

MSM16-2 processing log **ROV "Genesis" Navigation data**

a) Original data

The original navigation data was measured by a moon pool mounted IXSEA GAPS USBL positioning system by the University of Gent ROV team. The data was recorded and provided by the software OFOP (J. Greinert) in 1 second interval.

These data sets contain:

USBL position from IXSEA GAPS
Timestamp
Immersion

b) Processing

I. Processing steps:

1. Extraction of source data from OFOP
2. Manual validation of erroneous positions by reviewing speed, time and distance jumps
3. Removing of invalid positions
4. Smoothing of the track using a Gaussian/9 filter (in ADELIE GIS)
4. Interpolating missing data
5. Conversion of data to files of 1 and 10 second resolution

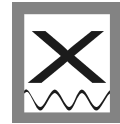
II. Processed data:

Result of the processing is the verified navigation in 1 second and in 10 second interval, held in ASCII table files (tab delimited) with the following format:

Column 1: Latitude [decimal degree]
Column 2: Longitude [decimal degree]
Column 3: Date [Format: DD.MM.YYYY HH:MM:SS]
Column 4: Immersion [metres]

III. Statistic

Station Number	Dive Number	Starttime	Endtime	Number of 1 s Positions
820	2	27.09.2010 17:27	27.09.2010 22:39	18720
825	3	28.09.2010 14:59	28.09.2010 20:18	19140
835	4	30.09.2010 07:16	30.09.2010 14:10	24840
844	5	02.10.2010 06:49	02.10.2010 09:13	8640
851	6	03.10.2010 12:58	03.10.2010 19:54	24960



c) Dive maps

