NextGen Water Resources Modeling Framework:

An overview of the model agnostic approach to integrating and coupling model runtime applications

Nels Frazier, Matt Williamson, Donald Johnson, Justin Singh-Mohudpur, Philip Miller, Shenting Cui, Robert Bartel, Christopher Tubbs

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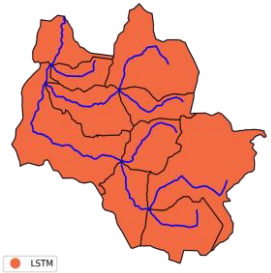
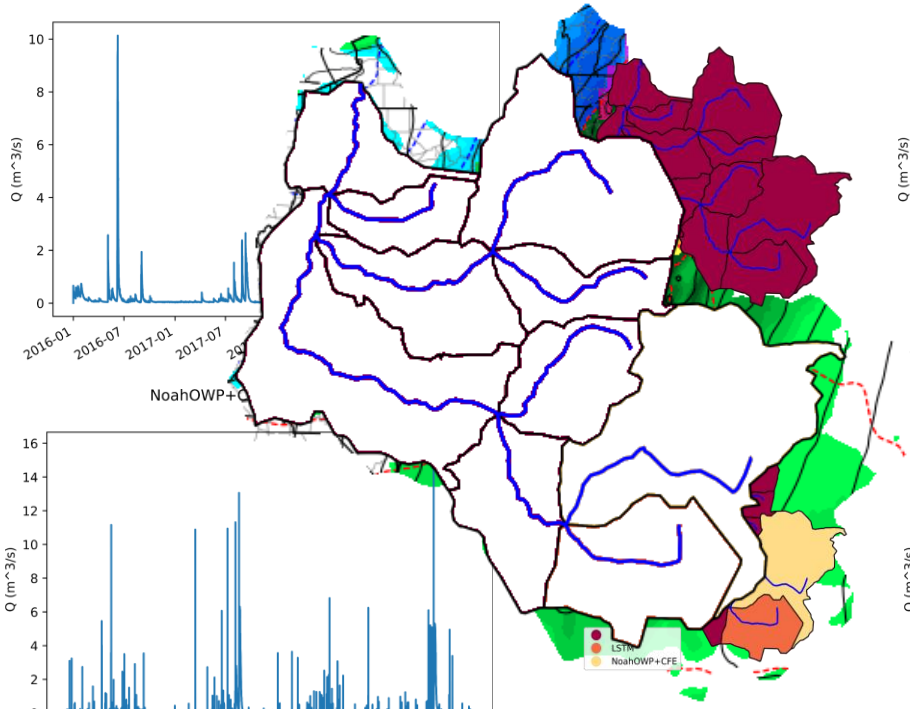
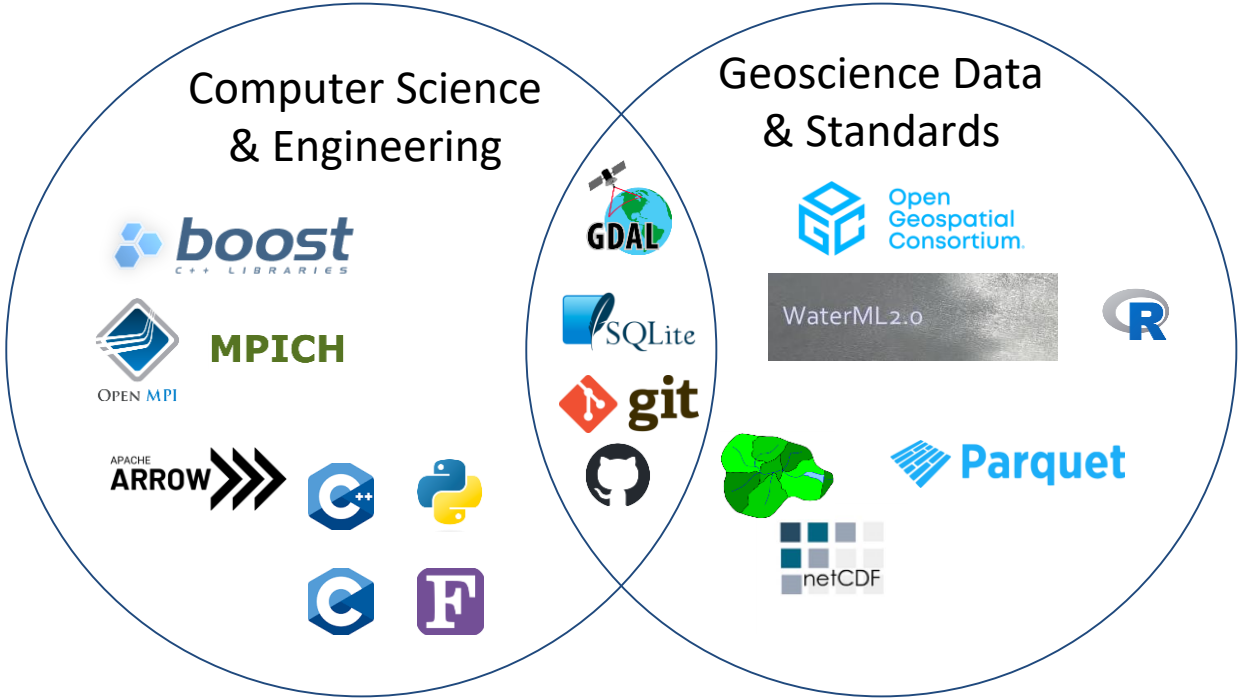
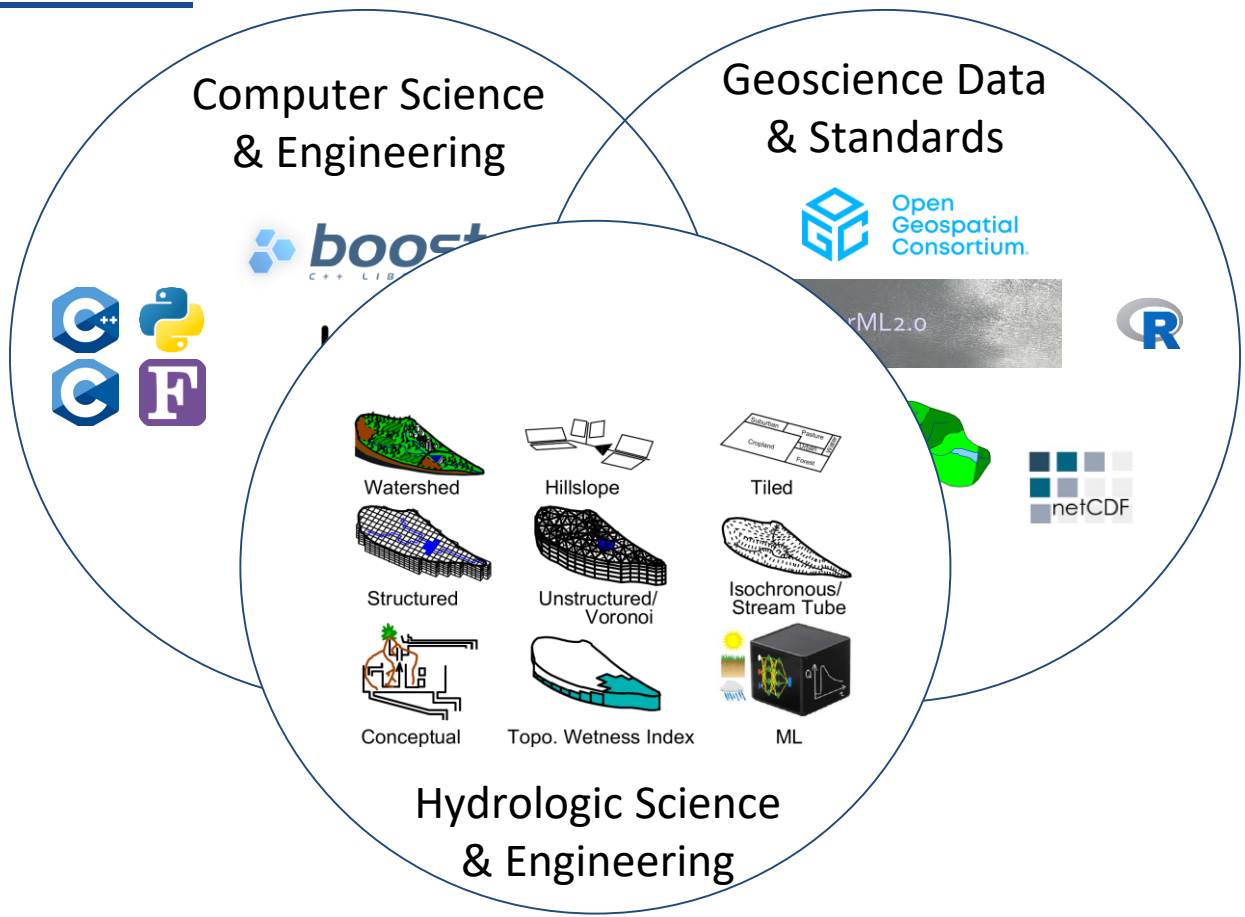


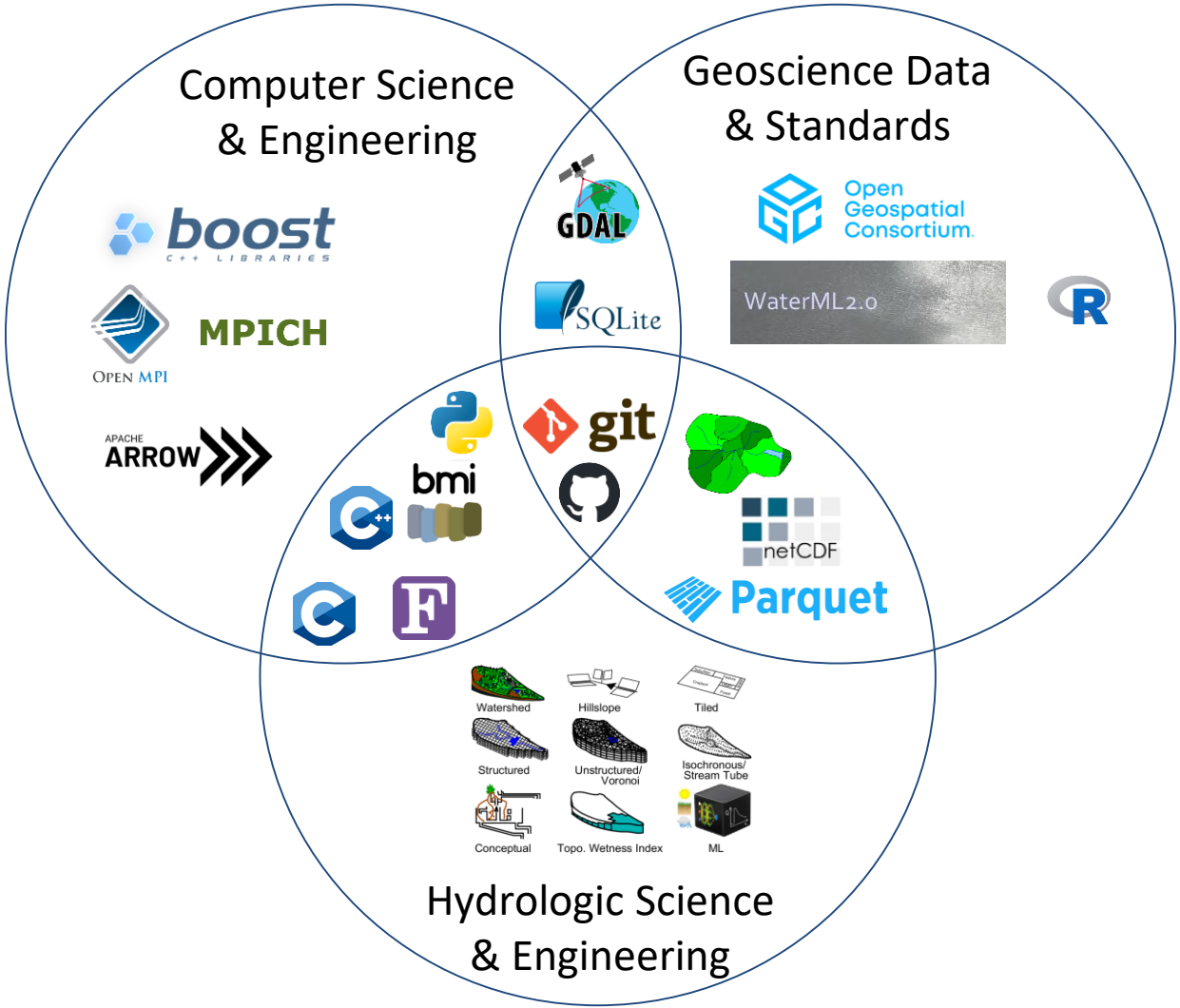


Enabling Technologies & Standards



Enabling Technologies & Standards

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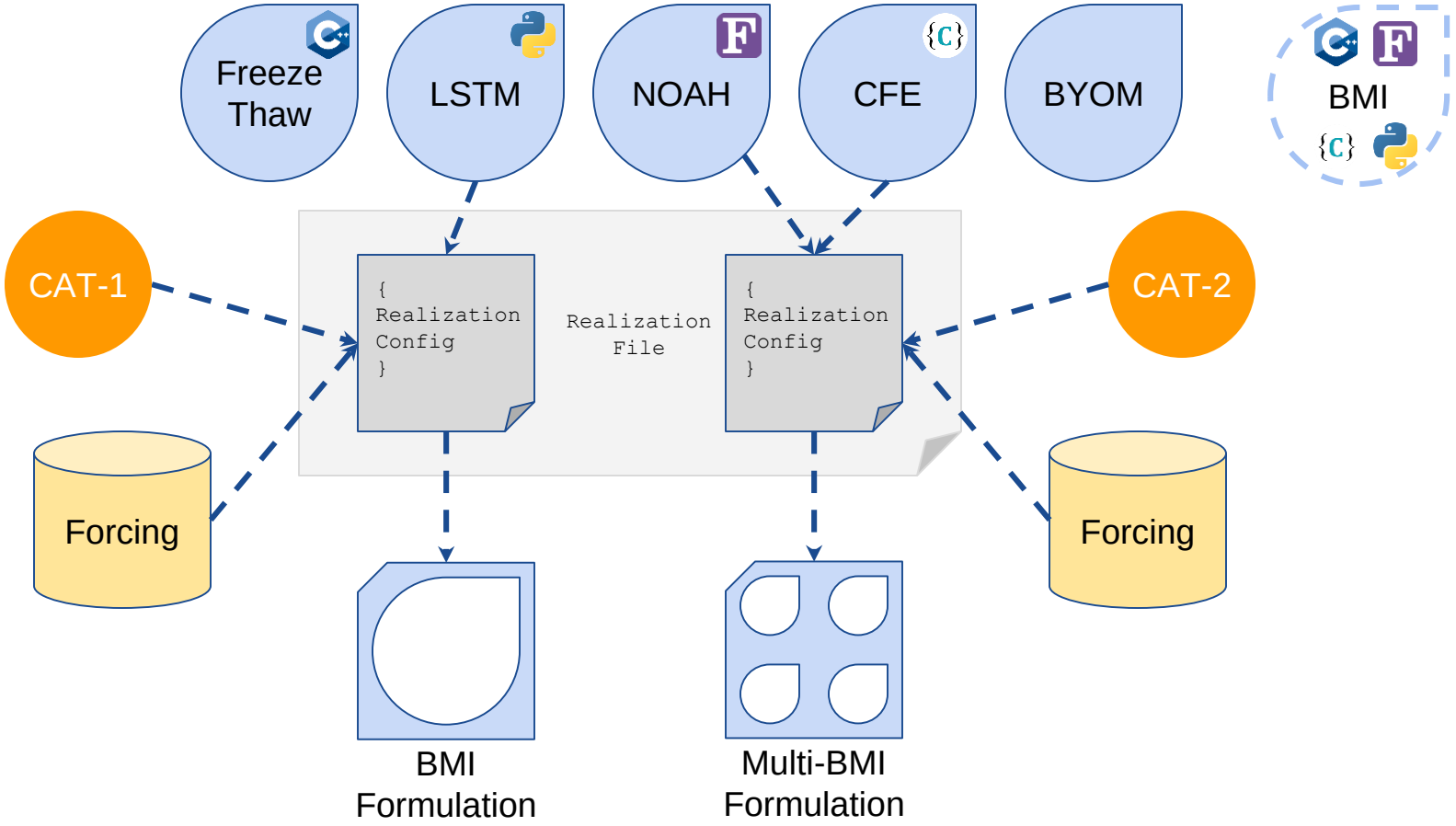
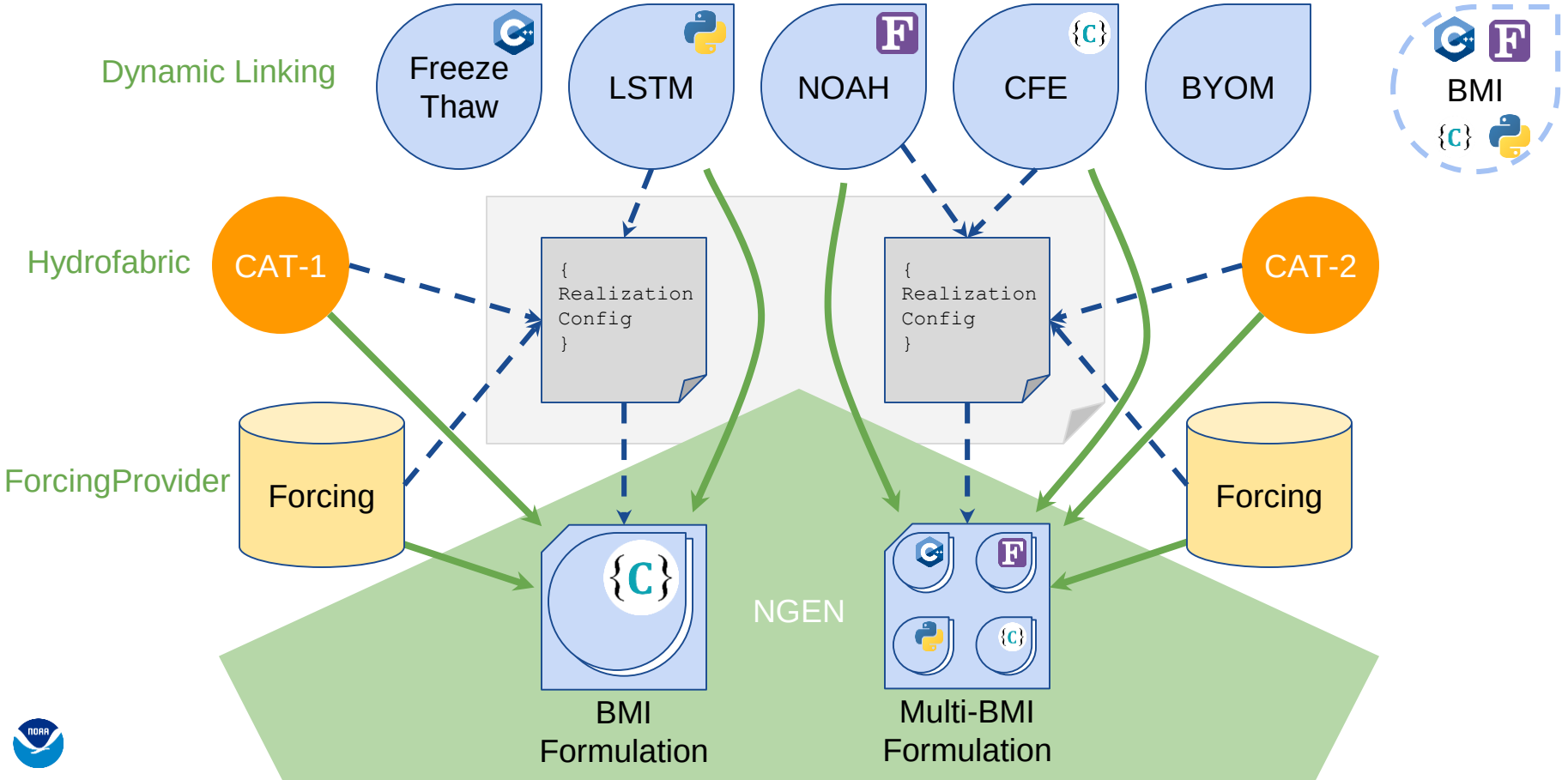
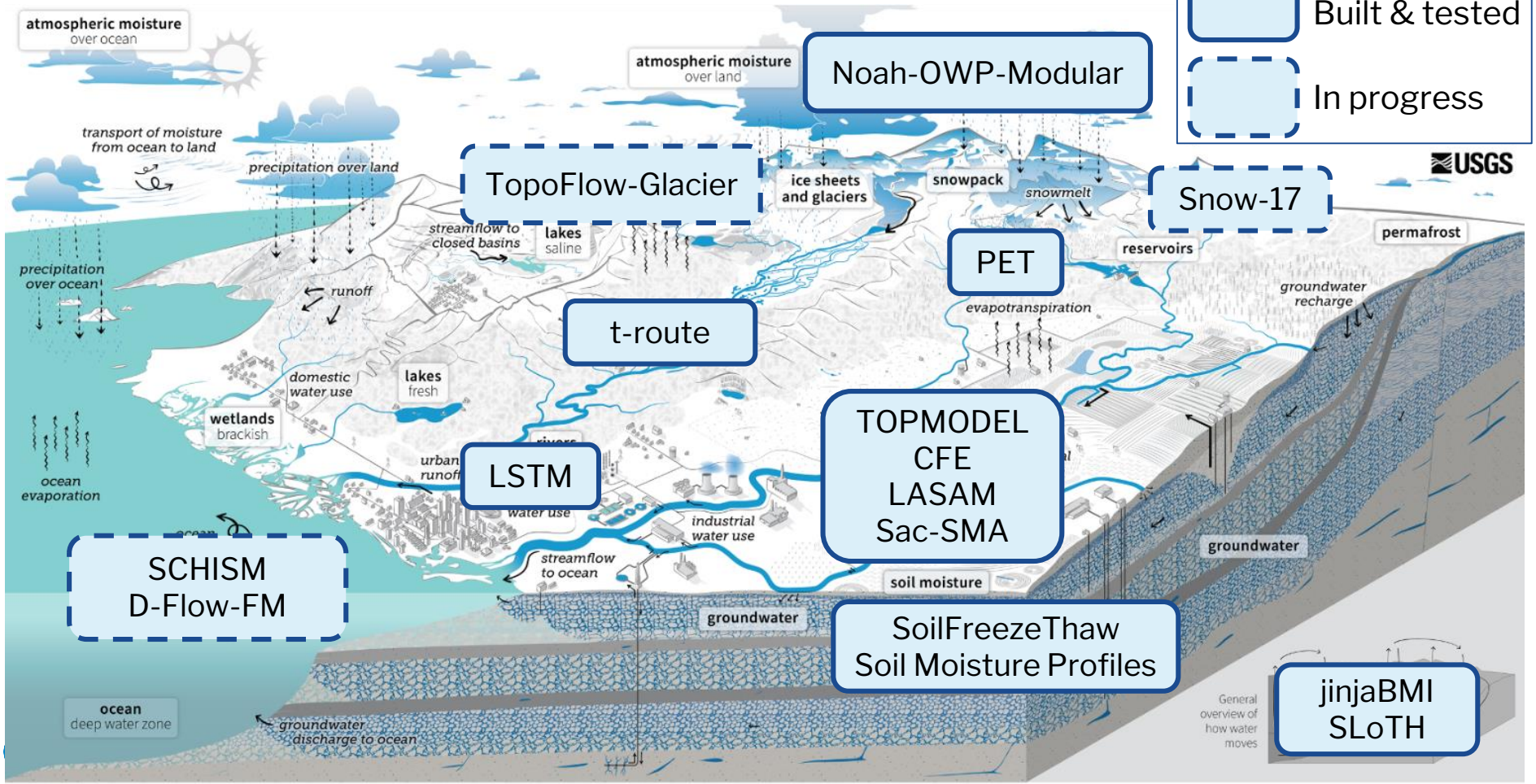
Model Engine: Connecting Models with BMI



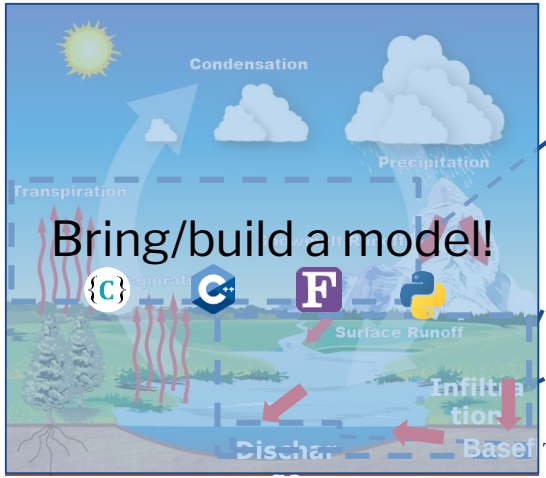
Model Engine: Integrating Technologies



NextGen Formulations



NextGen: Model Engine, Formulations, and Hydrofabric

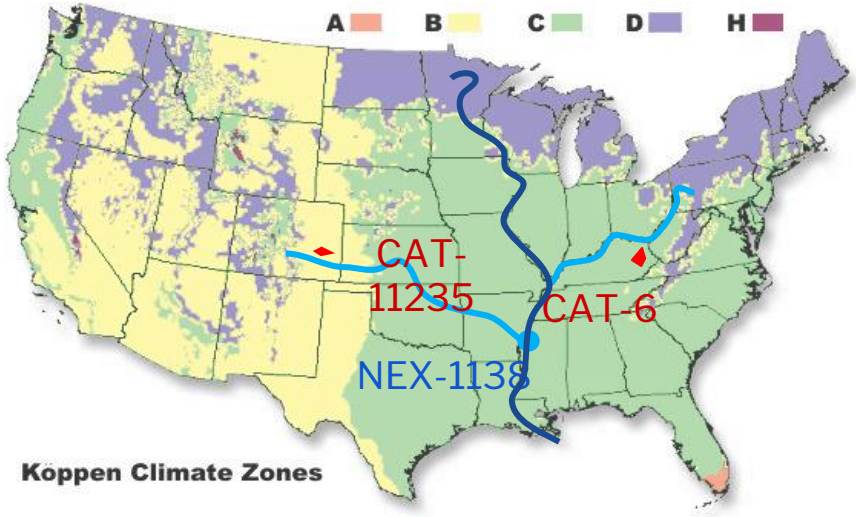


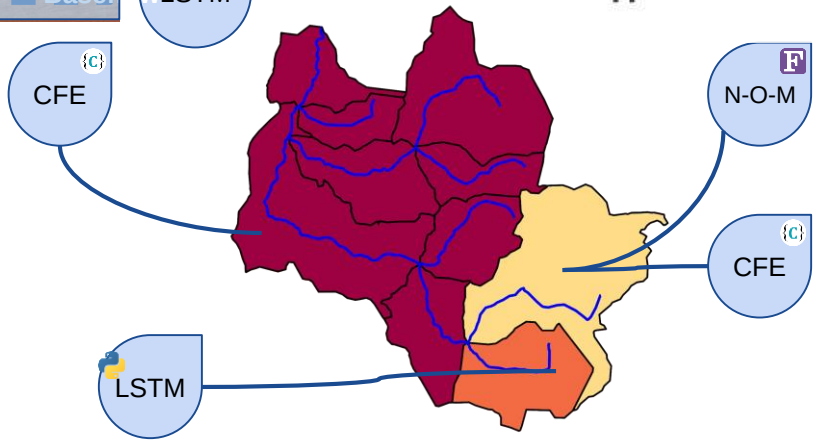
N-O-M

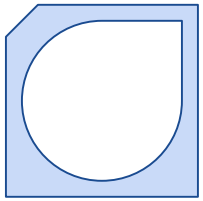
TOPM
ODEL

CFE

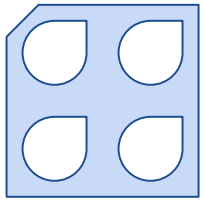
LSTM







BMI
Formulation



Multi-BMI
Formulation

Follow our Development

The NextGen model engine is developed in a transparent, open source manner with 19 current contributors, 74 GitHub stars, and 53 forks!

Over the past 4 years, it has evolved from research, to prototype, and we are currently working towards an operationally deployable system.

https://github.com/NOAA-OWP/ngen

Contributions to ngen main branch

OWP | OFFICE OF WATER PREDICTION

Thank You!

For More Information:

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