



Users Workshops and Training Days Australia 2016

To support our 2016 release, the TUFLOW team will be visiting major centres showcasing the new features of TUFLOW and offering 'hands on' introductory and advanced training sessions.

TUFLOW is a world-leading, powerful 1D and 2D computational engine for simulating floods, tides and pipe network hydraulics. It has been successfully applied world-wide to a diverse range of applications, from coastal storm tide inundation to broad scale whole of catchment flooding and fine-scale urban flooding with complex pipe networks.

BMT WBM, the developers of TUFLOW Products are holding a series of User Workshops and Training Days in Australia during April and May, 2016. These workshop and training days are focused on our grid based modelling platform, TUFLOW "Classic", which includes our TUFLOW GPU solver. We look forward to seeing you there.

Trainers and Presenters

The sessions will be conducted by the TUFLOW developers; three of Australia's leading hydraulic modelling experts: Bill Syme, Mitchell Smith and Phillip Ryan. Collectively the trio have over 50 years TUFLOW modelling experience!



Bill Syme
Software Manager
and TUFLOW Author



Mitchell Smith
TUFLOW Training
and Support Lead



Phillip Ryan
TUFLOW
Development Lead

TUFLOW User Workshop

The TUFLOW User Workshop focuses on applying new and upcoming TUFLOW features and effective modelling techniques. The workshops' intent is to improve your modelling efficiency through gaining a deeper understanding of how TUFLOW works and its wide range of features.

Introductory TUFLOW Training

This computer based training is aimed at new TUFLOW modellers. The course includes TUFLOW theory, followed by practical model creation and review of results.

Advanced TUFLOW Training

This computer based training is aimed at existing TUFLOW modellers. The course familiarises TUFLOW users with new features and efficient modelling practices in detail

Preparation

TUFLOW Users Workshop: A laptop will not be required. Pens and printed copies of presentations will be provided.

Training Days: Participants will need to bring their own computer (or one to share between two) for the Training days.

Dates and Locations

Location	Session	Date
Melbourne	Introductory TUFLOW Training	10 th May 2016
	TUFLOW User Workshop	11 th May 2016
	Advanced TUFLOW Training	12 th May 2016
Sydney	Introductory TUFLOW Training	24 th May 2016
	TUFLOW User Workshop	25 th May 2016
	Advanced TUFLOW Training	26 th May 2016
Perth	Introductory TUFLOW Training	16 th August 2016
	TUFLOW User Workshop	17 th August 2016
	Advanced TUFLOW Training	18 th August 2016

Costs

Costs for each workshop are outlined below. Multiple attendee discounts (from the same organisation) are available for the TUFLOW User Workshop.

TUFLOW User Workshop	\$495/person (inc GST) 1 st attendee \$385/person (inc GST) 2 nd , 3 rd ... attendees
Introductory or Advanced TUFLOW Training	\$880/person (inc. GST)

Registration and Payment

Please complete and send this section to BMT WBM with your payment option. Scan and e-mail to training@tuflow.com, or post (Attn: TUFLOW Training) to:

BMT WBM Pty Ltd
200 Creek Street
Brisbane, Queensland, 4000 Australia
ABN 54 010 830 421
Tel : + 61 7 3831 6744

Title First Name Surname

Organization.....

Address

.....

Postcode..... Telephone.....

Email.....

Indicate which location (please tick)

Melbourne Sydney Perth

Indicate which session (please tick)

First Attendee TUFLOW User Workshop (\$495)

Number of additional TUFLOW User Workshop attendees (\$385)

Title First Name Surname

Title First Name Surname

Title First Name Surname

Introductory TUFLOW Training (\$880)

Advanced TUFLOW Training (\$880)

Payment Amount:

Payment method: Cheque (please attach) Mastercard

Purchase Order (please attach) Visa

Credit Card No:

Expiry Date (MM/YY): /

Name on Card:

Signature:

Introductory TUFLOW Training

8:45

TUFLOW Introduction:

- Technical overview of TUFLOW.
- Presentation of the interactions between TUFLOW, GIS, SMS and text control files.

9:45

2D Model Theory

- Template files.
- Model geometry.
- Boundaries.
- Running TUFLOW simulations.

10:15

Tea break, software installation.

10:45

2D Model Development

- How to create and run 2D only floodplain model.
- Review results.

12:30

Lunch (provided).

13:15

2D Topography Modification

- How to use break lines.
- How to modify topography using cut/fill regions.
- Using model check files.

13:45

Embedding 1D structures

- 1D/2D linking mechanisms.
- How to embed 1D structures in a 2D model.
- How to review structure performance.

14:30

Model Performance

- Model check files.
- Model health / performance.

15:30

Afternoon tea and networking.

16:00 – 17:00

- Training day recap
- Q&A session.

TUFLOW User Workshop

8:45

- Welcome Introduction.
- Free demo version of TUFLOW.
- NEW 2016 Manual and Wiki pages.
- Point Rainfall to Gridded Rainfall feature.
- Infiltration.
- Log law bed resistance.
- Initial water level and simulation exit controls for Monte Carlo simulations.

10:30

Morning Tea and Networking.

10:45

- New and improved 1D bridges.
- New operating structure types.
- 2D layered flow constriction enhancements.
- New Structure Groups for combined 1D/2D output at structures.
- Structure representation guidance.

12:30

Lunch (provided).

13:15

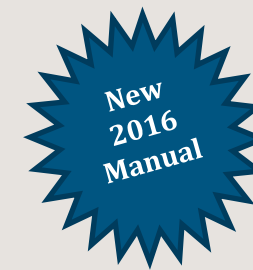
- GPU enhancements.
- GPU Memory optimisation.
- GPU Virtual pipes.
- New output formats (GIS, WaterRIDE, FEWS, 12D).
- New map output parameters (Hazard time cutoff, rainfall).
- Improved output file size compression.
- Combined 1D and 2D reporting location output.
- Python scripts for plotting
- New free utility TuPlot and results viewing and animations using Crayfish.
- New miTools features.
- General enhancements and key bug fixes.

15:30

Afternoon tea and networking.

16:00 – 17:00

- Theoretical session on modelling structures in 1D and 2D.
- Workshop recap
- Q&A session.



Advanced TUFLOW Training

8:45

TUFLOW Introduction

- Technical overview of TUFLOW – Inside the Black Box!

10:30

Morning Tea and Networking

10:45

Direct Rainfall Modelling – New Features and Modelling Techniques

- How to best use the new rainfall input types (NETCDF, ASCII, FLT) and interpolation options (Poly, IDW, TIN).
- Discussion on the impact of different bed resistance models for direct rainfall models. What is appropriate for a given model application?

12:15

Lunch (provided)

13:15

Structures

- How to implement the new 1D bridge types, and how bridge loss inputs vary compared with the past 1D inputs.
- Setting up 2D layered flow constrictions. What variety of options are available and best practise implementation approaches.
- How to create an operational pump, gate or weir (fabri-dam).
- How to set up 1D/2D combined Structure Group output.

TUFLOW's GPU Module

- How to setup a GPU model.
- How to optimize your computer hardware to get the best out of GPU.
- Discussion on the opportunities and limitations of GPU verses CPU.

Output Options

- Using Output Zones.
- Demonstration of new Output Formats (WaterRIDE, FEWS, 12D)
- Demonstration of Python, TuPlot, Crayfish and miTools
- Getting the most out of your check files!

15:30

Afternoon tea and networking.

16:00 – 17:00

- Training day recap
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