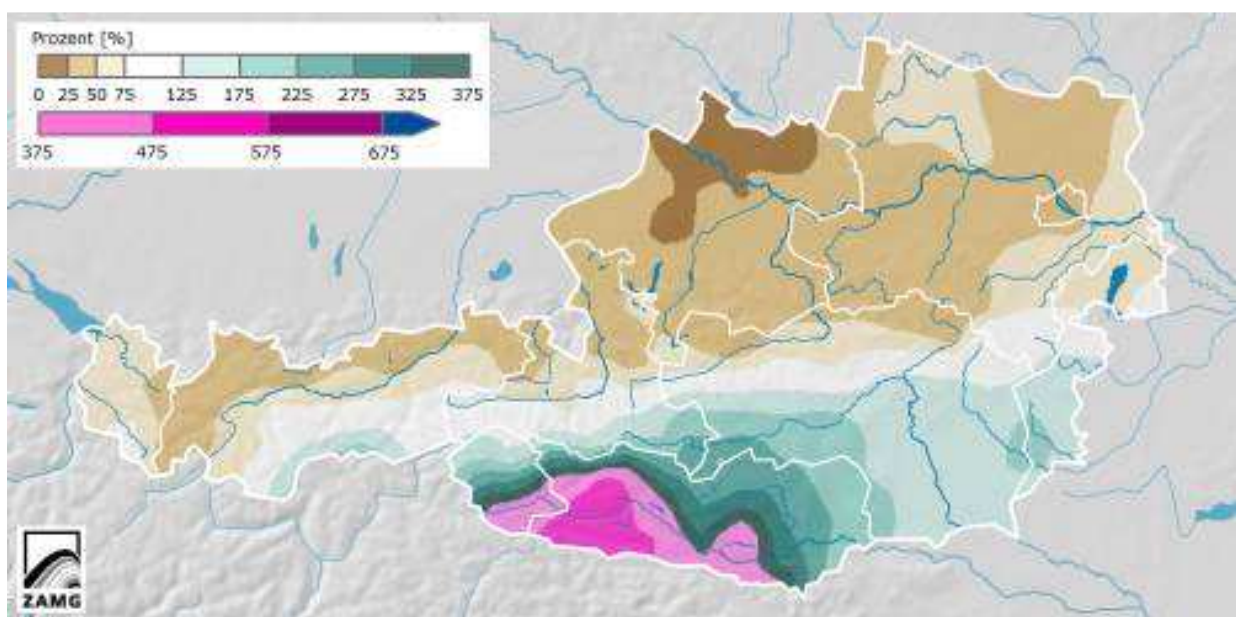


# The extreme winter 2013/14 in Austria

T. Haiden, 28 Feb 2014

## Precipitation

The DJF 2013/14 period was characterized by an exceptional predominance of southerly cyclonic flow, leading to 3-month precipitation totals of up to 500% of normal amounts (average over 1981-2010) in the southern parts of the Alps (Figure 1). Lowlands north of the Alps, as well as the northern alpine slopes, received only about 20-50% of the normal precipitation, making this the driest winter since 1857/58 in the region. The highest 3-month total in absolute terms was 1469 mm observed at the station Loiblpass (1097 m), while the lowest was 17 mm in Schöngrabern (253 m). These extreme amounts differ by nearly two orders of magnitude.



**Figure 1.** Precipitation in DJF 2013/14 as a percentage of the climatological average (source: ZAMG)

## Snow

In the southern parts of Austria a considerable percentage of the precipitation fell as snow, even at valley stations. In Dellach (628 m) 302 cm of snowfall were registered over a period of 26 days (compared to a long-term average of 78 cm). Over a 48-h period (2014-01-30 06 UTC to 2014-02-01 06 UTC), it snowed 131 cm at this station, corresponding to a 75-100 yr event.

## Temperature

For Austria as a whole, the winter 2013/14 was with a positive anomaly of 2.7 °C relative to 1981-2010 the second warmest in the 247-yr instrumental period. Only the winter 2006/2007 was warmer, with an anomaly of 3.4 °C.

## **Wind**

Mountain stations exposed to southerly flow registered about three times as many strong wind cases (gusts >100 km/h) as in an average winter. At the mountain-top station Patscherkofel (2252 m), 29 days with gusts >100 km/h occurred, compared to 11 cases in an average winter. Highest gust speeds at this station were 177 km/h on 25 Dec 2013, and 164 km/h on 10 Feb 2014.