**Supplementary Table S1** *Distances between* *Meteorological Office recording stations and research Farms 1 (Midlothian, 1990-2002) and 2 (Dumfries, 2003-2011)*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Farm** | **Station**  | **Years active** | **Scale** | **Distance to farm (km)** | **Elevation (m)** | **Weather elements recorded** |
| 1 | 250 | Until April 1999 | daily | 0 | 184 | Tdb, Twb, Ts, Tg, sun, snow, WS, visibility, RH, ppt |
| 1 | 15788  | Full period | daily | 3.3 | 181  | ppt |
| 1 | 249  | Full period | daily | 6.1 | 185  | Tdb, Twb, Ts, Tg, snow, WS, visibility, RH |
| 1 | 253  | Full period | daily | 11.3 | 26  | sun |
| 1 | 19260  | From Dec 1998 | hourly | 12.8 | 57  | PMSL |
| 1 | 246  | Full period | hourly | 14.4 | 35  | PMSL |
| 2 | 19259  | Full period | daily | 0 | 50  | Tdb, Twb, Ts, Tg, sun, snow, WS, visibility, RH, ppt |
| 2 | 1023  | Full period | hourly | 29 | 242  | PMSL |

We used data from the closest active weather station to each farm for each weather element. Meteorological Office stations 250 and 19259 were located on the grounds of the farms. ‘Years active’ indicates the period for which data were available for each farm. Abbreviations of weather elements are given in Table 1.