Boulder Amateur Television Club TV Repeater's REPEATER

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BATVC web site: www.kh6htv.com

ATN web site: www.atn-tv.com





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Mont Blanc in the Alps as seen from Nyon, Lake Geneva, Switzerland

323km, 10GHz, DATV Contact via Reflection from Mont Blanc

Locally, here in Boulder, Don, N0YE, has been pushing for us to try bouncing our DATV signals off of mountains. So far we have accomplished it rarely and only over distances of a few km. Well some hams in Switzerland and France have now set the bar much higher for us. They have passed digital video signals over a total distance of 323km on 10 GHz. They bounced their signals off of Mont Blanc. OK Don, are you up to the challenge to try to get even close to their record?



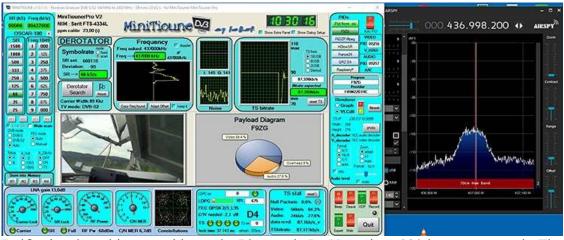
Starting in 2018, Michel, HB9AFO, in Bussigny (near Lausanne), Switzerland and several other hams began experimenting with bouncing their 10GHz signals off of Mont Blanc. Michel has a clear view of Mt. Blanc over an 83km path. His web site gives the full details. https://www.hb9afo.ch/articles/Mont-Blanc/default.htm They are using DVB-S with narrow bandwidths, low symbol rates and lots of FEC. In July, 2018, he and Pierre, HB9IAM, in Geneve made contact for a total distance of 156km. Then in August, 2019, the distance was pushed to 218km with Rolf F9ZG/P in Cret Monniot. Again in Sept. 2019, Bruno, F1MPE/P, in St. Romain got their record up to 258km. Most recently, in August of this year, Rolf working portable in Plat. Verrerie, pushed the distance up to an astonishing 322 km.



Rolf, F9ZG/P in Cret Monniot, via Mont Blanc



F1MPE/P received via Mont Blanc. Bruno, F1MPE (left) & Jean-Louis, F5AJJ (right)



Rolf's signal working portable on the Plateau de La Verrerie -- 322 km, new record. The actual incoming received signal can be seen in a video on Michael's web site.

A longer article detailing these experiments appeared in the French amateur radio magazine Radio - REF, October, 2019 issue.

(https://www.hb9afo.ch/histoire/radioref_10-2019_54-56.pdf)