







# Thanks to Julien Wirtz for letting us use his Presentation for the pilots of the World Championships









#### **Warning!**

This is a simplified observation of the complex phenomena that govern the breeze in our ranges.

Breeze strength and direction, convergence and turbulence depend on the direction of the wind and the variation of temperature with altitude (stability, instability, inversion).









#### From Grenoble to Chamonix, the playground can be adapted to all weather situations.



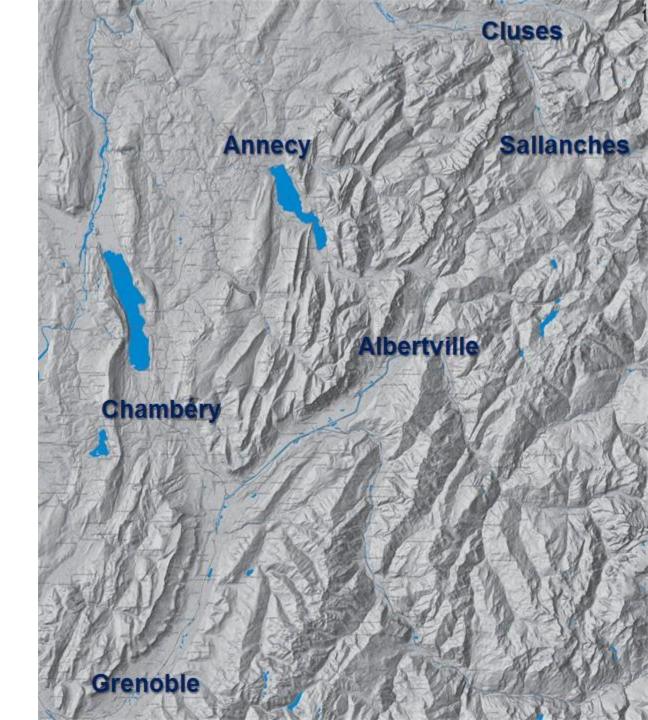








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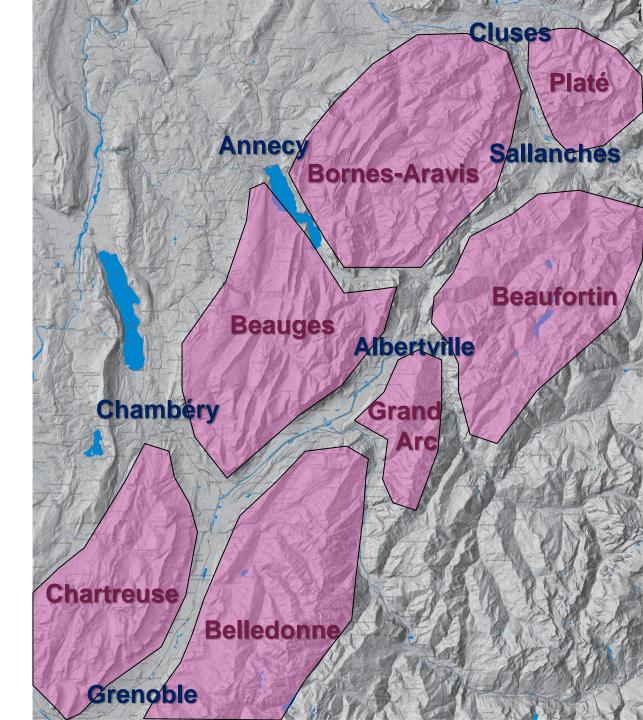






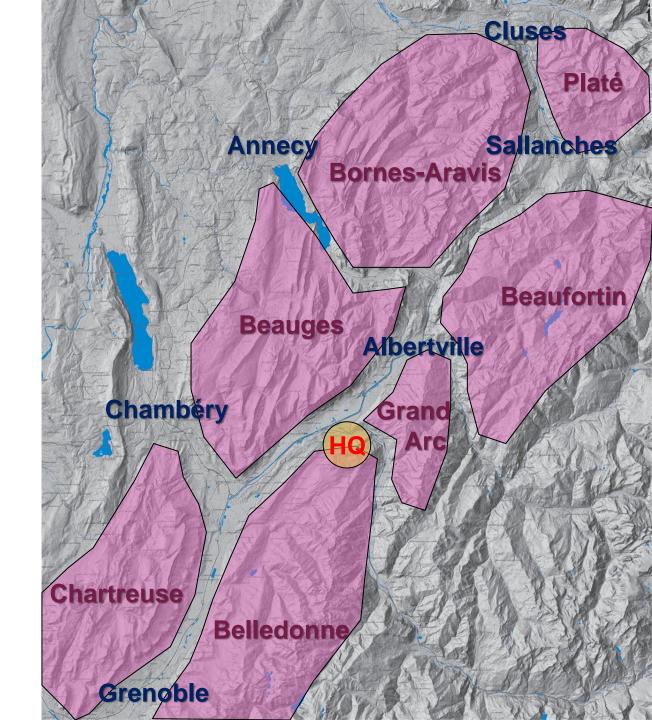


# Cities and mountain ranges of the area.





# The headquarters in relation to the different flight areas.



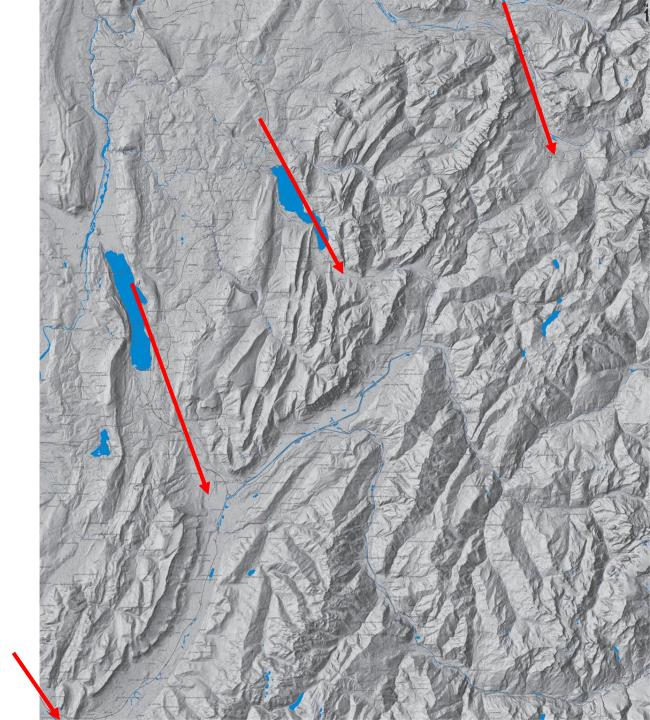








Four main 'doors' allow the air coming from the west to feed the thermal depression formed by convection on the high mountains.



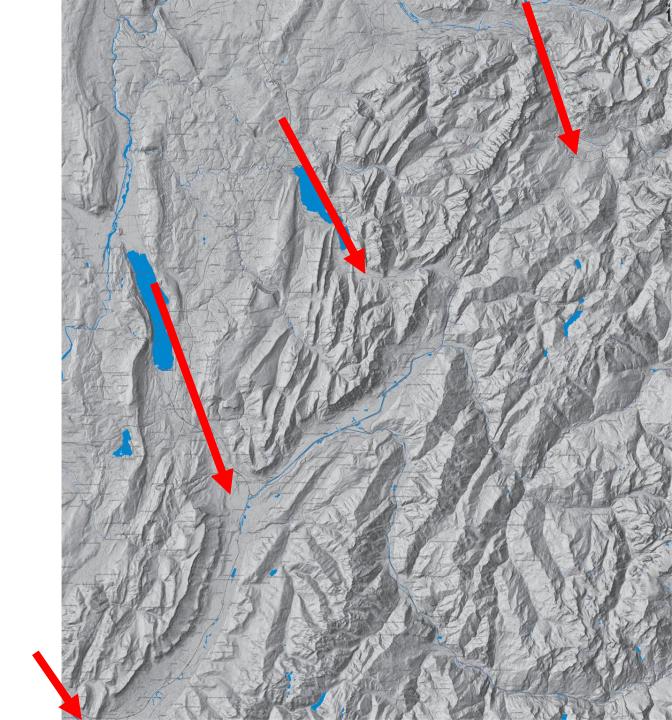








# The north-northwest wind flow accelerates the breeze.



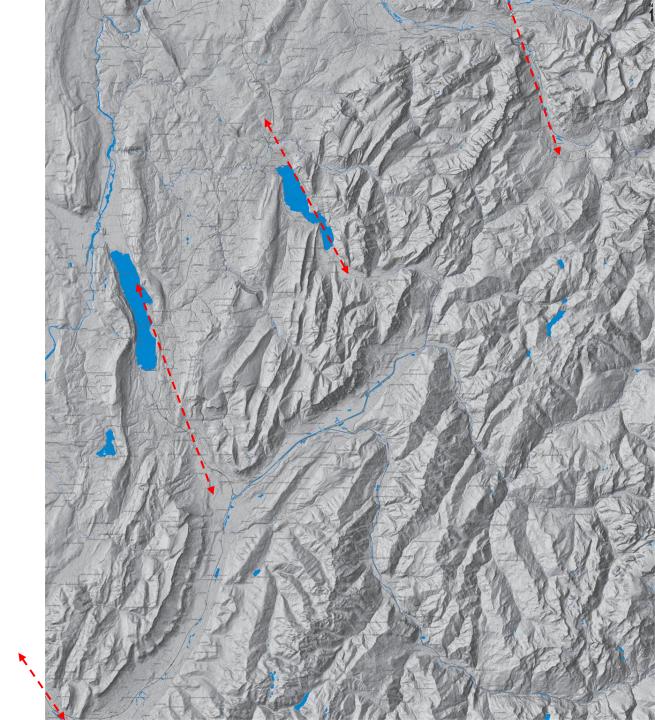








On the contrary, when there is no marked temperature inversion in the low layer, the south-oriented flow reduces the force of the breeze and may even reverse it.











#### Westerly winds

They don't disturb the pattern of breezes, but as they undulate over the pre-Alpine ridges, they can make the air mass rougher.

#### **Easterly winds**

They don't disturb the pattern over the pre-Alpine ridges either; however they often lead to advection of humid air and lower ceilings.

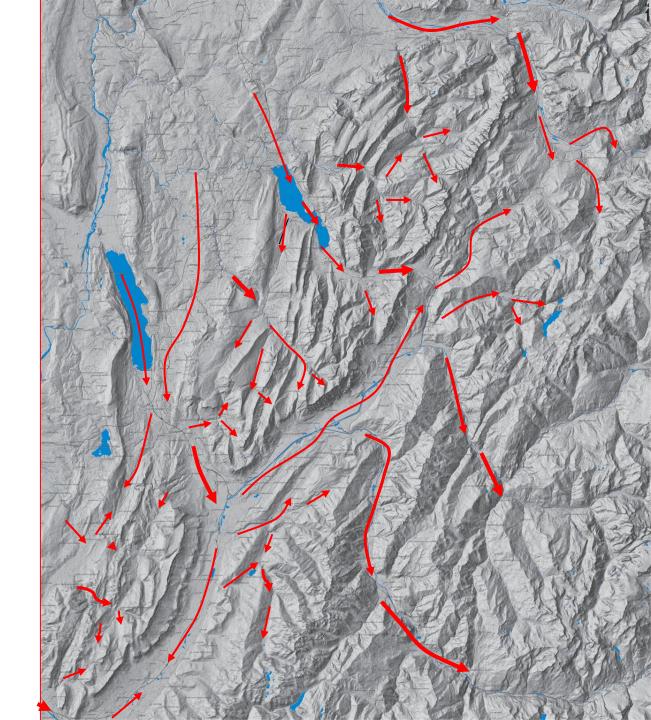








### View of the breeze in standard weather conditions.



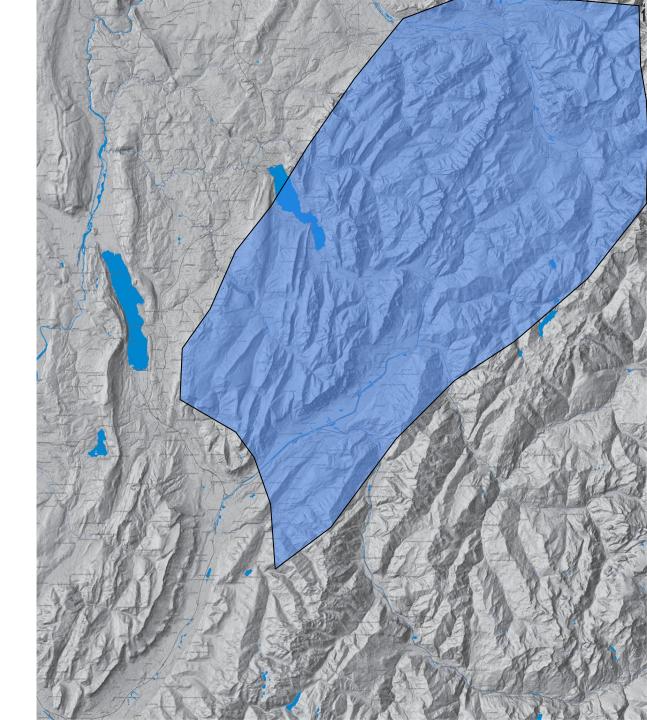








# Likely playground... With a weak southerly wind.



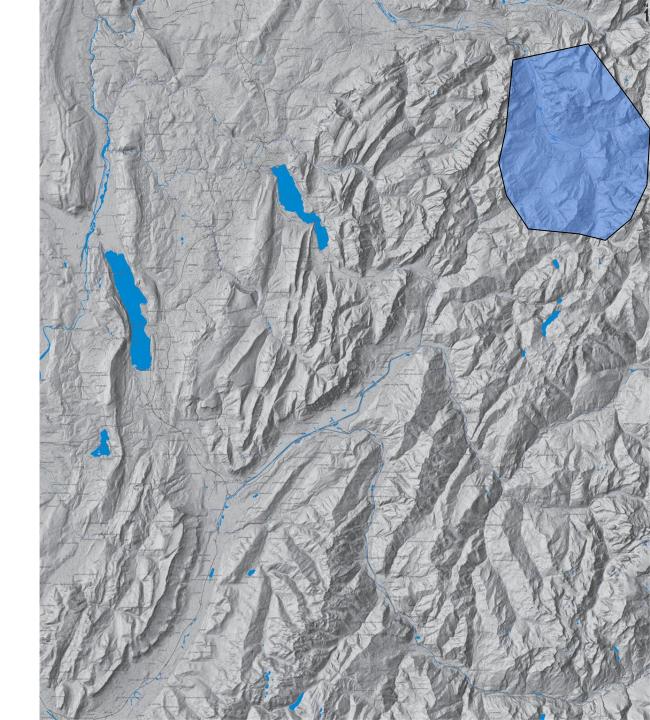








# With a moderate to strong southerly wind.











#### With a weak north wind.



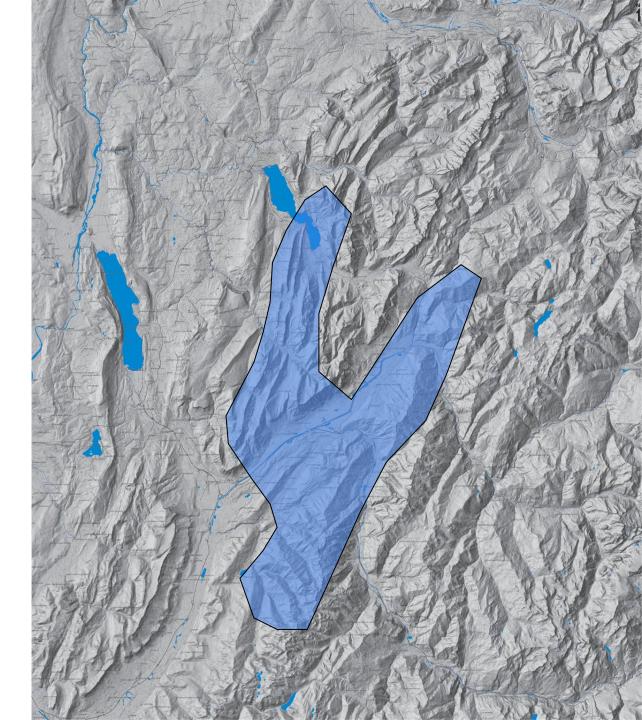








#### With a moderate north wind.



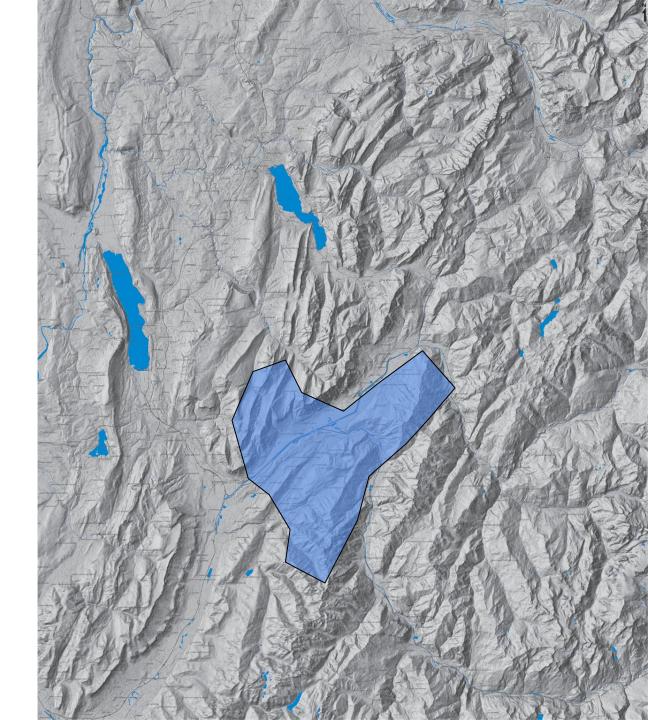








#### With a strong north wind.



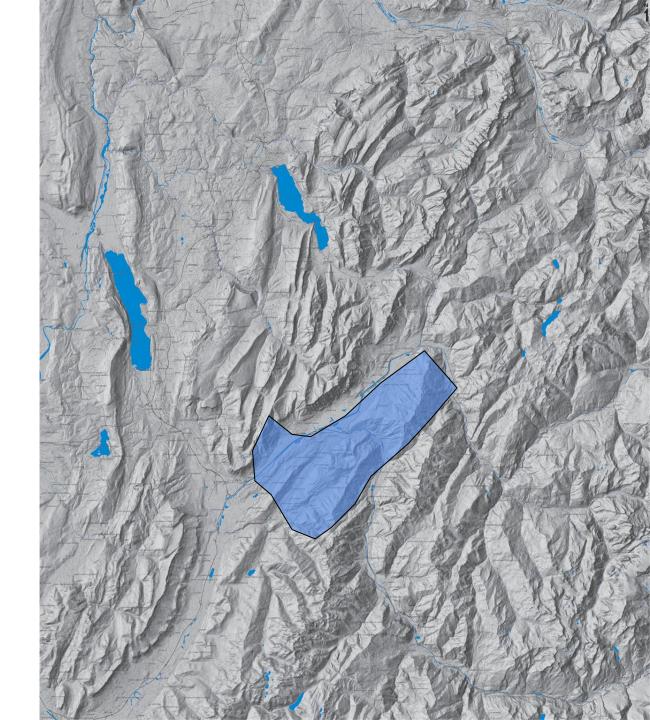








### And with very strong north wind.





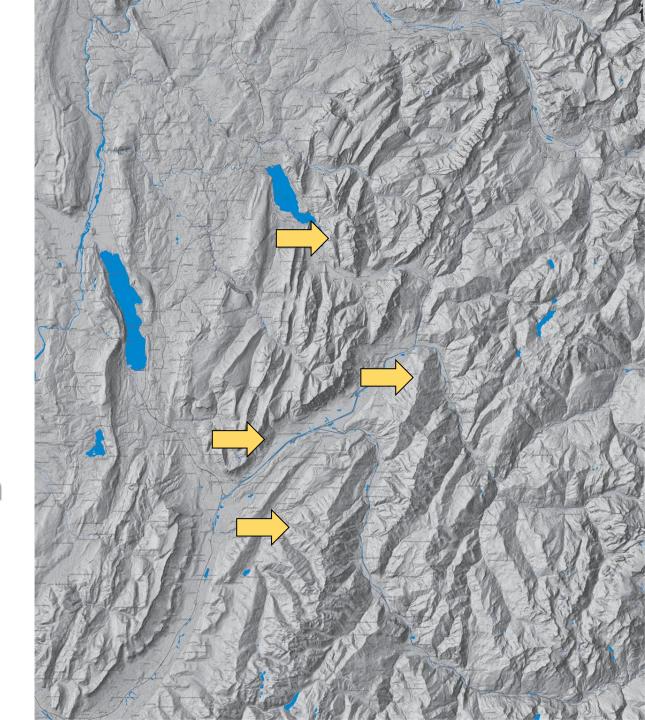






# Take-off sites... In regular conditions.

Montlambert: Alt 894m Val Pelouse: Alt 1692m Chalet de l'Ebaudiaz: Alt 1783m Forclaz pass: Alt 1257m





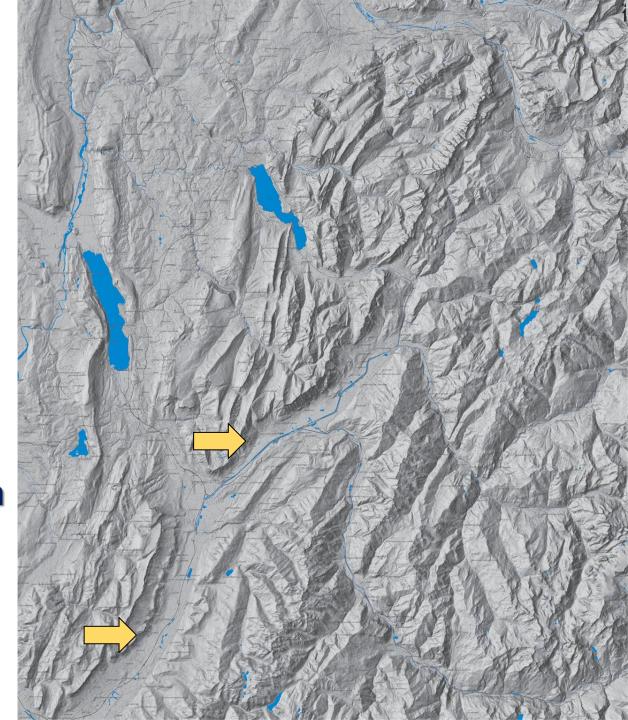






### In case of deteriorating weather at the end of the day.

Montlambert: Alt : 894m Saint Hilaire du Touvet: Alt 989m





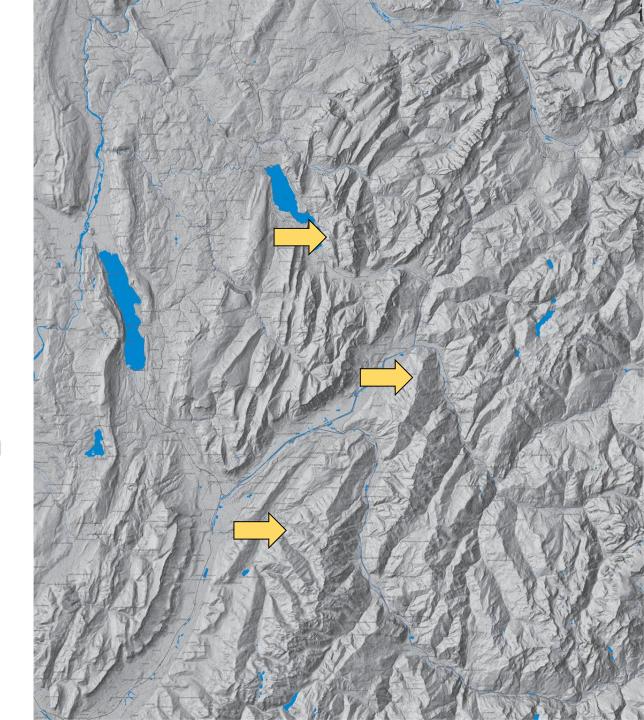






#### In case of low level stability.

Val Pelouse: Alt 1692m Chalet de l'Ebaudiaz: Alt 1783m Forclaz pass: Alt 1257m





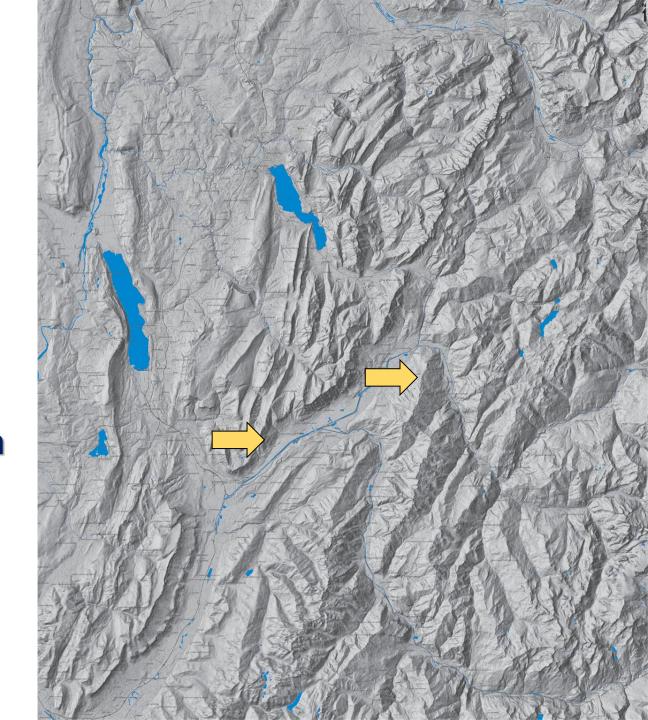






In case of strong north wind.

Montlambert: Alt 894m Chalet de l'Ebaudiaz: Alt 1783m





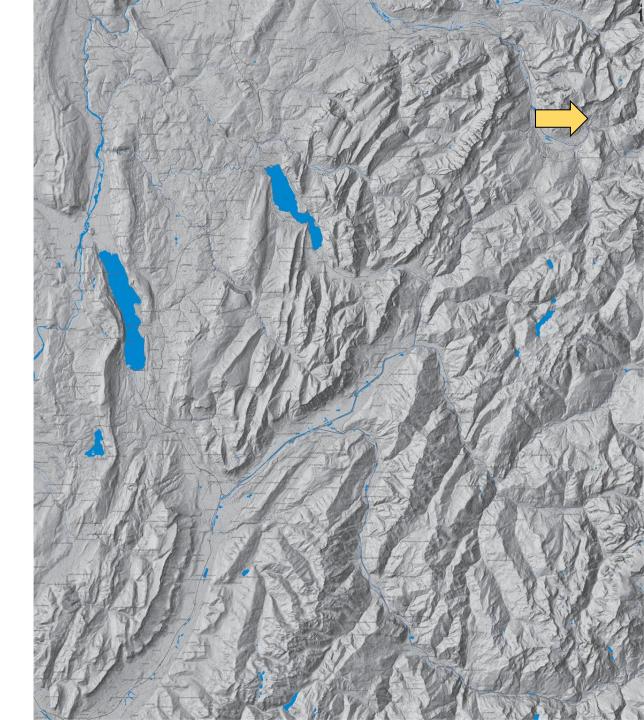






#### In case of strong south wind.

Passy: Alt 1335m





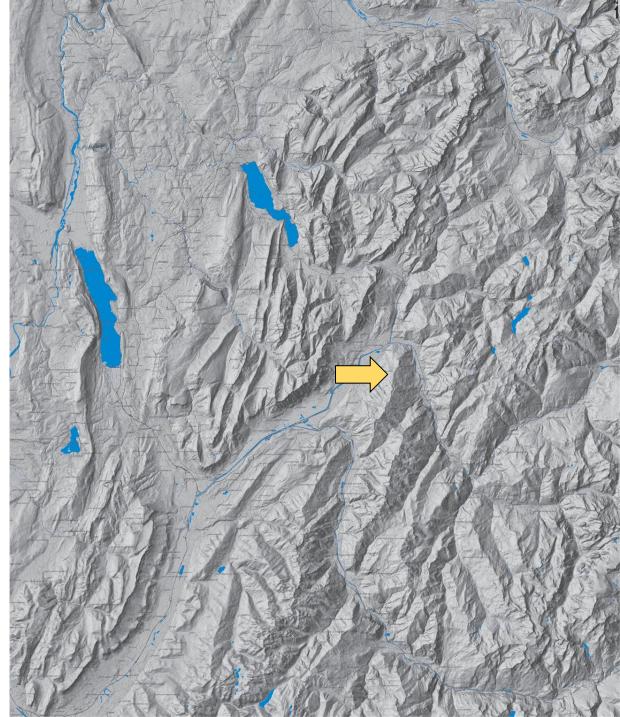






# To save a gloomy day improving in the evening.

Chalet de l'Ebaudiaz: Alt 1783m











#### Valley breeze and convergence in regular conditions.

