In this talk I will describe some idealised numerical simulations to investigate the effects of orography on the dynamics of heat lows. The behaviour of the heat low that forms over a plateau-like orography on a circular island is compared with that when the island is flat, and that when the plateau is surrounded by land instead of sea. In all cases, a broad-scale, negative radial gradient of potential temperature forms in the daytime mixed layer over land. The presence of orography enhances the broad-scale baroclinicity over the orographic slope due to identical heating of a column of air with a reduced mass, i.e. lower surface pressure. In the absence of sea, the baroclinicity is solely confined to the slope of the orography. The broad-scale potential temperature gradient results in an overturning circulation in the lowest few kilometres, which is separate from the shallower and more intense sea-breeze circulation in the island cases. The presence of orography leads to a stronger overturning circulation via enhanced baroclinicity. In the case without sea, both the overturning circulation and tangential circulation are closely tied to the orography. The overturning circulation advects absolute angular momentum inwards to spin up the low-level circulation, despite some frictional loss of angular momentum en route. During the night, radiative cooling over the land leads to a strong nocturnal low-level jet that amplifies the spin up process. During the daytime, the cyclone weakens as the angular momentum is convectively-mixed through a deep layer.