Alpine North and South Foehn: Are They Different?

David Plavcan and Georg J. Mayr
University of Innsbruck, Atmospheric and Cryospheric Sciences, Innsbruck, Austria (georg.mayr@uibk.ac.at)

Foehn in the European Alps has mostly been studied for air flowing from the climatologically warmer southern side to the north although it occurs also for reverse flow situations. The dense mesonet in the Alpine countries together with an objective foehn diagnosis method makes it possible to systematically compare north and south foehn for a variety of topographical settings. While they share many common characteristics, north foehn is more frequent than south foehn and in general temperatures do not rise as much or even decrease during foehn onset.