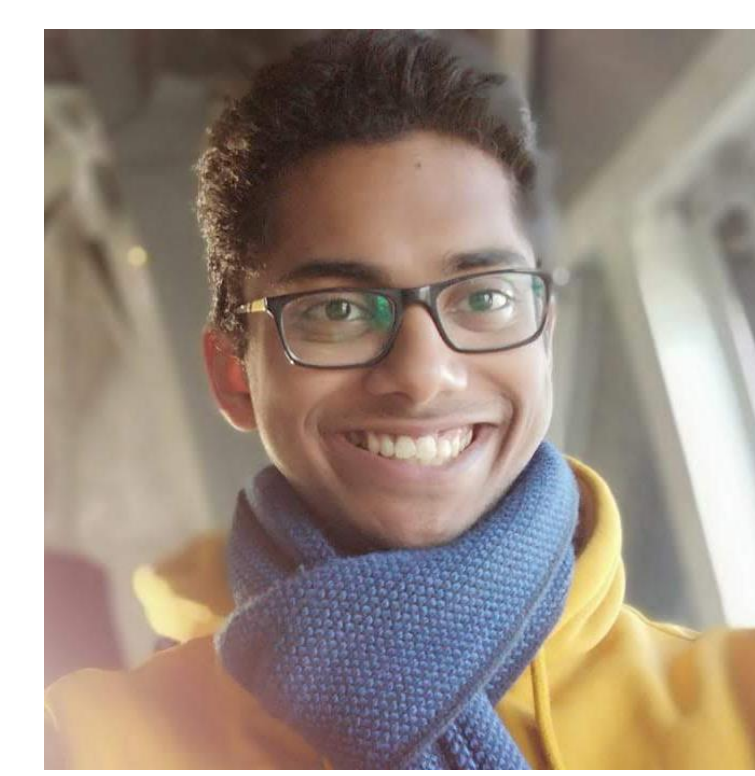


WP6.3 – Methods and tools to improve fresh water availability in the higher sandy region of the Netherlands

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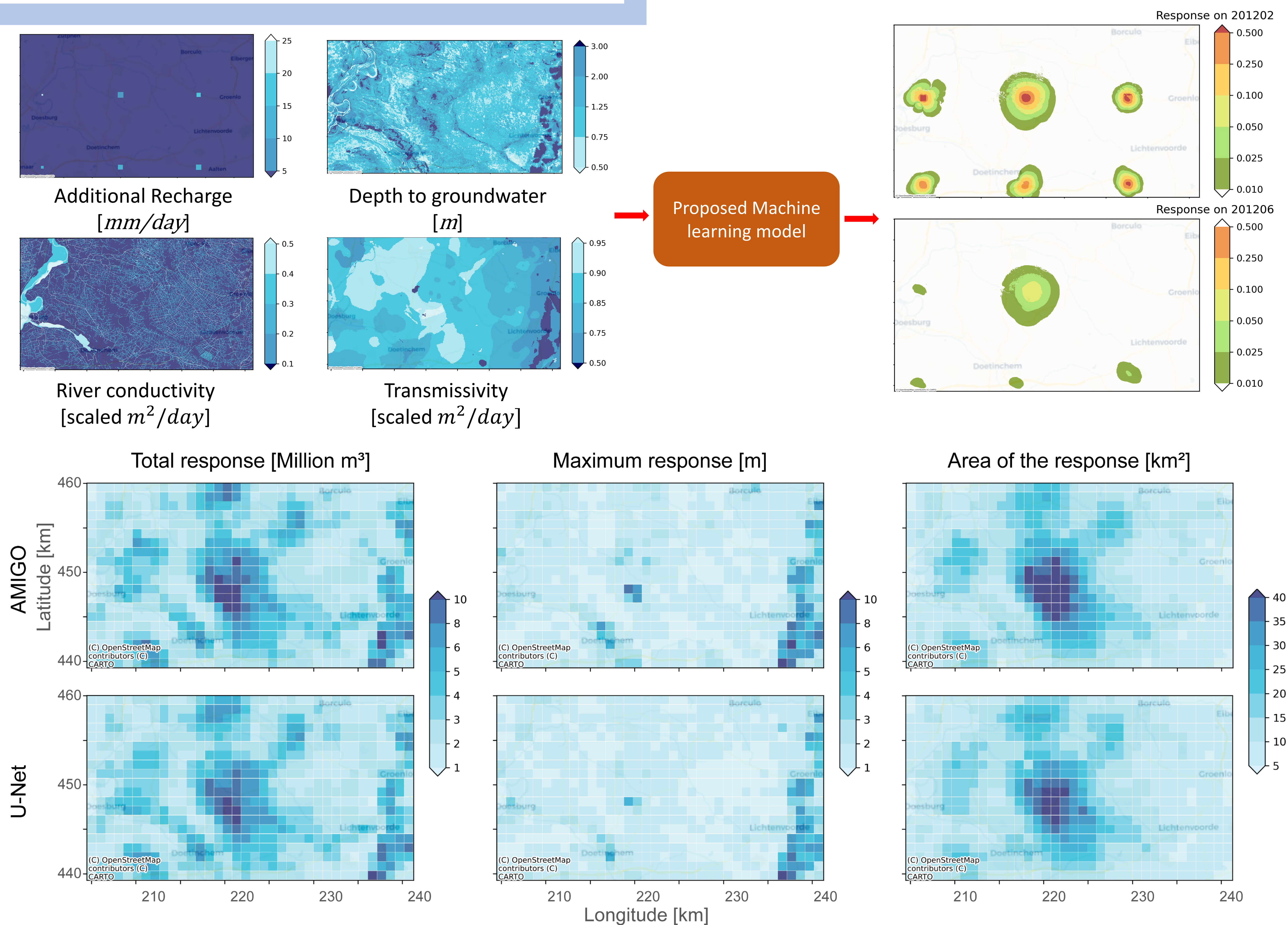
Research objective

- Model different managed aquifer recharge sites
- Draw general relations that effect the groundwater response
- Develop tools that could help optimize aquifer recharge in the higher sandy region

Results

The total aquifer storage is mostly dependent on the transmissivity, groundwater depth and surface network properties

But the duration that the storage would last is mostly dependent on the surface network properties



Future plans

- Study and explain the behavior of aquifer storage during dry summers
- Identify heuristic relations to quickly identify suitable aquifer recharge locations
- Develop a AI model that can help identify these locations

Take-home message

- Specific locations are feasible for aquifer storage
- Aquifer transmissivity and surface network properties strongly impact the aquifer storage
- AI can be used to efficiently optimize aquifer storage, estimating storage within 0.25 seconds