

NCoE eSTICC:

eScience Tools for Investigating Climate Change at High Northern Latitudes

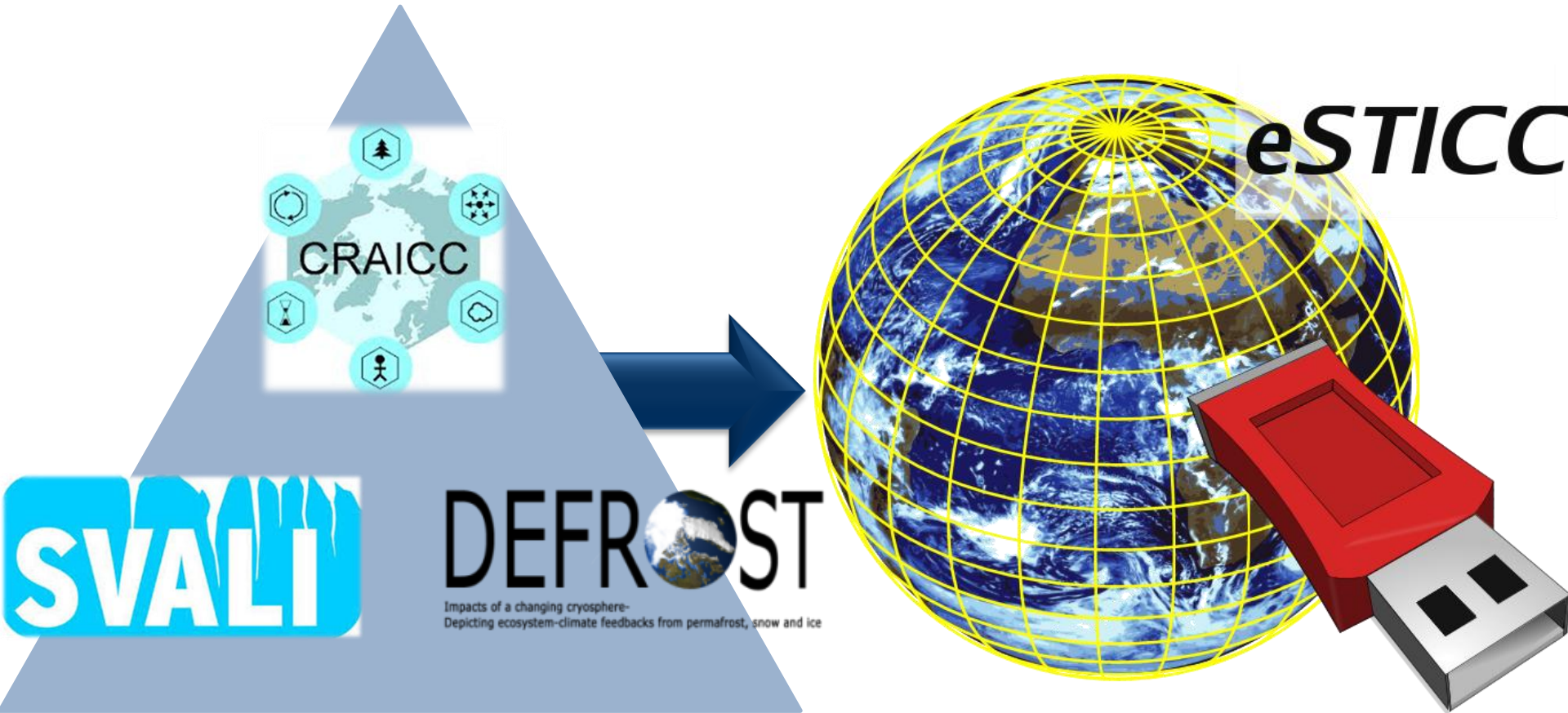
- Goals and perspectives for infrastructure needs

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Photograph: Silje Bergum Kinsten - norden.org



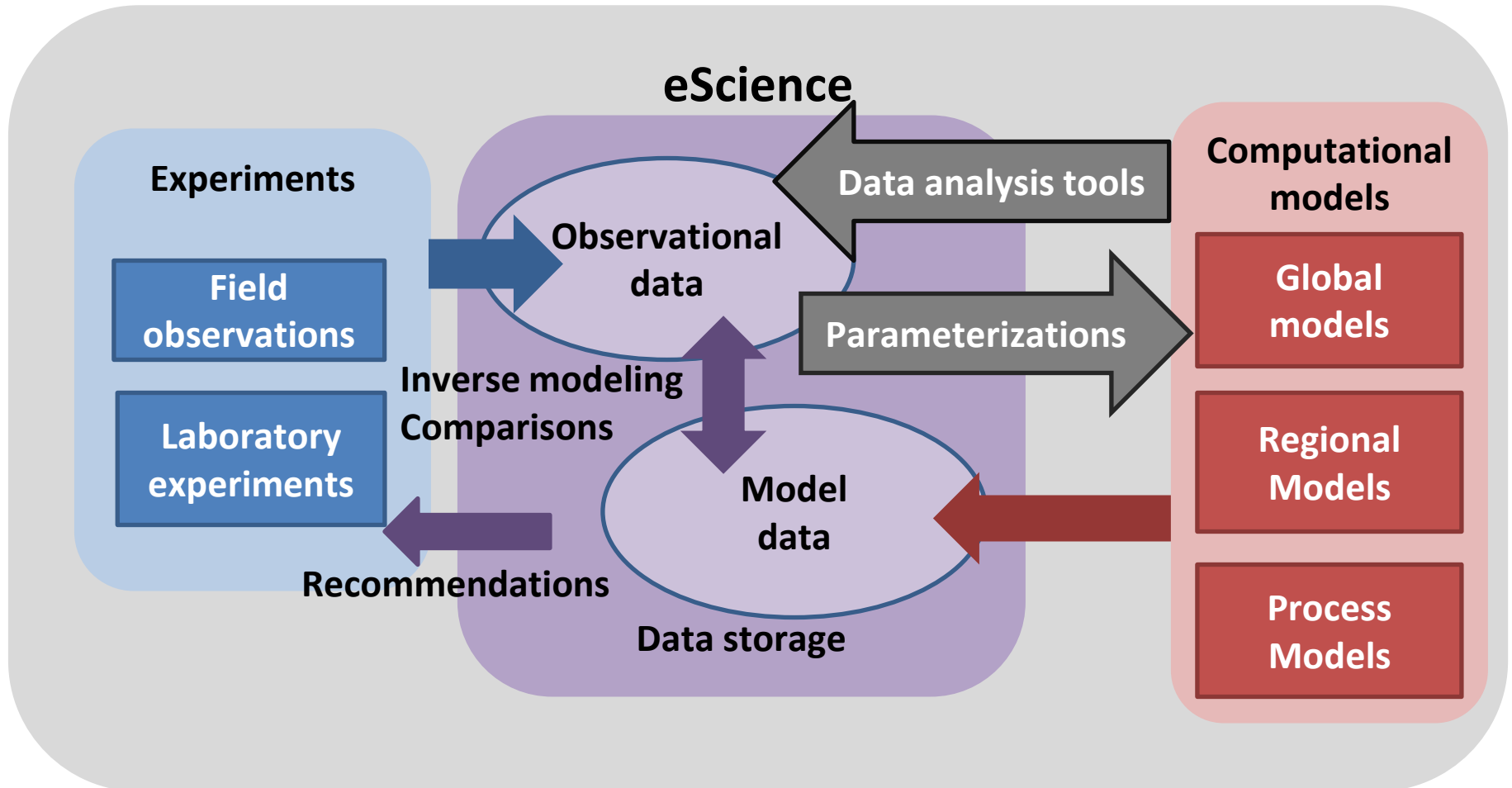
eSTICC: Bringing together 3 active NCoEs on Cryosphere – Climate interactions



Overarching goal:
***eScience* for accurate description of
the high-latitude feedback
processes in the climate system**

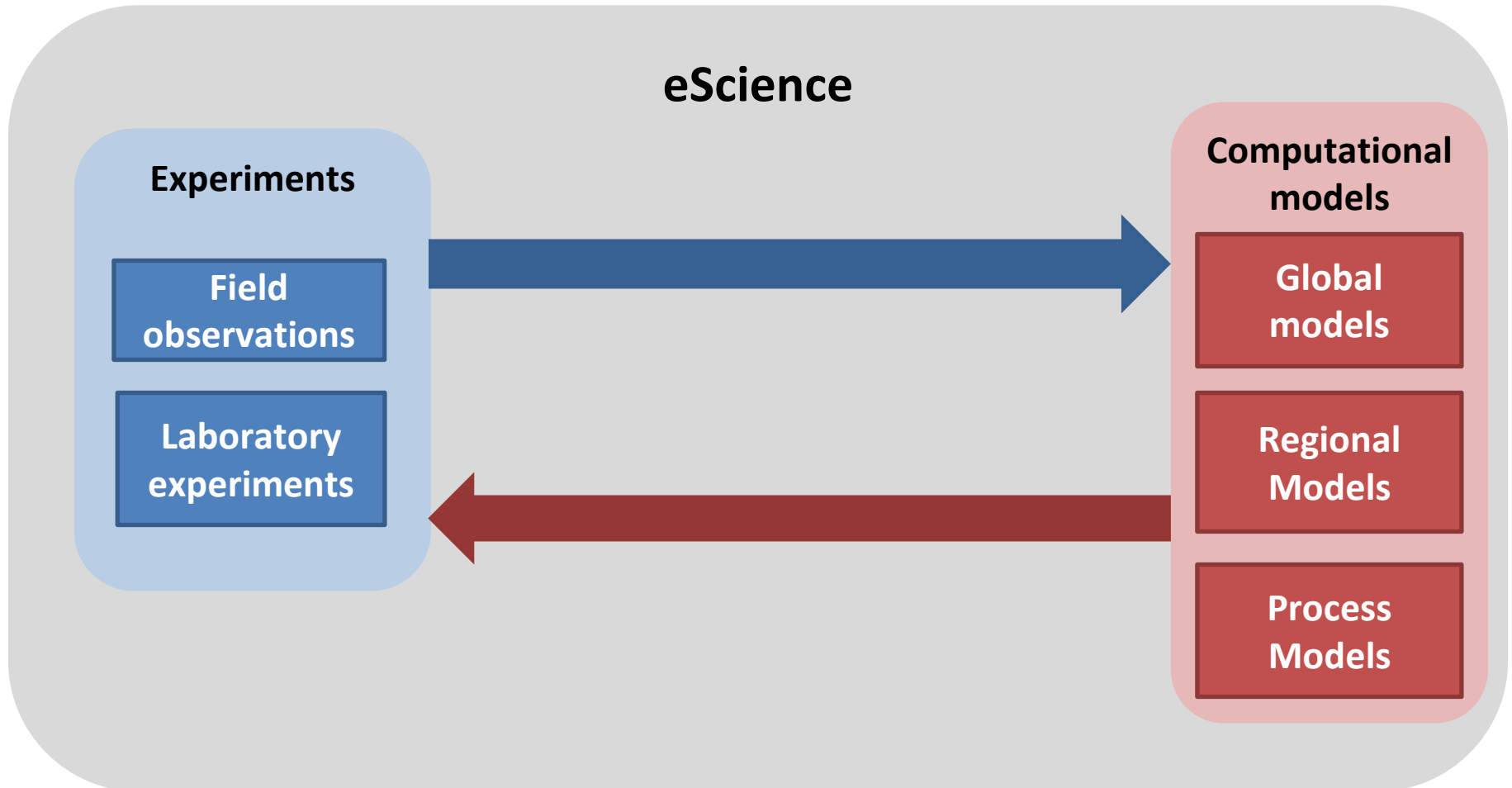
eSTICC: Concept and goals

- Integrate data and computational tools from CRAICC, SVALI & DEFROST



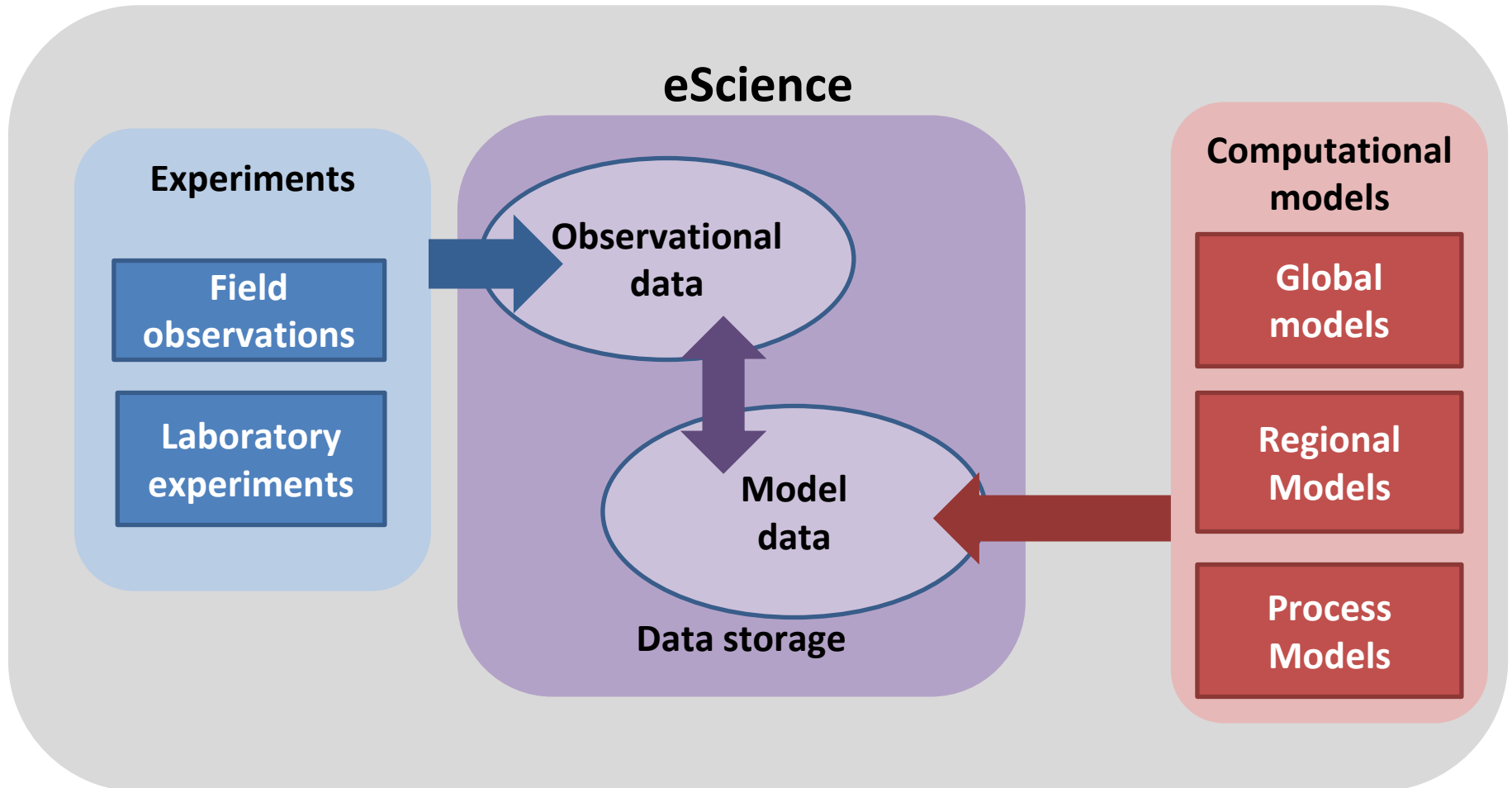
eSTICC: Concept and goals

- Facilitate the information flow between experimentalists and modelers



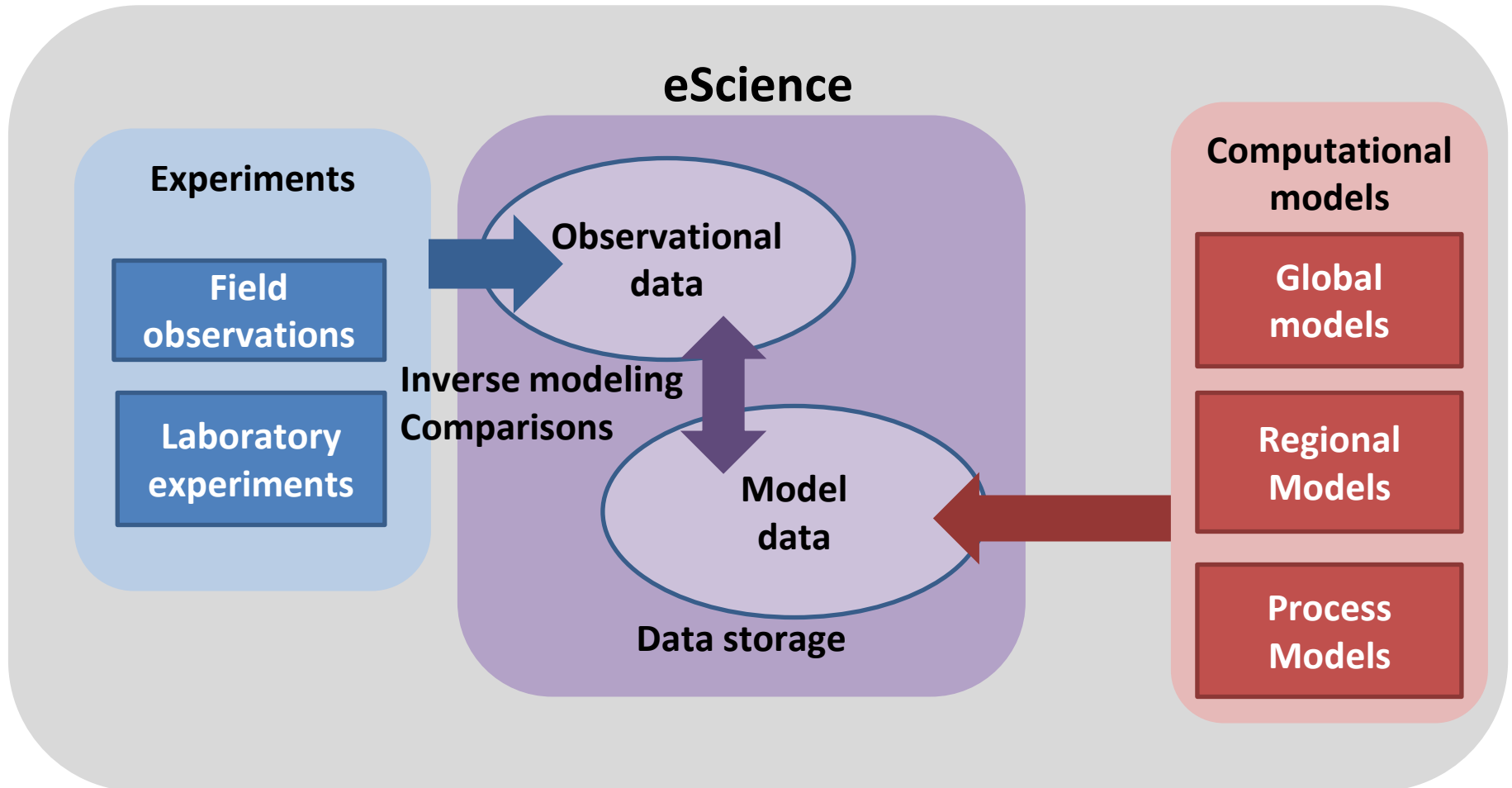
eSTICC: Concept and goals

- Improve handling and processing of large measurement and model data sets



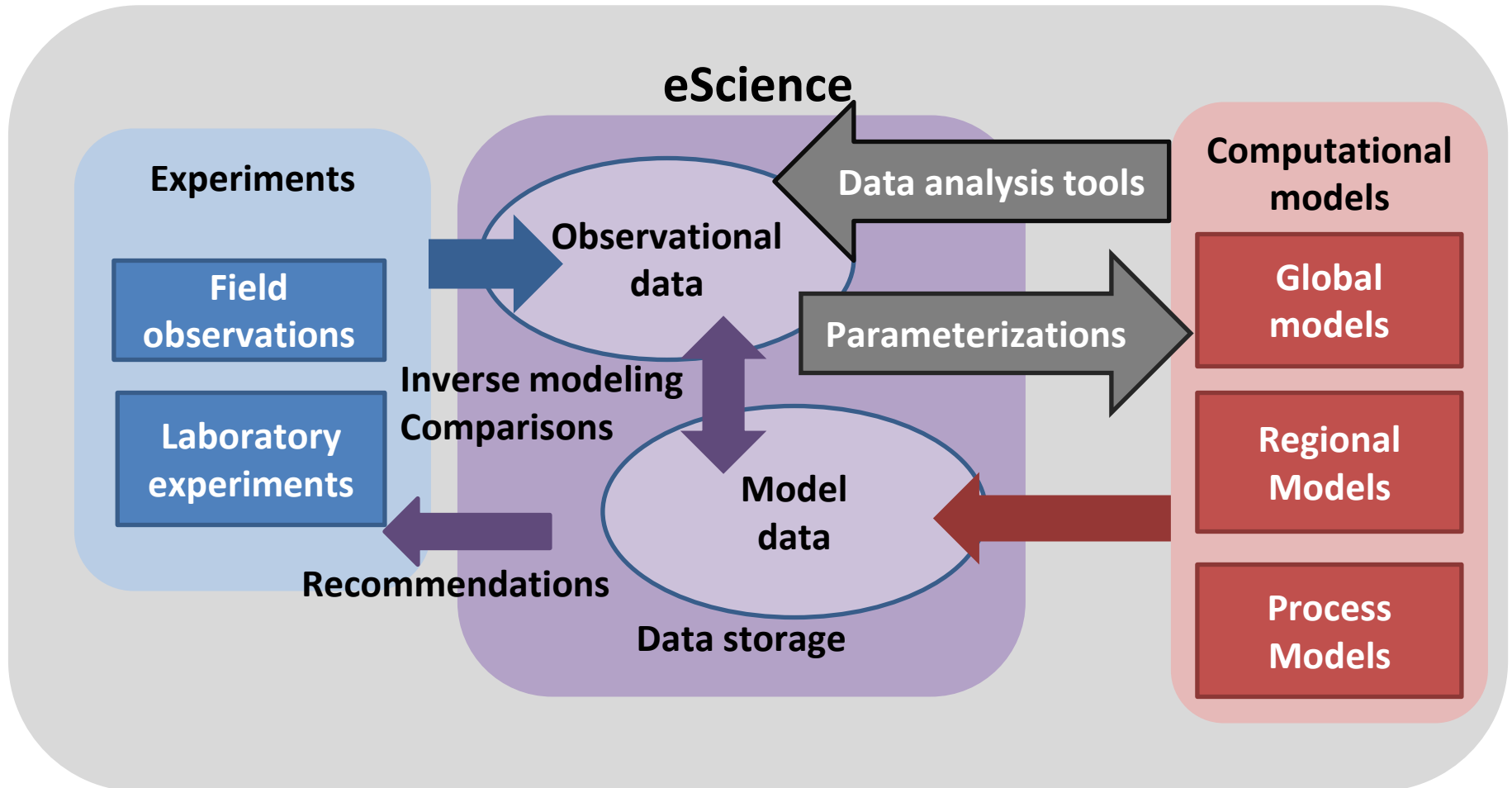
eSTICC: Concept and goals

- Enhance **inverse modeling** tools



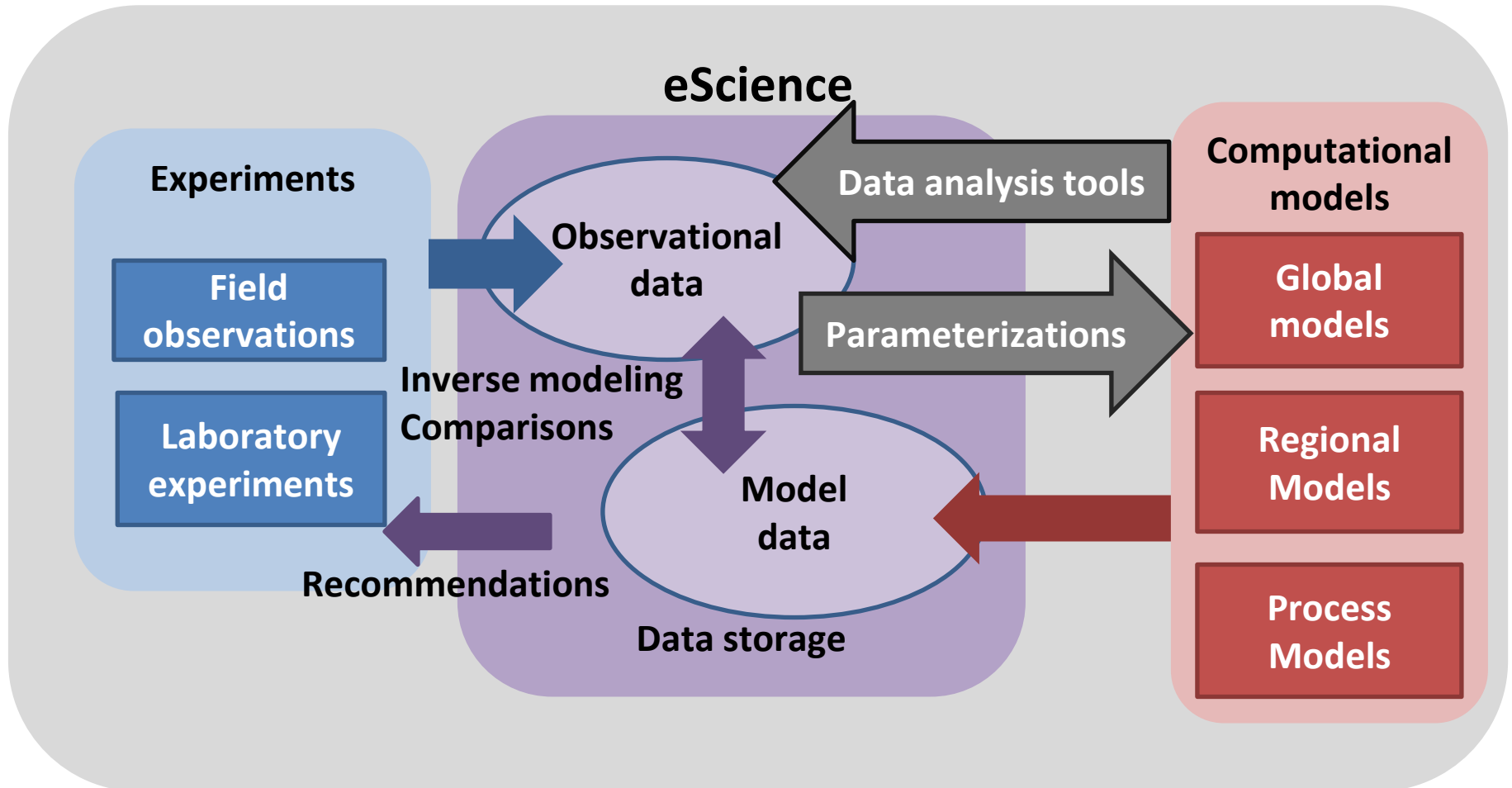
eSTICC: Concept and goals

- Integrate Nordic Earth System Modeling (ESM) efforts
- Develop parameterizations for ESMs
- Experiment with model resolution vs. complexity in ESMs

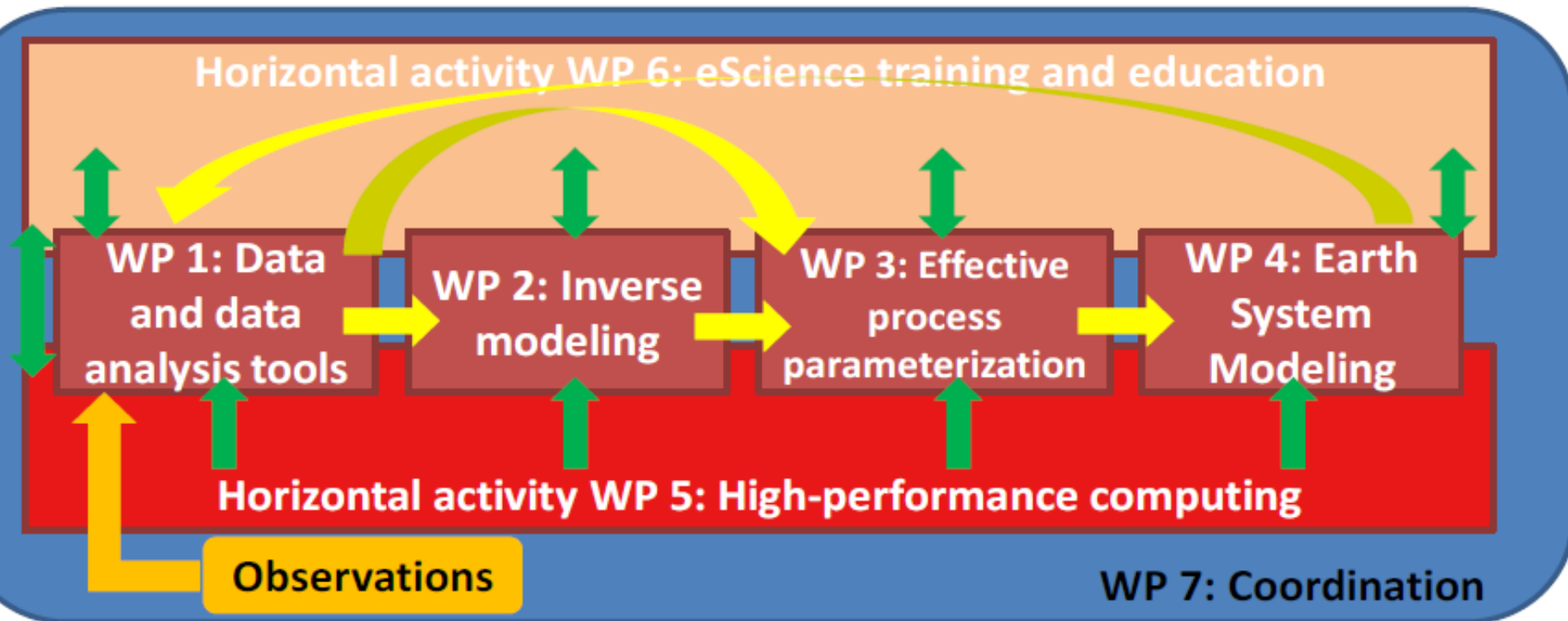


eSTICC: Concept and goals

- Improve the using efficiency of computing resources
- Develop workflow schemes to integrate different data, in light of the data accessibility



eSTICC: Organization and information flows



eSTICC: Perspectives for Nordic eInfrastructures



- Integrative approach – diverse needs
 - Storage and computational power
- Smooth flow of information/data critical
 - National boundaries
 - Data formats
 - Support in creating platforms for easy accessibility
- Interaction / synergies with the other Nordic eScience activities