

Updated Announcement

**The Southern Ocean in the Weddell Sea and off Dronning Maud Land:
unique oceanographic conditions shape circumpolar and global processes.**

**A multidisciplinary workshop of the
Weddell Sea - Dronning Maud Land (WS-DML) regional working group
of the Southern Ocean Observing System (SOOS)**

Online Workshop, 20 – 23 October 2020

(postponed from 28-30 April 2020 due to COVID-19)

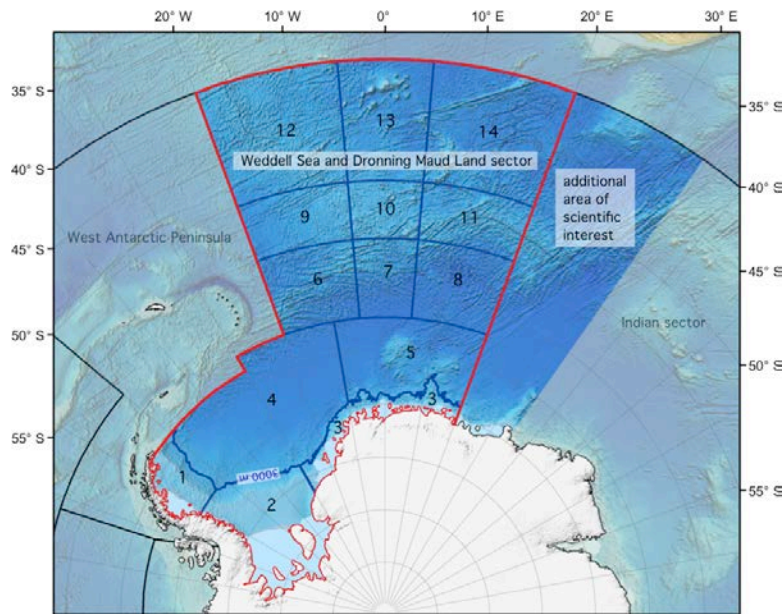
Organizers: M. Janout, M. Hoppema (AWI), S. Moreau and L. de Steur (NPI)



Background

The Weddell Sea including the ocean off Dronning Maud Land is regionally representative for the high-latitude Southern Ocean due to its pronounced seasonality, circumpolar currents, deep-water formation and multi-year sea-ice cover. In addition, the Weddell Gyre connects water masses at the northern margin of the Southern Ocean (SO) in the Antarctic Circumpolar Current (ACC) with those shaped by the large ice shelves and sea-ice formation in the southern Weddell Sea. This hydrodynamic regime affects a range of physical, geochemical and biological processes.

A smaller proportion of the western Weddell Sea is already experiencing climate-change and related consequences, including the acceleration of mass loss from ice shelves, enhanced ocean warming and freshening, rising air temperatures, and changes in wind patterns. In the eastern part, however, the environment is still relatively stable but is predicted to experience significant warming, sea-ice melt and ice-shelf loss until the end of the century. The recent re-emergence of the Weddell Polynya in this region, for not entirely understood reasons and with potentially significant impact on regional water masses underscores the importance of observing and understanding this region.



The aims of the workshop are to:

- (1) provide an overview and actual update of **scientific findings**, which underline the WS-DML as an important area for multi-disciplinary studies (30 registered oral presentations, 10 three-minute flash presentations (substitute for 'poster' session), and a discussion on initiating a WS-DML special issue. The SOOS community and also the individual researchers would benefit from an improved visibility of our results published in such a special volume.
- (2) inform the SOOS WS-DML community about the **progress of activities** in the area of interest.
- (3) present **ideas, actions and products for the future** including multi-national initiatives and ongoing and future national plans, including a discussion on the impact of COVID-19 on the coming field season, in a plenary session.

We would like to bring together scientists, who recognise the role of research in the Weddell Sea in the circumpolar system due to its physical/biological uniqueness and function. Our foci are important single-disciplinary results embedded in a larger regional or global context and multidisciplinary studies. **Any experts are welcome to participate and contribute to the international developments of this SOOS regional working group.** We would like to encourage **especially Early Career Scientists** and experts from countries with small and emerging Antarctic research programs to attend the workshop.

Since the workshop will be held online, there will be no limitations to the number of participants, but may we please ask interested colleagues to **register under the following link:**

https://docs.google.com/forms/d/e/1FAIpQLSd7QCVSd1r94Qe6vYhApsfqc3sLNjy-Ydmm64rwH2mMOIQ1jQ/viewform?usp=sf_link

All oral and flash poster presentation slots are already filled up according to the original oral and poster presentations for the workshop planned for April. For those who like to contribute slides to the plenary session on Friday (23 Oct 2020, 14:30-15:30) about ongoing and future (national or international) programs and plans, please send an email to Laura.de.Steur@npolar.no

Program: *"The Southern Ocean in the Weddell Sea and off Dronning Maud Land: unique oceanographic conditions shape circumpolar and global processes"*

Tues 20 Oct		Chair
13:00 – 13:30	Welcome, intro and presentation of the objectives	WG Co-chairs
13:30 - 14:30	Session I: Biology (a), 4 presentations	M. Wege
14:30 - 14:45	Break	
14:45 - 15:45	Session I: Biology (a), 4 presentations	S. Moreau
15:45 - 16:15	Plenary discussion Biology (a)	Wege & Moreau
16:15 – 16:30	Wrap up	M. Wege
Wed 21 Oct		
12:55 - 13:00	Welcome	M. Janout
13:00 – 14:15	Session II: Physical oceanography, 5 presentations	M. Janout
14:15 - 14:30	Break	
14:30 - 15:30	Session II: Physical oceanography, 4 presentations	L. de Steur
15:30 - 16:00	Plenary discussion Physical oceanography	Janout & de Steur
16:00 – 16:15	Wrap up	M. Janout
Thurs 22 Oct		
13:00 - 13:30	Posters: 2-slides, 3-minutes flash presentations	S. Moreau
13:30 – 14:15	Session II: Physical oceanography, 3 presentations	M. Hoppema
14:15 – 14:30	Break	
14:30 – 15:45	Session III: Biogeochemistry, 5 presentations	S. Fawcett
15:45 – 16:15	Plenary discussion physical oceanography	Hoppema & Fawcett
16:15 – 16:30	Wrap up	M. Hoppema
Fri 23 Oct		
12:40 - 12:45	Welcome	L. Biddle
12:45 – 14:00	Session I: Biology (b), 5 presentations	L. Biddle

14:00 – 14:15	Plenary discussion Biology (b)	Wege & Biddle
14:15 – 14:30	Break	
14:30 – 15:30	Plenary discussion: National programs & updates and ongoing or future international projects & plans	J.B. Sallee & A. Meijers
15:30 – 16:00	Special issue	Janout & Moreau
16:00 - 16:30	Data management, other actions	de Steur & Hoppema
16:30 - 16:45	Wrap up and farewell	All