

# Education evenings 2018

*Practical introduction  
to groundwater modelling*

Computer exercises  
01 01 General introduction

# Contents of this short course (1/2)

## ✓ 01 Evening 1

- 01 General introduction
- 02 Introduction to ModelMuse
- 03 Our first MODFLOW model
- 04 Adding features to our model

## ✓ 02 Evening 2

- 01 A more complex model
- 02 Calibrating the more complex model

# Contents of this short course (2/2)

## ✓ 03 Evening 3

- 01 RMA example model
- 02 Particle tracking
- 03 Solute transport simulation
- 04 What else?

## ✓ 04 Additional exercises

- 01 Grid design
- 02 Troubleshooting exercises
- 03 MODFLOW LGR

# Software we will use

## ✓ Pre- and postprocessors

ModelMuse 

ModelMate 

ModelViewer 

GW\_Chart 

**Make sure these are installed!**  
**See /00\_before-the-course/ !**



## ✓ Codes

MODFLOW-2005 

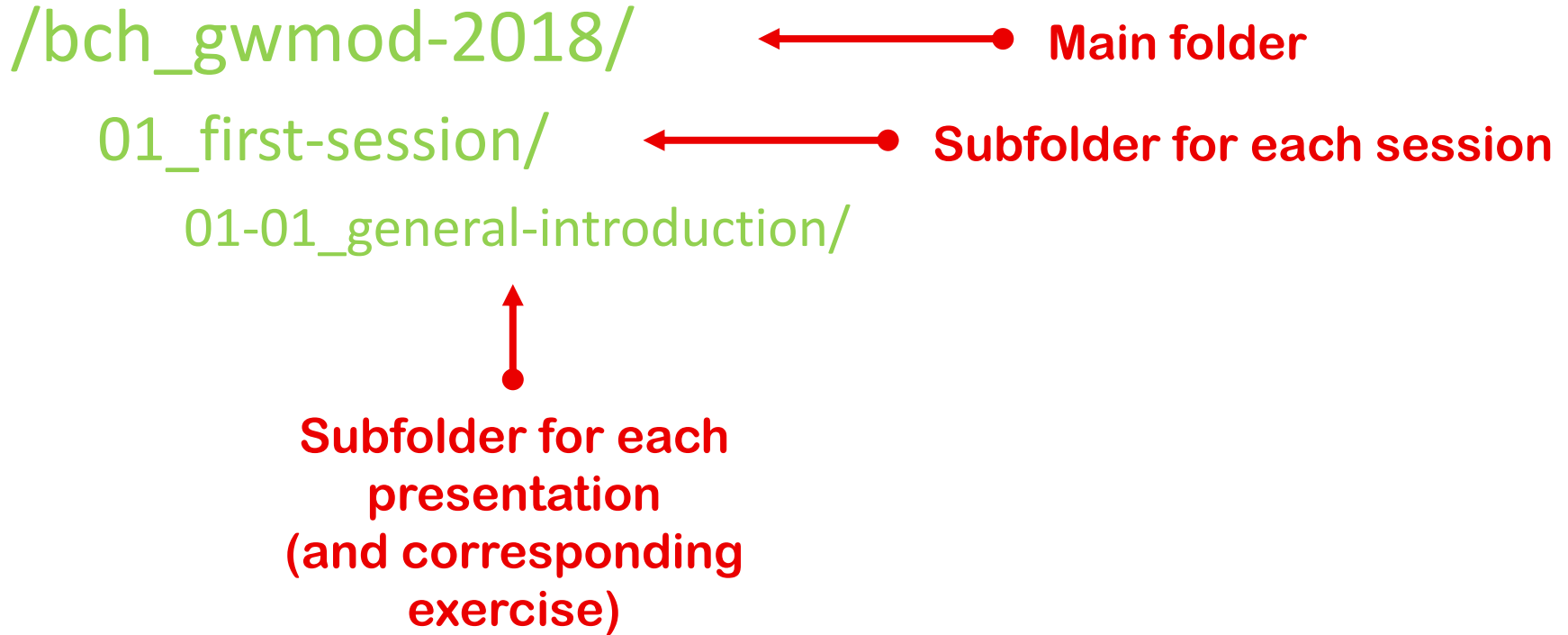
MODFLOW-LGR 

MODPATH 

MT3D-USGS 

UCODE 

# Folder structure (1/2)



# Folder structure (1/2)

/bch\_gwmod-2018/

00\_before-the-course/

01\_first-session/

02\_second-session/

03\_third-session/

04\_additional-exercises/

05\_software/

06\_solutions/

How to install  
everything



The diagram illustrates the folder structure of the course. It lists a series of folders from 00 to 06. Red arrows point from descriptive text to specific folders: 'How to install everything' points to 00\_before-the-course/, 'When we would have time left...' points to 03\_third-session/, 'All required codes and setup files' points to 05\_software/, and 'Example ModelMuse files for all exercises' points to 06\_solutions/.

When we would  
have time left...

All required codes  
and setup files

Example ModelMuse files  
for all exercises

# Acknowledgements (1/2)

- ✓ A large part of the exercises is based on training materials generously provided by Richard Winston (USGS), the ModelMuse author.
- ✓ Alberto Casillas (SCK•CEN, UGent) reviewed the exercises of the first edition of this course, and made several suggestions for improvement.

# Acknowledgements (2/2)

- ✓ All people who have worked on the programs and codes we will be using (you can find their names on the websites). Without them, this practical introduction to groundwater modelling with open source tools would not have been possible today.



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*Questions? Found an error?  
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