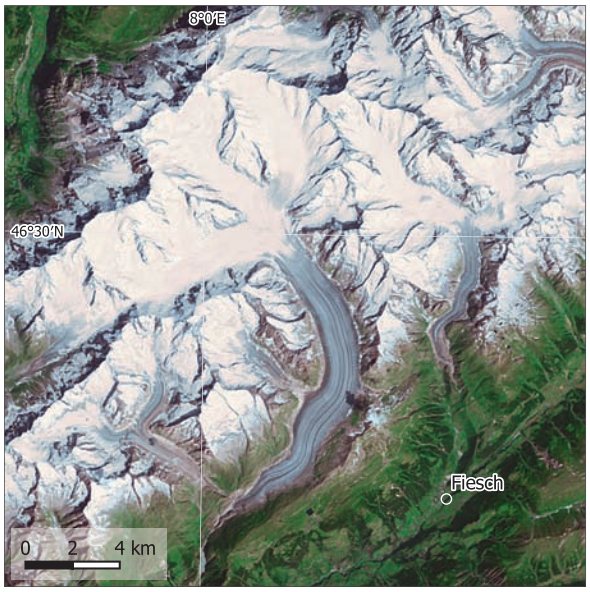
Aletsch Glacier, Switzerland

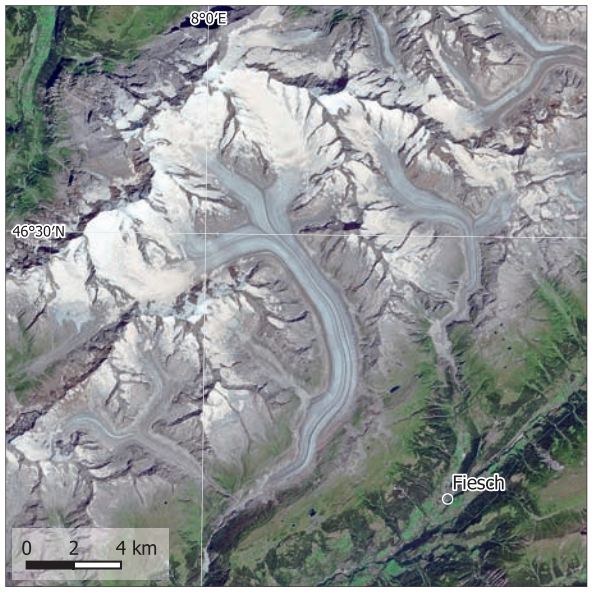
With a total length of almost 23 kilometres and an area of approximately 80 square kilometres, the Aletsch Glacier is the largest glacier in the Alps. Its ice reaches a thickness of up to 900 metres, forming a frozen river that winds its way through the rugged mountain landscape.

The effects of climate change are taking a toll on the Aletsch Glacier, as it is the case with most alpine glaciers. Over the past century, it has been retreating at an increasing rate of about 100 metres per year. Satellite data has shown that the Aletsch Glacier has lost almost 2 kilometres in length since the 1980s. Rising global temperatures are causing the glacier to lose more ice through melting than it gains through snowfall. This imbalance threatens not only the glacier's size but also the ecosystems that depend on it.

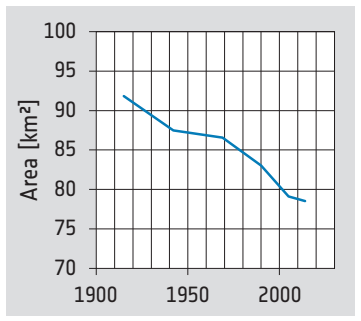
6. View of the Aletsch Glacier, showing the crevasses and the rubble of the moraines.



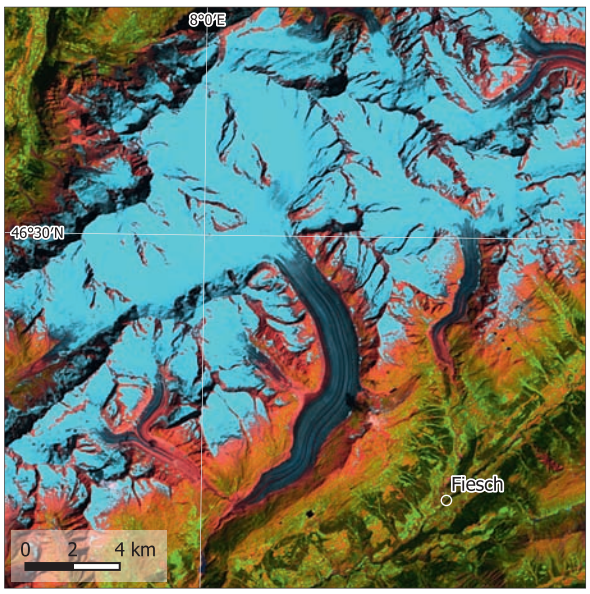
7. True colour image of the extent of the Aletsch Glacier in 1985. Data: Landsat 5, 1985-07-26.



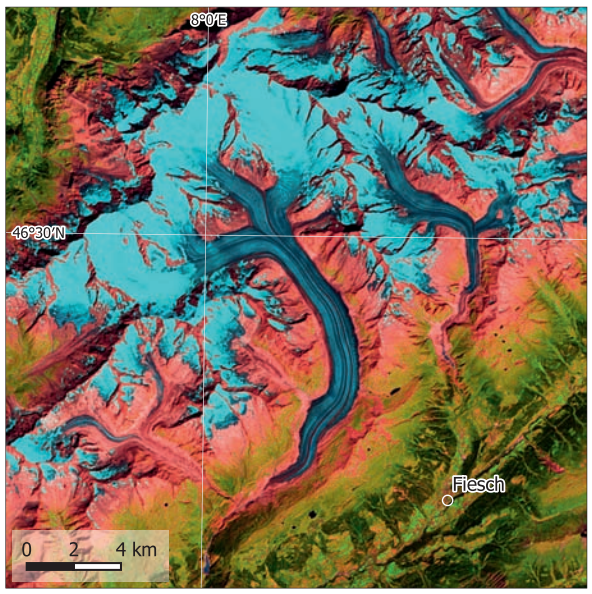
8. True colour image of the extent of the Aletsch Glacier in 2022. Data: Sentinel-2, 2022-07-13.



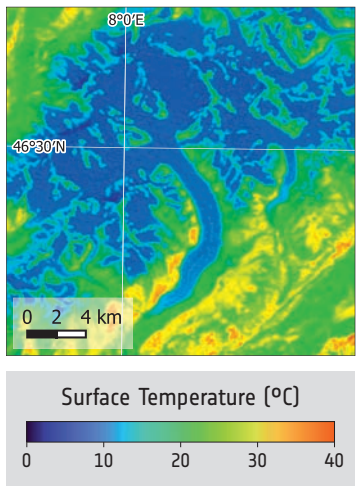
11. Aletsch Glacier, change in area since 1915.



9. False-colour infrared image (bands 5-4-3) of the Aletsch Glacier in 1985, highlighting ice in dark blue and snow in light blue colours. Data: Landsat 5, 1985-07-26.



10. False-colour infrared image (bands 11-7-4) of the Aletsch Glacier in 2022, highlighting ice in dark blue and snow in light blue colours. Data: Sentinel-2, 2022-07-13.



12. Thermal infrared image of the Aletsch Glacier in July 1985 (dark blue: temperature ~0 °C). Data: Landsat 5, 1985-07-26