

## 10-meter wind at LARISSA Beta site

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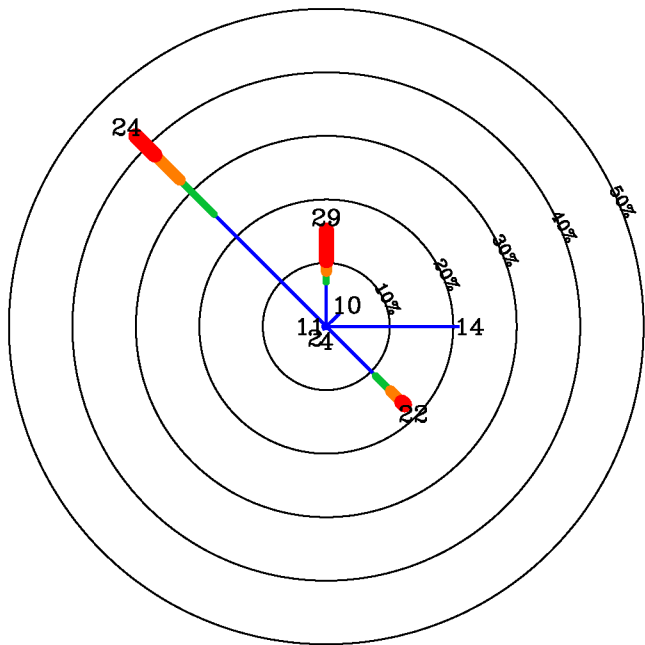
Figure: The wind roses display the frequency of 10-m wind directions at LARISSA Beta site (66.0372S, 64.0031W) during three southern summer seasons (2005-06, 2006-07 and 2007-08). Each circle represents the percentage of time the wind blows FROM a particular direction. The mean 10-m wind speed is printed at the end of each directional line. The various colors/thicknesses denotes wind speed ranges in mph. The four wind speed ranges shown correspond to the following Beaufort scale numbers: <6, 6, 7, >7. This statistical analysis is based on 6-hourly weather forecasts from the Antarctic Mesoscale Prediction System (AMPS) archive.

During the three summer seasons investigated, the prevailing winds mainly originated from the northwest (~40% of occurrences). The strong wind episodes observed in DJF 05-06 and DJF 07-08 were associated with northerly/northwesterly winds. However, more occurrences of easterly/southeasterly winds are seen in DJF 06-07 (both directions totaling 45% of occurrences).

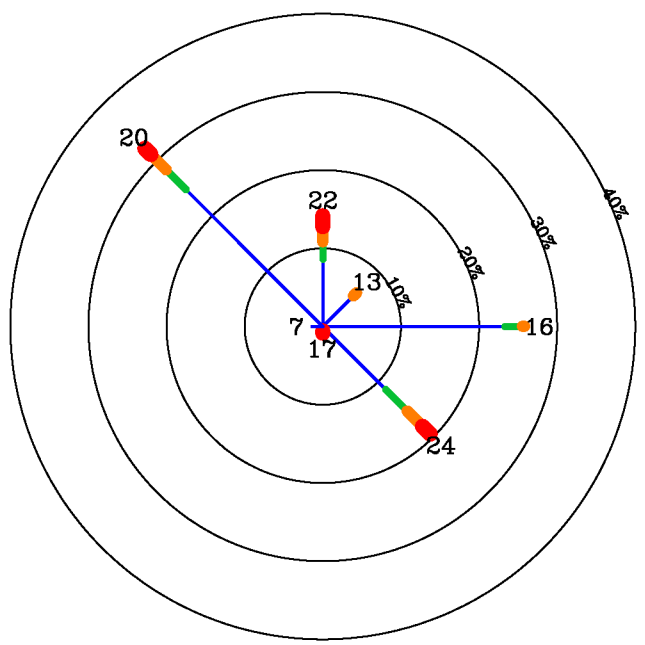
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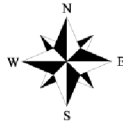
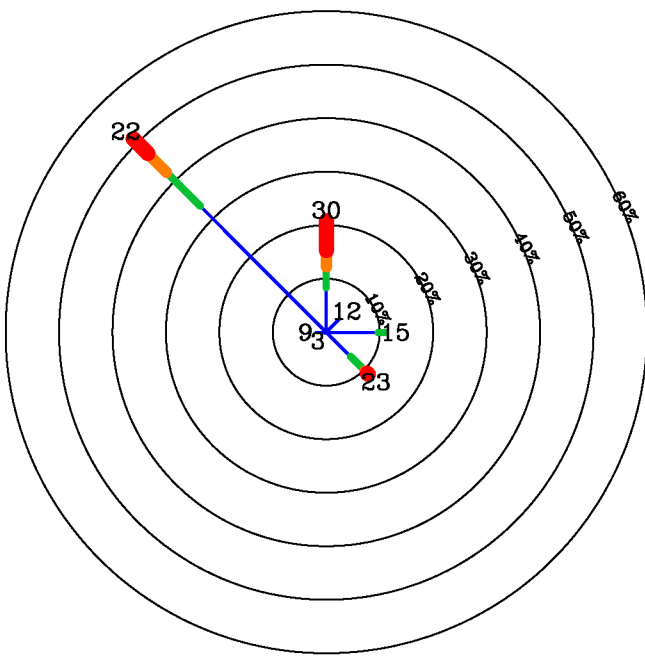
DJF 05–06



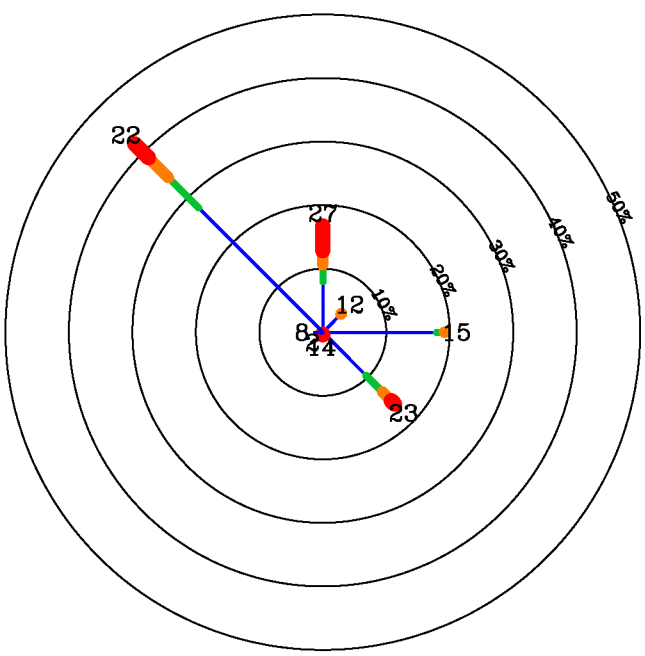
DJF 06–07



DJF 07–08



DJF (average)



- < 25 mph
- 25–31 mph
- 31–39 mph
- > 39 mph