

# Vehicle data description sheet

## ROV Quest 4000

Vessel R/V Meteor

Cruise M114

Chief Scientist Prof. Dr. Gerhard Bohrmann

Dive No. 351

## Deployment position

Latitude 19° 55,90 N

Longitude 94°^20,82 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

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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***data\_unpublish*** – asset in this folder must not be published or copied without permission of MARUM.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-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