

FCF Phase B (rigid, meander)

One volume contains the original summary data and boundary shear stress data files, in which details see the following table. The other volume contains one set of the final turbulence data, see experimental data files below.

Both volumes include some preliminary analysis of them. The volume is divided into the following three main sections, each dealing with one of the geometries tested as below:

- 60 TRAPEZOIDAL MEANDER CHANNEL (Vol.3)

Inbank flow, depth = 100mm; Overbank flow, depth = 200mm

- 60 NATURAL MEANDER CHANNEL (Vol.4)

Inbank flow, depth = 140mm; Overbank flow, depth = 165mm and depth = 200mm

- 110 NATURAL MEANDER CHANNEL (Vol.5)

Inbank flow, depth = 140mm; Overbank flow, depth = 165mm and depth = 200mm

Experimental series (1990-1991)

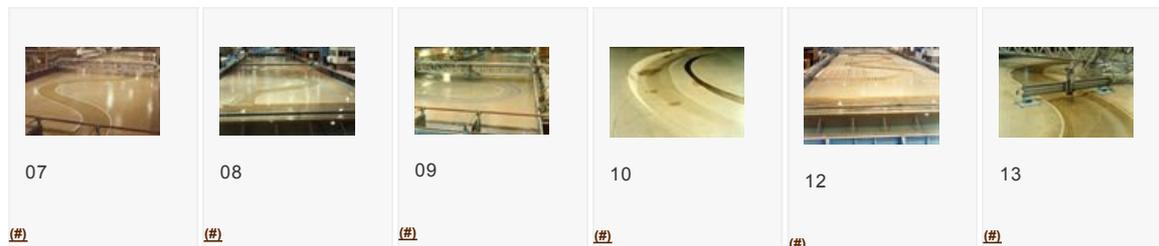
[Open all sections](#)

Channel Type	Depth	Main Channel (wall shear)	Raw Data (boundary shear)
60 Trapezoidal Meander (Valley slope = 0.996×10^{-3} Bed slope = 0.7248×10^{-3} Sinuosity = 1.374, Channel base width = 0.9m)	H=100mm H=200mm	SSA100.dat SSA200.dat SSF200.dat	SSA100.sum SSA200.sum at 0, apex of bend 6 SSF200.sum for floodplain
60 Natural Meander (Valley slope = 0.996×10^{-3} Bed slope = 0.7248×10^{-3} Sinuosity = 1.374)	H=140mm H=165mm H=200mm	60SH140.OUT 60SH165.OUT 60SH200.OUT	US09.sum at section 09, upstream of bend 6 6BE00.sum at -60 degrees, bend entrance 6BE01.sum at -40 6BE02.sum at -20 6BE03.sum at 0, apex of bend 6 6BE04.sum at +20 6BE05.sum at +40 6BE 06.sum at +60 DS08.sum at section 08, downstream of bend 6 616500.sum ~ 616506.sum 3165F1.sum for floodplain F1 (see sketch) 3165C.sum for main channel MC 3165F2.sum for floodplain F2 620000.sum ~ 620006.sum 3200F1.sum for floodplain F1 (see sketch) 3200MC.sum for main channel MC 3200F2.sum for floodplain F2 Additional floodplain measurements were taken at 7 cross sections transverse to the valley slope. The data are contained in files *.dbs & *.sbs (data & summary): 25200f.sbs, 26200f.sbs, 27200f.sbs, 28200f.sbs, 29200f.sbs, 30200f.sbs, 31200f.sbs
110 Natural Meander (Valley slope = 1.021×10^{-3} Bed slope = 0.4997×10^{-3} Sinuosity = 2.043)	H=140mm H=165mm H=200mm	Shprint1.inp shprnmcmmod.out (non-dimensional) 110SH140.out 110 PRN2.out Shprint2.inp 110SH200.out 110 PRN1.out 110FLDSH.out	R11WS0.sum (25/6/91) R21WSH.sum ~ R61WSH.sum R71WSR.sum (note one point missed near wall) R81WSH.sum R91WRR.sum (one point only) R101WS.sum, R111WS.sum, R121WS.sum R131WS.sum (bend 5) R11Ws0.sum Another independent set of measurements between bends 4 & 5 by

Lorena, in files 140R1.sum to 140R12.sum
 165R1.sum to 165R12.sum (main channel, excluding R6 & R8)
 165T1.sum to 165T5.sum (floodplain)
 R113WS.sum, R123WS.sum, R133WS.sum
 SHPRINT200.OUT
 PRINTOUT1.DAT
 R12WSH.sum to R92WSH
 R92WSA.sum
 R102WS.sum to R122WS.sum
 R13211.sum
 Some other data by Lorena, given in:
 200R1.sum, 200R3.sum, 200R3A.sum
 200R5.sum, 200R7.sum, 200R9.sum
 200R11.sum, 102ST2.sum
 Additional data is also given in:
 R13211.sum (Yuan)
 200T1.sum to 200T5.sum (Lorena)

Images

Click on the filenames below (the text displayed beneath each thumbnail) to display the relevant image.



Experimental data files

Details on the notation and data filename are also given in Notes on Boundary Shear Stress data and Notes on Turbulence data of FCF Phase B. Data files are in text format, which are regrouped and listed in the following manner. All files need to be unzipped using WINZIP and then opened using WordPad.

60 trapezoidal meander channel

- summary files
 - [depth = 100mm \(http://www.eee.bham.ac.uk/flowdata/FCFB/60t100s.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/60t100s.zip), [depth = 200mm \(http://www.eee.bham.ac.uk/flowdata/FCFB/60t200s.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/60t200s.zip)
- boundary shear stress
 - [inbank flow \(http://www.eee.bham.ac.uk/flowdata/FCFB/60t100b.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/60t100b.zip) (depth = 100mm)
 - [overbank flow \(http://www.eee.bham.ac.uk/flowdata/FCFB/60t200b.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/60t200b.zip) (depth = 200mm)
- turbulence data
 - [inbank flow \(http://www.eee.bham.ac.uk/flowdata/FCFB/60t100t.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/60t100t.zip) (depth = 100mm)
 - [overbank flow \(http://www.eee.bham.ac.uk/flowdata/FCFB/60t200t.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/60t200t.zip) (depth = 200mm)

60 natural meander channel

- summary files
 - [depth = 140mm \(http://www.eee.bham.ac.uk/flowdata/FCFB/60n140s.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/60n140s.zip), [depth = 165mm \(http://www.eee.bham.ac.uk/flowdata/FCFB/60n165s.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/60n165s.zip), [depth = 200mm \(http://www.eee.bham.ac.uk/flowdata/FCFB/60n200s.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/60n200s.zip)
- boundary shear stress
 - [inbank flow \(http://www.eee.bham.ac.uk/flowdata/FCFB/60n140b.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/60n140b.zip) (depth = 140mm)
 - [overbank flow \(http://www.eee.bham.ac.uk/flowdata/FCFB/60n165b.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/60n165b.zip) (depth = 165mm)
 - [overbank flow \(http://www.eee.bham.ac.uk/flowdata/FCFB/60n200b.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/60n200b.zip) (depth = 200mm)
- turbulence data
 - [inbank flow \(http://www.eee.bham.ac.uk/flowdata/FCFB/60n140t.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/60n140t.zip) (depth = 140mm)
 - [overbank flow \(http://www.eee.bham.ac.uk/flowdata/FCFB/60n165t.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/60n165t.zip) (depth = 165mm)
 - [overbank flow \(http://www.eee.bham.ac.uk/flowdata/FCFB/60n200t.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/60n200t.zip) (depth = 200mm)

110 natural meander channel

- summary files
 - [depth = 140mm \(http://www.eee.bham.ac.uk/flowdata/FCFB/110n140s.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/110n140s.zip), [depth = 200mm \(http://www.eee.bham.ac.uk/flowdata/FCFB/110n200s.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/110n200s.zip)
- boundary shear stress
 - [inbank flow \(http://www.eee.bham.ac.uk/flowdata/FCFB/110n140b.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/110n140b.zip) (depth = 140mm)
 - [overbank flow \(http://www.eee.bham.ac.uk/flowdata/FCFB/110n165b.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/110n165b.zip) (depth = 165mm)
 - [overbank flow \(http://www.eee.bham.ac.uk/flowdata/FCFB/110n200b.zip\)](http://www.eee.bham.ac.uk/flowdata/FCFB/110n200b.zip) (depth = 200mm)
- turbulence data

- **inbank flow** (<http://www.eee.bham.ac.uk/flowdata/FCFB/110n140t.zip>) (depth = 140mm)
- **overbank flow** (<http://www.eee.bham.ac.uk/flowdata/FCFB/110n200t.zip>) (depth = 200mm)