

#	Question	Answer	Answer Name
1	How sensitive are simulated groundwater recharge estimates to changes in rainfall, soil properties, and land use?	Negative recharge happens when ET exceeds rainfall. Often this shows up when the groundwater table is shallow. For example, this is especially common in riparian areas.	Douglas Graham
1	How sensitive are simulated groundwater recharge estimates to changes in rainfall, soil properties, and land use?	To David's initial question. the recharge is driven by rainfall - no rainfall means no recharge, unless you have ponded water. The soil properties define the recharge dynamics. Land use typically controls the runoff rate (e.g. paving) and actual ET (e.g. vegetation type)	Douglas Graham
2	In many arid and semi-arid basins with deep water table systems, the unsaturated zone is often predominantly weathered or fractured rock rather than soil. What parameter ranges should we use to represent this rock in UZ models, particularly for hydraulic conductivity and water-content parameters? Are there recommended literature values or databases for constraining these parameters?	Most groundwater models are based on an equivalent porous media approach. Basically, you are approximating the fracture network by a porous media. In the end, this is a calibration exercise. The important thing is that you are approximating the behaviour, not the physics. So, you are not trying to represent fracture flow, but the recharge dynamics. So, for data estimates, these would be very site specific. The data for soils is much more widely available.	Douglas Graham
3	Can we create a model of freshwater springs as are found in Himalayan region with MIKE SHE	in principle, yes. With the constraint that mountainous areas are typically bedrock dominated, so you still need to use the equivalent porous media	Douglas Graham
4	If I add the bore extraction in MIKE SHE, how can I extract the drawdown?	The water table is a standard output	Douglas Graham
5	In the demo, you use constant values for infiltration - Is it possible to use different soil types spatially, across the model domain? Consider if some areas of the domain have thick clay layers and some do not	Yes	Douglas Graham
6	Do you use also rainfall data derived from satellite imagery of the cloud? Is it possible to integrate to the mike she model?	live answered	Joel Voortman AWS
7	I have a question regarding the use of MIKESHE in Karst aquifers, how reliable is this model in those aquifers and what kind of datasets we need to run the model.	live answered	Joel Voortman AWS
8	Do you have any examples of MIKE SHE couples with MIKE 11?	live answered	Joel Voortman AWS
9	In a snowmelt-dominated karst catchment, how would MIKE SHE distinguish recharge generated by rainfall from recharge generated by snowmelt?	live answered	Joel Voortman AWS
10	It would be nice to incorporate permafrost in MIKESHE	live answered	Joel Voortman AWS
12	One last question how do you justify the presence on conduits in hard rock aquifers	if you can map them, you can add them as pipes in MIKE SHE. If you cannot map them, then you need to use an equivalent porous media	Douglas Graham
13	Can you include spatial GW extraction information to identify areas of 'recharge deficit'	Hi, yes, just join the next session end of October!	Phillipp Huttner