

NEMO Developers Committee meeting 14 September 2020

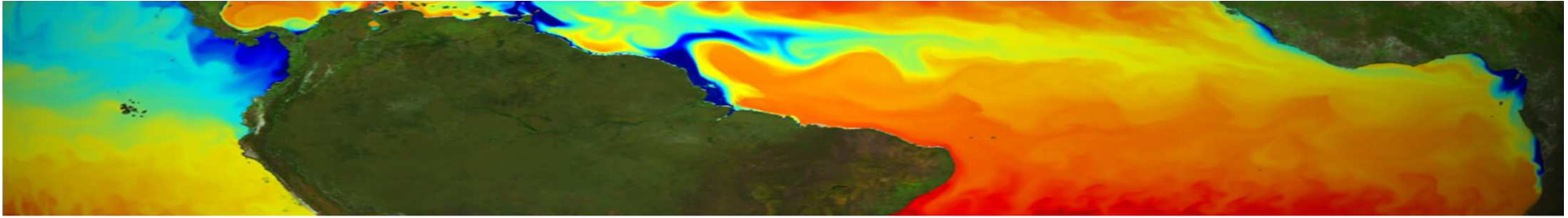


Agenda

- Reflections on 2020 Workplan (Claire and NEMO officers 40 mins)
- Organisation of merges this year (Claire; 20 mins)
- Set up of Scientific Advisory Committee (Mike; 15 mins)
- Preparation of next NEMO Development Strategy (Mike; 20 mins)
- Any other Business
 - Timetable for 2021 WP (Mike/Claire)
 - Scale-aware sea-ice project (Martin)
- There will be a second meeting later this year devoted to progress within Working Groups

Proposed agenda for second meeting

- For each Working Group
 - The WG Leader will prepare 3-5 slides on:
 - Progress against strategy
 - Successes
 - Any issues
 - **Proposed actions for the NEMO Work Plans 2021**
 - The WGL will have 5-15 minutes to present
 - We'll discuss for 5-15 minutes
- This meeting should probably be 1st half of Nov 2020



Setting up the NEMO Scientific Advisory Committee

**Mike Bell, Dorotea Iovino,
Claire Levy, Julien le Sommer**



Content

- Roles of different groups – how do they fit together?
(NDC, WGs, SAC, Drakkar)
- Terms of reference of SAC
(we discussed them last time)
- (Criteria for the choice of chair: emailed to you on 29 June)
- Current position
- Areas of expertise we want to cover

Roles of different groups

- **NEMO System Team** (meet every 3rd week: @ 1 hour)
 - Responsible for updating the NEMO code
- **Developers Committee** (meets 2-3 times a year: @ 2-3 hours)
 - Responsible for proposing & **implementing** NEMO Development Strategy
 - **Working Groups** (meet when they want to)
 - Now aligned with chapters of NEMO Development Strategy
 - Detailed discussions can take place
 - Sub-groups can report back to working groups
- **NEMO Steering Committee** (meets @ once a year)
 - Makes top-level decisions; owns staff resources
- **Scientific forums**
 - **Drakkar** - Presentations by scientists using NEMO (annual:Jan)
 - **EGU GA** – Numerical modelling of ocean (annual: Apr)

Role of Scientific Advisory Committee

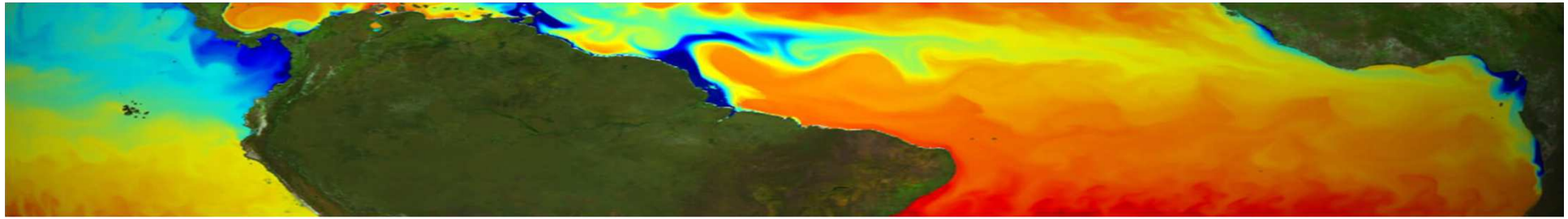
- **Advise** the NEMO Steering Committee (NSC), Developers Committee (NDC) and System Team (NST) on:
 - The priorities and opportunities for improving the current NEMO system
 - The NEMO strategy and work plans
 - Participation in international collaborations
- The focus of the advice should be on a 3-5 year period
- Full terms of reference: <https://forge.ipsl.jussieu.fr/nemo/wiki/ScientificAdvisoryBoard>
- **Frequency**
 - SAC members will be invited to participate in the NEMO Development Strategy (NDS) meetings that are held once every 5-6 years
 - One or two meetings will be held in between the NDS meetings
- **Membership**
 - A core group of 3-5 experts will be invited by the NSC
 - Additional members may be invited to specific meetings

Current Position

- The Developers Committee (NDC) proposed to set up an SAC
- The Steering Committee (NSC) has agreed to it
- The NDC Preparation Team suggested criteria for the chair of the SAC and suggested ideas for the chair (and members) of NSC
- NSC is discussing the choice of chair

Areas of Expertise

- Kernel (e.g. someone from GFDL team)
- Parametrisations
- HPC issues
- Software engineering
- Sea-ice
- Biogeochemistry



Preparation of the next NEMO development strategy

**Mike Bell, Dorotea Iovino,
Claire Levy, Julien Le Sommer**



Content

- Context:
 - It's nearly time to start on the next NDS
 - Why NDS is really important for the future of NEMO
- What we did last time
- Some questions

Timing

- Current NDS covers 2018-2022
- Should the next strategy cover 2022-2026 or 2023-2027?
- If the former it should be prepared in 2021
- Are we ready to update it?

- In addition to “bottom-up” working-level scientific collaborations
- We need
 - Our Development Strategies to identify key issues & developments
 - To engage with leading European experts on formulation of R&D activities to address them
 - To secure funding for these R&D activities
- The IMMERSE (and other EC) projects are important steps in this direction
- This is the responsibility of the NEMO Developers Committee & its Working Groups
- The NEMO Scientific Advisory Committee will support this

NEMO's future

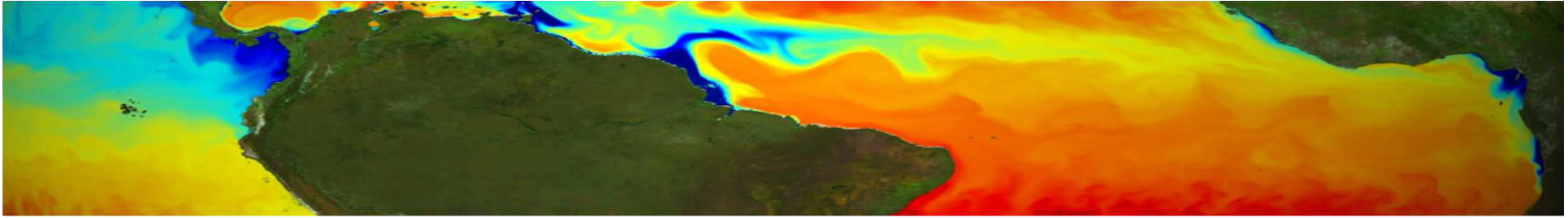
- The NEMO consortium has the expertise and organisation to maintain & develop a readable & flexible code base
- The consortium needs to build on its experience in:
 - periodically defining its Development Strategy
 - entraining & nurturing the scientific expertise to achieve it
- NEMO will (need to) keep evolving to adapt to
 - scientific advances (e.g. in dynamical cores, parametrisations)
 - new HPC architectures
 - methods for software quality assurance

What we did last time

- Agree a list of chapters
- Assign chapters to teams with a leader(s)
- Teams prepare a draft chapter
- Chapters are discussed at a workshop (Barcelona last time)
- The material is finalised
- The process took just over a year

Points for discussion

- Is there anything about the process we want to improve?
 - e.g. could some discussions before the workshop have gone into more depth?
 - Should we review progress against previous plan?
- Are there missing chapters?
 - e.g. user support/documentation?
- The SAC members should be involved in the process & the workshop
 - how do we make best use of them?



Timetable for 2021 Work Plan

Mike Bell, Claire Levy



Timetable to prepare WP2021

- Work Plan 2021 ready by the end of 2020
- **Between 14 and 23 Dec:** NDC meeting reviews WP2021
- NDC Prep Team prepares NDC discussion
- (1st half Dec: 2020 Merge)
- **13 or 20 Nov:** WP action proposals from NEMO officers and WGLs