



SLIM



co2storage project lifecycle

Dordtse weiden singeloptimalisatie

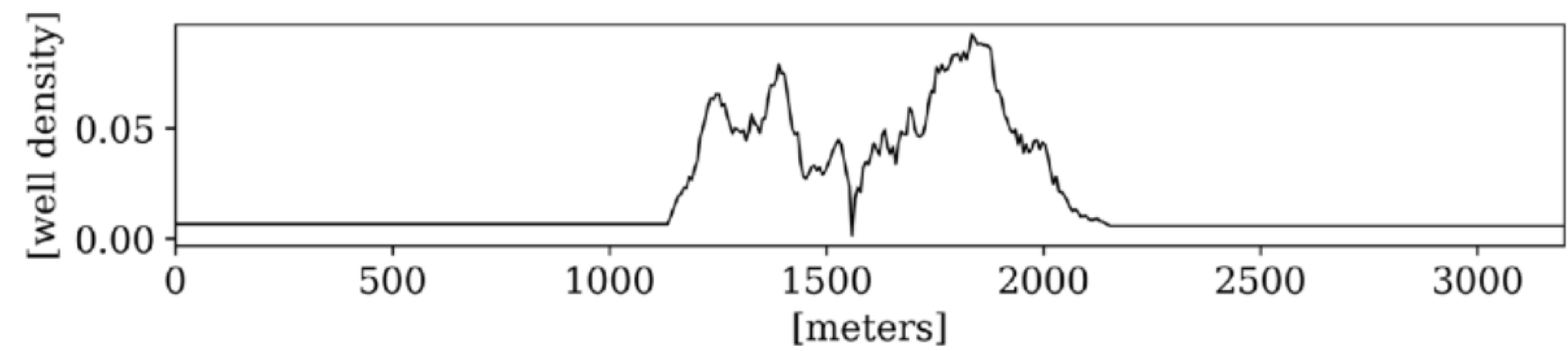
# Fluid flow

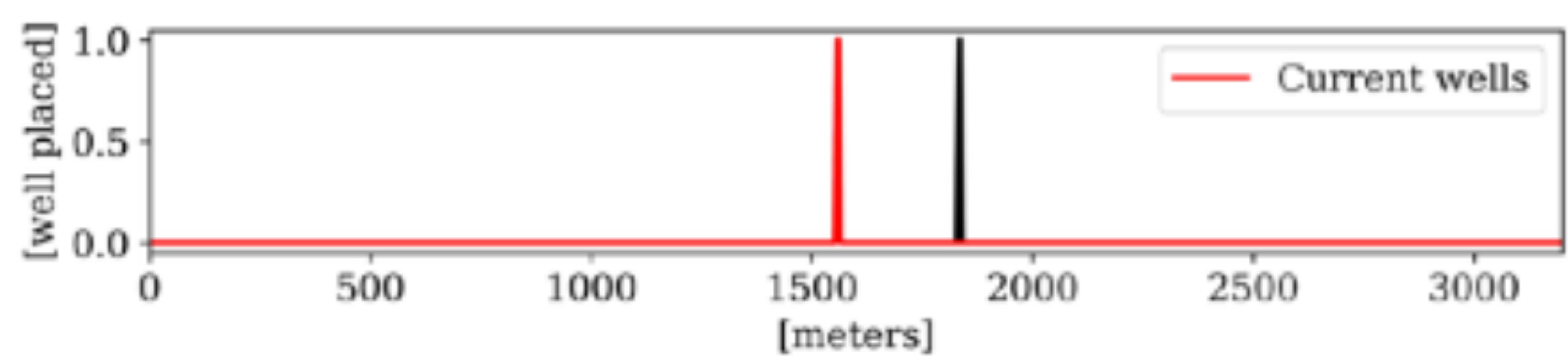
## simulations

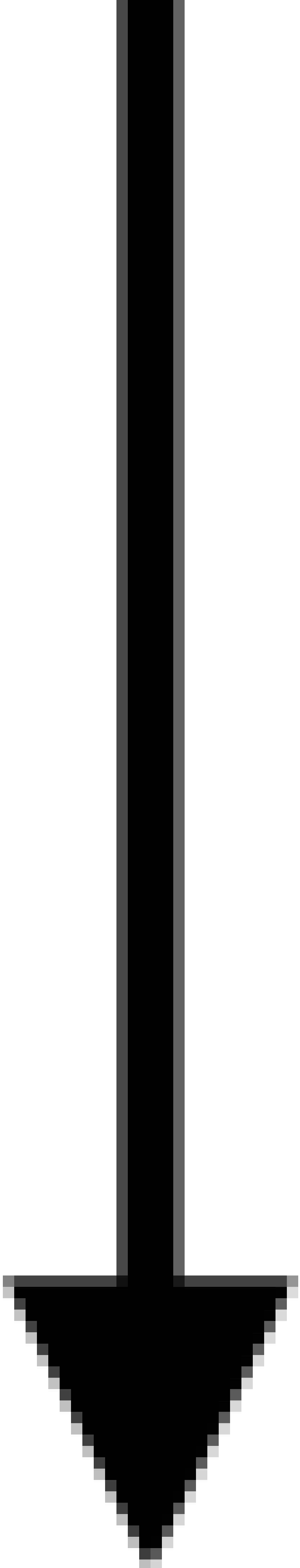


Synthetic

observations









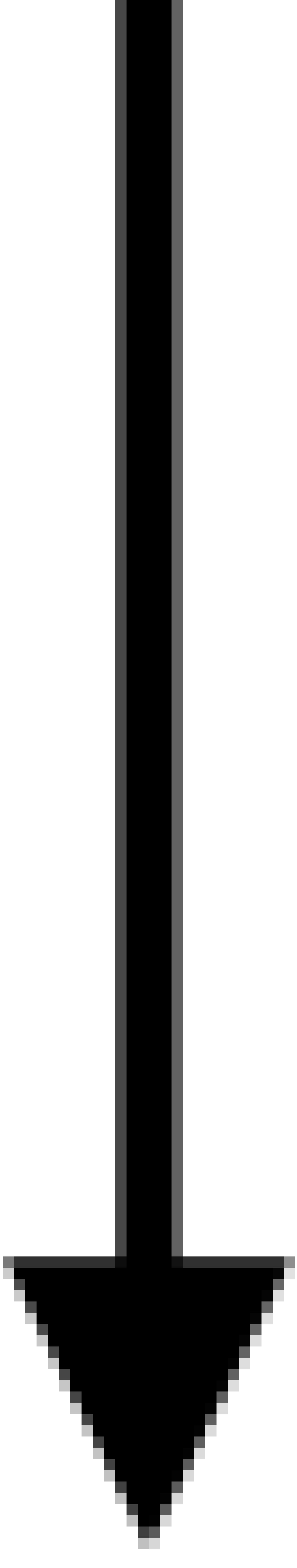
Field

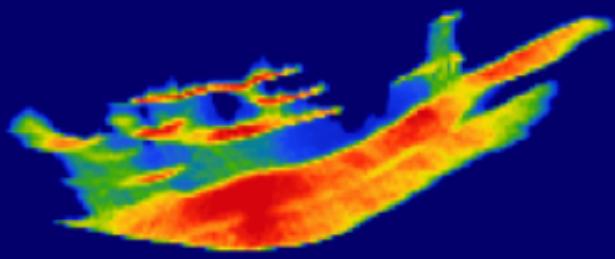
observation

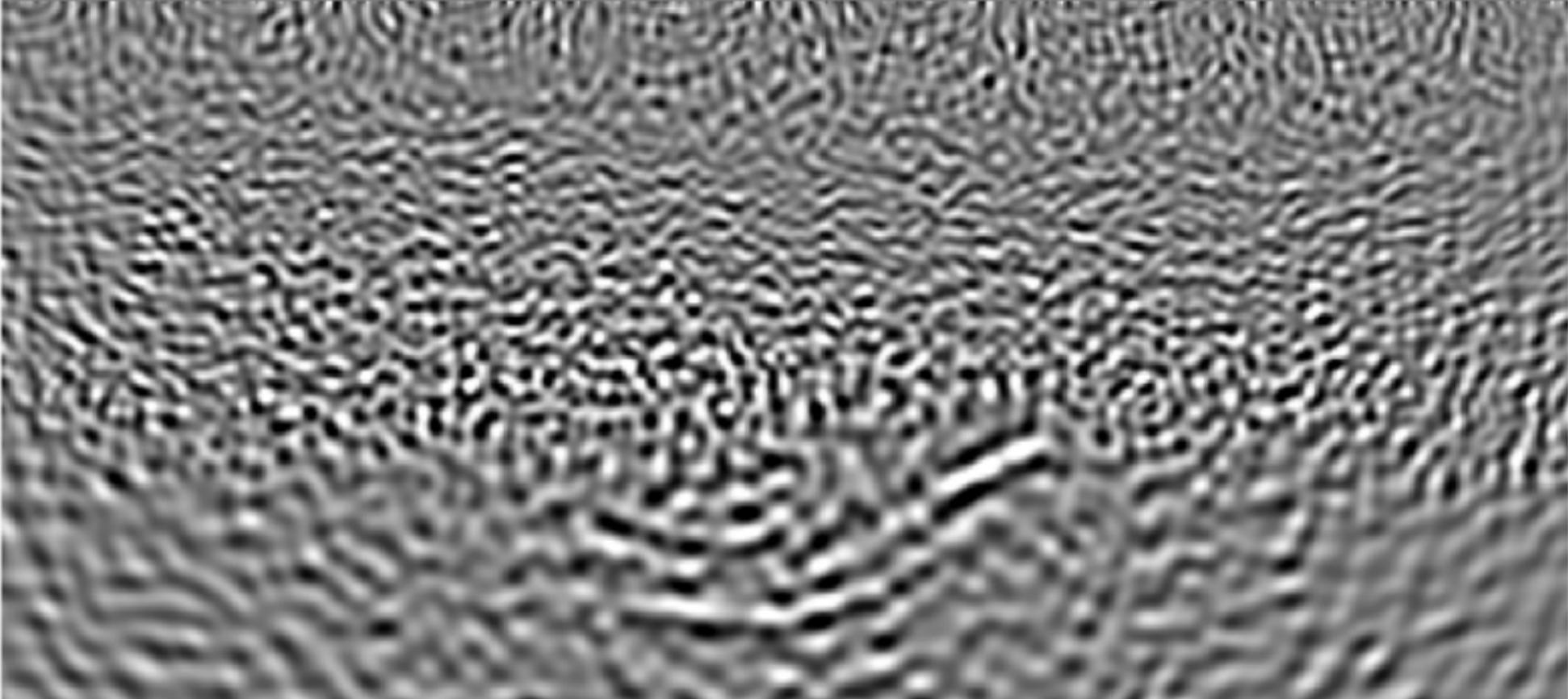


Posterior

inference

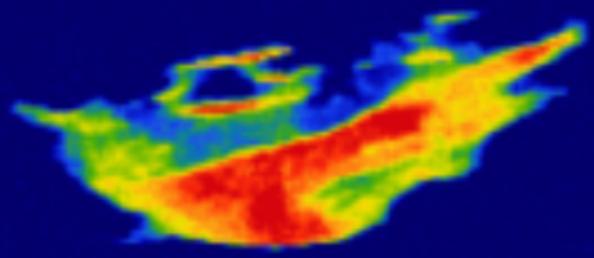


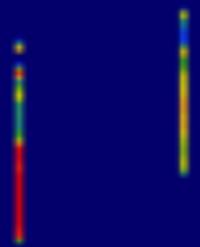


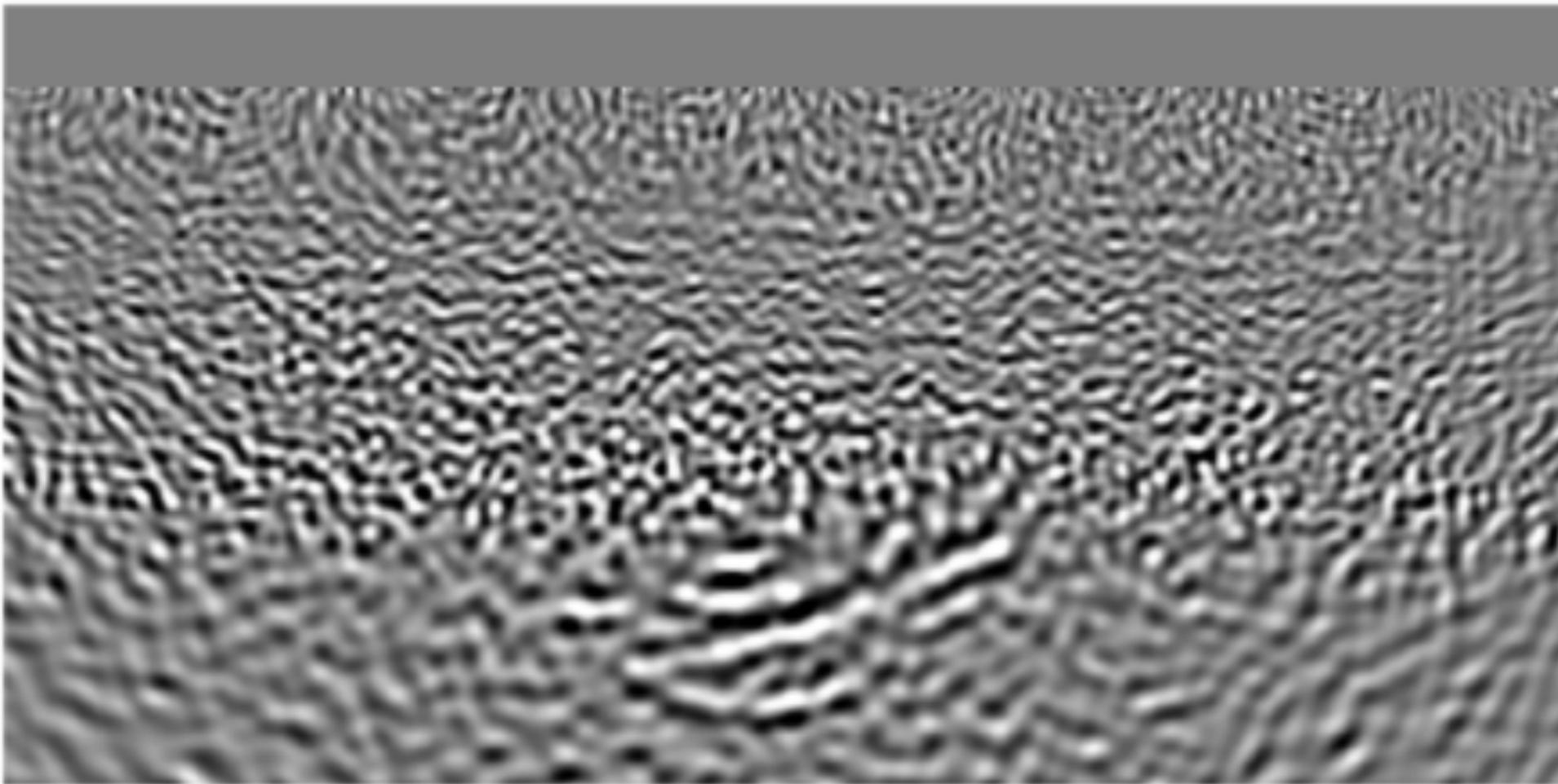












Prior samples  $p_{\theta|X_0}$

Forecasted plumes  $p(x_{k+1} | x_k)$

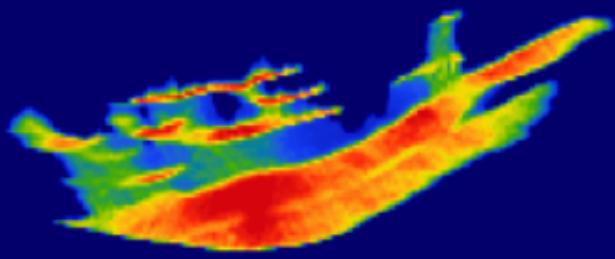
Train inference network and  
well design using pairs  $p(x_{k+1}, y_{k+1})$

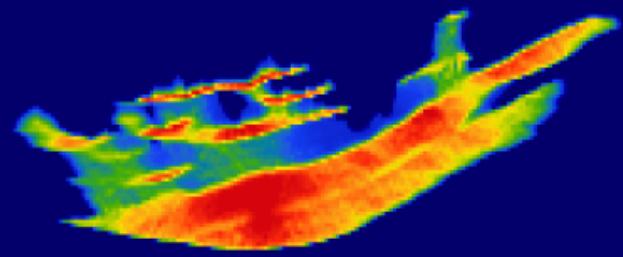
Outputs: posterior sampler

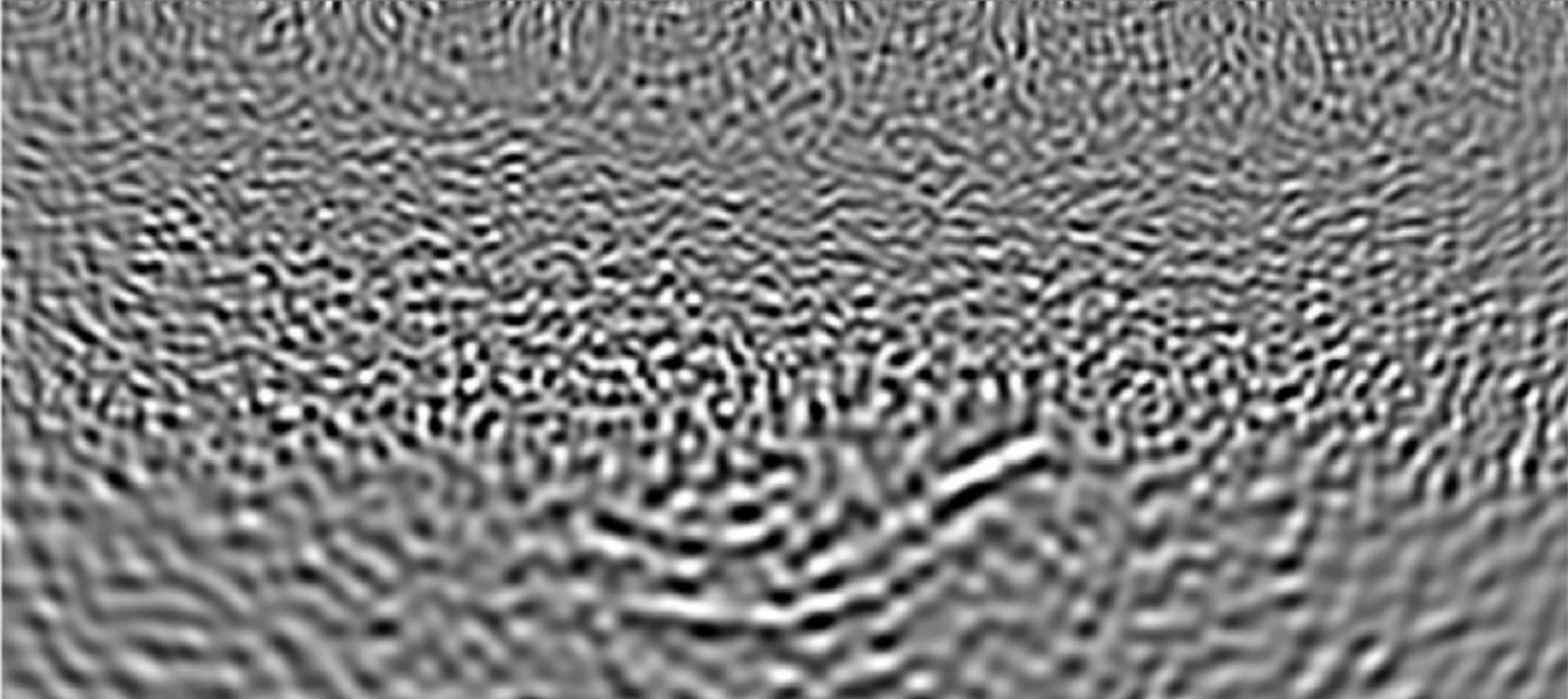
$p_{\hat{\theta}}(\mathbf{x}_{k+1} \mid \mathbf{y}_{k+1})$  and optimal well  
density

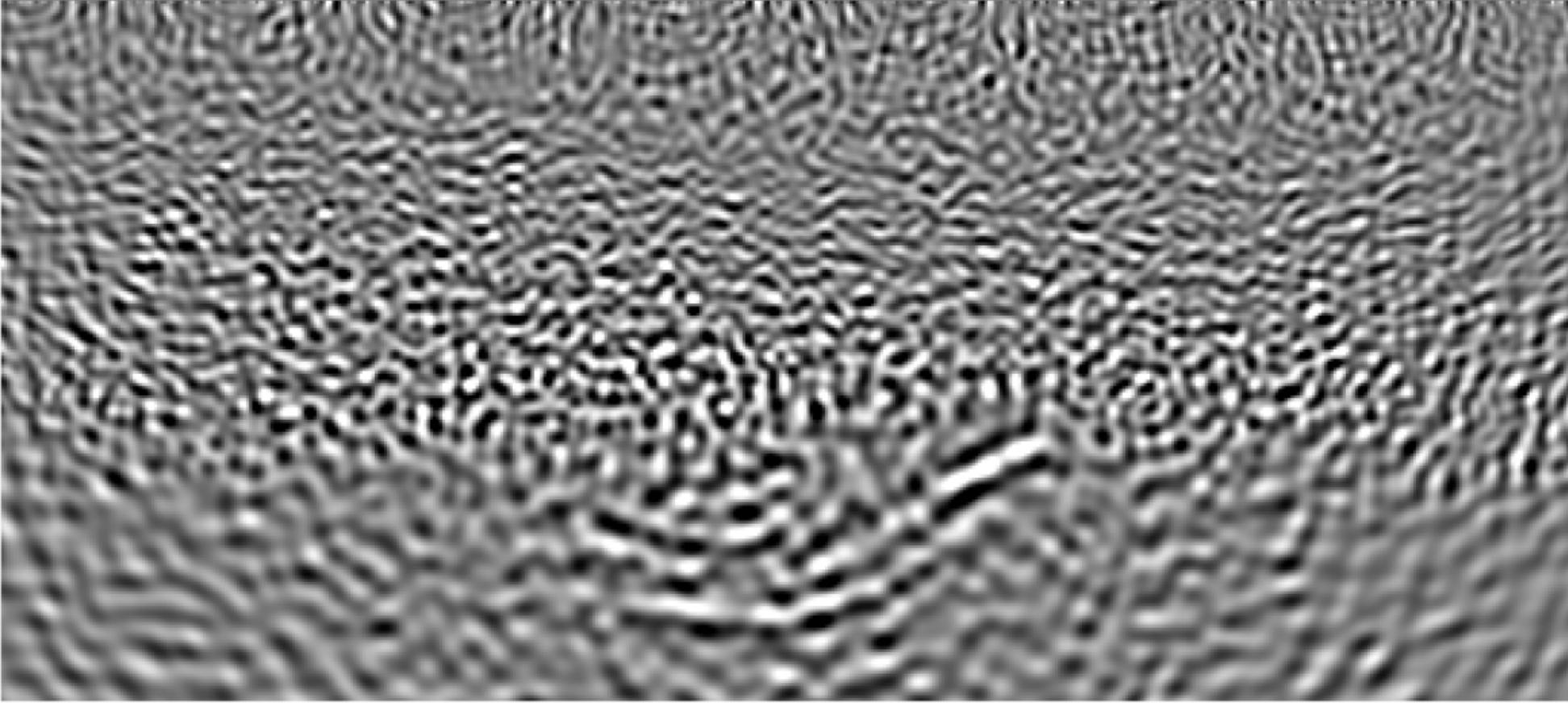
Collect field data  $y_{t+1}^0$  w/ optimal well

Inference from field data  $\hat{p}_\theta(\mathbf{x}_{t+1} | \mathbf{y}_{t+1}^0)$



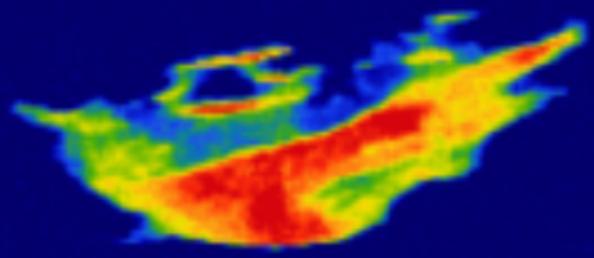


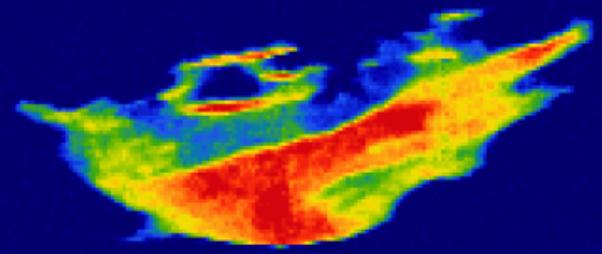




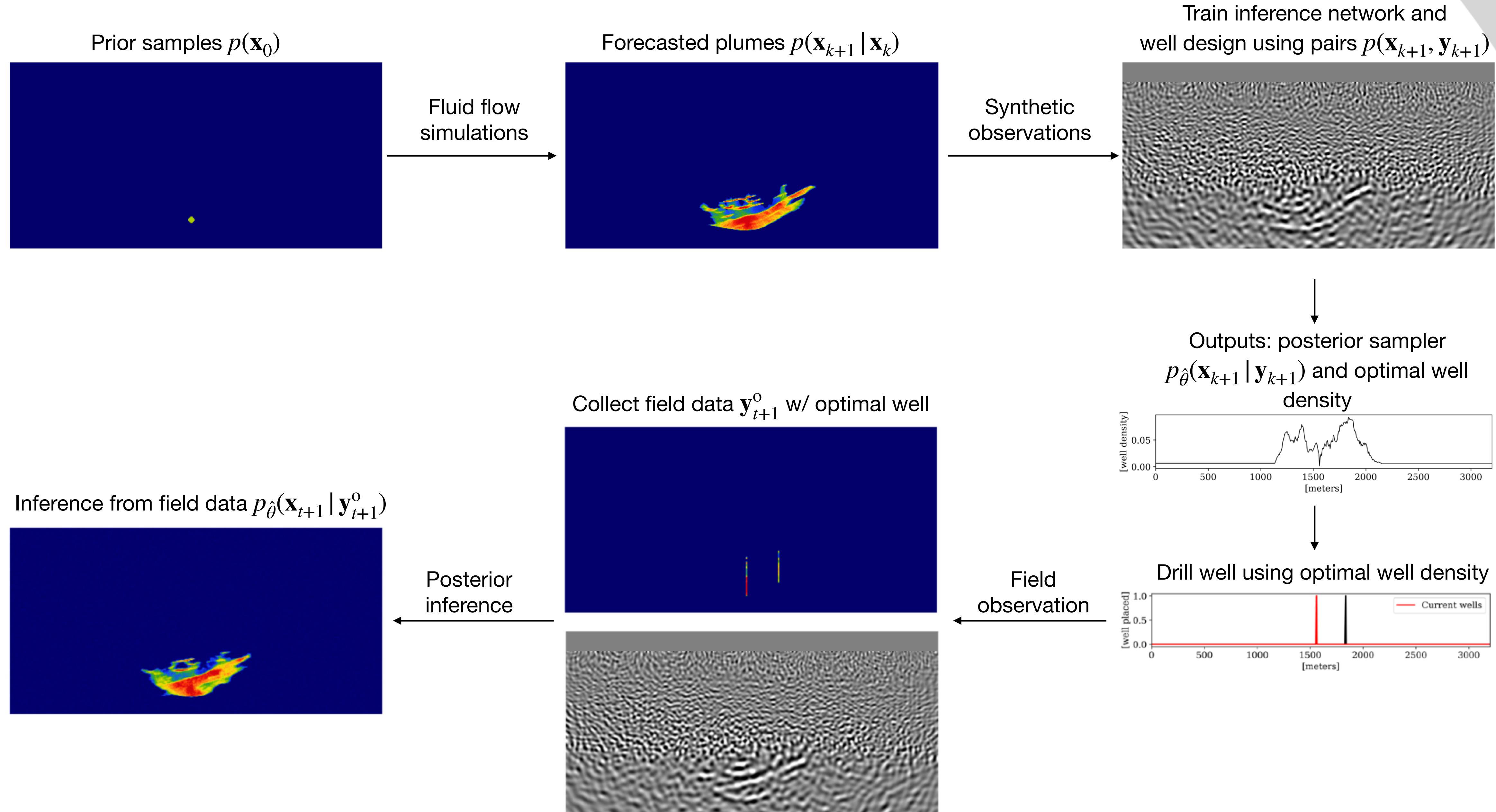








# CO<sub>2</sub> storage project life cycle



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