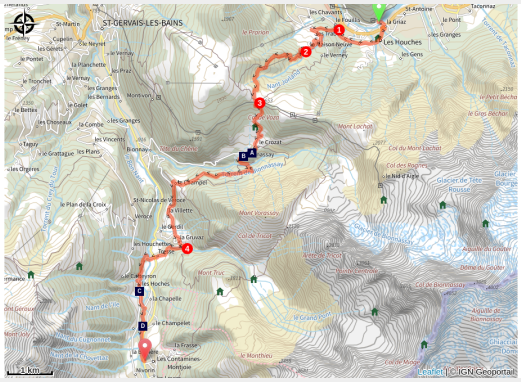
Les Houches - Les Contamines-Montjoie : discovering alpine geology

CC de la Vallée de Chamonix-Mont-Blanc - Les Houches

Le champel (@julietteBuret)



A leg of the Mont-Blanc geological tour. Glaciers and rocks of the massif: resources and associated risks for the inhabitants of the Val Montjoie.

Undoubtedly the most beautiful leg of the tour with untouched and geologically rich environments. Can you recognise a glacial rock bar or a thrust sheet in these landscapes?

Useful information

Practice : Summer hike

Duration : 5 h

Length : 16.9 km

Trek ascent : 1028 m

Difficulty : Medium

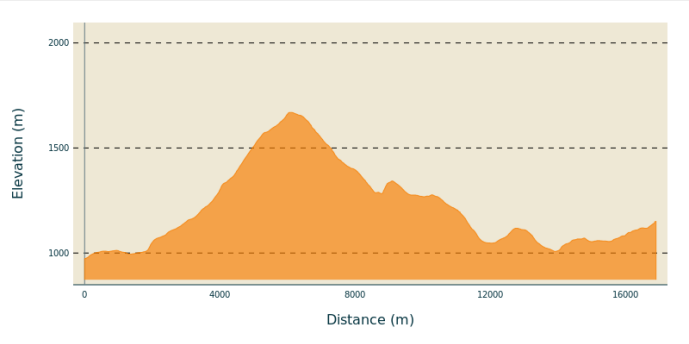
Type : Traversée

Themes : Flora, Géologie, Montagne sans voiture

Trek

Departure : Place de la gare, Les Houches
Arrival : Les Contamines-Montjoie
Cities : 1. Les Houches
2. Saint-Gervais-les-Bains
3. Les Contamines-Montjoie

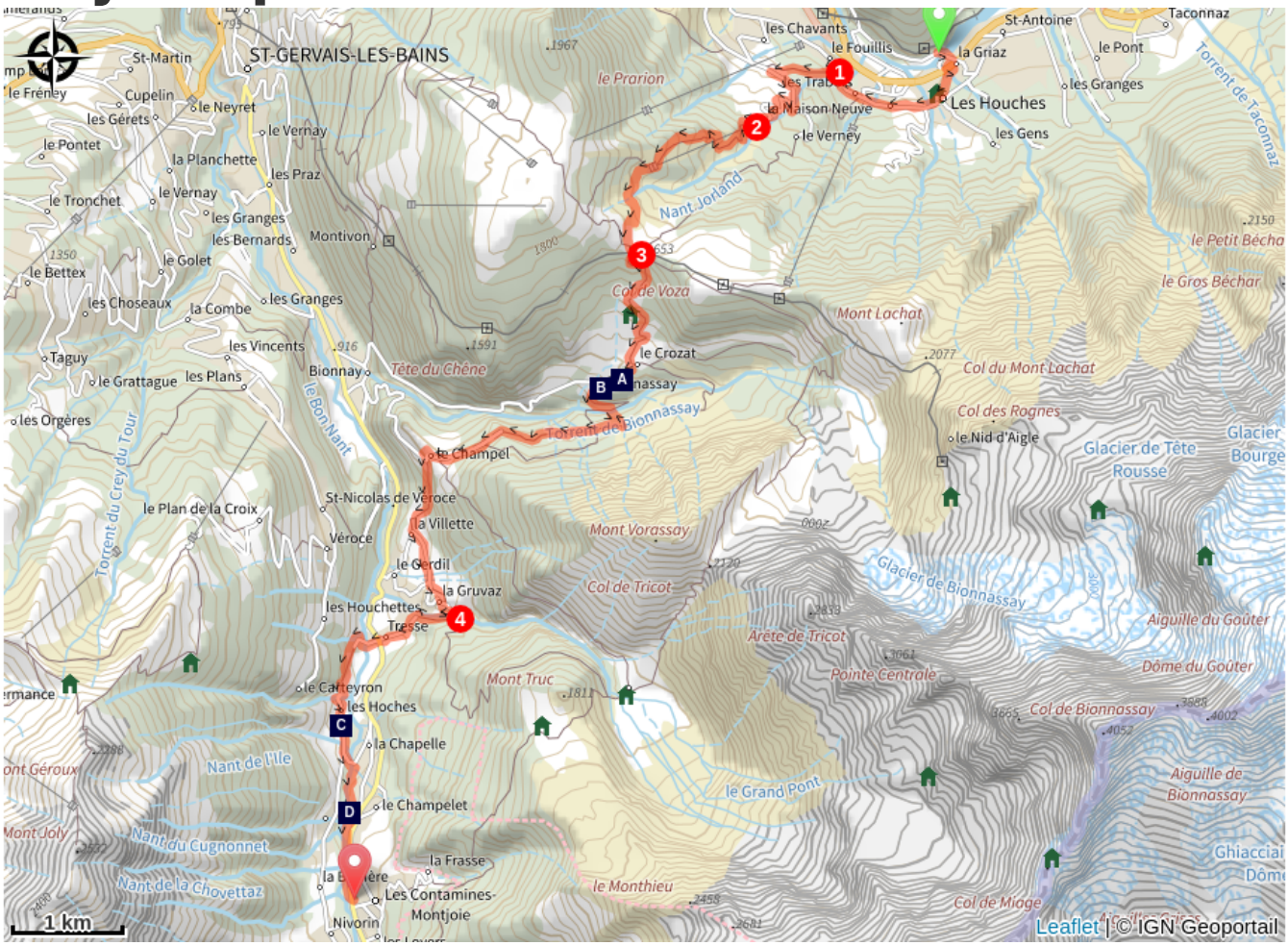
Altimetric profile



Min elevation 973 m Max elevation 1669 m

Follow the white and red TMB (Mont-Blanc Tour) signs. From the station, cross the Arve and follow the road towards the village in the direction of the Col de Voza. Pass under the tunnel Follow the forest track up to the Col de Voza Cross the tramway tracks and follow the track back down to the right towards Bionnassay Cross the Gruvaz car park and exit towards Les Contamines-Montjoie.

On your path...



Cargneules of the Bionnassay chapel (A)

Contamines-Montjoie National Nature Reserve (C)

The Bionnassay glacier (B)

Bon Nant (D)

All useful information

Animaux acceptés

Votre chien est autorisé dans cette zone d'espace naturel. Il est conseillé de le tenir en laisse. À l'approche d'un troupeau, il est obligatoire de lui mettre une laisse. Par sa présence, son odeur et ses déjections, votre chien peut perturber la biodiversité. Sa divagation dans la nature peut avoir des conséquences lourdes pour la faune sauvage et les troupeaux (transmission de germes, stress de la faune sauvage, destruction des couvées au sol). Les chiens sont interdits en cœur de parcs nationaux et dans la plupart des réserves naturelles.

Advices

Always be careful and plan ahead when hiking. Asters CEN-74 cannot be held responsible for any accident or inconvenience that may occur on this route. Check the weather conditions before setting off. Mountain Rescue contact details: call 112

How to come ?

Transports

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 des Contamines-Montjoie

Sensitivity period:

Contact: Asters - Conservatoire d'espaces naturels de Haute-Savoie
contact@cen-haute-savoie.org

On your path...

Cargneules of the Bionnassay chapel (A)

Have you noticed the rocks surrounding the doors, niches and windows of this chapel? These are cargneules (dolomite cavities with lime cement), easily recognisable by their orange colour and porous appearance. These rocks are often mineralised by pyrite, an iron sulphide. When pyrite decomposes, it forms deposits of sulphur and iron oxides, giving the cargneules its characteristic yellow-orange colour. In this region, cargneules are linked to the Triassic geological period, which also includes gypsum (white rocks formed in an area affected by water evaporation). Gypsum, which plays a key role in tectonic movements, contains water that can be released under pressure, facilitating the formation of cargneules near rifts.

Attribution : @DahUlm

The Bionnassay glacier (B)

You are now standing on Col de Voza. Look up at Mont Blanc and you'll see the Bionnassay glacier overlooking the valley below. This glacier obscures another, much smaller one: the Tête-Rousse glacier. Located on the right-hand side of the Bionnassay, it cannot be seen from the valley. It was first discovered on the night of 11 to 12 July 1892, when a pocket of water ruptured at the front of the glacier. Several million cubic metres of water and ice tumbled down the mountain, devastating the villages below and the thermal baths of Saint-Gervais. 175 people died, swept away by torrential waters. In 2010, a new pocket was discovered and emptied between September and October of the same year.

Attribution : @DahUlm

Contamines-Montjoie National Nature Reserve (C)

As you go up the Nant Borrant, you enter the Contamines-Montjoie Nature Reserve. Created in 1979, it stretches over 5,500 hectares from the village to the Aiguille de Tré-la-Tête (3,892 m). It stretches from the mountainous zones to snowy lines, and is home to a rich biodiversity. To enjoy and admire this wild and pristine nature for many years to come, we need to follow a few simple rules: - Picking a flower means destroying a plant. - The presence of dogs in the reserve disrupts the ecosystem: dogs can destroy broods and eggs, they transmit pathogens and cause stress to the wildlife. This nature reserve is one of the few where dogs are allowed on a lead, because this nature reserve features a hiking path. - This area can only be explored on foot; motor vehicles, and overflying such as paragliding, hang-gliding, helicopters, drones, etc. is prohibited at a height of less than 300 m from the ground. - let's collect our rubbish and take it back with us. - Bivouacking is forbidden at the Plan Jovet and the Lacs Jovets, but is permitted in the rest of the reserve. Camping is prohibited throughout the nature reserve. - Swimming is prohibited at the Lacs Jovets and the Plan Jovet - Stay on the main path to limit the risk of destroying plants that are as scarce as they are inconspicuous, and to make sure that the future generations of hikers will still be able to admire this beautiful natural site. Let's share our nature and behave responsibly!

Attribution : @carolineGehant

Bon Nant (D)

A nant is a term used to describe a mountain stream. The Bon Nant springs from the Contamines-Montjoie nature reserve at the Col du Bonhomme and flows into the Arve in Le Fayet some fifteen kilometres further down; it is one of the Arve’s largest tributaries. It forms the boundary between the Mont-Blanc and Beaufortain massifs and is used for hydroelectric power generation and fishing.

Attribution : IGN geoportail