



During the afternoon of 9th April 2008, a 22 knot gust of wind was recorded on the sonic anemometer at 27 Cantley Crescent, Wokingham. There was a coincident fall and rise in pressure of appx 0.8 mbar on the barograph. A graph of the one second output from the sonic anemometer is shown above. It can be seen that the whole event lasted little over one minute. A gust of this magnitude would not normally be regarded as an unusual event, except that on this particular day, all previous and subsequent gusts were in the range of 9 to 13 knots, marking this as an interesting event. From the graph, it can be seen that two minutes prior to the gust, the wind direction had been WSW. Over the next minute there was a lull, during which the direction backed to SE. As the speed increased the direction became SSW, but as the peak speed passed the direction veered to NW. Taken together, the changes in direction and speed and the drop in pressure are indicative of a small vortex of the dust-devil type passing close to, but not directly over, the anemometer. There were convective clouds overhead, high based cumulus humilis with a base near 6000 ft, and stratocumulus cugen with a base near 7000 ft, total cover 5 okta. The 1200 GMT Larkhill ascent (03743) showed the air to be conditionally unstable up to 7100 ft, and potentially unstable up to around 10000ft, although with the relative humidity falling to 20 % at 8100 ft, convection overshooting the 'lid' at 7100 ft would be quickly quenched by mixing with the dry environment.