**Important Meteorological data updates**:

1. **Wind speed** (WINDSP) data for **Woburn** (WOBMET) between 01/01/1998 and 01/06/2009 has been amended. Wind speed is measured in knots but converted to m/s within e-RA and displayed as m/s. However, between 01/01/1998 to 01/06/2009 this conversion was not made, so although the data was displayed as m/s it was still in knots. This has now been corrected (the conversion is knots x 0.514). The data for height, from 01/07/1999 to 01/06/2009, has also been corrected as it was measured at 2m but by convention is adjusted to 10m.

Values for wind speed are based on a single measurement made at 9am. If an average daily value for wind speed is required, this can be derived from total daily wind run.

**Wind speed (m/s) = wind run (km/day)/86.4**

1. **Drain gauge (DR20/DR40/DR60)** datafor **Rothamsted** (ROTHMET). All data in e-RA is currently in inches. This data will be converted into mm in the new e-RA Extract. To convert inches to mm, multiply by 25.4.
2. **RAIN\_L (1/1000th acre rain gauge)** data for **Rothamsted** (ROTHMET). Thieves stole the lead lining at the beginning of July 2010. It has been replaced and in operation since 15/02/2011.
3. **RAD (radiation)** data for **Rothamsted** (ROTHMET and NEWROTHMET). Radiation is correctly shown as J/cm2 in Rothmet and incorrectly in NewRothmet (should read MJ/m2 in NewRothmet).
4. **Change of rain gauge and the effect on rainfall capture**

Rainfall up until 2004 was measured manually using a 5" copper cylindrical rain gauge. In 2004 the Met Stations at Rothamsted and Woburn were automated and the 5" rain gauges replaced by an ARG100 tipping bucket rain gauge of diameter 10". The manufacturers of the ARG100 state that the "ARG100 rain gauge typically captures over 5% more rainfall than most traditionally-shaped cylindrical gauges due to its unique aerodynamic shape and reduced evaporation-loss properties". This has been found to be the case at Rothamsted. When we have compared the ARG100 with the 5" within the turf-wall enclosure we get a difference of approx. 10% over an 8 year period (2004 to 2011). This value however does change on a year to year basis.

A study to model rainfall data is being carried out to provide adjusted data. Once this is completed, adjusted rainfall values will be available from the e-RA curators. This applies to the variable RAIN in the Rothmet and Wobmet datasets.