

Sea Ice Working Group

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**CNRS (LOCEAN, CNRM-Game), UKMO, MERCATOR,
NERC (NOCS, CPOM, BAS), CMCC, UCL-LLN.**

Work done

- Decision on a Unified Sea Ice Model
 - Proposed by SIWG experts (Paris, Jan 31 – Feb 2)
 - Accepted by NEMO-SC and NEMO funding institutions (March-April)
- Provisional calendar for the Unified Sea Ice Model
 - Draft 1 (Paris, Jan 31-Feb 2), Draft 2 (London, May 12)
 - **Phase #0: Preparation** (Feb-June 2017)
 - **Phase #1: Transition** (July 2017-~Mar 2019)
 - **Phase #2: Evolution** (2019 and beyond)
- NEMO Development Strategy Document, Chapter 8
- Phase #0
 - AGRIF-LIM3 (CNRS)
 - SIMIP outputs (CNRS)
 - Melt Ponds Interface (CNRS)
 - Interactive ice-atmosphere and ice-ocean drags (MERCATOR, CNRS)

Open Issues (until Mar 2018)

- Firm calendar and resource evaluation for the SC
 - Draft under advanced discussion within the SIWG, to be sent soon (July 8th?)
 - Establish plan for evaluation / obtain missing resource allocation
- Phase#1: all groups retrieve anterior capabilities
 - Horizontal advection: compare Prather (LIM), UM5 (LIM-new), Linear Remapping (CICE & GELATO)
 - Melt ponds (Flocco & Feltham 2007, CICE)
 - EAP rheology in C-grid (CICE)
 - Ice-atm/-ocean interactive drags (CICE/MERCATOR+Canada)
 - UKMO Ice-atmosphere coupling

Perspectives (from Mar 2018)

- Technical and scientific evaluation of the new model
 - Low **vs** High Resolution
 - State **vs** Processes
 - Idealized **vs** forced **vs** coupled
- Discuss and plan future evolution (Phase #2)
 - First round (SIWG only): early 2018 in UK
 - Second round (SIWG + international experts): early 2019
 - Rewrite Ice Chapter of the Development Strategy Document