

# The Southern Westerlies during the last glacial maximum in PMIP2 simulations

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The Southern Hemisphere westerly winds are an important component of the climate system at hemispheric and global scales. Variations in their intensity and latitudinal position through an ice-age cycle have been proposed as important drivers of global climate change due to their influence on deep-ocean circulation and changes in atmospheric CO<sub>2</sub>. The position, intensity, and associated climatology of the southern westerlies during the last glacial maximum (LGM), however, is still poorly understood from empirical and modelling standpoints. Here we analyse the behaviour of the southern westerlies during the LGM using four coupled ocean-atmosphere simulations carried out by the Palaeoclimate Modelling Intercomparison Project Phase 2 (PMIP2). We analysed the atmospheric circulation by direct inspection of the winds and by using a cyclone tracking software to indicate storm tracks. The models suggest that changes were most significant during winter and over the Pacific ocean. For this season