

CR1.3/CL4.9/OS1.19

Ice-Ocean-Atmosphere Interactions in West Antarctica and the Weddell Sea Sector

Convener: Christine Batchelor

Co-conveners: Kiya Riverman, Frazer Christie, Katherine Hutchinson, David Vaughan

Displays | Chat Wed, 06 May, 14:00–15:45 CET

14:00

1. D2459 | EGU2020-603 | solicited

Recent Changes in the Larsen-Weddell System

Ted Scambos

14:05

2. D2460 | EGU2020-3636

Imminent re-opening of the Weddell Polynya detectable days ahead by spaceborne infrared

Céline Heuzé and Adriano Lemos

14:10

3. D2482 | EGU2020-10790

Early detection of the Weddell polynya re-opening using SAR imagery

Adriano Lemos and Céline Heuzé

14:15

4. D2461 | EGU2020-19812

Polynya area and frequency in the Weddell Sea in CMIP6 climate models

Martin Mohrmann, Céline Heuzé, and Sebastiaan Swart

14:20

5. D2467 | EGU2020-253

New observations of late summer bio-physical ice and snow conditions in the northwestern Weddell Sea

Stefanie Arndt, **Christian Haas**, and Ilka Peeken

14:25

6. D2466 | EGU2020-20152

The importance of sea ice biota for the ecosystem in the northwestern Weddell Sea

Ilka Peeken, Stefanie Arndt, Markus Janout, Thomas Krumpfen, and Christian Haas

14:30

7. D2476 | EGU2020-20610

Sea ice characteristics during the Weddell Sea expedition explored by geophysical and remote sensing methods

Wolfgang Rack, Frazer Christie, Evelyn Dowdeswell, Julian Dowdeswell, Paul Wachter, Toby Benham, Christian Haas, and Paul Bealing

14:35

8. D2469 | EGU2020-1567

Complex, evolving patterns of mass loss from Antarctica's largest glacier

Jonathan Bamber and Geoffrey Dawson

14:40

9. D2464 | EGU2020-245

Pathways of ocean heat towards Pine Island and Thwaites grounding lines

Yoshihiro Nakayama, Georgy Manucharyan, Hong Zhang, Pierre Dutrieux, Hector S. Torres, Patrice Klein, Helene Seroussi, Michael Schodlok, Eric Rignot, and Dimitris Menemenlis

14:45

10. D2463 | EGU2020-19934

Warm water flow and mixing beneath Thwaites Glacier ice shelf, West Antarctica

Anna Wåhlin, Bastien Queste, Alastair Graham, Kelly Hogan, Lars Boehme, Karen Heywood, Robert Larter, Erin Pettit, and Julia Wellner

14:50

11. D2465 | EGU2020-8411

Melt at grounding line controls observed and future retreat of Smith, Pope, and Kohler Glaciers

David Lilien, Ian Joughin, Benjamin Smith, and Noel Gourmelen

14:55

12. D2470 | EGU2020-1304

Reflection Seismic Interpretation of Topography and Acoustic Impedance beneath Thwaites Glacier, West Antarctica

Elisabeth Clyne, Sridhar Anandakrishnan, Atsuhiko Muto, Richard Alley, Donald Voight, and Kiya Riverman

15:00

13. D2468 | EGU2020-17323 | solicited

Lessons learnt from the former bed of Thwaites Glacier: a new multibeam-bathymetric dataset

Kelly Hogan, Robert Larter, Alastair Graham, Robert Arthern, James Kirkham, Rebecca Totten Minzoni, Tom Jordan, Rachel Clark, Victoria Fitzgerald, John Anderson, Claus-Dieter Hillenbrand, Frank Nitsche, Lauren Simkins, James Smith, Karsten Gohl, Jan Erik Arndt, Jongkuk Hong, and Julia Wellner

15:05

14. D2481 | EGU2020-17529

Initial results from International Thwaites Glacier Collaboration cruise NBP20-02

Robert Larter, Julia Wellner, Alastair Graham, Claus-Dieter Hillenbrand, Kelly Hogan, Frank Nitsche, James Smith, Lars Boehme, Mark Barham, John Anderson, Rebecca Minzoni, Lauren Simkins, Karen Heywood, and Erin Pettit and the NBP20-02 Shipboard Scientific Party

15:10

15. D2480 | EGU2020-16776

The horizontal circulation, upwelling and heat budget of the Weddell Gyre: an observation perspective

Krissy Reeve, Torsten Kanzow, Mario Hoppema, Olaf Boebel, Volker Strass, Walter Geibert, and Rüdiger Gerdes

15:15

16. D2462 | EGU2020-10194

A recent update on the circulation and water masses around the Filchner and Ronne ice shelves in the southern Weddell Sea

Markus Janout, Hartmut Hellmer, Tore Hattermann, Svein Osterhus, Lucrecia Stulic, Oliver Huhn, Jürgen Sültenfuss, and Torsten Kanzow

15:20

17. D2478 | EGU2020-18507

Meltwater and circulation characteristics adjacent to Larsen C ice shelf: insights from seawater oxygen isotopes

Joshua Mirkin, Adam West, Katherine Hutchinson, Raquel Flynn, and Sarah Fawcett

15:25

18. D2471 | EGU2020-1603

Submarine landforms on the Weddell Sea shelf imaged at high resolution using AUVs

Julian Dowdeswell, Christine Batchelor, Sasha Montelli, Dag Ottesen, Evelyn Dowdeswell, and Jeffrey Evans

15:30-15:45

Open discussion/ additional questions

The following contributions will not be presented during the live chat, but the authors welcome comments about their abstracts and displays:

D2473 | EGU2020-21821

Sea ice in the Weddell Sea: use of moderate resolution imagery to summarize inter-annual variation in conditions and support operational ship survey

Toby Benham, Frazer Christie, and Julian Dowdeswell

D2474 | EGU2020-21896

The Weddell Sea Expedition 2019

John Shears, Julian Dowdeswell, Freddie Ligthelm, and Paul Wachter

D2475 | EGU2020-7801

Recent glacial advance in the western Weddell Sea Sector driven by anomalous sea ice circulation

Frazer Christie, Toby Benham, and Julian Dowdeswell