



PS78 processing log ROV "Kiel 6000" Navigation data

a) Original data

The original navigation data was measured by an IXSEA Posidonia USBL positioning system. The data was recorded and provided by the software OFOP (J. Greinert).

These data sets contain:

USBL position from IXSEA Posidonia
Timestamp
Immersion

b) Processing

I. Processing steps:

1. Extraction of raw 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 positions to get a 1 second interval navigation track
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: Flag 1: Position measured by acoustic positioning system (USBL)
 0: No position from USBL, position is interpolated
Column 5: Immersion [metres]

III. Statistic

Station Number	Starttime	Endtime	Number of 1 s Positions
PS78/141-1	15.07.2011 11:02:06	15.07.2011 16:01:07	17942
PS78/149-1	18.07.2011 09:51:45	18.07.2011 19:04:46	33182
PS78/161-2	22.07.2011 10:21:55	22.07.2011 20:58:11	38177
PS78/164-1	24.07.2011 10:16:37	24.07.2011 19:02:09	31533
PS78/175-3	28.07.2011 08:55:04	28.07.2011 19:11:54	37011

c) Dive maps





