



Our Changing Climate

Fragmentation of the Filchner Ice Shelf

Antarctica has two great ice shelves: the Ross Ice Shelf near the Ross Sea and the Filchner Ice Shelf near the Antarctic Peninsula. By volume, the Filchner Ice Shelf is the largest ice shelf on the planet. In the austral winter of 1986, the front edge of the Filchner Ice Shelf broke off into the ocean, forming three enormous icebergs —A22, A23 and A24. In early

1990 A24 broke free and moved out into the open waters of the Weddell Sea and finally, in 1991, into the southern Atlantic Ocean. In the 1986 image above, notice how the break line created when the icebergs calved has filled with sea ice. Sea ice does not contain the flow lines that are apparent in the glacial ice of the shelf that lies behind the break line.