EMS7/ECAM8 Abstracts, Vol. 4, EMS2007-A-00092, 2007 7th EMS Annual Meeting / 8th ECAM © Author(s) 2007



An analysis of the July 2006 heatwave extent in Europe compared to the record year of 2003

M. Rebetez (1), O. Dupont (2) and M. Giroud (3)

(1) WSL Swiss Federal Research Institute, CP 96, 1015 Lausanne, Switzerland (rebetez@wsl.ch), (2) Meteo-France, B.P. 50120, 67403 Illkirch-Graffenstaden, France, (3) Meteo-Swiss, Avenue Paix 7 bis, 1211 Geneva 2, Switzerland

Recent analyses have identified summer warming trends in Europe in recent decades, culminating in 2003, when mean summer temperatures were exceptionally hot over much of Europe. Mean monthly temperatures were very high in July and reached record levels in both June and August 2003. In 2006, the mean monthly temperature for July reached a record high. Our analysis of temperature observations shows that the 2006 heatwave was located more to the north than in 2003, and particularly affected the Netherlands, Belgium, Germany, France and Switzerland. The July 2006 anomalies were similar in magnitude to those of June and August 2003, but the discrepancy between minimum and maximum temperature anomalies was larger in 2006 compared to both June and August 2003. For maximum temperature, the affected land area was larger in 2006, making July 2006 the most anomalously hot summer month ever measured in Europe.