

Big themes for Sea-Level Research over the coming 10 years:

- Thresholds, stability and rates of loss of the Antarctica ice sheet and the Greenland ice sheet.
- Understanding the commitment to sea-level rise over decades and centuries under different emission pathways and the implications for coastal adaptation and mitigation
- How can we use GIA information to constrain ice sheet changes?
- How can we better understand the relation between large-scale open ocean sea level change and coastal sea level changes in order to translate the open ocean signal to coastal signal?
- How can we incorporate long- and mid-term sea-level projections into hydrodynamic models to constrain coastal extreme sea level projections and explore coastal sea level impacts?
- How can we set-up regional and global sea-level budget studies and a linked consistent Earth energy budget to be repeated on a recurring basis? (frequency of recurrence to be decided)
- Moving to sea-level rise being a direct and explicit output in Earth-System Models (ESM) such that we capture the feedbacks between all ESM components.
- How can sea-level projections be best used with the range of decision analysis methods to develop effective, efficient and equitable adaptation solutions?
- How can we maximize the value of sea-level science and projection ranges (including high end) for adaptation planning and close the gap between sea-level science and practise/user needs?
- How can we capture the non-climate components of relative sea-level change that are essential for climate risk and adaptation assessment and develop appropriate scenarios, including human-induced subsidence.
- How should coastal climate services evolve and scale as coastal adaptation action multiplies and accelerates?