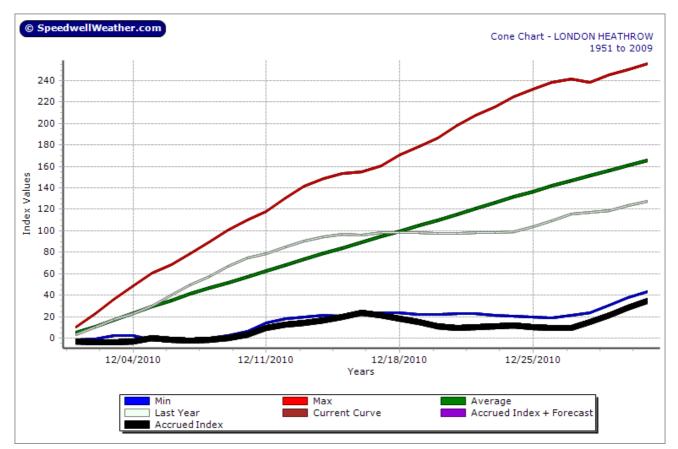


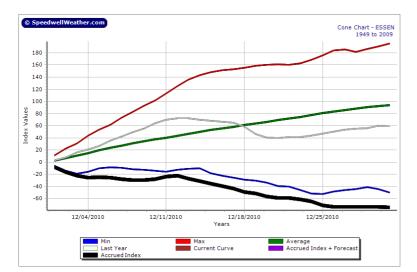
# December 2010 Cold Cold Cold..an update

In our note of 22 December, we looked at cumulative daily average temperatures for London Heathrow and a number of other European sites. At that time, using Speedwell forecasts, it appeared that Heathrow (from 1951), Essen (from 1949), Paris Orly (from 1951), Amsterdam (from 1951), Oslo (from 1937) and Stockholm (from 1950) would break their coldest December records. This turned out to be the case for all except Amsterdam which was narrowly beaten by 1969. The Cone Charts are updated below (2010 is the black line).



#### **London Heathrow**

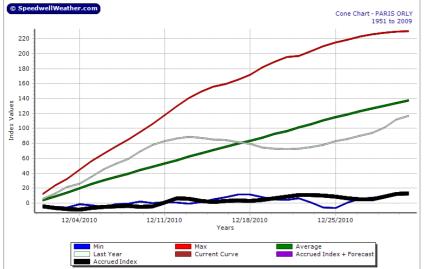
Coldest: 2010; 36.75 Second coldest: 1981; 44.55 Third coldest: 1962; 62.81



Essen Coldest: 2010: -72.05 Second coldest: 1969: -49.55 Third Coldest: 1963; -38.50

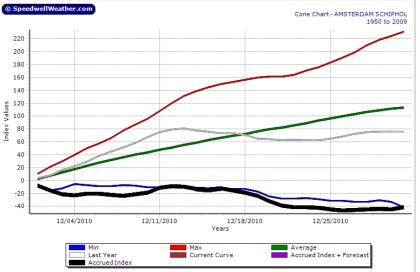
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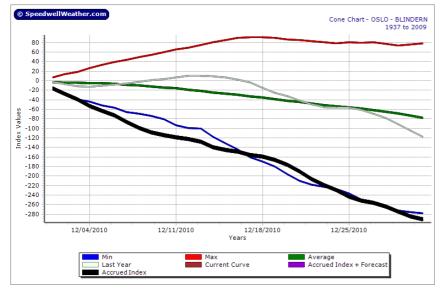
Paris Orly Coldest: 2010: 14.90

Second coldest: 1963: 15.10 Third coldest: 1969: 26.2



Amsterdam Schiphol

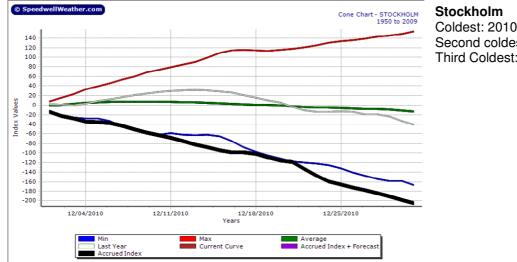
Coldest: 1969: -40.40 Second coldest: 2010: -38.80 Third Coldest: 1995; -21.30



#### **Oslo Blindern**

Coldest: 2010: -287.25 Second coldest: 1981: -276.70 Third Coldest: 1978; -251.60

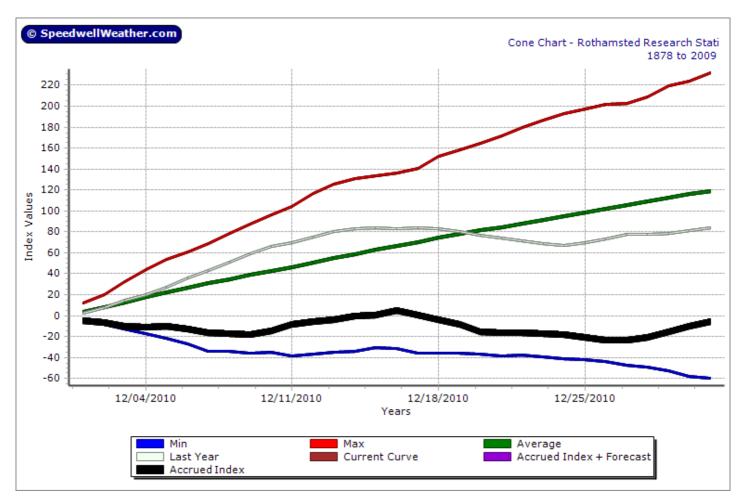




Coldest: 2010: -201.65 Second coldest: 1978: -165.70

Third Coldest: 1981; -157.95

In a later note of December 28th we looked at Rothamsted cumulative average temperatures as a way of extending our analysis of Heathrow. Rothamsted is only 26 miles from Heathrow. We have data from 1878. December 2010 is the fourth coldest:



#### Rothamsted

Coldest: 1890: -58.9 Second coldest: 1879: -24.5 Third Coldest: 1981; -9.10 Fourth coldest: 2010; -3.15



An obvious extension of the Rothamsted time series is found by looking at the Central England time series, CET. [With recognition to Hadley Centre: http://hadobs.metoffice.com/hadcet/data/download.html]

© SpeedwellWeather.com Cone Chart - Central England Temperatu 1772 to 2009 240 220 200 180 160 140 index Values 120 100 80 60 40 20 0 -20 -40 12/04/2010 12/11/2010 12/18/2010 12/25/2010 Years Min Max Average Last Year Current Curve Accrued Index + Forecast Accrued Index

The daily data in the CET record goes back to 1772. This is used to generate the cumulative average temperature cone chart below:

The finish is pretty close, so here are the numbers for the top ten coldest from 1772: Note that this CET analysis is based on preliminary data.

	Cumulative	Average
	Daily	Daily
	Average	Average
December	Temperature	Temperature
1890	-23.65	-0.76
2010	-21.10	-0.68
1788	-9.20	-0.30
1878	-8.70	-0.28
1796	-7.90	-0.25
1874	-6.00	-0.19
1784	9.00	0.29
1981	9.00	0.29
1844	12.20	0.39

Note that monthly average CET data is also available which extends the series to 1659. Using this data **2010 remains the second coldest** as shown on the Hadley Centre ranking. [http://hadobs.metoffice.com/hadcet/mly\_cet\_mean\_sort.txt]



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