

# Fiordland National Park, Southern Alps, New Zealand

Sentinel-2 MSI acquired on 18 June 2020 at 22:48:09 UTC

Sentinel-2 MSI acquired on 18 June 2021 at 22:48:11 UTC

Sentinel-1 CSAR IW acquired on 15 July 2021 from 17:48:34 to 17:48:59 UTC

Sentinel-1 CSAR IW acquired on 25 July 2021 at 07:46:21 UTC

Sentinel-1 CSAR IW acquired on 30 July 2021 from 07:53:56 to 07:54:25 UTC

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[2D Layerstack](#)

Fig. 1 - S2 (18.06.2020) - Fiordland National Park lies in the Southern Alps in New Zealand.

[3D view](#)

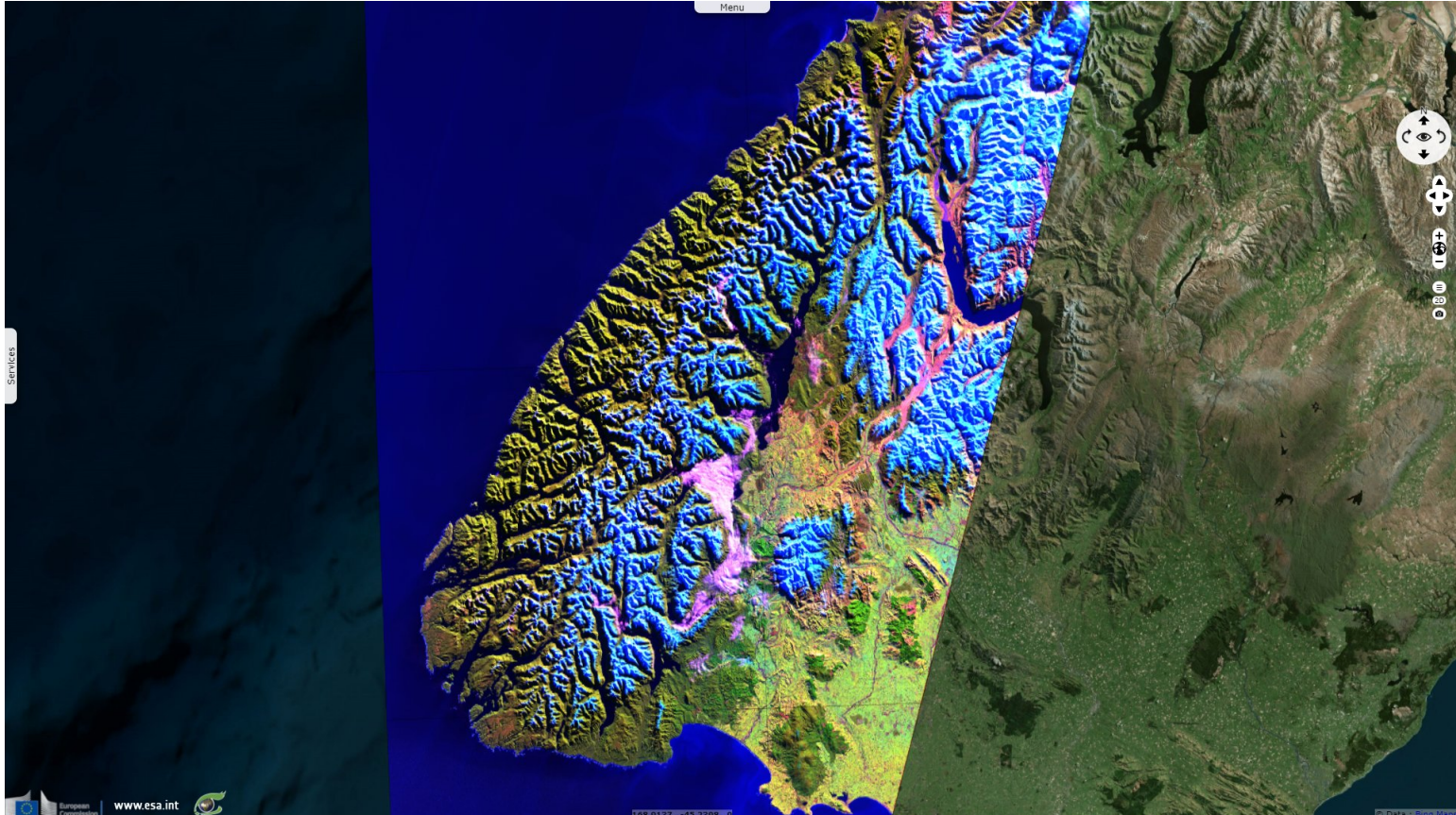


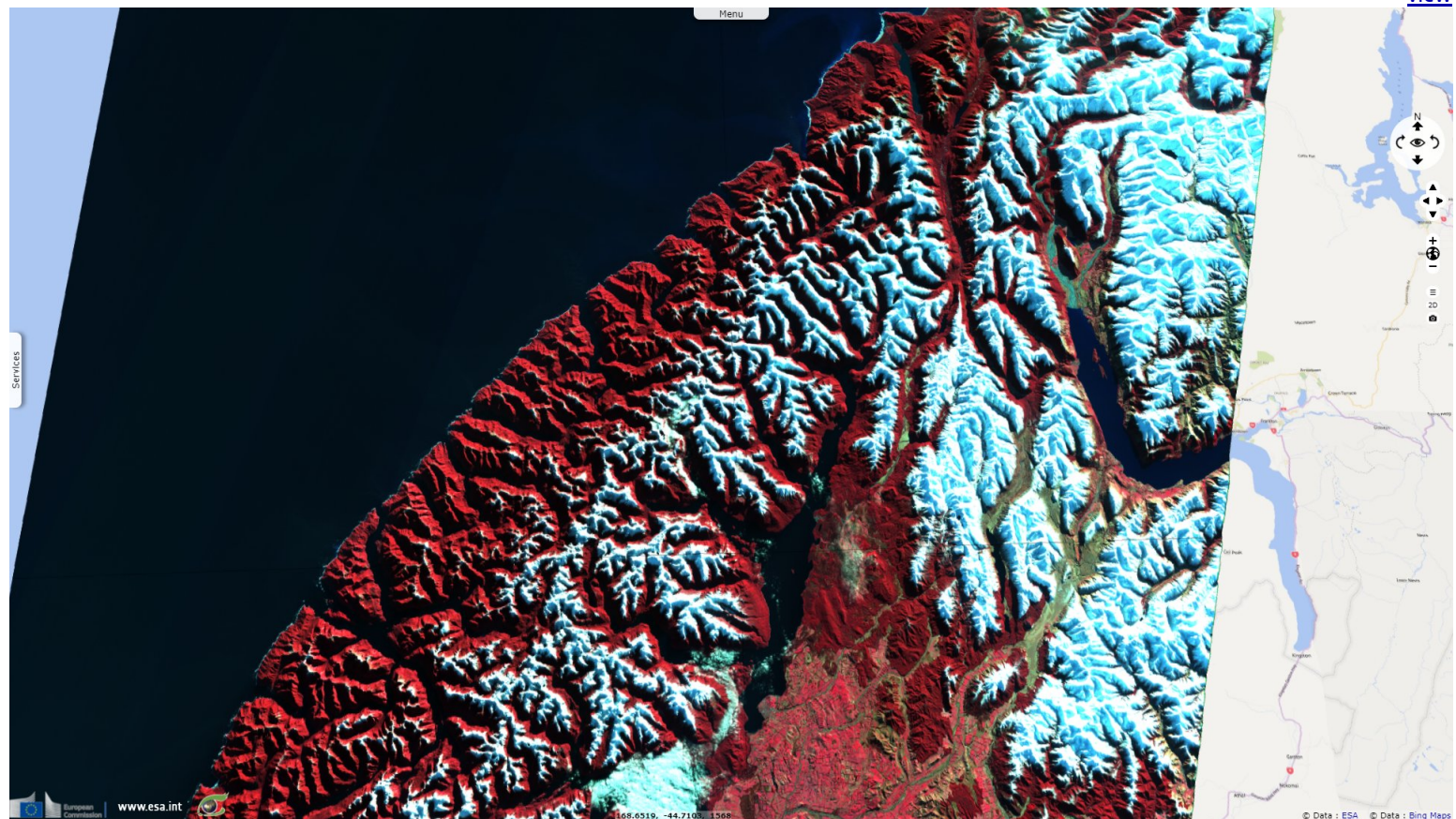
Fig. 2 - S1 (15.07.2021) - This landscape of fjords, mountains & glacial lakes has remained in pristine state due to its remoteness.

[3D view](#)



Fig. 3 - S2 (18.06.2020) - The higher elevations of the Southern Alps are located further north, the northern half of the park is also the highest.

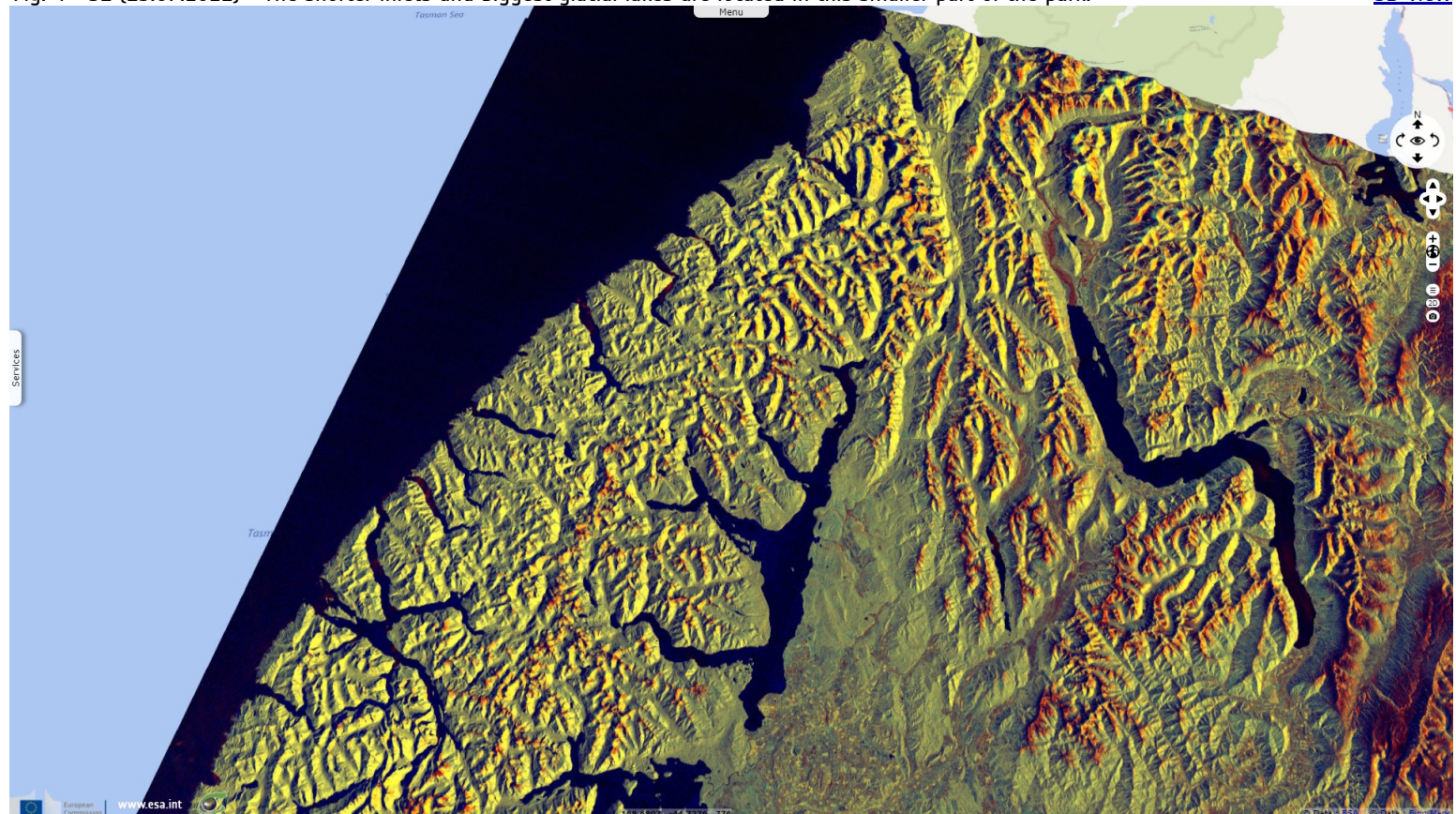
[3D view](#)



Fiordland National Park is one of New Zealand's treasured natural icons and is internationally recognised as part of the wider UNESCO World Heritage site, Te Wāhipounamu (Place of the Greenstone). The UNESCO World Heritage sheet [describes](#) the park as follows: "*Located in the south-west corner of New Zealand's South Island, Te Wāhipounamu – South West New Zealand covers 10% of New Zealand's landmass (2.6 million hectares) and is spread over a 450 km strip extending inland 40 - 90 km from the Tasman Sea. The property exhibits many classic examples of the tectonic, climatic, and glacial processes that have shaped the earth.*"

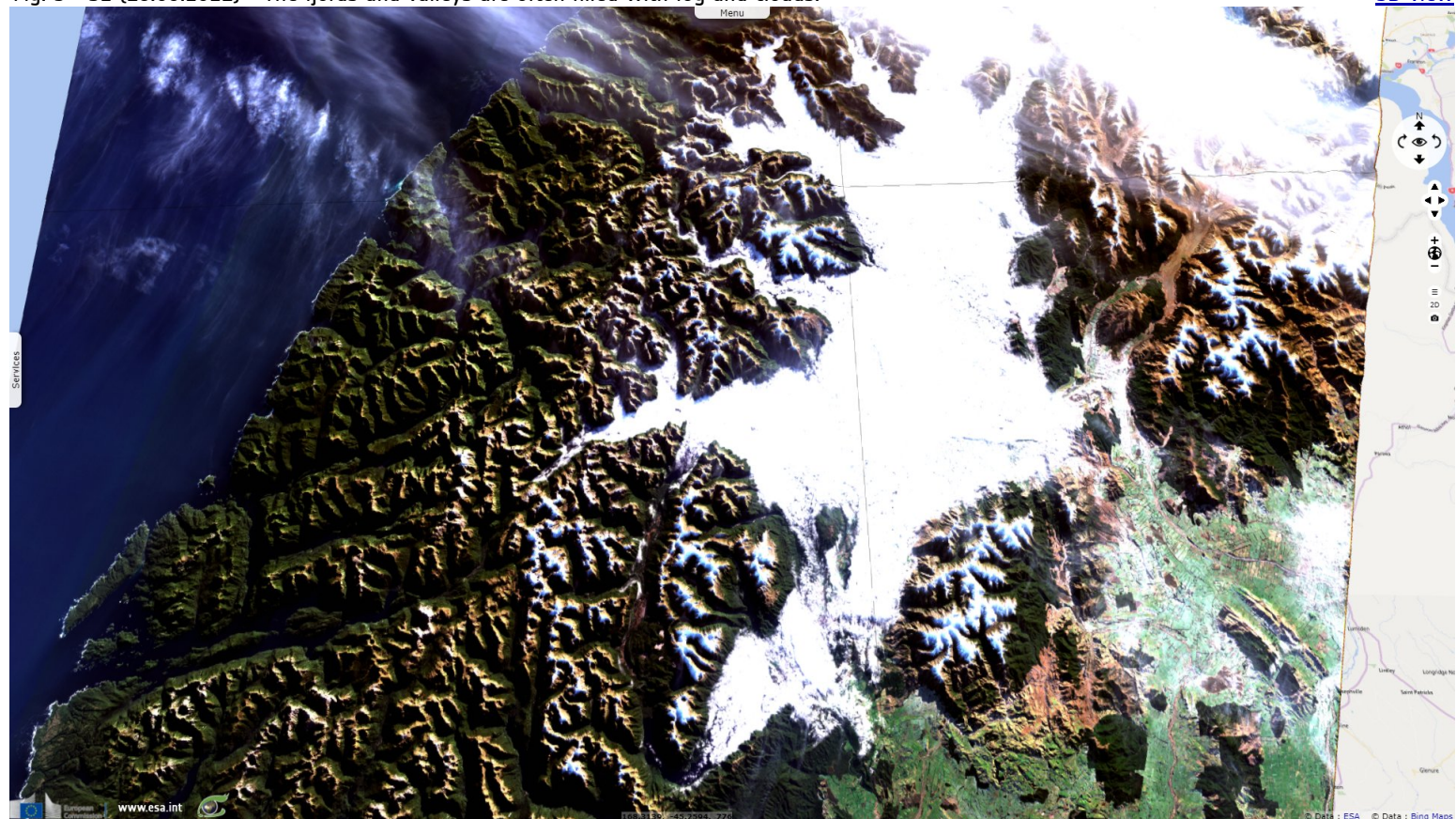
Fig. 4 - S1 (15.07.2021) - The shorter inlets and biggest glacial lakes are located in this smaller part of the park.

[3D view](#)



"The great Alpine Fault divides the region and marks the contact zone of the Indo-Australian and Pacific continental plates making it one of only three segments of the world's major plate boundaries on land. Collision between the two tectonic plates constructs the main mountain range, known as the Southern Alps/Kā Tiritiri o te Moana, which rise to nearly 4000 m altitude within a mere 30 km from the sea."

Fig. 5 - S2 (18.06.2021) - The fjords and valleys are often filled with fog and clouds.



"Overwhelmingly a mountainous wilderness, including significant piedmont surfaces in the north-west glaciation, both historic and modern, is a dominant landscape feature". Among its spectacular landforms, it includes the 15 fiords which deeply indent the Fiordland coastline.

Fig. 6 - S2 (18.06.2020) - The deeper, more complex fjords lie in the southern half of Fiordland park.



The official National Park website [adds](#): "It is home to glaciers, alpine ranges and unique flora and fauna that has been in existence since New Zealand was part of the supercontinent Gondwanaland. Fiordland National Park itself covers 1.2 million hectares of mountain, lake, fiord and rainforest environments and is administered by the Department of Conservation. Human activity within Fiordland has been limited because of its challenging and wild landscapes."

Fig. 7 - S2 (18.06.2021) - Same date a year later, the snow cover is much lower.

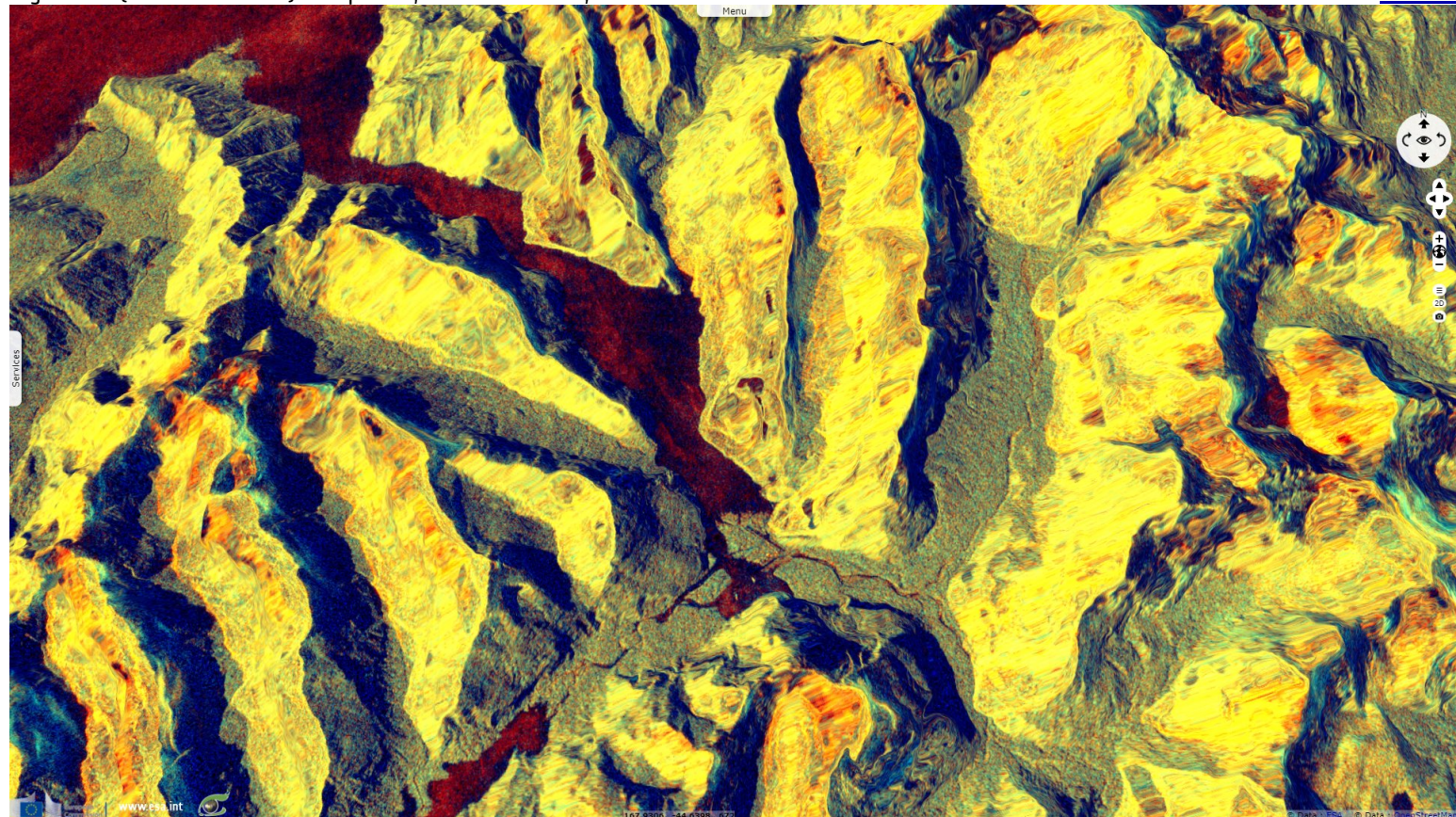
[3D view](#)



*"Early Māori visited Fiordland for hunting, fishing and gathering takiwai (a unique form of New Zealand jade or pounamu). Much later, European sealers and whalers took shelter in the fiords and built a handful of small settlements, these being New Zealand's earliest European settlements. But overall the sheer steepness of the terrain, the incredible isolation, and the wettest climate in New Zealand deterred all but the hardest from settling in the region."*

Fig. 8 - S1 (25 & 30.07.2021) - Piopiotahi, or Milford Sound, at north-west of the Park

[3D view](#)

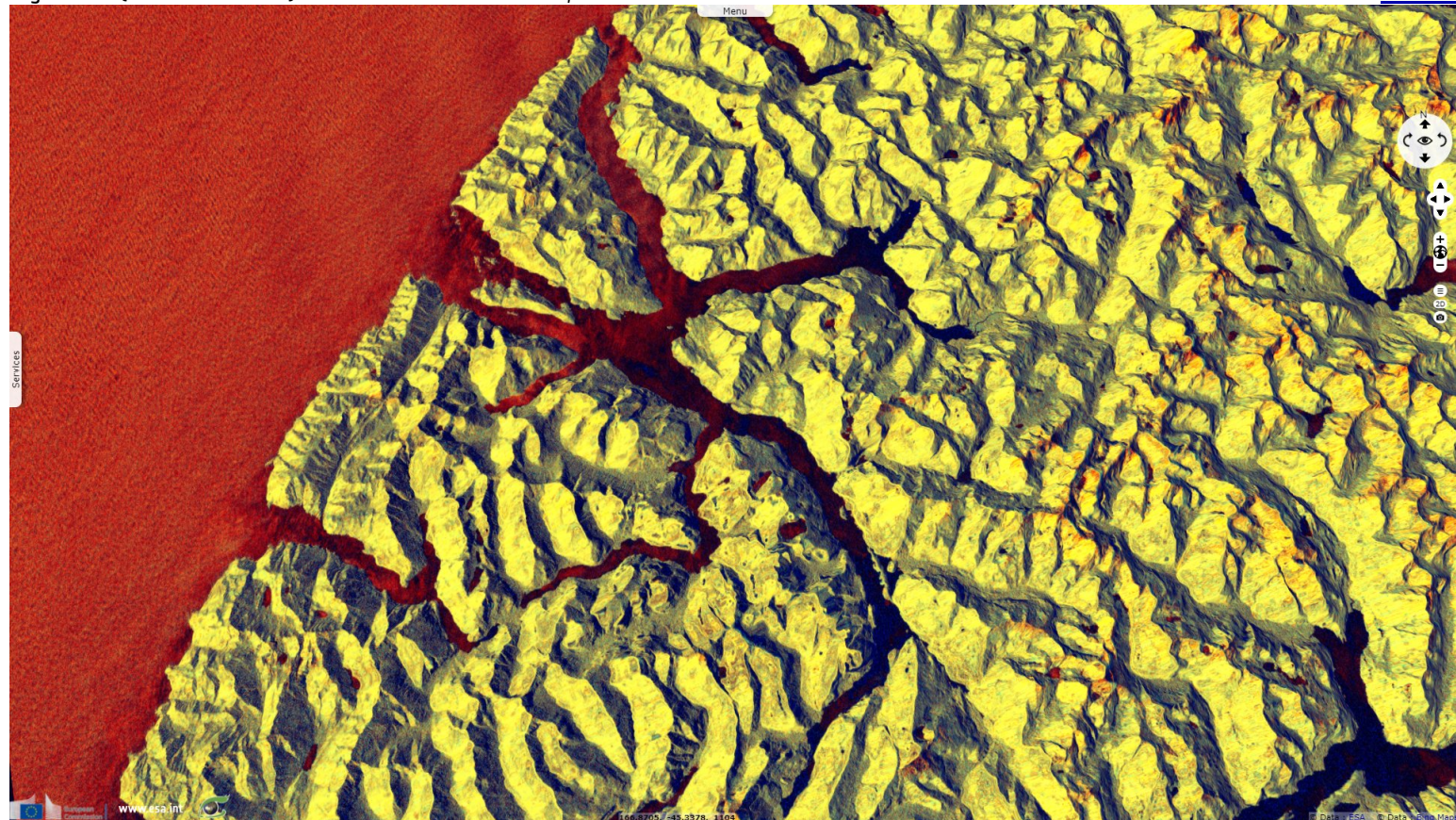


The park's most visited feature is Piopiotahi or Milford Sound, [described](#) as follows: *"Beginning under the watchful eye of Rahotu / Mitre Peak, Piopiotahi / Milford Sound runs 16 kilometres to the Tasman Sea. Within this steep and narrow, glacially-carved valley, a treasure-trove of ecological delights awaits. Discover dolphins, penguins and seals safe within the protection of the Piopiotahi (Milford Sound) Marine Reserve."*

*Piopiotahi / Milford Sound is a landscape commanded by water. The area receives around 6.5 - 7 metres of rainfall each year and has been known to receive up to 9 metres, making it the wettest inhabited place on the planet."*

Fig. 9 - S1 (25 & 30.07.2021) - Patea aka Doubtful Sound, further south-west.

[3D view](#)



More remote and deeper, Patea, known in English as Doubtful Sound is [advertised](#) as such: "Patea / Doubtful Sound spans a staggering 40 kilometres from the head of the fiord to the Tasman Sea. It is the deepest of New Zealand's 14 fiords. The fiord branches into three arms. With no road to the fiord, the experience of getting to Doubtful Sound is an adventure in itself. Patea / Doubtful Sound is only accessible to visitors by a tour excursion departing from Manapouri."

Fig. 10 - S2 (18.06.2020) - Dusky Sound, at the western extent of Fiordland National Park.

[3D view](#)

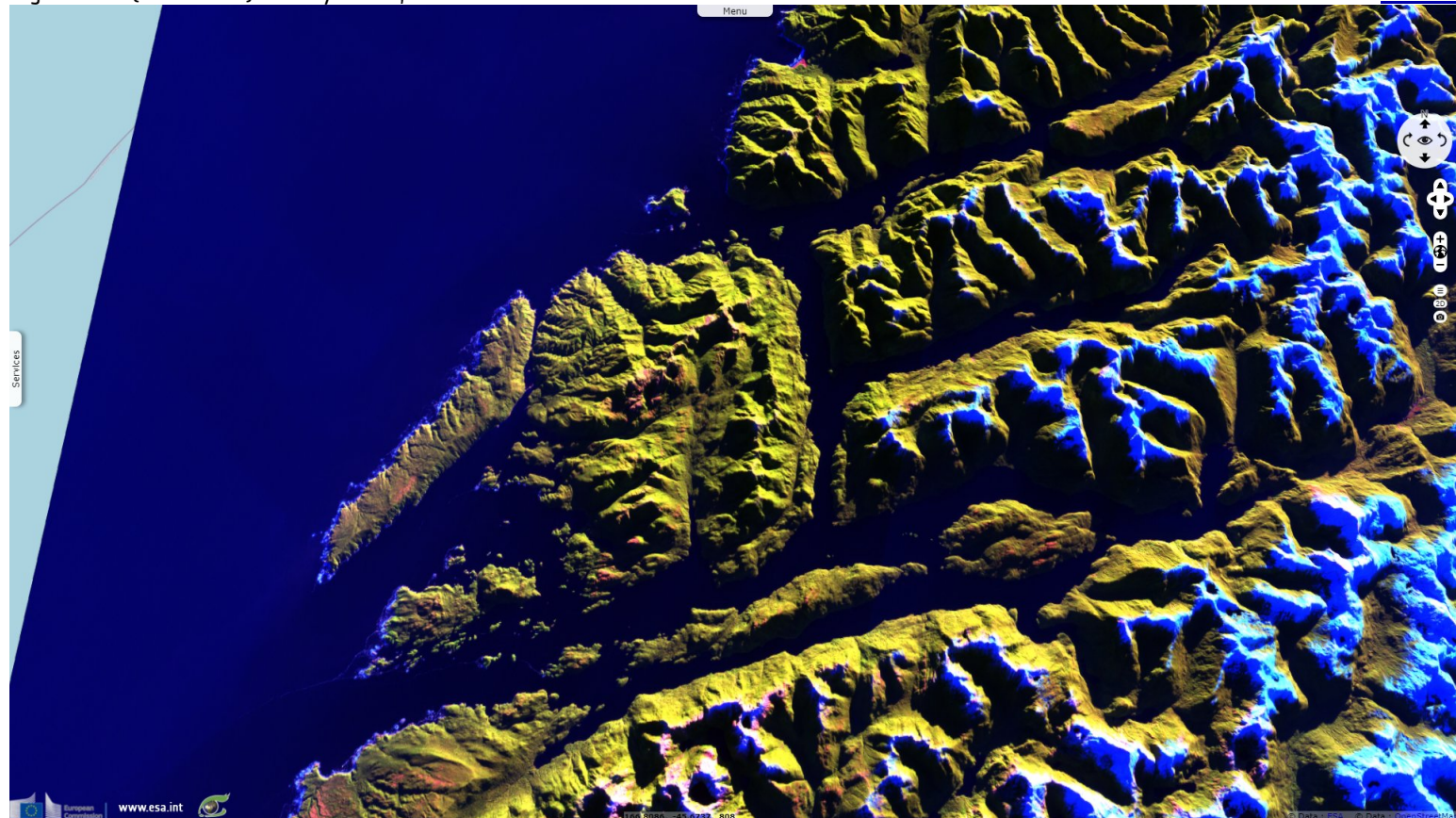
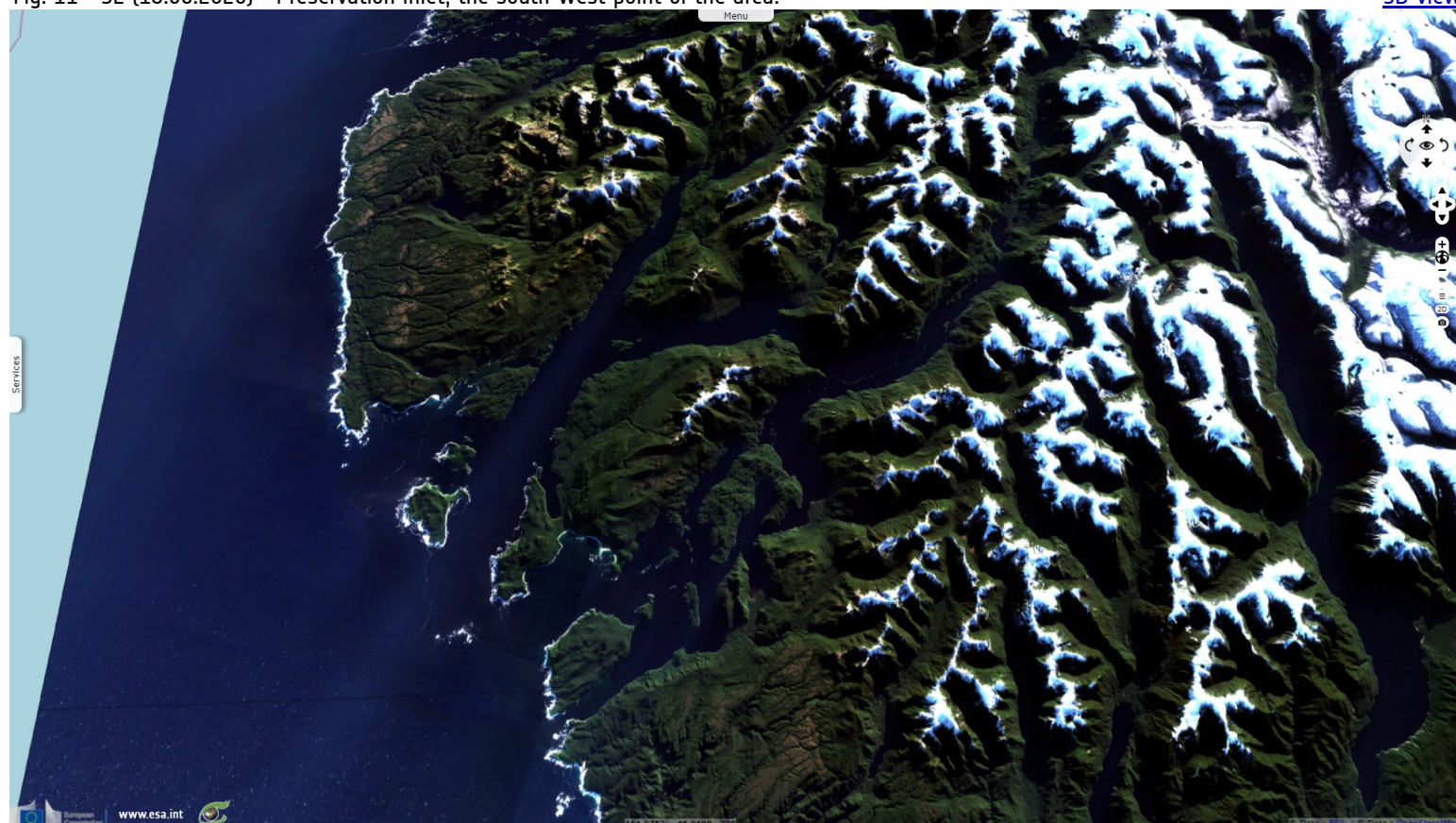


Fig. 11 - S2 (18.06.2020) - Preservation inlet, the south-west point of the area.

[3D view](#)



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