

Appendix B

Raw Data Files

A description of the ADCP raw data files with observed velocity data measured during the field campaign on March 19th 2003 at the IJzer mouth is presented in Table B-1. Every one contains records of the velocity profile at different points along the navigation canal every two seconds time interval, in average.

Table B-1: ADCP Raw data files description

Raw data files	Start Time	End Time
NP_000t.000	13:52	13:53
NP_001t.000	13:55	13:55
NP_002t.000	14:05	14:16
NP_003t.000	14:20	14:24
NP_004t.000	14:39	15:18
NP_005t.000	15:33	15:43
NP_006t.000	15:45	15:49
NP_007t.000	16:26	16:57
NP2_000t.000	17:45	17:50
NP2_001t.000	17:54	18:02
NP2_002t.000	18:01	18:10
NP2_003t.000	18:51	19:13
NP2_004t.000	19:42	19:45
NP2_005t.000	19:45	19:51
NP2_006t.000	20:33	20:52
NP2_007t.000	21:18	21:20
NP2_008t.000	21:22	21:34
NP2_009t.000	21:54	22:17
NP2_010t.000	22:29	22:45
NP2_011t.000	22:50	22:59
NP2_012t.000	23:00	23:06
NP2_013t.000	23:08	23:57

The time recorded by ADCP is two hours lagged respect to Greenwich Mean Time (GMT). After processing the field data using the Readadcp script developed by Caluwaerts (2003) in MATLAB, a comparison between the observed and the model velocity has been performed.

The original script has been modified in the present thesis. The details of the modifications are described in Appendix C.1.

In order to compare the model velocity with the observed data another routine has been developed in MATLAB. An explanation about the script (movsov.m) is given in Appendix C.2. However, before using this analysis tool some data treatment has been done. The time has been referred to GMT subtracting two hours from the recorded time. The coordinate system has been converted to UTM, 31, ED50 from WGS84 expressed in latitude and longitude. Moreover, the data has been split in different text files, each one storing observed velocity for measured points along different sections during thirty minutes time interval. A description of the new generated files is given in Table B-2 for cross sections and Table B-3 for longitudinal sections.

Table B-2: Text files with observed data along cross sections

Text files	Description	Cross Section	Observed Period
CROSS2_12H30	Long cross section	Section 2	12:00-12:30
CROSS3_12H30	Cross section	Section 3	12:00-12:30
CROSS4_12H30	Small cross section	Section 4	12:00-12:30
CROSS1_14H00	Small cross section	Section 1	13:30-14:00
CROSS2_14H00	Long cross section	Section 2	13:30-14:00
CROSS3_14H00	Cross section	Section 3	13:30-14:00
CROSS4_14H30	Small cross section	Section 4	14:00-14:30
CROSS3_15H00*	Cross section	Section 3	14:30-15:00
CROSS1_16H00	Small cross section	Section 1	15:30-16:00
CROSS2_16H00	Cross section	Section 2	15:30-16:00
CROSS3_16H30	Cross section	Section 3	16:00-16:30
CROSS4_17H00	Small cross section	Section 4	16:30-17:00
CROSS1_17H30	Small cross section	Section 1	17:00-17:30
CROSS2_18H00	Small cross section	Section 2	17:30-18:00
CROSS3_18H00	Small cross section	Section 3	17:30-18:00
CROSS1_19H00*	Small cross section	Section 1	18:30-19:00
CROSS2_19H30	Small cross section	Section 2	19:00-19:30
CROSS3_19H30	Small cross section	Section 3	19:00-19:30
CROSS2_21H00	Small Cross section	Section 2	20:30-21:00
CROSS3_21H00	Small Cross section	Section 3	20:30-21:00
CROSS1_21H30	Small Cross section	Section 1	21:00-21:30

* Far from the mean position of the cross section in the canal

Table B-3: Text files with observed data at longitudinal sections

Text Files	Description	Observed Period
LONG_13H30	Longitudinal section	13:00-13:30
LONG_15H00	Longitudinal section	14:30-15:00
LONG_17H30	Longitudinal section	17:00-17:30
LONG_19H00	Longitudinal section	18:30-19:00
LONG_19H30	Small longitudinal section	19:00-19:30
LONG_20H00	Two small longitudinal sections	19:30-20:00
LONG_20H30	Longitudinal section	20:00-20:30
LONG_21H00	Two small longitudinal sections	20:30-21:00
LONG_21H30	Longitudinal section	21:00-21:30