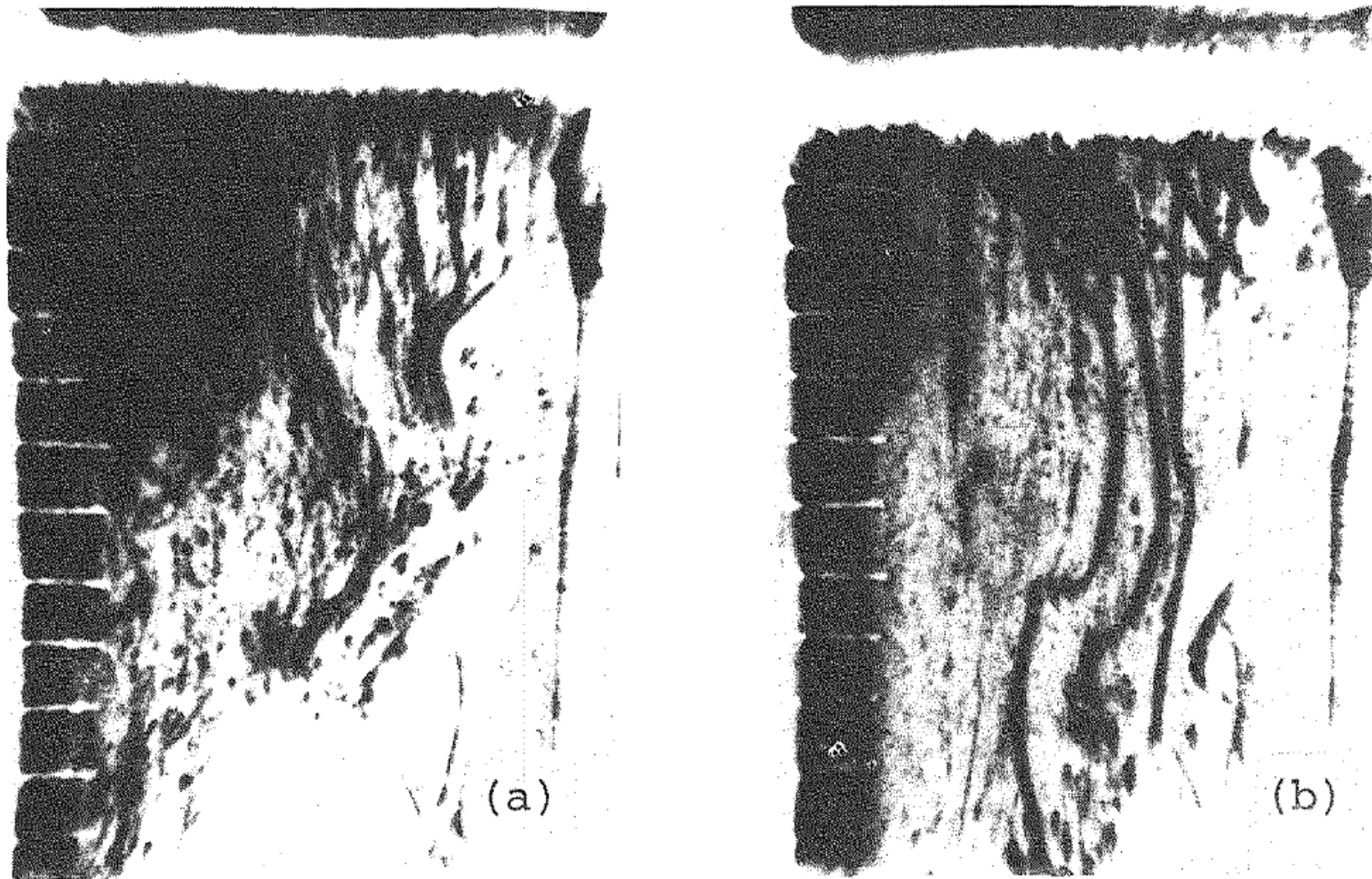


# Polynyas, Ice Factories, Under-Waterfalls ...



Kick-starting the World's Ocean Engine



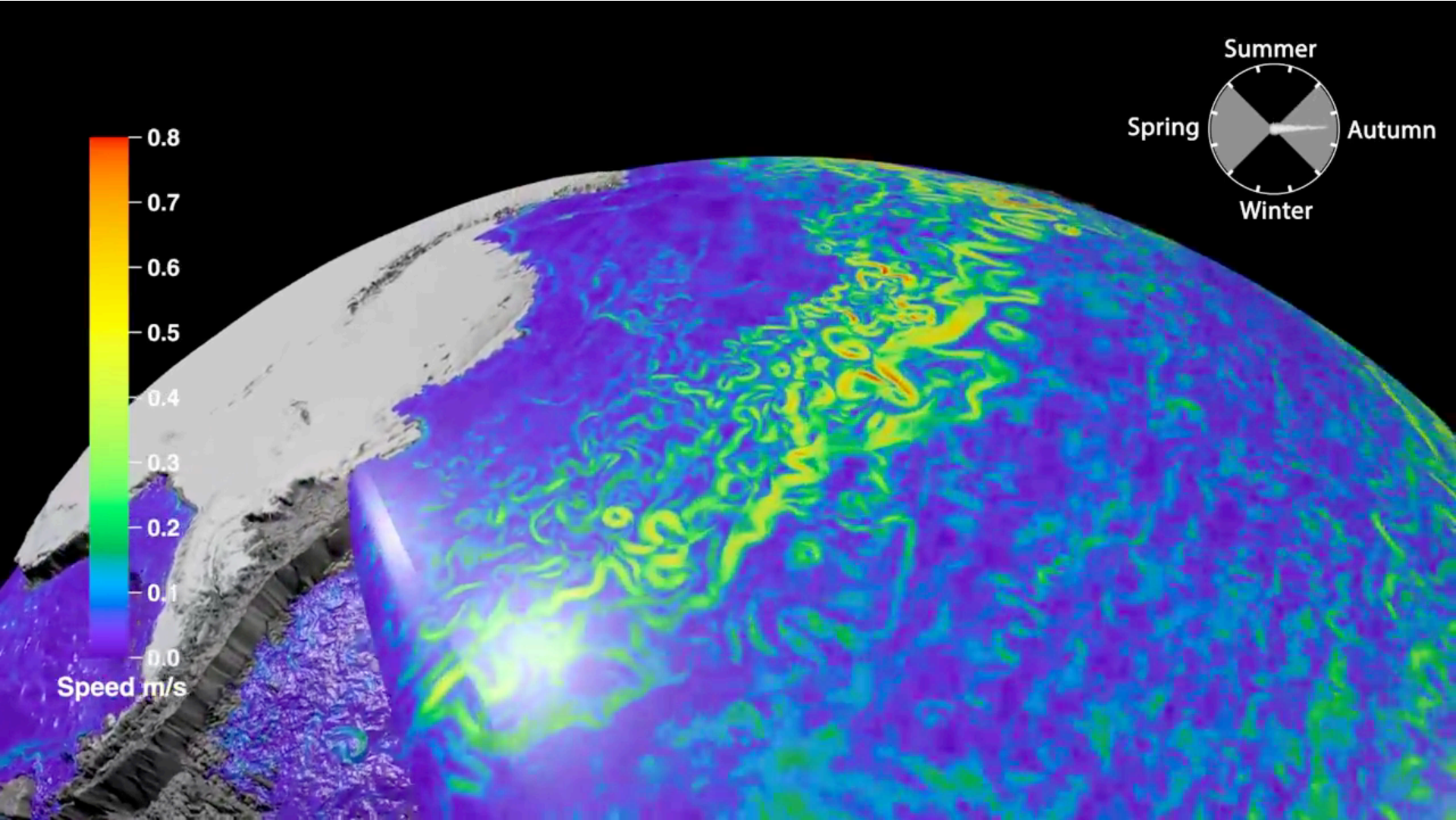
**Fig. 18** Schlieren photographs of brine filaments falling from the front of growing sea ice into the underlying seawater at (a) a higher (about  $0.51 \text{ cm} \cdot \text{h}^{-1}$ ) and (b) a lower (about  $0.32 \text{ cm} \cdot \text{h}^{-1}$ ) growth rate. The upper horizontal bright part is the growing sea ice. A scale of 2-cm interval is indicated on the left.



*Storm at Mawson Hut / Frank Hurley, 1911-1914, [State Library of New South Wales](#).*



## *Circulation of the Southern Ocean: Antarctic Bottom Water Formation*



## *The Thermohaline Circulation (The Great Ocean Conveyor Belt)*



**NASA** - [https://www.youtube.com/watch?v=3niR\\_-Kv4SM](https://www.youtube.com/watch?v=3niR_-Kv4SM)