

Deltares

Introduction to the program

Timo Kroon

Joachim Hunink, Betsy Romero, Huite Bootsma,
Joeri van Engelen, Tess op den Kelder, Frans Roelofsen

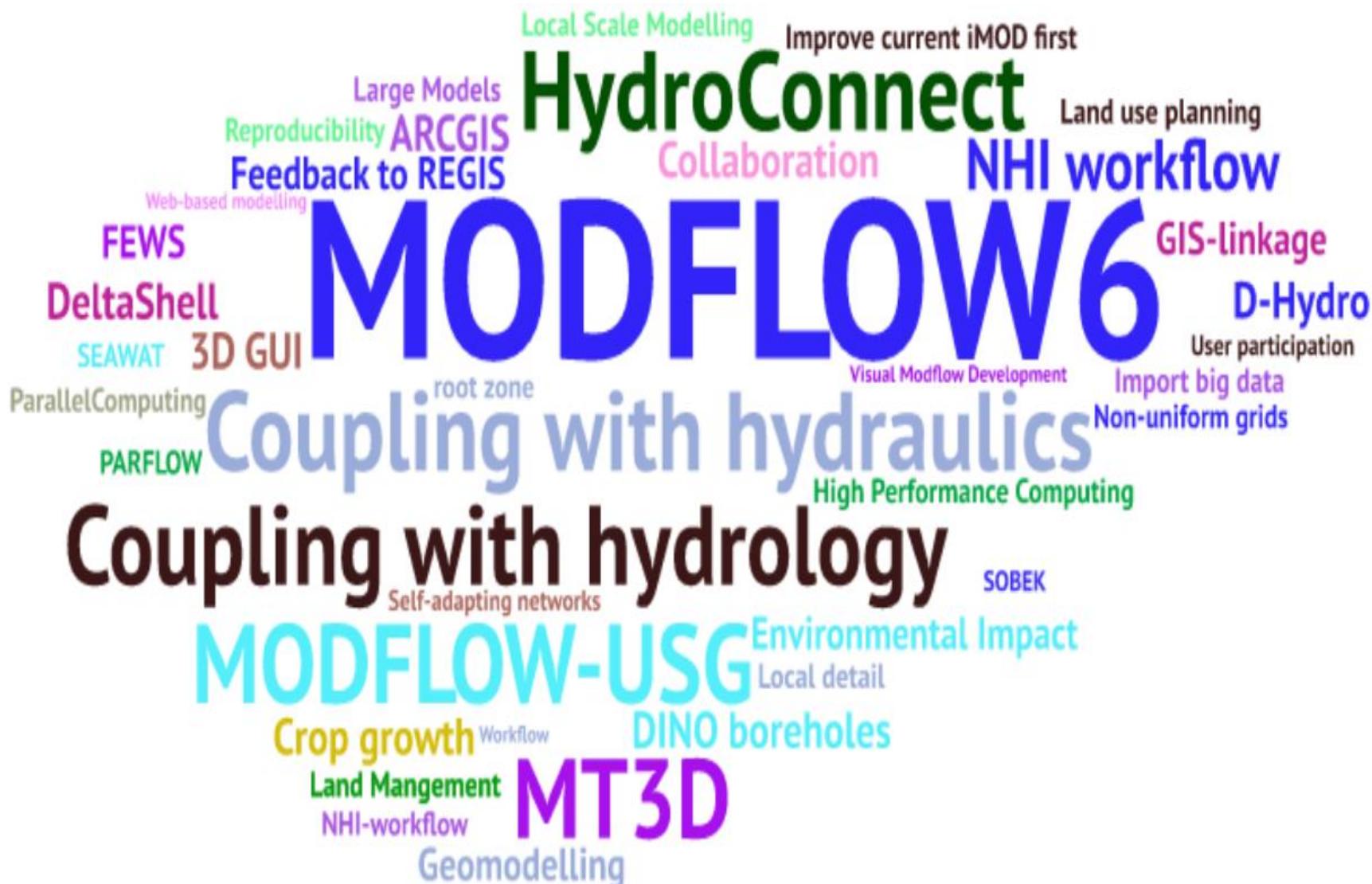
Webinar – iMOD international User Day

11/25/2021

Delft software days: iMOD user day 2018

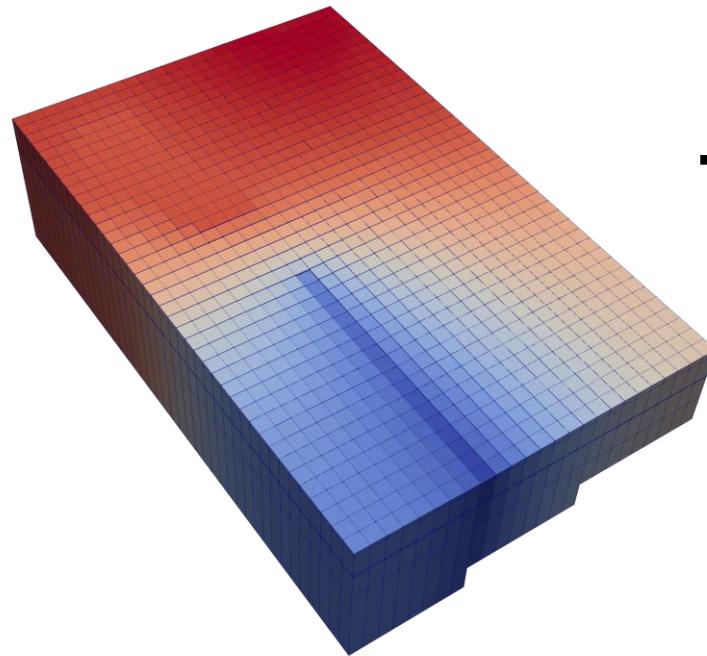


Example iMOD survey 2018: on which trends iMOD should focus?

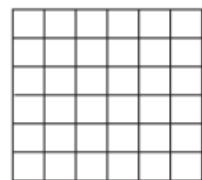


MODFLOW 6: new opportunities to simulate groundwater flow...

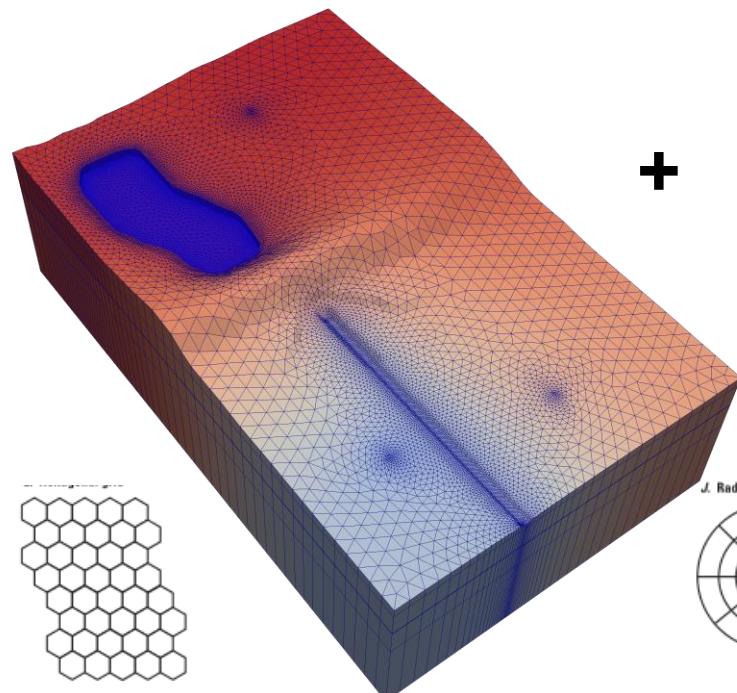
Regular, structured grids (DIS) as well as unstructured (DISV, DISU) and multi model simulations



A. Rectangular grid

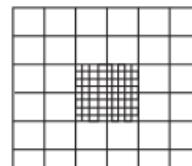


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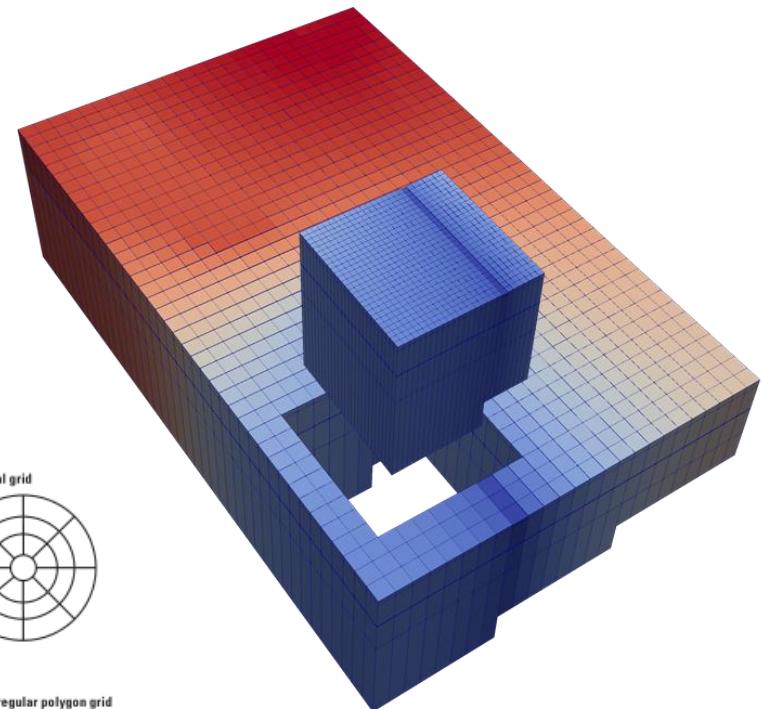


Unstructured grids

H. Rectangular, nested grid



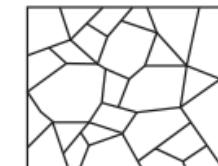
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J. Radial grid

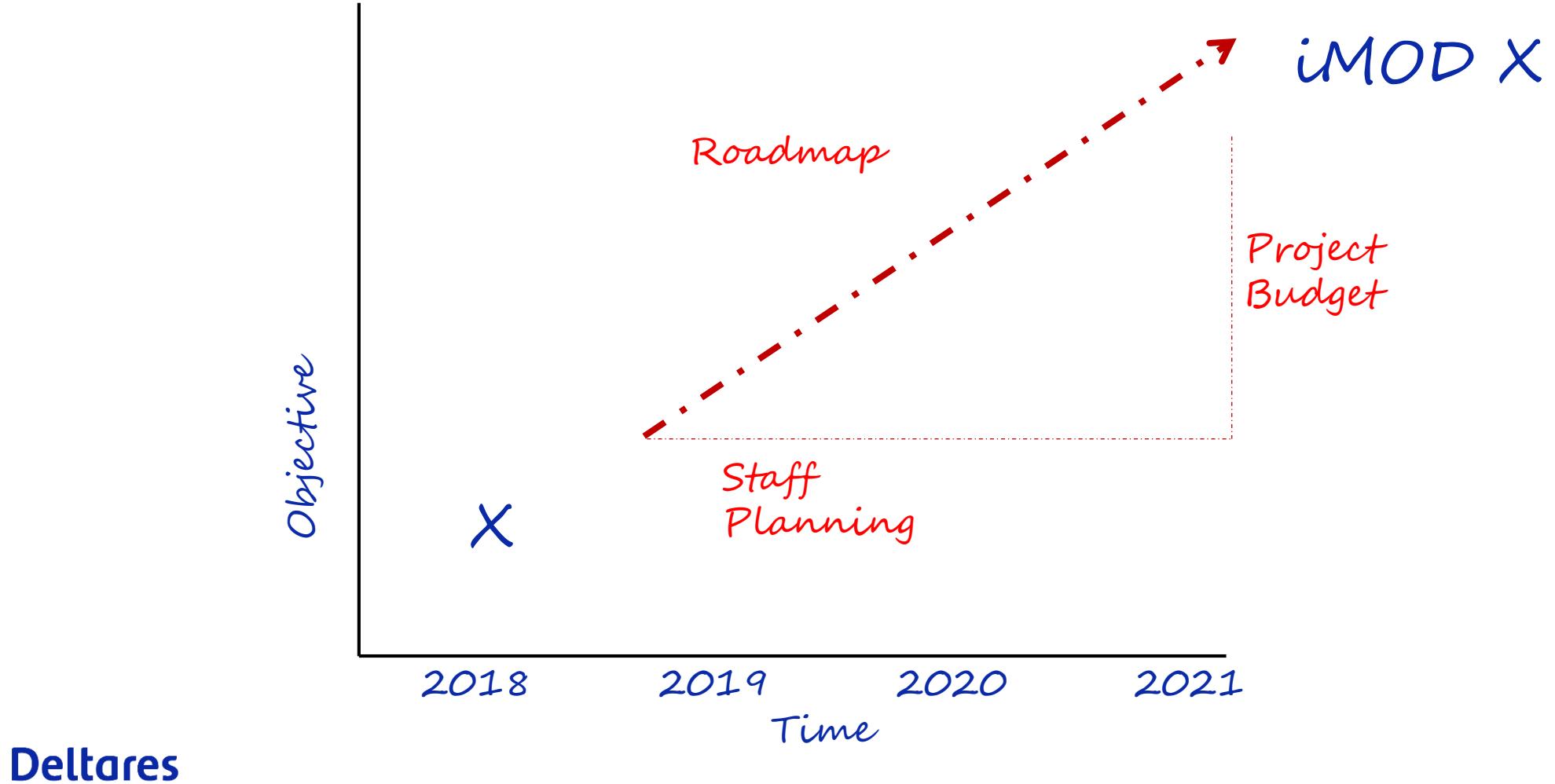


M. Irregular polygon grid

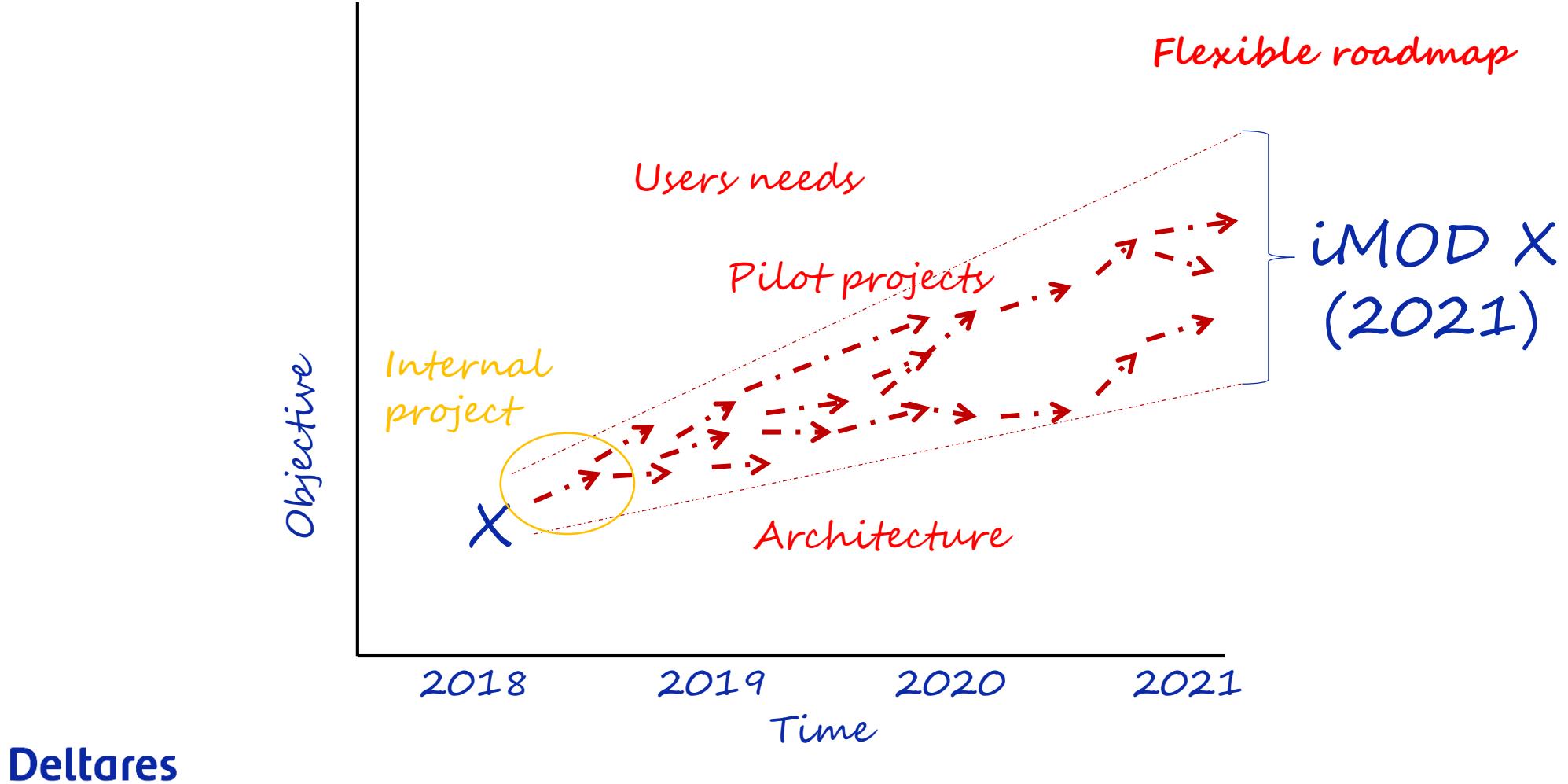


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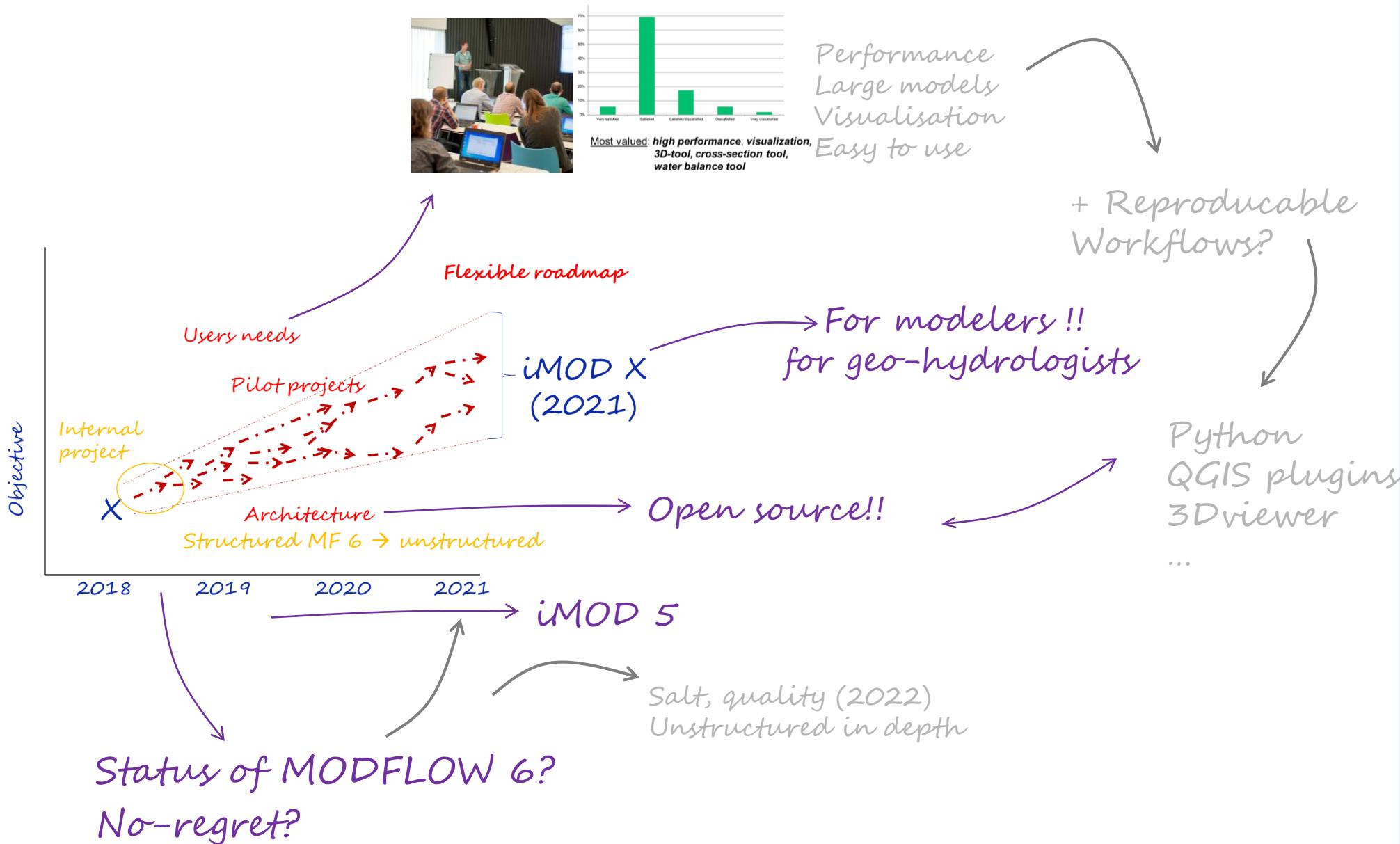
Back to situation 2018: linear roadmap? (ideal)



Reality: flexible roadmap towards full use of MODFLOW 6



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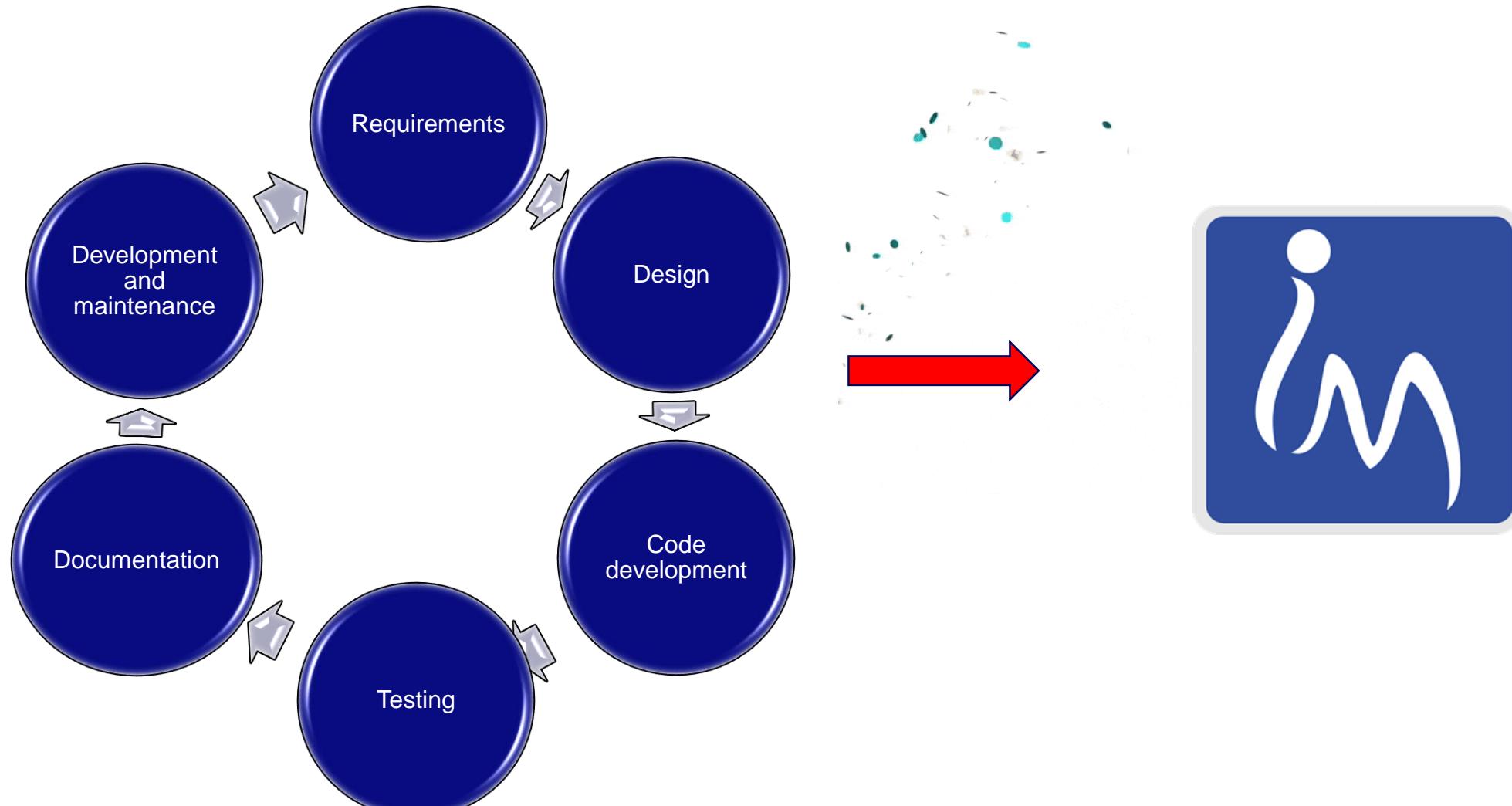


Roadmap iMOD 2019 – 2022 steps towards full use MODFLOW 6

1. Current iMOD 5 is robust; enables structured grids (MODFLOW6 + MF2005)
 - iMOD 5 will be needed coming years, also for water quality modelling
2. End of 2021: new user interface + tools for unstructured grids
 - End of 2022: further development, including water quality (MF6)
3. Strengthening cooperation with USGS
 - development in original computation core MODFLOW6 together with USGS
 - parallelization of computational kernel, large domains
 - interface for model couplings



Summary of the real work in 2019 – 2021 ...



Deltares

iMOD team 2021, contributing to the development of iMOD ...



Peter Vermeulen



Frans Roelofsen



Joeri van Engelen



Jarno Verkaik



Betsy Romero



Paul van Walsum



Joachim Hunink



Gijs Janssen



Huite Bootsma



Mila Mahya



Joost Delsman



Martijn Russcher



Luit-Jan Sloten



Julian Hofer



Tess op den Kelder



Robert Leander



Timo Kroon

Schedule of iMOD international user day

9:30 - 9:40	Welcome and introduction to the program (Otto de Keizer & Timo Kroon)
9:40 - 9:55	Overview of developments on the iMOD instrument (Joachim Hunink)
9:55 - 10.15	Showcase of application of iMOD in GIRAgua project in Chile (Betsy Romero)
10:15 - 10:35	Presentation of the new iMOD viewer (Joeri van Engelen)
Break	
10:50 - 11:15	Development of iMOD python (Huite Bootsma)
11:15 - 11:50	Showcase of application of iMOD in the province of Noord-Brabant (Frans Roelofsen)
	Showcase of application of iMOD python and MODFLOW 6 in a research project (Tess op den Kelder)
11.50 - 11.58	Where to find iMOD and further information? Demo of the new website (Frans Roelofsen)
11:58 - 12.00	Wrap-up and closure
<i>--- end of recording ---</i>	
12:00 - 12.30	 opportunity for further questions, discussion and live interaction with the iMOD team