pan – Angle of the upper camera head, horizontal direction

Quest PanTilt1Tilt – Angle of the upper camera head, vertical direction

PanTilt Pan2 – Angle of the lower camera head, horizontal direction

PanTilt Tilt2 – Angle of the lower camera head, vertical direction

StillCamera Comment – Name of still image taken with lower camera head still camera

USBL_Fish Latitude, Longitude – USBL position data of additional transponder, e.g. wire beacon

CTD Conductivity, Druck, Temperatur, HiTemp, Hi Temp2 – data from vehicle CTD, High Temperature