

# EIFFEL Pilot 5 – Summary of a drought monitoring and forecasting workshop on 31 May 2023

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# Content

- Workshop in a nutshell
- Background
- Key points from the discussions
- Next steps



# Workshop in a nutshell

- Collaboration between EIFFEL and a national drought-related project
- Discussed:
  - Useful indicators from the perspective of different user groups
  - Developing drought warnings
  - Challenges related to forecasts, communication and utilisation of warnings
- Two groups online, one present
  - Groups: water resources, agriculture, and water management from drought perspective
- The 22 participants were researchers, water professionals from different regional and national organisations, and ministry officials



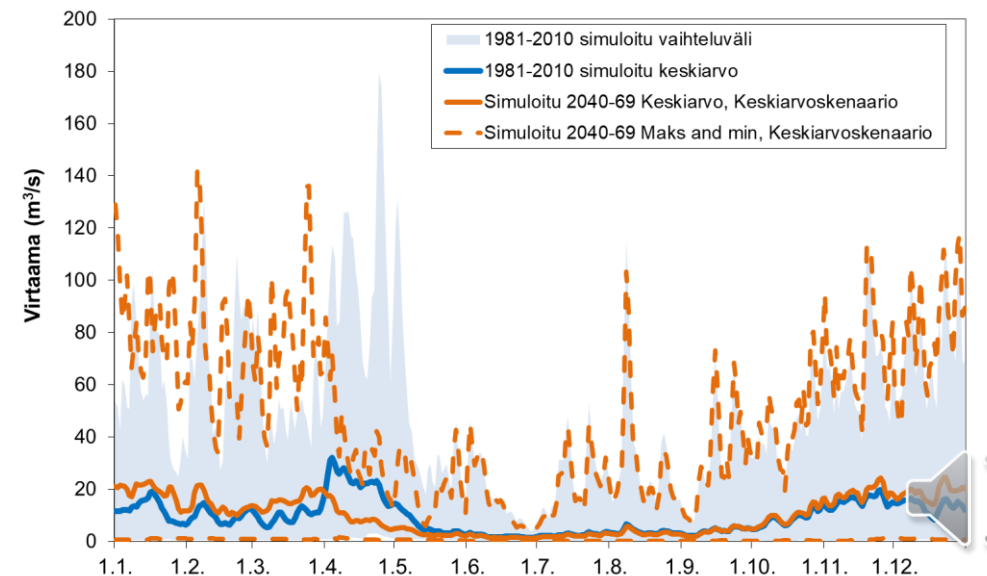
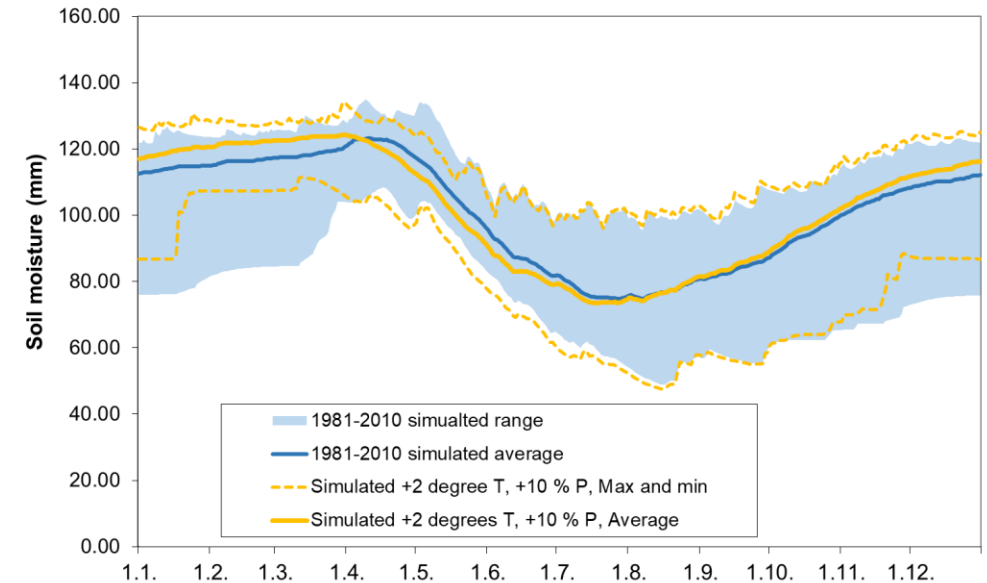
# Background

- The aim is to improve drought preparation in Finland
  - The push is a result of the drought of 2018 in Finland, and the droughts in Europe in recent years
- Climate change affects the drought risk
- Anticipation and preparation is important
  - > need for forecasts and warnings



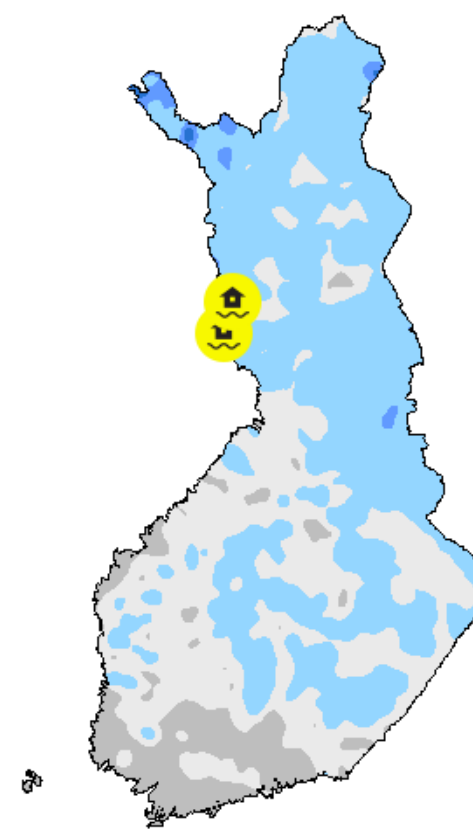
# The effects of climate change to drought in Finland

- On average, climate change increases precipitation and runoff in Finland
  - In some scenarios precipitation increase is small, and runoff can even decrease
- The change in seasonal rhythms affects drought
  - Winter runoff increases, summer runoff decreases
  - Water levels start decreasing earlier in the spring
- Drought risk is estimated to increase particularly during summer in Southern and middle Finland

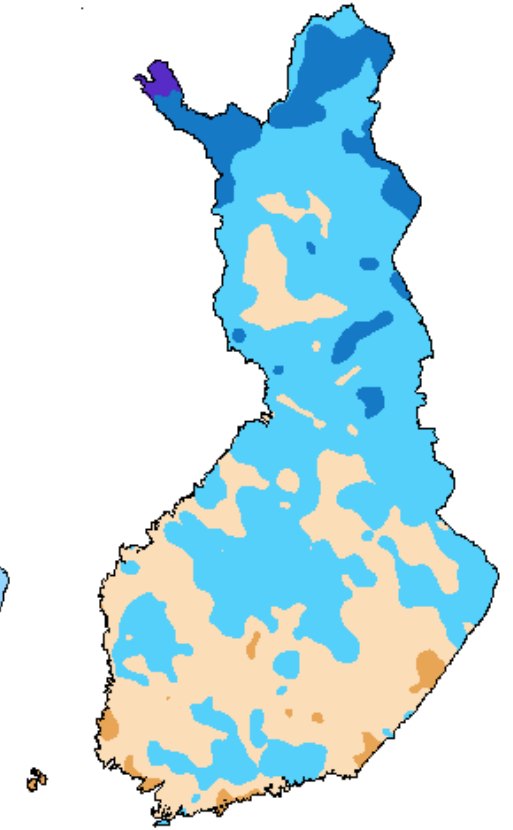


# Current drought forecasts – and warnings

- Maps, [vesi.fi](https://vesi.fi), [vesi.fi/en/drought-situation](https://vesi.fi/en/drought-situation)
  - All variables updated two weeks into the future
  - Selected variables updated monthly 2-3 months into the future
- Place-based indicators
- Warnings
  - No automatic warnings
  - Announcements where needed
  - Finnish Meteorological Institute issues warnings about forest fire and wildfire risks



Water situation, 26 May 2023



Soil moisture, 1-month forecast  
June 2023



# Key points from discussion

- Tailored warnings for different sectors and user groups
- Balancing between the need for longer timescale forecasts, and their uncertainties
- When communicating about drought, also include potential impacts
- Absolute values instead of relative values
- More research on the effects of droughts needed in order to understand the complex relationships and causations



# Next steps

- Monitoring and development of drought prediction system
  - Selection of nationally suitable drought indices and forecasts
  - Regional pilot testing of drought indices and forecasts
  - Publication of selected drought indices on [vesi.fi](http://vesi.fi) (=waterinfo.fi)
  - Development of drought situation monitoring and communication
  - Publication of Finland's drought risk assessment on [vesi.fi](http://vesi.fi)
- Comprehensive management of drought risks
  - Finalisation of national drought risk management guidelines
    - Related regional workshop
  - Establishment of drought working group and pilot implementation of management plan





More info: [vesi.fi/en/](https://vesi.fi/en/)

