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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. 360

Deployment position

Latitude 22° 1,467 N Longitude 93° 14,803 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 heredive 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



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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 data_unpublish - asset in this folder must not be published or copied without permission of MARUM.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-lookingscorpio_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 BottomVeIX – Velocity in X Direction

Quest BottomVeIY - 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



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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