

Col du Soufre

Tarentaise - LES ALLUES

En direction du Col du Soufre (Isabelle MIRA)



A one or two day hike with overnight stay at the Refuge du Saut following in the footsteps of the glaciers from the Plan de Tuéda National Nature Reserve. From the valley to the pass, through the forest, alpine pastures, mineral landscapes and finally the glaciers!

""I am always dazzled by the diversity of colours and geological variety encountered on this route. In addition to the stunning views, you will be disoriented like I was by this high mountain glacial atmosphere which, like the desert, is conducive to serenity and meditation." Danièle Bonnevie, Vanoise National Park ranger"

Useful information

Practice : Walking hike

Duration : 9 h

Length : 23.3 km

Trek ascent : 1173 m

Difficulty : Difficult

Type : Return

Themes : Lake and glacier

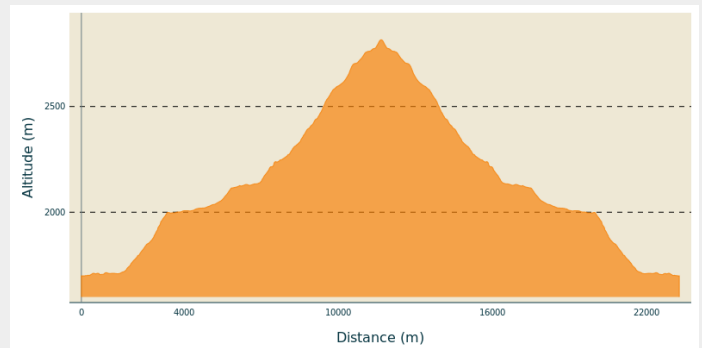
Trek

Departure : Méribel-Mottaret car park, Les Allues

Arrival : Méribel-Mottaret car park, Les Allues

Cities : 1. LES ALLUES
2. PRALOGNAN-LA-VANOISE

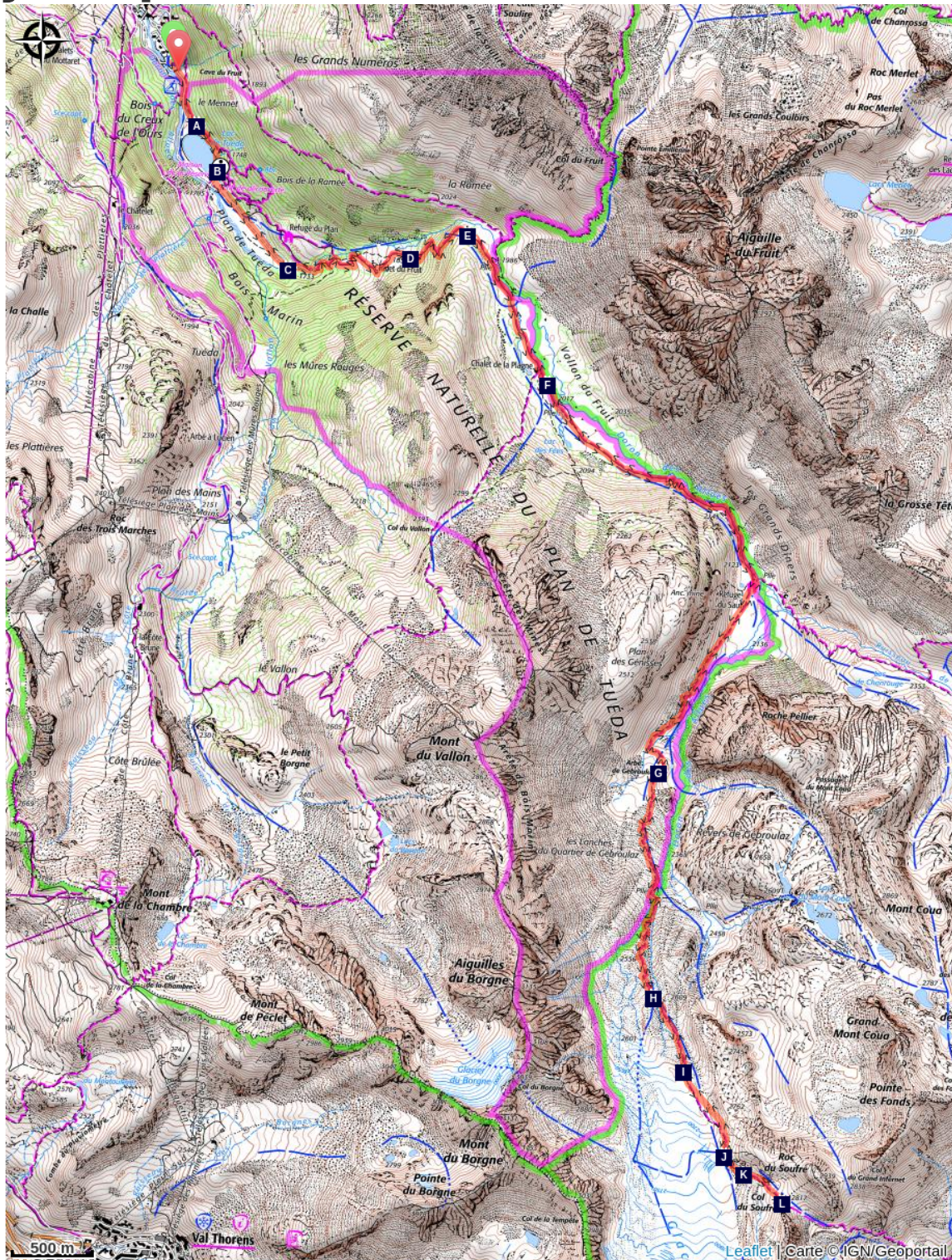
Altimetric profile



Min elevation 1699 m Max elevation 2817 m

"From the Méribel-Mottaret car park, follow the vehicle track that runs through the Tuéda plateau. Still on the track, climb up to the bar to reach the Plateau du Fruit, up to the Refuge du Saut. At the refuge take the valley on the right, in the direction of ""Col du Soufre"". Please note that this route has no amenities. Follow the valley and on the left of the glacial tongue of Gébroulaz, go as far as the Col du Soufre. To return, follow the same route."

On your path...



- ❁ Ibex in Marseille? (A)
- ❁ A glacier! How does it work? (C)
- ❁ A small plane cutter! (E)
- ❁ Living memories (G)
- ❁ Before the "Chasseurs Alpains" (Alpine Hunters) (I)
- ❁ View over the Gébroulaz Glacier (K)
- ❁ Plan de Tueda National Nature Reserve Centre (B)
- ❁ A reserve for a bird and a tree (D)
- ❁ Back and forth! (F)
- ❁ White, black and fossil. (H)
- ❁ Shrinking away. (J)
- ❁ Fallen soldiers. (L)

All useful information

Is in the midst of the park

The national park is an unrestricted natural area but subjected to regulations which must be known by all visitors.

Advices

Dogs are not permitted beyond the Plan de Tuéda plateau; take a sufficient supply of water for the day. An overnight stay at the Refuge du Saut is possible upon reservation to split the itinerary over 2 days. Make sure you take the IGN map 25 card n ° 3534 OT “Les Trois Vallées”; route recommended in August, after the snow has melted. Part of the route runs through a nature reserve; refer to the reserve’s specific regulations.

How to come ?

Transports

“

Rail connection to Moûtiers. Information: www.voyages-sncf.com

Then transport by coach to Méribel-Mottaret. Information: www.transavoie.com.

Also think about car-sharing with www.mobisavoie.fr

”

Access

From Moûtiers follow the RD 915 in the direction of “Bozel”. When you reach Brides les Bains, follow Les Allues via the RD 90 as far as Méribel-Mottaret. Park in the car park at the end of the road, at the entrance of the Plan de Tuéda Nature Reserve.

Advised parking

Méribel-Mottaret

Accessibility

NO

Environmental sensitive areas

Along your trek, you will go through sensitive areas related to the presence of a specific species or environment. In these areas, an appropriate behaviour allows to contribute to their preservation. For detailed information, specific forms are accessible for each area.

Réserve naturelle nationale de Tuéda - bas

Sensitivity period: January, February, March, April, May, November, Decembre

Contact:

Nicolas Gomez - conservateur de la réserve naturelle nationale de Tuéda -
nicolas.gomez@vanoise-parcnational.fr
04 79 08 60 81 ou 04 79 01 04 75

Cette zone est sensible pour le Tétrasyre notamment.

En période enneigée, quelle que soit l'épaisseur de neige, la pénétration des zones de quiétude de la Réserve naturelle nationale de Tuéda est interdite par l'arrêté préfectoral n°2018/88, en application du décret du 12 juillet 1990.

Ainsi, le ski et la raquette sont interdits sauf sur certains couloirs (piste de l'Ours, itinéraires, plateau de Tuéda).

Cette interdiction ne s'applique pas :

- aux activités cynégétiques réglementées par le décret de création de la réserve et le plan de chasse de la réserve.
- aux agences de l'OFB, ONF, gendarmerie nationale ainsi qu'aux agents de la réserve dans l'exercice de leurs missions.
- aux services de secours ou de sauvetage aux personnes, hors exercices

Réserve naturelle nationale de Tuéda - haut

Sensitivity period: January, February, March, April, May, November, Decembre

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nicolas.gomez@vanoise-parcnational.fr

04 79 08 60 81 ou 04 79 01 04 75

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Réserve naturelle nationale de Tuéda - centre

Sensitivity period: January, February, March, April, May, November, Decembre

Contact:

Nicolas Gomez - conservateur de la réserve naturelle nationale de Tuéda -
nicolas.gomez@vanoise-parcnational.fr
04 79 08 60 81 ou 04 79 01 04 75

Cette zone est sensible pour le Tétrás-lyre notamment.

En période enneigée, quelle que soit l'épaisseur de neige, la pénétration des zones de quiétude de la Réserve naturelle nationale de Tuéda est interdite par l'arrêté préfectoral n°2018/88, en application du décret du 12 juillet 1990.

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- aux services de secours ou de sauvetage aux personnes, hors exercices

Alpine ibex - winter

Sensitivity period: January, February, March, Decembre

Contact:

Parc national de la Vanoise - Nicolas Gomez -
nicolas.gomez@vanoise-parcnational.fr

La Réserve naturelle nationale de Plan de Tuéda abrite des populations de bouquetins en hiver.

Les milieux sont favorables : bonne exposition, gradient altitudinal, altitude élevée, zones escarpées.

Même très limitée, la fréquentation hivernale peut générer des perturbations pour la faune sauvage à une époque où elle doit limiter strictement ses dépenses énergétiques.

Les activités hivernales telles que le ski hors-piste, le ski de randonnée ou la raquette sont à éviter dans les zones concernées par l'hivernage du bouquetin.

Alpine ibex - winter

Sensitivity period: January, February, March, Decembre

Contact:

Parc national de la Vanoise - Nicolas Gomez -
nicolas.gomez@vanoise-parcnational.fr

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Les activités hivernales telles que le ski hors-piste, le ski de randonnée ou la raquette sont à éviter dans les zones concernées par l'hivernage du bouquetin.

Cette zone fait aussi l'objet d'une interdiction réglementaire de toutes activités, liée à la présence du Tétrás-Lyre.

Information desks

Maison de la Réserve Naturelle du Plan de Tuéda

Maison de la Réserve de Tueda, Mottaret,
Lac de Tuéda, 73550 Méribel

maisonreserve.tueda@vanoise-parcnational.fr

Tel : 04 79 01 04 75 / 04 79 62 30 54

<https://www.vanoise-parcnational.fr>

Méribel Tourisme

27 Place Maurice Front, 73550 Méribel

info@meribel.net

Tel : 04 79 08 60 01

<https://www.meribel.net>

On your path...



❄ Ibex in Marseille? (A)

Imagine 20,000 years ago, Lyon, Chambéry and Grenoble are drowned in an ocean of ice. Corsica and Great Britain are no longer islands because the level of the oceans is 100 m lower, and our ancestors hunt ibex and the European bison around Marseilles. Here, ice more than 1,000 m thick crushes you. Over the previous 2 million years, the periods of advancement and glacial retreat alternate every 100,000 years to the rhythm of the changing climate.

Attribution : PNV - IMBERDIS Ludovic



✿ Plan de Tueda National Nature Reserve Centre (B)

The National Nature Reserve was created in 1990 and is managed by Vanoise National Park. Plan de Tueda National Nature Reserve is located downstream of Vanoise National Park in the municipality of Les Allues. It extends from Lake Tueda all the way to the Gébroulaz glacier, encompassing both riverbanks of the Doron des Allues: in total there are 1,100 protected hectares of outstanding natural scenery to explore (and respect)! You can find out all about the secrets of the reserve's biodiversity and the Swiss pine and its forest through a free exhibition and a range of activities all year round. Your host at Vanoise National Park can also answer any questions about the park, forthcoming events and walks in the area if you'd like to extend your outing (you can book guided outings with the Park's warden-instructors). There is also a shop, where you can pick up a little souvenir of the Park to take home with you! And if you still want to find out more, head to the nearby glaciological trail for a fuller understanding of the landscape and the valley's history. In the summer only, there's also a botany trail to enjoy and tours of the reserve are organised by the warden.

The centre is located in the Nature Reserve, so please follow the regulations. Dogs are not allowed in the Reserve, and may only be taken around the lake on a lead.

Open in the summer.

Maison de la Réserve de Tueda - Mottaret
Meribel Mottaret - Lac de Tuéda
73550 Les Allues

Tel.: +33 (0)4 79 01 04 75

<http://www.vanoise-parcnational.fr/>
Free

Attribution : Sylvain Aymoz



❁ A glacier! How does it work? (C)

The snow falls and then compacts by the successive accumulation of layers. It becomes névé when it moves from a density of 100g/l to 500g/l. Depending on the altitude and its exposure to the sun, the névé stops melting in summer. The accumulation of these successive névés causes the formation of ice due to compression. Its density is then 900 g / l. Under the effect of the slope and its own weight, the glacial tongue begins to slide. The crevice between the névé and the glacier is called the “bergschrund”.

Attribution : PNV - BENOIT Philippe



❁ A reserve for a bird and a tree (D)

Since its creation in 1990, the Plan de Tuéda Nature Reserve has focused its preservation work on the cembro pine forest and the black grouse. This bird is an arctic-alpine relict. Its history is intertwined with that of the glaciers. During the last ice age, our galliform was pushed back to Southern Europe by the advancing glaciers and in their retreat, some chose to ascend in altitude while others went back up to Northern Europe. As a consequence, these populations were separated.

Attribution : PNV - FOLLIET Patrick

❁ A small plane cutter! (E)

"The glaciers behave like very large ""planes"". In a period of advance, they tear blocks of rock out of the mountain and crush them. Depending on the hardness of the rocks, this erosion happens relatively quickly. There is therefore a “rock bar” downstream of each glacial plateau. The slopes that you’ve just passed between the plateau of Plan de Tuéda and that of the Fruit are a fine example of this."



❁ Back and forth! (F)

The glacier deposits and moves all rock debris that it tears from the mountain to the rhythm of these advances and subsequent retreats. These mounds are called “lateral moraines” when they are deposited on the sides of the glacier and “frontal moraines” when they are on the former glacial front. Behind the rock bars and moraines, glacial lakes can form. They generally disappear as a result of the filling or splitting of the dykes created by the moraines.

Attribution : Jean-Pierre Perrier

❁ Living memories (G)

You will find yourself on the last “rock bar” cleared by the Gébroulaz glacier. Towards 1730, the “Sarde map” (land registry of the kingdom of Piedmont-Sardinia) identifies the glacial threshold at the foot of this “rock bar”. This glacier is followed between 1907 and 1965 by the Eaux et Forêts (Forestry and Water), and from 1991 by the CNRS (French National Centre for Scientific Research). It is part of a network of 9 worldwide glaciers (5 Alpine, 2 Andean and 2 Antarctic) used for the long-term monitoring of glacial and meteorological data.



❁ White, black and fossil. (H)

"There are 3 types of continental glaciers: the ""white"" glaciers, such as Gébroulaz, where the ice is visible year-round and flows along the slope. The ""black"" glaciers, such as the one in the Col du Grand Infernet, are covered with stones and continue to flow. And finally the ""fossil"" glaciers, which subsist only in the form of traces of pebbles that take a concentric form (small waves) and where the ice has disappeared completely. The latter are immobile. This is the case below the Col du Fruit in this valley!"

Attribution : PNV - PERRIER Jacques



❁ Before the “Chasseurs Alpains” (Alpine Hunters) (I)

Wearing white camouflage was not invented by the Alpine troops. This discovery is to be attributed both to the mountain hare and another arctic-alpine relict, the rock ptarmigan (*Lagopus mutus*). This cousin of the black grouse trades its summer grey-brown plumage for an entirely white camouflage in winter. And as if this adaptation to the snowy environment were not enough, the bird has also evolved to have furry boots! Its entire claw up to the tip is feathered&hellip, you guessed it, in white.

Attribution : PNV - MOLLARD Maurice

❁ Shrinking away. (J)

"Whereas glacier advance is known during the ""Little Ice Age"" (1600-1850), their retreat in the 150 years that followed is no longer in doubt (example: surface of Gébroulaz in 1965: 420 ha and in 2009: 330 ha). Recent monitoring has given surprising results. The upper part of the glacier (above 3,100 m in altitude) has thickened by 20 metres! Explanation: the glacier passes through a rocky narrowing which compresses it laterally and causes it to swell artificially."



❁ View over the Gébroulaz Glacier (K)

"

The ""glaciers"" have greatly impressed the collective imagination of the Alps and their shrinking forms, in landscape terms, is nothing short of a crime of lèse-majesté. The Gébroulaz glacier is one of the best monitored in France, with certain measures such as topographical maps dating back as far as the twentieth century. The annual measurements, useful for understanding, do not however prevent the glacier from decreasing in surface and thickness, depositing lateral moraines as here in its central zone."

Attribution : Legros. RTM-ONF Chambéry

❁ Fallen soldiers. (L)

"In Vanoise, since the end of the ""Little Ice Age"" (around 1850), the glaciers have lost 50% of their total surface area. It is regretful to witness the disappearing glaciers, such as Coin, Goyard, Nants and those in the Fournache valley. The glaciers of the Dôme de la Vanoise total another 19.6 km², over the 40 km² a century and a half ago."