Forecasting review (general information)

## **1. Potential review fields (Please feel free to suggest adding or deleting fields)**

* Ecological forecasting
  + Forest ecosystem
  + Agriculture ecosystem
  + Marine ecosystem
  + Harmful Algal Bloom (HAB) forecasting
* Meteorology forecasting
  + Tidal/king tide forecasting (esp relevant for tidal and storm surge + SLR)
  + Bering Sea - ROMSNPZ forecasts of cold pool area
  + Freshwater flow
* Health forecasting
* Financial forecasting
* Energy forecasting
* Political/elections forecasting and sports forecasting

## **2. Potential review topics (Dietze et al., 2018; Please feel free to suggest adding or deleting topics)**

* Data
  + Repeated measurements
  + Interoperability
  + Latency
* Theory and methods
  + Technical advancements
  + Predictability and uncertainty (communication of uncertainty)
  + Model-data assimilation
  + Workflow
  + Skill assessment (reforecasts)
* Devops infrastructure
  + Transparency
  + Reproducibility
  + Accessibility
* Training, culture, and institutions
* Decision support
  + Partnership
  + Management

## **Example**

* Participants
  + A (Coordinator), B, C, D, E
* What are the key lessons we can learn from this field? (In presenting key lessons might be good to contrast to how forecasts for fisheries are carried out and communicated)
  + Methods; Devops infrastructure; Training, culture, and institutions; Decision support
* Do we have a contact person for an interview?
  + F
* Plan (who’s doing what)
  + Review devops infrastructure (A, B)
  + Review forecasting methods (C, E)
  + Interview F (D, E)
* Milestones and timeline
  + Review presentation/discussion in August 2021
* References
  + Predictive Ecosystem Analyzer ([PEcAn Project](https://flux.aos.wisc.edu/projects/2018/6/19/pecan); [PEcAn Book](https://pecanproject.github.io/pecan-documentation/master/project-overview.html)): Integrated informatics toolbox for ecosystem modeling
  + LeBauer D, et al. (2013) Facilitating feedbacks between field measurements and ecosystem models. Ecol Monogr 83:133–154