

Rural Sulphur Dioxide Monitoring in the UK:

Data Summary 2001-2005

Report to

**Natural Environment Research Council -
Centre for Ecology and Hydrology (Edinburgh)**

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Executive Summary

Sulphur deposition is known to have acidifying effects on freshwater, soils and vegetation. For these effects to be assessed the total sulphur deposition must be estimated from both its wet and dry deposition pathways. The Department for Environment, Food and Rural Affairs (Defra) has placed a contract with the Centre for Ecology and Hydrology at Edinburgh (CEH) on *Acid Deposition Processes in the UK* (EPG 1/3/166 and RMP 2125) to quantify *inter alia* the wet and dry deposition budgets of sulphur for the United Kingdom.

As part of this contract, AEA Technology manages and operates the UK Rural Sulphur Dioxide Monitoring Network. This network provides monthly- and annual averaged concentrations of sulphur dioxide (SO₂), which are subsequently used to produce concentration maps for the UK. The dry sulphur deposition across the UK is then derived by CEH by combining the sulphur dioxide concentration field with estimated deposition velocities.

The SO₂ concentrations measured at some of the sites in the UK Acid Deposition Monitoring and the UK Rural Sulphur Dioxide Monitoring networks during the late 1990's, especially the daily sites in remote areas, were at or below the Limit of Detection (LOD) of the bubbler method. This would make it more difficult to determine reliable trends and could compromise the application of the monitoring data, for example, in identifying the cause of the non-linear response of ambient concentrations to change in emissions at such sites. A method intercomparison exercise was undertaken in collaboration with CEH at the Auchencorth Moss site near Edinburgh between September 1998 and May 1999 to evaluate potential replacement methods which will provide a lower Limit of Detection while retaining data integrity and consistency. On the basis of this exercise, the choice of methods to replace the bubbler method was limited to the denuder or the filter-pack methods on the grounds of cost, improved sensitivity, method robustness, ease of operation and the quality of the measurements. The filter-pack method was preferred for practical reasons and the new samplers were introduced into the monitoring network between April and November 2001.

The Rural Sulphur Dioxide Monitoring programme was terminated at the end of 2005. The monitoring programme has been replaced by the SO₂ measurements made in the expanded denuder network operated by CEH as part of Defra's Acid Deposition Monitoring programme.

This report provides a complete dataset of the SO₂ measurements for all sites in the UK Acid Deposition and Rural Sulphur Dioxide Monitoring Networks for the years 2001 to 2005. During the period covered by this report and as indicated above, the SO₂ sampler was changed from a H₂O₂ bubbler making daily/weekly measurements to a filter-pack sampler, making fortnightly measurements initially and four-weekly measurements from 2004. The introduction of the new sampler and the need to ensure coverage of the high emission area in Yorkshire led to some site changes.

The report also includes a comparison of the measurements made by the new filter-pack sampler with the previous H₂O₂ bubbler method. A comparison was also made with the measurements made in the Nitric Acid Denuder Network operated by CEH. This comparison allowed the following statements to be made:

- The three samplers generally showed the same qualitative behaviour with time
- The filter-pack and denuder measurements were in good agreement although the denuder measurements were slightly larger.
- Both the filter-pack and denuder measurements are lower than those of the bubbler. This is especially noticeable during the period from Spring 2002 when there was a significant discrepancy between the filter-pack and bubbler measurement.

To identify the cause of the lower filter-pack measurements, about 200 aerosol filters were retained and analysed between 2002 and 2005 from a number of the filter-pack monitoring sites. These measurements were then used to derive monthly sulphate and combined with the monthly sulphur dioxide concentrations to give total sulphur concentrations for comparison with the measurements made by the denuders and with the daily sulphate measurements. The results provided no clear

evidence that the low sulphur dioxide measurements on the filter-pack sampler were a result of absorption by or loss onto the untreated filter used to remove particulate sulphate.

In terms of UK concentrations, there has been a significant decline in sulphur dioxide concentrations during this period, with the network mean concentration falling by a factor of 2 from 1.06 to 0.5 µg SO₂ as S m⁻³ between 2001 and 2005. This fall has continued the long-term decline in sulphur dioxide concentrations.

Maps of the annual and monthly mean sulphur dioxide (SO₂) concentration fields have been derived for the UK. The spatial distribution of SO₂ is similar to that observed in previous years with the highest concentrations in the Yorkshire/Nottinghamshire and Thames estuary areas. The recent measurements show that SO₂ concentrations have continued to decline in rural areas, a trend which has been observed since the establishment of the network in the early 1990s. The trend for sites closest to emission sources is consistent with the reduction in UK SO₂ emissions calculated over this period.

The measurement data have already been provided to CEH for interpretation and further analysis as part of its programme of work and to the Pollution Climate Mapping team at AEA Environment & Energy.

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1 Introduction

Sulphur deposition is known to have acidifying effects on freshwater, soils and vegetation. For these effects to be assessed the total sulphur deposition must be estimated from both its wet and dry deposition pathways. The Department for Environment, Food and Rural Affairs (Defra) has placed a contract with the Centre for Ecology and Hydrology at Edinburgh (CEH) on *Acid Deposition Processes in the UK* (EPG 1/3/166 and RMP 2125) to quantify *inter alia* the wet and dry deposition budgets of sulphur for the United Kingdom.

As part of this contract, AEA Environment & Energy manages and operates the UK Rural Sulphur Dioxide Monitoring Network. This network provides monthly- and annual averaged concentrations of sulphur dioxide (SO₂), which are subsequently used to produce concentration maps for the UK. The dry sulphur deposition across the UK is then derived by CEH by combining the sulphur dioxide concentration field with estimated deposition velocities.

The concentrations measured at some of the sites in the monitoring networks (*i.e.*, the UK Acid Deposition Monitoring networks and the UK Rural Sulphur Dioxide Monitoring network), especially the daily sites in remote areas, were at or below the Limit of Detection of the then current hydrogen peroxide bubbler method. This will make it more difficult to determine reliable trends and could compromise the application of the monitoring data, for example, in identifying the cause of the non-linear response of ambient concentrations to change in emissions at such sites. A change in sampling method was required which would provide a lower Limit of Detection while retaining data integrity and consistency. An intercomparison exercise was undertaken in collaboration with CEH at the Auchencorth Moss site near Edinburgh between September 1998 and May 1999 to evaluate potential replacement methods. A summary of the intercomparison exercise and the results obtained were given in the 1999 Data Report [Hayman *et al.*, 2001b]. A more detailed description was provided in Hasler *et al.* [2000].

On the basis of the intercomparison exercise, the choice of methods to replace the bubbler method was limited to the denuder or the filter-pack methods on the grounds of cost, improved sensitivity, method robustness, ease of operation and the quality of the measurements. The filter-pack method was preferred for practical reasons and the new samplers were introduced into the monitoring network from April 2001.

The Rural Sulphur Dioxide Monitoring programme was terminated at the end of 2005. The monitoring programme will be replaced by the SO₂ measurements made in the expanded Nitric Acid Denuder Network operated by CEH as part of Defra's Acid Deposition Monitoring programme. The denuder SO₂ measurements can be found in the data reports prepared on the Acid Deposition Monitoring Network [Hayman *et al.*, 2001c, 2001d, 2003a, 2004, 2005a, b].

This report provides a complete dataset of the measurements for all sites in the UK Rural Sulphur Dioxide Monitoring Network for the years 2001 to 2005. The measurement data have been provided to CEH for interpretation and further analysis as part of its programme of work. The format of this report follows that used to report the measurements made in previous years [Hasler and Downing, 1998; Hasler *et al.*, 2001; Hayman *et al.*, 2001a-b, 2003b].

2 Network and Sampling Details

2.1 THE MONITORING SITES

At the start of 2001, the Rural Sulphur Dioxide Monitoring Network comprised 31 sites at which concentrations of SO₂ were measured on a weekly basis using the hydrogen peroxide bubbler method (see Section 2.3.1) and one site (Bush) at which daily measurements were made. There are a further 8 sites in the Acid Deposition Monitoring Network at which daily measurements were also made. During 2001, the SO₂ sampler was changed from the H₂O₂ bubbler making daily/weekly measurements to a filter-pack sampler, making fortnightly measurements initially and four-weekly measurements from 2004. The introduction of the new sampler and the need to ensure coverage of the high emission area in Yorkshire also led to some site changes (see Section 2.2).

Siting criteria and individual site assessment are given in Downing and Campbell [1995]. In general, the monitoring sites are located in rural areas which are largely unaffected by local domestic and industrial sources but which are representative of the surrounding region.

The main focus of this report is to provide a summary of the measurements made in the Rural Sulphur Dioxide Monitoring Network for the years 2001 to 2005 and to derive the SO₂ concentration fields for the UK. The concentration field is however significantly improved by including data that have been obtained in other SO₂ monitoring networks. These include:

- (i) the continuous monitoring sites operated by the power generating companies (NPower and E.On). The sites are mainly located around power stations in Yorkshire, Nottinghamshire and the Thames Estuary.
- (ii) five of the continuous monitoring sites from the Automatic Rural Network.
- (iii) the two continuous monitoring sites operated by CEH Edinburgh at Sutton Bonington and Auchencorth Moss.
- (iv) the 12 denuder monitoring sites operated by CEH Edinburgh [see Hayman *et al.*, 2001c, 2001d, 2003a, 2004, 2005a, b].

The sampling sites and their locations are listed in Table 2-1 and presented as a map in Figure 2-1.

2.2 SITE CHANGES WITHIN THE NETWORK

A number of changes were made to sites in the monitoring network between January 2001 and December 2005. The introduction of the new filter-pack sampler and the need to ensure coverage of the high emission area in Yorkshire has led to some rationalisation of sites.

Site	Comment
5301 – Brockhill	Site closed on 28/2/2002 as access restrictions precluded sampling during 2001; sampler moved to Drayton (5346) in 2002
5306 – Cardington	Close to site at Husborne Crawley (5312); Site closed on 30/1/2002 and sampler used at Church Fenton (5347)
5315 – Ratcliffe	Site closed on 4/12/2001 and effectively replaced with that at Sutton Bonington (5344)
5329 – Cam Forest	Sampler moved to Formoyle (5345) on 22/11/2001 as changed use of building housing the sampler at Cam Forest
5344 – Sutton Bonington	Site selected as a sampler intercomparison site and sampling commenced on 8/5/2001. The site effectively replaced that at Ratcliffe (5315)
5345 – Formoyle	Replaced Cam Forest site (5329); sampling commenced on 22/11/2001
5346 – Drayton	Replaced Brockhill site (5301); sampling commenced on 28/2/2002
5347 – Church Fenton	New site established on 16/10/2002 close to the major power stations in Yorkshire

Table 2-1 - Rural SO₂ Sampling Sites in Operation in the United Kingdom between 2001 and 2005.

Site Code	Site Name	Easting	Northing	Network and Measurement Technique	Site Code	Site Name	Easting	Northing	Network and Measurement Technique
5002	Eskdalemuir	3235	6030	UK Acid Deposition Monitoring Network	6003	Hall Farm	5589	1848	JEP – Npower Sites
5004	Stoke Ferry	5700	2988	<i>To Spring 2001</i>	6004	Lower Shorne	5703	1727	- UVF automatic analyser
5006	Lough Navar	192	5212	<i>- 8-port bubbler, daily</i>	6007	Carr Lane Drax	4672	4274	
5007	Barcombe Mills	5437	1149	<i>- filter-pack, fortnightly</i>	6008	Hemingbrough	4669	4297	
5008	Yarner Wood	2786	789	<i>From Spring 2001</i>	6014	North Featherstone	4427	4227	
5009	High Muffles	4776	4939		6017	Smeathalls Fm	4512	4252	
5010	Strathvaich Dam	2347	8750	<i>From 2004</i>	6020	Bexleyheath	5483	1745	
5011	Glen Dye	3642	7864	<i>- filter-pack, 4-weekly</i>	6021	Blair Mains	2972	6864	
5301	Brockhill 1	4002	2702	UK Rural SO₂ Monitoring Network	6022	Boverton Mill Farm	2993	1672	
5303	Caenby 1	4993	3900	<i>To Spring 2001</i>	6023	Didcot North	4516	1946	
5304	Camborne 1	1628	407	<i>- 8-port bubbler, daily</i>	6024	Didcot South	4485	1884	
5305	Camphill 1	2274	6546	<i>From Spring 2001</i>	6025	Downes Ground Farm	4704	4249	
5306	Cardington 2 (Note 1)	5082	2464		6026	East Tilbury	5675	1772	
5308	Corpach 1	2054	7782	<i>- filter-pack, fortnightly</i>	6027	Font-y-gary	3053	1661	
5309	Cresselly 1	2064	2062	<i>From 2004</i>	6028	Longniddry West	3426	6757	
5310	Etton 1	4980	4445	<i>- filter-pack, 4-weekly</i>	6029	Northfleet	5626	1747	
5312	Husborne Crawley 1	4964	2361		6030	Rosehurst Farm	4549	1926	
5313	Little Horkesley 1	5971	2312		6031	West Bank	4624	4250	
5314	Marshfield 1	3255	1830		6032	West Thurrock	5590	1768	
5315	Ratcliffe 13	4408	3278	See Section 2.2	7001	Bottesford	4797	3376	JEP – E.On Sites
5316	Rockbourne 1	4116	1181		7002	Marton School	4844	3819	- UVF automatic analyser
5317	Wakefield 24	4352	4132		7003	Bass Burton Brewery	4245	3232	
5318	Waunfawr 1	2533	3607		7004	Bentley Hall Farm	4085	3189	
5319	Fort Augustus 2	2366	8091		7005	Cromwell	4798	3622	
5320	Loch Leven 2	3159	6990		7006	Gainsborough Cem.	4819	3906	
5321	Redesdale 2	3833	5961		7007	Gillingham	5784	1693	
5322	Hebden Bridge 2	4011	4327		7008	Grove Reservoir	4742	3804	
5323	Preston Montford 2	3432	3143		7009	Ruddington	4564	3321	
5324	Bentra	1587	5459		7010	Stanton	4271	3193	
5325	Pitlochry	2918	7599		7011	Stile Cop Cemetery	4039	3160	
5326	Bush	3246	6638		7012	Telford Aqueduct	3690	3058	
5329	Cam Forest	1070	5785	See Section 2.2	7013	Telford School	3682	3040	
5330	Cwmystwyth	2774	2745		7014	Thorney	4858	3731	
5331	Rosemaund	3564	2476		7015	Weston on Trent	4408	3278	
5333	Fairseat	5622	1615		8001	Ladybower	4164	3892	Automatic Rural Network
5334	Bylchau	2959	3596		8002	Lullington Heath	5538	1016	- UVF automatic analyser
5335	Crai	2861	2183		8003	Harwell	4474	1863	
5338	Forsinain	2906	9486		8004	Narberth	2146	2127	
5339	Appleacre	3665	5208		8005	Rochester	5831	1762	
5343	Benniguinea	2570	5772		8006	Wicken Fen	5564	2692	
5344	Sutton Bonington	4505	3268	See Section 2.2	9001	Sutton Bonington	4505	3267	CEH
5345	Formoyle	1071	5875		9002	Auchencorth Moss	3221	6562	- UVF automatic analyser
5346	Drayton	4164	2594	See Section 2.2					
5347	Church Fenton	4528	4328						

Notes (1) Site closed in 2002 and historically not used for mapping purposes (see text).

The sites at Bylchau (site 5334) and Crai (site 5335) had been incorporated into the Rural SO₂ Monitoring Programme in 2000. These sites had previously been operated and managed under a separate contract let by the National Assembly of Wales.

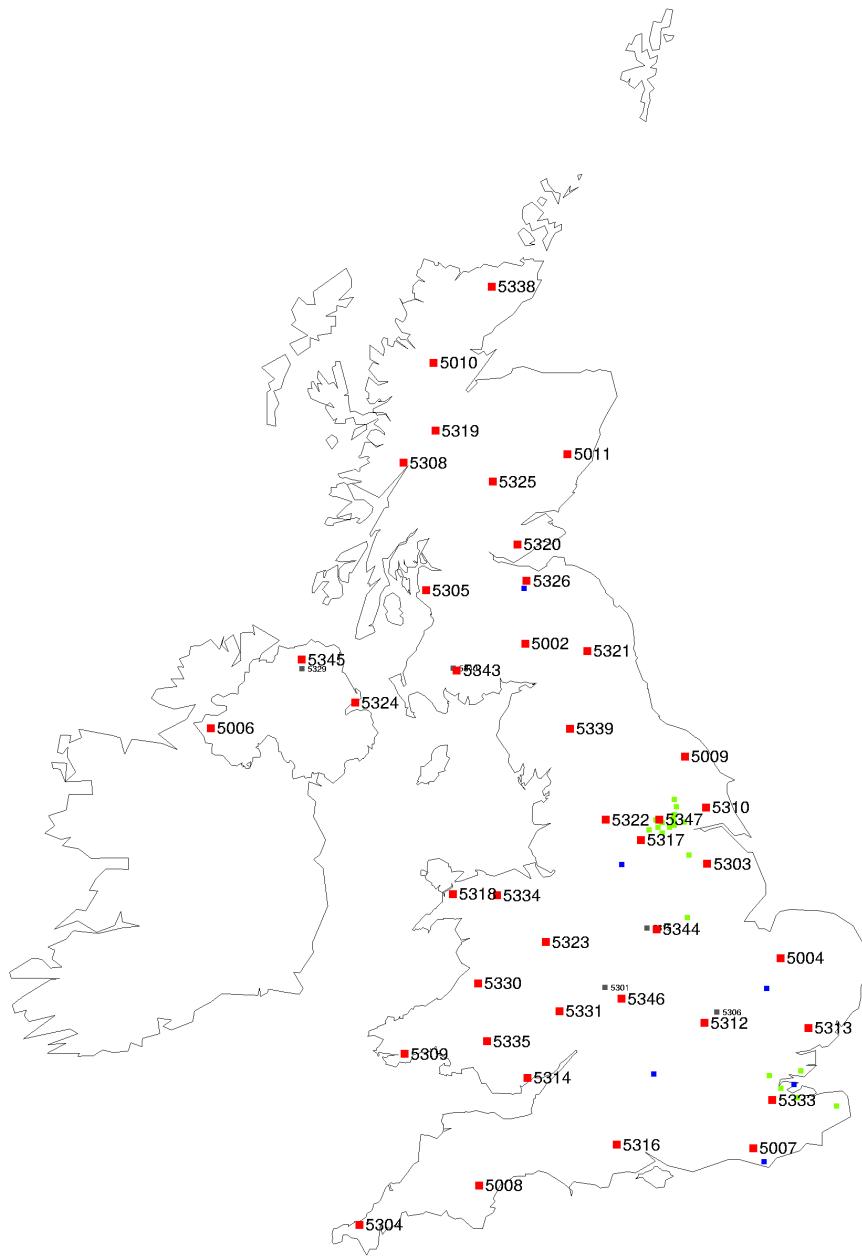


Figure 2-1 - Location of the Sites Used to Monitor and to Map SO₂ Concentrations.

[Sites that are operational are denoted by the red squares and site codes. Sites that have been closed are denoted using black squares. Other sites used in the production of concentration maps are indicated in blue (automatic measurements) and in green (JEP sites)].

2.3 THE SAMPLING TECHNIQUE

2.3.1 The Hydrogen Peroxide Bubbler Technique

At the beginning of 2001, the concentration measurements were made using the hydrogen peroxide bubbler technique [Downing and Campbell, 1995]. In this sampling method, air is drawn through a filter to remove any particulate matter (including particulate sulphate) and then through a hydrogen peroxide solution, where sulphur dioxide is absorbed and oxidised to sulphate. The resulting sulphate

concentration in the solution is determined by ion chromatography. The ambient concentration of sulphur dioxide is derived from the concentration of sulphate determined analytically and the volumes of (a) the air drawn through the bubbler during the sampling period and (b) the H₂O₂ solution.

There are three versions of the bubbler used in the Rural SO₂ and Acid Deposition monitoring networks:

- an 8-port bubbler is used at nine sites, where analysis of each daily sample is undertaken to give a daily measurement;
- an 8-port bubbler is used at 25 sites, where individual daily samples are bulked and a single analysis is undertaken to give a weekly measurement;
- a single-port bubbler is used at six sites. A single sample is collected and analysed to give a weekly measurement.

The single-port bubbler is used at the following six sites: Corpach (5308), Etton (5310), Marshfield (5314), Rockbourne (5316), Fort Augustus (5319) and Loch Leven (5320). The single-port bubbler was also operated in parallel with the 8-port bubblers located at Husborne Crawley (site codes: 5312 and 5336) and Ratcliffe (site codes: 5315 and 5337). The single-port bubbler measurements at both these sites ceased in May 1998.

The bubbler method is an EMEP recommended method [EMEP, 1996].

2.3.2 The Filter-Pack Sampler

The filter-pack sampler consists of two filters in series, which are enclosed in an airtight holder. Air is drawn through the filter-pack and sulphate aerosol particles are removed on the first filter. Sulphur dioxide is absorbed by the second filter, which has been previously washed with potassium carbonate and then impregnated with a glycerol/potassium hydroxide solution. It is quantitatively converted to solid potassium sulphite by reaction with the potassium hydroxide and oxidising species in the air convert the sulphite to sulphate during sampling. The sulphate on the exposed impregnated filter is extracted using water. The sulphate concentration in the solution is determined using ion chromatography and this is converted into a gas-phase concentration of sulphur dioxide by dividing the mass of sulphate collected on the filter by the volume of air that flowed through the filter pack during the sampling period.

This is also an EMEP recommended method [EMEP, 1996].

2.4 EQUIPMENT MAINTENANCE

Regular equipment maintenance is needed to maximise data capture and sample quality. The sites within the network are visited annually to ensure all equipment is operating safely and within acceptable working limits. The table shown in Appendix 1 summarises when the annual site maintenance and other visits occurred.

The bubbler and filter-pack units are based on a simple design with few moving parts. However, the motors within the sampling pumps occasionally fail. Consequently, the airflows at all sites are routinely monitored so that failing pumps can be identified and replaced before complete failure occurs. The sampling flowrate for the bubbler is maintained between 2 and 4 m³ per day. The filter-pack uses a higher flow rate of approximately 15 m³ per day.

To ensure airflows are recorded accurately the airflow meters are calibrated at least once a year against a certified wet gas meter (standard meter). The accepted tolerance for bubbler meters is where their measured air volume is within 3% of that measured by the standard meter. If meters are found to fall outside this criterion, they are withdrawn from use and replaced.

2.5 SENSITIVITY OF THE SAMPLING TECHNIQUES

The same ion chromatographs are used to determine the concentration of sulphate from both samplers. The instrument has an analytical limit of detection of 0.01 mg [SO₄²⁻ as S] per litre of solution.

For the volumes of H₂O₂ solution (400 cm³) and air flow rates (2-4 m³ per day) used in the bubbler method, this implies that the limit of detection for ambient SO₂ concentrations will vary between 0.15-0.30 µg SO₂ as S m⁻³ (0.1-0.2 ppb SO₂), depending on the actual air flow rate reported. For the filter-pack sampler, although the analytical limit of detection remains unchanged, significantly lower concentrations can be measured as higher air flow rates (210 m³ over a fortnight sampling period = 15 m³ per day) and a smaller extraction volume (25 cm³) are used. The filter-pack limit of detection for ambient SO₂ concentrations is 0.0012 µg SO₂ as S m⁻³ or 0.0009 ppb SO₂.

2.6 DATA CAPTURE

Annual and monthly mean concentrations are only calculated if the data capture exceeds 75%. There are a number of reasons why the concentrations cannot be determined for individual samples. These include:

Frequent	<ul style="list-style-type: none"> The electricity supply is interrupted and the sample collected is not representative of that week's concentration. A failure of the pump/meter/bubbler occurs.
Occasional	<ul style="list-style-type: none"> The sampler is switched off by the site operator when the site operator is unavailable. A long sampling period occurs when the site operator is unavailable (2 weeks plus usually) which because of the lack of fluid reservoir is not representative of that sampling period (H₂O₂ falls below dreschel stems in bottles). An error or mix-up is made by the site operator. The sample solution in the bubbler partially or completely leaks during transit because the sample container lids were not secured effectively. The total sample volume is unknown and the concentration in air cannot then be calculated. The parcel is lost during transit.
Rare	<ul style="list-style-type: none"> The sample is lost during analysis or sample registration. Vandalism at the monitoring site may cause the sample to be lost.

There were specific instances when sampling was affected over an extended period at certain sites. Access restriction to the Brockhill site prevented sample collection throughout much of 2001. As a result, this site was relocated to Drayton in early 2002.

Appendix 1 provides details of the annual site maintenance and other site visits.

3 Comparison of Samplers

3.1 OVERVIEW

In the late 1990's, the sulphur dioxide concentrations measured at some of the sites in the monitoring networks have been at or below the limit of detection (LOD) of the bubbler method. A change in sampling method was required to provide a lower LOD while retaining data integrity and consistency. Following the intercomparison exercise undertaken at the Auchencorth Moss site near Edinburgh between September 1998 and May 1999, the filter-pack method was selected to replace the hydrogen peroxide bubbler method. The filter-pack sampler was introduced into the monitoring network from April 2001.

At five sites, with very different sulphur dioxide environments, both the bubbler and filter-pack sampler have been operated side-by-side to compare the performance of the two samplers and hence to define the transfer function. The five sites selected are shown in Table 3-1, together with the periods when the two samplers were operated side-by-side.

Table 3-1 - Overlap Periods of the Bubbler and Filter-pack Samplers at the 5 Selected Sites

Site	Overlap Period(s)
5006 - Lough Navar	24/04/2001 – 05/11/2001 29/01/2002 – 25/07/2004
5010 – Strathvaich Dam	19/06/2001 – 31/12/2001
5326 – Bush	23/05/2001 – 30/07/2004
5330 – Cwmystwyth	26/04/2001 – 10/09/2003
5344 – Sutton Bonington	15/05/2001 – 29/12/2001 30/01/2002 – 03/07/2002

Lough Navar and Strathvaich Dam are remote sites where very low SO₂ concentrations are observed. Bush and Cwmystwyth are intermediate sites with annual mean concentrations of typically 1 ppb. Sutton Bonington is a high concentration site, not far from a major source of SO₂ at Ratcliffe on Soar.

3.2 RELATIVE PERFORMANCE OF THE BUBBLER AND FILTER-PACK SAMPLERS

The daily bubbler and fortnightly filter-pack measurements made at Bush between 2001 and 2003 are shown in Figure 3-1. At this site, SO₂ concentrations are also made using an automatic UV-F analyser. Figure 3-1 also includes the UV-F and daily bubbler measurements averaged over the same sampling periods as those of the filter-pack measurements. The agreement between the three samplers was good, both qualitatively and quantitatively.

In Figure 3-2, the bubbler and filter-pack measurements are compared at the other four overlap sites (Lough Navar, Strathvaich Dam, Cwmystwyth and Sutton Bonington). Although the bubbler measurements are close to the baseline or limit of detection of the technique at the low concentrations sites of Lough Navar and Strathvaich Dam, the two samplers appear to follow each other quite closely. The measurements suggest that there is an offset between the two samplers.

From Spring 2002, there was a significant change in the relative performances of the two samplers. This is most clearly seen in the measurements made at Lough Navar and Cwmystwyth where the filter-pack sampler reported much lower concentrations. As will be seen subsequently, this was traced to a change in the performance of the bubbler. These measurements were not used in the subsequent statistical analysis.

An unweighted linear regression analysis was undertaken of valid pairs of filter-pack and bubbler measurements at each site, as shown in Figure 3-3. All the measurements from mid 2002 onwards have been excluded for the reason indicated above and this accounted for the relatively large number of measurements pairs 'not used', which is indicated in Table 2-1.. The resulting regression

coefficients are summarised in Table 2-1. The coefficient of determination is greater than 0.75 at all the sites.

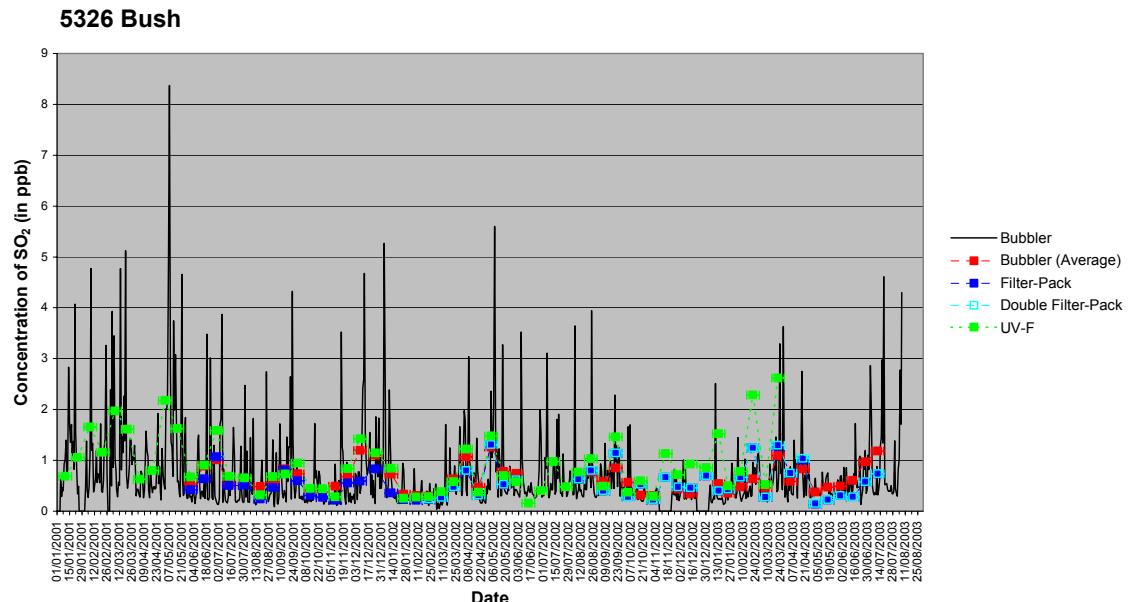


Figure 3-1 - Comparison of the Bubbler, Filter-pack and UV-F Measurements made at Bush between 2001 and 2003

The valid measurements from all 5 sites were then combined into a single regression analysis, as shown in the bottom right-hand panel of Figure 3-3 and these regression coefficients are also summarised in Table 3-2.

$$[\text{SO}_2] \text{ filter-pack} = 1.049 [\text{SO}_2] \text{ bubbler} - 0.108 \text{ (in ppb)}$$

The analysis indicates that there is (a) an almost 1:1 relationship between the two sampler measurements and (b) that the filter-pack sampler under-reads by ~0.1 ppb. This results almost replicates that obtained previously during the Auchencorth Moss intercomparison study.

Table 3-2 - Summary of the Regression Analysis of the Filter-pack vs Bubbler Measurements

Site	# Datapoints Used	# Datapoints Not Used	Slope	Intercept (ppb)	Coefficient of Determination
5006 Lough Navar	18	29	1.043	-0.088	0.937
5010 Strathvaich Dam	11	2	0.792	-0.050	0.771
5326 Bush	35	14	0.985	-0.127	0.749
5330 Cwmystwyth	29	23	1.198	-0.174	0.844
5344 Sutton Bonington	13	12	0.838	0.264	0.840
All Sites	106	80	1.049	-0.108	0.900
Auchencorth Moss	13	-	0.938	-0.135	0.688

A possible explanation for the under-read of the filter-pack sampler could be incomplete capture of SO₂ by the single impregnated filter paper. This was eliminated as the addition and subsequent analysis of a second impregnated filter showed that there was little if any breakthrough. Another possible explanation could be the capture of SO₂ on the untreated filter used to trap particulate sulphate. Although the filters have been retained for future analysis, the changed performance of the bubbler from mid 2002 may make this difficult to assess with the samples presently available.

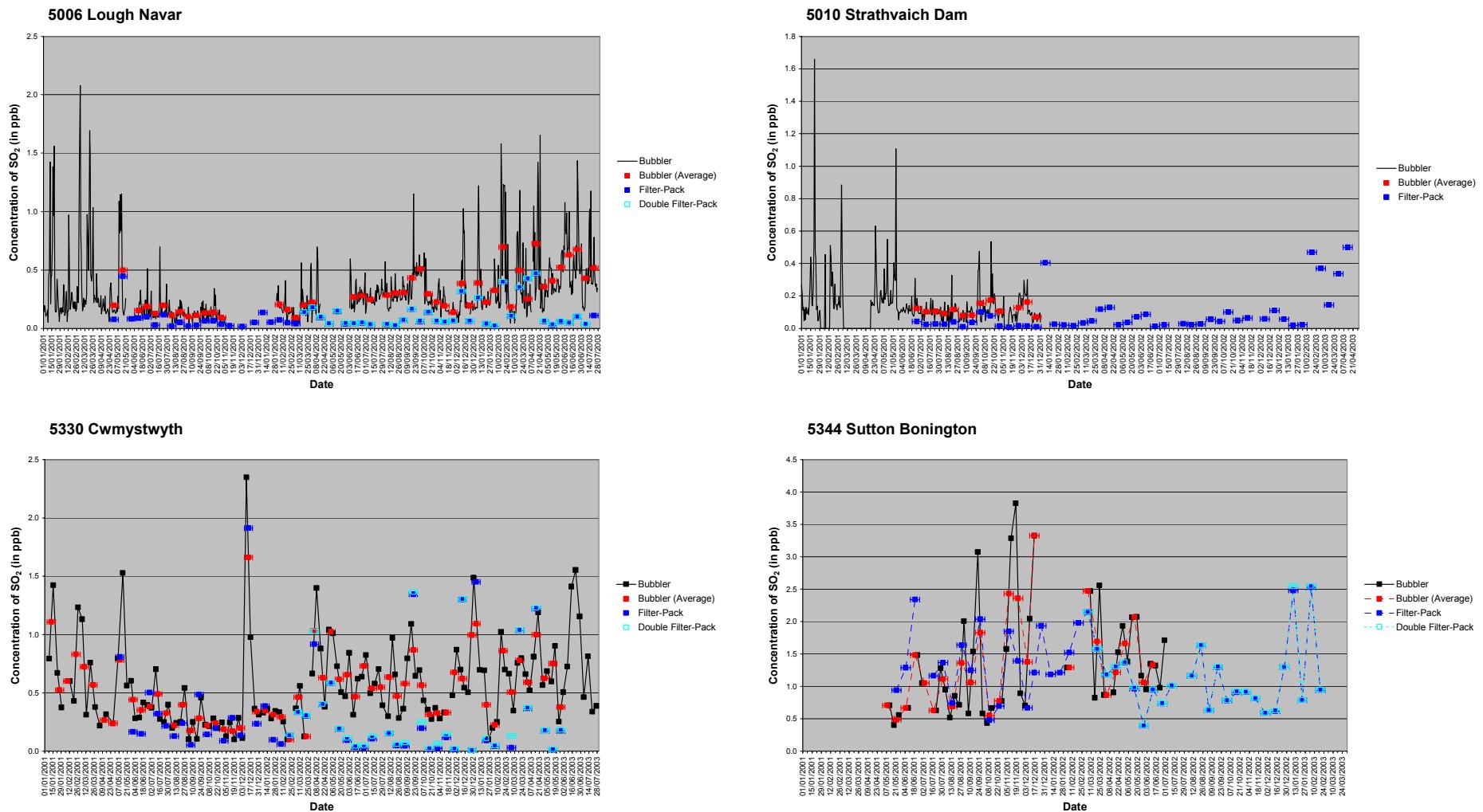


Figure 3-2 - Comparison of the Bubbler and Filter-pack Measurements made at the Other Overlap Sites between 2001 and 2003.

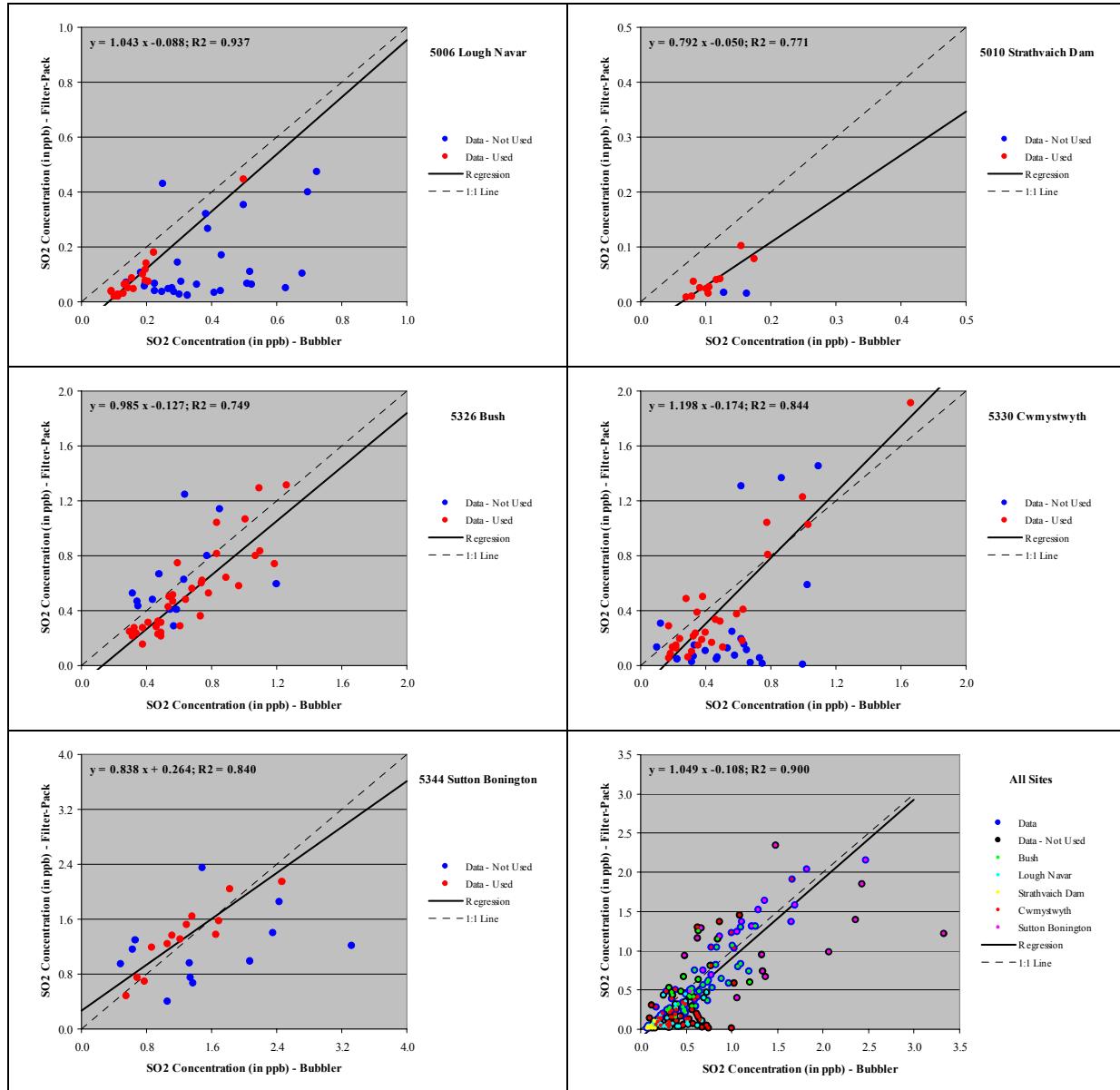


Figure 3-3 - Unweighted Linear Regression Analyses of the Valid Filter-Pack and Bubbler Measurements at Each of the Overlap Sites and All Sites combined

3.3 PERFORMANCE AGAINST OTHER SAMPLERS

The attempt to explain the offset was unfortunately confounded by the change in the performance of the bubbler technique from Spring 2002, most noticeably at Cwmystwyth and Lough Navar. The daily bubbler measurements of SO₂ at Bush have in the past shown very good agreement with the co-located automatic UV-F measurements [see e.g., Hasler *et al.*, 2000]. However, even at this site, there appeared to be a step change in the baseline of the bubbler at the Bush site from May 2002 when compared to the daily-averaged UV-F measurements, as shown in Figure 3-4. From investigations carried out, it would appear that the changed performance of the bubbler from Spring 2002 could be ascribed to either increasing porosity of or the effects of leaching of sulphate from the walls of the bubbler containers.

There are other measurements that can be used to provide an additional check of the performance of the filter-pack sampler. As part of the Acid Deposition Monitoring programme, measurements of nitric acid and other acid gases are made using a denuder technique on a monthly basis at 12 sites [see e.g., Hayman *et al.*, 2003a]. The monthly SO₂ denuder measurements were compared against the monthly-averaged concentrations derived from the filter-pack and bubbler measurements. Figure 3-5

shows a comparison of these measurements made at Bush, Lough Navar, Strathvaich Dam and Cwmystwyth.

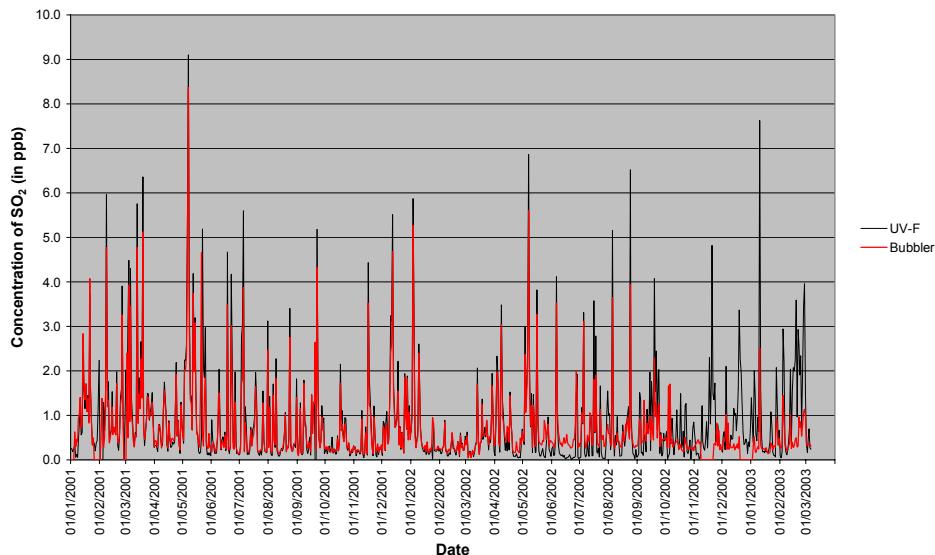


Figure 3-4 - Comparison of the Bubbler and UV-F SO₂ Measurements Made at Bush

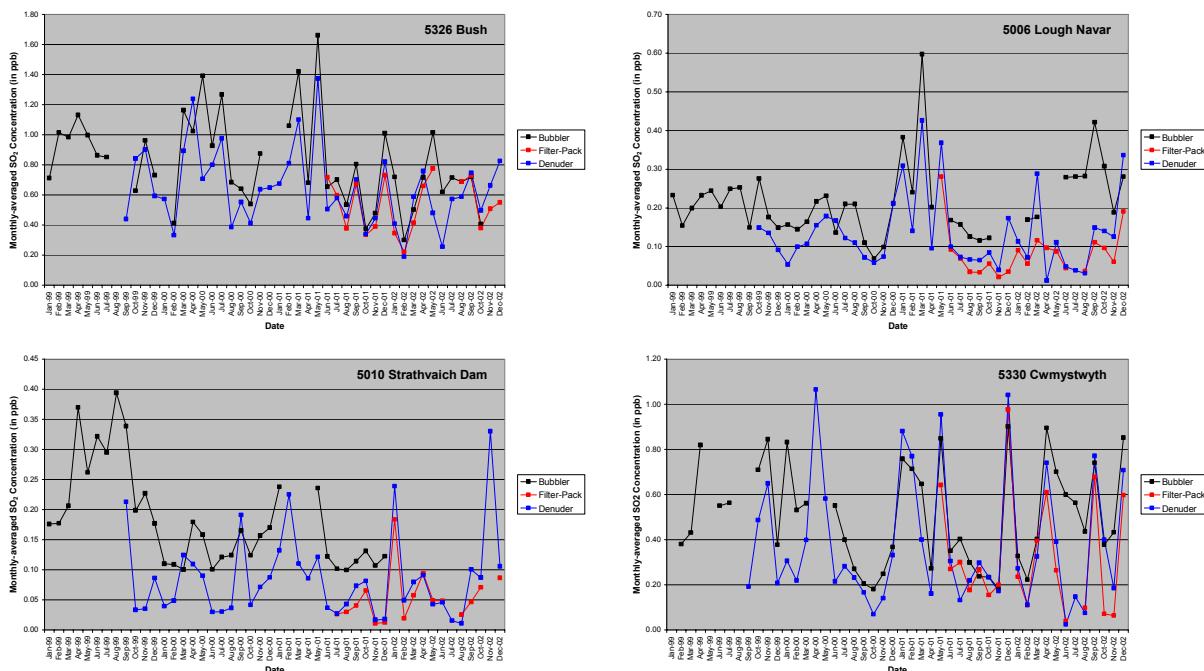


Figure 3-5 - Comparison of the Monthly-averaged Concentration Measurements made using the Bubbler, Filter-pack and Denuder Techniques

This comparison allows the following statements to be made:

- The three samplers generally show the same qualitative behaviour with time
- The filter-pack and denuder measurements are in good agreement although the denuder measurements are slightly larger.
- Both the filter-pack and denuder measurements are lower than those of the bubbler. This is especially noticeable during the period from Spring 2002 when there was a significant discrepancy between the filter-pack and bubbler measurement.

3.4 COMPARISON OF TOTAL SULPHUR

In the previous section, the comparison of the different SO₂ samplers indicated that the filter-pack sampler can under-read. The EMEP manual for sampling and chemical analysis [EMEP, 1996] indicates that a bias in the filter-pack sampler may be introduced for the following reasons:

- If the aerosol filter becomes wet during sampling since it is possible to have absorption of sulphur dioxide on cellulose-based filters. This gives an overestimation of the sulphate concentrations in aerosols and a corresponding underestimation of the sulphur dioxide. This is unlikely to be the explanation for the UK filter-pack samplers as the aerosol filters used are PTFE filters;
- The absorption of sulphur dioxide on the impregnated filter is not 100 per cent effective. Experiments within EMEP and also in the UK filter-pack samplers with a second KOH-impregnated filter behind the first have, however, not given measurable amounts of sulphur dioxide.
- It may be possible to lose components before the analysis due to incomplete extraction from the filter.

About 200 aerosol filters were retained and analysed between 2002 and 2005 from a number of the filter-pack monitoring sites. The concentrations are given in Appendix 2.1. These measurements were then used to derive monthly sulphate and combined with the monthly sulphur dioxide concentrations to give total sulphur¹ concentrations for comparison with the measurements made by the denuders and with the daily sulphate measurements.

There were 12 denuder sites operational between 2002 and 2005, as indicated in Table 3-3. 10 of these 12 sites had co-located filter-pack samplers. The Glensaugh denuder site is about 6.9 km from the Glen Dye filter-pack site. The nearest filter-pack site to the Rothamsted denuder site is the Husborne Crawley site. The sites are ~28 km apart. For the purposes of this analysis, the Glen Dye/Glen Dye and Husborne Crawley/Rothamsted sites were considered to be close enough to enable a valid comparison of the different samplers.

Table 3-3 – Sites in the Denuder Sampling Network.

Site	Denuder Site Code	Filter-pack Site Code
Bush	1	5326
Glensaugh	21	-
Glen Dye	-	5011
Rothamsted	24	-
Husborne Crawley	-	5312
Strathvaich Dam	30	5010
Eskdalemuir (Note 1)	31	5002
High Muffles (Note 1)	32	5009
Stoke Ferry	33	5004
Yarner Wood (Note 1)	34	5008
Barcombe Mills (Note 1)	83	5007
Sutton Bonington	40	5344
Lough Navar (Note 1)	45	5006
Cwmystwyth	70	5330

Note (1) Also measurements of daily particulate sulphate

The comparison of the monthly concentrations of SO₂, particulate sulphate and total sulphur derived from the denuder and filter-pack samplers between 2002 and 2005 are shown in Figure 3-6 for Lough Navar, Bush, Cwmystwyth and Sutton Bonington. Also included are the monthly concentrations derived from the daily particulate sulphate measurements for the sites at which such measurements are made. The comparison of the samplers for the other 8 sites can be found in Appendix 2.2.

¹ Concentration of Total sulphur (in µg S m⁻³) = Concentration of SO₂ (in µg SO₂ as S m⁻³) + Concentration of aerosol sulphate (in µg sulphate as S m⁻³).

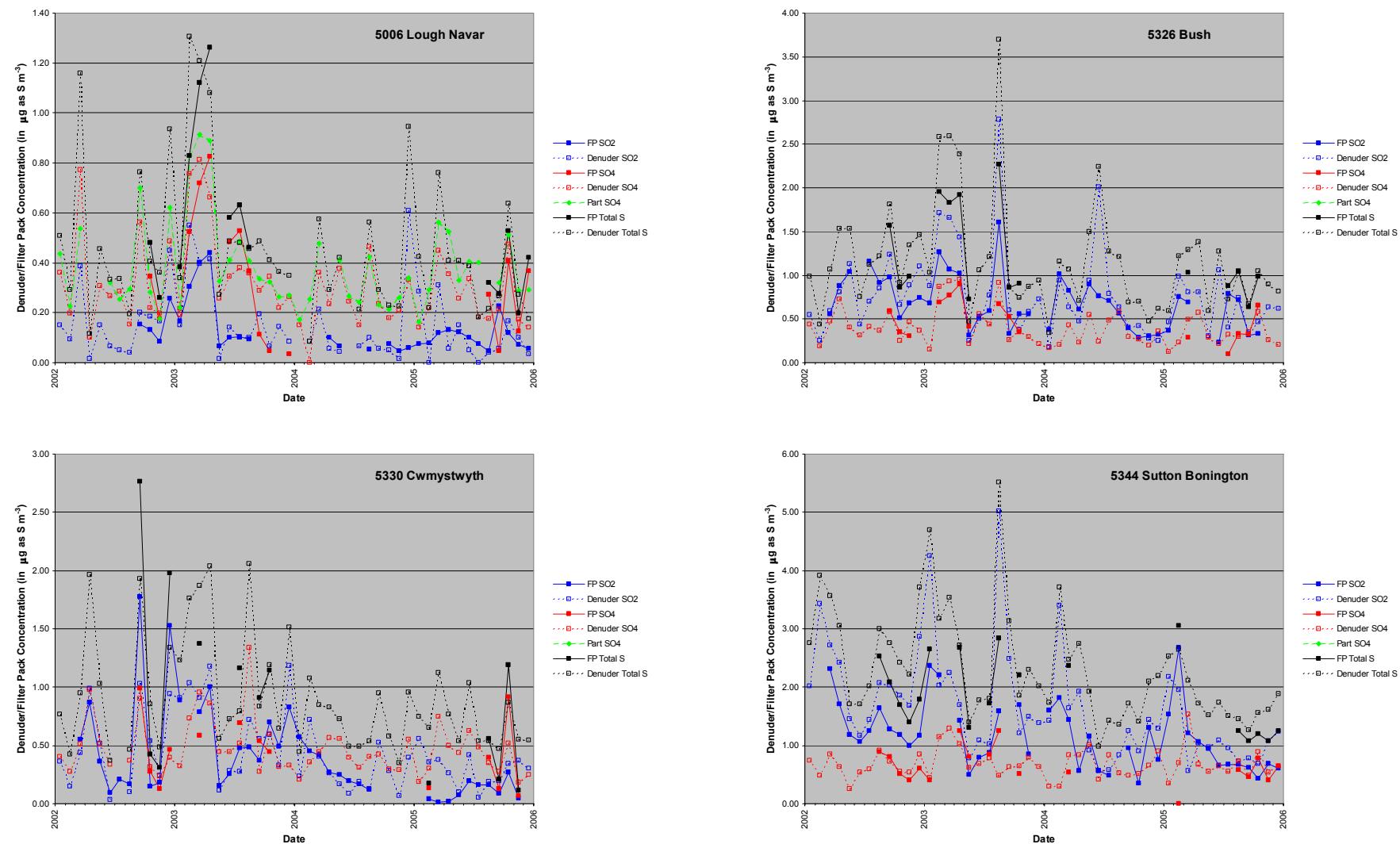


Figure 3-6 – Comparison of the Monthly Concentrations of Sulphur Dioxide, Particulate Sulphate and Total Sulphur Concentrations (in $\mu\text{g S m}^{-3}$) Derived from the Denuder and Filter-Pack Samplers between 2002 and 2005 at Lough Navar, Bush, Cwmystwyth and Sutton Bonington. Also included are the Monthly Concentrations derived from the Daily Particulate Sulphate Measurements for the Sites at which such Measurements are made.

As not all the particulate sulphate filters were analysed from the filter-pack sampler and a data capture criteria of 75% was applied for the determination of a valid monthly mean concentration, the number of valid pairs of denuder and filter-pack data for particulate sulphate and total sulphur was less than that for sulphur dioxide (see Table 3-4). The charts presented in Figure 3-6 and Appendix 2.2 provide an extensive comparison of the sulphur dioxide measurements (as was described in earlier sections) and show that the filter-pack sampler and the denuder were in good agreement at the low concentration sites but that the filter-pack sampler reported lower concentrations at the higher concentration sites (e.g., High Muffles and Sutton Bonington).

Table 3-4 – Number of Valid Pairs of Denuder and Filter-pack Measurements for the Comparison of Monthly Concentrations of Sulphur Dioxide, Particulate Sulphate and Total Sulphur.

Site	Number of Valid Pairs of Denuder and Filter-pack Measurements		
	Sulphur Dioxide	Particulate Sulphate	Total Sulphur
Bush	40	15	15
Glensaugh/Glen Dye	44	5	5
Rothamsted/Husborne Crawley	47	3	3
Strathvaich Dam	43	4	4
Eskdalemuir	44	5	5
High Muffles	46	5	4
Stoke Ferry	46	5	5
Yarner Wood	40	3	3
Barcombe Mills	44	4	4
Sutton Bonington	42	18	18
Lough Navar	30	17	14
Cwmystwyth	38	13	13
Total	504	97	93

A visual inspection of the sulphate measurements shows reasonable agreement between the two samplers. There is no clear evidence that the sulphate measurements from the filter-pack sampler are higher than those of the denuder. As a result, the comparison of the total sulphur showed the same trends as in the sulphur dioxide measurements - the filter-pack sampler and the denuder were in good agreement at the low concentration sites but that the filter-pack sampler reported lower concentrations at the higher concentration sites (e.g., High Muffles and Sutton Bonington).

Figure 3-7 presents scatter plots of the monthly concentrations of the denuder and filter-pack measurements of sulphur dioxide, particulate sulphate and total sulphur. Also included in Figure 3-7 is a scatter plot of the monthly concentrations of particulate sulphate from the daily and filter-pack measurements. There is again clear evidence in the sulphur dioxide scatter plot that the filter-pack sampler gives lower measurements but no significant evidence that the filter-pack measurements of particulate sulphate are higher as a result (except perhaps at High Muffles). Thus, it is unlikely to be absorption or capture of sulphur dioxide on the untreated front filter that is the cause of the low sulphur dioxide concentrations.

3.5 CONCLUDING REMARKS

The analysis of the sulphate filters did not account for the small offset between the bubbler and filter-pack samplers. Although only H₂O₂ solutions with no detectable sulphate concentration were used in the bubbler method, no field blanks were employed and previous experience has shown that leaching of sulphate from the bubbler container can occur. It is therefore likely that the offset represents the different ‘baselines’ of the bubbler and filter-pack samplers. It is worth noting the extensive comparison of co-located daily SO₂ measurements using filter-pack samplers and sensitive automatic analysers at 4 Finnish sites, reported by Leppänen *et al.* [2005]. The study found that the filter-pack sampler gave lower concentrations (by up to 12%) and that there was a constant offset between the samplers of 0.03-0.06 µg m⁻³. Although a number of possible causes were explored, no clear systematic influence could be detected.

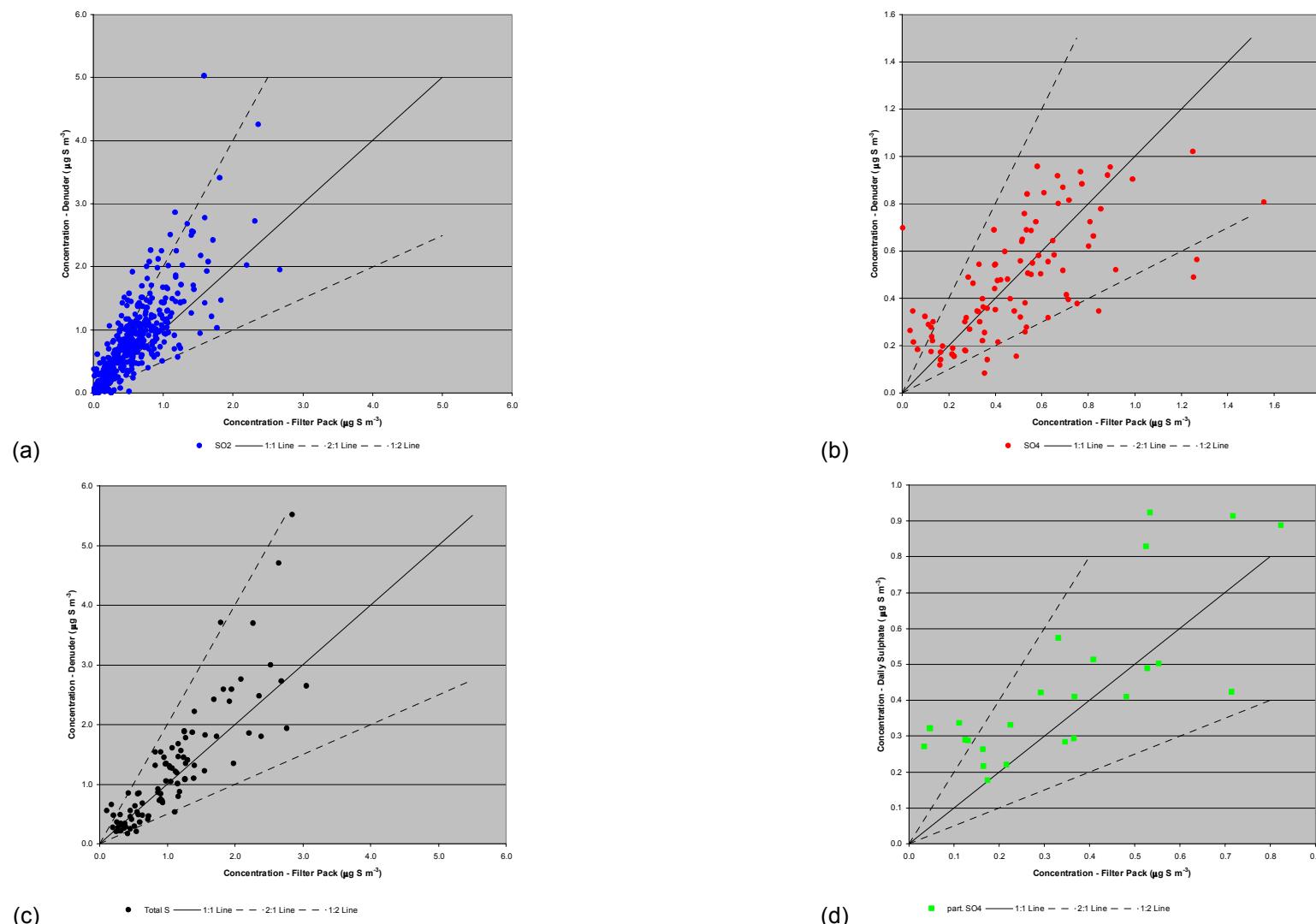


Figure 3-7 – Scatter Plots of the Monthly Concentrations of (a) Denuder Sulphur Dioxide vs Filter-pack Sulphur Dioxide, (b) Denuder Particulate Sulphate vs Filter-pack Particulate Sulphate, (c) Denuder Total Sulphur vs Filter-pack Total Sulphur and (d) Daily Particulate Sulphate vs Filter-pack Particulate Sulphate.

4 The 2001-2005 Measurements

The complete data set of measurements for the years 2001-2005 for the 32 sites in the Rural Sulphur Dioxide Monitoring Network and the 8 sites in the UK Acid Deposition Monitoring Networks are given in Appendix 3. Monthly mean concentrations have only been calculated when the data capture is greater than 75% and these are also presented in the Tables and Figures of Appendix 3. The measurements are also available from Defra's Air Quality Information Archive:

(<http://www.airquality.co.uk/archive/index.php>).

It should be noted that the end date of the sampling period for the measurements on the Air Quality Information Archive is currently taken to be the last full day of sampling. This is the day before those shown in Appendix 3, which is the date of the sample changeover.

4.1 CONCENTRATION STATISTICS

4.1.1 Annual Mean Concentrations

Annual mean concentrations have been calculated for the years 2001-2005 for those sites where the data capture was greater than 75%, as shown in Table 4-1. Annual mean concentrations are also given for 6 rural AURN sites and the 12 sites in the CEH-operated Nitric Acid Denuder network. Annual mean concentrations are not given for the JEP co-ordinated sites as the data for these sites have been provided on condition that neither the measurements made at the sites nor the statistics derived are explicitly reported². Table 4-1 also includes the annual mean concentrations for the years 1997-2000, where available. It is clear that the previous downward trend in the annual mean concentrations observed at many of the monitoring sites previously has continued [Hasler *et al.*, 2001; Hayman *et al.*, 2001a, b, 2003b].

At Rural SO₂ Monitoring sites and as in previous years, the highest annual mean concentrations are observed at sites, which are close to the major emission sources in the Midlands and Yorkshire (Caenby, Sutton Bonington, Wakefield, Hebden Bridge and Church Fenton). The lowest annual mean concentrations were measured at the remote network sites: Lough Navar in Northern Ireland, Fort Augustus, Forsinain and Strathvaich Dam in Scotland. All of these sites are located in less populated areas of the UK, away from the direct influence of SO₂ emission sources.

The concentrations from the bubbler measurements have not been corrected for the +0.1 ppb offset that was determined from the sampler overlap measurements. This small offset is highly significant at these low concentration sites and will account for some of the decrease observed. It is worth noting that the annual mean concentrations in 2005 at most of the remote sites are below the limit of detection of the bubbler method.

The low concentrations observed at the remote sites are confirmed by the CEH denuder measurements. There is however some divergence at the higher concentrations sites with the filter-pack sampler giving lower concentrations. This is for the reasons indicated in Section 3. The filter-pack measurements have not been corrected.

The measurements at the 6 rural AURN sites are made using automatic instruments. Even though, these are tuned and calibrated for lower concentrations, there is some evidence that the instruments are close to their limit of detection at some of the sites.

4.1.2 Trends in Annual Mean Concentrations

Overall, SO₂ concentrations at network sites have decreased over the period from network commencement in 1991/1992 and 2005. This is illustrated in Figure 4-1 for the annual mean concentrations at a number of the sites. Although much of the decrease can be associated with the

² The companies supplying the data consider that the measurements have commercial value and that a third party could benefit through their inclusion in this report.

decline in UK SO₂ emission estimates during this period [Dore, 2006], Fowler and co-workers have observed that the dry deposition velocity of SO₂ has effectively increased as ambient SO₂ concentrations have fallen and that this would enhance the decline.

Table 4-1 - Annual Mean Concentrations of SO₂ at Rural Locations for the Years 1997 to 2005.

Site code	Site name	Annual Mean Concentration (in µg SO ₂ as S m ⁻³)								
		1997	1998	1999	2000	2001	2002	2003	2004	2005
5002	Eskdalemuir	0.72	0.54	0.50	0.35	0.44	0.24	0.41	0.22	0.21
5004	Stoke Ferry	1.90	2.02	1.43	1.14	0.97	0.73	0.97	0.77	0.68
5006	Lough Navar	0.37	0.31	0.28	0.22	0.28	0.11	-	-	0.08
5007	Barcombe Mills	1.39	1.02	0.93	0.85	0.86	0.63	0.81	0.69	0.55
5008	Yarner Wood	0.88	0.70	0.57	0.42	0.64	0.28	0.60	0.37	0.33
5009	High Muffles	2.25	1.76	0.93	1.55	1.52	1.24	1.20	0.77	0.73
5010	Strathvaich Dam	0.43	0.40	0.35	0.18	0.20	0.09	0.11	0.06	0.08
5011	Glen Dye	0.73	0.48	0.39	0.35	0.50	0.29	0.40	0.16	0.16
5326	Bush	1.92	1.30	1.17	1.19	1.16	0.74	0.75	0.55	0.49
5301	Brockhill 1	2.45	1.44	1.03	1.34	-				
5303	Caenby 1	3.23	3.95	3.21	3.25	2.73	2.19	1.99	1.38	1.04
5304	Camborne 1	1.11	0.91	0.76	0.64	0.64	0.38	0.51	0.31	0.36
5305	Camphill 1	1.57	0.63	0.96	1.12	1.05	0.57	0.64	0.35	0.32
5306	Cardington 2	4.38	5.19	4.27	3.73	3.91				
5308	Corpach 1	1.23	0.84	0.60	0.57	0.53	0.35	0.55	0.37	0.20
5309	Cresselly 1	1.63	1.05	0.88	0.90	1.06	0.58	0.90	0.58	-
5310	Etton 1	3.62	3.53	2.91	2.34	-	-	1.30	0.88	0.92
5312	Husborne Crawley 1	2.73	2.36	1.41	1.47	1.51	1.11	1.27	0.86	0.97
5313	Little Horkesley 1	2.77	2.28	1.66	1.49	1.29	0.89	1.08	0.73	0.74
5314	Marshfield 1	1.78	1.60	1.42	1.10	1.59	0.81	0.83	0.57	0.52
5315	Ratcliffe 13	3.73	3.34	2.63	2.76	2.35				
5316	Rockbourne 1	1.51	1.20	0.86	0.72	1.00	0.59	0.87	0.55	0.64
5317	Wakefield 24	4.05	3.31	2.58	2.54	2.57	2.00	2.19	1.41	1.28
5318	Waunfawr 1	1.00	0.96	0.85	0.76	1.69	0.68	0.97	0.74	0.68
5319	Fort Augustus 2	0.34	0.62	-	-	0.14	0.12	0.15	-	0.07
5320	Loch Leven 2	2.45	1.92	1.69	1.26	1.26	1.74	1.44	-	0.72
5321	Redesdale 2	1.28	0.87	1.38	1.03	0.31	0.83	1.80	0.92	-
5322	Hebden Bridge 2	3.91	2.45	1.89	1.70	1.68	0.99	1.86	0.65	-
5323	Preston Montford 2	1.93	1.12	0.93	0.59	1.12	0.60	0.92	0.34	0.32
5324	Bentra	2.08	1.68	-	1.35	1.41	0.75	0.81	0.71	-
5325	Pitlochry	0.68	-	0.38	0.24	0.29	0.27	0.28	-	-
5329/5345	Cam Forest/Formoyle	0.76	-	-	0.44	0.29	0.16	0.33	-	0.11
5330	Cwmystwyth	1.39	1.04	0.86	0.59	0.64	0.36	0.52	-	0.15
5331	Rosemaund	1.28	1.35	1.02	0.67	0.64	0.44	0.65	0.39	0.40
5333	Fairseat	2.12	1.86	2.12	1.39	-	1.09	1.61	0.75	0.88
5334	Bylchau	1.28	0.90	0.54	0.45	0.84	0.50	0.78	0.31	0.36
5335	Crai	1.27	1.24	0.84	0.69	0.93	0.54	0.71	0.43	0.48
5338	Forsinain	0.28	0.37	0.34	0.30	0.20	0.14	0.14	0.18	0.08
5339	Appleacre	1.76	1.66	1.44	0.83	0.80	0.60	0.93	0.42	0.40
5340/5343	Garry/Garrib/Benniginea	0.53	0.40	0.31	0.26	0.34	0.20	0.32	0.14	0.16
5344	Sutton Bonington					-	1.48	1.26	0.97	0.89
5346	Drayton						0.72	0.81	0.58	0.48
5347	Church Fenton							1.55	1.13	0.88
AURN	Ladybower	4.90	3.65	2.45	2.15	2.50	2.50	2.75	1.60	1.45
	Lullington Heath	2.30	1.80	1.55	1.35	1.45	1.25	1.65	1.50	1.35
	Harwell	-	1.85	1.25	1.75	1.55	1.15	1.80	1.45	1.20
	Narberth (1)	1.55	2.20	-	2.65	-	-	-	1.35	1.10
	Rochester	5.20	4.25	4.05	3.90	4.15	3.10	3.35	3.45	3.05
	Wicken Fen	-	1.85	1.40	1.20	1.20	0.90	1.30	1.65	1.95
CEH Denuder	Bush					1.85	1.83	0.77	1.02	0.67
	Glensaugh					1.25	0.93	0.31	0.37	0.17
	Rothamsted					2.96	3.11	1.21	1.61	1.02
	Strathvaich Dam					0.24	0.22	0.13	0.13	0.05
	Eskdalemuir					1.09	0.97	0.37	0.40	0.17
	High Muffles					3.71	3.34	1.58	1.45	0.83
	Stoke Ferry					3.40	2.49	0.93	1.23	0.85
	Yarner Wood					1.18	1.26	0.44	0.65	0.31
	Barcombe Mills						2.01	0.88	1.03	0.81
	Sutton Bonington					5.12	5.16	2.09	2.06	1.35
	Lough Navar					0.33	0.43	0.17	0.19	0.12
	Cwmystwyth					1.02	1.24	0.49	0.67	0.29

Notes: '-' indicates that an annual mean concentration could not be determined as the data capture was less than 75%; (1) Site not used for mapping purposes (see text); (2) New site (less than 50% data capture); (3) The data for these sites have been provided solely for use in generating the SO₂ concentration map and on condition that neither the measurements made at the sites nor the statistics derived are explicitly reported; (4) JEP site was opened between 1997 and 2000; (5) JEP site was closed between 1997 and 2000.

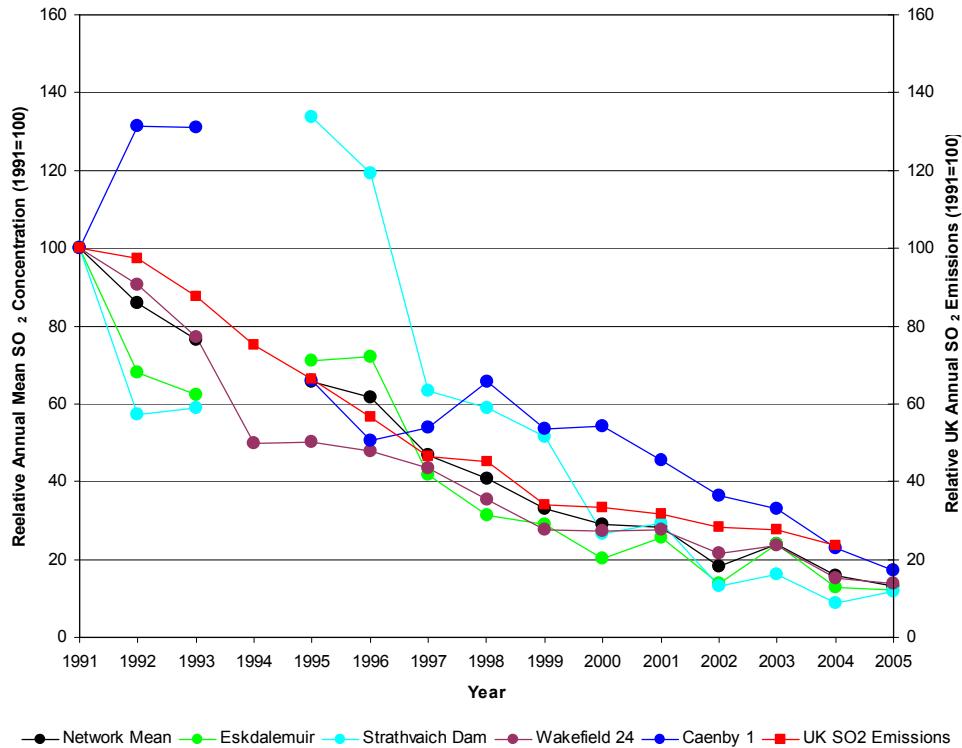


Figure 4-1 – Trends in Annual Mean SO₂ Concentrations and UK SO₂ Emissions between 1991 and 2005 (Relative to 1991 = 100).

Figure 4-2 presents both the monthly and running annual mean SO₂ concentrations measured at Eskdalemuir. This is used as an example to illustrate the substantial decline in SO₂ concentrations since the early 1980s. The average concentration at Eskdalemuir has decreased by a factor of ten since 1980 from 4.5 ppb to 0.3 ppb.

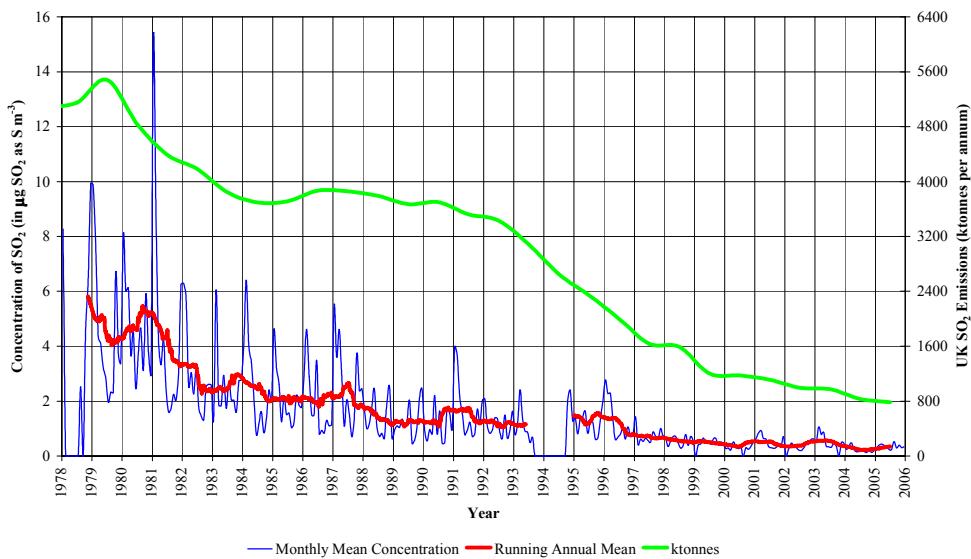


Figure 4-2 - Trends in the concentration of sulphur dioxide observed at Eskdalemuir since 1978 and in the annual UK emissions of sulphur dioxide

Figure 4-2 also suggests that the large seasonal variations, where higher concentrations are observed during cold winter months, are no longer apparent. Higher concentrations are expected during the winter period because of the relatively higher emissions at this time of the year, combined with poorer vertical dispersion of the emissions.

The decline in annual mean concentrations is also mirrored in the trends in other SO₂ concentration metrics (a) the number of days the daily annual mean concentration was above 125 µg SO₂ m⁻³ and (b) the number of periods that the 15-minute averaged concentration exceeded 266 µg SO₂ m⁻³. Figure 4-3, taken from the Defra web-site³, shows the significant downward trends in these metrics between 1990 and 2005.

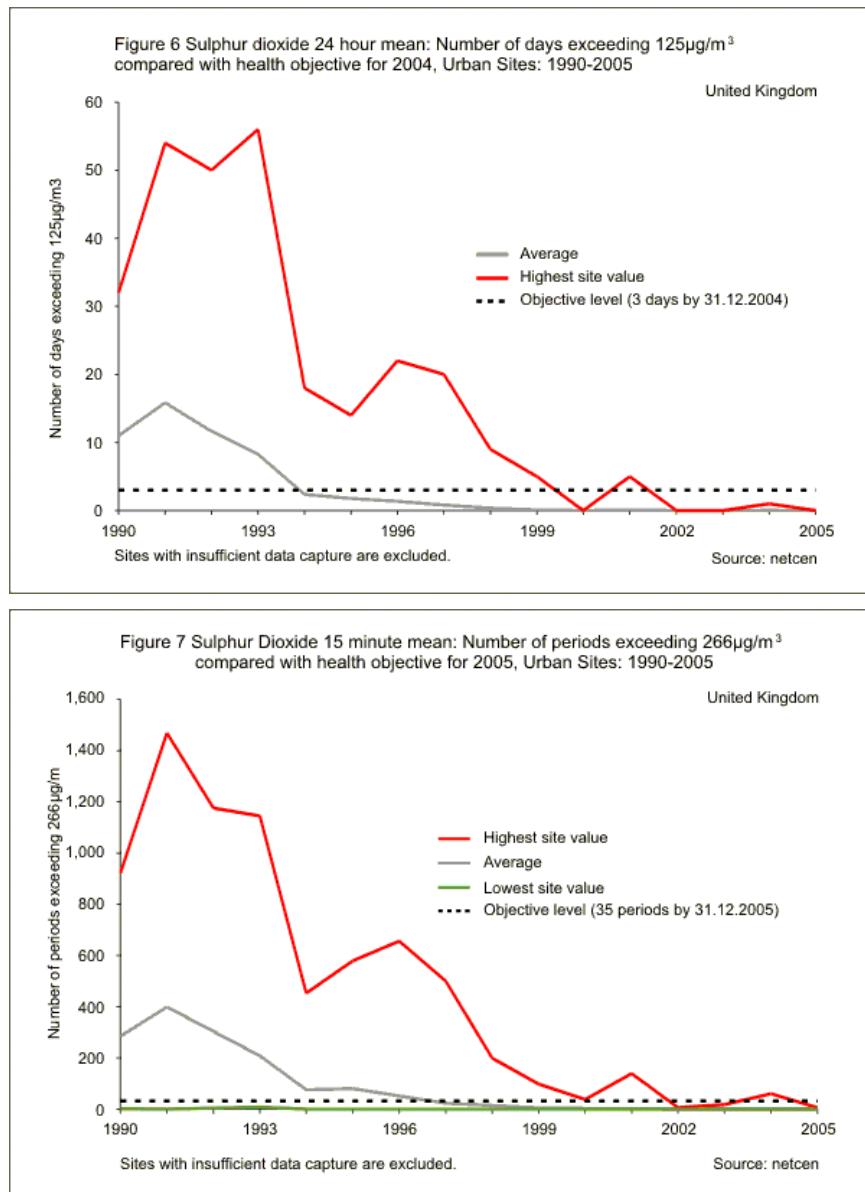


Figure 4-3 - Trends in the Number of Days the Daily Annual Mean Concentration was above 125 µg SO₂ m⁻³ (Upper Panel) and the Number of Periods that the 15-minute Averaged Concentration exceeded 266 µg SO₂ m⁻³.

4.1.3 Maximum Concentrations

In previous reports [Hasler *et al.*, 2001; Hayman *et al.*, 2001a, b, 2003b], the maximum daily or weekly concentrations were presented for a selection of sites. Many of the maximum daily and weekly SO₂ concentrations were observed during the autumn and winter and were associated with short-term pollution events. With the change in sampler and the longer sampling frequencies now used, this statistic is no longer meaningful and the maximum concentrations were not calculated for the measurements made from 2001 onwards.

³ See <http://www.defra.gov.uk/environment/statistics/airqual/index.htm>

4.2 SPATIAL VARIATIONS

The sites with valid annual mean concentrations were used to derive the geographical distribution of the annual mean SO₂ concentrations for 2001 to 2005, as shown in Figure 4-4. The annual concentration map was calculated using a geostatistical kriging method developed by Webster *et al.* [1991]. Appendix 4 provides a summary of the kriging method and the parameters used.

In 2000, the annual mean concentration at the Cardington site was 2.8 ppb compared to the nearby site at Husborne Crawley, which had an annual mean of 1.1 ppb. As in earlier years, the Cardington data have not been used for mapping purposes because this site was originally established to determine the effect of specific factors that influenced local concentrations of SO₂ and not to determine regional patterns. The Cardington site is influenced by a local source, as has been shown in a modelling exercise undertaken by Vincent⁴. Downing and Campbell [1995] showed that the exclusion of the Cardington data does not greatly influence the reliability of the maps since there are good representative sites nearby (Woburn originally and then Husborne Crawley on relocation). The site at Cardington was closed in 2002 and the sampler used at the Church Fenton site.

Most of the sites in the Yorkshire/Nottinghamshire area and the Thames Estuary are JEP sites that employ UVF (ultraviolet fluorescence) continuous monitors, whereas the majority of the sites in the Rural SO₂ Monitoring network across the UK now use the filter-pack technique. The method intercomparison exercise presented in Section 3 and particularly the measurements made at Bush and Sutton Bonington showed that the filter-pack sampler gave lower concentrations than the UV fluorescence method. No correction was made for this difference.

Figure 4-4 also shows the corresponding maps for the years 1998-2000 for comparison. The spatial distribution of the annual mean concentration of SO₂ for 2001-2005 is similar to those observed in earlier years [Hasler and Downing, 1998; Hasler *et al.*, 2001; Hayman *et al.*, 2001a, b] with the highest concentrations observed in the Yorkshire/ Nottinghamshire area and the Thames Estuary. The sites in these areas are located closest to major UK SO₂ sources. These maps confirm the overall downward trend in the annual mean concentration of SO₂.

4.3 URBAN-ENHANCED MAPS

The sites used to map the rural SO₂ concentration field are sited away from local sources of pollution so that they are representative of the region. The maps of the rural SO₂ concentration field presented in Figure 4-4 show that the concentrations observed are highest in those regions with major sources (*i.e.*, Yorkshire, Thames Estuary, etc). However, the maps produced using the rural concentration field alone are not adequate to characterise fully the dry deposition in the urban environment, or in rural locations that are on the fringes of urban areas, because this network has samplers sited away from local sources. Hence, the deposition maps prepared using the rural concentration field alone would be inaccurate.

4.3.1 Maps for 1998 to 2000

For the years 1998-2000, a simple methodology was used to estimate the correction needed [Stedman *et al.*, 2001a, 2001b]. The difference in the urban SO₂ concentration (taken from automatic monitoring instruments in urban background locations) and the corresponding rural background was derived and the difference was correlated with a simple dispersion of the emissions from line and area sources (*i.e.*, excluding point sources) within a 35 km x 35 km area, weighted by distance and direction from the receptor. A slight variant of this methodology was used to calculate the 2000 concentration map [see Hayman *et al.*, 2003b]. The dispersion coefficients derived are then applied to the area sources in the National Atmospheric Emission Inventory to give the urban enhancement for each 1 km x 1 km grid square covering the UK. The maps derived are shown in Figure 4-5.

As the approach excluded the emissions from the major point sources, it was appropriate to include the JEP sites in the derivation of the base rural concentration field. However, sites such as Cardington that were unduly influenced by local sources were excluded.

⁴ Personal communication (2002).

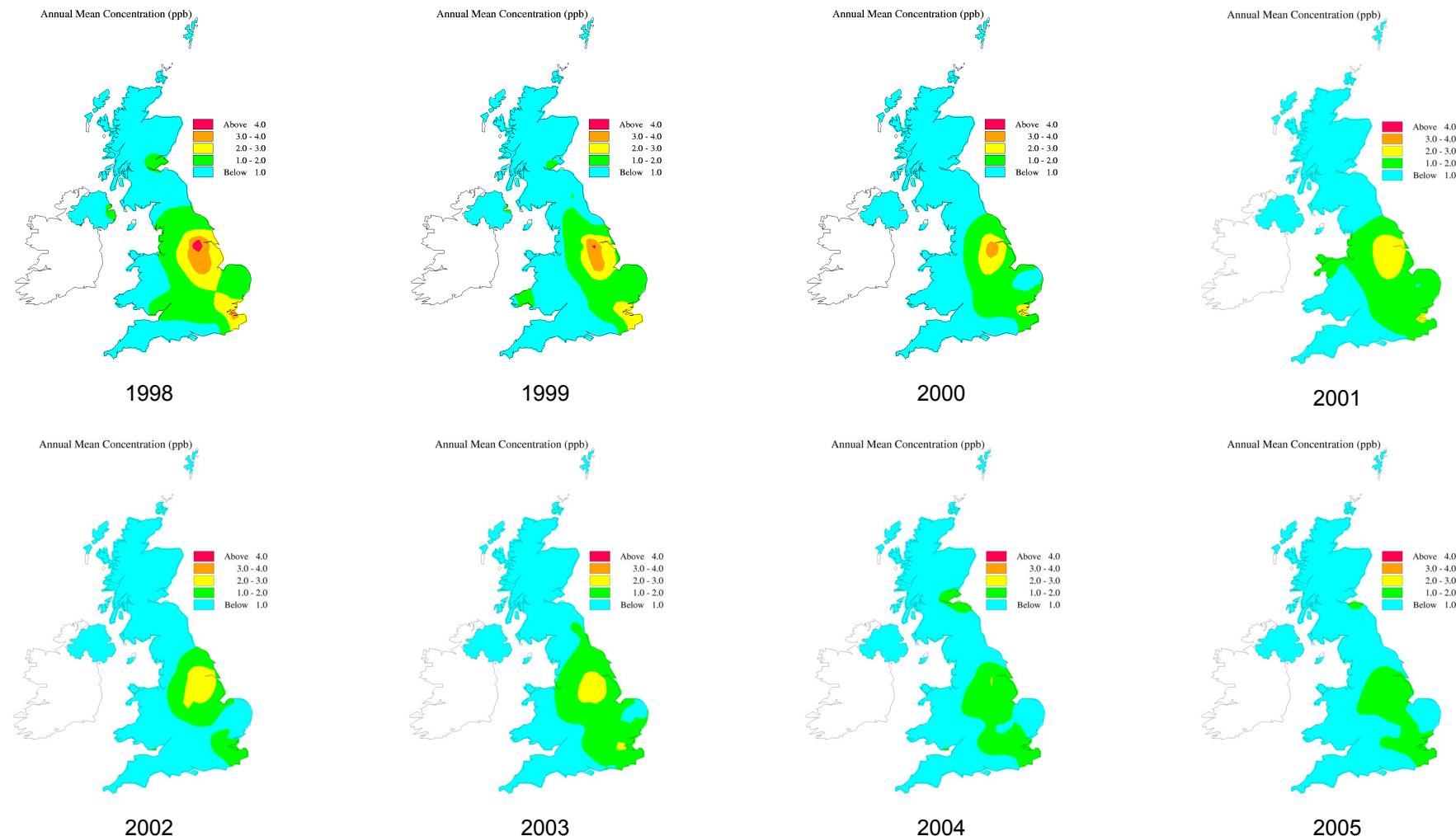


Figure 4-4 - Maps of Rural SO₂ Concentrations (ppb) for the years 1998-2005.

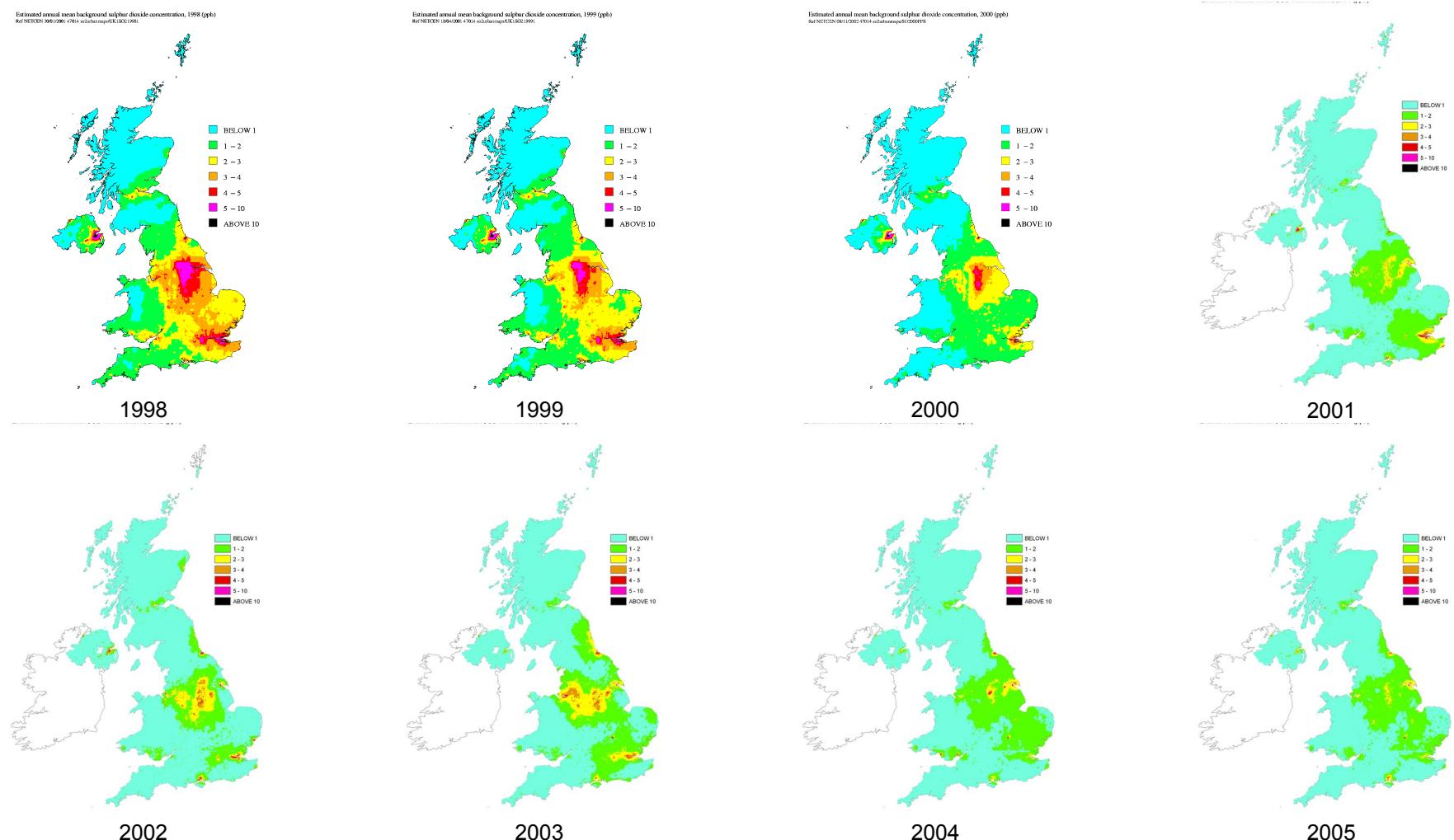


Figure 4-5 - Maps of Urban-enhanced SO₂ Concentrations (ppb) for the years 1998-2005.

4.3.2 Maps for 2001 to 2005

The urban-enhanced maps for the year 2001 to 2005 are also shown in Figure 4-5. These maps were derived using a modelling approach. The approach is based on the methods of Abbott and Vincent [1999], which have been extended subsequently, as described by Stedman *et al.* [2005a, b].

Emissions from point and area sources were modelled separately. Emissions from larger point sources were modelled explicitly using the dispersion model ADMS (versions 3.1, 3.2, 3.3). Emissions from smaller point sources and area sources were modelled using 1 km x 1 km emission grids and a dispersion kernel approach. The large and small point source modelling procedure is detailed in Stedman *et al.* [2005a].

Emissions profiles for the power stations in England and Wales were provided by the Environment Agency. These profiles were used in modelling work undertaken by the power station operators as part of their air quality management responsibilities. The emission profiles are derived using procedures agreed by the power generators and the Environment Agency. The emissions from the point sources are modelled using the randomising feature within the 10° wind sectors. This removes the pronounced "frills" at significant distances from the emission sources that were previously apparent in the maps of high concentration percentiles [see Stedman *et al.*, 2005a].

A number of receptor areas were defined, which together covered the UK. Each receptor area was 150 km x 150 km. For larger point sources (sources with emissions \geq 500 tonnes per year) all sources within the receptor area and sources in the adjoining 150 km x 150 km squares were assumed to influence concentrations within the receptor area. Concentrations were calculated on a regular 5 km x 5 km grid and sequential hourly meteorological data for Waddington. This approach ensures that the combined impact of several sources on ambient high percentile concentrations is estimated correctly (it is not possible to add together the percentiles from different sources at an individual receptor because the percentiles are unlikely to correspond to the same hour of the year).

The contribution to ambient annual mean SO₂ concentration from emissions from small point sources and area sources were calculated using dispersion kernel based models [Stedman *et al.*, 2005b]. Emissions from point sources were obtained from the Environment Agency. Area emissions were based on the NAEI emissions. The contributions to the annual mean concentrations from the different sources were then summed and calibrated.

Measured annual mean SO₂ concentrations were used to calibrate the annual mean SO₂ model output, as described in Stedman *et al.* [2005b]. The only calibration that took place was the generation of bias adjustment factors. Linear regression analysis of modelled and measured concentrations at rural monitoring sites was carried out to establish the values of the coefficient and constant in the following equation:

$$\text{Annual Average Concentration} = a \times \text{Modelled Part A} + b \times \text{Modelled Area and Small Point Sources} + c$$

The factors derived are shown in Table 4-2.

Table 4-2 - Calibration Coefficients for Annual Mean Model.

Points Coefficient (b)	Area Coefficient (b)	Constant (c) $\mu\text{g m}^{-3}$
0.80	1.00	0.55

Measured concentrations from Rural SO₂ Monitoring Network sites [this report], rural, suburban and industrial sites in the national automatic monitoring networks and rural automatic monitoring sites maintained by the electricity generating companies were used to calibrate the model. A list of the sites maintained by the electricity generating companies can be found in Stedman *et al.* [2005a]. The calibration plot for 2004 is shown in Figure 4-6.

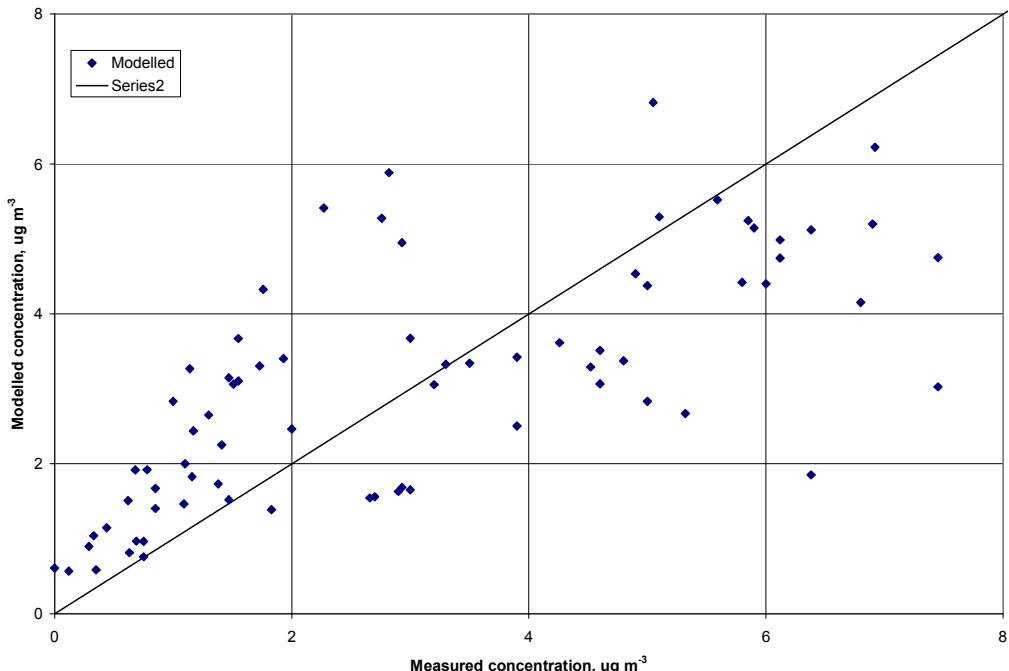


Figure 4-6 - Calibration Plot for 2004 Annual Mean SO₂ Concentration.

The 2004 maps do not include a spatially varying residual component. In previous studies [Stedman *et al.*, 2005b and earlier], this residual component was derived by subtraction of the modelled concentration from concentrations measured at the sampling sites and then interpolating onto a 1 km x 1 km grid. For previous years, the final modelled concentration at the sampling sites was consequently equal to exactly the measured concentration. However, this introduced additional uncertainty at increasing distance from the sampling site, the new approach is therefore a more robust modelling methodology.

4.3.3 Trends between 1998 and 2005

Figure 4-5 presents the urban-enhanced maps derived for the years 1998-2005. The spatial distribution of SO₂ is similar to that observed in previous years with the highest concentrations in the Yorkshire/Nottinghamshire and Thames estuary areas. The downward trend in annual mean concentrations apparent in the measurements is evident in the maps (although some of the decline could be associated with changes in the sampling method and the approach for deriving the urban enhancement). The decline in sulphur dioxide concentrations is also apparent in high concentration regions in the Thames Estuary and in Yorkshire and Nottinghamshire, as shown by the smaller areas of concentrations above say 4 ppb.

5 Concluding Remarks

The Rural Sulphur Dioxide Monitoring programme was terminated at the end of 2005. The monitoring programme will be replaced by the SO₂ measurements made in the expanded denuder network operated by CEH as part of Defra's Acid Deposition Monitoring programme.

This report provides a complete dataset of the SO₂ measurements for all sites in the UK Acid Deposition and Rural Sulphur Dioxide Monitoring Networks for the years 2001 to 2005. During the period covered by this report, the SO₂ sampler was changed from a H₂O₂ bubbler making daily/weekly measurements to a filter-pack sampler, making fortnightly measurements initially and four-weekly measurements from 2004. The introduction of the new sampler and the need to ensure coverage of the high emission area in Yorkshire led to some site changes.

A comparison was made of the measurements made by the then new filter-pack sampler with the previous H₂O₂ bubbler method. A comparison was also made with the measurements made in the Nitric Acid Denuder Network operated by CEH. This comparison allowed the following statements to be made:

- The three samplers generally showed the same qualitative behaviour with time
- The filter-pack and denuder measurements were in good agreement although the denuder measurements were slightly larger.
- Both the filter-pack and denuder measurements are lower than those of the bubbler. This is especially noticeable during the period from Spring 2002 when there was a significant discrepancy between the filter-pack and bubbler measurement.

To identify the cause of the lower filter-pack measurements, about 200 aerosol filters were retained and analysed between 2002 and 2005 from a number of the filter-pack monitoring sites. These measurements were then used to derive monthly sulphate and combined with the monthly sulphur dioxide concentrations to give total sulphur concentrations for comparison with the measurements made by the denuders and with the daily sulphate measurements. The results provided no clear evidence that the low sulphur dioxide measurements on the filter-pack sampler were a result of absorption by or loss onto the untreated filter used to remove particulate sulphate.

There has been a significant decline in sulphur dioxide concentrations during this period, with the network mean concentration falling by a factor of 2 from 1.06 to 0.5 µg SO₂ as S m⁻³ between 2001 and 2005. This fall has continued the long-term decline in sulphur dioxide concentrations.

Maps of the annual and monthly mean sulphur dioxide (SO₂) concentration fields have been derived for the UK. The spatial distribution of SO₂ is similar to that observed in previous years with the highest concentrations in the Yorkshire/Nottinghamshire and Thames estuary areas. The recent measurements show that SO₂ concentrations have continued to decline in rural areas, a trend which has been observed since the establishment of the network in the early 1990s. The trend for sites closest to emission sources is consistent with the reduction in UK SO₂ emissions calculated over this period.

The measurement data have already been provided to CEH for interpretation and further analysis as part of its programme of work and to the Pollution Climate Mapping team at netcen.

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Appendix 1

ANNUAL SITE MAINTENANCE AND OTHER SITE VISITS

Site Code	Site Name	Date of Site Visit	Comments
5002	Eskdalemuir (1)	23/05/01 09/07/01 23/06/03 13/05/04 05/07/04 22/08/05 31/01/06	Replaced bubbler meter. Installed SO ₂ filter-pack Changed both filter-pack and bubbler meters Routine site maintenance visit Bubbler replaced Bubbler replaced Replaced filter-pack pump and meter, and replaced bubbler SO ₂ filter-pack removed
5004	Stoke Ferry (1)	09/05/01 25/05/01 23/04/02 21/05/03 05/05/04 10/05/05 13/04/06	Removal of bubbler and installation of filter-pack Reinstalled bubbler for particulate sulphate sampling Filterpack meter replaced Routine site maintenance visit Filter-pack pump replaced Routine site maintenance visit SO ₂ filter-pack removed
5006	Lough Navar (1)	24/04/01 21/11/01 21/08/02 14/10/03 11/09/04 09/08/05 14/02/06	Bubbler valve, pump and meter replaced, filter-pack installed Replaced bubbler valve and filter-pack meter Replaced bubbler meter and filter-pack meter Routine site maintenance visit Routine site maintenance visit Routine site maintenance visit SO ₂ filter-pack removed
5007	Barcombe Mills (1)	10/05/01 06/06/01 09/09/02 04/08/03 06/10/04 10/05/05 14/03/06	Removal of bubbler and installation of filter-pack Reinstalled bubbler for particulate sulphate sampling Filter-pack meter changed, bubbler replaced Bubbler replaced Routine site maintenance visit New bubbler installed SO ₂ filter-pack removed
5008	Yarner Wood (1)	16/07/01 01/07/02 23/07/03 16/06/04 08/12/04 05/10/05 15/03/06	Replaced bubbler, installed filter-pack and new inlet New bubbler meter installed Filterpack pump replaced Routine site maintenance visit New bubbler installed New bubbler required SO ₂ filter-pack removed
5009	High Muffles (1)	21/05/01 17/10/02 17/06/03 24/06/04 04/07/05 03/05/06	SO ₂ filter-pack installed, bubbler retained for sulphate measurements Bubbler replaced Bubbler meter and extension cable changed New bubbler pump installed Bubbler replaced SO ₂ filter-pack removed, bubbler replaced
5010	Strathvaich Dam (1)	19/06/01 22/07/02 04/07/03 17/07/04 06/09/05	Replaced bubbler meter. Installed SO ₂ filter-pack Routine site maintenance visit Routine site maintenance visit. New meter and pump sent in April 03 Replaced filter-pack pump & meter Replaced filter-pack pump & meter
5011	Glen Dye (1)	20/06/01 18/07/02 01/07/03 13/07/04 27/07/05 17/01/06	Installed SO ₂ filter-pack Routine site maintenance visit. Retrieved bubbler from site New pump fitted Replaced filter-pack holder. Leak > 5% Replaced pump diaphragm SO ₂ filter-pack removed
5301	Brockhill 1	25/01/01 20/07/01	Replaced bubbler meter and pump - ad-hoc visit due to failing airflow Site closed, bubbler removed
5303	Caenby 1	23/10/01 22/05/02 22/05/03 02/06/04 15/06/05 16/01/06	Removed bubbler. Installed SO ₂ filter-pack Routine site maintenance visit Meter replaced Routine site maintenance visit Routine site maintenance visit Approximate date – SO ₂ filter-pack removed by CEH Edinburgh

Site Code	Site Name	Date of Site Visit	Comments
5304	Camborne 1	17/07/01 02/07/02 22/07/03 15/06/04 14/07/05	Removed bubbler, installed SO ₂ filter-pack (new conduit) Routine site maintenance visit Routine site maintenance visit Replaced filter-pack holder. Leak 5.5% Meter and pump replaced
5305	Camphill 1	09/08/01 11/07/02 26/06/03 07/07/04 18/07/05 25/01/06	Removed bubbler, installed SO ₂ filter-pack (new conduit) Routine site maintenance visit Routine site maintenance visit New filter-pack head fitted, system re-tubed Replaced filter-pack holder. Leak 5.1% SO ₂ filter-pack removed
5306	Cardington 2	30/01/02	End of SO ₂ sampling – bubbler removed
5308	Corpach 1	15/08/01 19/10/01 24/07/02 09/07/03 18/07/04 20/07/05 24/01/06	Removed single port bubbler and replaced with SO ₂ filter-pack Relocated filterpack to different building (same site) Routine site maintenance visit Routine site maintenance visit New pump installed Routine site maintenance visit SO ₂ filter-pack removed
5309	Cresselly 1	10/07/01 01/11/01 01/05/02 11/06/03 19/05/04 26/01/05	Routine bubbler site maintenance visit Removed bubbler, installed SO ₂ filter-pack Routine site maintenance visit New meter installed New pump installed Site ceased sampling (building turned derelict)
5310	Etton 1	10/09/01 17/10/02 16/06/03 23/06/04 05/07/04 05/07/05 11/01/06	Removed bubbler, relocated site 1.5 km away with SO ₂ filter-pack New meter installed Routine site maintenance visit Routine site maintenance visit Ad-hoc visit – filter -pack unit replaced Routine site maintenance visit SO ₂ filter-pack removed
5312	Husborne Crawley 1	14/09/01 22/04/02 20/05/03 04/05/04 26/04/05 11/01/06	Removed bubbler, installed SO ₂ filter-pack Routine site maintenance visit Routine site maintenance visit Routine site maintenance visit. Leak 5.9% Routine site maintenance visit SO ₂ filter-pack removed
5313	Little Horkestone 1	25/10/01 11/09/02 06/08/03 06/05/04 10/05/05	Removed bubbler, installed SO ₂ filter-pack Routine site maintenance visit Filter-pack head and meter changed Replaced filterpack holder Routine site maintenance visit
5314	Marshfield 1	09/07/01 29/04/02 09/06/03 17/05/04 23/05/05 14/02/06	Removed bubbler, installed SO ₂ filter-pack Routine site maintenance visit Filterpack meter changed New filter-pack holder and tubing installed Routine site maintenance visit SO ₂ filter-pack removed
5315	Ratcliffe 13	04/12/01	End of SO ₂ sampling – bubbler removed
5316	Rockbourne 1	27/09/01 04/07/02 24/07/03 05/10/04 09/05/05 07/02/06	Removed bubbler, installed SO ₂ filter-pack Routine site maintenance visit Routine site maintenance visit New pump installed Filter-pack unit replaced SO ₂ filter-pack removed
5317	Wakefield 24	24/10/01 15/10/02 09/09/03 21/06/04 20/06/05	Removed bubbler. Re-sited and installed SO ₂ filter-pack Routine site maintenance visit Routine site maintenance visit New meter installed Complete replacement of filter-pack unit

Site Code	Site Name	Date of Site Visit	Comments
5318	Waunfawr 1	21/04/01 30/10/01 03/10/02 15/07/03 07/09/04 06/04/05 22/03/06	Replaced bubbler Removed bubbler. Installed SO ₂ filter-pack Routine site maintenance visit Routine site maintenance visit Meter and pump replaced Ad-hoc visit to replace filter-pack inlet after vandalism SO ₂ filter-pack removed
5319	Fort Augustus 2	14/08/01 24/07/02 09/07/03 18/07/04 21/07/05 24/01/06	Removed bubbler. Installed SO ₂ filter-pack Routine site maintenance visit Routine site maintenance visit Replaced filter-pack holder and pump Routine site maintenance visit SO ₂ filter-pack removed
5320	Loch Leven 2	08/08/01 25/07/02 30/06/03 12/07/04 28/07/05 23/01/06	Removed bubbler. Installed SO ₂ filter-pack Routine site maintenance visit Replaced pump and meter Routine site maintenance visit Routine site maintenance visit SO ₂ filter-pack removed
5321	Redesdale 2	18/10/01 25/06/02 03/06/03 01/07/04 13/07/05 07/02/06	Removed bubbler. Installed SO ₂ filter-pack Routine site maintenance visit Pump replaced Routine site maintenance visit Filter-pack pump changed SO ₂ filter-pack removed
5322	Hebden Bridge 2	12/09/01 28/06/02 10/09/03 22/06/04 06/07/05	Removed bubbler. Installed SO ₂ filter-pack Routine site maintenance visit Meter replaced Pump replaced Routine site maintenance visit
5323	Preston Montford 2	29/10/01 01/10/02 14/07/03 06/09/04 21/08/05 20/03/06	Removed bubbler. Installed SO ₂ filter-pack Routine site maintenance visit Routine site maintenance visit Routine site maintenance visit Filter-pack pump changed SO ₂ filter-pack removed
5324	Bentra	20/11/01 20/08/02 15/10/03 10/08/04 23/08/05 27/02/06	Removed bubbler. Installed SO ₂ filter-pack Routine site maintenance visit Filter-pack moved to new building, meter replaced Replaced filter-pack head and installed new pump Complete filter-pack unit replaced SO ₂ filter-pack removed
5325	Pitlochry	13/08/01 16/07/02 03/07/03 15/07/04 22/03/05 24/01/06	Removed bubbler. Installed SO ₂ filter-pack Routine site maintenance visit New meter installed New pump installed Sampler moved to nearby building approx 20 feet away SO ₂ filter-pack removed
5326	Bush	23/05/01 11/07/02 26/06/03 08/07/04 02/08/05	Replaced but retained bubbler. Installed SO ₂ filter-pack Filter-pack meter replaced. Bubbler unit (all except meter) replaced Routine site maintenance visit Whole bubbler changed, filter-pack holder and pump replaced Bubbler removed. Filter-pack head changed
5329	Cam Forest	22/11/01	Bubbler retrieved – site moved to Formoyle (5345)
5330	Cwmystwyth	26/04/01 02/05/02 12/06/03 20/05/04 19/04/05	Replaced but retained bubbler. Installed SO ₂ filter-pack Bubbler meter replaced Replaced complete bubbler and filter-pack meter Pump replaced. Bubbler and inlet removed New filter-pack head and inlet installed
5331	Rosemaund	12/07/01 03/05/02 13/06/03 09/09/04 24/08/05 20/03/06	Removed bubbler. Installed SO ₂ filter-pack Routine site maintenance visit Routine site maintenance visit New pump installed Pump diaphragms replaced SO ₂ filter-pack removed

Site Code	Site Name	Date of Site Visit	Comments
5333	Fairseat	30/08/01 10/09/02 05/08/03 30/09/04 10/05/05 14/03/06	Removed bubbler. Installed SO ₂ filter-pack New meter installed Filter-pack head replaced Complete filter-pack unit replaced New pump installed SO ₂ filter-pack removed
5334	Bylchau	30/10/01 02/10/02 15/07/03 07/09/04 23/08/05 21/03/06	Removed bubbler. Installed SO ₂ filter-pack Routine site maintenance visit Routine site maintenance visit Pump replaced Routine site maintenance visit SO ₂ filter-pack removed
5335	Crai	10/07/01 30/04/02 10/06/03 18/05/04 24/05/05 15/02/06	Removed bubbler. Installed SO ₂ filter-pack Routine site maintenance visit Filter-pack meter replaced New pump installed Pump badly damaged – replaced SO ₂ filter-pack removed
5338	Forsinain	24/03/01 18/06/01 05/06/02 08/07/03 20/07/04 26/07/05 01/02/06	Ad-hoc visit – replaced faulty valve only Removed bubbler. Installed SO ₂ filter-pack Replaced pump and meter Filter-pack meter replaced Replaced pump and meter Complete filter-pack unit replaced SO ₂ filter-pack removed
5339	Appleacre	17/10/01 26/06/02 05/06/03 25/02/04 30/06/04 04/08/05	Removed bubbler. Installed SO ₂ filter-pack Routine site maintenance visit Repaired filter-pack inlet to reduce leak Ad-hoc site visit to replace whole filterpack unit Routine site maintenance visit Routine site maintenance visit
5343	Benniguinea	07/08/01 10/07/02 24/06/03 06/07/04 03/08/05	Removed bubbler. Installed SO ₂ filter-pack Routine site maintenance visit Filter-pack meter replaced Routine site maintenance visit Routine site maintenance visit
5344	Sutton Bonington	08/05/01 13/09/01 22/10/01 25/04/02 23/05/03 04/10/04 14/06/05	New site – filter-pack and bubbler installed Ad-hoc visit to check air flow delivered by SO ₂ filterpack pump Ad-hoc visit – replacement filter-pack unit fitted Bubbler replaced Routine site maintenance visit Meter replaced New filter-pack unit installed
5345	Formoyle	22/11/01 22/08/02 15/10/03 12/08/04 28/07/05	New site replacing Cam Forest. SO ₂ filter-pack installed Routine site maintenance visit Meter changed Replaced pump and meter Complete filter-pack unit replaced
5346	Drayton	28/02/02 30/09/02 11/09/03 14/10/04 17/08/05	New site – SO ₂ filter-pack installation Routine site maintenance visit Routine site maintenance visit Routine site maintenance visit Routine site maintenance visit
5347	Church Fenton	16/10/02 18/06/03 23/06/04 12/08/04 17/03/05 06/07/05 03/05/06	New site – SO ₂ filter-pack installation Meter replaced Pump replaced Filter-pack pump and meter replaced New filter-pack housing installed Routine site maintenance visit SO ₂ filter-pack removed

Note (1) These sites are operated as part of the UK Acid Deposition Monitoring Network

Appendix 2

COMPARISON OF FILTER-PACK AND DENUDER MEASUREMENTS OF PARTICULATE SULPHATE AND TOTAL SULPHUR

Appendix 2.1 Filter-pack Sulphur Dioxide, Particulate Sulphate and Total Sulphur Measurements.

Appendix 2.2 Comparison of the Monthly Concentrations of Sulphur Dioxide, Particulate Sulphate and Total Sulphur Concentrations (in $\mu\text{g S m}^{-3}$) Derived from the Denuder and Filter-Pack Samplers between 2002 and 2005.

Appendix 2.1

Filter-pack Sulphur Dioxide, Particulate Sulphate and Total Sulphur Measurements.

Note –999 indicates a sample which was not collected nor analysed or which was excluded during the annual reviews of the datasets as part of the QA/QC process.

Site	Start Date	End Date	Concentration (in µg as S m ⁻³)		
			SO ₂	Particulate SO ₄	Total S
5002	29/12/2004	26/01/2005	0.12	-999	-999
5002	26/01/2005	23/02/2005	0.24	-999	-999
5002	23/02/2005	23/03/2005	0.33	-999	-999
5002	23/03/2005	24/04/2005	0.23	-999	-999
5002	24/04/2005	18/05/2005	0.32	-999	-999
5002	18/05/2005	15/06/2005	0.09	-999	-999
5002	15/06/2005	13/07/2005	0.11	-999	-999
5002	13/07/2005	10/08/2005	0.08	0.30	0.38
5002	10/08/2005	07/09/2005	0.52	0.06	0.58
5002	07/09/2005	05/10/2005	0.07	0.27	0.34
5002	05/10/2005	02/11/2005	0.28	0.34	0.63
5002	02/11/2005	30/11/2005	0.17	0.16	0.33
5002	30/11/2005	04/01/2006	0.20	0.16	0.37
5004	21/12/2004	25/01/2005	0.69	-999	-999
5004	25/01/2005	22/02/2005	0.94	-999	-999
5004	22/02/2005	18/03/2005	0.70	-999	-999
5004	18/03/2005	19/04/2005	0.89	-999	-999
5004	19/04/2005	17/05/2005	0.66	-999	-999
5004	17/05/2005	14/06/2005	0.52	-999	-999
5004	14/06/2005	12/07/2005	1.09	-999	-999
5004	12/07/2005	09/08/2005	0.49	0.72	1.20
5004	09/08/2005	06/09/2005	0.59	0.55	1.14
5004	06/09/2005	04/10/2005	0.43	0.51	0.94
5004	04/10/2005	01/11/2005	0.49	0.69	1.18
5004	01/11/2005	30/11/2005	0.52	0.42	0.94
5004	30/11/2005	05/01/2006	0.84	0.56	1.40
5006	12/08/2002	26/08/2002	0.04	0.27	0.31
5006	26/08/2002	09/09/2002	0.10	0.35	0.45
5006	09/09/2002	23/09/2002	0.22	-999	-999
5006	23/09/2002	07/10/2002	0.09	0.63	0.71
5006	07/10/2002	21/10/2002	0.19	0.32	0.51
5006	21/10/2002	04/11/2002	0.09	0.22	0.31
5006	04/11/2002	18/11/2002	0.08	0.12	0.20
5006	18/11/2002	02/12/2002	0.09	0.22	0.31
5006	02/12/2002	16/12/2002	0.43	-999	-999
5006	16/12/2002	30/12/2002	0.09	0.29	0.38
5006	30/12/2002	13/01/2003	0.35	0.29	0.64
5006	13/01/2003	27/01/2003	0.05	0.16	0.21
5006	27/01/2003	10/02/2003	0.03	0.20	0.23
5006	10/02/2003	24/02/2003	0.53	0.77	1.31
5006	24/02/2003	10/03/2003	0.14	0.41	0.55
5006	10/03/2003	24/03/2003	0.47	0.88	1.35
5006	24/03/2003	07/04/2003	0.57	0.78	1.36
5006	07/04/2003	21/04/2003	0.63	1.01	1.64
5006	21/04/2003	05/05/2003	0.09	0.59	0.68
5006	05/05/2003	19/05/2003	0.05	0.22	0.27
5006	19/05/2003	02/06/2003	0.08	-999	-999
5006	02/06/2003	16/06/2003	0.07	0.46	0.52
5006	16/06/2003	30/06/2003	0.14	0.50	0.64
5006	30/06/2003	14/07/2003	0.05	0.51	0.56
5006	14/07/2003	28/07/2003	0.15	0.54	0.69
5006	28/07/2003	11/08/2003	0.11	0.57	0.68
5006	11/08/2003	25/08/2003	0.10	0.26	0.35
5006	25/08/2003	08/09/2003	0.07	0.29	0.37
5006	08/09/2003	10/09/2003	-999	-999	-999
5006	10/09/2003	22/09/2003	-999	0.07	-999
5006	22/09/2003	06/10/2003	-999	0.03	-999
5006	06/10/2003	20/10/2003	-999	0.08	-999
5006	20/10/2003	03/11/2003	-999	0.02	-999
5006	03/11/2003	17/11/2003	-999	-999	-999
5006	17/11/2003	01/12/2003	-999	-999	-999
5006	01/12/2003	15/12/2003	-999	0.05	-999
5006	15/12/2003	29/12/2003	-999	0.02	-999
5006	29/12/2003	26/01/2004	-999	-999	-999
5006	26/01/2004	23/02/2004	-999	-999	-999
5006	23/02/2004	22/03/2004	-999	0.03	-999
5006	22/03/2004	19/04/2004	0.12	-999	-999
5006	19/04/2004	03/05/2004	0.07	-999	-999
5006	03/05/2004	17/05/2004	0.04	0.52	0.55
5006	17/05/2004	14/06/2004	0.09	-999	-999
5006	14/06/2004	12/07/2004	-999	-999	-999
5006	12/07/2004	09/08/2004	0.08	-999	-999
5006	09/08/2004	06/09/2004	0.04	-999	-999

Site	Start Date	End Date	Concentration (in µg as S m ⁻³)		
			SO ₂	Particulate SO ₄	Total S
5006	06/09/2004	04/10/2004	0.00	-999	-999
5006	04/10/2004	01/11/2004	0.08	-999	-999
5006	01/11/2004	29/11/2004	0.05	-999	-999
5006	29/11/2004	29/12/2004	0.06	-999	-999
5006	29/12/2004	24/01/2005	0.08	-999	-999
5006	24/01/2005	21/02/2005	0.05	-999	-999
5006	21/02/2005	21/03/2005	0.14	-999	-999
5006	21/03/2005	18/04/2005	0.08	-999	-999
5006	18/04/2005	16/05/2005	0.20	-999	-999
5006	16/05/2005	13/06/2005	0.05	-999	-999
5006	13/06/2005	11/07/2005	0.13	-999	-999
5006	11/07/2005	09/08/2005	0.04	0.28	0.33
5006	09/08/2005	05/09/2005	0.05	0.27	0.32
5006	05/09/2005	03/10/2005	0.25	0.01	0.27
5006	03/10/2005	31/10/2005	0.11	0.45	0.56
5006	31/10/2005	28/11/2005	0.07	0.10	0.17
5006	28/11/2005	11/01/2006	0.06	0.37	0.42
5007	29/12/2004	26/01/2005	0.23	-999	-999
5007	26/01/2005	23/02/2005	1.09	-999	-999
5007	23/02/2005	23/03/2005	1.27	-999	-999
5007	23/03/2005	20/04/2005	0.57	-999	-999
5007	20/04/2005	18/05/2005	0.61	-999	-999
5007	18/05/2005	15/06/2005	0.56	-999	-999
5007	15/06/2005	23/07/2005	-999	-999	-999
5007	23/07/2005	24/08/2005	0.63	0.63	1.26
5007	24/08/2005	21/09/2005	0.37	-999	-999
5007	21/09/2005	19/10/2005	0.33	0.59	0.92
5007	19/10/2005	16/11/2005	0.42	0.46	0.88
5007	16/11/2005	14/12/2005	0.45	0.33	0.78
5007	14/12/2005	04/01/2006	0.52	0.72	1.23
5008	29/12/2004	26/01/2005	0.20	-999	-999
5008	26/01/2005	23/02/2005	0.38	-999	-999
5008	23/02/2005	23/03/2005	0.59	-999	-999
5008	23/03/2005	20/04/2005	0.39	-999	-999
5008	20/04/2005	18/05/2005	0.50	-999	-999
5008	18/05/2005	15/06/2005	0.29	-999	-999
5008	15/06/2005	13/07/2005	0.32	-999	-999
5008	13/07/2005	10/08/2005	0.12	0.54	0.66
5008	10/08/2005	07/09/2005	0.32	0.97	1.30
5008	07/09/2005	05/10/2005	0.20	0.65	0.85
5008	05/10/2005	02/11/2005	-999	-999	-999
5008	02/11/2005	30/11/2005	0.42	0.51	0.93
5008	30/11/2005	27/12/2005	0.27	-999	-999
5008	27/12/2005	24/01/2006	0.39	0.25	0.64
5009	29/12/2004	26/01/2005	0.65	-999	-999
5009	26/01/2005	23/02/2005	0.76	-999	-999
5009	23/02/2005	09/03/2005	0.95	-999	-999
5009	09/03/2005	23/03/2005	0.50	-999	-999
5009	23/03/2005	20/04/2005	0.82	-999	-999
5009	20/04/2005	18/05/2005	0.56	-999	-999
5009	18/05/2005	15/06/2005	0.73	-999	-999
5009	15/06/2005	13/07/2005	0.64	-999	-999
5009	13/07/2005	10/08/2005	0.43	0.41	0.84
5009	10/08/2005	07/09/2005	0.72	0.89	1.61
5009	07/09/2005	05/10/2005	0.88	0.66	1.54
5009	05/10/2005	02/11/2005	-999	1.36	-999
5009	02/11/2005	04/01/2006	0.98	0.29	1.27
5010	03/12/2004	05/01/2005	0.02	-999	-999
5010	05/01/2005	27/01/2005	0.07	-999	-999
5010	27/01/2005	28/02/2005	0.03	-999	-999
5010	28/02/2005	03/04/2005	0.06	-999	-999
5010	03/04/2005	01/05/2005	0.30	-999	-999
5010	01/05/2005	15/05/2005	0.07	-999	-999
5010	15/05/2005	12/06/2005	0.04	-999	-999
5010	12/06/2005	10/07/2005	0.04	-999	-999
5010	10/07/2005	07/08/2005	0.02	-999	-999
5010	07/08/2005	04/09/2005	0.04	0.22	0.25
5010	04/09/2005	02/10/2005	0.06	0.52	0.59
5010	02/10/2005	30/10/2005	0.09	0.63	0.72
5010	30/10/2005	29/11/2005	0.05	-999	-999
5010	29/11/2005	02/01/2006	0.12	0.17	0.29
5011	29/12/2004	25/01/2005	0.09	-999	-999
5011	25/01/2005	22/02/2005	0.11	-999	-999
5011	22/02/2005	23/03/2005	0.11	-999	-999

Site	Start Date	End Date	Concentration (in µg as S m ⁻³)		
			SO ₂	Particulate SO ₄	Total S
5011	23/03/2005	19/04/2005	0.34	-999	-999
	19/04/2005	16/05/2005	0.00	-999	-999
	16/05/2005	14/06/2005	0.10	-999	-999
	14/06/2005	12/07/2005	0.15	-999	-999
	12/07/2005	09/08/2005	0.11	0.08	0.19
	09/08/2005	06/09/2005	0.22	0.34	0.55
	06/09/2005	05/10/2005	0.18	0.26	0.44
	05/10/2005	01/11/2005	0.23	0.36	0.58
	01/11/2005	29/11/2005	0.08	0.22	0.30
	29/11/2005	04/01/2006	0.25	0.35	0.60
5312	08/12/2004	11/01/2005	0.78	-999	-999
	11/01/2005	16/02/2005	0.74	-999	-999
	16/02/2005	06/04/2005	1.83	-999	-999
	06/04/2005	28/04/2005	0.83	-999	-999
	28/04/2005	20/05/2005	1.56	-999	-999
	20/05/2005	21/06/2005	0.76	-999	-999
	21/06/2005	20/07/2005	1.12	-999	-999
	20/07/2005	23/08/2005	0.62	-999	-999
	23/08/2005	06/09/2005	0.61	0.75	1.36
	06/09/2005	04/10/2005	0.61	0.51	1.13
	04/10/2005	04/11/2005	0.86	1.67	2.52
	04/11/2005	06/12/2005	0.70	0.42	1.11
5326	06/12/2005	06/01/2006	-999	-999	-999
	15/02/2002	01/03/2002	0.33	-999	-999
	01/03/2002	15/03/2002	0.37	-999	-999
	15/03/2002	29/03/2002	0.64	-999	-999
	29/03/2002	12/04/2002	1.07	-999	-999
	12/04/2002	26/04/2002	0.43	-999	-999
	26/04/2002	10/05/2002	1.75	-999	-999
	10/05/2002	24/05/2002	0.71	-999	-999
	24/05/2002	07/06/2002	0.83	-999	-999
	07/06/2002	21/06/2002	-999	-999	-999
	21/06/2002	05/07/2002	-999	-999	-999
	05/07/2002	19/07/2002	1.69	-999	-999
	19/07/2002	02/08/2002	0.59	-999	-999
	02/08/2002	16/08/2002	0.84	-999	-999
	16/08/2002	30/08/2002	1.07	0.36	1.43
	30/08/2002	13/09/2002	0.54	0.62	1.16
	13/09/2002	27/09/2002	1.52	0.58	2.10
	27/09/2002	11/10/2002	0.38	0.54	0.92
	11/10/2002	25/10/2002	0.71	0.29	1.00
	25/10/2002	08/11/2002	0.30	0.21	0.52
	08/11/2002	22/11/2002	0.89	0.31	1.20
	22/11/2002	06/12/2002	0.64	0.37	1.02
	06/12/2002	20/12/2002	0.62	-999	-999
	20/12/2002	10/01/2003	0.93	-999	-999
	10/01/2003	17/01/2003	0.54	0.32	0.86
	17/01/2003	31/01/2003	0.58	0.28	0.86
	31/01/2003	14/02/2003	0.89	0.39	1.29
	14/02/2003	28/02/2003	1.67	0.99	2.65
	28/02/2003	14/03/2003	0.38	0.41	0.79
	14/03/2003	28/03/2003	1.73	1.12	2.85
	28/03/2003	11/04/2003	1.00	0.68	1.68
	11/04/2003	25/04/2003	1.39	1.27	2.66
	25/04/2003	09/05/2003	0.20	0.38	0.58
	09/05/2003	23/05/2003	0.30	0.28	0.58
	23/05/2003	06/06/2003	0.42	0.65	1.07
	06/06/2003	20/06/2003	0.39	-999	-999
	20/06/2003	04/07/2003	0.77	0.50	1.27
	04/07/2003	18/07/2003	0.99	0.53	1.52
	18/07/2003	01/08/2003	0.17	-999	-999
	01/08/2003	15/08/2003	1.90	0.99	2.89
	15/08/2003	29/08/2003	1.56	0.40	1.96
	29/08/2003	12/09/2003	0.42	0.41	0.83
	12/09/2003	26/09/2003	0.29	0.69	0.98
	26/09/2003	10/10/2003	0.27	0.36	0.63
	10/10/2003	24/10/2003	0.77	0.33	1.10
	24/10/2003	07/11/2003	0.51	0.36	0.87
	07/11/2003	21/11/2003	0.57	-999	-999
	21/11/2003	05/12/2003	0.56	0.28	0.83
	05/12/2003	19/12/2003	-999	-999	-999
	19/12/2003	02/01/2004	0.69	0.17	0.86
	02/01/2004	30/01/2004	0.32	-999	-999
	30/01/2004	20/02/2004	1.08	0.49	1.56
	20/02/2004	26/03/2004	0.90	-999	-999

Site	Start Date	End Date	Concentration (in µg as S m ⁻³)		
			SO ₂	Particulate SO ₄	Total S
5326	26/03/2004	27/04/2004	0.55	-999	-999
5326	27/04/2004	21/05/2004	0.98	-999	-999
5326	21/05/2004	25/06/2004	0.75	-999	-999
5326	25/06/2004	15/07/2004	0.83	-999	-999
5326	15/07/2004	13/08/2004	0.61	-999	-999
5326	13/08/2004	17/09/2004	0.54	-999	-999
5326	17/09/2004	08/10/2004	0.23	0.18	0.41
5326	08/10/2004	06/11/2004	0.30	-999	-999
5326	06/11/2004	03/12/2004	0.31	-999	-999
5326	03/12/2004	30/12/2004	0.33	-999	-999
5326	30/12/2004	28/01/2005	0.31	-999	-999
5326	28/01/2005	28/02/2005	0.75	-999	-999
5326	28/02/2005	24/03/2005	0.75	0.28	1.03
5326	24/03/2005	19/04/2005	0.52	-999	-999
5326	19/04/2005	20/05/2005	-999	-999	-999
5326	20/05/2005	20/06/2005	0.36	-999	-999
5326	20/06/2005	14/07/2005	0.01	0.01	0.02
5326	14/07/2005	08/08/2005	1.35	0.16	1.51
5326	08/08/2005	05/09/2005	0.53	0.38	0.92
5326	05/09/2005	06/10/2005	0.28	0.31	0.59
5326	06/10/2005	04/11/2005	0.34	0.72	1.06
5326	04/11/2005	30/11/2005	-999	-999	-999
5326	30/11/2005	01/01/2006	-999	-999	-999
5330	13/02/2002	28/02/2002	0.18	-999	-999
5330	28/02/2002	14/03/2002	0.45	-999	-999
5330	14/03/2002	28/03/2002	0.41	-999	-999
5330	28/03/2002	11/04/2002	1.37	-999	-999
5330	11/04/2002	25/04/2002	0.54	-999	-999
5330	25/04/2002	09/05/2002	0.78	-999	-999
5330	09/05/2002	23/05/2002	0.26	-999	-999
5330	23/05/2002	05/06/2002	0.15	-999	-999
5330	05/06/2002	20/06/2002	0.09	-999	-999
5330	20/06/2002	04/07/2002	0.08	-999	-999
5330	04/07/2002	19/07/2002	0.29	-999	-999
5330	19/07/2002	01/08/2002	0.15	-999	-999
5330	01/08/2002	16/08/2002	0.21	-999	-999
5330	16/08/2002	29/08/2002	0.13	0.03	0.16
5330	29/08/2002	12/09/2002	0.12	0.73	0.85
5330	12/09/2002	26/09/2002	3.59	1.33	4.92
5330	26/09/2002	10/10/2002	0.33	0.62	0.96
5330	10/10/2002	23/10/2002	0.05	0.11	0.16
5330	23/10/2002	07/11/2002	0.11	0.17	0.27
5330	07/11/2002	21/11/2002	0.32	0.19	0.50
5330	21/11/2002	05/12/2002	0.03	0.02	0.05
5330	05/12/2002	18/12/2002	3.47	0.86	4.33
5330	18/12/2002	31/12/2002	0.01	0.20	0.22
5330	31/12/2002	14/01/2003	1.93	-999	-999
5330	14/01/2003	28/01/2003	0.14	-999	-999
5330	28/01/2003	14/02/2003	0.11	0.15	0.26
5330	14/02/2003	25/02/2003	-999	-999	-999
5330	25/02/2003	12/03/2003	0.27	0.12	0.39
5330	12/03/2003	25/03/2003	1.39	1.06	2.44
5330	25/03/2003	08/04/2003	0.50	0.42	0.92
5330	08/04/2003	23/04/2003	1.64	-999	-999
5330	23/04/2003	08/05/2003	0.24	-999	-999
5330	08/05/2003	20/05/2003	0.02	-999	-999
5330	20/05/2003	04/06/2003	0.25	0.82	1.06
5330	04/06/2003	18/06/2003	0.18	-999	-999
5330	18/06/2003	02/07/2003	0.33	0.67	1.00
5330	02/07/2003	16/07/2003	0.85	0.79	1.64
5330	16/07/2003	30/07/2003	0.13	0.49	0.62
5330	30/07/2003	12/08/2003	0.40	1.36	1.76
5330	12/08/2003	26/08/2003	0.54	-999	-999
5330	26/08/2003	10/09/2003	0.51	0.51	1.02
5330	10/09/2003	24/09/2003	0.20	0.64	0.84
5330	24/09/2003	08/10/2003	0.53	0.36	0.90
5330	08/10/2003	21/10/2003	0.97	0.59	1.55
5330	21/10/2003	04/11/2003	0.49	0.32	0.82
5330	04/11/2003	18/11/2003	0.41	0.43	0.84
5330	18/11/2003	03/12/2003	0.58	-999	-999
5330	03/12/2003	17/12/2003	1.23	0.62	1.85
5330	17/12/2003	31/12/2003	0.48	-999	-999
5330	31/12/2003	30/01/2004	0.58	-999	-999
5330	30/01/2004	23/02/2004	0.45	-999	-999
5330	23/02/2004	22/03/2004	0.48	-999	-999

Site	Start Date	End Date	Concentration (in µg as S m ⁻³)		
			SO ₂	Particulate SO ₄	Total S
5330	22/03/2004	21/04/2004	0.28	-999	-999
5330	21/04/2004	19/05/2004	0.23	-999	-999
5330	19/05/2004	14/06/2004	0.26	-999	-999
5330	14/06/2004	07/07/2004	0.15	-999	-999
5330	07/07/2004	09/08/2004	0.17	-999	-999
5330	09/08/2004	27/08/2004	0.10	-999	-999
5330	27/08/2004	05/10/2004	-999	-999	-999
5330	05/10/2004	02/11/2004	-999	-999	-999
5330	02/11/2004	02/12/2004	-999	-999	-999
5330	02/12/2004	30/12/2004	-999	-999	-999
5330	30/12/2004	25/01/2005	-999	-999	-999
5330	25/01/2005	22/02/2005	0.04	0.13	0.18
5330	22/02/2005	21/03/2005	0.02	-999	-999
5330	21/03/2005	20/04/2005	0.01	-999	-999
5330	20/04/2005	18/05/2005	0.04	-999	-999
5330	18/05/2005	26/05/2005	-999	-999	-999
5330	26/05/2005	15/06/2005	0.16	-999	-999
5330	15/06/2005	14/07/2005	0.22	-999	-999
5330	14/07/2005	10/08/2005	0.12	0.40	0.52
5330	10/08/2005	08/09/2005	0.18	0.40	0.58
5330	08/09/2005	03/10/2005	0.06	0.04	0.10
5330	03/10/2005	02/11/2005	0.29	0.98	1.26
5330	02/11/2005	01/12/2005	0.04	0.03	0.07
5330	01/12/2005	05/01/2006	-999	-999	-999
5344	27/02/2002	13/03/2002	2.87	-999	-999
5344	13/03/2002	27/03/2002	2.10	-999	-999
5344	27/03/2002	10/04/2002	1.58	-999	-999
5344	10/04/2002	24/04/2002	1.74	-999	-999
5344	24/04/2002	08/05/2002	1.83	-999	-999
5344	08/05/2002	22/05/2002	1.31	-999	-999
5344	22/05/2002	05/06/2002	0.53	-999	-999
5344	05/06/2002	19/06/2002	1.27	-999	-999
5344	19/06/2002	03/07/2002	0.99	-999	-999
5344	03/07/2002	17/07/2002	1.35	-999	-999
5344	17/07/2002	31/07/2002	1.16	-999	-999
5344	31/07/2002	19/08/2002	1.56	0.87	2.42
5344	19/08/2002	28/08/2002	2.18	0.93	3.12
5344	28/08/2002	11/09/2002	0.85	0.85	1.70
5344	11/09/2002	24/09/2002	1.74	0.88	2.62
5344	24/09/2002	09/10/2002	1.05	0.61	1.66
5344	09/10/2002	23/10/2002	1.23	0.54	1.77
5344	23/10/2002	06/11/2002	1.22	0.37	1.60
5344	06/11/2002	20/11/2002	1.09	0.46	1.55
5344	20/11/2002	06/12/2002	0.79	0.34	1.13
5344	06/12/2002	20/12/2002	0.84	0.85	1.69
5344	20/12/2002	02/01/2003	1.73	0.46	2.19
5344	02/01/2003	16/01/2003	3.40	0.47	3.87
5344	16/01/2003	29/01/2003	1.06	0.32	1.37
5344	29/01/2003	12/02/2003	3.40	-999	-999
5344	12/02/2003	26/02/2003	1.27	0.96	2.22
5344	26/02/2003	13/03/2003	-999	-999	-999
5344	13/03/2003	27/03/2003	1.68	1.31	2.99
5344	27/03/2003	09/04/2003	1.97	1.07	3.04
5344	09/04/2003	23/04/2003	1.72	1.36	3.08
5344	23/04/2003	07/05/2003	0.39	1.24	1.63
5344	07/05/2003	21/05/2003	0.53	0.51	1.04
5344	21/05/2003	04/06/2003	0.53	0.93	1.46
5344	04/06/2003	18/06/2003	0.75	-999	-999
5344	18/06/2003	04/07/2003	0.91	0.72	1.63
5344	04/07/2003	16/07/2003	1.11	1.02	2.12
5344	16/07/2003	30/07/2003	0.54	0.59	1.13
5344	30/07/2003	13/08/2003	1.75	1.97	3.72
5344	13/08/2003	27/08/2003	1.45	0.64	2.09
5344	27/08/2003	10/09/2003	-999	-999	-999
5344	10/09/2003	24/09/2003	1.10	-999	-999
5344	24/09/2003	08/10/2003	0.92	0.53	1.45
5344	08/10/2003	22/10/2003	1.86	0.60	2.46
5344	22/10/2003	05/11/2003	2.00	0.39	2.38
5344	05/11/2003	19/11/2003	0.52	-999	-999
5344	19/11/2003	03/12/2003	0.84	0.39	1.24
5344	03/12/2003	17/12/2003	0.89	-999	-999
5344	17/12/2003	31/12/2003	-999	0.02	-999
5344	31/12/2003	28/01/2004	1.56	-999	-999
5344	28/01/2004	25/02/2004	1.81	-999	-999
5344	25/02/2004	25/03/2004	1.83	0.54	2.36

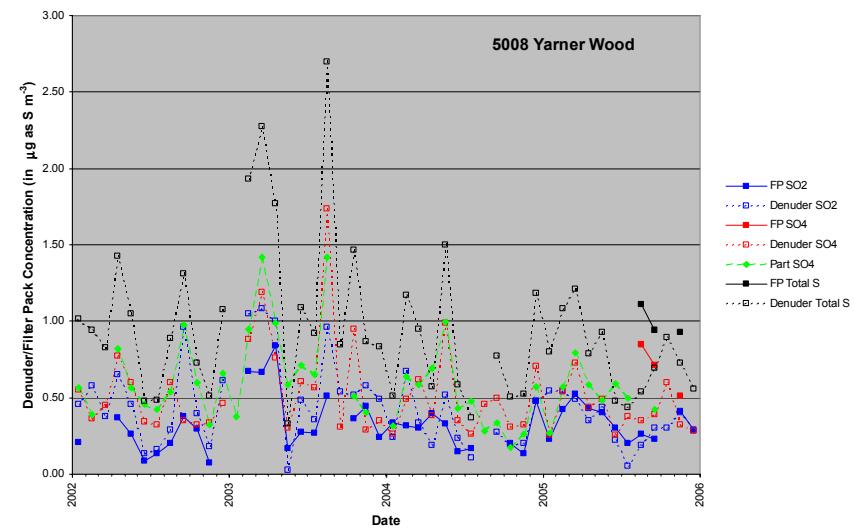
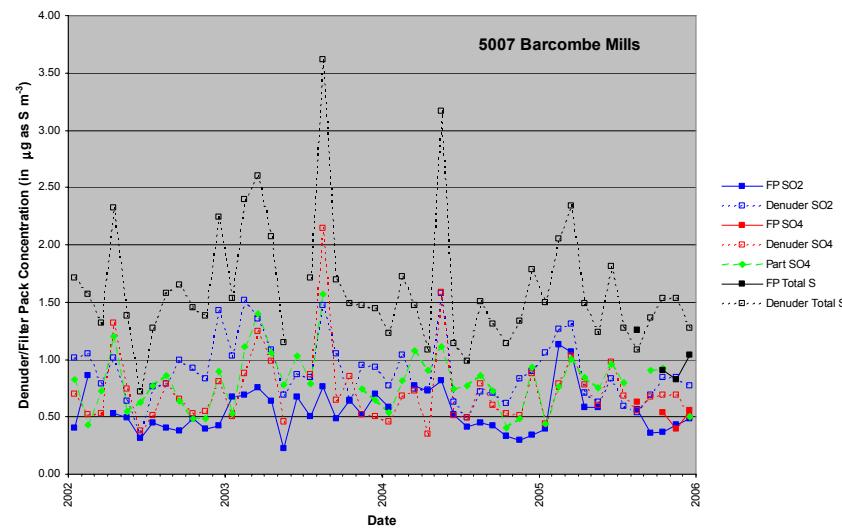
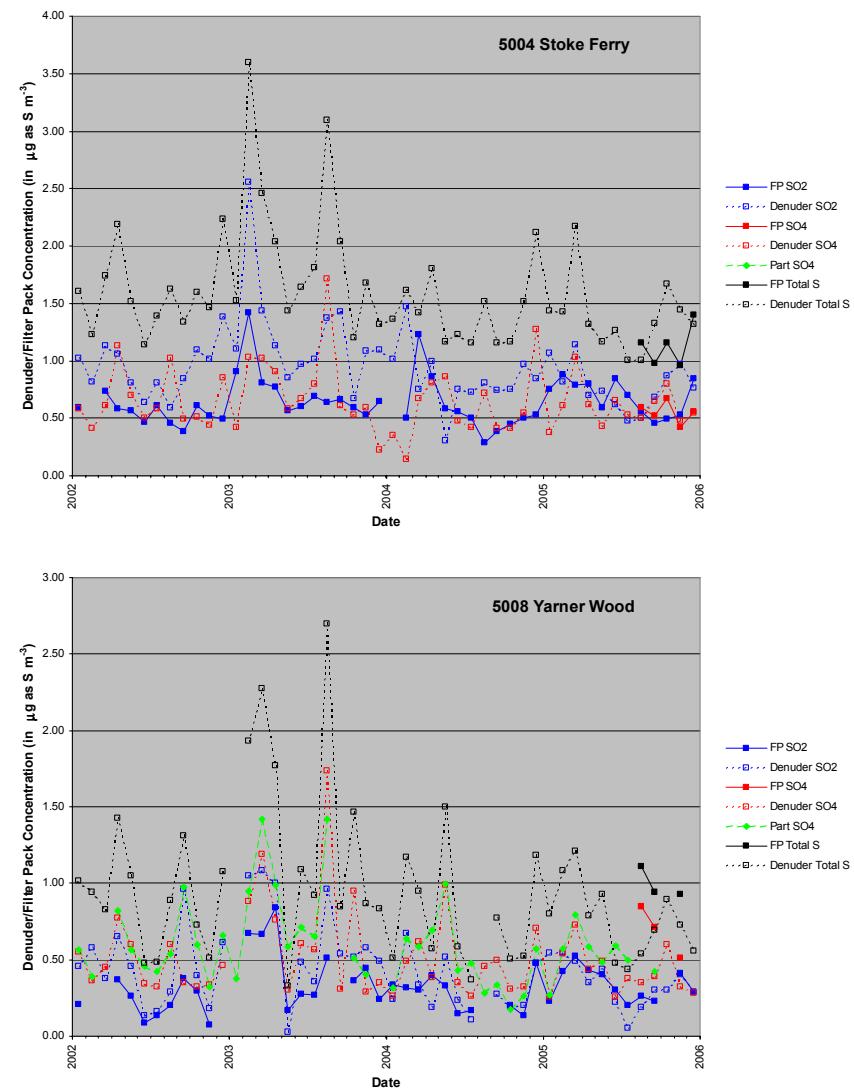
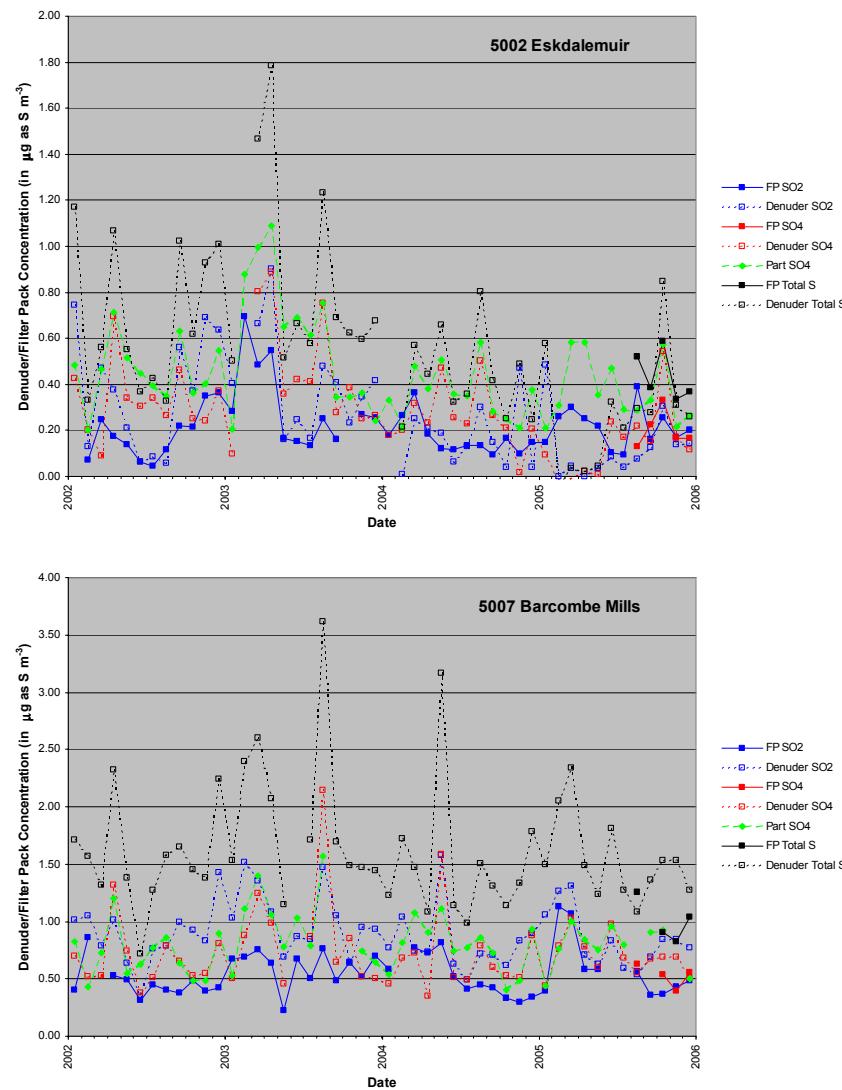
Site	Start Date	End Date	Concentration (in µg as S m ⁻³)		
			SO ₂	Particulate SO ₄	Total S
5344	25/03/2004	22/04/2004	0.13	-999	-999
5344	22/04/2004	19/05/2004	1.59	-999	-999
5344	19/05/2004	17/06/2004	0.57	0.60	1.16
5344	17/06/2004	16/07/2004	0.57	-999	-999
5344	16/07/2004	11/08/2004	0.40	-999	-999
5344	11/08/2004	08/09/2004	-999	-999	-999
5344	08/09/2004	06/10/2004	0.96	-999	-999
5344	06/10/2004	03/11/2004	0.23	-999	-999
5344	03/11/2004	01/12/2004	1.38	-999	-999
5344	01/12/2004	29/12/2004	0.71	-999	-999
5344	29/12/2004	26/01/2005	1.17	-999	-999
5344	26/01/2005	23/02/2005	3.06	0.00	3.06
5344	23/02/2005	22/03/2005	1.30	-999	-999
5344	22/03/2005	20/04/2005	1.05	-999	-999
5344	20/04/2005	18/05/2005	1.08	-999	-999
5344	18/05/2005	14/06/2005	0.76	-999	-999
5344	14/06/2005	11/07/2005	0.59	-999	-999
5344	11/07/2005	09/08/2005	0.70	0.65	1.35
5344	09/08/2005	06/09/2005	0.66	0.55	1.21
5344	06/09/2005	04/10/2005	0.61	0.43	1.05
5344	04/10/2005	01/11/2005	0.41	0.81	1.22
5344	01/11/2005	29/11/2005	0.69	0.38	1.07
5344	29/11/2005	04/01/2006	0.60	0.65	1.25

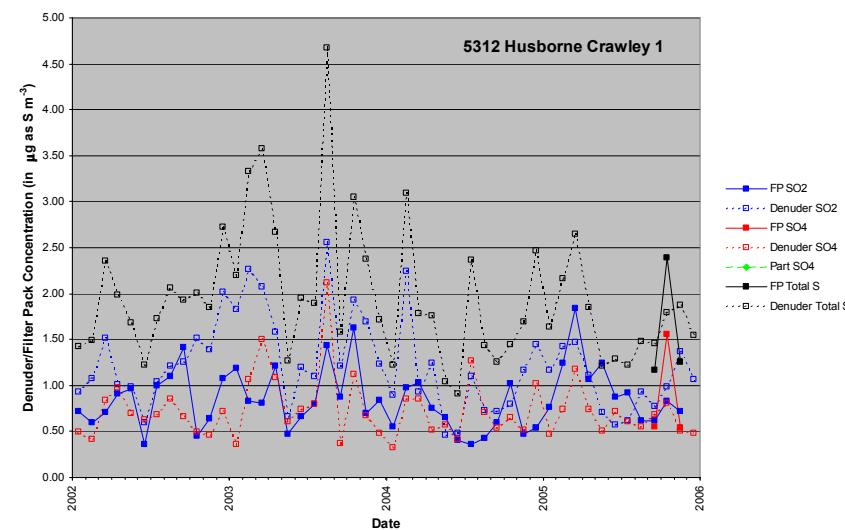
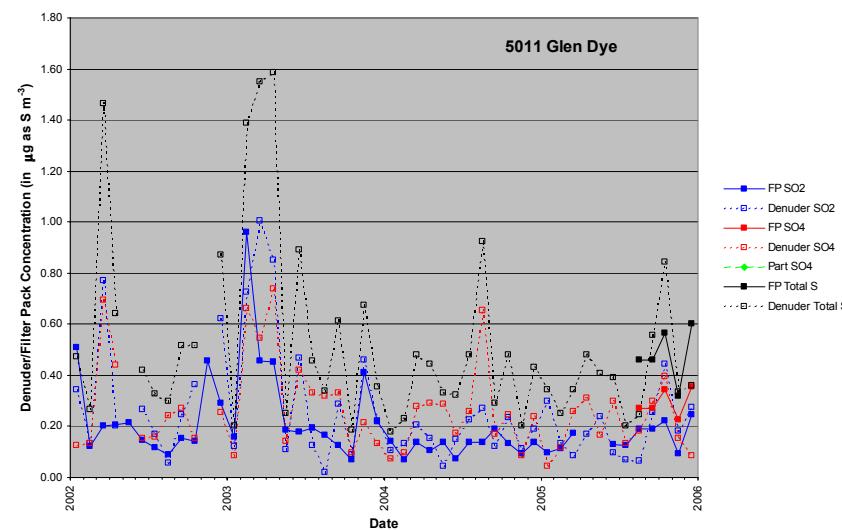
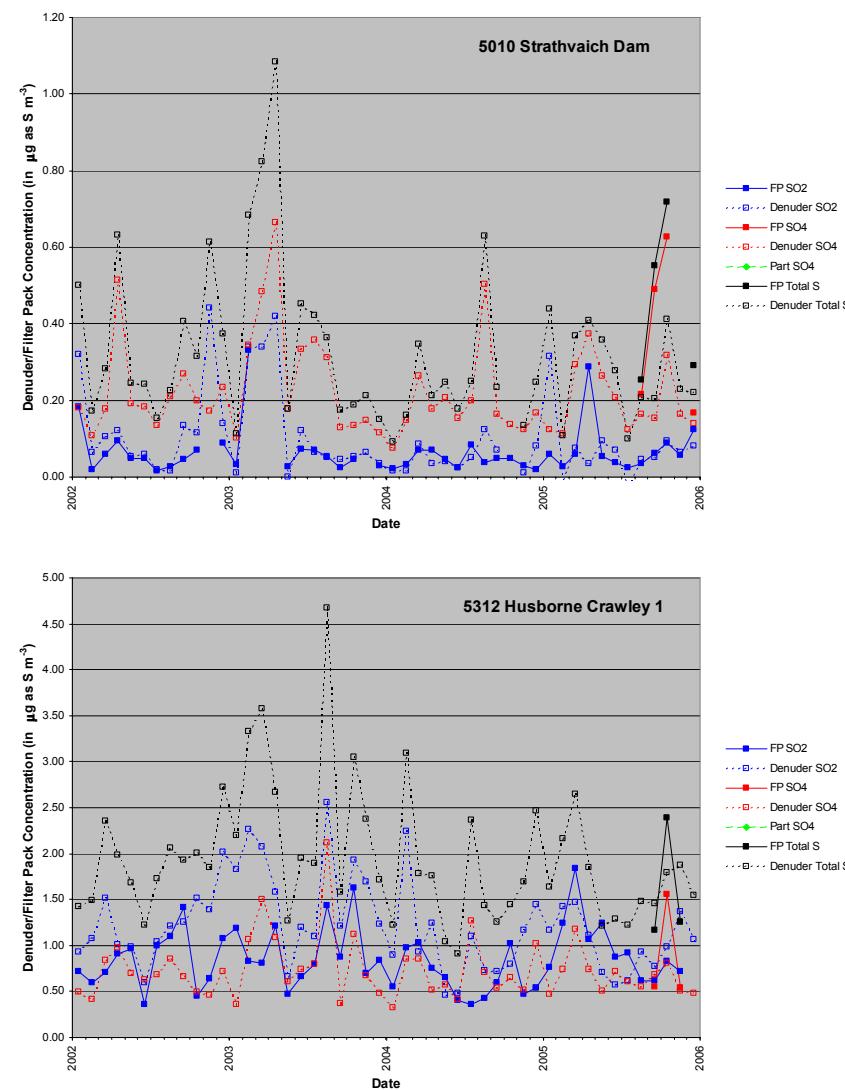
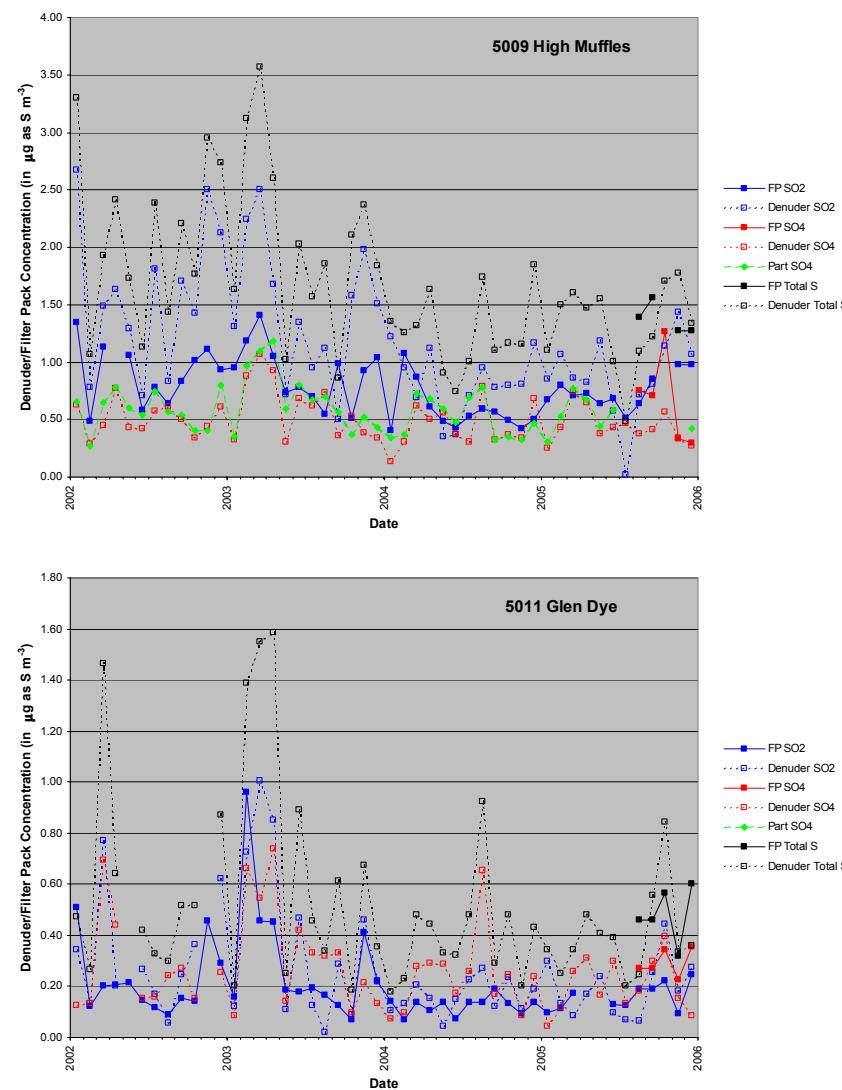
Appendix 2.2

Comparison of the Monthly Concentrations of Sulphur Dioxide, Particulate Sulphate and Total Sulphur Concentrations (in µg S m⁻³) Derived from the Denuder and Filter-Pack Samplers between 2002 and 2005 for the following sites:

- | | |
|------------------|------------------|
| ➤ Eskdalemuir | Stoke Ferry |
| ➤ Barcombe Mills | Yarner Wood |
| ➤ High Muffles | Strathvaich Dam |
| ➤ Glen Dye | Husborne Crawley |

Also included are the Monthly Concentrations derived from the Daily Particulate Sulphate Measurements for the Sites at which such Measurements are made.





Appendix 3

THE SO₂ MEASUREMENTS: 2001-2005

National Environmental Technology Centre

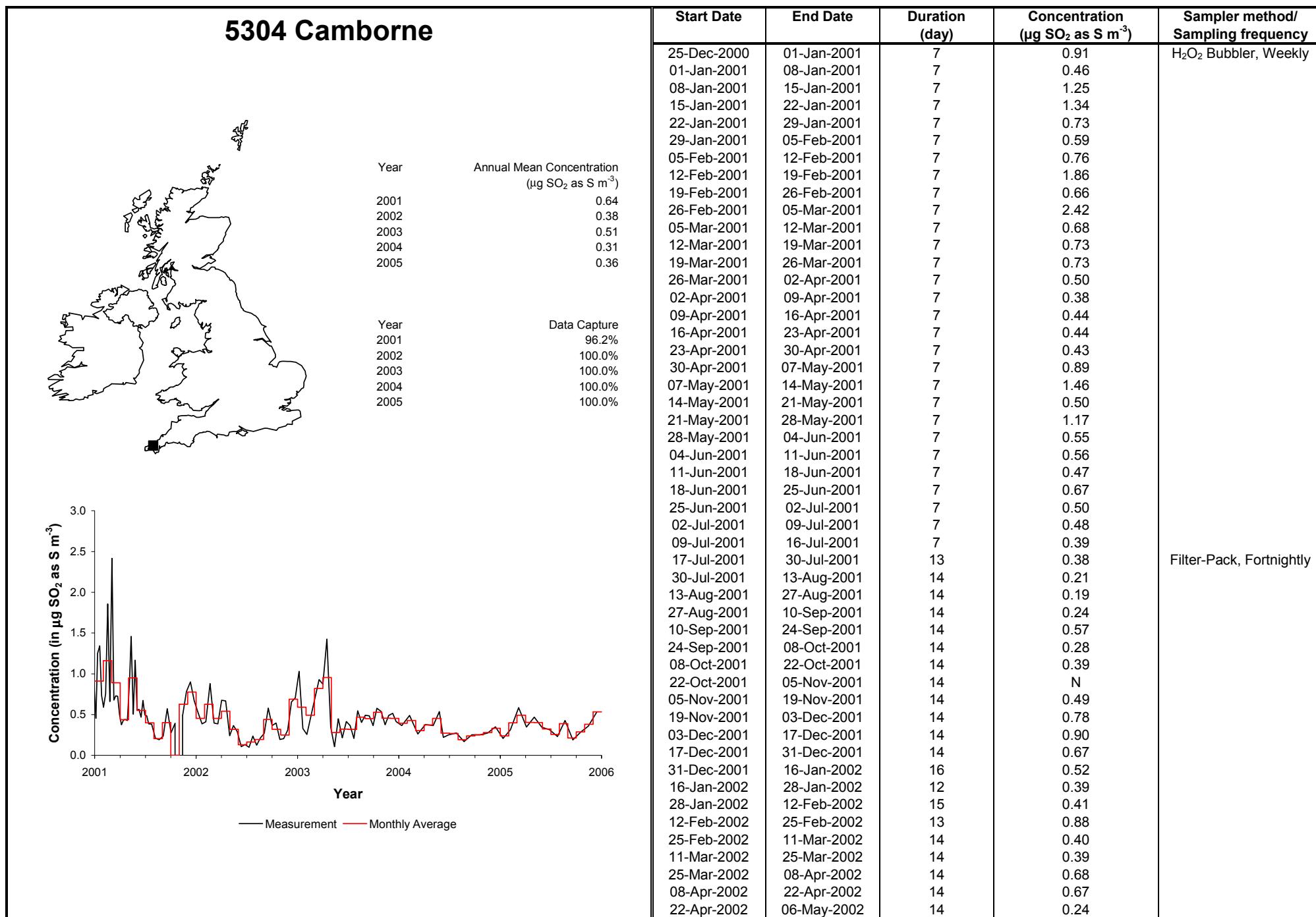
Sites:

5304 Camborne 1
5008 Yarner Wood
5007 Barcombe Mills
5316 Rockbourne 1
5333 Fairseat
5314 Marshfield 1
5309 Cresselly 1
5335 Crai
5313 Little Horkesley 1
5312 Husborne Crawley 1
5306 Cardington 2
5331 Rosemaund
5301 Brockhill 1
5346 Drayton
5330 Cwmystwyth
5004 Stoke Ferry
5323 Preston Montford 2
5315 Ratcliffe 13
5344 Sutton Bonington
5334 Bylchau
5318 Waunfawr 1
5303 Caenby 1
5347 Church Fenton
5317 Wakefield 24
5322 Hebden Bridge 2
5310 Etton 1
5009 High Muffles
5339 Appleacre
5006 Lough Navar
5324 Bentra
5329 Cam Forest
5345 Formoyle
5343 Benniguinea
5321 Redesdale 2
5002 Eskdalemuir
5305 Camphill 1
5326 Bush
5320 Loch Leven 2
5325 Pitlochry
5308 Corpach 1
5011 Glen Dye
5319 Fort Augustus 2
5010 Strathvaich Dam
5338 Forsinain

<u>Variables Analysed</u>	<u>Units</u>	<u>Specified Variable Limit</u>
Sulphur Dioxide as S	µg m ⁻³	1.0

Time Period Covered:

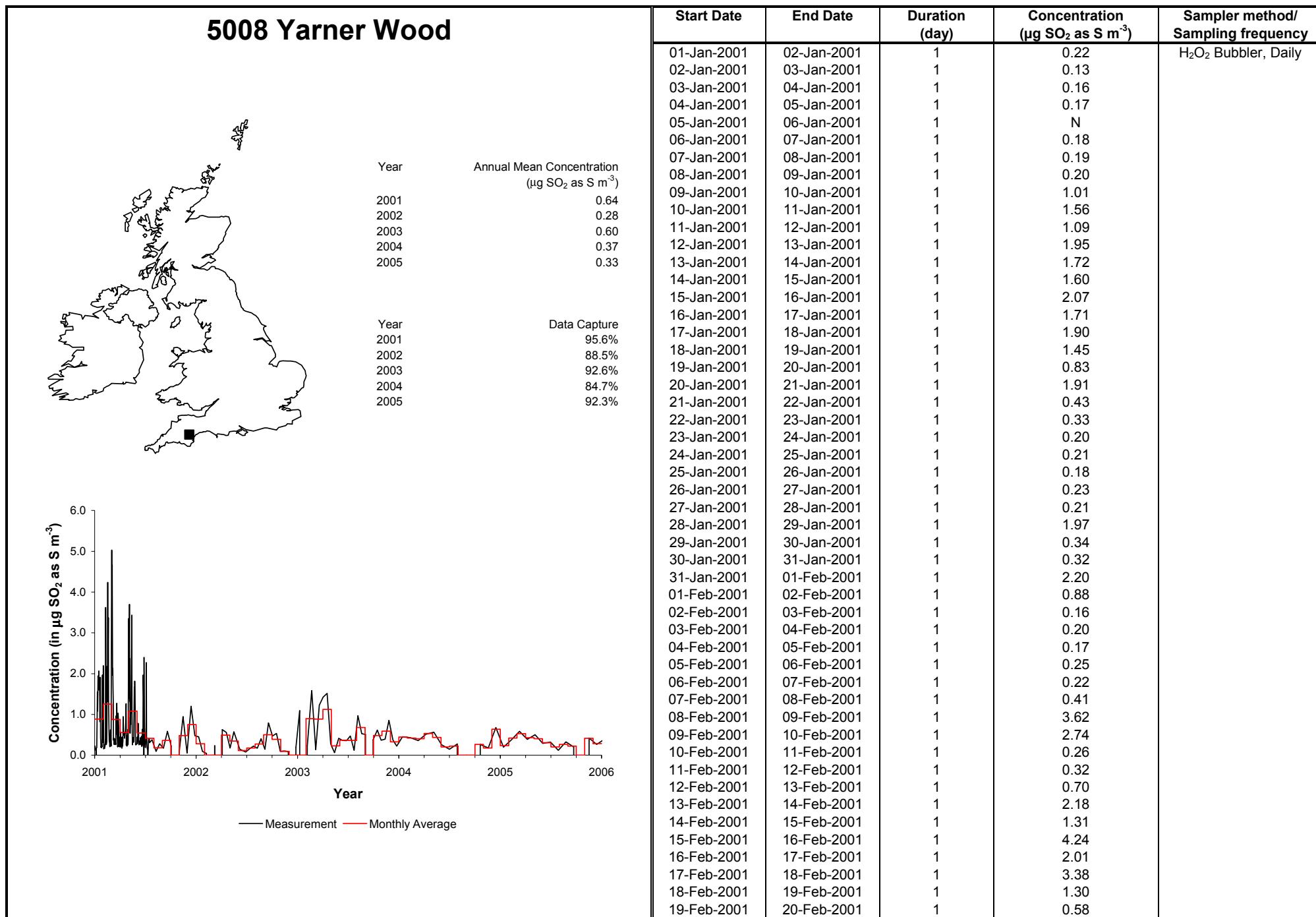
January 2001 - December 2005



5304 Camborne

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
06-May-2002	20-May-2002	14	0.37	Filter-Pack, Fortnightly	11-Jul-2004	08-Aug-2004	28	0.27	Filter-Pack, 4 Weekly
20-May-2002	03-Jun-2002	14	0.29		08-Aug-2004	06-Sep-2004	29	0.17	
03-Jun-2002	17-Jun-2002	14	0.11		06-Sep-2004	03-Oct-2004	27	0.25	
17-Jun-2002	01-Jul-2002	14	0.13		03-Oct-2004	31-Oct-2004	28	0.25	
01-Jul-2002	15-Jul-2002	14	0.10		31-Oct-2004	28-Nov-2004	28	0.27	
15-Jul-2002	29-Jul-2002	14	0.24		28-Nov-2004	28-Dec-2004	30	0.35	
29-Jul-2002	12-Aug-2002	14	0.13		28-Dec-2004	23-Jan-2005	26	0.21	
12-Aug-2002	26-Aug-2002	14	0.22		23-Jan-2005	20-Feb-2005	28	0.31	
26-Aug-2002	09-Sep-2002	14	0.27		20-Feb-2005	20-Mar-2005	28	0.58	
09-Sep-2002	23-Sep-2002	14	0.58		20-Mar-2005	17-Apr-2005	28	0.35	
23-Sep-2002	07-Oct-2002	14	0.37		17-Apr-2005	15-May-2005	28	0.47	
07-Oct-2002	21-Oct-2002	14	0.40		15-May-2005	12-Jun-2005	28	0.35	
21-Oct-2002	04-Nov-2002	14	0.19		12-Jun-2005	10-Jul-2005	28	0.31	
04-Nov-2002	18-Nov-2002	14	0.21		10-Jul-2005	07-Aug-2005	28	0.23	
18-Nov-2002	02-Dec-2002	14	0.31		07-Aug-2005	04-Sep-2005	28	0.43	
02-Dec-2002	16-Dec-2002	14	0.65		04-Sep-2005	02-Oct-2005	28	0.19	
16-Dec-2002	30-Dec-2002	14	0.70		02-Oct-2005	30-Oct-2005	28	0.29	
30-Dec-2002	13-Jan-2003	14	1.03		30-Oct-2005	27-Nov-2005	28	0.36	
13-Jan-2003	27-Jan-2003	14	0.33		27-Nov-2005	01-Jan-2006	35	0.53	
27-Jan-2003	10-Feb-2003	14	0.26		01-Jan-2006				Monitoring terminated
10-Feb-2003	10-Mar-2003	28	0.61						
10-Mar-2003	24-Mar-2003	14	0.93						
24-Mar-2003	07-Apr-2003	14	0.87						
07-Apr-2003	21-Apr-2003	14	1.43						
21-Apr-2003	05-May-2003	14	0.35						
05-May-2003	19-May-2003	14	0.11						
19-May-2003	02-Jun-2003	14	0.45						
02-Jun-2003	16-Jun-2003	14	0.22						
16-Jun-2003	30-Jun-2003	14	0.41						
30-Jun-2003	14-Jul-2003	14	0.37						
14-Jul-2003	28-Jul-2003	14	0.21						
28-Jul-2003	11-Aug-2003	14	0.55						
11-Aug-2003	25-Aug-2003	14	0.40						
25-Aug-2003	08-Sep-2003	14	0.49						
08-Sep-2003	22-Sep-2003	14	0.49						
22-Sep-2003	06-Oct-2003	14	0.37						
06-Oct-2003	20-Oct-2003	14	0.58						
20-Oct-2003	06-Nov-2003	17	0.54						
06-Nov-2003	17-Nov-2003	11	0.38						
17-Nov-2003	01-Dec-2003	14	0.49						
01-Dec-2003	15-Dec-2003	14	0.51						
15-Dec-2003	28-Dec-2003	13	0.41						
28-Dec-2003	25-Jan-2004	28	0.37	Filter-Pack, 4 Weekly					
25-Jan-2004	22-Feb-2004	28	0.49						
22-Feb-2004	21-Mar-2004	28	0.26						
21-Mar-2004	18-Apr-2004	28	0.38						
18-Apr-2004	16-May-2004	28	0.37						
16-May-2004	04-Jun-2004	19	0.54						
04-Jun-2004	13-Jun-2004	9	0.22						
13-Jun-2004	11-Jul-2004	28	0.25						

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5008 Yarner Wood

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
20-Feb-2001	21-Feb-2001	1	0.35	H ₂ O ₂ Bubbler, Daily	11-Apr-2001	12-Apr-2001	1	0.95	H ₂ O ₂ Bubbler, Daily
21-Feb-2001	22-Feb-2001	1	0.30		12-Apr-2001	13-Apr-2001	1	0.60	
22-Feb-2001	23-Feb-2001	1	0.21		13-Apr-2001	14-Apr-2001	1	0.49	
23-Feb-2001	24-Feb-2001	1	0.43		14-Apr-2001	15-Apr-2001	1	0.55	
24-Feb-2001	25-Feb-2001	1	0.62		15-Apr-2001	16-Apr-2001	1	0.52	
25-Feb-2001	26-Feb-2001	1	0.47		16-Apr-2001	17-Apr-2001	1	0.42	
26-Feb-2001	27-Feb-2001	1	0.22		17-Apr-2001	18-Apr-2001	1	0.52	
27-Feb-2001	28-Feb-2001	1	2.45		18-Apr-2001	19-Apr-2001	1	0.56	
28-Feb-2001	01-Mar-2001	1	5.03		19-Apr-2001	20-Apr-2001	1	0.60	
01-Mar-2001	02-Mar-2001	1	3.70		20-Apr-2001	21-Apr-2001	1	0.81	
02-Mar-2001	03-Mar-2001	1	4.67		21-Apr-2001	22-Apr-2001	1	1.26	
03-Mar-2001	04-Mar-2001	1	1.96		22-Apr-2001	23-Apr-2001	1	0.25	
04-Mar-2001	05-Mar-2001	1	2.12		23-Apr-2001	24-Apr-2001	1	0.48	
05-Mar-2001	06-Mar-2001	1	1.65		24-Apr-2001	25-Apr-2001	1	0.23	
06-Mar-2001	07-Mar-2001	1	1.08		25-Apr-2001	26-Apr-2001	1	0.25	
07-Mar-2001	08-Mar-2001	1	0.37		26-Apr-2001	27-Apr-2001	1	0.29	
08-Mar-2001	09-Mar-2001	1	0.42		27-Apr-2001	28-Apr-2001	1	0.63	
09-Mar-2001	10-Mar-2001	1	0.27		28-Apr-2001	29-Apr-2001	1	0.25	
10-Mar-2001	11-Mar-2001	1	0.26		29-Apr-2001	30-Apr-2001	1	0.39	
11-Mar-2001	12-Mar-2001	1	0.40		30-Apr-2001	01-May-2001	1	3.35	
12-Mar-2001	13-Mar-2001	1	0.27		01-May-2001	02-May-2001	1	1.80	
13-Mar-2001	14-Mar-2001	1	0.27		02-May-2001	03-May-2001	1	1.39	
14-Mar-2001	15-Mar-2001	1	0.30		03-May-2001	04-May-2001	1	3.70	
15-Mar-2001	16-Mar-2001	1	0.26		04-May-2001	05-May-2001	1	1.32	
16-Mar-2001	17-Mar-2001	1	0.97		05-May-2001	06-May-2001	1	2.37	
17-Mar-2001	18-Mar-2001	1	0.52		06-May-2001	07-May-2001	1	0.54	
18-Mar-2001	19-Mar-2001	1	1.20		07-May-2001	08-May-2001	1	0.93	
19-Mar-2001	20-Mar-2001	1	1.27		08-May-2001	09-May-2001	1	0.75	
20-Mar-2001	21-Mar-2001	1	0.46		09-May-2001	10-May-2001	1	1.10	
21-Mar-2001	22-Mar-2001	1	0.32		10-May-2001	11-May-2001	1	1.41	
22-Mar-2001	23-Mar-2001	1	0.20		11-May-2001	12-May-2001	1	2.64	
23-Mar-2001	24-Mar-2001	1	0.26		12-May-2001	13-May-2001	1	3.43	
24-Mar-2001	25-Mar-2001	1	1.03		13-May-2001	14-May-2001	1	1.03	
25-Mar-2001	26-Mar-2001	1	0.83		14-May-2001	15-May-2001	1	0.25	
26-Mar-2001	27-Mar-2001	1	0.67		15-May-2001	16-May-2001	1	0.38	
27-Mar-2001	28-Mar-2001	1	0.21		16-May-2001	17-May-2001	1	0.32	
28-Mar-2001	29-Mar-2001	1	0.25		17-May-2001	18-May-2001	1	0.43	
29-Mar-2001	30-Mar-2001	1	0.38		18-May-2001	19-May-2001	1	0.32	
30-Mar-2001	31-Mar-2001	1	0.44		19-May-2001	20-May-2001	1	0.44	
31-Mar-2001	01-Apr-2001	1	0.20		20-May-2001	21-May-2001	1	0.75	
01-Apr-2001	02-Apr-2001	1	0.57		21-May-2001	22-May-2001	1	1.67	
02-Apr-2001	03-Apr-2001	1	0.37		22-May-2001	23-May-2001	1	1.25	
03-Apr-2001	04-Apr-2001	1	0.41		23-May-2001	24-May-2001	1	1.82	
04-Apr-2001	05-Apr-2001	1	0.27		24-May-2001	25-May-2001	1	1.20	
05-Apr-2001	06-Apr-2001	1	0.22		25-May-2001	26-May-2001	1	0.64	
06-Apr-2001	07-Apr-2001	1	0.17		26-May-2001	27-May-2001	1	0.26	
07-Apr-2001	08-Apr-2001	1	0.45		27-May-2001	28-May-2001	1	0.26	
08-Apr-2001	09-Apr-2001	1	0.21		28-May-2001	29-May-2001	1	0.26	
09-Apr-2001	10-Apr-2001	1	0.28		29-May-2001	30-May-2001	1	0.27	
10-Apr-2001	11-Apr-2001	1	0.35		30-May-2001	31-May-2001	1	0.29	

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

5008 Yarner Wood

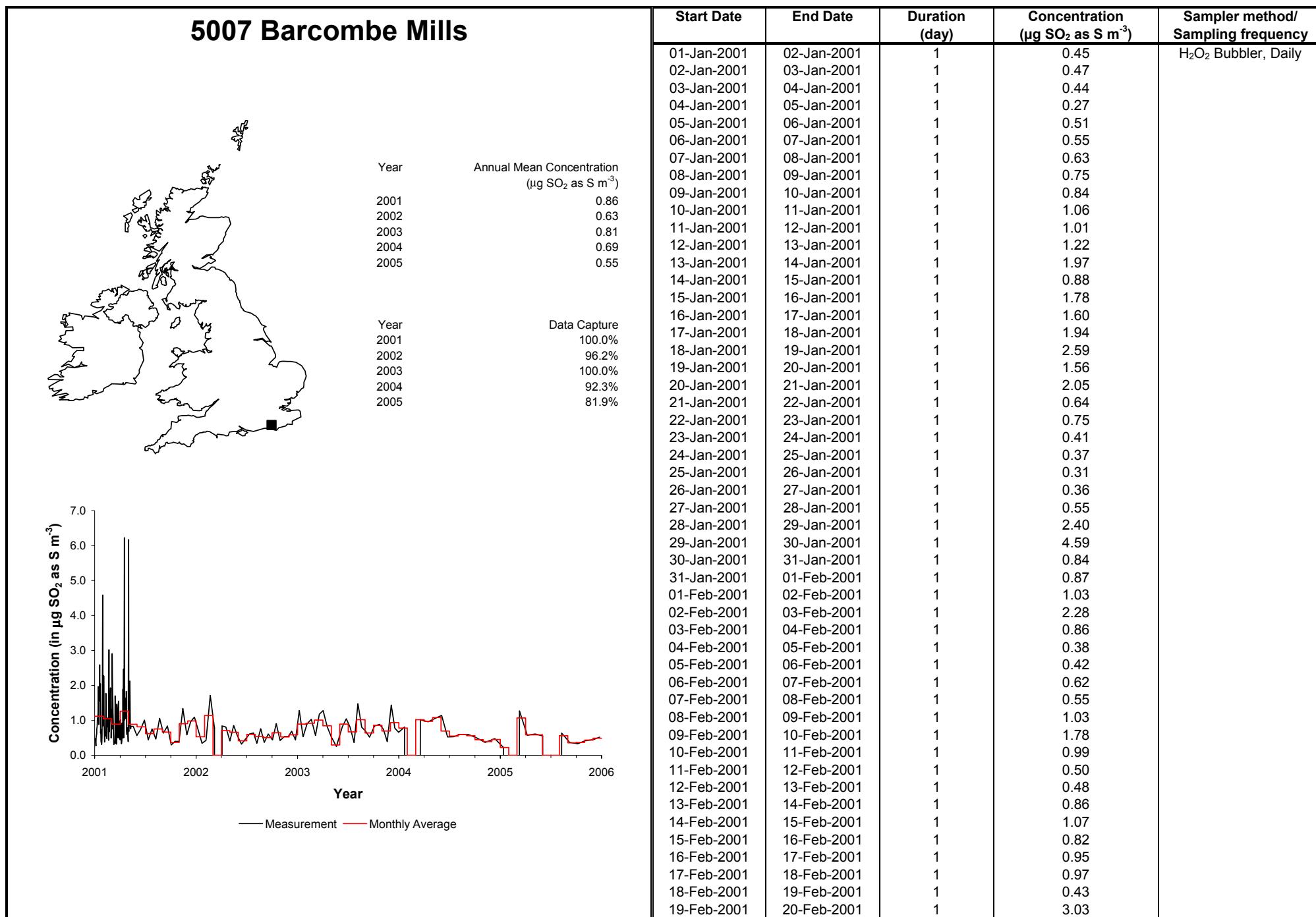
Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
31-May-2001	01-Jun-2001	1	0.44	H ₂ O ₂ Bubbler, Daily	12-Sep-2001	25-Sep-2001	13	0.59	
01-Jun-2001	02-Jun-2001	1	0.28		25-Sep-2001	10-Oct-2001	15	0.23	
02-Jun-2001	03-Jun-2001	1	0.38		10-Oct-2001	24-Oct-2001	14	N	
03-Jun-2001	04-Jun-2001	1	0.54		24-Oct-2001	07-Nov-2001	14	0.09	
04-Jun-2001	05-Jun-2001	1	0.78		07-Nov-2001	21-Nov-2001	14	0.95	
05-Jun-2001	06-Jun-2001	1	0.61		21-Nov-2001	05-Dec-2001	14	0.06	
06-Jun-2001	07-Jun-2001	1	0.28		05-Dec-2001	19-Dec-2001	14	1.20	
07-Jun-2001	08-Jun-2001	1	0.25		19-Dec-2001	02-Jan-2002	14	0.48	
08-Jun-2001	09-Jun-2001	1	0.33		02-Jan-2002	17-Jan-2002	15	0.45	
09-Jun-2001	10-Jun-2001	1	0.35		17-Jan-2002	30-Jan-2002	13	0.10	
10-Jun-2001	11-Jun-2001	1	0.34		30-Jan-2002	13-Feb-2002	14	0.05	
11-Jun-2001	12-Jun-2001	1	0.28		13-Feb-2002	27-Feb-2002	14	N	
12-Jun-2001	13-Jun-2001	1	0.43		27-Feb-2002	13-Mar-2002	14	0.23	
13-Jun-2001	14-Jun-2001	1	0.26		13-Mar-2002	27-Mar-2002	14	N	
14-Jun-2001	15-Jun-2001	1	0.35		27-Mar-2002	10-Apr-2002	14	0.63	
15-Jun-2001	16-Jun-2001	1	0.28		10-Apr-2002	24-Apr-2002	14	0.56	
16-Jun-2001	17-Jun-2001	1	0.47		24-Apr-2002	08-May-2002	14	0.18	
17-Jun-2001	18-Jun-2001	1	0.21		08-May-2002	22-May-2002	14	0.57	
18-Jun-2001	19-Jun-2001	1	0.32		22-May-2002	19-Jun-2002	28	0.14	
19-Jun-2001	20-Jun-2001	1	0.64		19-Jun-2002	03-Jul-2002	14	0.08	
20-Jun-2001	21-Jun-2001	1	0.25		03-Jul-2002	17-Jul-2002	14	0.15	
21-Jun-2001	22-Jun-2001	1	0.59		17-Jul-2002	31-Jul-2002	14	0.22	
22-Jun-2001	23-Jun-2001	1	1.97		31-Jul-2002	14-Aug-2002	14	0.17	
23-Jun-2001	24-Jun-2001	1	1.37		14-Aug-2002	28-Aug-2002	14	0.40	
24-Jun-2001	25-Jun-2001	1	N		28-Aug-2002	11-Sep-2002	14	0.15	
25-Jun-2001	26-Jun-2001	1	2.39		11-Sep-2002	24-Sep-2002	13	0.80	
26-Jun-2001	27-Jun-2001	1	0.84		24-Sep-2002	09-Oct-2002	15	0.47	
27-Jun-2001	28-Jun-2001	1	0.29		09-Oct-2002	23-Oct-2002	14	0.54	
28-Jun-2001	29-Jun-2001	1	0.26		23-Oct-2002	06-Nov-2002	14	0.10	
29-Jun-2001	30-Jun-2001	1	0.19		06-Nov-2002	20-Nov-2002	14	0.10	
30-Jun-2001	01-Jul-2001	1	0.22		20-Nov-2002	04-Dec-2002	14	0.09	
01-Jul-2001	02-Jul-2001	1	0.29		04-Dec-2002	18-Dec-2002	14	N	
02-Jul-2001	03-Jul-2001	1	0.70		18-Dec-2002	02-Jan-2003	15	0.19	
03-Jul-2001	04-Jul-2001	1	2.27		02-Jan-2003	15-Jan-2003	13	1.10	
04-Jul-2001	05-Jul-2001	1	0.45		15-Jan-2003	29-Jan-2003	14	N	
05-Jul-2001	06-Jul-2001	1	0.41		29-Jan-2003	12-Feb-2003	14	0.23	
06-Jul-2001	07-Jul-2001	1	0.21		12-Feb-2003	26-Feb-2003	14	1.58	
07-Jul-2001	08-Jul-2001	1	0.15		26-Feb-2003	12-Mar-2003	14	0.14	
08-Jul-2001	09-Jul-2001	1	0.15		12-Mar-2003	25-Mar-2003	13	1.23	
09-Jul-2001	10-Jul-2001	1	<0.18		25-Mar-2003	08-Apr-2003	14	1.42	
10-Jul-2001	11-Jul-2001	1	0.19		08-Apr-2003	22-Apr-2003	14	1.52	
11-Jul-2001	12-Jul-2001	1	0.36		22-Apr-2003	05-May-2003	13	0.28	
12-Jul-2001	13-Jul-2001	1	0.40		05-May-2003	20-May-2003	15	0.07	
13-Jul-2001	14-Jul-2001	1	0.39		20-May-2003	04-Jun-2003	15	0.42	
14-Jul-2001	15-Jul-2001	1	0.41		04-Jun-2003	17-Jun-2003	13	0.36	
15-Jul-2001	16-Jul-2001	1	0.31		17-Jun-2003	01-Jul-2003	14	0.36	
16-Jul-2001	01-Aug-2001	16	0.38	Filter-Pack, Fortnightly	01-Jul-2003	15-Jul-2003	14	0.47	
01-Aug-2001	15-Aug-2001	14	0.10		15-Jul-2003	29-Jul-2003	14	0.12	
15-Aug-2001	28-Aug-2001	13	0.28		29-Jul-2003	12-Aug-2003	14	0.97	
28-Aug-2001	12-Sep-2001	15	0.17		12-Aug-2003	26-Aug-2003	14	0.53	

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

5008 Yarner Wood

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
26-Aug-2003	09-Sep-2003	14	0.51	Filter-Pack, Fortnightly					Filter-Pack, Fortnightly
09-Sep-2003	22-Sep-2003	13	N						
22-Sep-2003	07-Oct-2003	15	0.38						
07-Oct-2003	21-Oct-2003	14	0.62						
21-Oct-2003	04-Nov-2003	14	0.37						
04-Nov-2003	18-Nov-2003	14	0.39						
18-Nov-2003	02-Dec-2003	14	0.85						
02-Dec-2003	16-Dec-2003	14	0.37						
16-Dec-2003	30-Dec-2003	14	0.22						
30-Dec-2003	27-Jan-2004	28	0.45						
27-Jan-2004	24-Feb-2004	28	0.43	Filter-Pack, 4 Weekly					
24-Feb-2004	23-Mar-2004	28	0.36						
23-Mar-2004	20-Apr-2004	28	0.51						
20-Apr-2004	19-May-2004	29	0.57						
19-May-2004	16-Jun-2004	28	0.26						
16-Jun-2004	14-Jul-2004	28	0.15						
14-Jul-2004	11-Aug-2004	28	0.28						
11-Aug-2004	09-Sep-2004	29	N						
09-Sep-2004	06-Oct-2004	27	N						
06-Oct-2004	03-Nov-2004	28	0.27						
03-Nov-2004	01-Dec-2004	28	0.18						
01-Dec-2004	29-Dec-2004	28	0.68						
29-Dec-2004	26-Jan-2005	28	0.20						
26-Jan-2005	23-Feb-2005	28	0.38						
23-Feb-2005	23-Mar-2005	28	0.59						
23-Mar-2005	20-Apr-2005	28	0.39						
20-Apr-2005	18-May-2005	28	0.50						
18-May-2005	15-Jun-2005	28	0.29						
15-Jun-2005	13-Jul-2005	28	0.32						
13-Jul-2005	10-Aug-2005	28	0.12						
10-Aug-2005	07-Sep-2005	28	0.32						
07-Sep-2005	05-Oct-2005	28	0.20						
05-Oct-2005	02-Nov-2005	28	N						
02-Nov-2005	30-Nov-2005	28	0.42						
30-Nov-2005	27-Dec-2005	27	0.27						
27-Dec-2005	24-Jan-2006	28	0.39	Monitoring terminated					
24-Jan-2006									

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5007 Barcombe Mills

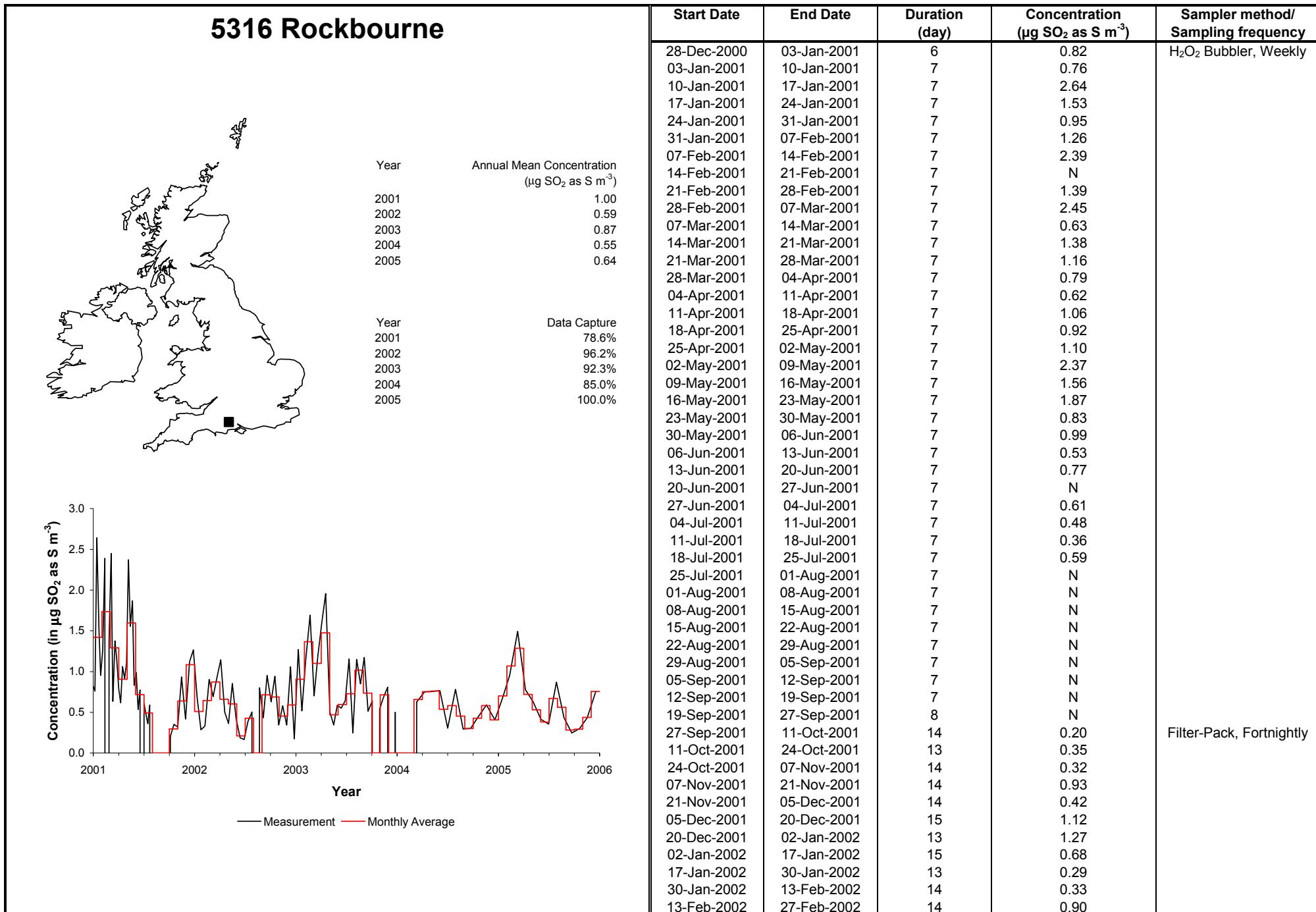
Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
20-Feb-2001	21-Feb-2001	1	0.67	H ₂ O ₂ Bubbler, Daily	11-Apr-2001	12-Apr-2001	1	0.69	
21-Feb-2001	22-Feb-2001	1	1.00		12-Apr-2001	13-Apr-2001	1	2.47	
22-Feb-2001	23-Feb-2001	1	1.11		13-Apr-2001	14-Apr-2001	1	0.50	
23-Feb-2001	24-Feb-2001	1	1.49		14-Apr-2001	15-Apr-2001	1	0.67	
24-Feb-2001	25-Feb-2001	1	1.93		15-Apr-2001	16-Apr-2001	1	6.23	
25-Feb-2001	26-Feb-2001	1	1.40		16-Apr-2001	17-Apr-2001	1	1.01	
26-Feb-2001	27-Feb-2001	1	0.50		17-Apr-2001	18-Apr-2001	1	1.21	
27-Feb-2001	28-Feb-2001	1	0.73		18-Apr-2001	19-Apr-2001	1	1.63	
28-Feb-2001	01-Mar-2001	1	1.32		19-Apr-2001	20-Apr-2001	1	1.43	
01-Mar-2001	02-Mar-2001	1	0.75		20-Apr-2001	21-Apr-2001	1	1.06	
02-Mar-2001	03-Mar-2001	1	2.91		21-Apr-2001	22-Apr-2001	1	1.04	
03-Mar-2001	04-Mar-2001	1	1.73		22-Apr-2001	23-Apr-2001	1	1.83	
04-Mar-2001	05-Mar-2001	1	1.64		23-Apr-2001	24-Apr-2001	1	0.69	
05-Mar-2001	06-Mar-2001	1	1.22		24-Apr-2001	25-Apr-2001	1	0.59	
06-Mar-2001	07-Mar-2001	1	0.78		25-Apr-2001	26-Apr-2001	1	0.67	
07-Mar-2001	08-Mar-2001	1	0.64		26-Apr-2001	27-Apr-2001	1	0.78	
08-Mar-2001	09-Mar-2001	1	0.31		27-Apr-2001	28-Apr-2001	1	0.68	
09-Mar-2001	10-Mar-2001	1	0.36		28-Apr-2001	29-Apr-2001	1	0.54	
10-Mar-2001	11-Mar-2001	1	0.37		29-Apr-2001	30-Apr-2001	1	0.40	
11-Mar-2001	12-Mar-2001	1	0.35		30-Apr-2001	01-May-2001	1	6.17	
12-Mar-2001	13-Mar-2001	1	0.41		01-May-2001	02-May-2001	1	0.69	
13-Mar-2001	14-Mar-2001	1	1.70		02-May-2001	03-May-2001	1	1.81	
14-Mar-2001	15-Mar-2001	1	0.64		03-May-2001	04-May-2001	1	1.69	
15-Mar-2001	16-Mar-2001	1	0.34		04-May-2001	05-May-2001	1	1.26	
16-Mar-2001	17-Mar-2001	1	1.00		05-May-2001	06-May-2001	1	2.12	
17-Mar-2001	18-Mar-2001	1	0.32		06-May-2001	07-May-2001	1	1.49	
18-Mar-2001	19-Mar-2001	1	0.77		07-May-2001	08-May-2001	1	0.81	
19-Mar-2001	20-Mar-2001	1	1.47		08-May-2001	09-May-2001	1	0.76	
20-Mar-2001	21-Mar-2001	1	0.62		09-May-2001	10-May-2001	1	0.83	
21-Mar-2001	22-Mar-2001	1	0.58		10-May-2001	24-May-2001	14	0.83	
22-Mar-2001	23-Mar-2001	1	0.60		24-May-2001	05-Jun-2001	12	0.57	
23-Mar-2001	24-Mar-2001	1	0.50		05-Jun-2001	19-Jun-2001	14	0.73	
24-Mar-2001	25-Mar-2001	1	1.36		19-Jun-2001	03-Jul-2001	14	1.01	
25-Mar-2001	26-Mar-2001	1	1.55		03-Jul-2001	17-Jul-2001	14	0.44	
26-Mar-2001	27-Mar-2001	1	1.29		17-Jul-2001	31-Jul-2001	14	0.76	
27-Mar-2001	28-Mar-2001	1	0.64		31-Jul-2001	14-Aug-2001	14	0.47	
28-Mar-2001	29-Mar-2001	1	0.48		14-Aug-2001	28-Aug-2001	14	1.06	
29-Mar-2001	30-Mar-2001	1	0.99		28-Aug-2001	11-Sep-2001	14	0.64	
30-Mar-2001	31-Mar-2001	1	0.82		11-Sep-2001	25-Sep-2001	14	0.84	
31-Mar-2001	01-Apr-2001	1	0.44		25-Sep-2001	09-Oct-2001	14	0.30	
01-Apr-2001	02-Apr-2001	1	0.75		09-Oct-2001	23-Oct-2001	14	0.40	
02-Apr-2001	03-Apr-2001	1	1.02		23-Oct-2001	06-Nov-2001	14	0.40	
03-Apr-2001	04-Apr-2001	1	0.65		06-Nov-2001	20-Nov-2001	14	1.34	
04-Apr-2001	05-Apr-2001	1	0.56		20-Nov-2001	04-Dec-2001	14	0.59	
05-Apr-2001	06-Apr-2001	1	0.33		04-Dec-2001	18-Dec-2001	14	0.96	
06-Apr-2001	07-Apr-2001	1	0.43		18-Dec-2001	02-Jan-2002	15	1.09	
07-Apr-2001	08-Apr-2001	1	0.93		02-Jan-2002	15-Jan-2002	13	0.72	
08-Apr-2001	09-Apr-2001	1	0.49		15-Jan-2002	29-Jan-2002	14	0.34	
09-Apr-2001	10-Apr-2001	1	0.52		29-Jan-2002	12-Feb-2002	14	0.43	
10-Apr-2001	11-Apr-2001	1	1.90		12-Feb-2002	27-Feb-2002	15	1.71	

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

5007 Barcombe Mills

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
27-Feb-2002	12-Mar-2002	13	0.78	Filter-Pack, Fortnightly	31-Mar-2004	28-Apr-2004	28	0.96	Filter-Pack, 4 Weekly
12-Mar-2002	26-Mar-2002	14	N		28-Apr-2004	26-May-2004	28	1.07	
26-Mar-2002	09-Apr-2002	14	0.84		26-May-2004	09-Jun-2004	14	1.15	
09-Apr-2002	23-Apr-2002	14	0.81		09-Jun-2004	07-Jul-2004	28	0.53	
23-Apr-2002	07-May-2002	14	0.41		07-Jul-2004	23-Jul-2004	16	0.53	
07-May-2002	21-May-2002	14	0.86		23-Jul-2004	25-Aug-2004	33	0.60	
21-May-2002	05-Jun-2002	15	0.56		25-Aug-2004	22-Sep-2004	28	0.59	
05-Jun-2002	18-Jun-2002	13	0.32		22-Sep-2004	20-Oct-2004	28	0.50	
18-Jun-2002	02-Jul-2002	14	0.47		20-Oct-2004	24-Nov-2004	35	0.37	
02-Jul-2002	18-Jul-2002	16	0.61		24-Nov-2004	29-Dec-2004	35	0.48	
18-Jul-2002	30-Jul-2002	12	0.64		29-Dec-2004	26-Jan-2005	28	0.23	
30-Jul-2002	13-Aug-2002	14	0.34		26-Jan-2005	23-Feb-2005	28	N	
13-Aug-2002	27-Aug-2002	14	0.76		23-Feb-2005	23-Mar-2005	28	1.27	
27-Aug-2002	09-Sep-2002	13	0.37		23-Mar-2005	20-Apr-2005	28	0.57	
09-Sep-2002	24-Sep-2002	15	0.61		20-Apr-2005	18-May-2005	28	0.61	
24-Sep-2002	08-Oct-2002	14	0.45		18-May-2005	15-Jun-2005	28	0.56	
08-Oct-2002	22-Oct-2002	14	0.91		15-Jun-2005	23-Jul-2005	38	N	
22-Oct-2002	05-Nov-2002	14	0.42		23-Jul-2005	24-Aug-2005	32	0.63	
05-Nov-2002	22-Nov-2002	17	0.54		24-Aug-2005	21-Sep-2005	28	0.37	
22-Nov-2002	03-Dec-2002	11	0.54		21-Sep-2005	19-Oct-2005	28	0.33	
03-Dec-2002	17-Dec-2002	14	0.69		19-Oct-2005	16-Nov-2005	28	0.42	
17-Dec-2002	31-Dec-2002	14	0.44		16-Nov-2005	14-Dec-2005	28	0.45	
31-Dec-2002	14-Jan-2003	14	1.28		14-Dec-2005	04-Jan-2006	21	0.52	
14-Jan-2003	28-Jan-2003	14	0.53		04-Jan-2006				Monitoring terminated
28-Jan-2003	11-Feb-2003	14	0.90						
11-Feb-2003	25-Feb-2003	14	1.03						
25-Feb-2003	11-Mar-2003	14	0.57						
11-Mar-2003	25-Mar-2003	14	1.18						
25-Mar-2003	08-Apr-2003	14	1.28						
08-Apr-2003	22-Apr-2003	14	0.83						
22-Apr-2003	06-May-2003	14	0.54						
06-May-2003	02-Jun-2003	27	0.25						
02-Jun-2003	17-Jun-2003	15	0.82						
17-Jun-2003	30-Jun-2003	13	1.04						
30-Jun-2003	15-Jul-2003	15	0.81						
15-Jul-2003	29-Jul-2003	14	0.36						
29-Jul-2003	12-Aug-2003	14	1.48						
12-Aug-2003	26-Aug-2003	14	0.80						
26-Aug-2003	09-Sep-2003	14	0.69						
09-Sep-2003	24-Sep-2003	15	0.52						
24-Sep-2003	15-Oct-2003	21	0.84						
15-Oct-2003	30-Oct-2003	15	0.89						
30-Oct-2003	12-Nov-2003	13	0.74						
12-Nov-2003	26-Nov-2003	14	0.39						
26-Nov-2003	10-Dec-2003	14	1.44						
10-Dec-2003	23-Dec-2003	13	0.78						
23-Dec-2003	07-Jan-2004	15	0.66						
07-Jan-2004	04-Feb-2004	28	0.81						
04-Feb-2004	03-Mar-2004	28	N						
03-Mar-2004	31-Mar-2004	28	1.03	Filter-Pack, 4 Weekly					

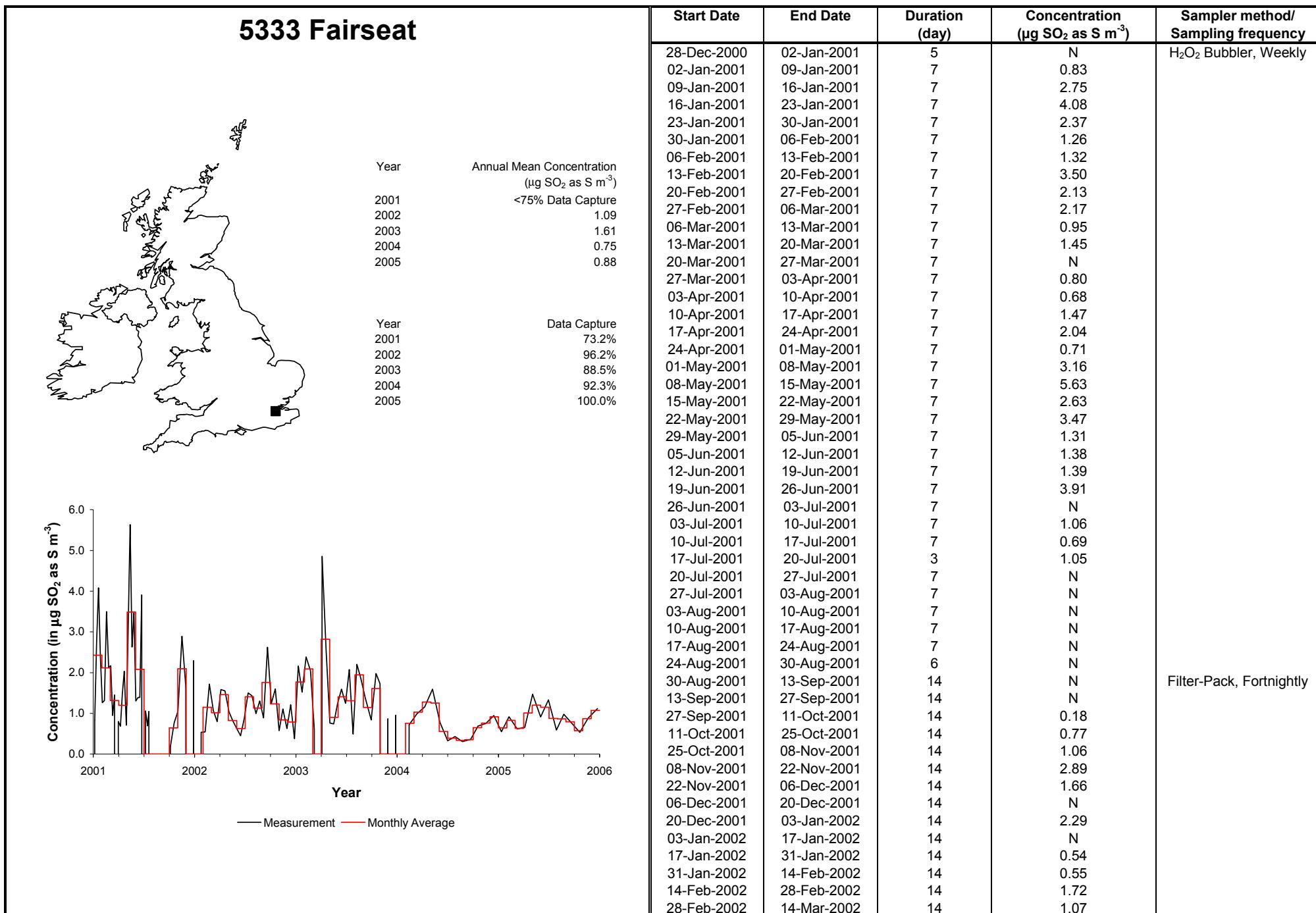
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5316 Rockbourne

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
27-Feb-2002	13-Mar-2002	14	0.70	Filter-Pack, Fortnightly	25-Feb-2004	24-Mar-2004	28	0.63	Filter-Pack, 4 Weekly
13-Mar-2002	27-Mar-2002	14	0.93		24-Mar-2004	21-Apr-2004	28	0.75	
27-Mar-2002	10-Apr-2002	14	1.14		21-Apr-2004	19-May-2004	28	0.76	
10-Apr-2002	24-Apr-2002	14	0.50		19-May-2004	16-Jun-2004	28	0.77	
24-Apr-2002	08-May-2002	14	0.36		16-Jun-2004	14-Jul-2004	28	0.31	
08-May-2002	22-May-2002	14	0.86		14-Jul-2004	11-Aug-2004	28	0.78	
22-May-2002	05-Jun-2002	14	0.42		11-Aug-2004	08-Sep-2004	28	0.30	
05-Jun-2002	19-Jun-2002	14	0.19		08-Sep-2004	05-Oct-2004	27	0.30	
19-Jun-2002	03-Jul-2002	14	0.17		05-Oct-2004	03-Nov-2004	29	0.45	
03-Jul-2002	17-Jul-2002	14	0.39		03-Nov-2004	01-Dec-2004	28	0.59	
17-Jul-2002	31-Jul-2002	14	0.50		01-Dec-2004	04-Jan-2005	34	0.41	
31-Jul-2002	14-Aug-2002	14	N		04-Jan-2005	26-Jan-2005	22	0.67	
14-Aug-2002	28-Aug-2002	14	0.80		26-Jan-2005	23-Feb-2005	28	0.95	
28-Aug-2002	11-Sep-2002	14	0.43		23-Feb-2005	23-Mar-2005	28	1.49	
11-Sep-2002	25-Sep-2002	14	0.95		23-Mar-2005	20-Apr-2005	28	0.78	
25-Sep-2002	09-Oct-2002	14	0.63		20-Apr-2005	18-May-2005	28	0.63	
09-Oct-2002	23-Oct-2002	14	0.94		18-May-2005	15-Jun-2005	28	0.42	
23-Oct-2002	06-Nov-2002	14	0.35		15-Jun-2005	13-Jul-2005	28	0.35	
06-Nov-2002	20-Nov-2002	14	0.58		13-Jul-2005	10-Aug-2005	28	0.87	
20-Nov-2002	04-Dec-2002	14	0.35		10-Aug-2005	07-Sep-2005	28	0.43	
04-Dec-2002	18-Dec-2002	14	1.06		07-Sep-2005	05-Oct-2005	28	0.25	
18-Dec-2002	02-Jan-2003	15	0.17		05-Oct-2005	02-Nov-2005	28	0.30	
02-Jan-2003	16-Jan-2003	14	1.27		02-Nov-2005	30-Nov-2005	28	0.43	
16-Jan-2003	29-Jan-2003	13	0.52		30-Nov-2005	04-Jan-2006	35	0.76	
29-Jan-2003	12-Feb-2003	14	1.14		04-Jan-2006				Monitoring terminated
12-Feb-2003	26-Feb-2003	14	1.69						
26-Feb-2003	12-Mar-2003	14	0.70						
12-Mar-2003	26-Mar-2003	14	1.20						
26-Mar-2003	09-Apr-2003	14	1.61						
09-Apr-2003	23-Apr-2003	14	1.96						
23-Apr-2003	09-May-2003	16	0.50						
09-May-2003	21-May-2003	12	0.34						
21-May-2003	04-Jun-2003	14	0.58						
04-Jun-2003	18-Jun-2003	14	0.55						
18-Jun-2003	02-Jul-2003	14	0.64						
02-Jul-2003	16-Jul-2003	14	1.15						
16-Jul-2003	30-Jul-2003	14	0.25						
30-Jul-2003	13-Aug-2003	14	1.15						
13-Aug-2003	27-Aug-2003	14	0.85						
27-Aug-2003	10-Sep-2003	14	1.17						
10-Sep-2003	25-Sep-2003	15	0.51						
25-Sep-2003	09-Oct-2003	14	0.64						
09-Oct-2003	22-Oct-2003	13	N						
22-Oct-2003	05-Nov-2003	14	0.54						
05-Nov-2003	19-Nov-2003	14	0.69						
19-Nov-2003	03-Dec-2003	14	0.81						
03-Dec-2003	17-Dec-2003	14	N						
17-Dec-2003	31-Dec-2003	14	0.50						
31-Dec-2003	28-Jan-2004	28	N						
28-Jan-2004	25-Feb-2004	28	N	Filter-Pack, 4 Weekly					

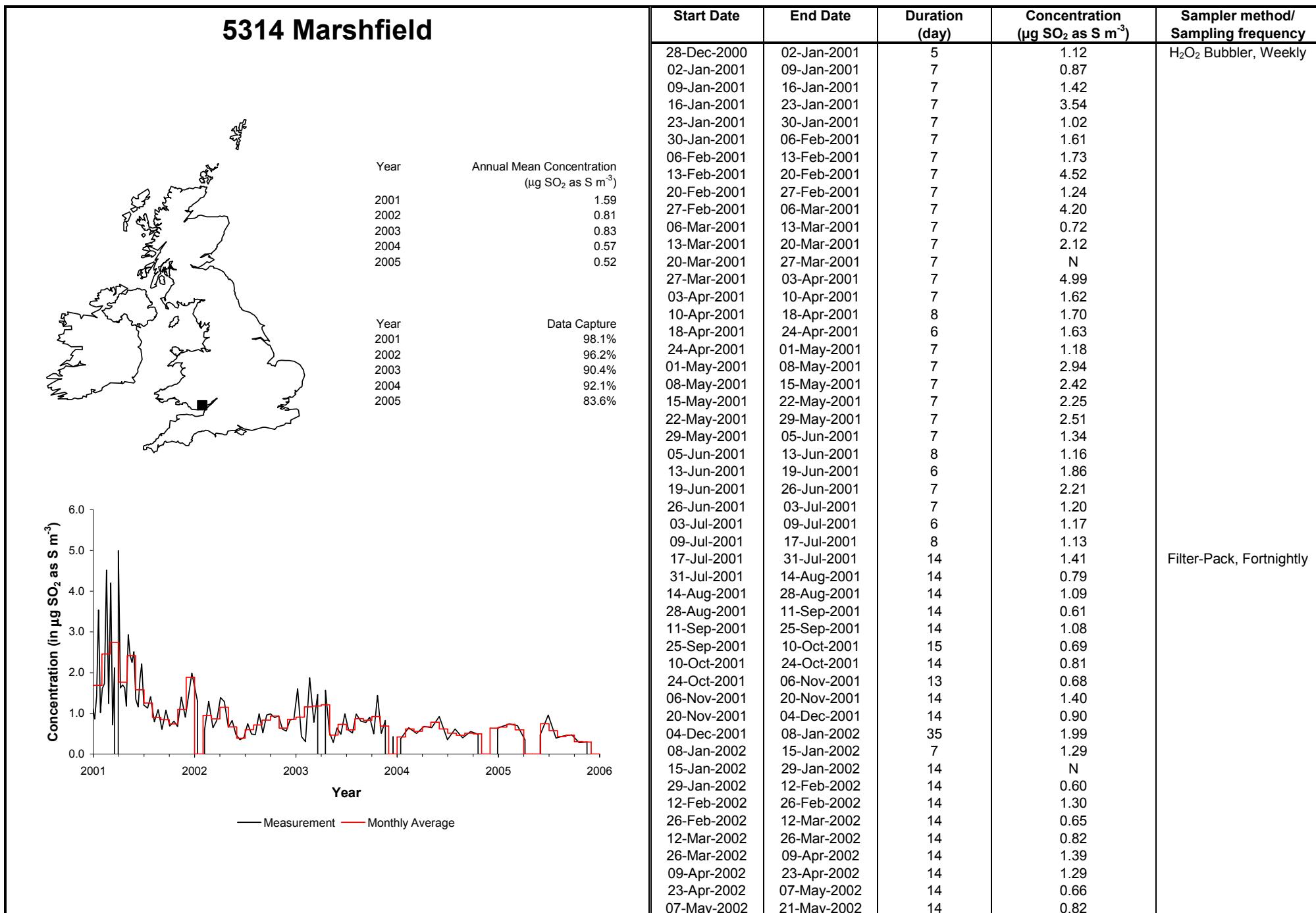
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5333 Fairseat

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
14-Mar-2002	28-Mar-2002	14	0.80	Filter-Pack, Fortnightly	23-Apr-2004	19-May-2004	26	1.59	Filter-Pack, 4 Weekly
28-Mar-2002	11-Apr-2002	14	1.59		19-May-2004	16-Jun-2004	28	0.78	
11-Apr-2002	25-Apr-2002	14	1.55		16-Jun-2004	14-Jul-2004	28	0.33	
25-Apr-2002	09-May-2002	14	1.04		14-Jul-2004	09-Aug-2004	26	0.43	
09-May-2002	23-May-2002	14	0.82		09-Aug-2004	07-Sep-2004	29	0.31	
23-May-2002	06-Jun-2002	14	0.64		07-Sep-2004	05-Oct-2004	28	0.36	
06-Jun-2002	21-Jun-2002	15	0.45		05-Oct-2004	01-Nov-2004	27	0.69	
21-Jun-2002	04-Jul-2002	13	0.89		01-Nov-2004	29-Nov-2004	28	0.75	
04-Jul-2002	18-Jul-2002	14	1.50		29-Nov-2004	30-Dec-2004	31	0.95	
18-Jul-2002	01-Aug-2002	14	1.43		30-Dec-2004	24-Jan-2005	25	0.55	
01-Aug-2002	15-Aug-2002	14	1.00		24-Jan-2005	21-Feb-2005	28	0.92	
15-Aug-2002	29-Aug-2002	14	1.30		21-Feb-2005	21-Mar-2005	28	0.62	
29-Aug-2002	12-Sep-2002	14	0.89		21-Mar-2005	18-Apr-2005	28	0.66	
12-Sep-2002	26-Sep-2002	14	2.62		18-Apr-2005	17-May-2005	29	1.47	
26-Sep-2002	10-Oct-2002	14	1.24		17-May-2005	14-Jun-2005	28	0.91	
10-Oct-2002	24-Oct-2002	14	1.60		14-Jun-2005	13-Jul-2005	29	1.33	
24-Oct-2002	07-Nov-2002	14	0.58		13-Jul-2005	10-Aug-2005	28	0.59	
07-Nov-2002	21-Nov-2002	14	1.11		10-Aug-2005	06-Sep-2005	27	0.98	
21-Nov-2002	05-Dec-2002	14	0.62		06-Sep-2005	07-Oct-2005	31	0.76	
05-Dec-2002	19-Dec-2002	14	1.21		07-Oct-2005	02-Nov-2005	26	0.53	
19-Dec-2002	03-Jan-2003	15	0.38		02-Nov-2005	07-Dec-2005	35	0.88	
03-Jan-2003	16-Jan-2003	13	2.16		07-Dec-2005	09-Jan-2006	33	1.12	
16-Jan-2003	30-Jan-2003	14	1.52		09-Jan-2006				Monitoring terminated
30-Jan-2003	13-Feb-2003	14	2.39						
13-Feb-2003	27-Feb-2003	14	2.05						
27-Feb-2003	13-Mar-2003	14	0.61						
13-Mar-2003	27-Mar-2003	14	N						
27-Mar-2003	10-Apr-2003	14	4.85						
10-Apr-2003	24-Apr-2003	14	2.55						
24-Apr-2003	08-May-2003	14	0.76						
08-May-2003	22-May-2003	14	0.74						
22-May-2003	05-Jun-2003	14	1.23						
05-Jun-2003	19-Jun-2003	14	1.59						
19-Jun-2003	03-Jul-2003	14	1.25						
03-Jul-2003	17-Jul-2003	14	2.07						
17-Jul-2003	31-Jul-2003	14	0.49						
31-Jul-2003	14-Aug-2003	14	2.20						
14-Aug-2003	28-Aug-2003	14	1.88						
28-Aug-2003	18-Sep-2003	21	1.38						
18-Sep-2003	09-Oct-2003	21	0.84						
09-Oct-2003	23-Oct-2003	14	1.98						
23-Oct-2003	06-Nov-2003	14	1.72						
06-Nov-2003	20-Nov-2003	14	N						
20-Nov-2003	04-Dec-2003	14	0.86						
04-Dec-2003	18-Dec-2003	14	N						
18-Dec-2003	02-Jan-2004	15	0.95						
02-Jan-2004	30-Jan-2004	28	N						
30-Jan-2004	26-Feb-2004	27	0.72						
26-Feb-2004	25-Mar-2004	28	0.99						
25-Mar-2004	23-Apr-2004	29	1.16						

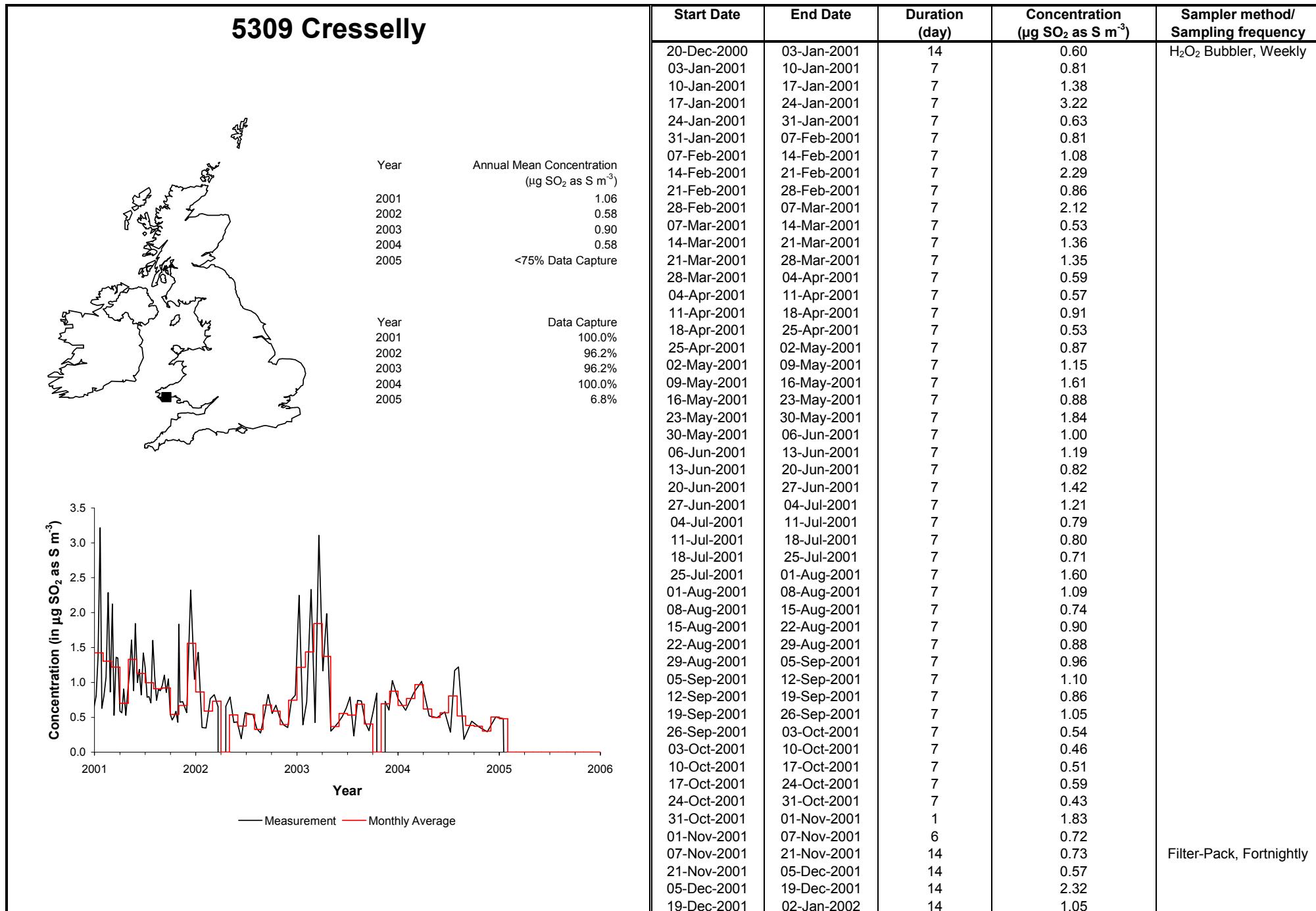
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5314 Marshfield

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
21-May-2002	05-Jun-2002	15	0.48	Filter-Pack, Fortnightly	10-Aug-2004	08-Sep-2004	29	0.40	Filter-Pack, 4 Weekly
05-Jun-2002	18-Jun-2002	13	0.35		08-Sep-2004	05-Oct-2004	27	0.55	
18-Jun-2002	02-Jul-2002	14	0.41		05-Oct-2004	01-Nov-2004	27	0.49	
02-Jul-2002	16-Jul-2002	14	0.75		01-Nov-2004	30-Nov-2004	29	N	
16-Jul-2002	30-Jul-2002	14	0.49		30-Nov-2004	25-Jan-2005	56	0.64	
30-Jul-2002	13-Aug-2002	14	0.48		25-Jan-2005	22-Feb-2005	28	0.74	
13-Aug-2002	27-Aug-2002	14	0.99		22-Feb-2005	23-Mar-2005	29	0.70	
27-Aug-2002	10-Sep-2002	14	0.52		23-Mar-2005	18-Apr-2005	26	0.35	
10-Sep-2002	23-Sep-2002	13	0.96		18-Apr-2005	16-May-2005	28	N	
23-Sep-2002	08-Oct-2002	15	0.99		16-May-2005	14-Jun-2005	29	0.47	
08-Oct-2002	22-Oct-2002	14	0.90		14-Jun-2005	11-Jul-2005	27	0.96	
22-Oct-2002	05-Nov-2002	14	0.94		11-Jul-2005	09-Aug-2005	29	0.40	
05-Nov-2002	19-Nov-2002	14	0.61		09-Aug-2005	07-Sep-2005	29	0.45	
19-Nov-2002	03-Dec-2002	14	0.56		07-Sep-2005	05-Oct-2005	28	0.47	
03-Dec-2002	17-Dec-2002	14	0.84		05-Oct-2005	31-Oct-2005	26	0.28	
17-Dec-2002	31-Dec-2002	14	0.86		31-Oct-2005	30-Nov-2005	30	0.29	
31-Dec-2002	14-Jan-2003	14	1.61		30-Nov-2005	01-Jan-2006	32	N	
14-Jan-2003	28-Jan-2003	14	0.43		01-Jan-2006				Monitoring terminated
28-Jan-2003	11-Feb-2003	14	0.31						
11-Feb-2003	25-Feb-2003	14	1.88						
25-Feb-2003	11-Mar-2003	14	0.78						
11-Mar-2003	25-Mar-2003	14	1.47						
25-Mar-2003	08-Apr-2003	14	N						
08-Apr-2003	23-Apr-2003	15	1.57						
23-Apr-2003	06-May-2003	13	0.54						
06-May-2003	20-May-2003	14	0.29						
20-May-2003	03-Jun-2003	14	0.64						
03-Jun-2003	17-Jun-2003	14	0.49						
17-Jun-2003	01-Jul-2003	14	0.99						
01-Jul-2003	15-Jul-2003	14	0.59						
15-Jul-2003	29-Jul-2003	14	0.52						
29-Jul-2003	12-Aug-2003	14	0.99						
12-Aug-2003	02-Sep-2003	21	0.81						
02-Sep-2003	16-Sep-2003	14	0.78						
16-Sep-2003	30-Sep-2003	14	0.91						
30-Sep-2003	14-Oct-2003	14	0.50						
14-Oct-2003	28-Oct-2003	14	1.44						
28-Oct-2003	11-Nov-2003	14	0.51						
11-Nov-2003	25-Nov-2003	14	0.82						
25-Nov-2003	09-Dec-2003	14	N						
09-Dec-2003	23-Dec-2003	14	0.42						
23-Dec-2003	30-Dec-2003	7	N						
30-Dec-2003	27-Jan-2004	28	0.38	Filter-Pack, 4 Weekly					
27-Jan-2004	24-Feb-2004	28	0.65						
24-Feb-2004	23-Mar-2004	28	0.51						
23-Mar-2004	20-Apr-2004	28	0.68						
20-Apr-2004	17-May-2004	27	0.65						
17-May-2004	15-Jun-2004	29	0.92						
15-Jun-2004	13-Jul-2004	28	0.35						
13-Jul-2004	10-Aug-2004	28	0.62						

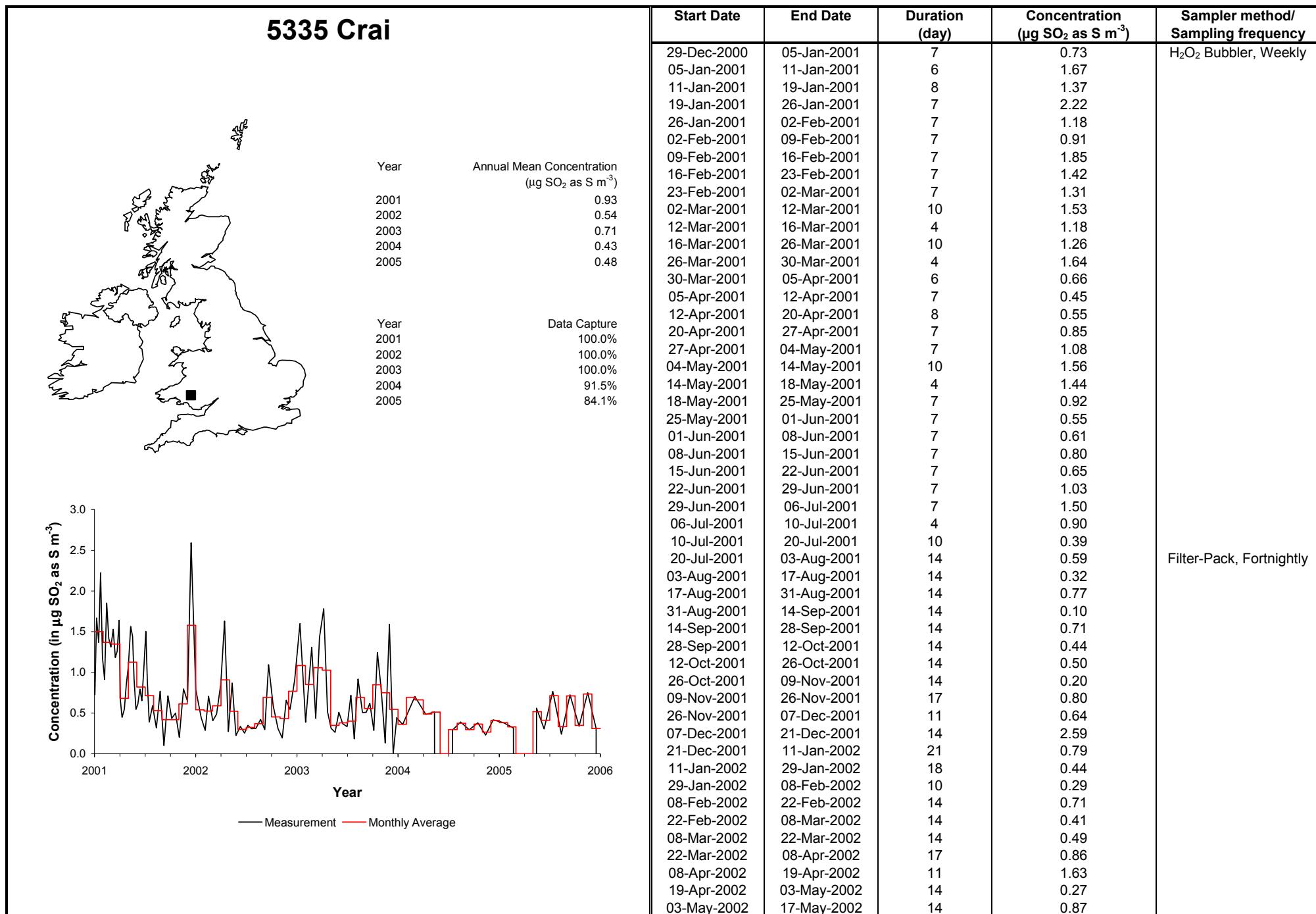
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5309 Cresselly

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
02-Jan-2002	16-Jan-2002	14	1.43	Filter-Pack, Fortnightly	03-Dec-2003	17-Dec-2003	14	1.03	Filter-Pack, Fortnightly
16-Jan-2002	30-Jan-2002	14	0.36		17-Dec-2003	14-Jan-2004	28	0.77	Filter-Pack, 4 Weekly
30-Jan-2002	13-Feb-2002	14	0.35		14-Jan-2004	11-Feb-2004	28	0.60	
13-Feb-2002	27-Feb-2002	14	0.77		11-Feb-2004	10-Mar-2004	28	0.86	
27-Feb-2002	13-Mar-2002	14	0.82		10-Mar-2004	07-Apr-2004	28	1.02	
13-Mar-2002	27-Mar-2002	14	0.65		07-Apr-2004	05-May-2004	28	0.52	
27-Mar-2002	10-Apr-2002	14	N		05-May-2004	02-Jun-2004	28	0.50	
10-Apr-2002	24-Apr-2002	14	0.66		02-Jun-2004	30-Jun-2004	28	0.58	
24-Apr-2002	10-May-2002	16	0.79		30-Jun-2004	14-Jul-2004	14	0.29	
10-May-2002	22-May-2002	12	0.43		14-Jul-2004	30-Jul-2004	16	1.17	
22-May-2002	05-Jun-2002	14	0.44		30-Jul-2004	11-Aug-2004	12	1.22	
05-Jun-2002	19-Jun-2002	14	0.19		11-Aug-2004	08-Sep-2004	28	0.18	
19-Jun-2002	03-Jul-2002	14	0.57		08-Sep-2004	06-Oct-2004	28	0.44	
03-Jul-2002	18-Jul-2002	15	0.55		06-Oct-2004	04-Nov-2004	29	0.36	
18-Jul-2002	31-Jul-2002	13	0.54		04-Nov-2004	01-Dec-2004	27	0.30	
31-Jul-2002	14-Aug-2002	14	0.34		01-Dec-2004	04-Jan-2005	34	0.51	
14-Aug-2002	29-Aug-2002	15	0.27		04-Jan-2005	26-Jan-2005	22	0.48	
29-Aug-2002	11-Sep-2002	13	0.53		26-Jan-2005	01-Jan-2006	340	N	
11-Sep-2002	25-Sep-2002	14	0.83		01-Jan-2006				Monitoring terminated
25-Sep-2002	09-Oct-2002	14	0.56						
09-Oct-2002	23-Oct-2002	14	0.67						
23-Oct-2002	06-Nov-2002	14	0.50						
06-Nov-2002	20-Nov-2002	14	0.39						
20-Nov-2002	04-Dec-2002	14	0.36						
04-Dec-2002	18-Dec-2002	14	0.76						
18-Dec-2002	02-Jan-2003	15	0.82						
02-Jan-2003	15-Jan-2003	13	2.25						
15-Jan-2003	29-Jan-2003	14	0.39						
29-Jan-2003	13-Feb-2003	15	0.72						
13-Feb-2003	26-Feb-2003	13	2.33						
26-Feb-2003	12-Mar-2003	14	0.43						
12-Mar-2003	27-Mar-2003	15	3.11						
27-Mar-2003	09-Apr-2003	13	1.17						
09-Apr-2003	24-Apr-2003	15	1.99						
24-Apr-2003	08-May-2003	14	0.30						
08-May-2003	21-May-2003	13	0.36						
21-May-2003	04-Jun-2003	14	0.43						
04-Jun-2003	18-Jun-2003	14	0.51						
18-Jun-2003	02-Jul-2003	14	0.63						
02-Jul-2003	16-Jul-2003	14	0.79						
16-Jul-2003	30-Jul-2003	14	0.23						
30-Jul-2003	13-Aug-2003	14	0.74						
13-Aug-2003	27-Aug-2003	14	0.73						
27-Aug-2003	10-Sep-2003	14	0.43						
10-Sep-2003	24-Sep-2003	14	0.31						
24-Sep-2003	08-Oct-2003	14	0.57						
08-Oct-2003	22-Oct-2003	14	0.84						
22-Oct-2003	05-Nov-2003	14	N						
05-Nov-2003	24-Nov-2003	19	0.73						
24-Nov-2003	03-Dec-2003	9	0.60						

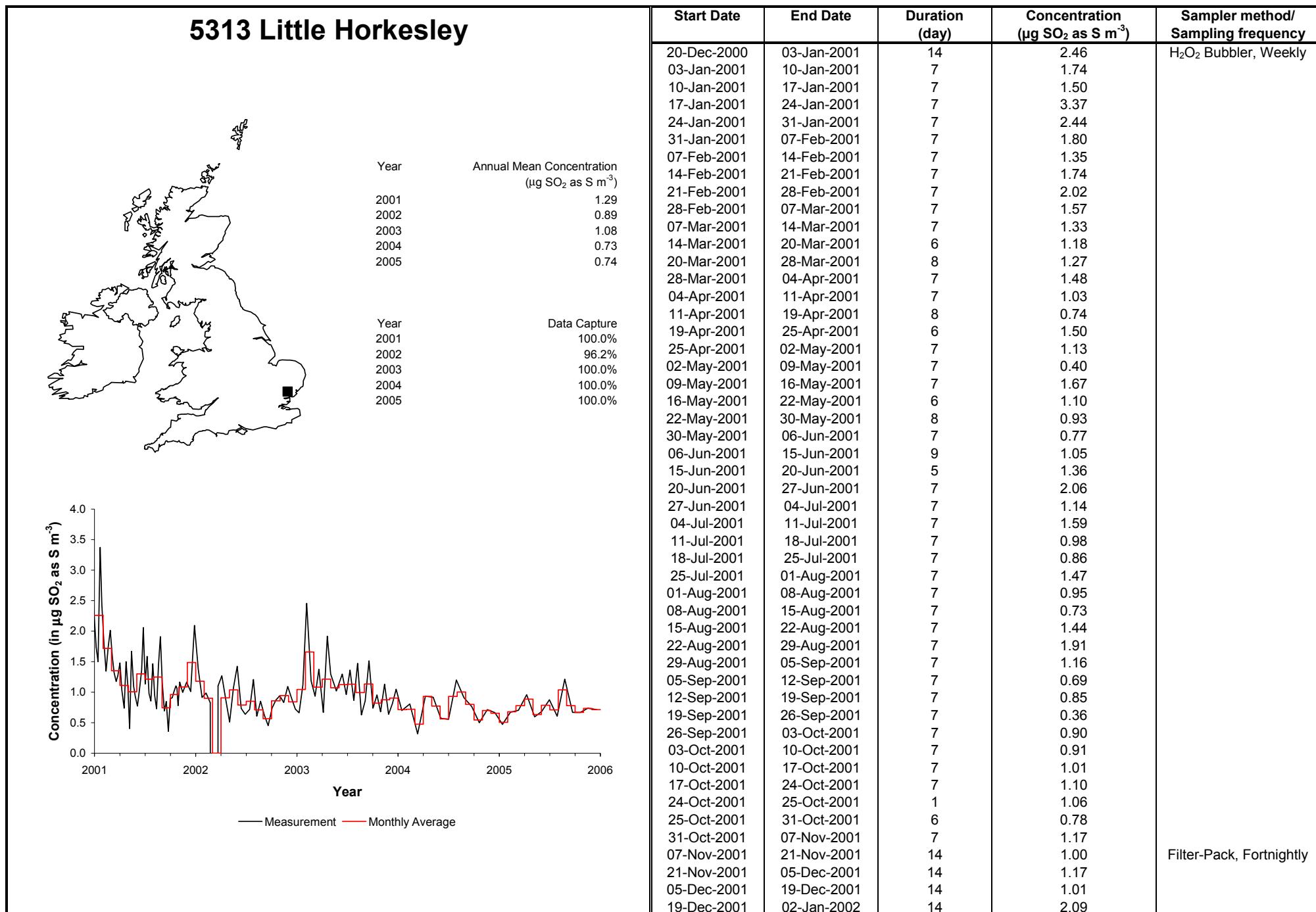
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5335 Crai

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
17-May-2002	31-May-2002	14	0.22	Filter-Pack, Fortnightly	25-Nov-2004	24-Dec-2004	29	0.42	
31-May-2002	18-Jun-2002	18	0.34		24-Dec-2004	07-Feb-2005	45	0.38	
18-Jun-2002	01-Jul-2002	13	0.25		07-Feb-2005	04-Mar-2005	25	0.32	
01-Jul-2002	12-Jul-2002	11	0.35		04-Mar-2005	31-Mar-2005	27	N	
12-Jul-2002	26-Jul-2002	14	0.31		31-Mar-2005	29-Apr-2005	29	N	
26-Jul-2002	13-Aug-2002	18	0.31		29-Apr-2005	27-May-2005	28	0.56	
13-Aug-2002	30-Aug-2002	17	0.42		27-May-2005	24-Jun-2005	28	0.31	
30-Aug-2002	13-Sep-2002	14	0.30		24-Jun-2005	29-Jul-2005	35	0.77	
13-Sep-2002	26-Sep-2002	13	1.10		29-Jul-2005	26-Aug-2005	28	0.24	
26-Sep-2002	17-Oct-2002	21	0.59		26-Aug-2005	30-Sep-2005	35	0.72	
17-Oct-2002	01-Nov-2002	15	0.31		30-Sep-2005	31-Oct-2005	31	0.34	
01-Nov-2002	15-Nov-2002	14	0.19		31-Oct-2005	30-Nov-2005	30	0.75	
15-Nov-2002	29-Nov-2002	14	0.66		30-Nov-2005	30-Dec-2005	30	0.31	
29-Nov-2002	13-Dec-2002	14	0.55		30-Dec-2005				Monitoring terminated
13-Dec-2002	03-Jan-2003	21	0.91						
03-Jan-2003	20-Jan-2003	17	1.60						
20-Jan-2003	14-Feb-2003	25	0.39						
14-Feb-2003	28-Feb-2003	14	1.31						
28-Feb-2003	14-Mar-2003	14	0.44						
14-Mar-2003	28-Mar-2003	14	1.43						
28-Mar-2003	14-Apr-2003	17	1.78						
14-Apr-2003	25-Apr-2003	11	0.52						
25-Apr-2003	10-May-2003	15	0.32						
10-May-2003	23-May-2003	13	0.27						
23-May-2003	06-Jun-2003	14	0.51						
06-Jun-2003	20-Jun-2003	14	0.37						
20-Jun-2003	07-Jul-2003	17	0.33						
07-Jul-2003	18-Jul-2003	11	0.72						
18-Jul-2003	01-Aug-2003	14	0.18						
01-Aug-2003	15-Aug-2003	14	0.92						
15-Aug-2003	03-Sep-2003	19	0.51						
03-Sep-2003	12-Sep-2003	9	0.51						
12-Sep-2003	29-Sep-2003	17	0.62						
29-Sep-2003	10-Oct-2003	11	0.29						
10-Oct-2003	24-Oct-2003	14	1.24						
24-Oct-2003	07-Nov-2003	14	0.79						
07-Nov-2003	21-Nov-2003	14	0.13						
21-Nov-2003	08-Dec-2003	17	1.59						
08-Dec-2003	19-Dec-2003	11	0.01						
19-Dec-2003	02-Jan-2004	14	0.44						
02-Jan-2004	02-Feb-2004	31	0.36	Filter-Pack, 4 Weekly					
02-Feb-2004	26-Mar-2004	53	0.70						
26-Mar-2004	23-Apr-2004	28	0.48						
23-Apr-2004	28-May-2004	35	0.51						
28-May-2004	28-Jun-2004	31	N						
28-Jun-2004	30-Jul-2004	32	0.29						
30-Jul-2004	27-Aug-2004	28	0.39						
27-Aug-2004	30-Sep-2004	34	0.30						
30-Sep-2004	29-Oct-2004	29	0.38						
29-Oct-2004	25-Nov-2004	27	0.23						

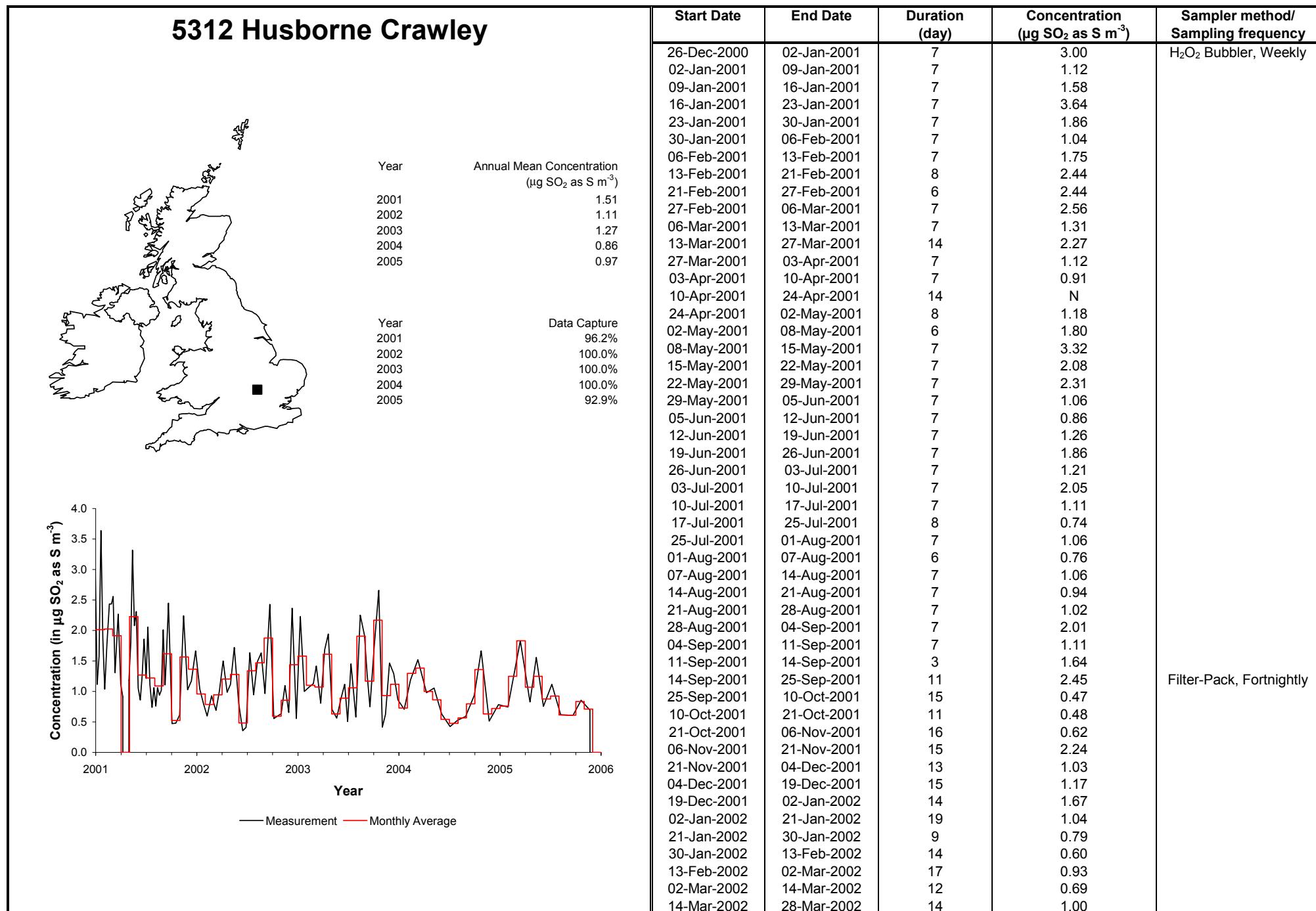
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5313 Little Horkesley

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
02-Jan-2002	17-Jan-2002	15	1.38	Filter-Pack, Fortnightly	17-Dec-2003	31-Dec-2003	14	1.05	Filter-Pack, Fortnightly
17-Jan-2002	30-Jan-2002	13	0.91		31-Dec-2003	28-Jan-2004	28	0.70	Filter-Pack, 4 Weekly
30-Jan-2002	13-Feb-2002	14	0.99		28-Jan-2004	25-Feb-2004	28	0.81	
13-Feb-2002	27-Feb-2002	14	0.83		25-Feb-2004	24-Mar-2004	28	0.32	
27-Feb-2002	13-Mar-2002	14	N		24-Mar-2004	21-Apr-2004	28	0.94	
13-Mar-2002	27-Mar-2002	14	1.10		21-Apr-2004	19-May-2004	28	0.92	
27-Mar-2002	10-Apr-2002	14	1.27		19-May-2004	16-Jun-2004	28	0.57	
10-Apr-2002	24-Apr-2002	14	0.87		16-Jun-2004	14-Jul-2004	28	0.56	
24-Apr-2002	09-May-2002	15	0.51		14-Jul-2004	11-Aug-2004	28	1.20	
09-May-2002	22-May-2002	13	1.07		11-Aug-2004	08-Sep-2004	28	0.91	
22-May-2002	05-Jun-2002	14	1.42		08-Sep-2004	06-Oct-2004	28	0.77	
05-Jun-2002	19-Jun-2002	14	0.74		06-Oct-2004	03-Nov-2004	28	0.50	
19-Jun-2002	03-Jul-2002	14	0.64		03-Nov-2004	01-Dec-2004	28	0.71	
03-Jul-2002	22-Jul-2002	19	0.72		01-Dec-2004	30-Dec-2004	29	0.67	
22-Jul-2002	31-Jul-2002	9	1.21		30-Dec-2004	26-Jan-2005	27	0.47	
31-Jul-2002	15-Aug-2002	15	0.61		26-Jan-2005	23-Feb-2005	28	0.67	
15-Aug-2002	28-Aug-2002	13	0.85		23-Feb-2005	23-Mar-2005	28	0.70	
28-Aug-2002	11-Sep-2002	14	0.62		23-Mar-2005	25-Apr-2005	33	0.96	
11-Sep-2002	25-Sep-2002	14	0.45		25-Apr-2005	18-May-2005	23	0.60	
25-Sep-2002	09-Oct-2002	14	0.74		18-May-2005	15-Jun-2005	28	0.68	
09-Oct-2002	23-Oct-2002	14	0.87		15-Jun-2005	13-Jul-2005	28	0.88	
23-Oct-2002	06-Nov-2002	14	0.94		13-Jul-2005	10-Aug-2005	28	0.61	
06-Nov-2002	20-Nov-2002	14	0.83		10-Aug-2005	07-Sep-2005	28	1.22	
20-Nov-2002	04-Dec-2002	14	1.09		07-Sep-2005	05-Oct-2005	28	0.67	
04-Dec-2002	18-Dec-2002	14	0.91		05-Oct-2005	02-Nov-2005	28	0.67	
18-Dec-2002	02-Jan-2003	15	0.73		02-Nov-2005	01-Dec-2005	29	0.74	
02-Jan-2003	15-Jan-2003	13	0.66		01-Dec-2005	05-Jan-2006	35	0.72	
15-Jan-2003	29-Jan-2003	14	1.12		05-Jan-2006				Monitoring terminated
29-Jan-2003	12-Feb-2003	14	2.46						
12-Feb-2003	26-Feb-2003	14	1.19						
26-Feb-2003	12-Mar-2003	14	0.94						
12-Mar-2003	26-Mar-2003	14	1.38						
26-Mar-2003	14-Apr-2003	19	0.67						
14-Apr-2003	23-Apr-2003	9	1.92						
23-Apr-2003	07-May-2003	14	1.30						
07-May-2003	04-Jun-2003	28	1.02						
04-Jun-2003	18-Jun-2003	14	1.30						
18-Jun-2003	02-Jul-2003	14	0.96						
02-Jul-2003	16-Jul-2003	14	1.36						
16-Jul-2003	30-Jul-2003	14	0.87						
30-Jul-2003	13-Aug-2003	14	1.47						
13-Aug-2003	27-Aug-2003	14	0.63						
27-Aug-2003	10-Sep-2003	14	0.86						
10-Sep-2003	24-Sep-2003	14	1.51						
24-Sep-2003	09-Oct-2003	15	0.74						
09-Oct-2003	23-Oct-2003	14	0.96						
23-Oct-2003	05-Nov-2003	13	0.68						
05-Nov-2003	19-Nov-2003	14	1.13						
19-Nov-2003	03-Dec-2003	14	0.64						
03-Dec-2003	17-Dec-2003	14	0.81						

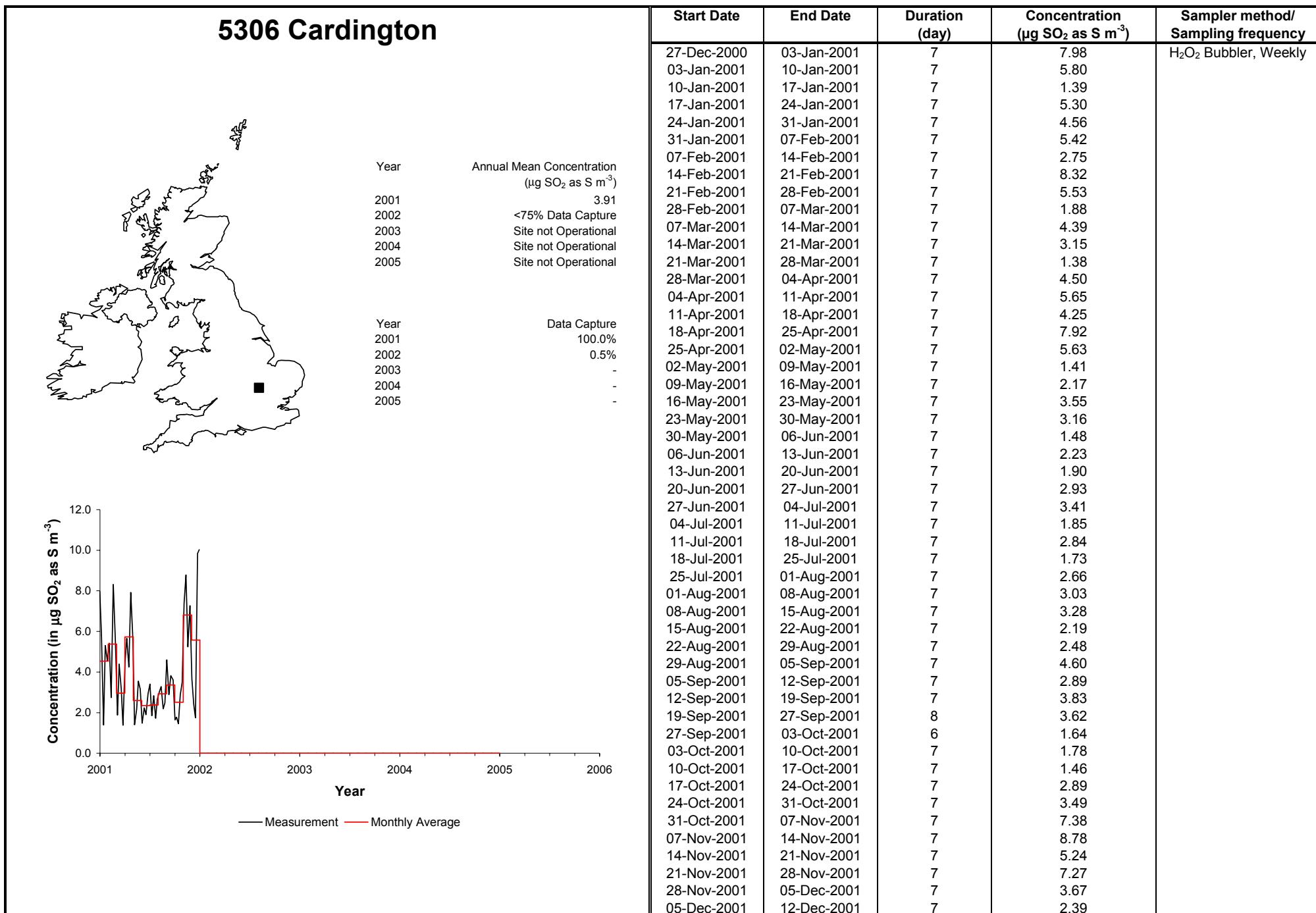
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5312 Husborne Crawley

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
28-Mar-2002	12-Apr-2002	15	1.50	Filter-Pack, Fortnightly	23-Apr-2004	18-May-2004	25	1.06	Filter-Pack, 4 Weekly
12-Apr-2002	24-Apr-2002	12	0.99		18-May-2004	18-Jun-2004	31	0.63	
24-Apr-2002	07-May-2002	13	1.12		18-Jun-2004	16-Jul-2004	28	0.42	
07-May-2002	21-May-2002	14	1.72		16-Jul-2004	13-Aug-2004	28	0.53	
21-May-2002	08-Jun-2002	18	0.81		13-Aug-2004	13-Sep-2004	31	0.59	
08-Jun-2002	19-Jun-2002	11	0.36		13-Sep-2004	14-Oct-2004	31	0.94	
19-Jun-2002	01-Jul-2002	12	0.41		14-Oct-2004	04-Nov-2004	21	1.67	
01-Jul-2002	17-Jul-2002	16	1.64		04-Nov-2004	08-Dec-2004	34	0.52	
17-Jul-2002	30-Jul-2002	13	0.95		08-Dec-2004	11-Jan-2005	34	0.78	
30-Jul-2002	13-Aug-2002	14	1.49		11-Jan-2005	16-Feb-2005	36	0.75	
13-Aug-2002	27-Aug-2002	14	1.63		16-Feb-2005	06-Apr-2005	49	1.83	
27-Aug-2002	11-Sep-2002	15	0.96		06-Apr-2005	28-Apr-2005	22	0.83	
11-Sep-2002	30-Sep-2002	19	2.43		28-Apr-2005	20-May-2005	22	1.56	
30-Sep-2002	09-Oct-2002	9	0.56		20-May-2005	21-Jun-2005	32	0.76	
09-Oct-2002	24-Oct-2002	15	0.59		21-Jun-2005	20-Jul-2005	29	1.12	
24-Oct-2002	07-Nov-2002	14	0.64		20-Jul-2005	23-Aug-2005	34	0.62	
07-Nov-2002	21-Nov-2002	14	1.10		23-Aug-2005	06-Sep-2005	14	0.61	
21-Nov-2002	03-Dec-2002	12	0.66		06-Sep-2005	04-Oct-2005	28	0.61	
03-Dec-2002	18-Dec-2002	15	2.37		04-Oct-2005	04-Nov-2005	31	0.86	
18-Dec-2002	02-Jan-2003	15	0.56		04-Nov-2005	06-Dec-2005	32	0.70	
02-Jan-2003	17-Jan-2003	15	2.23		06-Dec-2005	06-Jan-2006	31	N	
17-Jan-2003	31-Jan-2003	14	1.00		06-Jan-2006				Monitoring terminated
31-Jan-2003	18-Feb-2003	18	1.07						
18-Feb-2003	28-Feb-2003	10	1.13						
28-Feb-2003	13-Mar-2003	13	1.42						
13-Mar-2003	31-Mar-2003	18	0.81						
31-Mar-2003	11-Apr-2003	11	1.69						
11-Apr-2003	25-Apr-2003	14	1.94						
25-Apr-2003	09-May-2003	14	0.71						
09-May-2003	29-May-2003	20	0.56						
29-May-2003	10-Jun-2003	12	0.89						
10-Jun-2003	23-Jun-2003	13	1.12						
23-Jun-2003	01-Jul-2003	8	0.51						
01-Jul-2003	18-Jul-2003	17	1.45						
18-Jul-2003	05-Aug-2003	18	0.58						
05-Aug-2003	20-Aug-2003	15	2.25						
20-Aug-2003	05-Sep-2003	16	1.92						
05-Sep-2003	09-Sep-2003	4	1.27						
09-Sep-2003	25-Sep-2003	16	0.75						
25-Sep-2003	10-Oct-2003	15	1.72						
10-Oct-2003	29-Oct-2003	19	2.66						
29-Oct-2003	05-Nov-2003	7	0.42						
05-Nov-2003	19-Nov-2003	14	0.63						
19-Nov-2003	04-Dec-2003	15	1.47						
04-Dec-2003	18-Dec-2003	14	1.30						
18-Dec-2003	05-Jan-2004	18	0.86						
05-Jan-2004	02-Feb-2004	28	0.71	Filter-Pack, 4 Weekly					
02-Feb-2004	19-Feb-2004	17	1.19						
19-Feb-2004	24-Mar-2004	34	1.52						
24-Mar-2004	23-Apr-2004	30	0.98						

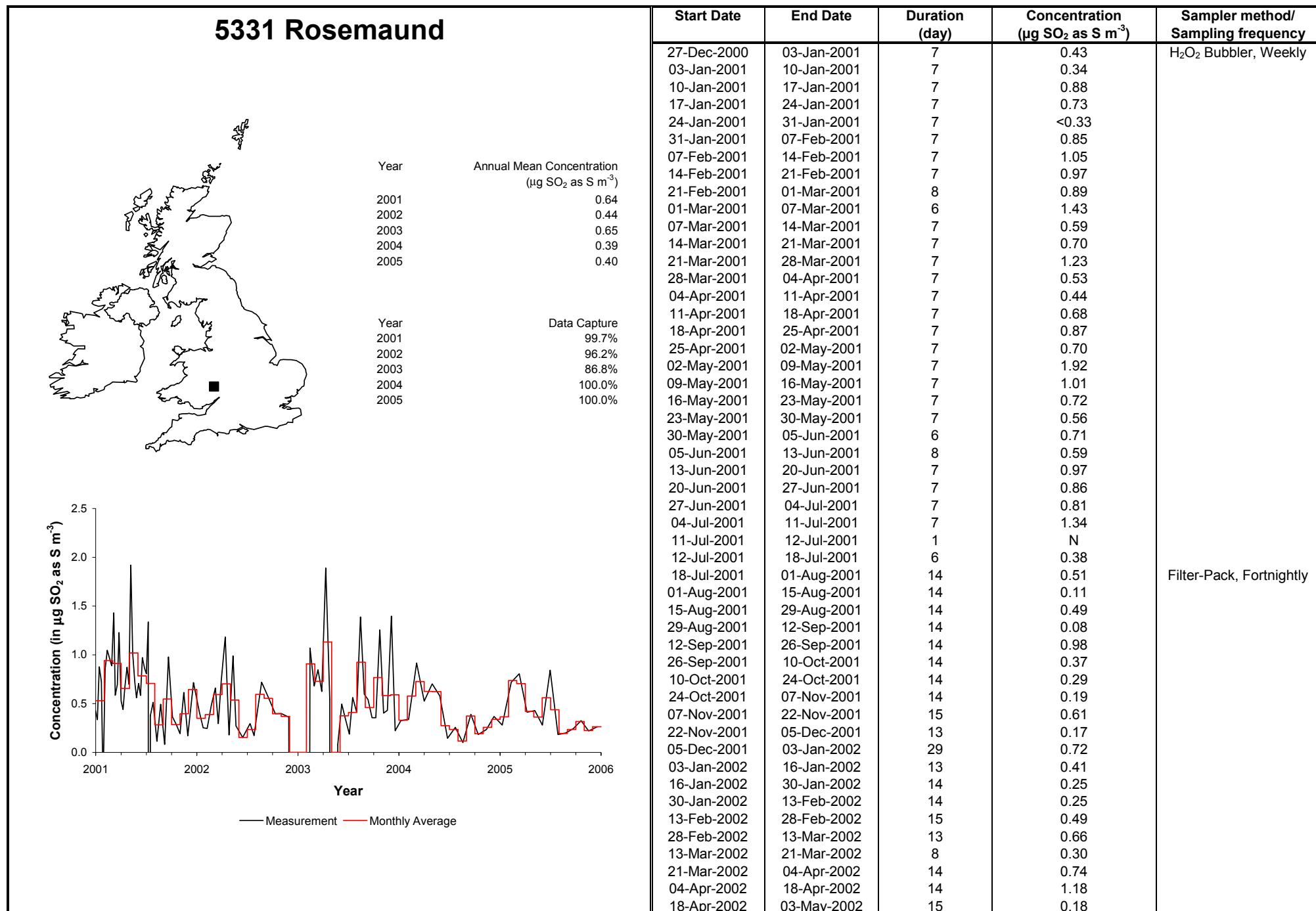
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5306 Cardington

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
12-Dec-2001	19-Dec-2001	7	1.75	H ₂ O ₂ Bubbler, Weekly					
19-Dec-2001	26-Dec-2001	7	9.84						
26-Dec-2001	02-Jan-2002	7	10.03	Monitoring terminated					
02-Jan-2002									

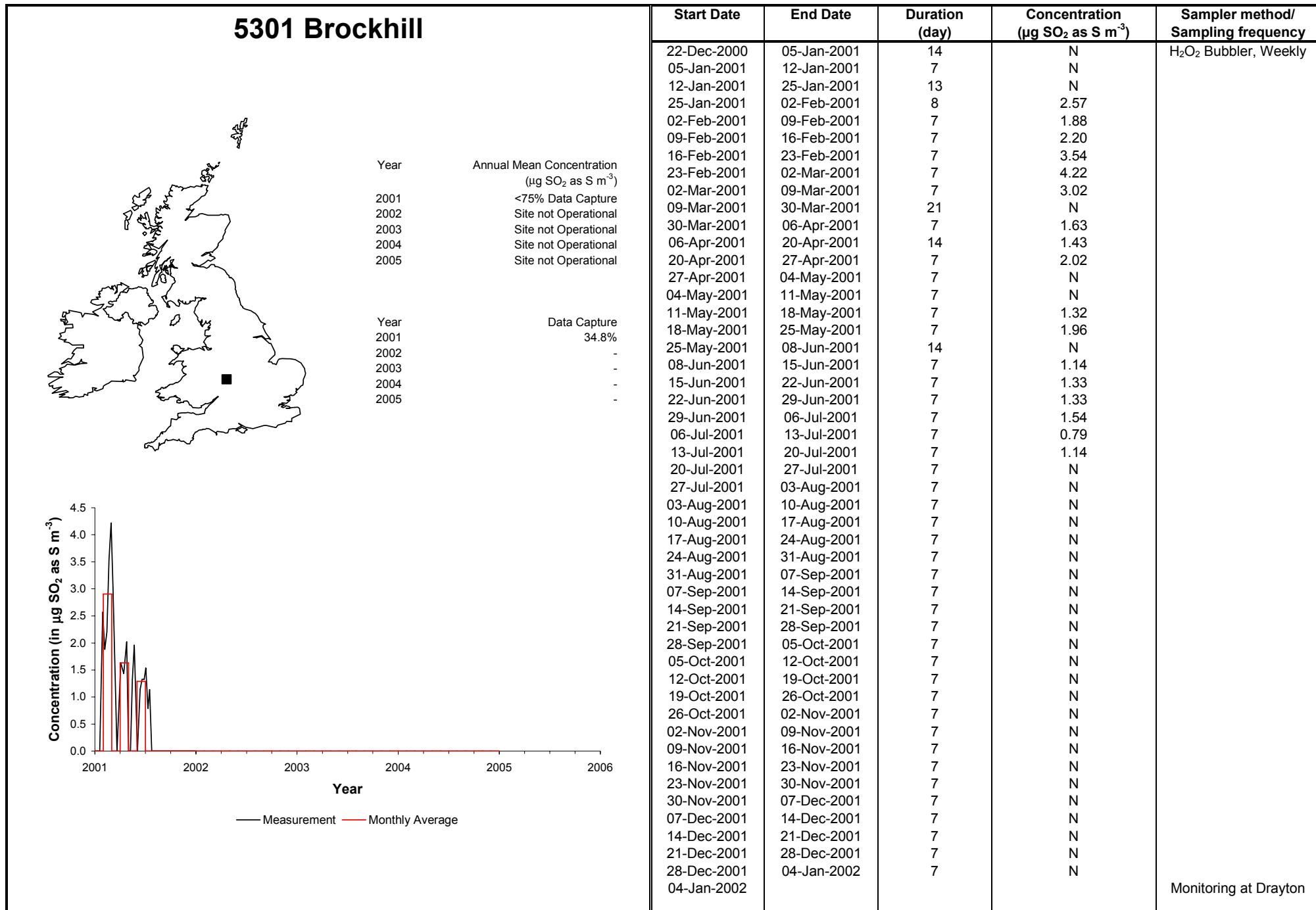
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

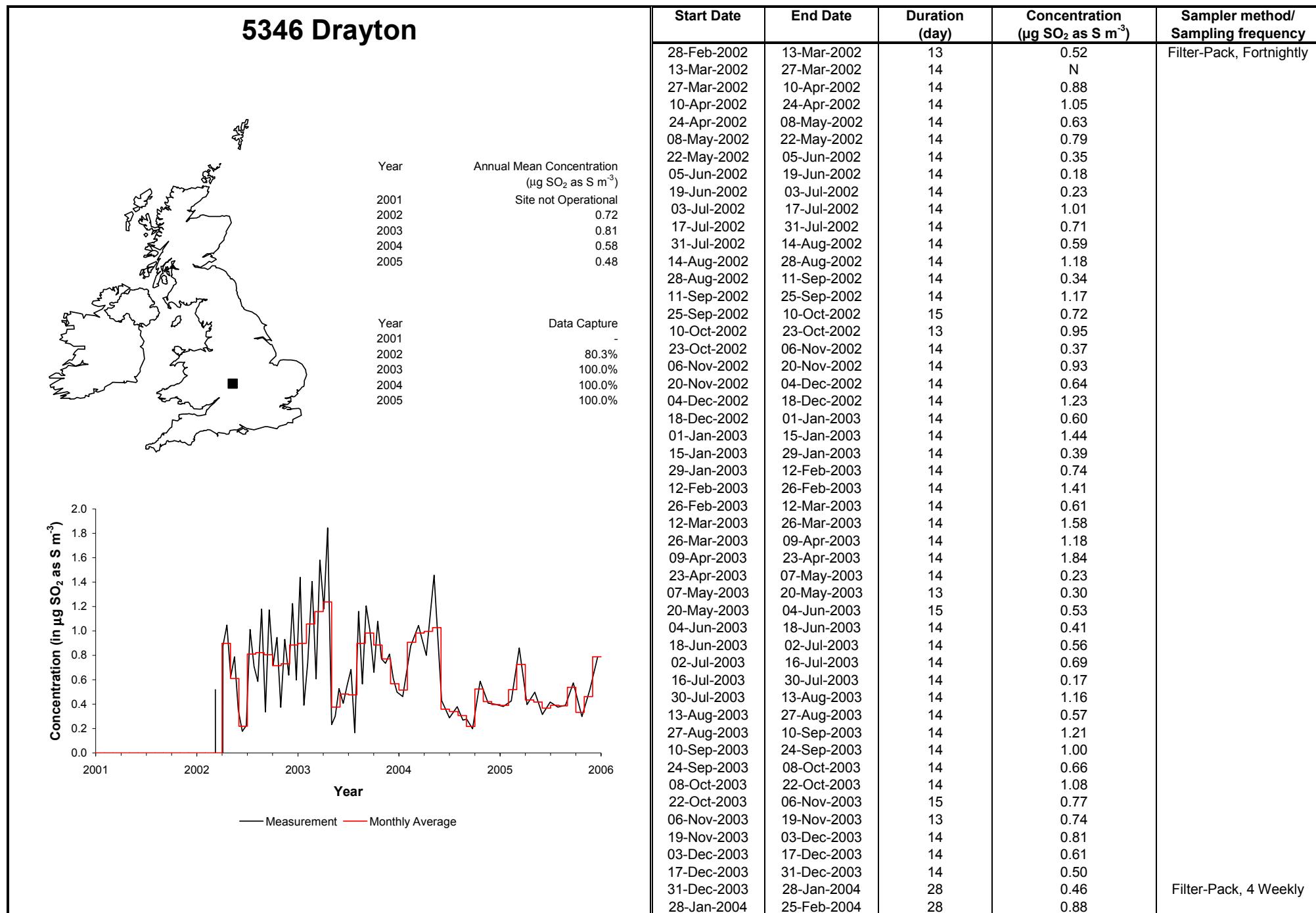


5331 Rosemaund

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
03-May-2002	16-May-2002	13	0.99	Filter-Pack, Fortnightly	23-Feb-2005	24-Mar-2005	29	0.81	Filter-Pack, 4 Weekly
16-May-2002	24-May-2002	8	0.27		24-Mar-2005	20-Apr-2005	27	0.41	
24-May-2002	03-Jul-2002	40	0.15		20-Apr-2005	18-May-2005	28	0.43	
03-Jul-2002	17-Jul-2002	14	0.30		18-May-2005	16-Jun-2005	29	0.28	
17-Jul-2002	31-Jul-2002	14	0.17		16-Jun-2005	13-Jul-2005	27	0.84	
31-Jul-2002	14-Aug-2002	14	0.45		13-Jul-2005	11-Aug-2005	29	0.18	
14-Aug-2002	29-Aug-2002	15	0.72		11-Aug-2005	07-Sep-2005	27	0.20	
29-Aug-2002	26-Sep-2002	28	0.59		07-Sep-2005	05-Oct-2005	28	0.25	
26-Sep-2002	24-Oct-2002	28	0.40		05-Oct-2005	02-Nov-2005	28	0.33	
24-Oct-2002	07-Nov-2002	14	0.40		02-Nov-2005	30-Nov-2005	28	0.22	
07-Nov-2002	18-Dec-2002	41	0.36		30-Nov-2005	03-Jan-2006	34	0.26	
18-Dec-2002	05-Feb-2003	49	N		03-Jan-2006				Monitoring terminated
05-Feb-2003	19-Feb-2003	14	1.07						
19-Feb-2003	06-Mar-2003	15	0.68						
06-Mar-2003	19-Mar-2003	13	0.85						
19-Mar-2003	03-Apr-2003	15	0.63						
03-Apr-2003	16-Apr-2003	13	1.89						
16-Apr-2003	01-May-2003	15	0.55						
01-May-2003	14-May-2003	13	N						
14-May-2003	01-Jun-2003	18	0.08						
01-Jun-2003	11-Jun-2003	10	0.50						
11-Jun-2003	26-Jun-2003	15	0.36						
26-Jun-2003	10-Jul-2003	14	0.19						
10-Jul-2003	23-Jul-2003	13	0.56						
23-Jul-2003	06-Aug-2003	14	0.41						
06-Aug-2003	20-Aug-2003	14	1.39						
20-Aug-2003	03-Sep-2003	14	0.60						
03-Sep-2003	17-Sep-2003	14	0.54						
17-Sep-2003	01-Oct-2003	14	0.36						
01-Oct-2003	15-Oct-2003	14	0.36						
15-Oct-2003	29-Oct-2003	14	1.26						
29-Oct-2003	12-Nov-2003	14	0.40						
12-Nov-2003	26-Nov-2003	14	0.43						
26-Nov-2003	10-Dec-2003	14	1.40						
10-Dec-2003	24-Dec-2003	14	0.22						
24-Dec-2003	21-Jan-2004	28	0.33	Filter-Pack, 4 Weekly					
21-Jan-2004	18-Feb-2004	28	0.34						
18-Feb-2004	17-Mar-2004	28	0.92						
17-Mar-2004	14-Apr-2004	28	0.53						
14-Apr-2004	12-May-2004	28	0.70						
12-May-2004	10-Jun-2004	29	0.58						
10-Jun-2004	07-Jul-2004	27	0.15						
07-Jul-2004	04-Aug-2004	28	0.26						
04-Aug-2004	02-Sep-2004	29	0.10						
02-Sep-2004	30-Sep-2004	28	0.39						
30-Sep-2004	27-Oct-2004	27	0.18						
27-Oct-2004	26-Nov-2004	30	0.24						
26-Nov-2004	22-Dec-2004	26	0.37						
22-Dec-2004	26-Jan-2005	35	0.28						
26-Jan-2005	23-Feb-2005	28	0.72						

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

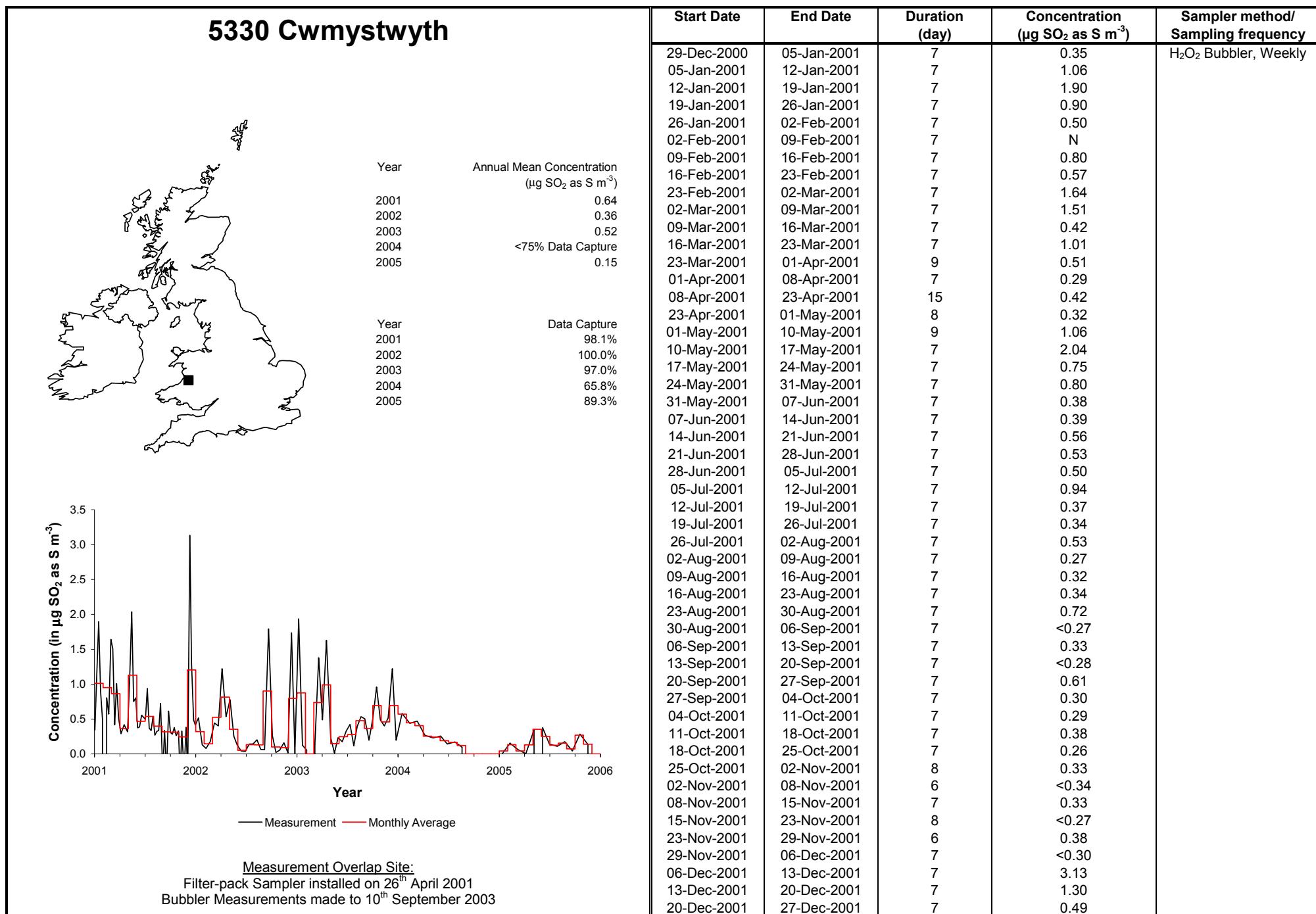




5346 Drayton

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
25-Feb-2004	24-Mar-2004	28	1.05	Filter-Pack, 4 Weekly					
24-Mar-2004	22-Apr-2004	29	0.80						
22-Apr-2004	19-May-2004	27	1.46						
19-May-2004	16-Jun-2004	28	0.43						
16-Jun-2004	14-Jul-2004	28	0.29						
14-Jul-2004	11-Aug-2004	28	0.38						
11-Aug-2004	25-Aug-2004	14	0.27						
25-Aug-2004	08-Sep-2004	14	0.28						
08-Sep-2004	06-Oct-2004	28	0.20						
06-Oct-2004	03-Nov-2004	28	0.59						
03-Nov-2004	01-Dec-2004	28	0.41						
01-Dec-2004	29-Dec-2004	28	0.40						
29-Dec-2004	26-Jan-2005	28	0.38						
26-Jan-2005	23-Feb-2005	28	0.43						
23-Feb-2005	23-Mar-2005	28	0.86						
23-Mar-2005	20-Apr-2005	28	0.40						
20-Apr-2005	18-May-2005	28	0.50						
18-May-2005	16-Jun-2005	29	0.32						
16-Jun-2005	13-Jul-2005	27	0.42						
13-Jul-2005	10-Aug-2005	28	0.38						
10-Aug-2005	07-Sep-2005	28	0.39						
07-Sep-2005	05-Oct-2005	28	0.57						
05-Oct-2005	09-Nov-2005	35	0.30						
09-Nov-2005	01-Dec-2005	22	0.52						
01-Dec-2005	04-Jan-2006	34	0.79						
				Monitoring terminated					

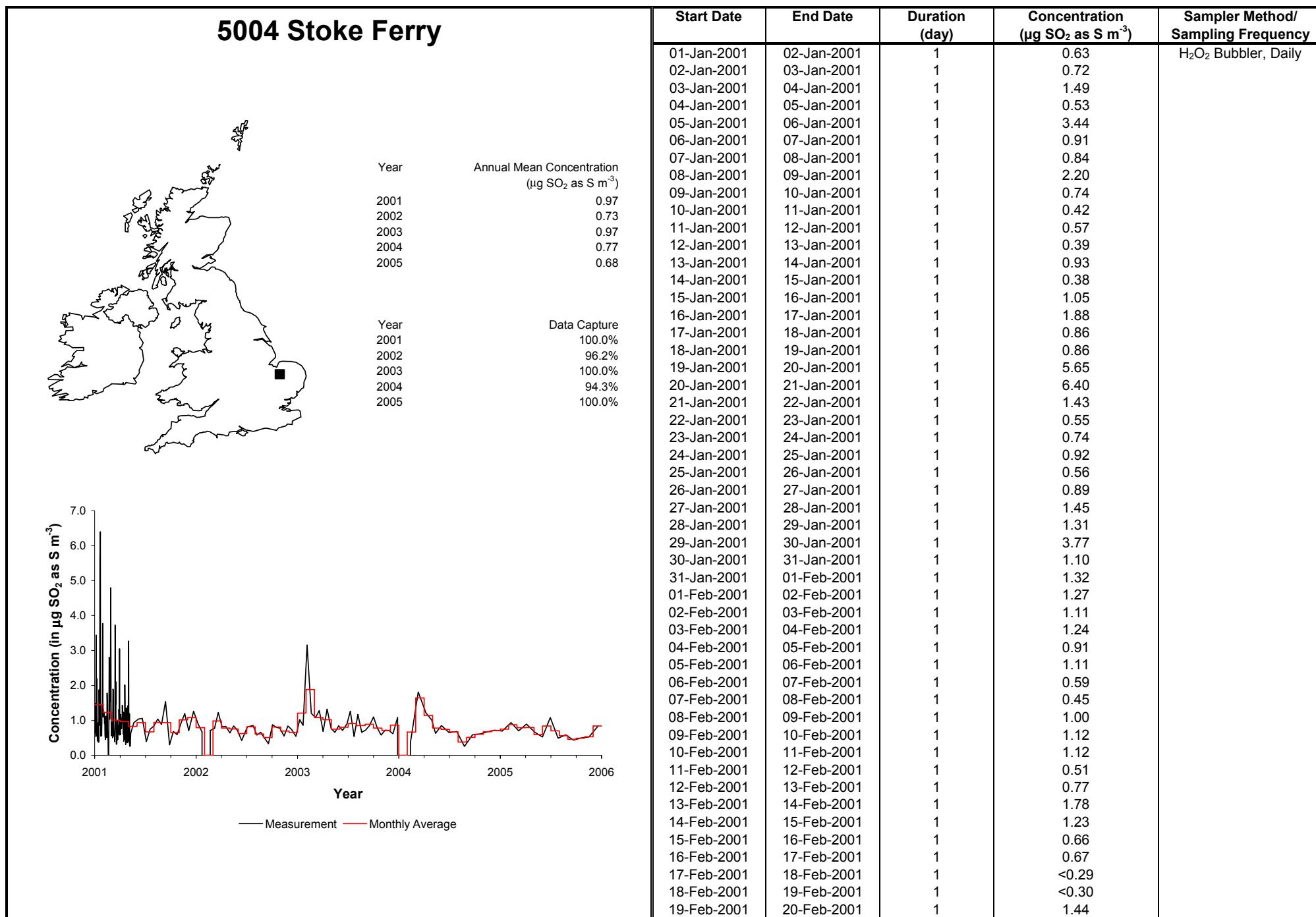
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5330 Cwmystwyth

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	
27-Dec-2001	03-Jan-2002	7	0.42	Filter-Pack, Fortnightly	18-Nov-2003	03-Dec-2003	15	0.52	Filter-Pack, 4 Weekly	
03-Jan-2002	17-Jan-2002	14	0.52		03-Dec-2003	17-Dec-2003	14	1.22		
17-Jan-2002	31-Jan-2002	14	0.13		17-Dec-2003	31-Dec-2003	14	0.20		
31-Jan-2002	13-Feb-2002	13	0.08		31-Dec-2003	30-Jan-2004	30	0.58		
13-Feb-2002	28-Feb-2002	15	0.18		30-Jan-2004	23-Feb-2004	24	0.44		
28-Feb-2002	14-Mar-2002	14	0.45		23-Feb-2004	22-Mar-2004	28	0.47		
14-Mar-2002	28-Mar-2002	14	0.40		22-Mar-2004	21-Apr-2004	30	0.27		
28-Mar-2002	11-Apr-2002	14	1.22		21-Apr-2004	19-May-2004	28	0.23		
11-Apr-2002	25-Apr-2002	14	0.54		19-May-2004	14-Jun-2004	26	0.26		
25-Apr-2002	09-May-2002	14	0.78		14-Jun-2004	07-Jul-2004	23	0.14		
09-May-2002	23-May-2002	14	0.25		07-Jul-2004	09-Aug-2004	33	0.17		
23-May-2002	05-Jun-2002	13	0.13		09-Aug-2004	27-Aug-2004	18	0.10		
05-Jun-2002	20-Jun-2002	15	0.04		27-Aug-2004	05-Oct-2004	39	N		
20-Jun-2002	04-Jul-2002	14	0.04		05-Oct-2004	02-Nov-2004	28	N		
04-Jul-2002	19-Jul-2002	15	0.14		02-Nov-2004	02-Dec-2004	30	N		
19-Jul-2002	01-Aug-2002	13	0.14		02-Dec-2004	30-Dec-2004	28	N		
01-Aug-2002	16-Aug-2002	15	0.20		30-Dec-2004	25-Jan-2005	26	N		
16-Aug-2002	29-Aug-2002	13	0.06		25-Jan-2005	22-Feb-2005	28	0.16		
29-Aug-2002	12-Sep-2002	14	0.06		22-Feb-2005	21-Mar-2005	27	0.06		
12-Sep-2002	26-Sep-2002	14	1.79		21-Mar-2005	20-Apr-2005	30	0.00		
26-Sep-2002	10-Oct-2002	14	0.26		20-Apr-2005	18-May-2005	28	0.34		
10-Oct-2002	23-Oct-2002	13	0.02		18-May-2005	26-May-2005	8	N		
23-Oct-2002	07-Nov-2002	15	0.05		26-May-2005	15-Jun-2005	20	0.38		
07-Nov-2002	21-Nov-2002	14	0.16		15-Jun-2005	14-Jul-2005	29	0.14		
21-Nov-2002	05-Dec-2002	14	0.02		14-Jul-2005	10-Aug-2005	27	0.11		
05-Dec-2002	18-Dec-2002	13	1.74		10-Aug-2005	08-Sep-2005	29	0.18		
18-Dec-2002	31-Dec-2002	13	0.01		08-Sep-2005	03-Oct-2005	25	0.04		
31-Dec-2002	14-Jan-2003	14	1.94		03-Oct-2005	02-Nov-2005	30	0.29		
14-Jan-2003	28-Jan-2003	14	0.12		02-Nov-2005	01-Dec-2005	29	0.13		
28-Jan-2003	14-Feb-2003	17	0.05		01-Dec-2005	05-Jan-2006	35	N		
14-Feb-2003	25-Feb-2003	11	N		Monitoring terminated					
25-Feb-2003	12-Mar-2003	15	0.14							
12-Mar-2003	25-Mar-2003	13	1.38							
25-Mar-2003	08-Apr-2003	14	0.49							
08-Apr-2003	23-Apr-2003	15	1.63							
23-Apr-2003	08-May-2003	15	0.24							
08-May-2003	20-May-2003	12	0.01							
20-May-2003	04-Jun-2003	15	0.23							
04-Jun-2003	18-Jun-2003	14	0.18							
18-Jun-2003	02-Jul-2003	14	0.33							
02-Jul-2003	16-Jul-2003	14	0.42							
16-Jul-2003	30-Jul-2003	14	0.11							
30-Jul-2003	12-Aug-2003	13	0.39							
12-Aug-2003	26-Aug-2003	14	0.53							
26-Aug-2003	10-Sep-2003	15	0.50							
10-Sep-2003	24-Sep-2003	14	0.20							
24-Sep-2003	08-Oct-2003	14	0.52							
08-Oct-2003	21-Oct-2003	13	0.96							
21-Oct-2003	04-Nov-2003	14	0.49							
04-Nov-2003	18-Nov-2003	14	0.40							

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5004 Stoke Ferry

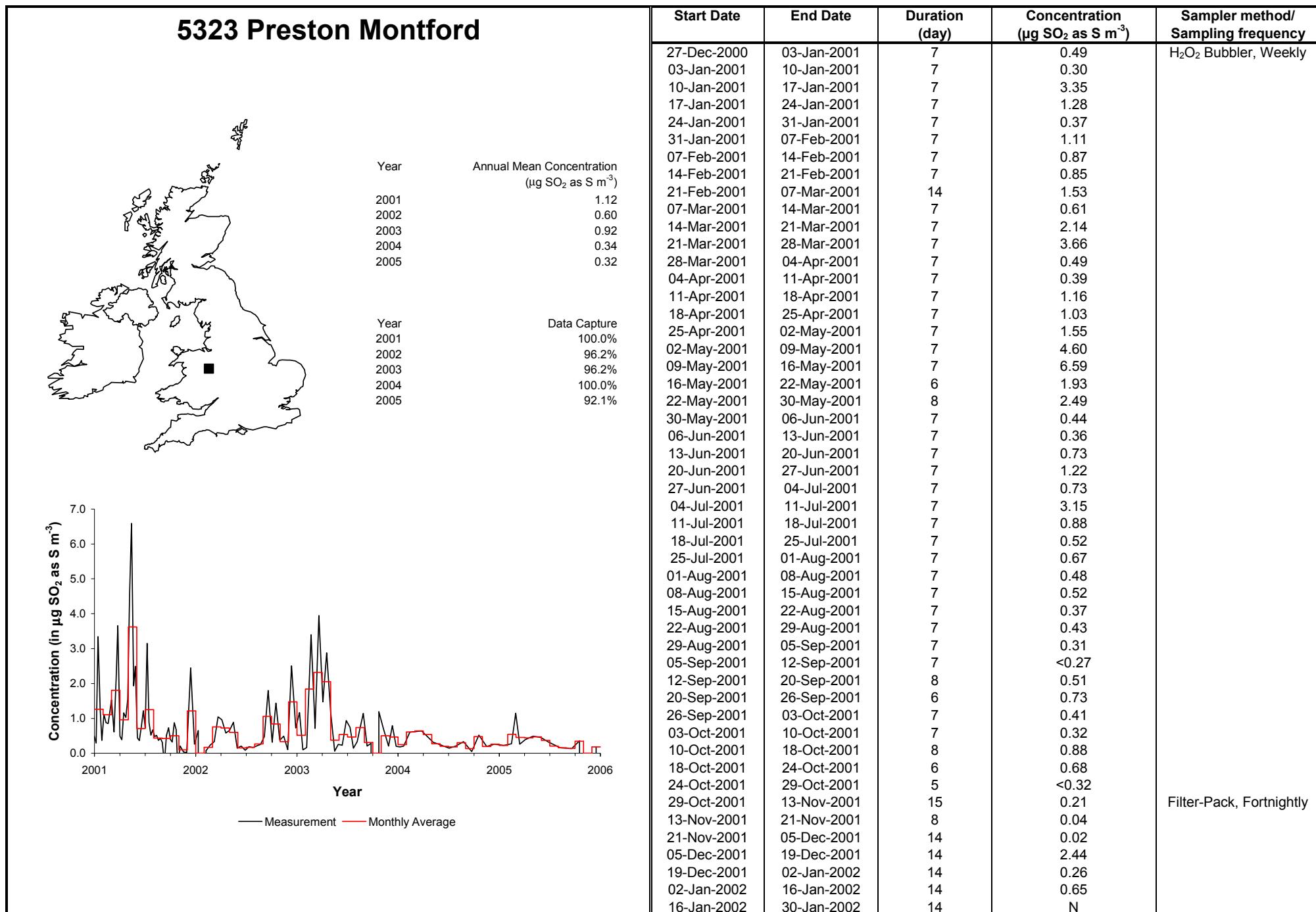
Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
20-Feb-2001	21-Feb-2001	1	2.81	H ₂ O ₂ Bubbler, Daily	11-Apr-2001	12-Apr-2001	1	0.61	
21-Feb-2001	22-Feb-2001	1	1.03		12-Apr-2001	13-Apr-2001	1	1.23	H ₂ O ₂ Bubbler, Daily
22-Feb-2001	23-Feb-2001	1	1.77		13-Apr-2001	14-Apr-2001	1	0.40	
23-Feb-2001	24-Feb-2001	1	1.53		14-Apr-2001	15-Apr-2001	1	0.92	
24-Feb-2001	25-Feb-2001	1	2.30		15-Apr-2001	16-Apr-2001	1	0.92	
25-Feb-2001	26-Feb-2001	1	4.80		16-Apr-2001	17-Apr-2001	1	0.46	
26-Feb-2001	27-Feb-2001	1	1.27		17-Apr-2001	18-Apr-2001	1	2.02	
27-Feb-2001	28-Feb-2001	1	0.56		18-Apr-2001	19-Apr-2001	1	0.95	
28-Feb-2001	01-Mar-2001	1	0.95		19-Apr-2001	20-Apr-2001	1	1.20	
01-Mar-2001	02-Mar-2001	1	0.66		20-Apr-2001	21-Apr-2001	1	0.31	
02-Mar-2001	03-Mar-2001	1	0.62		21-Apr-2001	22-Apr-2001	1	0.44	
03-Mar-2001	04-Mar-2001	1	0.50		22-Apr-2001	23-Apr-2001	1	1.35	
04-Mar-2001	05-Mar-2001	1	1.19		23-Apr-2001	24-Apr-2001	1	0.96	
05-Mar-2001	06-Mar-2001	1	1.90		24-Apr-2001	25-Apr-2001	1	0.48	
06-Mar-2001	07-Mar-2001	1	1.80		25-Apr-2001	26-Apr-2001	1	0.68	
07-Mar-2001	08-Mar-2001	1	0.91		26-Apr-2001	27-Apr-2001	1	0.36	
08-Mar-2001	09-Mar-2001	1	0.56		27-Apr-2001	28-Apr-2001	1	1.42	
09-Mar-2001	10-Mar-2001	1	0.65		28-Apr-2001	29-Apr-2001	1	0.41	
10-Mar-2001	11-Mar-2001	1	0.66		29-Apr-2001	30-Apr-2001	1	0.44	
11-Mar-2001	12-Mar-2001	1	0.39		30-Apr-2001	01-May-2001	1	3.27	
12-Mar-2001	13-Mar-2001	1	0.73		01-May-2001	02-May-2001	1	0.60	
13-Mar-2001	14-Mar-2001	1	3.73		02-May-2001	03-May-2001	1	0.36	
14-Mar-2001	15-Mar-2001	1	1.44		03-May-2001	04-May-2001	1	1.19	
15-Mar-2001	16-Mar-2001	1	2.11		04-May-2001	05-May-2001	1	0.26	
16-Mar-2001	17-Mar-2001	1	0.94		05-May-2001	06-May-2001	1	0.43	
17-Mar-2001	18-Mar-2001	1	0.31		06-May-2001	07-May-2001	1	0.26	
18-Mar-2001	19-Mar-2001	1	0.42		07-May-2001	08-May-2001	1	0.33	
19-Mar-2001	20-Mar-2001	1	0.34		08-May-2001	09-May-2001	1	0.64	
20-Mar-2001	21-Mar-2001	1	1.00		10-May-2001	29-May-2001	19	0.94	
21-Mar-2001	22-Mar-2001	1	0.70		29-May-2001	12-Jun-2001	14	1.04	Filter-Pack, Fortnightly
22-Mar-2001	23-Mar-2001	1	0.44		12-Jun-2001	26-Jun-2001	14	1.06	
23-Mar-2001	24-Mar-2001	1	0.61		26-Jun-2001	10-Jul-2001	14	0.39	
24-Mar-2001	25-Mar-2001	1	0.85		10-Jul-2001	24-Jul-2001	14	0.75	
25-Mar-2001	26-Mar-2001	1	0.60		24-Jul-2001	07-Aug-2001	14	0.84	
26-Mar-2001	27-Mar-2001	1	0.70		07-Aug-2001	21-Aug-2001	14	1.04	
27-Mar-2001	28-Mar-2001	1	1.32		21-Aug-2001	04-Sep-2001	14	0.88	
28-Mar-2001	29-Mar-2001	1	0.80		04-Sep-2001	18-Sep-2001	14	1.54	
29-Mar-2001	30-Mar-2001	1	3.05		18-Sep-2001	02-Oct-2001	14	0.30	
30-Mar-2001	31-Mar-2001	1	0.58		02-Oct-2001	16-Oct-2001	14	0.69	
31-Mar-2001	01-Apr-2001	1	0.63		16-Oct-2001	30-Oct-2001	14	0.59	
01-Apr-2001	02-Apr-2001	1	0.59		30-Oct-2001	13-Nov-2001	14	0.91	
02-Apr-2001	03-Apr-2001	1	1.17		13-Nov-2001	27-Nov-2001	14	1.20	
03-Apr-2001	04-Apr-2001	1	0.96		27-Nov-2001	11-Dec-2001	14	0.71	
04-Apr-2001	05-Apr-2001	1	1.06		11-Dec-2001	02-Jan-2002	22	1.26	
05-Apr-2001	06-Apr-2001	1	0.76		02-Jan-2002	15-Jan-2002	13	0.89	
06-Apr-2001	07-Apr-2001	1	1.03		15-Jan-2002	29-Jan-2002	14	0.67	
07-Apr-2001	08-Apr-2001	1	0.94		29-Jan-2002	12-Feb-2002	14	N	
08-Apr-2001	09-Apr-2001	1	1.43		12-Feb-2002	26-Feb-2002	14	0.71	
09-Apr-2001	10-Apr-2001	1	1.18		26-Feb-2002	12-Mar-2002	14	0.77	
10-Apr-2001	11-Apr-2001	1	1.03		12-Mar-2002	26-Mar-2002	14	1.23	

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

5004 Stoke Ferry

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
26-Mar-2002	09-Apr-2002	14	0.82	Filter-Pack, Fortnightly	05-May-2004	18-May-2004	13	0.63	Filter-Pack, 4 Weekly
09-Apr-2002	23-Apr-2002	14	0.83		18-May-2004	15-Jun-2004	28	0.86	
23-Apr-2002	07-May-2002	14	0.64		15-Jun-2004	13-Jul-2004	28	0.65	
07-May-2002	21-May-2002	14	0.84		13-Jul-2004	10-Aug-2004	28	0.68	
21-May-2002	05-Jun-2002	15	0.72		10-Aug-2004	07-Sep-2004	28	0.25	
05-Jun-2002	19-Jun-2002	14	0.43		07-Sep-2004	06-Oct-2004	29	0.58	
19-Jun-2002	16-Jul-2002	27	0.82		06-Oct-2004	02-Nov-2004	27	0.61	
16-Jul-2002	30-Jul-2002	14	0.85		02-Nov-2004	30-Nov-2004	28	0.68	
30-Jul-2002	13-Aug-2002	14	0.58		30-Nov-2004	21-Dec-2004	21	0.72	
13-Aug-2002	28-Aug-2002	15	0.66		21-Dec-2004	25-Jan-2005	35	0.70	
28-Aug-2002	10-Sep-2002	13	0.50		25-Jan-2005	22-Feb-2005	28	0.94	
10-Sep-2002	24-Sep-2002	14	0.33		22-Feb-2005	18-Mar-2005	24	0.70	
24-Sep-2002	08-Oct-2002	14	0.88		18-Mar-2005	19-Apr-2005	32	0.89	
08-Oct-2002	21-Oct-2002	13	0.80		19-Apr-2005	17-May-2005	28	0.66	
21-Oct-2002	05-Nov-2002	15	0.78		17-May-2005	14-Jun-2005	28	0.52	
05-Nov-2002	19-Nov-2002	14	0.55		14-Jun-2005	12-Jul-2005	28	1.09	
19-Nov-2002	03-Dec-2002	14	0.84		12-Jul-2005	09-Aug-2005	28	0.49	
03-Dec-2002	17-Dec-2002	14	0.74		09-Aug-2005	06-Sep-2005	28	0.59	
17-Dec-2002	02-Jan-2003	16	0.55		06-Sep-2005	04-Oct-2005	28	0.44	
02-Jan-2003	14-Jan-2003	12	1.02		04-Oct-2005	01-Nov-2005	28	0.50	
14-Jan-2003	28-Jan-2003	14	0.86		01-Nov-2005	30-Nov-2005	29	0.52	
28-Jan-2003	11-Feb-2003	14	3.16		30-Nov-2005	05-Jan-2006	36	0.84	
11-Feb-2003	25-Feb-2003	14	1.20		05-Jan-2006				Monitoring terminated
25-Feb-2003	11-Mar-2003	14	1.08						
11-Mar-2003	25-Mar-2003	14	1.28						
25-Mar-2003	08-Apr-2003	14	0.68						
08-Apr-2003	23-Apr-2003	15	1.32						
23-Apr-2003	06-May-2003	13	0.76						
06-May-2003	20-May-2003	14	0.66						
20-May-2003	03-Jun-2003	14	0.85						
03-Jun-2003	18-Jun-2003	15	0.71						
18-Jun-2003	02-Jul-2003	14	0.90						
02-Jul-2003	15-Jul-2003	13	1.26						
15-Jul-2003	29-Jul-2003	14	0.54						
29-Jul-2003	12-Aug-2003	14	1.17						
12-Aug-2003	26-Aug-2003	14	0.66						
26-Aug-2003	09-Sep-2003	14	0.72						
09-Sep-2003	23-Sep-2003	14	0.86						
23-Sep-2003	08-Oct-2003	15	1.10						
08-Oct-2003	21-Oct-2003	13	0.78						
21-Oct-2003	04-Nov-2003	14	0.58						
04-Nov-2003	19-Nov-2003	15	0.72						
19-Nov-2003	02-Dec-2003	13	0.72						
02-Dec-2003	16-Dec-2003	14	0.62						
16-Dec-2003	06-Jan-2004	21	1.09						
06-Jan-2004	27-Jan-2004	21	N	Filter-Pack, 4 Weekly					
27-Jan-2004	24-Feb-2004	28	0.37						
24-Feb-2004	23-Mar-2004	28	1.81						
23-Mar-2004	20-Apr-2004	28	1.22						
20-Apr-2004	05-May-2004	15	1.01						

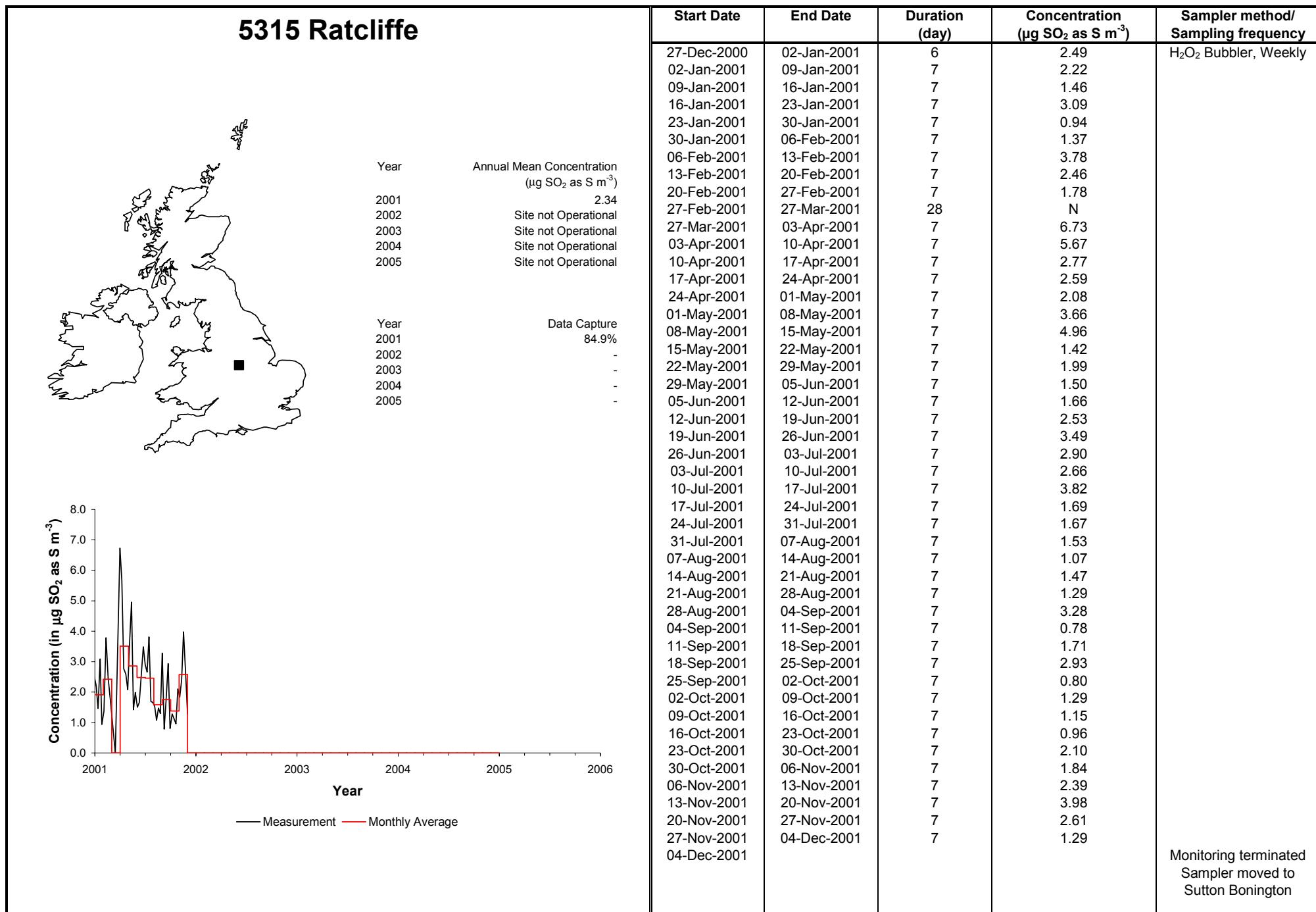
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

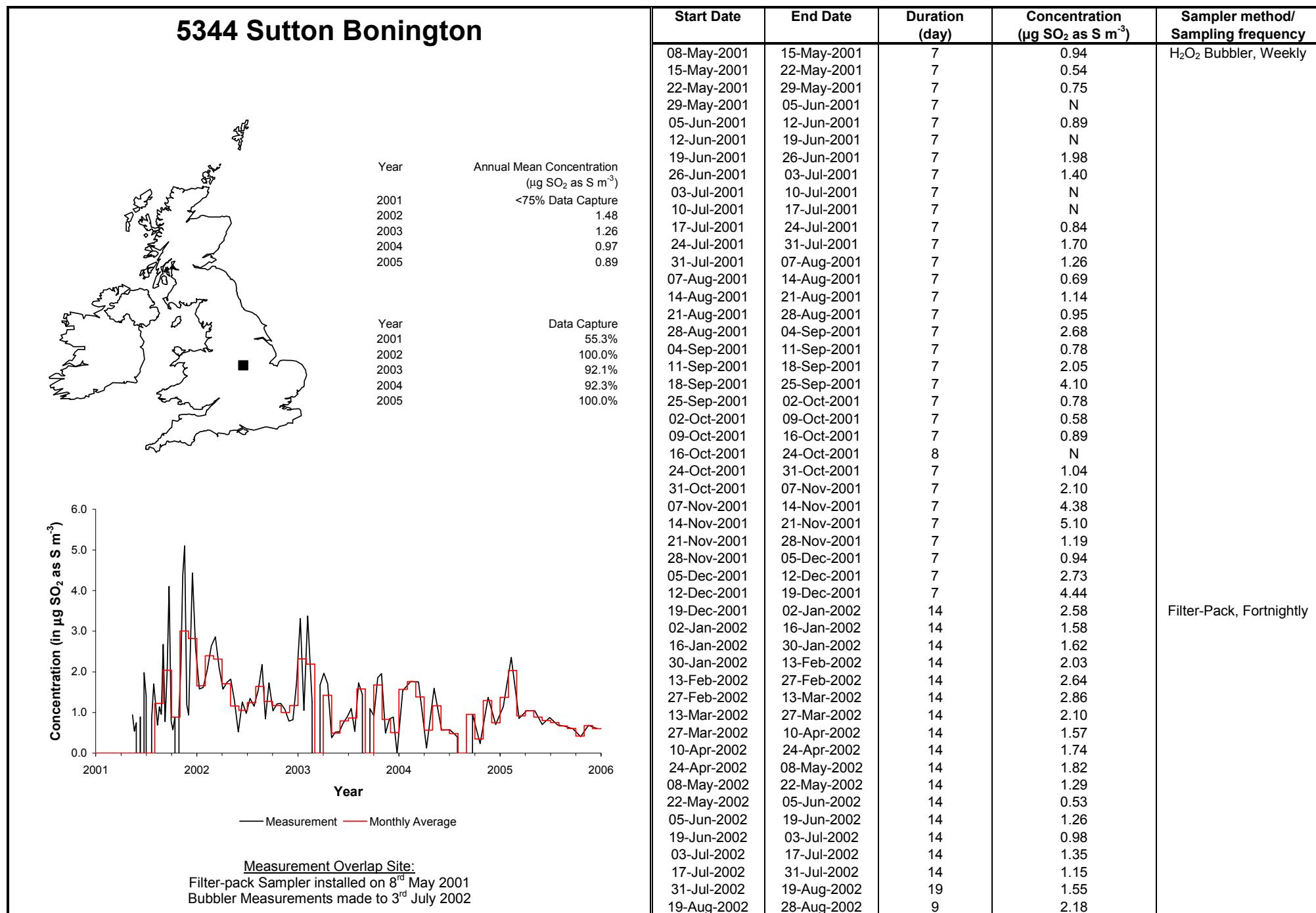


5323 Preston Montford

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
30-Jan-2002	13-Feb-2002	14	0.07	Filter-Pack, Fortnightly	31-Dec-2003	14-Jan-2004	14	0.19	Filter-Pack, 4 Weekly
13-Feb-2002	28-Feb-2002	15	0.24		14-Jan-2004	28-Jan-2004	14	0.21	
28-Feb-2002	13-Mar-2002	13	0.34		28-Jan-2004	25-Feb-2004	28	0.61	
13-Mar-2002	27-Mar-2002	14	1.05		25-Feb-2004	22-Apr-2004	57	0.64	
27-Mar-2002	11-Apr-2002	15	0.96		22-Apr-2004	18-May-2004	26	0.31	
11-Apr-2002	24-Apr-2002	13	0.58		18-May-2004	21-Jun-2004	34	0.23	
24-Apr-2002	08-May-2002	14	0.66		21-Jun-2004	14-Jul-2004	23	0.15	
08-May-2002	22-May-2002	14	0.89		14-Jul-2004	08-Aug-2004	25	0.21	
22-May-2002	05-Jun-2002	14	0.15		08-Aug-2004	10-Sep-2004	33	0.33	
05-Jun-2002	19-Jun-2002	14	0.21		10-Sep-2004	04-Oct-2004	24	0.05	
19-Jun-2002	03-Jul-2002	14	0.09		04-Oct-2004	01-Nov-2004	28	0.52	
03-Jul-2002	18-Jul-2002	15	0.19		01-Nov-2004	29-Nov-2004	28	0.19	
18-Jul-2002	31-Jul-2002	13	0.17		29-Nov-2004	27-Dec-2004	28	0.26	
31-Jul-2002	14-Aug-2002	14	0.21		27-Dec-2004	06-Feb-2005	41	0.23	
14-Aug-2002	28-Aug-2002	14	0.25		06-Feb-2005	20-Feb-2005	14	0.27	
28-Aug-2002	11-Sep-2002	14	0.48		20-Feb-2005	06-Mar-2005	14	1.15	
11-Sep-2002	25-Sep-2002	14	1.80		06-Mar-2005	20-Mar-2005	14	0.26	
25-Sep-2002	09-Oct-2002	14	0.32		20-Mar-2005	17-Apr-2005	28	0.39	
09-Oct-2002	23-Oct-2002	14	1.44		17-Apr-2005	15-May-2005	28	0.49	
23-Oct-2002	06-Nov-2002	14	0.38		15-May-2005	12-Jun-2005	28	0.45	
06-Nov-2002	20-Nov-2002	14	0.49		12-Jun-2005	10-Jul-2005	28	0.32	
20-Nov-2002	04-Dec-2002	14	0.11		10-Jul-2005	04-Sep-2005	56	0.16	
04-Dec-2002	18-Dec-2002	14	2.51		04-Sep-2005	03-Oct-2005	29	0.14	
18-Dec-2002	06-Jan-2003	19	0.73		03-Oct-2005	30-Oct-2005	27	0.36	
06-Jan-2003	15-Jan-2003	9	1.17		30-Oct-2005	28-Nov-2005	29	N	
15-Jan-2003	29-Jan-2003	14	0.10		28-Nov-2005	01-Jan-2006	34	0.18	
29-Jan-2003	12-Feb-2003	14	0.17		01-Jan-2006				Monitoring terminated
12-Feb-2003	26-Feb-2003	14	3.40						
26-Feb-2003	12-Mar-2003	14	0.71						
12-Mar-2003	26-Mar-2003	14	3.95						
26-Mar-2003	09-Apr-2003	14	1.48						
09-Apr-2003	23-Apr-2003	14	2.88						
23-Apr-2003	08-May-2003	15	1.18						
08-May-2003	22-May-2003	14	0.06						
22-May-2003	04-Jun-2003	13	0.25						
04-Jun-2003	18-Jun-2003	14	0.23						
18-Jun-2003	02-Jul-2003	14	0.94						
02-Jul-2003	16-Jul-2003	14	0.75						
16-Jul-2003	29-Jul-2003	13	0.15						
29-Jul-2003	13-Aug-2003	15	0.34						
13-Aug-2003	20-Aug-2003	7	0.74						
20-Aug-2003	03-Sep-2003	14	1.14						
03-Sep-2003	17-Sep-2003	14	0.21						
17-Sep-2003	01-Oct-2003	14	0.29						
01-Oct-2003	15-Oct-2003	14	N						
15-Oct-2003	29-Oct-2003	14	1.19						
29-Oct-2003	19-Nov-2003	21	0.70						
19-Nov-2003	03-Dec-2003	14	0.21						
03-Dec-2003	17-Dec-2003	14	0.79						
17-Dec-2003	31-Dec-2003	14	0.20						

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

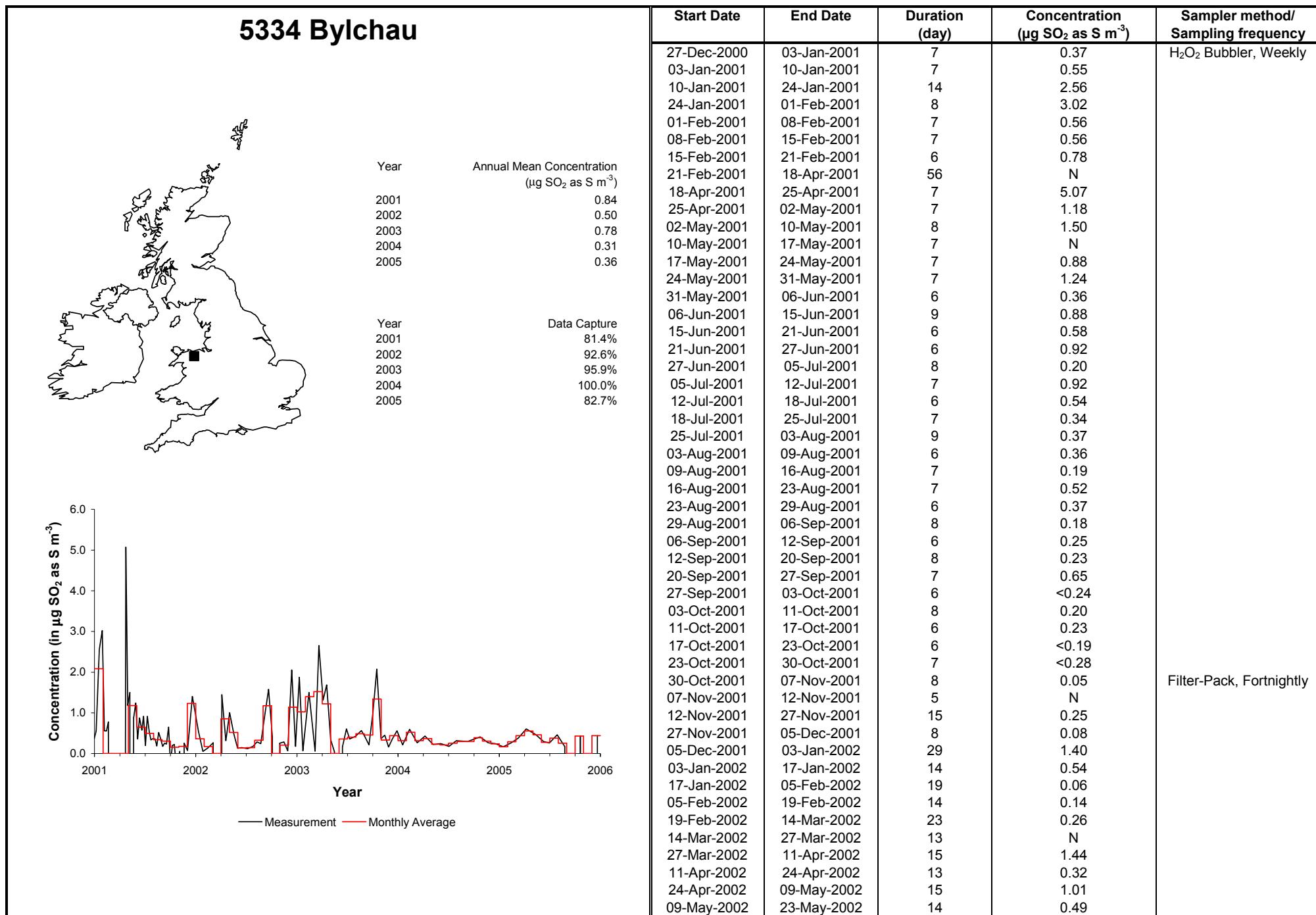




5344 Sutton Bonington

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
28-Aug-2002	11-Sep-2002	14	0.84	Filter-Pack, Fortnightly	23-Feb-2005	22-Mar-2005	27	0.86	Filter-Pack, 4 Weekly
11-Sep-2002	24-Sep-2002	13	1.73		22-Mar-2005	20-Apr-2005	29	1.04	
24-Sep-2002	09-Oct-2002	15	1.04		20-Apr-2005	18-May-2005	28	1.04	
09-Oct-2002	23-Oct-2002	14	1.21		18-May-2005	14-Jun-2005	27	0.70	
23-Oct-2002	06-Nov-2002	14	1.22		14-Jun-2005	11-Jul-2005	27	0.88	
06-Nov-2002	20-Nov-2002	14	1.09		11-Jul-2005	09-Aug-2005	29	0.69	
20-Nov-2002	06-Dec-2002	16	0.79		09-Aug-2005	06-Sep-2005	28	0.66	
06-Dec-2002	20-Dec-2002	14	0.82		06-Sep-2005	04-Oct-2005	28	0.60	
20-Dec-2002	02-Jan-2003	13	1.73		04-Oct-2005	01-Nov-2005	28	0.40	
02-Jan-2003	16-Jan-2003	14	3.31		01-Nov-2005	29-Nov-2005	28	0.68	
16-Jan-2003	29-Jan-2003	13	1.05		29-Nov-2005	04-Jan-2006	36	0.60	
29-Jan-2003	12-Feb-2003	14	3.37		04-Jan-2006				Monitoring terminated
12-Feb-2003	26-Feb-2003	14	1.26						
26-Feb-2003	13-Mar-2003	15	N						
13-Mar-2003	27-Mar-2003	14	1.68						
27-Mar-2003	09-Apr-2003	13	1.97						
09-Apr-2003	23-Apr-2003	14	1.71						
23-Apr-2003	07-May-2003	14	0.38						
07-May-2003	21-May-2003	14	0.52						
21-May-2003	04-Jun-2003	14	0.52						
04-Jun-2003	18-Jun-2003	14	0.74						
18-Jun-2003	04-Jul-2003	16	0.90						
04-Jul-2003	16-Jul-2003	12	1.10						
16-Jul-2003	30-Jul-2003	14	0.53						
30-Jul-2003	13-Aug-2003	14	1.73						
13-Aug-2003	27-Aug-2003	14	1.44						
27-Aug-2003	10-Sep-2003	14	N						
10-Sep-2003	24-Sep-2003	14	1.09						
24-Sep-2003	08-Oct-2003	14	0.92						
08-Oct-2003	22-Oct-2003	14	1.85						
22-Oct-2003	05-Nov-2003	14	1.96						
05-Nov-2003	19-Nov-2003	14	0.49						
19-Nov-2003	03-Dec-2003	14	0.84						
03-Dec-2003	17-Dec-2003	14	0.89						
17-Dec-2003	31-Dec-2003	14	0.00						
31-Dec-2003	28-Jan-2004	28	1.54	Filter-Pack, 4 Weekly					
28-Jan-2004	25-Feb-2004	28	1.76						
25-Feb-2004	25-Mar-2004	29	1.75						
25-Mar-2004	22-Apr-2004	28	0.13						
22-Apr-2004	19-May-2004	27	1.60						
19-May-2004	17-Jun-2004	29	0.57						
17-Jun-2004	16-Jul-2004	29	0.57						
16-Jul-2004	11-Aug-2004	26	0.40						
11-Aug-2004	08-Sep-2004	28	N						
08-Sep-2004	06-Oct-2004	28	0.95						
06-Oct-2004	03-Nov-2004	28	0.23						
03-Nov-2004	01-Dec-2004	28	1.37						
01-Dec-2004	29-Dec-2004	28	0.71						
29-Dec-2004	26-Jan-2005	28	1.14						
26-Jan-2005	23-Feb-2005	28	2.35						

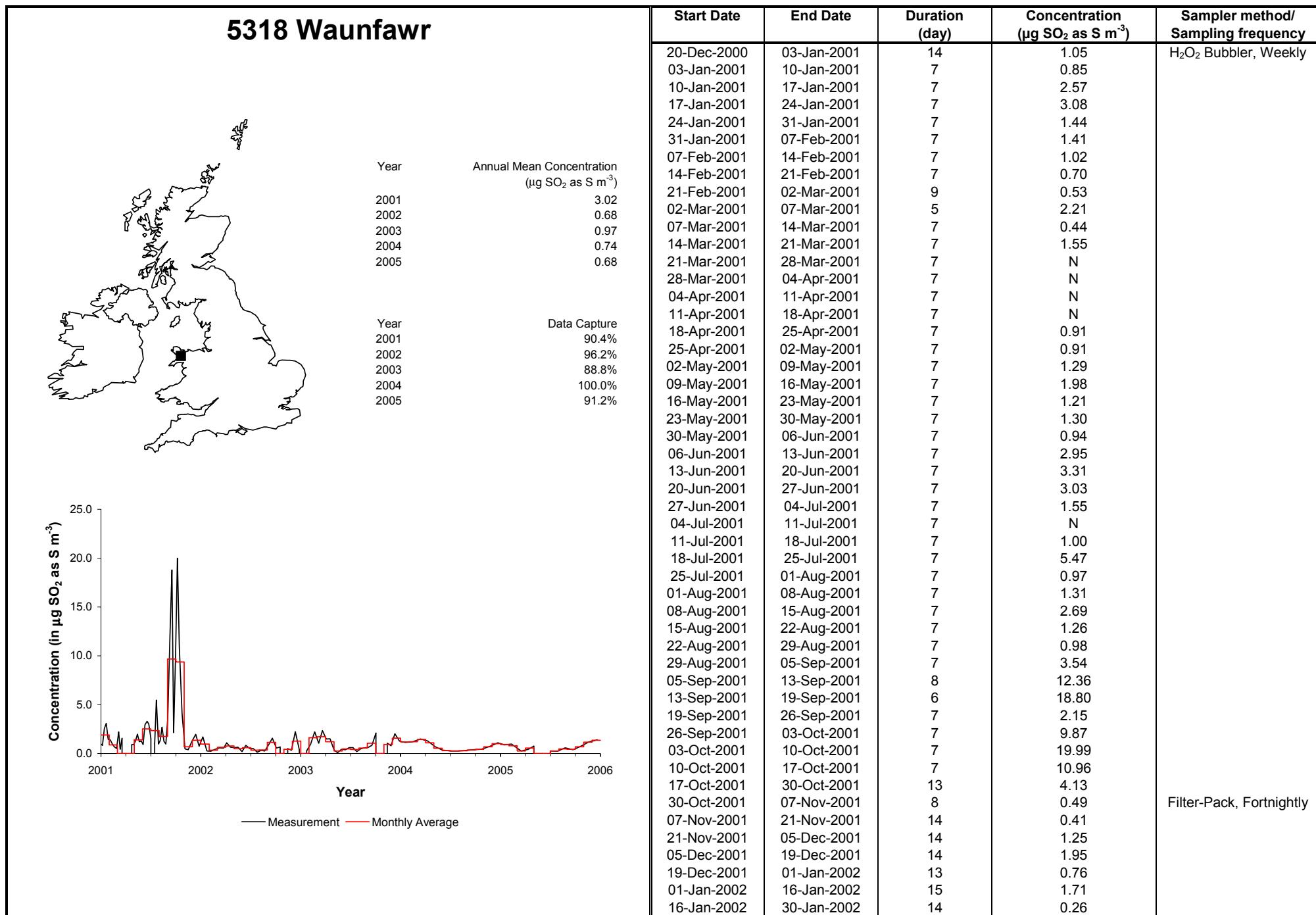
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5334 Bylchau

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
23-May-2002	06-Jun-2002	14	0.13	Filter-Pack, Fortnightly	02-Dec-2004	30-Dec-2004	28	0.24	
06-Jun-2002	20-Jun-2002	14	0.15		30-Dec-2004	01-Feb-2005	33	0.17	
20-Jun-2002	18-Jul-2002	28	0.12		01-Feb-2005	22-Feb-2005	21	0.26	
18-Jul-2002	01-Aug-2002	14	0.18		22-Feb-2005	23-Mar-2005	29	0.38	
01-Aug-2002	15-Aug-2002	14	0.29		23-Mar-2005	20-Apr-2005	28	0.61	
15-Aug-2002	29-Aug-2002	14	0.25		20-Apr-2005	31-May-2005	41	0.47	
29-Aug-2002	12-Sep-2002	14	0.90		31-May-2005	16-Jun-2005	16	0.29	
12-Sep-2002	27-Sep-2002	15	1.58		16-Jun-2005	13-Jul-2005	27	0.26	
27-Sep-2002	09-Oct-2002	12	0.41		13-Jul-2005	10-Aug-2005	28	0.46	
09-Oct-2002	23-Oct-2002	14	N		10-Aug-2005	07-Sep-2005	28	0.17	
23-Oct-2002	07-Nov-2002	15	0.25		07-Sep-2005	06-Oct-2005	29	N	
07-Nov-2002	21-Nov-2002	14	0.29		06-Oct-2005	02-Nov-2005	27	0.43	
21-Nov-2002	04-Dec-2002	13	0.07		02-Nov-2005	06-Dec-2005	34	N	
04-Dec-2002	20-Dec-2002	16	2.05		06-Dec-2005	03-Jan-2006	28	0.44	
20-Dec-2002	02-Jan-2003	13	0.18		03-Jan-2006				Monitoring terminated
02-Jan-2003	16-Jan-2003	14	1.88						
16-Jan-2003	29-Jan-2003	13	0.07						
29-Jan-2003	27-Feb-2003	29	1.50						
27-Feb-2003	12-Mar-2003	13	0.06						
12-Mar-2003	27-Mar-2003	15	2.66						
27-Mar-2003	10-Apr-2003	14	1.31						
10-Apr-2003	23-Apr-2003	13	1.69						
23-Apr-2003	08-May-2003	15	0.34						
08-May-2003	21-May-2003	13	0.04						
21-May-2003	05-Jun-2003	15	N						
05-Jun-2003	20-Jun-2003	15	0.17						
20-Jun-2003	02-Jul-2003	12	0.61						
02-Jul-2003	15-Jul-2003	13	0.36						
15-Jul-2003	13-Aug-2003	29	0.43						
13-Aug-2003	28-Aug-2003	15	0.56						
28-Aug-2003	10-Sep-2003	13	0.40						
10-Sep-2003	24-Sep-2003	14	0.21						
24-Sep-2003	08-Oct-2003	14	1.02						
08-Oct-2003	23-Oct-2003	15	2.08						
23-Oct-2003	06-Nov-2003	14	0.37						
06-Nov-2003	20-Nov-2003	14	0.45						
20-Nov-2003	03-Dec-2003	13	0.16						
03-Dec-2003	17-Dec-2003	14	0.36						
17-Dec-2003	06-Jan-2004	20	0.56	Filter-Pack, 4 Weekly					
06-Jan-2004	28-Jan-2004	22	0.21						
28-Jan-2004	24-Feb-2004	27	0.59						
24-Feb-2004	22-Mar-2004	27	0.26						
22-Mar-2004	22-Apr-2004	31	0.43						
22-Apr-2004	19-May-2004	27	0.22						
19-May-2004	17-Jun-2004	29	0.24						
17-Jun-2004	15-Jul-2004	28	0.18						
15-Jul-2004	10-Aug-2004	26	0.31						
10-Aug-2004	06-Oct-2004	57	0.29						
06-Oct-2004	09-Nov-2004	34	0.41						
09-Nov-2004	02-Dec-2004	23	0.27						

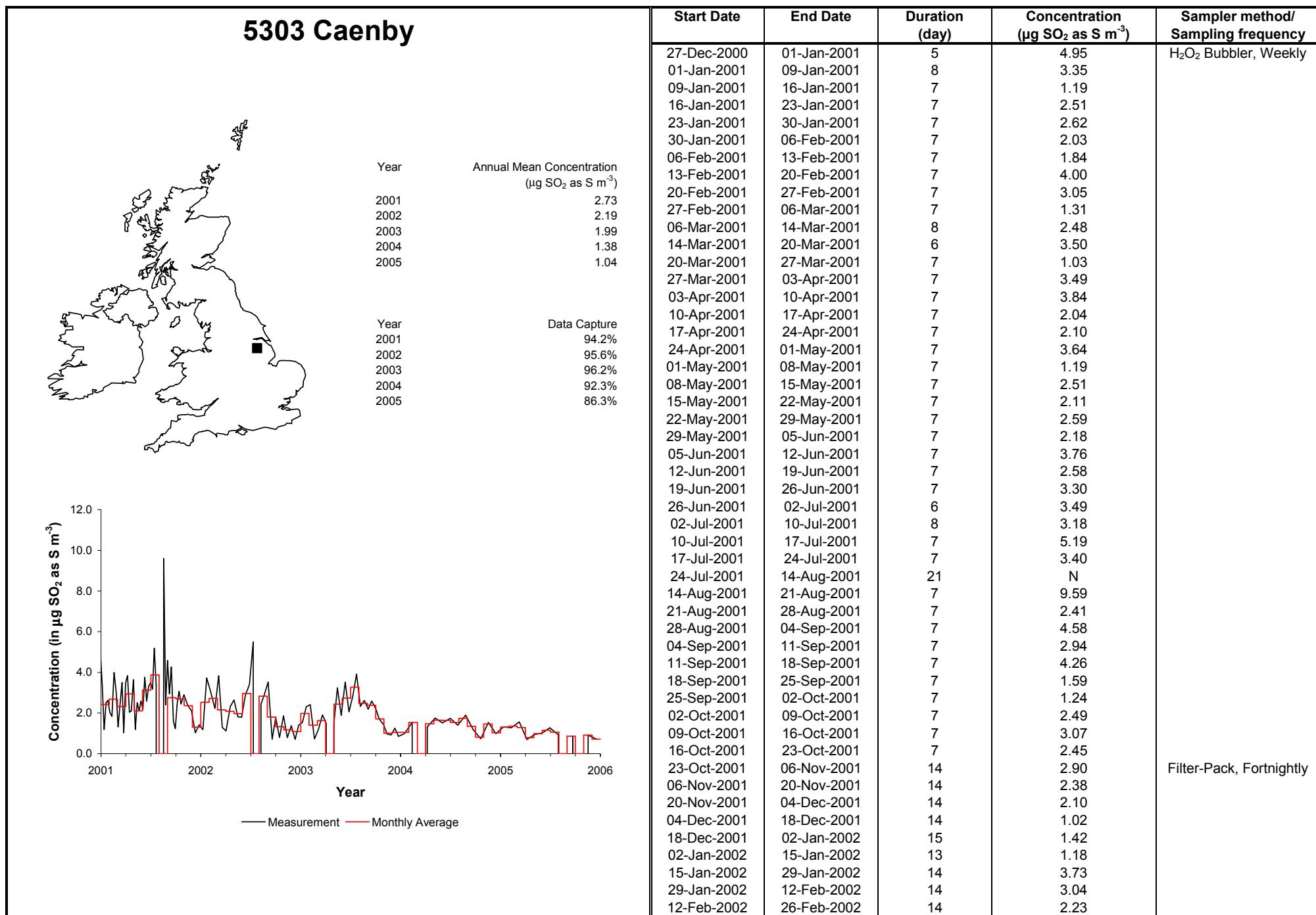
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5318 Waunfawr

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
30-Jan-2002	13-Feb-2002	14	0.24	Filter-Pack, Fortnightly	07-Jan-2004	28-Jan-2004	21	1.15	Filter-Pack, 4 Weekly
13-Feb-2002	27-Feb-2002	14	0.43		28-Jan-2004	01-Mar-2004	33	1.21	
27-Feb-2002	18-Mar-2002	19	0.60		01-Mar-2004	24-Mar-2004	23	1.49	
18-Mar-2002	28-Mar-2002	10	0.56		24-Mar-2004	21-Apr-2004	28	1.30	
28-Mar-2002	10-Apr-2002	13	1.10		21-Apr-2004	19-May-2004	28	0.69	
10-Apr-2002	24-Apr-2002	14	0.67		19-May-2004	17-Jun-2004	29	0.35	
24-Apr-2002	08-May-2002	14	0.62		17-Jun-2004	14-Jul-2004	27	0.28	
08-May-2002	22-May-2002	14	0.65		14-Jul-2004	11-Aug-2004	28	0.26	
22-May-2002	05-Jun-2002	14	0.20		11-Aug-2004	07-Sep-2004	27	0.30	
05-Jun-2002	19-Jun-2002	14	0.83		07-Sep-2004	06-Oct-2004	29	0.39	
19-Jun-2002	03-Jul-2002	14	0.52		06-Oct-2004	05-Nov-2004	30	0.45	
03-Jul-2002	18-Jul-2002	15	0.50		05-Nov-2004	08-Dec-2004	33	0.74	
18-Jul-2002	31-Jul-2002	13	0.15		08-Dec-2004	04-Jan-2005	27	1.09	
31-Jul-2002	14-Aug-2002	14	0.34		04-Jan-2005	27-Jan-2005	23	0.88	
14-Aug-2002	28-Aug-2002	14	0.26		27-Jan-2005	22-Feb-2005	26	0.97	
28-Aug-2002	11-Sep-2002	14	0.87		22-Feb-2005	06-Apr-2005	43	0.28	
11-Sep-2002	25-Sep-2002	14	1.57		06-Apr-2005	15-Apr-2005	9	0.43	
25-Sep-2002	09-Oct-2002	14	0.56		15-Apr-2005	16-May-2005	31	0.76	
09-Oct-2002	23-Oct-2002	14	0.68		16-May-2005	17-Jun-2005	32	N	
23-Oct-2002	06-Nov-2002	14	N		17-Jun-2005	12-Jul-2005	25	0.28	
06-Nov-2002	20-Nov-2002	14	0.51		12-Jul-2005	10-Aug-2005	29	0.24	
20-Nov-2002	04-Dec-2002	14	0.35		10-Aug-2005	07-Sep-2005	28	0.59	
04-Dec-2002	19-Dec-2002	15	2.24		07-Sep-2005	05-Oct-2005	28	0.39	
19-Dec-2002	03-Jan-2003	15	0.39		05-Oct-2005	02-Nov-2005	28	0.73	
03-Jan-2003	15-Jan-2003	12	N		02-Nov-2005	05-Dec-2005	33	1.18	
15-Jan-2003	29-Jan-2003	14	0.28		05-Dec-2005	05-Jan-2006	31	1.39	
29-Jan-2003	12-Feb-2003	14	0.98		05-Jan-2006				Monitoring terminated
12-Feb-2003	26-Feb-2003	14	2.23						
26-Feb-2003	12-Mar-2003	14	1.05						
12-Mar-2003	26-Mar-2003	14	2.35						
26-Mar-2003	09-Apr-2003	14	1.50						
09-Apr-2003	23-Apr-2003	14	1.52						
23-Apr-2003	07-May-2003	14	0.38						
07-May-2003	21-May-2003	14	0.08						
21-May-2003	04-Jun-2003	14	0.44						
04-Jun-2003	18-Jun-2003	14	0.40						
18-Jun-2003	02-Jul-2003	14	0.61						
02-Jul-2003	16-Jul-2003	14	0.61						
16-Jul-2003	30-Jul-2003	14	0.21						
30-Jul-2003	13-Aug-2003	14	0.48						
13-Aug-2003	27-Aug-2003	14	0.59						
27-Aug-2003	10-Sep-2003	14	0.63						
10-Sep-2003	24-Sep-2003	14	0.84						
24-Sep-2003	08-Oct-2003	14	2.08						
08-Oct-2003	22-Oct-2003	14	N						
22-Oct-2003	06-Nov-2003	15	N						
06-Nov-2003	19-Nov-2003	13	1.06						
19-Nov-2003	03-Dec-2003	14	0.81						
03-Dec-2003	17-Dec-2003	14	2.03						
17-Dec-2003	07-Jan-2004	21	1.26	Filter-Pack, 4 Weekly					

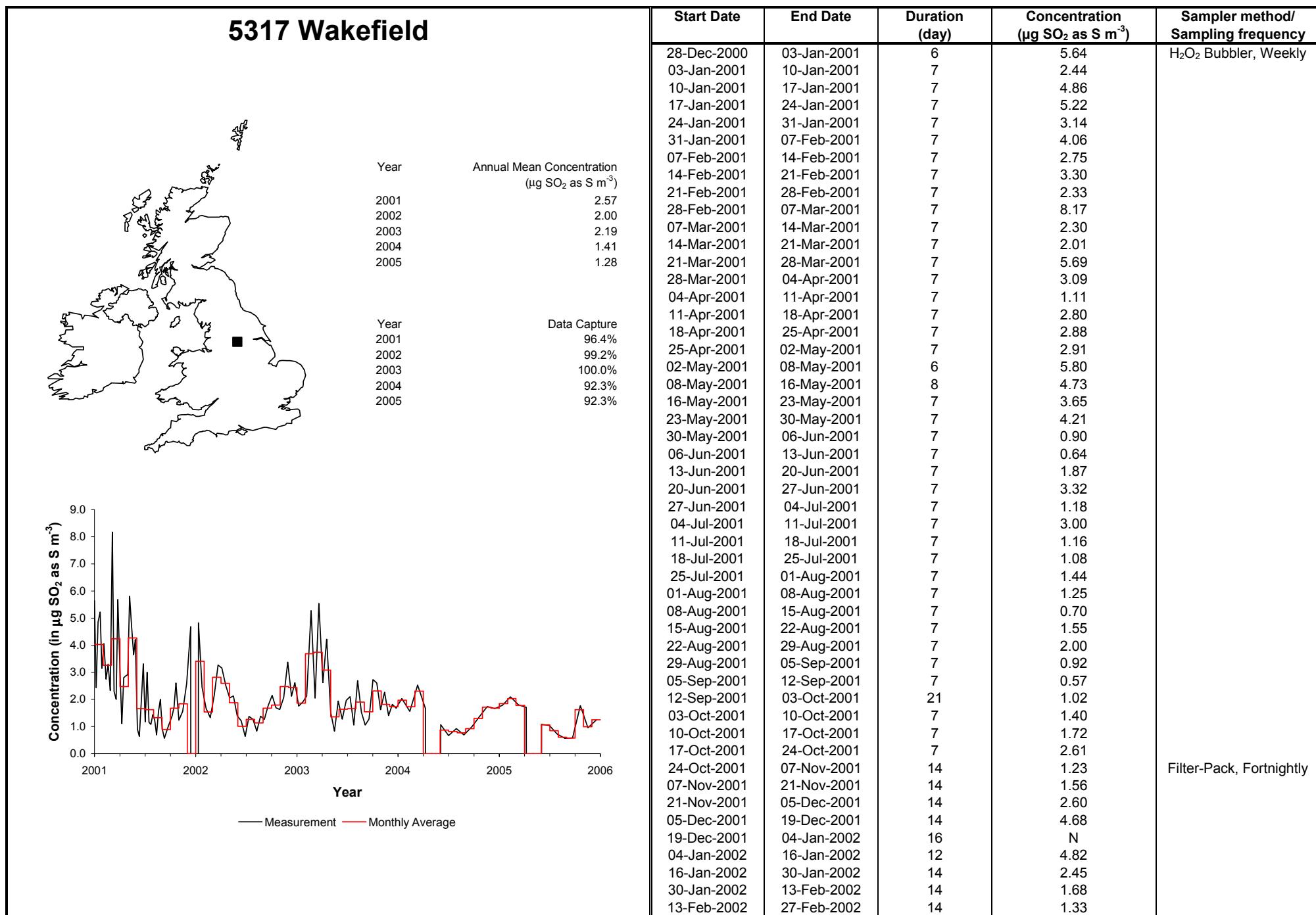
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5303 Caenby

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
26-Feb-2002	12-Mar-2002	14	3.83	Filter-Pack, Fortnightly	25-Feb-2004	24-Mar-2004	28	N	Filter-Pack, 4 Weekly
12-Mar-2002	25-Mar-2002	13	1.30		24-Mar-2004	20-Apr-2004	27	1.31	
25-Mar-2002	09-Apr-2002	15	1.12		20-Apr-2004	18-May-2004	28	1.75	
09-Apr-2002	23-Apr-2002	14	2.31		18-May-2004	15-Jun-2004	28	1.51	
23-Apr-2002	07-May-2002	14	2.64		15-Jun-2004	13-Jul-2004	28	1.74	
07-May-2002	21-May-2002	14	1.82		13-Jul-2004	11-Aug-2004	29	1.41	
21-May-2002	05-Jun-2002	15	1.79		11-Aug-2004	08-Sep-2004	28	1.90	
05-Jun-2002	18-Jun-2002	13	2.89		08-Sep-2004	06-Oct-2004	28	1.18	
18-Jun-2002	02-Jul-2002	14	3.39		06-Oct-2004	03-Nov-2004	28	0.73	
02-Jul-2002	16-Jul-2002	14	5.50		03-Nov-2004	30-Nov-2004	27	1.53	
16-Jul-2002	01-Aug-2002	16	N		30-Nov-2004	29-Dec-2004	29	0.99	
01-Aug-2002	13-Aug-2002	12	2.44		29-Dec-2004	25-Jan-2005	27	1.32	
13-Aug-2002	27-Aug-2002	14	2.91		25-Jan-2005	22-Feb-2005	28	1.28	
27-Aug-2002	10-Sep-2002	14	3.52		22-Feb-2005	22-Mar-2005	28	1.57	
10-Sep-2002	24-Sep-2002	14	0.72		22-Mar-2005	20-Apr-2005	29	0.69	
24-Sep-2002	07-Oct-2002	13	1.77		20-Apr-2005	17-May-2005	27	0.95	
07-Oct-2002	22-Oct-2002	15	0.80		17-May-2005	15-Jun-2005	29	1.02	
22-Oct-2002	05-Nov-2002	14	1.86		15-Jun-2005	12-Jul-2005	27	1.28	
05-Nov-2002	19-Nov-2002	14	0.79		12-Jul-2005	15-Aug-2005	34	0.93	
19-Nov-2002	03-Dec-2002	14	1.37		15-Aug-2005	06-Sep-2005	22	N	
03-Dec-2002	17-Dec-2002	14	0.71		06-Sep-2005	04-Oct-2005	28	0.86	
17-Dec-2002	31-Dec-2002	14	1.40		04-Oct-2005	01-Nov-2005	28	N	
31-Dec-2002	15-Jan-2003	15	1.54		01-Nov-2005	01-Dec-2005	30	0.91	
15-Jan-2003	28-Jan-2003	13	2.31		01-Dec-2005	03-Jan-2006	33	0.72	Monitoring terminated
28-Jan-2003	11-Feb-2003	14	2.41		03-Jan-2006				
11-Feb-2003	25-Feb-2003	14	0.73						
25-Feb-2003	11-Mar-2003	14	1.20						
11-Mar-2003	28-Mar-2003	17	1.91						
28-Mar-2003	08-Apr-2003	11	1.50						
08-Apr-2003	22-Apr-2003	14	N						
22-Apr-2003	06-May-2003	14	1.45						
06-May-2003	20-May-2003	14	3.24						
20-May-2003	03-Jun-2003	14	1.89						
03-Jun-2003	17-Jun-2003	14	3.52						
17-Jun-2003	01-Jul-2003	14	2.07						
01-Jul-2003	15-Jul-2003	14	2.82						
15-Jul-2003	29-Jul-2003	14	3.91						
29-Jul-2003	12-Aug-2003	14	2.33						
12-Aug-2003	29-Aug-2003	17	2.62						
29-Aug-2003	09-Sep-2003	11	2.19						
09-Sep-2003	23-Sep-2003	14	2.59						
23-Sep-2003	07-Oct-2003	14	2.22						
07-Oct-2003	22-Oct-2003	15	1.70						
22-Oct-2003	05-Nov-2003	14	1.43						
05-Nov-2003	19-Nov-2003	14	0.96						
19-Nov-2003	03-Dec-2003	14	0.92						
03-Dec-2003	17-Dec-2003	14	1.25						
17-Dec-2003	30-Dec-2003	13	0.85						
30-Dec-2003	29-Jan-2004	30	0.99						
29-Jan-2004	25-Feb-2004	27	1.53	Filter-Pack, 4 Weekly					

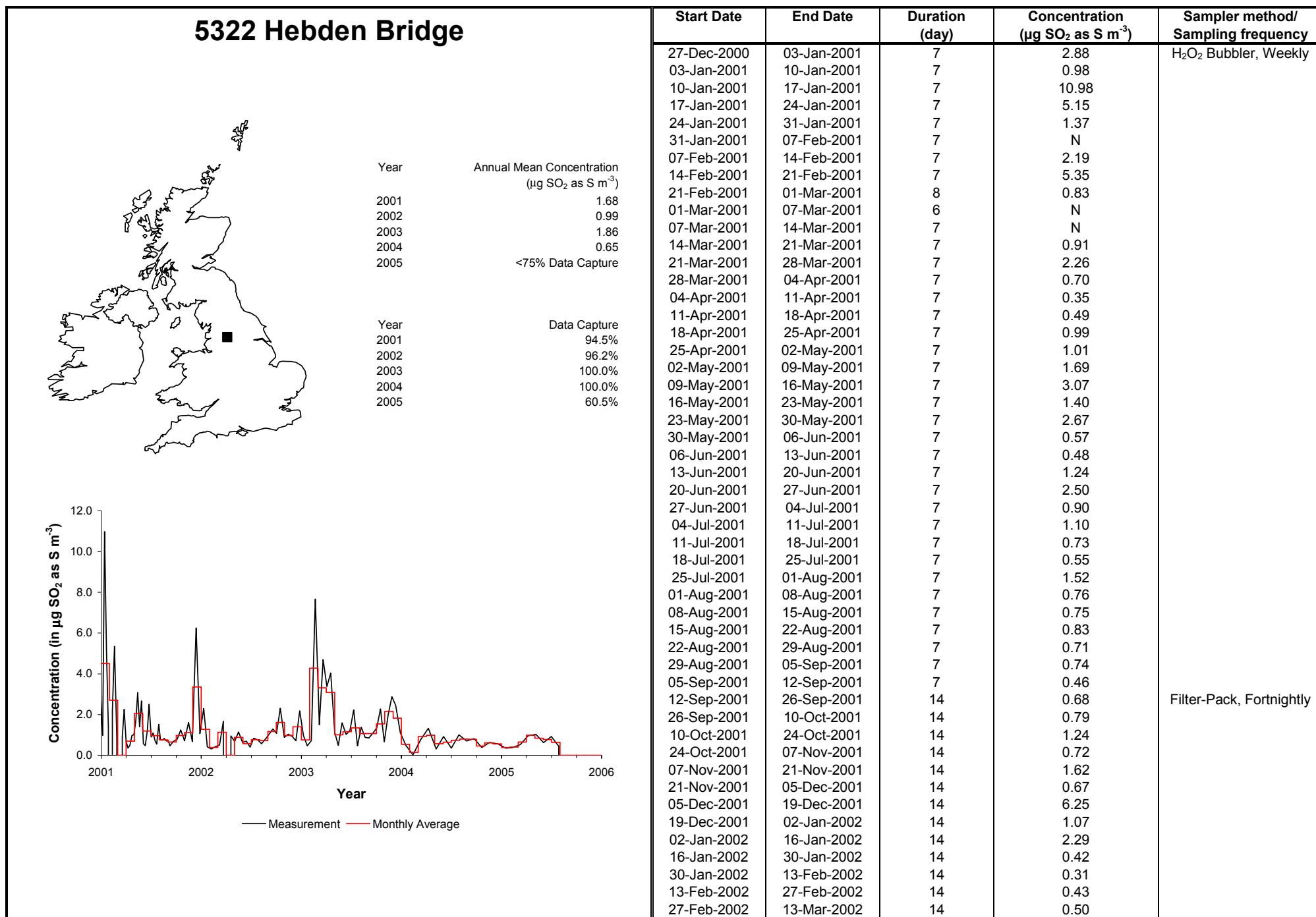
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5317 Wakefield

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
27-Feb-2002	13-Mar-2002	14	2.15	Filter-Pack, Fortnightly	25-Feb-2004	24-Mar-2004	28	2.53	Filter-Pack, 4 Weekly
13-Mar-2002	28-Mar-2002	15	3.27		24-Mar-2004	21-Apr-2004	28	1.67	
28-Mar-2002	10-Apr-2002	13	3.15		21-Apr-2004	19-May-2004	28	N	
10-Apr-2002	24-Apr-2002	14	2.51		19-May-2004	16-Jun-2004	28	1.07	
24-Apr-2002	08-May-2002	14	2.06		16-Jun-2004	14-Jul-2004	28	0.67	
08-May-2002	22-May-2002	14	2.13		14-Jul-2004	11-Aug-2004	28	0.92	
22-May-2002	05-Jun-2002	14	1.40		11-Aug-2004	08-Sep-2004	28	0.70	
05-Jun-2002	19-Jun-2002	14	1.22		08-Sep-2004	06-Oct-2004	28	0.99	
19-Jun-2002	03-Jul-2002	14	0.64		06-Oct-2004	03-Nov-2004	28	1.36	
03-Jul-2002	18-Jul-2002	15	1.38		03-Nov-2004	01-Dec-2004	28	1.74	
18-Jul-2002	31-Jul-2002	13	1.27		01-Dec-2004	29-Dec-2004	28	1.66	
31-Jul-2002	14-Aug-2002	14	0.83		29-Dec-2004	26-Jan-2005	28	1.79	
14-Aug-2002	28-Aug-2002	14	1.39		26-Jan-2005	23-Feb-2005	28	2.10	
28-Aug-2002	11-Sep-2002	14	1.27		23-Feb-2005	23-Mar-2005	28	1.80	
11-Sep-2002	25-Sep-2002	14	1.77		23-Mar-2005	20-Apr-2005	28	1.71	
25-Sep-2002	09-Oct-2002	14	2.15		20-Apr-2005	18-May-2005	28	N	
09-Oct-2002	23-Oct-2002	14	1.69		18-May-2005	15-Jun-2005	28	1.08	
23-Oct-2002	06-Nov-2002	14	1.63		15-Jun-2005	13-Jul-2005	28	1.04	
06-Nov-2002	20-Nov-2002	14	2.07		13-Jul-2005	10-Aug-2005	28	0.72	
20-Nov-2002	04-Dec-2002	14	3.38		10-Aug-2005	07-Sep-2005	28	0.56	
04-Dec-2002	18-Dec-2002	14	2.12		07-Sep-2005	05-Oct-2005	28	0.58	
18-Dec-2002	31-Dec-2002	13	2.62		05-Oct-2005	02-Nov-2005	28	1.77	
31-Dec-2002	15-Jan-2003	15	1.76		02-Nov-2005	30-Nov-2005	28	0.96	
15-Jan-2003	29-Jan-2003	14	1.91		30-Nov-2005	04-Jan-2006	35	1.25	
29-Jan-2003	12-Feb-2003	14	2.12						Monitoring terminated
12-Feb-2003	26-Feb-2003	14	5.28						
26-Feb-2003	12-Mar-2003	14	2.05						
12-Mar-2003	26-Mar-2003	14	5.55						
26-Mar-2003	09-Apr-2003	14	2.63						
09-Apr-2003	23-Apr-2003	14	4.22						
23-Apr-2003	07-May-2003	14	1.53						
07-May-2003	21-May-2003	14	0.84						
21-May-2003	04-Jun-2003	14	1.94						
04-Jun-2003	18-Jun-2003	14	1.27						
18-Jun-2003	02-Jul-2003	14	1.96						
02-Jul-2003	16-Jul-2003	14	2.10						
16-Jul-2003	30-Jul-2003	14	1.06						
30-Jul-2003	13-Aug-2003	14	2.70						
13-Aug-2003	27-Aug-2003	14	1.53						
27-Aug-2003	10-Sep-2003	14	1.06						
10-Sep-2003	24-Sep-2003	14	1.27						
24-Sep-2003	08-Oct-2003	14	2.74						
08-Oct-2003	22-Oct-2003	14	2.60						
22-Oct-2003	06-Nov-2003	15	1.63						
06-Nov-2003	19-Nov-2003	13	2.27						
19-Nov-2003	03-Dec-2003	14	1.40						
03-Dec-2003	17-Dec-2003	14	1.81						
17-Dec-2003	31-Dec-2003	14	1.67						
31-Dec-2003	28-Jan-2004	28	2.04						
28-Jan-2004	25-Feb-2004	28	1.56	Filter-Pack, 4 Weekly					

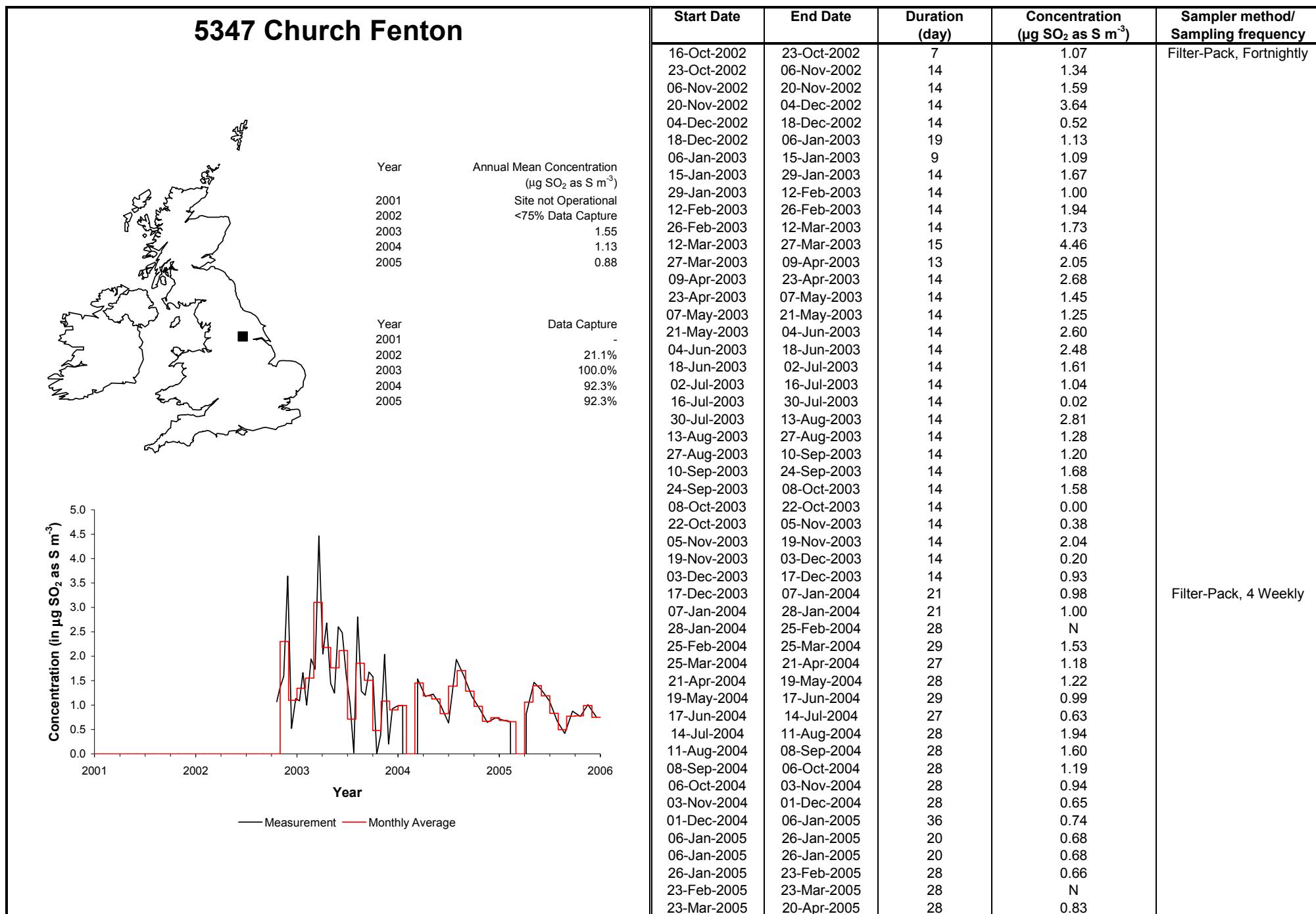
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5322 Hebden Bridge

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler method/ Sampling frequency
13-Mar-2002	27-Mar-2002	14	1.66	Filter-Pack, Fortnightly	24-Mar-2004	21-Apr-2004	28	1.32	Filter-Pack, 4 Weekly
27-Mar-2002	10-Apr-2002	14	N		21-Apr-2004	19-May-2004	28	0.31	
10-Apr-2002	24-Apr-2002	14	0.94		19-May-2004	16-Jun-2004	28	0.92	
24-Apr-2002	08-May-2002	14	0.69		16-Jun-2004	14-Jul-2004	28	0.36	
08-May-2002	22-May-2002	14	1.15		14-Jul-2004	11-Aug-2004	28	1.00	
22-May-2002	05-Jun-2002	14	0.63		11-Aug-2004	08-Sep-2004	28	0.70	
05-Jun-2002	19-Jun-2002	14	0.69		08-Sep-2004	06-Oct-2004	28	0.82	
19-Jun-2002	03-Jul-2002	14	0.40		06-Oct-2004	03-Nov-2004	28	0.39	
03-Jul-2002	16-Jul-2002	13	0.84		03-Nov-2004	01-Dec-2004	28	0.63	
16-Jul-2002	01-Aug-2002	16	0.76		01-Dec-2004	05-Jan-2005	35	0.56	
01-Aug-2002	14-Aug-2002	13	0.57		05-Jan-2005	26-Jan-2005	21	0.35	
14-Aug-2002	28-Aug-2002	14	0.79		26-Jan-2005	22-Feb-2005	27	0.37	
28-Aug-2002	11-Sep-2002	14	1.04		22-Feb-2005	23-Mar-2005	29	0.52	
11-Sep-2002	25-Sep-2002	14	1.30		23-Mar-2005	20-Apr-2005	28	0.96	
25-Sep-2002	08-Oct-2002	13	1.08		20-Apr-2005	18-May-2005	28	1.03	
08-Oct-2002	23-Oct-2002	15	2.31		18-May-2005	15-Jun-2005	28	0.62	
23-Oct-2002	06-Nov-2002	14	0.88		15-Jun-2005	13-Jul-2005	28	0.92	
06-Nov-2002	20-Nov-2002	14	1.04		13-Jul-2005	10-Aug-2005	28	0.44	
20-Nov-2002	04-Dec-2002	14	0.93		10-Aug-2005	10-Sep-2005	31	N	
04-Dec-2002	18-Dec-2002	14	0.72		10-Sep-2005	01-Jan-2006	113	N	
18-Dec-2002	02-Jan-2003	15	2.19		01-Jan-2006				Monitoring terminated
02-Jan-2003	15-Jan-2003	13	0.96						
15-Jan-2003	29-Jan-2003	14	0.47						
29-Jan-2003	12-Feb-2003	14	0.71						
12-Feb-2003	26-Feb-2003	14	7.67						
26-Feb-2003	12-Mar-2003	14	1.50						
12-Mar-2003	26-Mar-2003	14	4.70						
26-Mar-2003	09-Apr-2003	14	3.37						
09-Apr-2003	23-Apr-2003	14	4.03						
23-Apr-2003	07-May-2003	14	1.13						
07-May-2003	21-May-2003	14	0.49						
21-May-2003	04-Jun-2003	14	1.60						
04-Jun-2003	18-Jun-2003	14	1.02						
18-Jun-2003	02-Jul-2003	14	1.21						
02-Jul-2003	16-Jul-2003	14	2.23						
16-Jul-2003	30-Jul-2003	14	0.47						
30-Jul-2003	13-Aug-2003	14	1.37						
13-Aug-2003	27-Aug-2003	14	0.88						
27-Aug-2003	10-Sep-2003	14	0.85						
10-Sep-2003	24-Sep-2003	14	1.08						
24-Sep-2003	08-Oct-2003	14	1.33						
08-Oct-2003	22-Oct-2003	14	2.28						
22-Oct-2003	05-Nov-2003	14	0.67						
05-Nov-2003	19-Nov-2003	14	1.97						
19-Nov-2003	03-Dec-2003	14	2.87						
03-Dec-2003	17-Dec-2003	14	2.45						
17-Dec-2003	07-Jan-2004	21	1.10						
07-Jan-2004	28-Jan-2004	21	0.48						
28-Jan-2004	25-Feb-2004	28	0.02						
25-Feb-2004	24-Mar-2004	28	0.77	Filter-Pack, 4 Weekly					

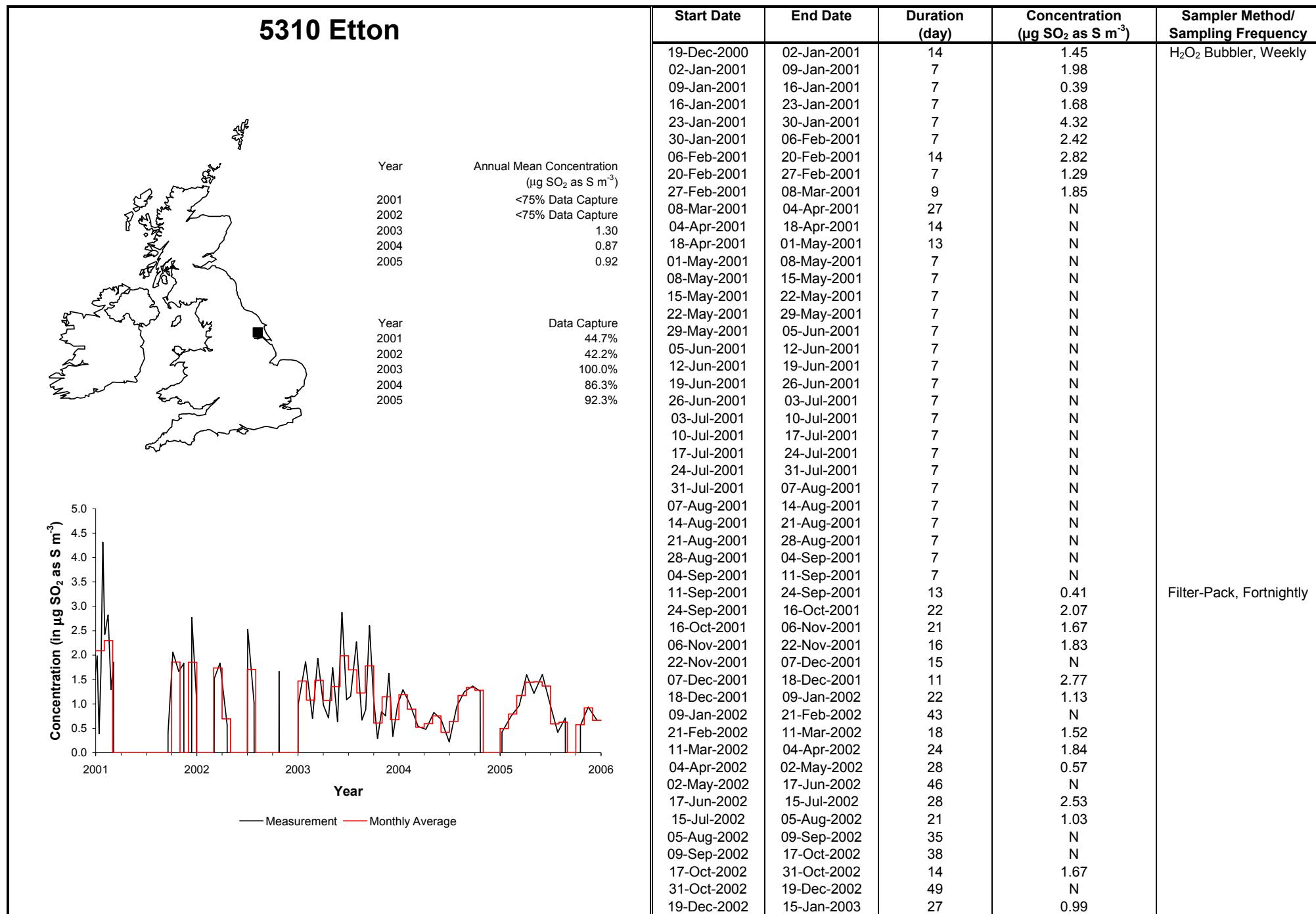
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5347 Church Fenton

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
20-Apr-2005	18-May-2005	28	1.47	Filter-Pack, 4 Weekly					
18-May-2005	15-Jun-2005	28	1.31						
15-Jun-2005	13-Jul-2005	28	1.09						
13-Jul-2005	10-Aug-2005	28	0.67						
10-Aug-2005	08-Sep-2005	29	0.42						
08-Sep-2005	05-Oct-2005	27	0.88						
05-Oct-2005	02-Nov-2005	28	0.77						
02-Nov-2005	30-Nov-2005	28	1.01						
30-Nov-2005	04-Jan-2006	35	0.75						
04-Jan-2006				Monitoring terminated					

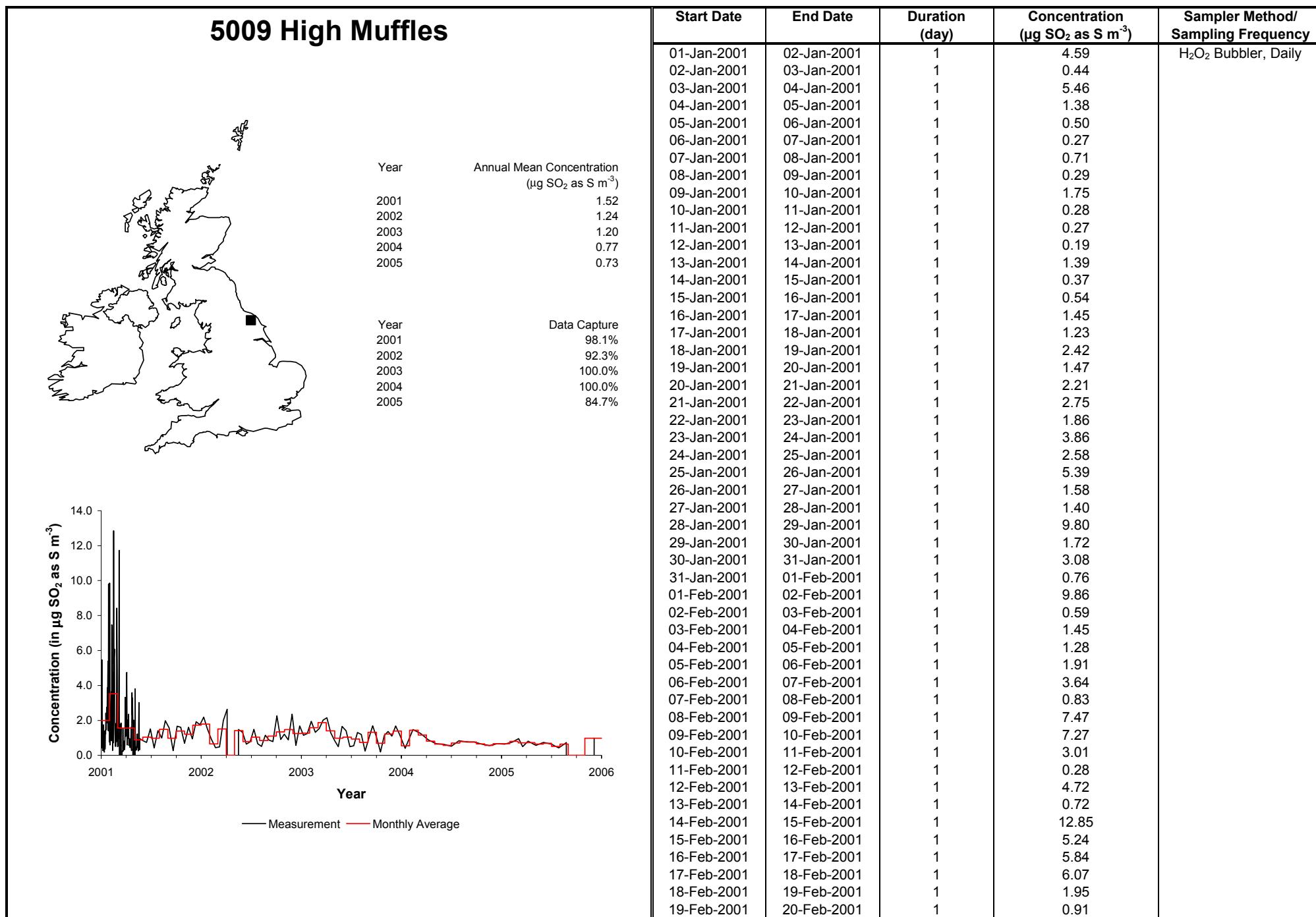
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5310 Etton

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
15-Jan-2003	10-Feb-2003	26	1.87	Filter-Pack, Fortnightly					
10-Feb-2003	03-Mar-2003	21	0.71						
03-Mar-2003	20-Mar-2003	17	1.94						
20-Mar-2003	14-Apr-2003	25	0.98						
14-Apr-2003	24-Apr-2003	10	0.71						
24-Apr-2003	15-May-2003	21	1.75						
15-May-2003	29-May-2003	14	0.63						
29-May-2003	16-Jun-2003	18	2.88						
16-Jun-2003	30-Jun-2003	14	1.09						
30-Jun-2003	17-Jul-2003	17	1.16						
17-Jul-2003	11-Aug-2003	25	2.27						
11-Aug-2003	27-Aug-2003	16	0.67						
27-Aug-2003	08-Sep-2003	12	0.89						
08-Sep-2003	22-Sep-2003	14	2.61						
22-Sep-2003	06-Oct-2003	14	1.19						
06-Oct-2003	22-Oct-2003	16	0.29						
22-Oct-2003	06-Nov-2003	15	0.84						
06-Nov-2003	18-Nov-2003	12	0.76						
18-Nov-2003	01-Dec-2003	13	1.63						
01-Dec-2003	15-Dec-2003	14	0.33						
15-Dec-2003	05-Jan-2004	21	0.97	Filter-Pack, 4 Weekly					
05-Jan-2004	26-Jan-2004	21	1.30						
26-Jan-2004	24-Feb-2004	29	0.99						
24-Feb-2004	22-Mar-2004	27	0.54						
22-Mar-2004	21-Apr-2004	30	0.48						
21-Apr-2004	17-May-2004	26	0.82						
17-May-2004	14-Jun-2004	28	0.69						
14-Jun-2004	14-Jul-2004	30	0.22						
14-Jul-2004	09-Aug-2004	26	0.95						
09-Aug-2004	08-Sep-2004	30	1.25						
08-Sep-2004	08-Oct-2004	30	1.37						
08-Oct-2004	01-Nov-2004	24	1.26						
01-Nov-2004	01-Jan-2005	61	N						
21-Dec-2004	25-Jan-2005	35	0.42						
25-Jan-2005	24-Feb-2005	30	0.76						
24-Feb-2005	22-Mar-2005	26	0.97						
22-Mar-2005	19-Apr-2005	28	1.60						
19-Apr-2005	13-May-2005	24	1.21						
13-May-2005	20-Jun-2005	38	1.61						
20-Jun-2005	11-Jul-2005	21	0.96						
11-Jul-2005	10-Aug-2005	30	0.42						
10-Aug-2005	06-Sep-2005	27	0.71						
06-Sep-2005	04-Oct-2005	28	N						
04-Oct-2005	31-Oct-2005	27	0.56						
31-Oct-2005	29-Nov-2005	29	0.94						
29-Nov-2005	03-Jan-2006	35	0.66	Monitoring terminated					

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5009 High Muffles

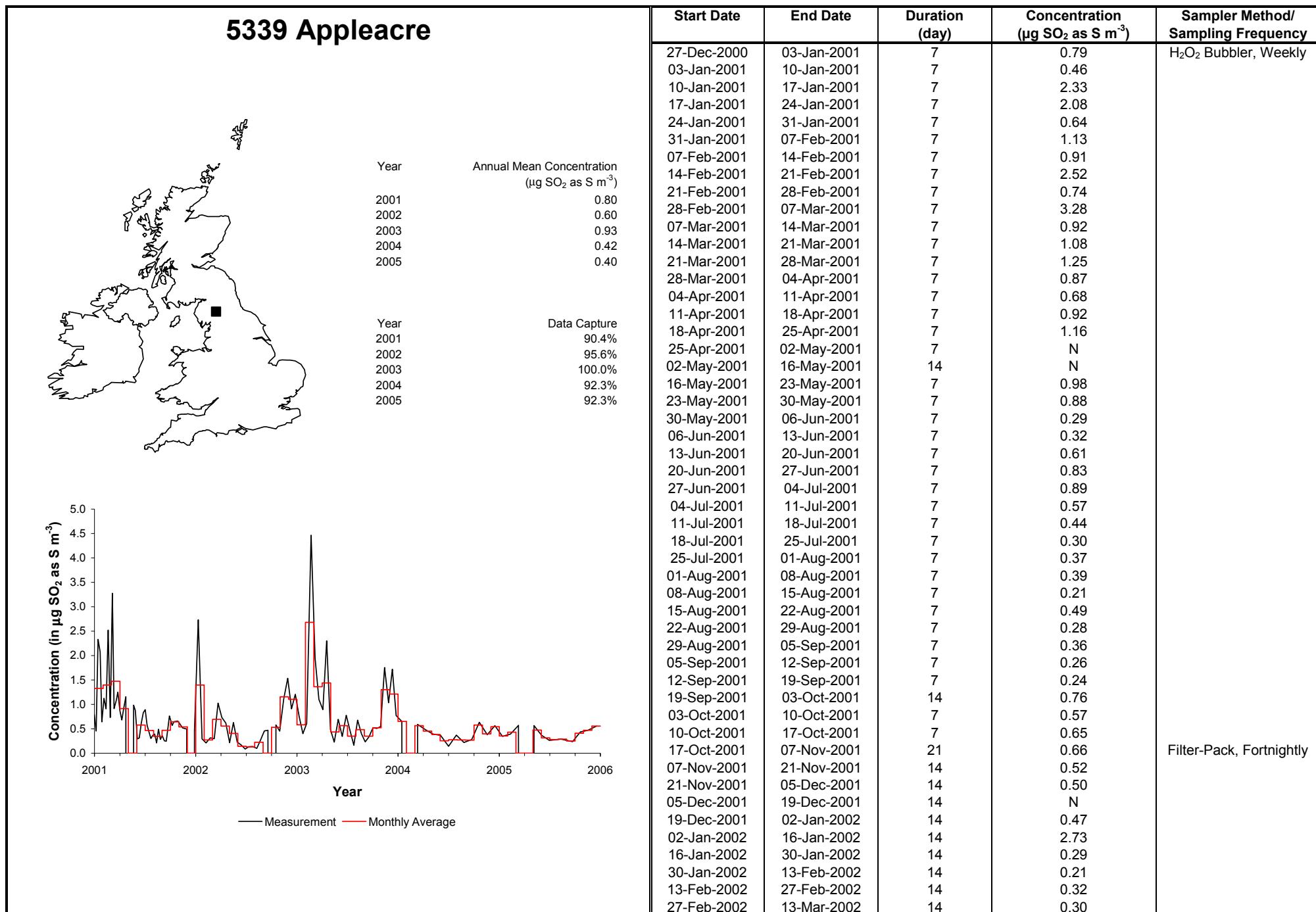
Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
20-Feb-2001	21-Feb-2001	1	0.52	H ₂ O ₂ Bubbler, Daily	11-Apr-2001	12-Apr-2001	1	0.61	
21-Feb-2001	22-Feb-2001	1	0.51		12-Apr-2001	13-Apr-2001	1	0.57	H ₂ O ₂ Bubbler, Daily
22-Feb-2001	23-Feb-2001	1	1.82		13-Apr-2001	14-Apr-2001	1	0.96	
23-Feb-2001	24-Feb-2001	1	0.79		14-Apr-2001	15-Apr-2001	1	0.45	
24-Feb-2001	25-Feb-2001	1	4.23		15-Apr-2001	16-Apr-2001	1	0.46	
25-Feb-2001	26-Feb-2001	1	8.42		16-Apr-2001	17-Apr-2001	1	0.58	
26-Feb-2001	27-Feb-2001	1	4.87		17-Apr-2001	18-Apr-2001	1	0.49	
27-Feb-2001	28-Feb-2001	1	1.11		18-Apr-2001	19-Apr-2001	1	1.60	
28-Feb-2001	01-Mar-2001	1	0.50		19-Apr-2001	20-Apr-2001	1	0.40	
01-Mar-2001	02-Mar-2001	1	0.56		20-Apr-2001	21-Apr-2001	1	0.26	
02-Mar-2001	03-Mar-2001	1	1.25		21-Apr-2001	22-Apr-2001	1	3.58	
03-Mar-2001	04-Mar-2001	1	0.94		22-Apr-2001	23-Apr-2001	1	2.32	
04-Mar-2001	05-Mar-2001	1	5.13		23-Apr-2001	24-Apr-2001	1	3.28	
05-Mar-2001	06-Mar-2001	1	11.74		24-Apr-2001	25-Apr-2001	1	1.85	
06-Mar-2001	07-Mar-2001	1	1.89		25-Apr-2001	26-Apr-2001	1	N	
07-Mar-2001	08-Mar-2001	1	N		26-Apr-2001	27-Apr-2001	1	1.42	
08-Mar-2001	09-Mar-2001	1	N		27-Apr-2001	28-Apr-2001	1	2.01	
09-Mar-2001	10-Mar-2001	1	1.78		28-Apr-2001	29-Apr-2001	1	0.38	
10-Mar-2001	11-Mar-2001	1	1.51		29-Apr-2001	30-Apr-2001	1	N	
11-Mar-2001	12-Mar-2001	1	0.77		30-Apr-2001	01-May-2001	1	0.84	
12-Mar-2001	13-Mar-2001	1	1.85		01-May-2001	02-May-2001	1	N	
13-Mar-2001	14-Mar-2001	1	0.57		02-May-2001	03-May-2001	1	3.80	
14-Mar-2001	15-Mar-2001	1	N		03-May-2001	04-May-2001	1	0.37	
15-Mar-2001	16-Mar-2001	1	N		04-May-2001	05-May-2001	1	0.44	
16-Mar-2001	17-Mar-2001	1	0.25		05-May-2001	06-May-2001	1	0.34	
17-Mar-2001	18-Mar-2001	1	0.24		06-May-2001	07-May-2001	1	0.30	
18-Mar-2001	19-Mar-2001	1	0.22		07-May-2001	08-May-2001	1	0.48	
19-Mar-2001	20-Mar-2001	1	1.52		08-May-2001	09-May-2001	1	0.33	
20-Mar-2001	21-Mar-2001	1	0.24		09-May-2001	10-May-2001	1	0.71	
21-Mar-2001	22-Mar-2001	1	0.41		10-May-2001	11-May-2001	1	1.22	
22-Mar-2001	23-Mar-2001	1	0.72		11-May-2001	12-May-2001	1	0.69	
23-Mar-2001	24-Mar-2001	1	0.82		12-May-2001	13-May-2001	1	0.45	
24-Mar-2001	25-Mar-2001	1	0.40		13-May-2001	14-May-2001	1	0.48	
25-Mar-2001	26-Mar-2001	1	0.31		14-May-2001	15-May-2001	1	0.26	
26-Mar-2001	27-Mar-2001	1	0.52		15-May-2001	16-May-2001	1	0.42	
27-Mar-2001	28-Mar-2001	1	1.33		16-May-2001	17-May-2001	1	1.99	
28-Mar-2001	29-Mar-2001	1	3.32		17-May-2001	18-May-2001	1	3.02	
29-Mar-2001	30-Mar-2001	1	1.09		18-May-2001	19-May-2001	1	0.41	
30-Mar-2001	31-Mar-2001	1	1.53		19-May-2001	20-May-2001	1	0.32	
31-Mar-2001	01-Apr-2001	1	1.15		20-May-2001	21-May-2001	1	0.95	
01-Apr-2001	02-Apr-2001	1	3.86		21-May-2001	06-Jun-2001	16	0.86	Filter-Pack, Fortnightly
02-Apr-2001	03-Apr-2001	1	4.74		06-Jun-2001	20-Jun-2001	14	0.73	
03-Apr-2001	04-Apr-2001	1	2.82		20-Jun-2001	04-Jul-2001	14	1.51	
04-Apr-2001	05-Apr-2001	1	0.60		04-Jul-2001	18-Jul-2001	14	0.43	
05-Apr-2001	06-Apr-2001	1	2.03		18-Jul-2001	01-Aug-2001	14	1.41	
06-Apr-2001	07-Apr-2001	1	1.63		01-Aug-2001	15-Aug-2001	14	0.99	
07-Apr-2001	08-Apr-2001	1	1.90		15-Aug-2001	29-Aug-2001	14	1.98	
08-Apr-2001	09-Apr-2001	1	0.96		29-Aug-2001	12-Sep-2001	14	1.58	
09-Apr-2001	10-Apr-2001	1	2.35		12-Sep-2001	26-Sep-2001	14	0.27	
10-Apr-2001	11-Apr-2001	1	0.56		26-Sep-2001	10-Oct-2001	14	1.67	

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

5009 High Muffles

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
10-Oct-2001	24-Oct-2001	14	1.62	Filter-Pack, Fortnightly	10-Sep-2003	24-Sep-2003	14	1.69	Filter-Pack, Fortnightly
24-Oct-2001	07-Nov-2001	14	0.69		24-Sep-2003	08-Oct-2003	14	1.01	
07-Nov-2001	21-Nov-2001	14	1.61		08-Oct-2003	22-Oct-2003	14	0.20	
21-Nov-2001	05-Dec-2001	14	0.95		22-Oct-2003	05-Nov-2003	14	1.13	
05-Dec-2001	19-Dec-2001	14	1.92		05-Nov-2003	19-Nov-2003	14	1.37	
19-Dec-2001	02-Jan-2002	14	1.75		19-Nov-2003	03-Dec-2003	14	1.10	
02-Jan-2002	16-Jan-2002	14	2.19		03-Dec-2003	17-Dec-2003	14	1.68	
16-Jan-2002	30-Jan-2002	14	1.52		17-Dec-2003	31-Dec-2003	14	1.21	
30-Jan-2002	13-Feb-2002	14	0.93		31-Dec-2003	28-Jan-2004	28	0.41	
13-Feb-2002	27-Feb-2002	14	0.43		28-Jan-2004	25-Feb-2004	28	1.48	Filter-Pack, 4 Weekly
27-Feb-2002	13-Mar-2002	14	0.49		25-Feb-2004	24-Mar-2004	28	1.25	
13-Mar-2002	27-Mar-2002	14	1.99		24-Mar-2004	21-Apr-2004	28	0.88	
27-Mar-2002	10-Apr-2002	14	2.64		21-Apr-2004	19-May-2004	28	0.66	
10-Apr-2002	24-Apr-2002	14	N		19-May-2004	16-Jun-2004	28	0.63	
24-Apr-2002	08-May-2002	14	N		16-Jun-2004	14-Jul-2004	28	0.51	
08-May-2002	22-May-2002	14	1.48		14-Jul-2004	11-Aug-2004	28	0.84	
22-May-2002	05-Jun-2002	14	1.32		11-Aug-2004	08-Sep-2004	28	0.77	
05-Jun-2002	19-Jun-2002	14	0.64		08-Sep-2004	06-Oct-2004	28	0.76	
19-Jun-2002	03-Jul-2002	14	0.77		06-Oct-2004	03-Nov-2004	28	0.64	
03-Jul-2002	17-Jul-2002	14	1.48		03-Nov-2004	01-Dec-2004	28	0.56	
17-Jul-2002	31-Jul-2002	14	0.67		01-Dec-2004	29-Dec-2004	28	0.67	
31-Jul-2002	14-Aug-2002	14	0.51		29-Dec-2004	26-Jan-2005	28	0.65	
14-Aug-2002	28-Aug-2002	14	1.16		26-Jan-2005	23-Feb-2005	28	0.76	
28-Aug-2002	11-Sep-2002	14	0.87		23-Feb-2005	09-Mar-2005	14	0.95	
11-Sep-2002	25-Sep-2002	14	0.78		09-Mar-2005	23-Mar-2005	14	0.50	
25-Sep-2002	09-Oct-2002	14	2.26		23-Mar-2005	20-Apr-2005	28	0.82	
09-Oct-2002	23-Oct-2002	14	0.91		20-Apr-2005	18-May-2005	28	0.56	
23-Oct-2002	06-Nov-2002	14	1.21		18-May-2005	15-Jun-2005	28	0.73	
06-Nov-2002	20-Nov-2002	14	0.88		15-Jun-2005	13-Jul-2005	28	0.64	
20-Nov-2002	04-Dec-2002	14	2.36		13-Jul-2005	10-Aug-2005	28	0.43	
04-Dec-2002	18-Dec-2002	14	0.57		10-Aug-2005	07-Sep-2005	28	0.72	
18-Dec-2002	01-Jan-2003	14	1.68		07-Sep-2005	05-Oct-2005	28	N	
01-Jan-2003	15-Jan-2003	14	1.16		05-Oct-2005	02-Nov-2005	28	N	
15-Jan-2003	29-Jan-2003	14	1.24		02-Nov-2005	04-Jan-2006	63	0.98	Monitoring terminated
29-Jan-2003	12-Feb-2003	14	1.94		04-Jan-2006				
12-Feb-2003	26-Feb-2003	14	1.31						
26-Feb-2003	12-Mar-2003	14	1.54						
12-Mar-2003	26-Mar-2003	14	2.02						
26-Mar-2003	09-Apr-2003	14	2.15						
09-Apr-2003	23-Apr-2003	14	1.29						
23-Apr-2003	07-May-2003	14	0.84						
07-May-2003	21-May-2003	14	0.50						
21-May-2003	04-Jun-2003	14	1.66						
04-Jun-2003	18-Jun-2003	14	1.40						
18-Jun-2003	02-Jul-2003	14	0.50						
02-Jul-2003	16-Jul-2003	14	0.55						
16-Jul-2003	30-Jul-2003	14	1.31						
30-Jul-2003	13-Aug-2003	14	1.19						
13-Aug-2003	27-Aug-2003	14	0.25						
27-Aug-2003	10-Sep-2003	14	0.97						

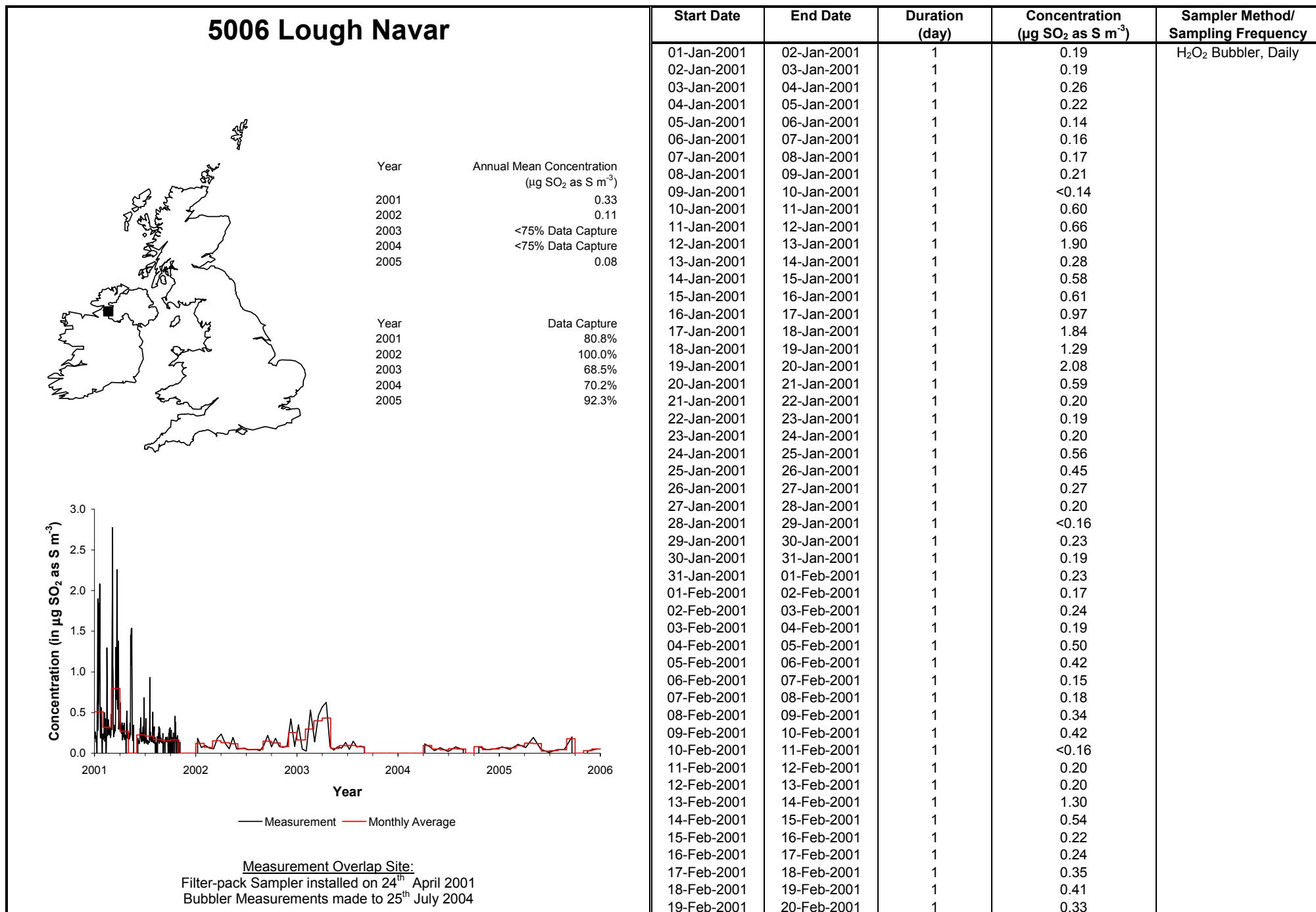
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



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Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
13-Mar-2002	27-Mar-2002	14	1.03	Filter-Pack, Fortnightly	25-Feb-2004	24-Mar-2004	28	0.59	Filter-Pack, 4 Weekly
27-Mar-2002	10-Apr-2002	14	0.73		24-Mar-2004	21-Apr-2004	28	0.49	
10-Apr-2002	24-Apr-2002	14	0.62		21-Apr-2004	18-May-2004	27	0.40	
24-Apr-2002	08-May-2002	14	0.22		18-May-2004	16-Jun-2004	29	0.37	
08-May-2002	22-May-2002	14	0.63		16-Jun-2004	14-Jul-2004	28	0.14	
22-May-2002	05-Jun-2002	14	0.23		14-Jul-2004	11-Aug-2004	28	0.37	
05-Jun-2002	19-Jun-2002	14	0.17		11-Aug-2004	08-Sep-2004	28	0.22	
19-Jun-2002	03-Jul-2002	14	0.09		08-Sep-2004	06-Oct-2004	28	0.28	
03-Jul-2002	16-Jul-2002	13	0.13		06-Oct-2004	03-Nov-2004	28	0.64	
16-Jul-2002	31-Jul-2002	15	0.14		03-Nov-2004	01-Dec-2004	28	0.38	
31-Jul-2002	14-Aug-2002	14	0.10		01-Dec-2004	29-Dec-2004	28	0.57	
14-Aug-2002	28-Aug-2002	14	0.27		29-Dec-2004	26-Jan-2005	28	0.35	
28-Aug-2002	11-Sep-2002	14	0.46		26-Jan-2005	23-Feb-2005	28	0.39	
11-Sep-2002	23-Sep-2002	12	0.47		23-Feb-2005	23-Mar-2005	28	0.57	
23-Sep-2002	09-Oct-2002	16	N		23-Mar-2005	20-Apr-2005	28	N	
09-Oct-2002	23-Oct-2002	14	0.58		20-Apr-2005	18-May-2005	28	0.57	
23-Oct-2002	06-Nov-2002	14	0.46		18-May-2005	15-Jun-2005	28	0.37	
06-Nov-2002	20-Nov-2002	14	1.11		15-Jun-2005	13-Jul-2005	28	0.27	
20-Nov-2002	04-Dec-2002	14	1.53		13-Jul-2005	07-Sep-2005	56	0.29	
04-Dec-2002	18-Dec-2002	14	0.91		07-Sep-2005	05-Oct-2005	28	0.24	
18-Dec-2002	01-Jan-2003	14	1.21		05-Oct-2005	02-Nov-2005	28	0.44	
01-Jan-2003	15-Jan-2003	14	0.76		02-Nov-2005	30-Nov-2005	28	0.47	
15-Jan-2003	29-Jan-2003	14	0.40		30-Nov-2005	04-Jan-2006	35	0.56	
29-Jan-2003	12-Feb-2003	14	0.61		04-Jan-2006				Monitoring terminated
12-Feb-2003	26-Feb-2003	14	4.47						
26-Feb-2003	12-Mar-2003	14	1.94						
12-Mar-2003	26-Mar-2003	14	1.10						
26-Mar-2003	09-Apr-2003	14	0.90						
09-Apr-2003	23-Apr-2003	14	2.30						
23-Apr-2003	06-May-2003	13	0.48						
06-May-2003	21-May-2003	15	0.23						
21-May-2003	04-Jun-2003	14	0.70						
04-Jun-2003	18-Jun-2003	14	0.35						
18-Jun-2003	02-Jul-2003	14	0.78						
02-Jul-2003	16-Jul-2003	14	0.46						
16-Jul-2003	30-Jul-2003	14	0.16						
30-Jul-2003	13-Aug-2003	14	0.68						
13-Aug-2003	27-Aug-2003	14	0.40						
27-Aug-2003	10-Sep-2003	14	0.23						
10-Sep-2003	24-Sep-2003	14	0.34						
24-Sep-2003	08-Oct-2003	14	0.52						
08-Oct-2003	22-Oct-2003	14	0.51						
22-Oct-2003	05-Nov-2003	14	0.55						
05-Nov-2003	19-Nov-2003	14	1.76						
19-Nov-2003	03-Dec-2003	14	1.03						
03-Dec-2003	17-Dec-2003	14	1.72						
17-Dec-2003	31-Dec-2003	14	0.77						
31-Dec-2003	28-Jan-2004	28	0.65	Filter-Pack, 4 Weekly					
28-Jan-2004	19-Feb-2004	22	N						
19-Feb-2004	25-Feb-2004	6	N						

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



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Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
20-Feb-2001	21-Feb-2001	1	0.25	H ₂ O ₂ Bubbler, Daily	11-Apr-2001	12-Apr-2001	1	0.26	H ₂ O ₂ Bubbler, Daily
21-Feb-2001	22-Feb-2001	1	0.23		12-Apr-2001	13-Apr-2001	1	0.34	
22-Feb-2001	23-Feb-2001	1	0.30		13-Apr-2001	14-Apr-2001	1	0.26	
23-Feb-2001	24-Feb-2001	1	0.22		14-Apr-2001	15-Apr-2001	1	0.20	
24-Feb-2001	25-Feb-2001	1	0.30		15-Apr-2001	16-Apr-2001	1	0.37	
25-Feb-2001	26-Feb-2001	1	0.20		16-Apr-2001	17-Apr-2001	1	0.20	
26-Feb-2001	27-Feb-2001	1	0.23		17-Apr-2001	18-Apr-2001	1	0.17	
27-Feb-2001	28-Feb-2001	1	0.48		18-Apr-2001	19-Apr-2001	1	0.19	
28-Feb-2001	01-Mar-2001	1	0.30		19-Apr-2001	20-Apr-2001	1	0.20	
01-Mar-2001	02-Mar-2001	1	0.29		20-Apr-2001	21-Apr-2001	1	0.22	
02-Mar-2001	03-Mar-2001	1	1.16		21-Apr-2001	22-Apr-2001	1	0.17	
03-Mar-2001	04-Mar-2001	1	1.99		22-Apr-2001	23-Apr-2001	1	<0.16	
04-Mar-2001	05-Mar-2001	1	2.77		23-Apr-2001	24-Apr-2001	1	0.21	
05-Mar-2001	06-Mar-2001	1	1.10		24-Apr-2001	25-Apr-2001	1	0.46	
06-Mar-2001	07-Mar-2001	1	0.86		25-Apr-2001	26-Apr-2001	1	0.52	
07-Mar-2001	08-Mar-2001	1	0.42		26-Apr-2001	27-Apr-2001	1	0.37	
08-Mar-2001	09-Mar-2001	1	0.20		27-Apr-2001	28-Apr-2001	1	0.21	
09-Mar-2001	10-Mar-2001	1	0.23		28-Apr-2001	29-Apr-2001	1	0.18	
10-Mar-2001	11-Mar-2001	1	0.35		29-Apr-2001	30-Apr-2001	1	0.19	
11-Mar-2001	12-Mar-2001	1	0.25		30-Apr-2001	01-May-2001	1	0.21	
12-Mar-2001	13-Mar-2001	1	0.32		01-May-2001	02-May-2001	1	0.21	
13-Mar-2001	14-Mar-2001	1	0.32		02-May-2001	03-May-2001	1	0.19	
14-Mar-2001	15-Mar-2001	1	0.28		03-May-2001	04-May-2001	1	0.17	
15-Mar-2001	16-Mar-2001	1	0.38		04-May-2001	05-May-2001	1	0.18	
16-Mar-2001	17-Mar-2001	1	1.30		05-May-2001	06-May-2001	1	0.25	
17-Mar-2001	18-Mar-2001	1	1.04		06-May-2001	07-May-2001	1	0.19	
18-Mar-2001	19-Mar-2001	1	0.66		07-May-2001	08-May-2001	1	0.37	
19-Mar-2001	20-Mar-2001	1	0.95		08-May-2001	09-May-2001	1	0.23	
20-Mar-2001	21-Mar-2001	1	2.26		09-May-2001	10-May-2001	1	1.45	
21-Mar-2001	22-Mar-2001	1	1.99		10-May-2001	11-May-2001	1	1.09	
22-Mar-2001	23-Mar-2001	1	0.62		11-May-2001	12-May-2001	1	1.53	
23-Mar-2001	24-Mar-2001	1	0.54		12-May-2001	13-May-2001	1	1.12	
24-Mar-2001	25-Mar-2001	1	0.58		13-May-2001	14-May-2001	1	1.54	
25-Mar-2001	26-Mar-2001	1	0.77		14-May-2001	15-May-2001	1	0.62	
26-Mar-2001	27-Mar-2001	1	1.38		15-May-2001	16-May-2001	1	0.24	
27-Mar-2001	28-Mar-2001	1	0.30		16-May-2001	17-May-2001	1	0.18	
28-Mar-2001	29-Mar-2001	1	0.38		17-May-2001	18-May-2001	1	0.15	
29-Mar-2001	30-Mar-2001	1	0.35		18-May-2001	19-May-2001	1	0.20	
30-Mar-2001	31-Mar-2001	1	0.34		19-May-2001	20-May-2001	1	0.24	
31-Mar-2001	01-Apr-2001	1	0.30		20-May-2001	21-May-2001	1	0.34	
01-Apr-2001	02-Apr-2001	1	0.62		21-May-2001	22-May-2001	1	N	
02-Apr-2001	03-Apr-2001	1	0.29		22-May-2001	23-May-2001	1	N	
03-Apr-2001	04-Apr-2001	1	0.32		23-May-2001	24-May-2001	1	N	
04-Apr-2001	05-Apr-2001	1	0.35		24-May-2001	25-May-2001	1	N	
05-Apr-2001	06-Apr-2001	1	0.25		25-May-2001	26-May-2001	1	N	
06-Apr-2001	07-Apr-2001	1	0.24		26-May-2001	27-May-2001	1	N	
07-Apr-2001	08-Apr-2001	1	0.25		27-May-2001	28-May-2001	1	N	
08-Apr-2001	09-Apr-2001	1	0.37		28-May-2001	29-May-2001	1	N	
09-Apr-2001	10-Apr-2001	1	0.16		29-May-2001	30-May-2001	1	N	
10-Apr-2001	11-Apr-2001	1	0.20		30-May-2001	31-May-2001	1	N	

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

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Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
31-May-2001	01-Jun-2001	1	N	H ₂ O ₂ Bubbler, Daily	20-Jul-2001	21-Jul-2001	1	0.26	H ₂ O ₂ Bubbler, Daily
01-Jun-2001	02-Jun-2001	1	N		21-Jul-2001	22-Jul-2001	1	0.16	
02-Jun-2001	03-Jun-2001	1	N		22-Jul-2001	23-Jul-2001	1	0.14	
03-Jun-2001	04-Jun-2001	1	N		23-Jul-2001	24-Jul-2001	1	0.14	
04-Jun-2001	05-Jun-2001	1	0.19		24-Jul-2001	25-Jul-2001	1	0.19	
05-Jun-2001	06-Jun-2001	1	0.14		25-Jul-2001	26-Jul-2001	1	0.20	
06-Jun-2001	07-Jun-2001	1	0.13		26-Jul-2001	27-Jul-2001	1	0.20	
07-Jun-2001	08-Jun-2001	1	0.15		27-Jul-2001	28-Jul-2001	1	0.14	
08-Jun-2001	09-Jun-2001	1	0.12		28-Jul-2001	29-Jul-2001	1	0.51	
09-Jun-2001	10-Jun-2001	1	0.13		29-Jul-2001	30-Jul-2001	1	0.15	
10-Jun-2001	11-Jun-2001	1	0.14		30-Jul-2001	31-Jul-2001	1	0.13	
11-Jun-2001	12-Jun-2001	1	0.20		31-Jul-2001	01-Aug-2001	1	0.16	
12-Jun-2001	13-Jun-2001	1	0.30		01-Aug-2001	02-Aug-2001	1	0.21	
13-Jun-2001	14-Jun-2001	1	0.28		02-Aug-2001	03-Aug-2001	1	0.33	
14-Jun-2001	15-Jun-2001	1	0.44		03-Aug-2001	04-Aug-2001	1	0.12	
15-Jun-2001	16-Jun-2001	1	0.30		04-Aug-2001	05-Aug-2001	1	0.15	
16-Jun-2001	17-Jun-2001	1	0.18		05-Aug-2001	06-Aug-2001	1	0.19	
17-Jun-2001	18-Jun-2001	1	0.14		06-Aug-2001	07-Aug-2001	1	0.19	
18-Jun-2001	19-Jun-2001	1	0.25		07-Aug-2001	08-Aug-2001	1	<0.12	
19-Jun-2001	20-Jun-2001	1	0.25		08-Aug-2001	09-Aug-2001	1	0.12	
20-Jun-2001	21-Jun-2001	1	0.15		09-Aug-2001	10-Aug-2001	1	0.13	
21-Jun-2001	22-Jun-2001	1	0.17		10-Aug-2001	11-Aug-2001	1	0.12	
22-Jun-2001	23-Jun-2001	1	0.32		11-Aug-2001	12-Aug-2001	1	<0.13	
23-Jun-2001	24-Jun-2001	1	0.33		12-Aug-2001	13-Aug-2001	1	<0.14	
24-Jun-2001	25-Jun-2001	1	0.16		13-Aug-2001	14-Aug-2001	1	0.20	
25-Jun-2001	26-Jun-2001	1	0.26		14-Aug-2001	15-Aug-2001	1	<0.13	
26-Jun-2001	27-Jun-2001	1	0.68		15-Aug-2001	16-Aug-2001	1	0.17	
27-Jun-2001	28-Jun-2001	1	0.12		16-Aug-2001	17-Aug-2001	1	0.17	
28-Jun-2001	29-Jun-2001	1	0.17		17-Aug-2001	18-Aug-2001	1	0.14	
29-Jun-2001	30-Jun-2001	1	0.23		18-Aug-2001	19-Aug-2001	1	0.25	
30-Jun-2001	01-Jul-2001	1	0.14		19-Aug-2001	20-Aug-2001	1	0.16	
01-Jul-2001	02-Jul-2001	1	0.14		20-Aug-2001	21-Aug-2001	1	0.33	
02-Jul-2001	03-Jul-2001	1	0.43		21-Aug-2001	22-Aug-2001	1	0.12	
03-Jul-2001	04-Jul-2001	1	0.17		22-Aug-2001	23-Aug-2001	1	0.31	
04-Jul-2001	05-Jul-2001	1	0.19		23-Aug-2001	24-Aug-2001	1	0.26	
05-Jul-2001	06-Jul-2001	1	0.12		24-Aug-2001	25-Aug-2001	1	0.21	
06-Jul-2001	07-Jul-2001	1	0.16		25-Aug-2001	26-Aug-2001	1	0.14	
07-Jul-2001	08-Jul-2001	1	0.12		26-Aug-2001	27-Aug-2001	1	0.19	
08-Jul-2001	09-Jul-2001	1	0.13		27-Aug-2001	28-Aug-2001	1	0.15	
09-Jul-2001	10-Jul-2001	1	0.16		28-Aug-2001	29-Aug-2001	1	0.18	
10-Jul-2001	11-Jul-2001	1	0.11		29-Aug-2001	30-Aug-2001	1	0.13	
11-Jul-2001	12-Jul-2001	1	0.14		30-Aug-2001	31-Aug-2001	1	0.14	
12-Jul-2001	13-Jul-2001	1	0.13		31-Aug-2001	01-Sep-2001	1	0.13	
13-Jul-2001	14-Jul-2001	1	0.13		01-Sep-2001	02-Sep-2001	1	0.15	
14-Jul-2001	15-Jul-2001	1	0.14		02-Sep-2001	03-Sep-2001	1	0.13	
15-Jul-2001	16-Jul-2001	1	0.13		03-Sep-2001	04-Sep-2001	1	0.24	
16-Jul-2001	17-Jul-2001	1	0.31		04-Sep-2001	05-Sep-2001	1	<0.12	
17-Jul-2001	18-Jul-2001	1	0.93		05-Sep-2001	06-Sep-2001	1	0.13	
18-Jul-2001	19-Jul-2001	1	0.31		06-Sep-2001	07-Sep-2001	1	0.13	
19-Jul-2001	20-Jul-2001	1	0.16		07-Sep-2001	08-Sep-2001	1	0.14	

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

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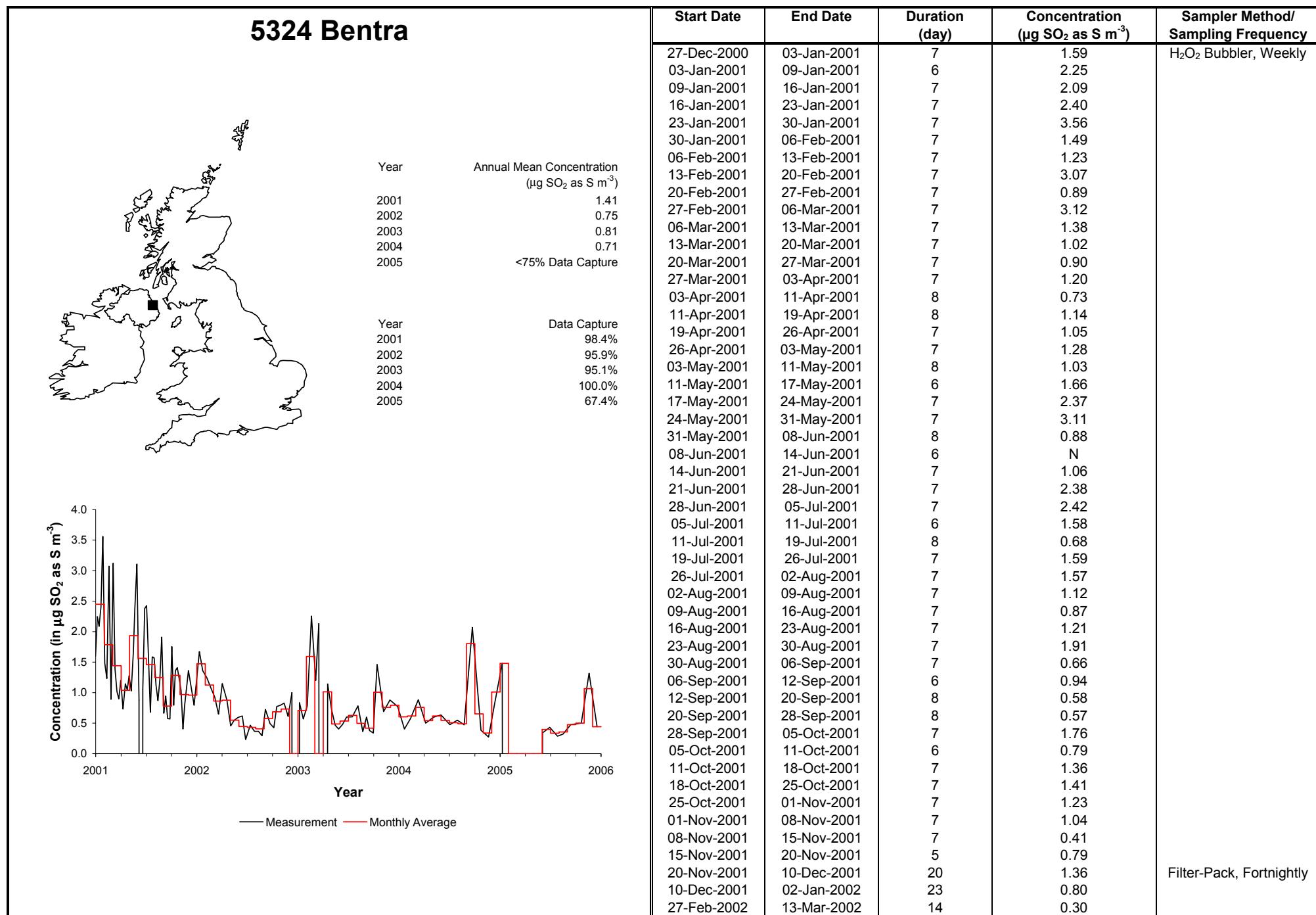
Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
08-Sep-2001	09-Sep-2001	1	0.14	H ₂ O ₂ Bubbler, Daily	28-Oct-2001	29-Oct-2001	1	<0.15	H ₂ O ₂ Bubbler, Daily
09-Sep-2001	10-Sep-2001	1	0.13		29-Oct-2001	30-Oct-2001	1	0.15	
10-Sep-2001	11-Sep-2001	1	<0.12		30-Oct-2001	31-Oct-2001	1	0.11	
11-Sep-2001	12-Sep-2001	1	0.17		31-Oct-2001	01-Nov-2001	1	0.11	
12-Sep-2001	13-Sep-2001	1	0.14		01-Nov-2001	02-Nov-2001	1	<0.12	
13-Sep-2001	14-Sep-2001	1	0.20		02-Nov-2001	03-Nov-2001	1	<0.12	
14-Sep-2001	15-Sep-2001	1	0.16		03-Nov-2001	04-Nov-2001	1	<0.12	
15-Sep-2001	16-Sep-2001	1	0.14		04-Nov-2001	05-Nov-2001	1	0.14	
16-Sep-2001	17-Sep-2001	1	0.14		05-Nov-2001	06-Nov-2001	1	N	
17-Sep-2001	18-Sep-2001	1	0.17		06-Nov-2001	07-Nov-2001	1	N	
18-Sep-2001	19-Sep-2001	1	0.18		07-Nov-2001	08-Nov-2001	1	N	
19-Sep-2001	20-Sep-2001	1	0.20		08-Nov-2001	09-Nov-2001	1	N	
20-Sep-2001	21-Sep-2001	1	0.14		09-Nov-2001	10-Nov-2001	1	N	
21-Sep-2001	22-Sep-2001	1	0.15		10-Nov-2001	11-Nov-2001	1	N	
22-Sep-2001	23-Sep-2001	1	<0.14		11-Nov-2001	12-Nov-2001	1	N	
23-Sep-2001	24-Sep-2001	1	<0.14		12-Nov-2001	13-Nov-2001	1	N	
24-Sep-2001	25-Sep-2001	1	0.25		13-Nov-2001	14-Nov-2001	1	N	
25-Sep-2001	26-Sep-2001	1	0.19		14-Nov-2001	15-Nov-2001	1	N	
26-Sep-2001	27-Sep-2001	1	0.30		15-Nov-2001	16-Nov-2001	1	N	
27-Sep-2001	28-Sep-2001	1	<0.14		16-Nov-2001	17-Nov-2001	1	N	
28-Sep-2001	29-Sep-2001	1	0.31		17-Nov-2001	18-Nov-2001	1	N	
29-Sep-2001	30-Sep-2001	1	<0.12		18-Nov-2001	19-Nov-2001	1	N	
30-Sep-2001	01-Oct-2001	1	0.22		19-Nov-2001	20-Nov-2001	1	N	
01-Oct-2001	02-Oct-2001	1	0.16		20-Nov-2001	21-Nov-2001	1	N	
02-Oct-2001	03-Oct-2001	1	0.22		21-Nov-2001	22-Nov-2001	1	N	
03-Oct-2001	04-Oct-2001	1	0.28		22-Nov-2001	23-Nov-2001	1	N	
04-Oct-2001	05-Oct-2001	1	<0.14		23-Nov-2001	24-Nov-2001	1	N	
05-Oct-2001	06-Oct-2001	1	<0.14		24-Nov-2001	25-Nov-2001	1	N	
06-Oct-2001	07-Oct-2001	1	0.19		25-Nov-2001	26-Nov-2001	1	N	
07-Oct-2001	08-Oct-2001	1	<0.15		26-Nov-2001	27-Nov-2001	1	N	
08-Oct-2001	09-Oct-2001	1	0.15		27-Nov-2001	28-Nov-2001	1	N	
09-Oct-2001	10-Oct-2001	1	0.15		28-Nov-2001	29-Nov-2001	1	N	
10-Oct-2001	11-Oct-2001	1	0.14		29-Nov-2001	30-Nov-2001	1	N	
11-Oct-2001	12-Oct-2001	1	0.25		30-Nov-2001	01-Dec-2001	1	N	
12-Oct-2001	13-Oct-2001	1	<0.13		01-Dec-2001	02-Dec-2001	1	N	
13-Oct-2001	14-Oct-2001	1	<0.13		02-Dec-2001	03-Dec-2001	1	N	
14-Oct-2001	15-Oct-2001	1	<0.16		03-Dec-2001	04-Dec-2001	1	N	
15-Oct-2001	16-Oct-2001	1	0.20		04-Dec-2001	05-Dec-2001	1	N	
16-Oct-2001	17-Oct-2001	1	0.15		05-Dec-2001	06-Dec-2001	1	N	
17-Oct-2001	18-Oct-2001	1	0.46		06-Dec-2001	07-Dec-2001	1	N	
18-Oct-2001	19-Oct-2001	1	0.26		07-Dec-2001	08-Dec-2001	1	N	
19-Oct-2001	20-Oct-2001	1	0.38		08-Dec-2001	09-Dec-2001	1	N	
20-Oct-2001	21-Oct-2001	1	0.13		09-Dec-2001	10-Dec-2001	1	N	
21-Oct-2001	22-Oct-2001	1	<0.15		10-Dec-2001	11-Dec-2001	1	N	
22-Oct-2001	23-Oct-2001	1	0.19		11-Dec-2001	12-Dec-2001	1	N	
23-Oct-2001	24-Oct-2001	1	0.16		12-Dec-2001	13-Dec-2001	1	N	
24-Oct-2001	25-Oct-2001	1	0.16		13-Dec-2001	14-Dec-2001	1	N	
25-Oct-2001	26-Oct-2001	1	0.20		14-Dec-2001	15-Dec-2001	1	N	
26-Oct-2001	27-Oct-2001	1	0.21		15-Dec-2001	16-Dec-2001	1	N	
27-Oct-2001	28-Oct-2001	1	<0.13		16-Dec-2001	17-Dec-2001	1	N	

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

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Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
17-Dec-2001	18-Dec-2001	1	N		05-May-2003	19-May-2003	14	0.04	
18-Dec-2001	19-Dec-2001	1	N		19-May-2003	02-Jun-2003	14	0.08	
19-Dec-2001	20-Dec-2001	1	N		02-Jun-2003	16-Jun-2003	14	0.06	
20-Dec-2001	21-Dec-2001	1	N		16-Jun-2003	30-Jun-2003	14	0.13	
21-Dec-2001	22-Dec-2001	1	N		30-Jun-2003	14-Jul-2003	14	0.05	
22-Dec-2001	23-Dec-2001	1	N		14-Jul-2003	28-Jul-2003	14	0.15	
23-Dec-2001	24-Dec-2001	1	N		28-Jul-2003	11-Aug-2003	14	0.08	
24-Dec-2001	25-Dec-2001	1	N		11-Aug-2003	25-Aug-2003	14	0.09	
25-Dec-2001	26-Dec-2001	1	N		25-Aug-2003	08-Sep-2003	14	0.07	
26-Dec-2001	27-Dec-2001	1	N		08-Sep-2003	10-Sep-2003	2	N	
27-Dec-2001	28-Dec-2001	1	N		10-Sep-2003	22-Sep-2003	12	N	
28-Dec-2001	29-Dec-2001	1	N		22-Sep-2003	06-Oct-2003	14	N	
29-Dec-2001	30-Dec-2001	1	N		06-Oct-2003	20-Oct-2003	14	N	
30-Dec-2001	31-Dec-2001	1	N		20-Oct-2003	03-Nov-2003	14	N	
31-Dec-2001	01-Jan-2002	1	N		03-Nov-2003	17-Nov-2003	14	N	
31-Dec-2001	14-Jan-2002	14	0.18	Filter-Pack, Fortnightly	17-Nov-2003	01-Dec-2003	14	N	
14-Jan-2002	28-Jan-2002	14	0.07		01-Dec-2003	15-Dec-2003	14	N	
28-Jan-2002	11-Feb-2002	14	0.10		15-Dec-2003	29-Dec-2003	14	N	
11-Feb-2002	25-Feb-2002	14	0.06		29-Dec-2003	26-Jan-2004	28	N	
25-Feb-2002	11-Mar-2002	14	0.06		26-Jan-2004	23-Feb-2004	28	N	
11-Mar-2002	25-Mar-2002	14	0.18		23-Feb-2004	22-Mar-2004	28	N	
25-Mar-2002	08-Apr-2002	14	0.24		22-Mar-2004	19-Apr-2004	28	0.11	
08-Apr-2002	22-Apr-2002	14	0.12		19-Apr-2004	03-May-2004	14	0.07	
22-Apr-2002	06-May-2002	14	0.06		03-May-2004	17-May-2004	14	0.03	
06-May-2002	20-May-2002	14	0.19		17-May-2004	14-Jun-2004	28	0.07	
20-May-2002	03-Jun-2002	14	0.05		14-Jun-2004	12-Jul-2004	28	0.02	
03-Jun-2002	17-Jun-2002	14	0.06		12-Jul-2004	09-Aug-2004	28	0.08	
17-Jun-2002	01-Jul-2002	14	0.06		09-Aug-2004	06-Sep-2004	28	0.04	
01-Jul-2002	15-Jul-2002	14	0.04		06-Sep-2004	04-Oct-2004	28	N	
15-Jul-2002	29-Jul-2002	14	0.05		04-Oct-2004	01-Nov-2004	28	0.08	
29-Jul-2002	12-Aug-2002	14	0.05		01-Nov-2004	29-Nov-2004	28	0.05	
12-Aug-2002	26-Aug-2002	14	0.03		29-Nov-2004	29-Dec-2004	30	0.05	
26-Aug-2002	09-Sep-2002	14	0.09		29-Dec-2004	24-Jan-2005	26	0.08	
09-Sep-2002	23-Sep-2002	14	0.22		24-Jan-2005	21-Feb-2005	28	0.05	
23-Sep-2002	07-Oct-2002	14	0.08		21-Feb-2005	21-Mar-2005	28	0.11	
07-Oct-2002	21-Oct-2002	14	0.18		21-Mar-2005	18-Apr-2005	28	0.07	
21-Oct-2002	04-Nov-2002	14	0.08		18-Apr-2005	16-May-2005	28	0.20	
04-Nov-2002	18-Nov-2002	14	0.07		16-May-2005	13-Jun-2005	28	0.05	
18-Nov-2002	02-Dec-2002	14	0.09		13-Jun-2005	11-Jul-2005	28	0.01	
02-Dec-2002	16-Dec-2002	14	0.42		11-Jul-2005	09-Aug-2005	29	0.04	
16-Dec-2002	30-Dec-2002	14	0.08		09-Aug-2005	05-Sep-2005	27	0.05	
30-Dec-2002	13-Jan-2003	14	0.35		05-Sep-2005	03-Oct-2005	28	0.20	
13-Jan-2003	27-Jan-2003	14	0.05		03-Oct-2005	31-Oct-2005	28	N	
27-Jan-2003	10-Feb-2003	14	0.03		31-Oct-2005	28-Nov-2005	28	0.03	
10-Feb-2003	24-Feb-2003	14	0.53		28-Nov-2005	11-Jan-2006	44	0.05	
24-Feb-2003	10-Mar-2003	14	0.14		11-Jan-2006				Monitoring terminated
10-Mar-2003	24-Mar-2003	14	0.47						
24-Mar-2003	07-Apr-2003	14	0.57						
07-Apr-2003	21-Apr-2003	14	0.63						
21-Apr-2003	05-May-2003	14	0.08						

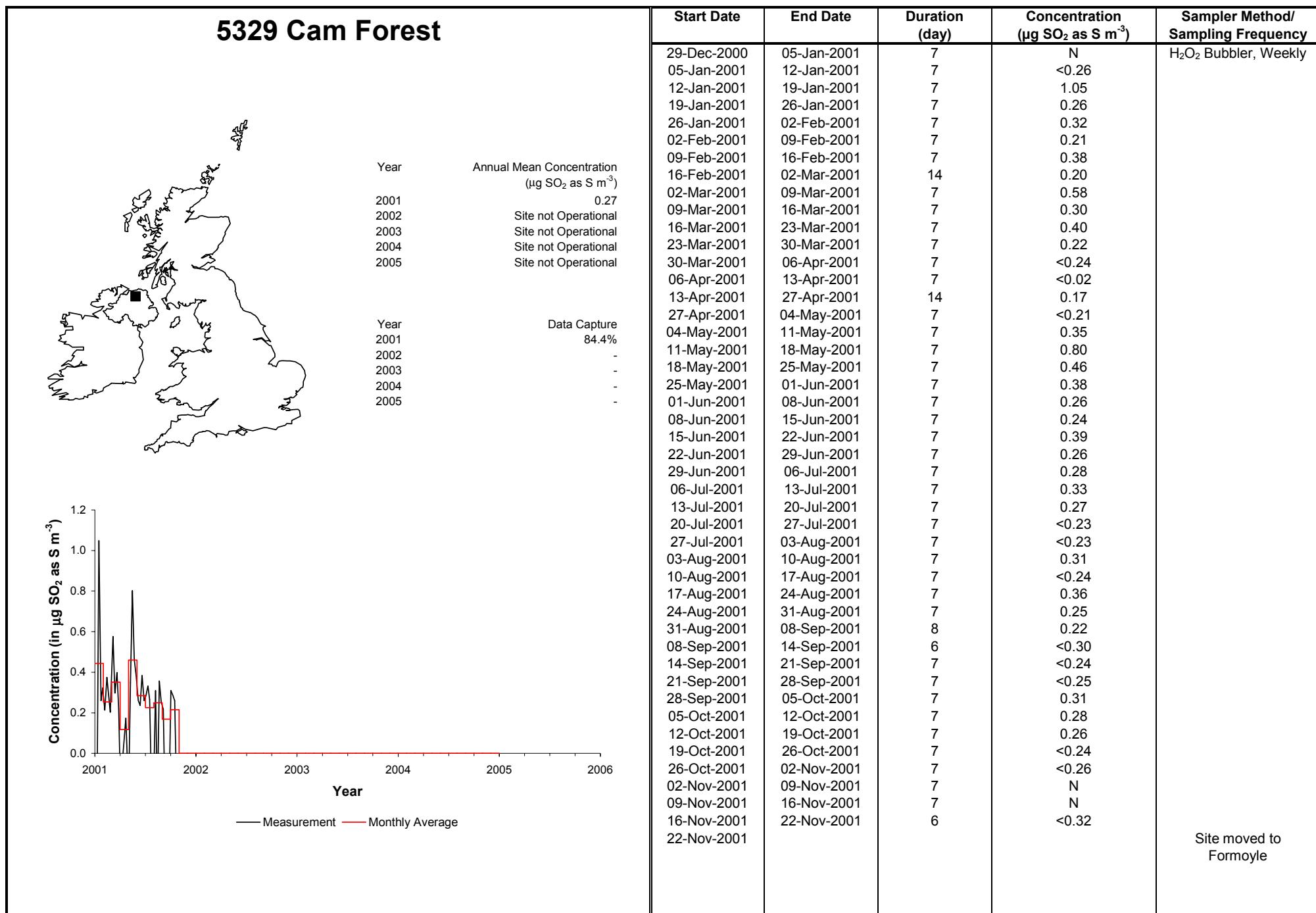
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

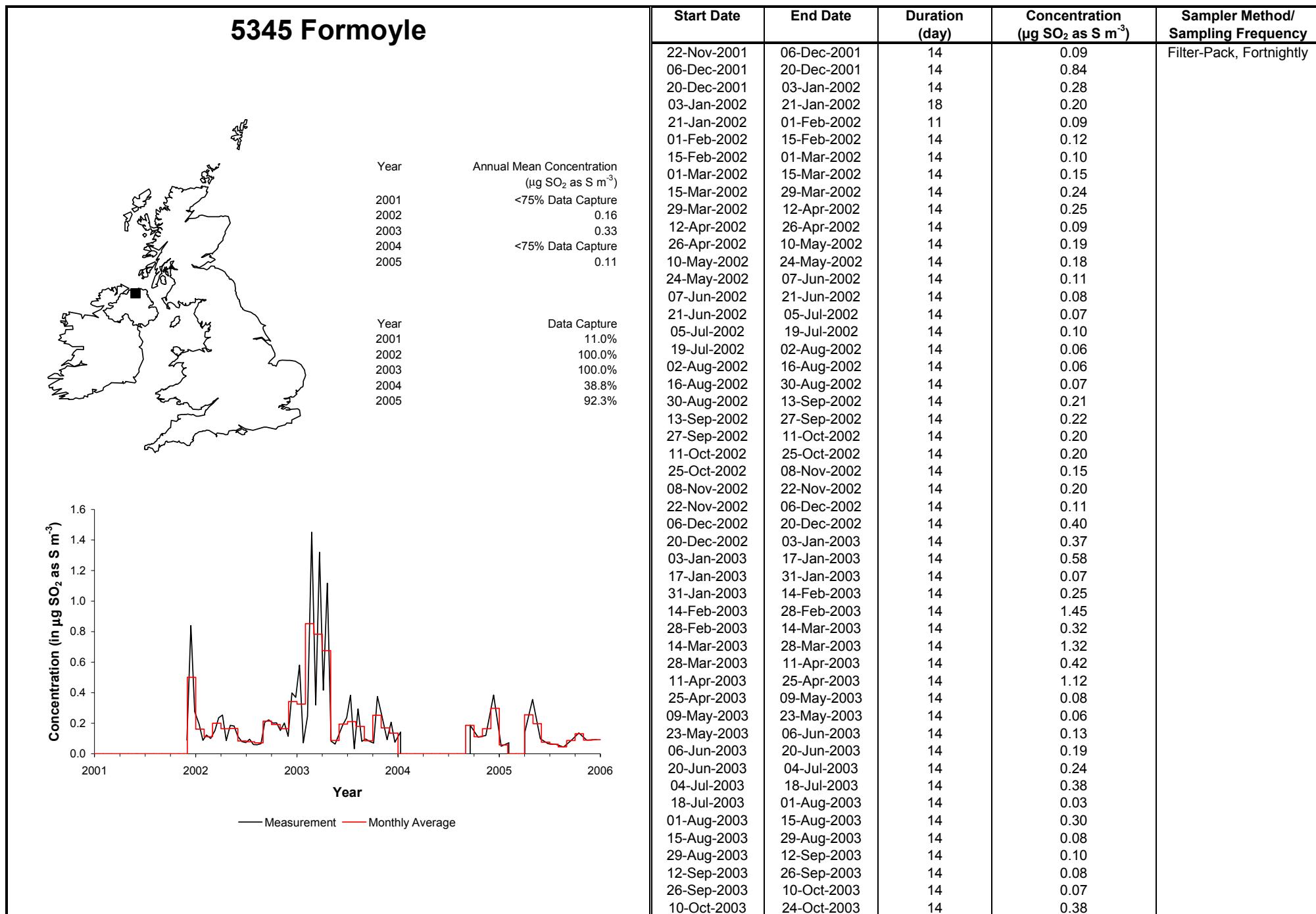


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Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
16-Jan-2002	29-Jan-2002	13	1.36	Filter-Pack, Fortnightly	26-Feb-2004	22-Mar-2004	25	0.88	
29-Jan-2002	12-Feb-2002	14	1.25		22-Mar-2004	19-Apr-2004	28	0.50	
12-Feb-2002	25-Feb-2002	13	1.08		19-Apr-2004	17-May-2004	28	0.60	
25-Feb-2002	12-Mar-2002	15	0.93		17-May-2004	14-Jun-2004	28	0.64	
12-Mar-2002	25-Mar-2002	13	0.65		14-Jun-2004	19-Jul-2004	35	0.48	
25-Mar-2002	09-Apr-2002	15	1.15		19-Jul-2004	09-Aug-2004	21	0.55	
09-Apr-2002	26-Apr-2002	17	0.88		09-Aug-2004	06-Sep-2004	28	0.47	
26-Apr-2002	07-May-2002	11	0.46		06-Sep-2004	06-Oct-2004	30	2.07	
07-May-2002	20-May-2002	13	0.55		06-Oct-2004	09-Nov-2004	34	0.38	
20-May-2002	06-Jun-2002	17	0.60		09-Nov-2004	29-Nov-2004	20	0.27	
06-Jun-2002	18-Jun-2002	12	0.62		29-Nov-2004	23-Dec-2004	24	0.82	
18-Jun-2002	01-Jul-2002	13	0.23		23-Dec-2004	24-Jan-2005	32	1.48	
01-Jul-2002	22-Jul-2002	21	0.47		24-Jan-2005	22-Feb-2005	29	N	
22-Jul-2002	31-Jul-2002	9	0.37		22-Feb-2005	20-Apr-2005	57	N	
31-Jul-2002	20-Aug-2002	20	0.37		20-Apr-2005	23-May-2005	33	N	
20-Aug-2002	27-Aug-2002	7	0.29		23-May-2005	13-Jun-2005	21	0.34	
27-Aug-2002	12-Sep-2002	16	0.73		13-Jun-2005	11-Jul-2005	28	0.43	
12-Sep-2002	30-Sep-2002	18	0.49		11-Jul-2005	08-Aug-2005	28	0.29	
30-Sep-2002	09-Oct-2002	9	0.42		08-Aug-2005	23-Aug-2005	15	0.32	
09-Oct-2002	21-Oct-2002	12	0.77		23-Aug-2005	03-Oct-2005	41	0.48	
21-Oct-2002	04-Nov-2002	14	0.79		03-Oct-2005	07-Nov-2005	35	0.50	
04-Nov-2002	18-Nov-2002	14	0.83		07-Nov-2005	28-Nov-2005	21	1.32	
18-Nov-2002	02-Dec-2002	14	0.61		28-Nov-2005	03-Jan-2006	36	0.44	
02-Dec-2002	16-Dec-2002	14	1.00		03-Jan-2006				Monitoring terminated
16-Dec-2002	31-Dec-2002	15	N						
31-Dec-2002	13-Jan-2003	13	0.84						
13-Jan-2003	27-Jan-2003	14	0.57						
27-Jan-2003	10-Feb-2003	14	0.78						
10-Feb-2003	24-Feb-2003	14	2.26						
24-Feb-2003	10-Mar-2003	14	1.20						
10-Mar-2003	21-Mar-2003	11	2.13						
21-Mar-2003	08-Apr-2003	18	N						
08-Apr-2003	24-Apr-2003	16	1.14						
24-Apr-2003	07-May-2003	13	0.72						
07-May-2003	19-May-2003	12	0.47						
19-May-2003	03-Jun-2003	15	0.40						
03-Jun-2003	16-Jun-2003	13	0.48						
16-Jun-2003	30-Jun-2003	14	0.60						
30-Jun-2003	28-Jul-2003	28	0.61						
28-Jul-2003	11-Aug-2003	14	0.78						
11-Aug-2003	02-Sep-2003	22	0.36						
02-Sep-2003	09-Sep-2003	7	0.60						
09-Sep-2003	22-Sep-2003	13	0.38						
22-Sep-2003	06-Oct-2003	14	0.34						
06-Oct-2003	21-Oct-2003	15	1.46						
21-Oct-2003	20-Nov-2003	30	0.69						
20-Nov-2003	07-Dec-2003	17	0.88						
07-Dec-2003	15-Jan-2004	39	0.77						
15-Jan-2004	26-Jan-2004	11	0.41						
26-Jan-2004	26-Feb-2004	31	0.58	Filter-Pack, 4 Weekly					

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

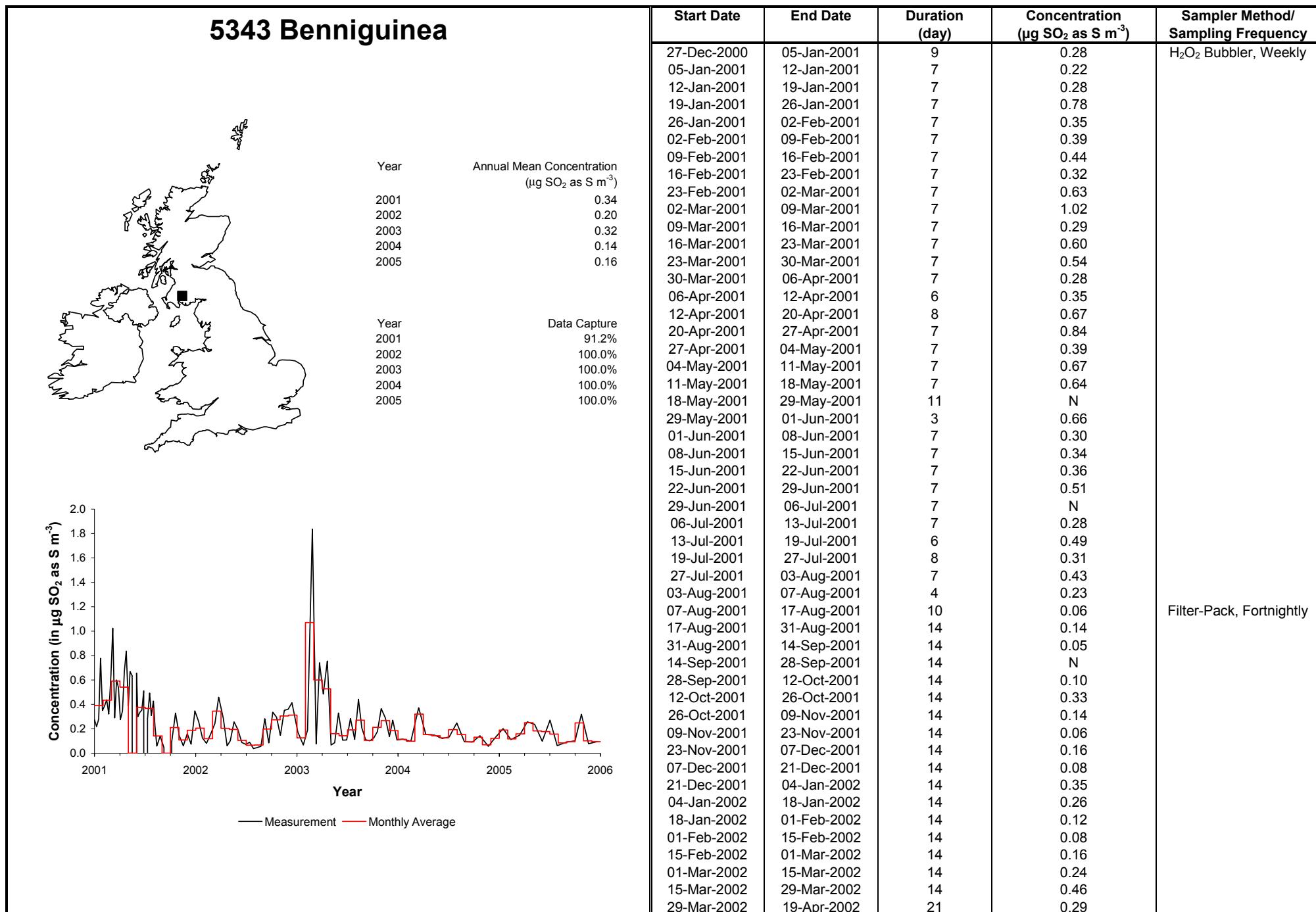




5345 Formoyle

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
24-Oct-2003	14-Nov-2003	21	0.25	Filter-Pack, Fortnightly					
14-Nov-2003	28-Nov-2003	14	0.09						
28-Nov-2003	12-Dec-2003	14	0.21						
12-Dec-2003	26-Dec-2003	14	0.08						
26-Dec-2003	23-Jan-2004	28	0.14	Filter-Pack, 4 Weekly					
23-Jan-2004	20-Feb-2004	28	N						
20-Feb-2004	19-Mar-2004	28	N						
19-Mar-2004	16-Apr-2004	28	N						
16-Apr-2004	14-May-2004	28	N						
14-May-2004	11-Jun-2004	28	N						
11-Jun-2004	09-Jul-2004	28	N						
09-Jul-2004	06-Aug-2004	28	N						
06-Aug-2004	03-Sep-2004	28	N						
03-Sep-2004	01-Oct-2004	28	0.19						
01-Oct-2004	29-Oct-2004	28	0.11						
29-Oct-2004	26-Nov-2004	28	0.12						
26-Nov-2004	24-Dec-2004	28	0.39						
24-Dec-2004	21-Jan-2005	28	0.05						
21-Jan-2005	18-Feb-2005	28	0.07						
18-Feb-2005	18-Mar-2005	28	N						
18-Mar-2005	15-Apr-2005	28	0.14						
15-Apr-2005	13-May-2005	28	0.36						
13-May-2005	10-Jun-2005	28	0.10						
10-Jun-2005	08-Jul-2005	28	0.07						
08-Jul-2005	05-Aug-2005	28	0.06						
05-Aug-2005	02-Sep-2005	28	0.04						
02-Sep-2005	30-Sep-2005	28	0.09						
30-Sep-2005	28-Oct-2005	28	0.14						
28-Oct-2005	25-Nov-2005	28	0.09						
25-Nov-2005	09-Jan-2006	45	0.09	Monitoring terminated					
09-Jan-2006									

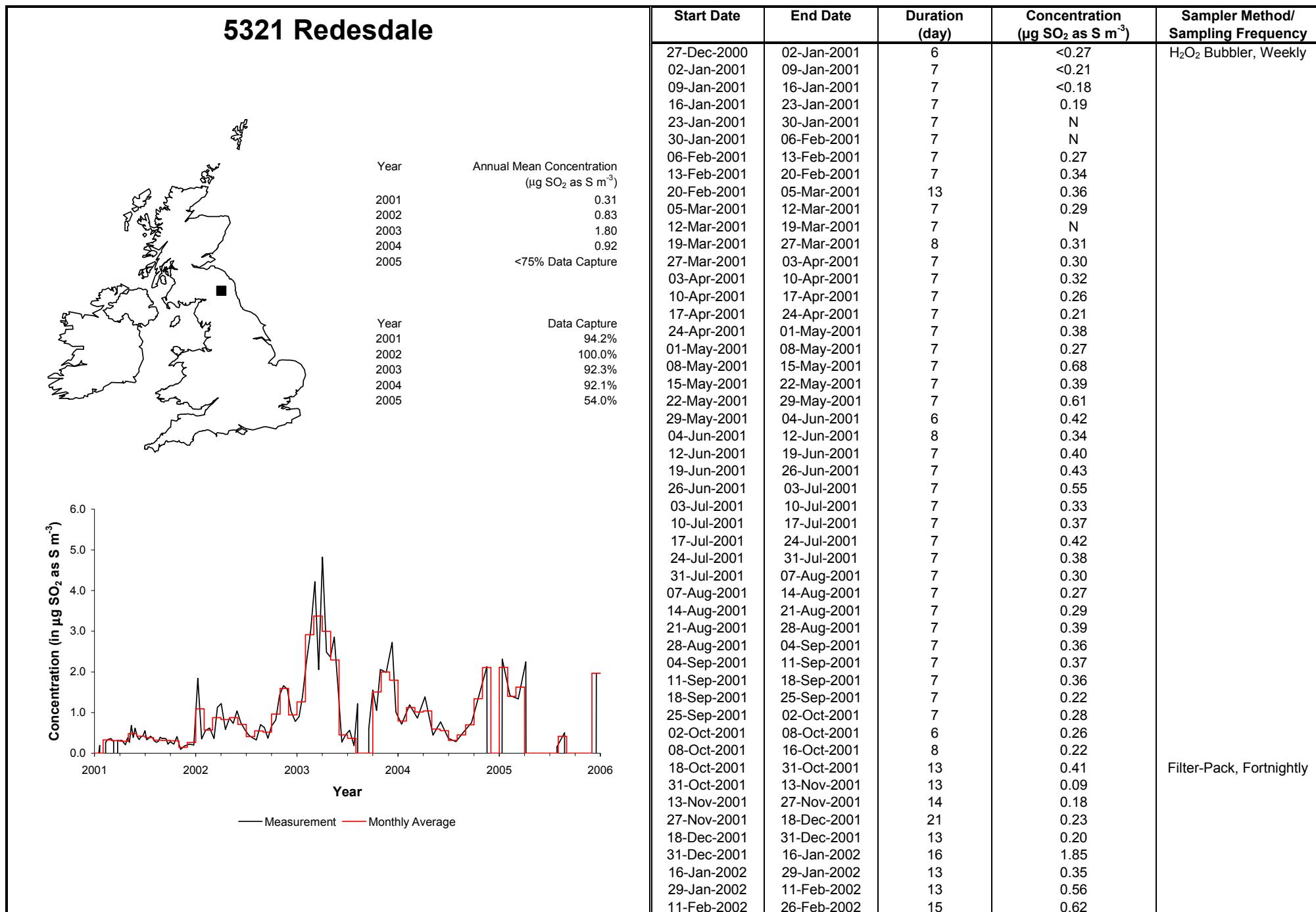
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5343 Benniguinea

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
19-Apr-2002	26-Apr-2002	7	0.06	Filter-Pack, Fortnightly	18-Jun-2004	16-Jul-2004	28	0.13	
26-Apr-2002	10-May-2002	14	0.10		16-Jul-2004	13-Aug-2004	28	0.25	
10-May-2002	24-May-2002	14	0.26		13-Aug-2004	10-Sep-2004	28	0.10	
24-May-2002	07-Jun-2002	14	0.20		10-Sep-2004	08-Oct-2004	28	0.09	
07-Jun-2002	21-Jun-2002	14	0.09		08-Oct-2004	05-Nov-2004	28	0.14	
21-Jun-2002	05-Jul-2002	14	0.07		05-Nov-2004	07-Dec-2004	32	0.06	
05-Jul-2002	19-Jul-2002	14	0.09		07-Dec-2004	31-Dec-2004	24	0.14	
19-Jul-2002	02-Aug-2002	14	0.04		31-Dec-2004	28-Jan-2005	28	0.20	
02-Aug-2002	16-Aug-2002	14	0.05		28-Jan-2005	25-Feb-2005	28	0.11	
16-Aug-2002	30-Aug-2002	14	0.06		25-Feb-2005	29-Mar-2005	32	0.15	
30-Aug-2002	13-Sep-2002	14	0.28		29-Mar-2005	22-Apr-2005	24	0.26	
13-Sep-2002	27-Sep-2002	14	0.09		22-Apr-2005	20-May-2005	28	0.24	
27-Sep-2002	11-Oct-2002	14	0.34		20-May-2005	17-Jun-2005	28	0.10	
11-Oct-2002	25-Oct-2002	14	0.30		17-Jun-2005	15-Jul-2005	28	0.27	
25-Oct-2002	08-Nov-2002	14	0.15		15-Jul-2005	08-Aug-2005	24	0.06	
08-Nov-2002	22-Nov-2002	14	0.35		08-Aug-2005	19-Sep-2005	42	0.09	
22-Nov-2002	06-Dec-2002	14	0.36		19-Sep-2005	11-Oct-2005	22	0.10	
06-Dec-2002	20-Dec-2002	14	0.41		11-Oct-2005	04-Nov-2005	24	0.32	
20-Dec-2002	17-Jan-2003	28	0.17		04-Nov-2005	02-Dec-2005	28	0.08	
17-Jan-2003	31-Jan-2003	14	0.07		02-Dec-2005	04-Jan-2006	33	0.10	
31-Jan-2003	14-Feb-2003	14	0.19		04-Jan-2006				Monitoring terminated
14-Feb-2003	04-Mar-2003	18	1.84						
04-Mar-2003	14-Mar-2003	10	0.08						
14-Mar-2003	28-Mar-2003	14	0.74						
28-Mar-2003	11-Apr-2003	14	0.49						
11-Apr-2003	25-Apr-2003	14	0.76						
25-Apr-2003	09-May-2003	14	0.07						
09-May-2003	22-May-2003	13	0.09						
22-May-2003	06-Jun-2003	15	0.33						
06-Jun-2003	20-Jun-2003	14	0.11						
20-Jun-2003	04-Jul-2003	14	0.11						
04-Jul-2003	18-Jul-2003	14	0.29						
18-Jul-2003	04-Aug-2003	17	0.11						
04-Aug-2003	15-Aug-2003	11	0.44						
15-Aug-2003	29-Aug-2003	14	0.21						
29-Aug-2003	12-Sep-2003	14	0.11						
12-Sep-2003	29-Sep-2003	17	0.10						
29-Sep-2003	10-Oct-2003	11	0.13						
10-Oct-2003	24-Oct-2003	14	0.18						
24-Oct-2003	07-Nov-2003	14	0.37						
07-Nov-2003	24-Nov-2003	17	0.29						
24-Nov-2003	05-Dec-2003	11	0.14						
05-Dec-2003	19-Dec-2003	14	0.27						
19-Dec-2003	05-Jan-2004	17	0.11						
05-Jan-2004	30-Jan-2004	25	0.12	Filter-Pack, 4 Weekly					
30-Jan-2004	02-Mar-2004	32	0.10						
02-Mar-2004	26-Mar-2004	24	0.37						
26-Mar-2004	23-Apr-2004	28	0.15						
23-Apr-2004	27-May-2004	34	0.15						
27-May-2004	18-Jun-2004	22	0.12						

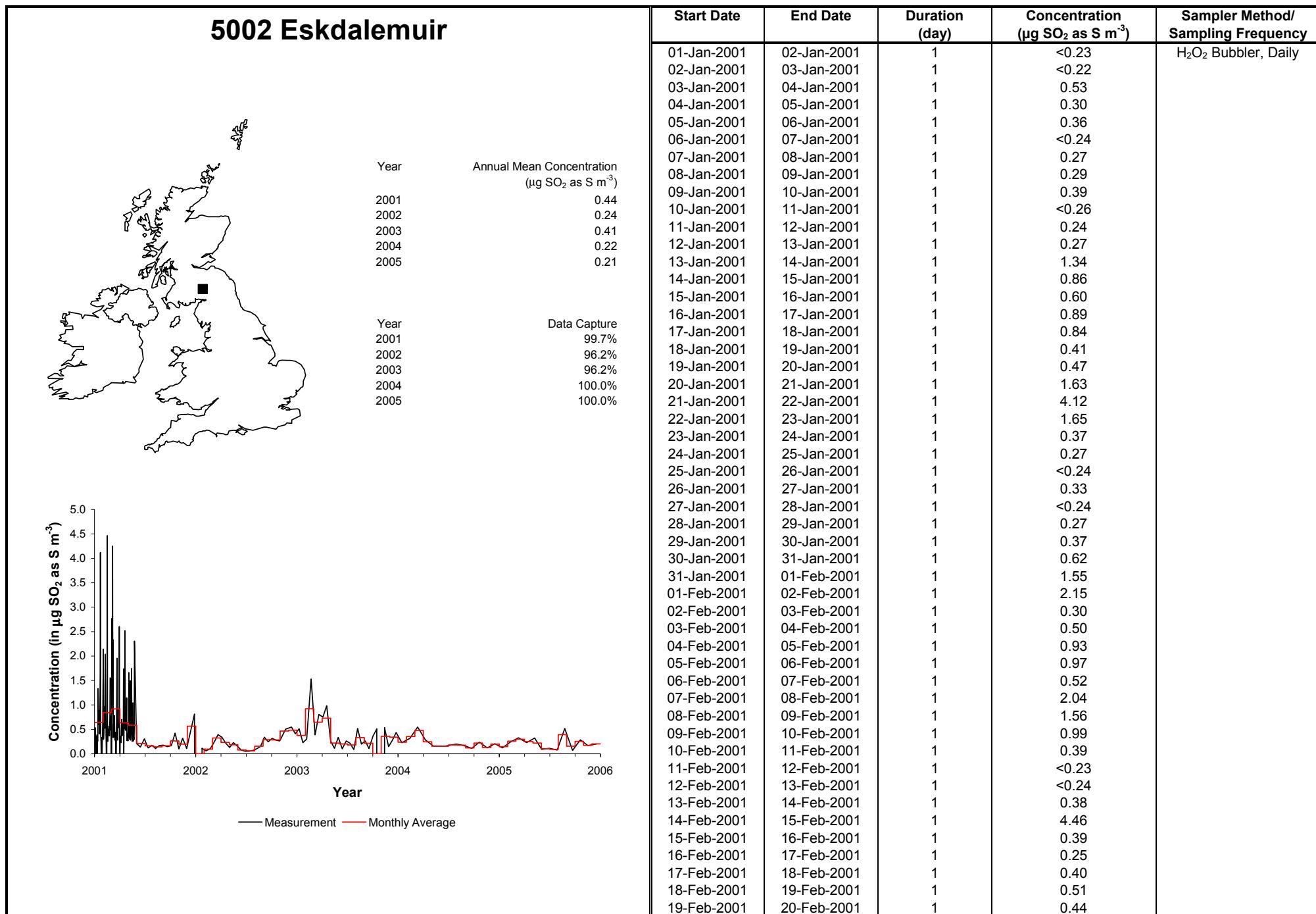
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5321 Redesdale

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
26-Feb-2002	12-Mar-2002	14	0.36	Filter-Pack, Fortnightly	23-Mar-2004	20-Apr-2004	28	1.39	Filter-Pack, 4 Weekly
12-Mar-2002	25-Mar-2002	13	1.13		20-Apr-2004	18-May-2004	28	0.45	
25-Mar-2002	09-Apr-2002	15	1.22		18-May-2004	15-Jun-2004	28	0.77	
09-Apr-2002	23-Apr-2002	14	0.59		15-Jun-2004	13-Jul-2004	28	0.37	
23-Apr-2002	08-May-2002	15	0.86		13-Jul-2004	10-Aug-2004	28	0.29	
08-May-2002	21-May-2002	13	0.74		10-Aug-2004	07-Sep-2004	28	0.52	
21-May-2002	05-Jun-2002	15	1.04		07-Sep-2004	05-Oct-2004	28	0.75	
05-Jun-2002	18-Jun-2002	13	0.74		05-Oct-2004	02-Nov-2004	28	1.43	
18-Jun-2002	02-Jul-2002	14	0.57		02-Nov-2004	30-Nov-2004	28	2.13	
02-Jul-2002	16-Jul-2002	14	0.45		30-Nov-2004	29-Dec-2004	29	N	
16-Jul-2002	30-Jul-2002	14	0.38		29-Dec-2004	25-Jan-2005	27	2.31	
30-Jul-2002	13-Aug-2002	14	0.32		25-Jan-2005	22-Feb-2005	28	1.42	
13-Aug-2002	29-Aug-2002	16	0.71		22-Feb-2005	22-Mar-2005	28	1.33	
29-Aug-2002	10-Sep-2002	12	0.63		22-Mar-2005	19-Apr-2005	28	2.25	
10-Sep-2002	24-Sep-2002	14	0.37		19-Apr-2005	17-May-2005	28	N	
24-Sep-2002	07-Oct-2002	13	0.67		17-May-2005	14-Jun-2005	28	N	
07-Oct-2002	23-Oct-2002	16	0.82		14-Jun-2005	12-Jul-2005	28	N	
23-Oct-2002	05-Nov-2002	13	1.42		12-Jul-2005	09-Aug-2005	28	0.16	
05-Nov-2002	19-Nov-2002	14	1.66		09-Aug-2005	06-Sep-2005	28	0.50	
19-Nov-2002	03-Dec-2002	14	1.57		06-Sep-2005	04-Oct-2005	28	N	
03-Dec-2002	17-Dec-2002	14	1.03		04-Oct-2005	01-Nov-2005	28	N	
17-Dec-2002	02-Jan-2003	16	0.78		01-Nov-2005	29-Nov-2005	28	N	
02-Jan-2003	14-Jan-2003	12	0.90		29-Nov-2005	03-Jan-2006	35	1.97	
14-Jan-2003	29-Jan-2003	15	1.39		03-Jan-2006				Monitoring terminated
29-Jan-2003	11-Feb-2003	13	2.24						
11-Feb-2003	25-Feb-2003	14	3.01						
25-Feb-2003	11-Mar-2003	14	4.22						
11-Mar-2003	25-Mar-2003	14	2.05						
25-Mar-2003	08-Apr-2003	14	4.82						
08-Apr-2003	22-Apr-2003	14	2.48						
22-Apr-2003	06-May-2003	14	2.37						
06-May-2003	20-May-2003	14	2.86						
20-May-2003	03-Jun-2003	14	1.60						
03-Jun-2003	17-Jun-2003	14	0.28						
17-Jun-2003	30-Jun-2003	13	0.45						
30-Jun-2003	16-Jul-2003	16	0.56						
16-Jul-2003	01-Aug-2003	16	0.19						
01-Aug-2003	12-Aug-2003	11	1.22						
12-Aug-2003	26-Aug-2003	14	N						
26-Aug-2003	09-Sep-2003	14	N						
09-Sep-2003	23-Sep-2003	14	0.61						
23-Sep-2003	07-Oct-2003	14	1.55						
07-Oct-2003	21-Oct-2003	14	1.05						
21-Oct-2003	05-Nov-2003	15	2.06						
05-Nov-2003	02-Dec-2003	27	1.99						
02-Dec-2003	16-Dec-2003	14	2.73						
16-Dec-2003	30-Dec-2003	14	1.01						
30-Dec-2003	27-Jan-2004	28	0.72						
27-Jan-2004	24-Feb-2004	28	1.19						
24-Feb-2004	23-Mar-2004	28	0.86	Filter-Pack, 4 Weekly					

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



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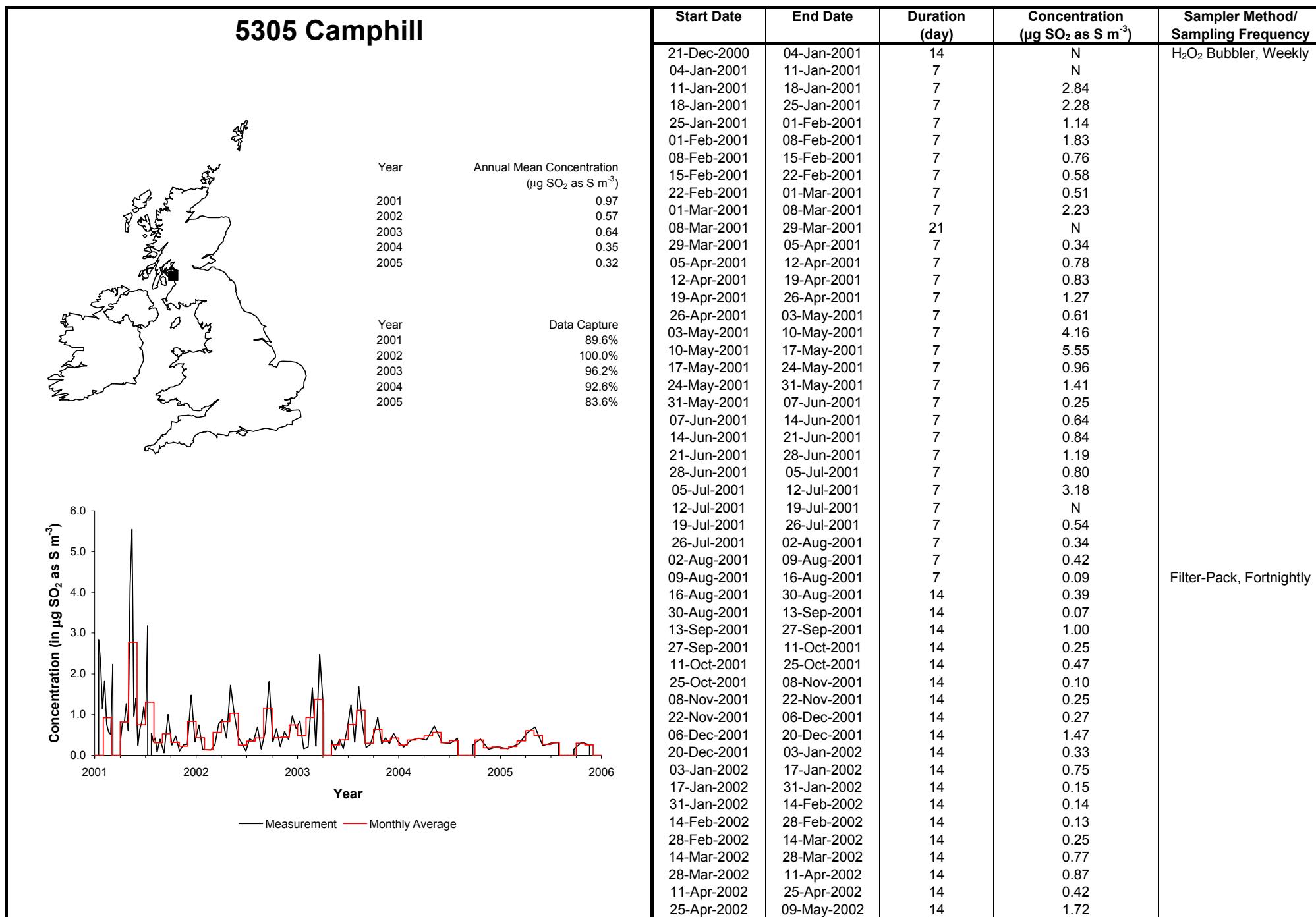
Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
20-Feb-2001	21-Feb-2001	1	0.56	H ₂ O ₂ Bubbler, Daily	11-Apr-2001	12-Apr-2001	1	0.50	
21-Feb-2001	22-Feb-2001	1	0.37		12-Apr-2001	13-Apr-2001	1	0.56	H ₂ O ₂ Bubbler, Daily
22-Feb-2001	23-Feb-2001	1	0.56		13-Apr-2001	14-Apr-2001	1	1.74	
23-Feb-2001	24-Feb-2001	1	0.71		14-Apr-2001	15-Apr-2001	1	<0.26	
24-Feb-2001	25-Feb-2001	1	1.56		15-Apr-2001	16-Apr-2001	1	0.99	
25-Feb-2001	26-Feb-2001	1	0.49		16-Apr-2001	17-Apr-2001	1	0.52	
26-Feb-2001	27-Feb-2001	1	0.77		17-Apr-2001	18-Apr-2001	1	0.78	
27-Feb-2001	28-Feb-2001	1	0.31		18-Apr-2001	19-Apr-2001	1	2.52	
28-Feb-2001	01-Mar-2001	1	N		19-Apr-2001	20-Apr-2001	1	1.16	
01-Mar-2001	02-Mar-2001	1	2.77		20-Apr-2001	21-Apr-2001	1	0.49	
02-Mar-2001	03-Mar-2001	1	0.82		21-Apr-2001	22-Apr-2001	1	0.48	
03-Mar-2001	04-Mar-2001	1	2.25		22-Apr-2001	23-Apr-2001	1	0.96	
04-Mar-2001	05-Mar-2001	1	4.25		23-Apr-2001	24-Apr-2001	1	0.58	
05-Mar-2001	06-Mar-2001	1	1.35		24-Apr-2001	25-Apr-2001	1	1.15	
06-Mar-2001	07-Mar-2001	1	2.34		25-Apr-2001	26-Apr-2001	1	0.27	
07-Mar-2001	08-Mar-2001	1	0.33		26-Apr-2001	27-Apr-2001	1	0.41	
08-Mar-2001	09-Mar-2001	1	0.62		27-Apr-2001	28-Apr-2001	1	0.31	
09-Mar-2001	10-Mar-2001	1	0.35		28-Apr-2001	29-Apr-2001	1	0.41	
10-Mar-2001	11-Mar-2001	1	0.34		29-Apr-2001	30-Apr-2001	1	0.26	
11-Mar-2001	12-Mar-2001	1	0.78		30-Apr-2001	01-May-2001	1	0.64	
12-Mar-2001	13-Mar-2001	1	0.44		01-May-2001	02-May-2001	1	0.33	
13-Mar-2001	14-Mar-2001	1	0.28		02-May-2001	03-May-2001	1	1.67	
14-Mar-2001	15-Mar-2001	1	0.34		03-May-2001	04-May-2001	1	0.63	
15-Mar-2001	16-Mar-2001	1	0.44		04-May-2001	05-May-2001	1	0.71	
16-Mar-2001	17-Mar-2001	1	<0.28		05-May-2001	06-May-2001	1	0.45	
17-Mar-2001	18-Mar-2001	1	<0.26		06-May-2001	07-May-2001	1	0.30	
18-Mar-2001	19-Mar-2001	1	0.28		07-May-2001	08-May-2001	1	1.50	
19-Mar-2001	20-Mar-2001	1	0.68		08-May-2001	09-May-2001	1	0.28	
20-Mar-2001	21-Mar-2001	1	1.96		09-May-2001	10-May-2001	1	0.34	
21-Mar-2001	22-Mar-2001	1	0.81		10-May-2001	11-May-2001	1	0.44	
22-Mar-2001	23-Mar-2001	1	0.41		11-May-2001	12-May-2001	1	1.21	
23-Mar-2001	24-Mar-2001	1	0.28		12-May-2001	13-May-2001	1	1.75	
24-Mar-2001	25-Mar-2001	1	0.53		13-May-2001	14-May-2001	1	0.92	
25-Mar-2001	26-Mar-2001	1	0.53		14-May-2001	15-May-2001	1	0.26	
26-Mar-2001	27-Mar-2001	1	0.54		15-May-2001	16-May-2001	1	0.29	
27-Mar-2001	28-Mar-2001	1	0.90		16-May-2001	17-May-2001	1	0.38	
28-Mar-2001	29-Mar-2001	1	0.68		17-May-2001	18-May-2001	1	1.04	
29-Mar-2001	30-Mar-2001	1	2.60		18-May-2001	19-May-2001	1	0.26	
30-Mar-2001	31-Mar-2001	1	0.31		19-May-2001	20-May-2001	1	0.34	
31-Mar-2001	01-Apr-2001	1	<0.24		20-May-2001	21-May-2001	1	0.34	
01-Apr-2001	02-Apr-2001	1	0.30		21-May-2001	22-May-2001	1	0.30	
02-Apr-2001	03-Apr-2001	1	0.36		22-May-2001	23-May-2001	1	0.50	
03-Apr-2001	04-Apr-2001	1	0.26		23-May-2001	24-May-2001	1	2.31	
04-Apr-2001	05-Apr-2001	1	0.23		24-May-2001	06-Jun-2001	13	0.21	
05-Apr-2001	06-Apr-2001	1	0.48		06-Jun-2001	20-Jun-2001	14	0.14	
06-Apr-2001	07-Apr-2001	1	0.70		20-Jun-2001	04-Jul-2001	14	0.31	
07-Apr-2001	08-Apr-2001	1	0.51		04-Jul-2001	18-Jul-2001	14	0.12	
08-Apr-2001	09-Apr-2001	1	0.37		18-Jul-2001	01-Aug-2001	14	0.17	
09-Apr-2001	10-Apr-2001	1	0.43		01-Aug-2001	14-Aug-2001	13	0.11	
10-Apr-2001	11-Apr-2001	1	0.61		14-Aug-2001	29-Aug-2001	15	0.17	

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

5002 Eskdalemuir

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
29-Aug-2001	12-Sep-2001	14	0.18	Filter-Pack, Fortnightly	13-Aug-2003	27-Aug-2003	14	0.20	Filter-Pack, Fortnightly
12-Sep-2001	26-Sep-2001	14	0.15		27-Aug-2003	10-Sep-2003	14	0.27	
26-Sep-2001	10-Oct-2001	14	0.17		10-Sep-2003	24-Sep-2003	14	0.11	
10-Oct-2001	24-Oct-2001	14	0.42		24-Sep-2003	08-Oct-2003	14	0.36	
24-Oct-2001	08-Nov-2001	15	0.10		08-Oct-2003	22-Oct-2003	14	0.51	
08-Nov-2001	21-Nov-2001	13	0.32		22-Oct-2003	05-Nov-2003	14	N	
21-Nov-2001	05-Dec-2001	14	0.11		05-Nov-2003	19-Nov-2003	14	0.54	
05-Dec-2001	19-Dec-2001	14	0.47		19-Nov-2003	03-Dec-2003	14	0.15	
19-Dec-2001	02-Jan-2002	14	0.81		03-Dec-2003	17-Dec-2003	14	0.28	
02-Jan-2002	16-Jan-2002	14	N		17-Dec-2003	31-Dec-2003	14	0.44	
16-Jan-2002	30-Jan-2002	14	0.11		31-Dec-2003	28-Jan-2004	28	0.23	Filter-Pack, 4 Weekly
30-Jan-2002	13-Feb-2002	14	0.06		28-Jan-2004	25-Feb-2004	28	0.31	
13-Feb-2002	27-Feb-2002	14	0.11		25-Feb-2004	24-Mar-2004	28	0.55	
27-Feb-2002	13-Mar-2002	14	0.24		24-Mar-2004	21-Apr-2004	28	0.29	
13-Mar-2002	27-Mar-2002	14	0.39		21-Apr-2004	19-May-2004	28	0.16	
27-Mar-2002	10-Apr-2002	14	0.34		19-May-2004	14-Jul-2004	56	0.16	
10-Apr-2002	24-Apr-2002	14	0.22		14-Jul-2004	11-Aug-2004	28	0.20	
24-Apr-2002	08-May-2002	14	0.13		11-Aug-2004	08-Sep-2004	28	0.17	
08-May-2002	22-May-2002	14	0.23		08-Sep-2004	06-Oct-2004	28	0.11	
22-May-2002	05-Jun-2002	14	0.16		06-Oct-2004	03-Nov-2004	28	0.24	
05-Jun-2002	19-Jun-2002	14	0.08		03-Nov-2004	01-Dec-2004	28	0.12	
19-Jun-2002	03-Jul-2002	14	0.06		01-Dec-2004	29-Dec-2004	28	0.21	
03-Jul-2002	17-Jul-2002	14	0.06		29-Dec-2004	26-Jan-2005	28	0.12	
17-Jul-2002	31-Jul-2002	14	0.07		26-Jan-2005	23-Feb-2005	28	0.24	
31-Jul-2002	14-Aug-2002	14	0.11		23-Feb-2005	23-Mar-2005	28	0.33	
14-Aug-2002	28-Aug-2002	14	0.15		23-Mar-2005	24-Apr-2005	32	0.23	
28-Aug-2002	11-Sep-2002	14	0.34		24-Apr-2005	18-May-2005	24	0.32	
11-Sep-2002	25-Sep-2002	14	0.25		18-May-2005	15-Jun-2005	28	0.09	
25-Sep-2002	09-Oct-2002	14	0.32		15-Jun-2005	13-Jul-2005	28	0.12	
09-Oct-2002	23-Oct-2002	14	0.28		13-Jul-2005	10-Aug-2005	28	0.08	
23-Oct-2002	06-Nov-2002	14	0.27		10-Aug-2005	07-Sep-2005	28	0.52	
06-Nov-2002	04-Dec-2002	28	0.51		07-Sep-2005	05-Oct-2005	28	0.07	
04-Dec-2002	18-Dec-2002	14	0.55		05-Oct-2005	02-Nov-2005	28	0.29	
18-Dec-2002	01-Jan-2003	14	0.41		02-Nov-2005	30-Nov-2005	28	0.17	
01-Jan-2003	16-Jan-2003	15	0.52		30-Nov-2005	04-Jan-2006	35	0.20	Monitoring terminated
16-Jan-2003	29-Jan-2003	13	0.23		04-Jan-2006				
29-Jan-2003	12-Feb-2003	14	0.30						
12-Feb-2003	26-Feb-2003	14	1.53						
26-Feb-2003	12-Mar-2003	14	0.39						
12-Mar-2003	26-Mar-2003	14	0.81						
26-Mar-2003	09-Apr-2003	14	0.75						
09-Apr-2003	23-Apr-2003	14	0.98						
23-Apr-2003	07-May-2003	14	0.26						
07-May-2003	21-May-2003	14	0.11						
21-May-2003	05-Jun-2003	15	0.34						
05-Jun-2003	18-Jun-2003	13	0.11						
18-Jun-2003	02-Jul-2003	14	0.26						
02-Jul-2003	16-Jul-2003	14	0.22						
16-Jul-2003	30-Jul-2003	14	0.09						
30-Jul-2003	13-Aug-2003	14	0.52						

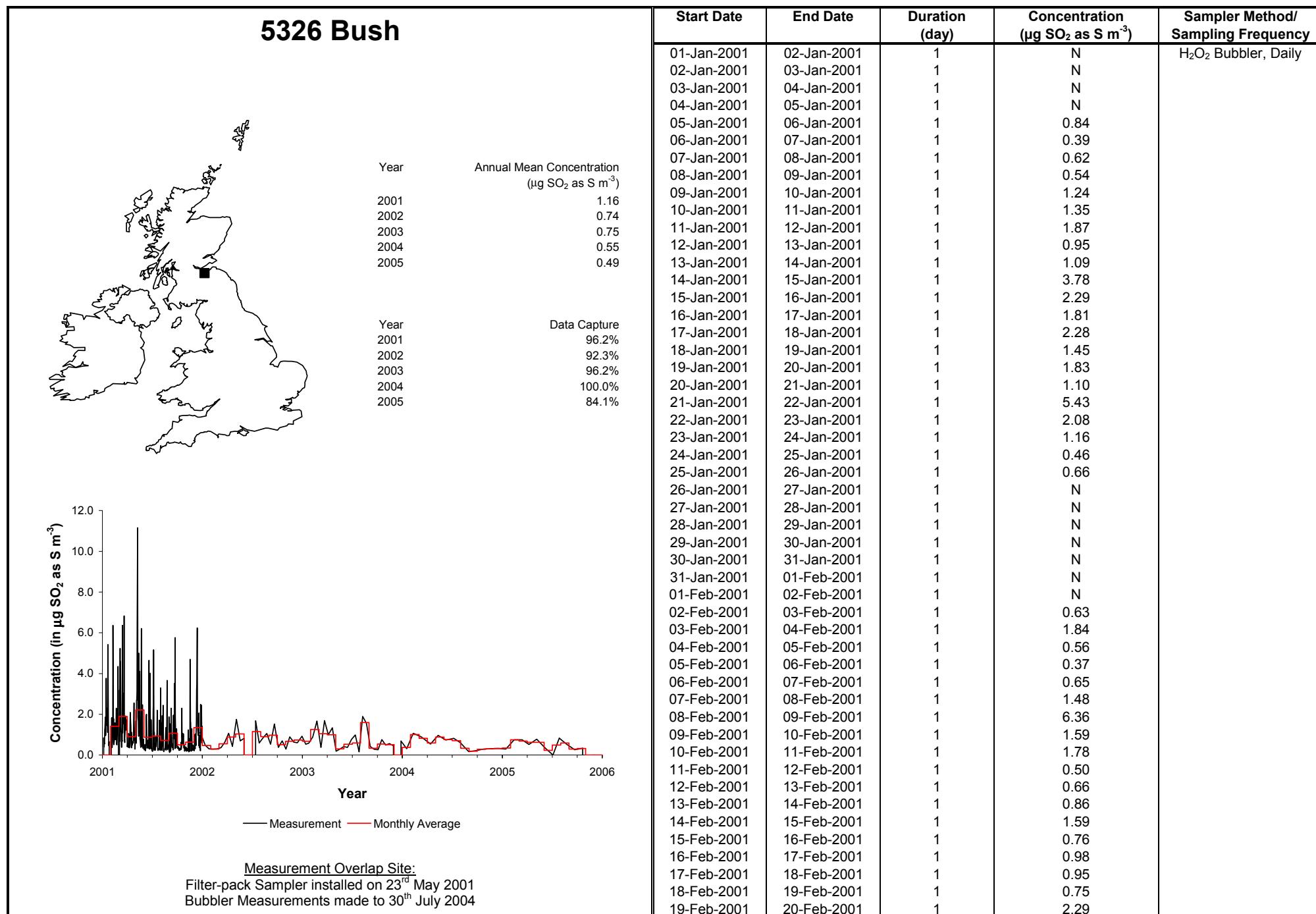
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



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Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
09-May-2002	23-May-2002	14	1.01	Filter-Pack, Fortnightly	15-Jul-2004	13-Aug-2004	29	0.42	Filter-Pack, 4 Weekly
23-May-2002	06-Jun-2002	14	0.45		13-Aug-2004	09-Sep-2004	27	N	
06-Jun-2002	20-Jun-2002	14	0.29		09-Sep-2004	07-Oct-2004	28	0.26	
20-Jun-2002	04-Jul-2002	14	0.10		07-Oct-2004	05-Nov-2004	29	0.40	
04-Jul-2002	18-Jul-2002	14	0.40		05-Nov-2004	02-Dec-2004	27	0.15	
18-Jul-2002	02-Aug-2002	15	0.35		02-Dec-2004	06-Jan-2005	35	0.21	
02-Aug-2002	15-Aug-2002	13	0.70		06-Jan-2005	17-Feb-2005	42	0.16	
15-Aug-2002	29-Aug-2002	14	0.15		17-Feb-2005	24-Mar-2005	35	0.28	
29-Aug-2002	12-Sep-2002	14	0.57		24-Mar-2005	21-Apr-2005	28	0.56	
12-Sep-2002	27-Sep-2002	15	1.81		21-Apr-2005	18-May-2005	27	0.70	
27-Sep-2002	10-Oct-2002	13	0.33		18-May-2005	16-Jun-2005	29	0.24	
10-Oct-2002	23-Oct-2002	13	0.65		16-Jun-2005	14-Jul-2005	28	0.30	
23-Oct-2002	07-Nov-2002	15	0.21		14-Jul-2005	11-Aug-2005	28	0.32	
07-Nov-2002	21-Nov-2002	14	0.59		11-Aug-2005	09-Sep-2005	29	N	
21-Nov-2002	06-Dec-2002	15	0.39		09-Sep-2005	06-Oct-2005	27	0.15	
06-Dec-2002	19-Dec-2002	13	0.97		06-Oct-2005	03-Nov-2005	28	0.32	
19-Dec-2002	03-Jan-2003	15	0.66		03-Nov-2005	01-Dec-2005	28	0.25	
03-Jan-2003	16-Jan-2003	13	0.85		01-Dec-2005	04-Jan-2006	34	N	
16-Jan-2003	31-Jan-2003	15	0.16		04-Jan-2006				Monitoring terminated
31-Jan-2003	14-Feb-2003	14	0.20						
14-Feb-2003	28-Feb-2003	14	1.66						
28-Feb-2003	13-Mar-2003	13	0.23						
13-Mar-2003	27-Mar-2003	14	2.47						
27-Mar-2003	10-Apr-2003	14	1.04						
10-Apr-2003	24-Apr-2003	14	N						
24-Apr-2003	08-May-2003	14	0.37						
08-May-2003	23-May-2003	15	0.13						
23-May-2003	06-Jun-2003	14	0.39						
06-Jun-2003	20-Jun-2003	14	0.17						
20-Jun-2003	03-Jul-2003	13	0.64						
03-Jul-2003	17-Jul-2003	14	1.24						
17-Jul-2003	01-Aug-2003	15	0.32						
01-Aug-2003	15-Aug-2003	14	1.68						
15-Aug-2003	29-Aug-2003	14	0.73						
29-Aug-2003	11-Sep-2003	13	0.19						
11-Sep-2003	25-Sep-2003	14	0.26						
25-Sep-2003	09-Oct-2003	14	0.53						
09-Oct-2003	23-Oct-2003	14	0.93						
23-Oct-2003	06-Nov-2003	14	0.28						
06-Nov-2003	20-Nov-2003	14	0.43						
20-Nov-2003	04-Dec-2003	14	0.28						
04-Dec-2003	18-Dec-2003	14	0.55						
18-Dec-2003	08-Jan-2004	21	0.33	Filter-Pack, 4 Weekly					
08-Jan-2004	29-Jan-2004	21	0.21						
29-Jan-2004	27-Feb-2004	29	0.37						
27-Feb-2004	25-Mar-2004	27	0.42						
25-Mar-2004	22-Apr-2004	28	0.37						
22-Apr-2004	20-May-2004	28	0.72						
20-May-2004	17-Jun-2004	28	0.32						
17-Jun-2004	15-Jul-2004	28	0.29						

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



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Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
20-Feb-2001	21-Feb-2001	1	0.53	H ₂ O ₂ Bubbler, Daily	11-Apr-2001	12-Apr-2001	1	2.10	
21-Feb-2001	22-Feb-2001	1	0.50		12-Apr-2001	13-Apr-2001	1	1.59	
22-Feb-2001	23-Feb-2001	1	0.81		13-Apr-2001	14-Apr-2001	1	1.44	
23-Feb-2001	24-Feb-2001	1	1.66		14-Apr-2001	15-Apr-2001	1	0.55	
24-Feb-2001	25-Feb-2001	1	1.90		15-Apr-2001	16-Apr-2001	1	0.36	
25-Feb-2001	26-Feb-2001	1	4.35		16-Apr-2001	17-Apr-2001	1	1.11	
26-Feb-2001	27-Feb-2001	1	0.97		17-Apr-2001	18-Apr-2001	1	0.68	
27-Feb-2001	28-Feb-2001	1	N		18-Apr-2001	19-Apr-2001	1	0.49	
28-Feb-2001	01-Mar-2001	1	N		19-Apr-2001	20-Apr-2001	1	0.64	
01-Mar-2001	02-Mar-2001	1	N		20-Apr-2001	21-Apr-2001	1	0.65	
02-Mar-2001	03-Mar-2001	1	3.19		21-Apr-2001	22-Apr-2001	1	0.58	
03-Mar-2001	04-Mar-2001	1	0.66		22-Apr-2001	23-Apr-2001	1	0.62	
04-Mar-2001	05-Mar-2001	1	5.24		23-Apr-2001	24-Apr-2001	1	1.34	
05-Mar-2001	06-Mar-2001	1	1.15		24-Apr-2001	25-Apr-2001	1	2.56	
06-Mar-2001	07-Mar-2001	1	4.60		25-Apr-2001	26-Apr-2001	1	0.73	
07-Mar-2001	08-Mar-2001	1	1.37		26-Apr-2001	27-Apr-2001	1	1.18	
08-Mar-2001	09-Mar-2001	1	1.08		27-Apr-2001	28-Apr-2001	1	0.48	
09-Mar-2001	10-Mar-2001	1	0.56		28-Apr-2001	29-Apr-2001	1	0.30	
10-Mar-2001	11-Mar-2001	1	0.38		29-Apr-2001	30-Apr-2001	1	1.65	
11-Mar-2001	12-Mar-2001	1	0.77		30-Apr-2001	01-May-2001	1	0.97	
12-Mar-2001	13-Mar-2001	1	0.68		01-May-2001	02-May-2001	1	0.71	
13-Mar-2001	14-Mar-2001	1	6.36		02-May-2001	03-May-2001	1	0.58	
14-Mar-2001	15-Mar-2001	1	1.09		03-May-2001	04-May-2001	1	2.69	
15-Mar-2001	16-Mar-2001	1	1.96		04-May-2001	05-May-2001	1	2.70	
16-Mar-2001	17-Mar-2001	1	1.54		05-May-2001	06-May-2001	1	3.10	
17-Mar-2001	18-Mar-2001	1	3.02		06-May-2001	07-May-2001	1	6.52	
18-Mar-2001	19-Mar-2001	1	1.85		07-May-2001	08-May-2001	1	11.16	
19-Mar-2001	20-Mar-2001	1	6.83		08-May-2001	09-May-2001	1	3.81	
20-Mar-2001	21-Mar-2001	1	0.94		09-May-2001	10-May-2001	1	1.82	
21-Mar-2001	22-Mar-2001	1	0.61		10-May-2001	11-May-2001	1	1.68	
22-Mar-2001	23-Mar-2001	1	0.82		11-May-2001	12-May-2001	1	0.92	
23-Mar-2001	24-Mar-2001	1	1.21		12-May-2001	13-May-2001	1	4.99	
24-Mar-2001	25-Mar-2001	1	1.91		13-May-2001	14-May-2001	1	2.65	
25-Mar-2001	26-Mar-2001	1	1.86		14-May-2001	15-May-2001	1	4.10	
26-Mar-2001	27-Mar-2001	1	1.23		15-May-2001	16-May-2001	1	2.24	
27-Mar-2001	28-Mar-2001	1	1.43		16-May-2001	17-May-2001	1	0.77	
28-Mar-2001	29-Mar-2001	1	1.35		17-May-2001	18-May-2001	1	0.79	
29-Mar-2001	30-Mar-2001	1	1.73		18-May-2001	19-May-2001	1	0.47	
30-Mar-2001	31-Mar-2001	1	1.02		19-May-2001	20-May-2001	1	0.38	
31-Mar-2001	01-Apr-2001	1	0.40		20-May-2001	21-May-2001	1	2.10	
01-Apr-2001	02-Apr-2001	1	0.58		21-May-2001	22-May-2001	1	6.21	
02-Apr-2001	03-Apr-2001	1	0.57		22-May-2001	23-May-2001	1	0.80	
03-Apr-2001	04-Apr-2001	1	0.44		23-May-2001	24-May-2001	1	0.42	
04-Apr-2001	05-Apr-2001	1	0.38		24-May-2001	25-May-2001	1	1.81	
05-Apr-2001	06-Apr-2001	1	1.05		25-May-2001	26-May-2001	1	2.46	
06-Apr-2001	07-Apr-2001	1	1.00		26-May-2001	27-May-2001	1	0.55	
07-Apr-2001	08-Apr-2001	1	0.86		27-May-2001	28-May-2001	1	0.34	
08-Apr-2001	09-Apr-2001	1	0.36		28-May-2001	29-May-2001	1	0.35	
09-Apr-2001	10-Apr-2001	1	0.55		29-May-2001	30-May-2001	1	0.78	
10-Apr-2001	11-Apr-2001	1	1.48		30-May-2001	31-May-2001	1	0.37	

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

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Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
31-May-2001	01-Jun-2001	1	0.39	H ₂ O ₂ Bubbler, Daily	20-Jul-2001	21-Jul-2001	1	0.29	H ₂ O ₂ Bubbler, Daily
01-Jun-2001	02-Jun-2001	1	0.25		21-Jul-2001	22-Jul-2001	1	0.24	
02-Jun-2001	03-Jun-2001	1	0.46		22-Jul-2001	23-Jul-2001	1	0.24	
03-Jun-2001	04-Jun-2001	1	0.50		23-Jul-2001	24-Jul-2001	1	0.29	
04-Jun-2001	05-Jun-2001	1	0.34		24-Jul-2001	25-Jul-2001	1	0.28	
05-Jun-2001	06-Jun-2001	1	0.21		25-Jul-2001	26-Jul-2001	1	0.37	
06-Jun-2001	07-Jun-2001	1	0.41		26-Jul-2001	27-Jul-2001	1	1.71	
07-Jun-2001	08-Jun-2001	1	0.62		27-Jul-2001	28-Jul-2001	1	0.59	
08-Jun-2001	09-Jun-2001	1	1.86		28-Jul-2001	29-Jul-2001	1	0.28	
09-Jun-2001	10-Jun-2001	1	2.00		29-Jul-2001	30-Jul-2001	1	0.23	
10-Jun-2001	11-Jun-2001	1	0.75		30-Jul-2001	31-Jul-2001	1	0.26	
11-Jun-2001	12-Jun-2001	1	0.33		31-Jul-2001	01-Aug-2001	1	3.30	
12-Jun-2001	13-Jun-2001	1	0.51		01-Aug-2001	02-Aug-2001	1	0.37	
13-Jun-2001	14-Jun-2001	1	0.54		02-Aug-2001	03-Aug-2001	1	1.58	
14-Jun-2001	15-Jun-2001	1	0.38		03-Aug-2001	04-Aug-2001	1	0.25	
15-Jun-2001	16-Jun-2001	1	0.73		04-Aug-2001	05-Aug-2001	1	0.25	
16-Jun-2001	17-Jun-2001	1	0.34		05-Aug-2001	06-Aug-2001	1	0.24	
17-Jun-2001	18-Jun-2001	1	0.73		06-Aug-2001	07-Aug-2001	1	1.94	
18-Jun-2001	19-Jun-2001	1	4.64		07-Aug-2001	08-Aug-2001	1	0.52	
19-Jun-2001	20-Jun-2001	1	0.32		08-Aug-2001	09-Aug-2001	1	0.45	
20-Jun-2001	21-Jun-2001	1	0.30		09-Aug-2001	10-Aug-2001	1	2.44	
21-Jun-2001	22-Jun-2001	1	0.37		10-Aug-2001	11-Aug-2001	1	0.39	
22-Jun-2001	23-Jun-2001	1	4.02		11-Aug-2001	12-Aug-2001	1	0.22	
23-Jun-2001	24-Jun-2001	1	2.07		12-Aug-2001	13-Aug-2001	1	0.17	
24-Jun-2001	25-Jun-2001	1	0.35		13-Aug-2001	14-Aug-2001	1	0.24	
25-Jun-2001	26-Jun-2001	1	0.32		14-Aug-2001	15-Aug-2001	1	0.28	
26-Jun-2001	27-Jun-2001	1	1.73		15-Aug-2001	16-Aug-2001	1	0.30	
27-Jun-2001	28-Jun-2001	1	0.40		16-Aug-2001	17-Aug-2001	1	0.33	
28-Jun-2001	29-Jun-2001	1	0.31		17-Aug-2001	18-Aug-2001	1	0.49	
29-Jun-2001	30-Jun-2001	1	0.22		18-Aug-2001	19-Aug-2001	1	0.75	
30-Jun-2001	01-Jul-2001	1	0.19		19-Aug-2001	20-Aug-2001	1	1.35	
01-Jul-2001	02-Jul-2001	1	0.18		20-Aug-2001	21-Aug-2001	1	0.24	
02-Jul-2001	03-Jul-2001	1	0.34		21-Aug-2001	22-Aug-2001	1	0.41	
03-Jul-2001	04-Jul-2001	1	2.29		22-Aug-2001	23-Aug-2001	1	0.36	
04-Jul-2001	05-Jul-2001	1	2.41		23-Aug-2001	24-Aug-2001	1	0.57	
05-Jul-2001	06-Jul-2001	1	5.16		24-Aug-2001	25-Aug-2001	1	3.66	
06-Jul-2001	07-Jul-2001	1	0.24		25-Aug-2001	26-Aug-2001	1	0.41	
07-Jul-2001	08-Jul-2001	1	1.11		26-Aug-2001	27-Aug-2001	1	0.26	
08-Jul-2001	09-Jul-2001	1	0.58		27-Aug-2001	28-Aug-2001	1	0.31	
09-Jul-2001	10-Jul-2001	1	0.28		28-Aug-2001	29-Aug-2001	1	0.45	
10-Jul-2001	11-Jul-2001	1	0.25		29-Aug-2001	30-Aug-2001	1	0.46	
11-Jul-2001	12-Jul-2001	1	0.23		30-Aug-2001	31-Aug-2001	1	0.57	
12-Jul-2001	13-Jul-2001	1	0.38		31-Aug-2001	01-Sep-2001	1	1.87	
13-Jul-2001	14-Jul-2001	1	0.89		01-Sep-2001	02-Sep-2001	1	0.21	
14-Jul-2001	15-Jul-2001	1	0.41		02-Sep-2001	03-Sep-2001	1	0.12	
15-Jul-2001	16-Jul-2001	1	0.66		03-Sep-2001	04-Sep-2001	1	0.66	
16-Jul-2001	17-Jul-2001	1	0.77		04-Sep-2001	05-Sep-2001	1	1.53	
17-Jul-2001	18-Jul-2001	1	1.07		05-Sep-2001	06-Sep-2001	1	0.21	
18-Jul-2001	19-Jul-2001	1	2.20		06-Sep-2001	07-Sep-2001	1	0.19	
19-Jul-2001	20-Jul-2001	1	1.50		07-Sep-2001	08-Sep-2001	1	0.37	

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

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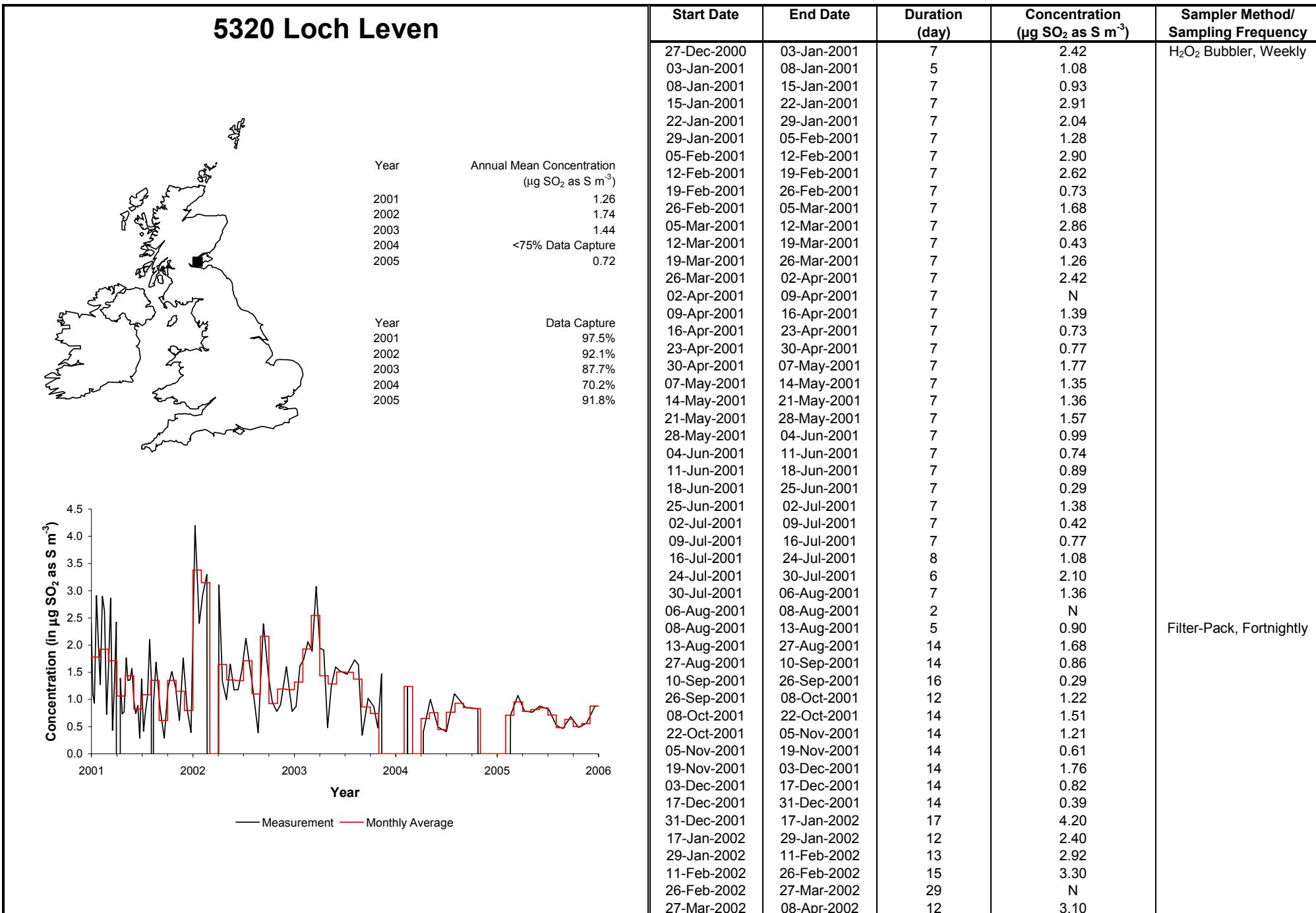
Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
08-Sep-2001	09-Sep-2001	1	2.29	H ₂ O ₂ Bubbler, Daily	28-Oct-2001	29-Oct-2001	1	0.23	H ₂ O ₂ Bubbler, Daily
09-Sep-2001	10-Sep-2001	1	1.01		29-Oct-2001	30-Oct-2001	1	0.32	
10-Sep-2001	11-Sep-2001	1	0.97		30-Oct-2001	31-Oct-2001	1	0.25	
11-Sep-2001	12-Sep-2001	1	0.45		31-Oct-2001	01-Nov-2001	1	0.40	
12-Sep-2001	13-Sep-2001	1	0.35		01-Nov-2001	02-Nov-2001	1	0.33	
13-Sep-2001	14-Sep-2001	1	0.55		02-Nov-2001	03-Nov-2001	1	0.37	
14-Sep-2001	15-Sep-2001	1	0.44		03-Nov-2001	04-Nov-2001	1	0.19	
15-Sep-2001	16-Sep-2001	1	0.25		04-Nov-2001	05-Nov-2001	1	0.30	
16-Sep-2001	17-Sep-2001	1	1.95		05-Nov-2001	06-Nov-2001	1	0.31	
17-Sep-2001	18-Sep-2001	1	0.79		06-Nov-2001	07-Nov-2001	1	0.27	
18-Sep-2001	19-Sep-2001	1	1.69		07-Nov-2001	08-Nov-2001	1	0.22	
19-Sep-2001	20-Sep-2001	1	1.68		08-Nov-2001	09-Nov-2001	1	0.25	
20-Sep-2001	21-Sep-2001	1	3.53		09-Nov-2001	10-Nov-2001	1	1.23	
21-Sep-2001	22-Sep-2001	1	0.32		10-Nov-2001	11-Nov-2001	1	0.22	
22-Sep-2001	23-Sep-2001	1	5.77		11-Nov-2001	12-Nov-2001	1	0.16	
23-Sep-2001	24-Sep-2001	1	1.87		12-Nov-2001	13-Nov-2001	1	0.23	
24-Sep-2001	25-Sep-2001	1	0.74		13-Nov-2001	14-Nov-2001	1	0.81	
25-Sep-2001	26-Sep-2001	1	0.35		14-Nov-2001	15-Nov-2001	1	0.41	
26-Sep-2001	27-Sep-2001	1	0.54		15-Nov-2001	16-Nov-2001	1	0.19	
27-Sep-2001	28-Sep-2001	1	1.28		16-Nov-2001	17-Nov-2001	1	4.70	
28-Sep-2001	29-Sep-2001	1	0.89		17-Nov-2001	18-Nov-2001	1	1.66	
29-Sep-2001	30-Sep-2001	1	0.86		18-Nov-2001	19-Nov-2001	1	1.56	
30-Sep-2001	01-Oct-2001	1	0.35		19-Nov-2001	20-Nov-2001	1	0.84	
01-Oct-2001	02-Oct-2001	1	0.34		20-Nov-2001	21-Nov-2001	1	0.37	
02-Oct-2001	03-Oct-2001	1	0.40		21-Nov-2001	22-Nov-2001	1	0.19	
03-Oct-2001	04-Oct-2001	1	0.30		22-Nov-2001	23-Nov-2001	1	1.29	
04-Oct-2001	05-Oct-2001	1	0.40		23-Nov-2001	24-Nov-2001	1	0.66	
05-Oct-2001	06-Oct-2001	1	0.32		24-Nov-2001	25-Nov-2001	1	0.25	
06-Oct-2001	07-Oct-2001	1	0.23		25-Nov-2001	26-Nov-2001	1	0.27	
07-Oct-2001	08-Oct-2001	1	0.26		26-Nov-2001	27-Nov-2001	1	0.48	
08-Oct-2001	09-Oct-2001	1	0.33		27-Nov-2001	28-Nov-2001	1	0.23	
09-Oct-2001	10-Oct-2001	1	0.23		28-Nov-2001	29-Nov-2001	1	0.39	
10-Oct-2001	11-Oct-2001	1	0.33		29-Nov-2001	30-Nov-2001	1	0.33	
11-Oct-2001	12-Oct-2001	1	0.27		30-Nov-2001	01-Dec-2001	1	0.45	
12-Oct-2001	13-Oct-2001	1	0.30		01-Dec-2001	02-Dec-2001	1	0.21	
13-Oct-2001	14-Oct-2001	1	0.26		02-Dec-2001	03-Dec-2001	1	1.00	
14-Oct-2001	15-Oct-2001	1	0.64		03-Dec-2001	04-Dec-2001	1	0.92	
15-Oct-2001	16-Oct-2001	1	0.29		04-Dec-2001	05-Dec-2001	1	0.30	
16-Oct-2001	17-Oct-2001	1	0.54		05-Dec-2001	06-Dec-2001	1	1.04	
17-Oct-2001	18-Oct-2001	1	2.30		06-Dec-2001	07-Dec-2001	1	1.04	
18-Oct-2001	19-Oct-2001	1	0.88		07-Dec-2001	08-Dec-2001	1	0.47	
19-Oct-2001	20-Oct-2001	1	1.07		08-Dec-2001	09-Dec-2001	1	0.68	
20-Oct-2001	21-Oct-2001	1	0.69		09-Dec-2001	10-Dec-2001	1	1.74	
21-Oct-2001	22-Oct-2001	1	0.55		10-Dec-2001	11-Dec-2001	1	3.22	
22-Oct-2001	23-Oct-2001	1	1.05		11-Dec-2001	12-Dec-2001	1	3.47	
23-Oct-2001	24-Oct-2001	1	0.92		12-Dec-2001	13-Dec-2001	1	6.24	
24-Oct-2001	25-Oct-2001	1	0.35		13-Dec-2001	14-Dec-2001	1	1.97	
25-Oct-2001	26-Oct-2001	1	0.36		14-Dec-2001	15-Dec-2001	1	1.28	
26-Oct-2001	27-Oct-2001	1	0.50		15-Dec-2001	16-Dec-2001	1	0.97	
27-Oct-2001	28-Oct-2001	1	0.19		16-Dec-2001	17-Dec-2001	1	1.03	

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

5326 Bush

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	
17-Dec-2001	18-Dec-2001	1	1.21	Filter-Pack, Fortnightly	25-Apr-2003	09-May-2003	14	0.19	Filter-Pack, Fortnightly	
18-Dec-2001	19-Dec-2001	1	2.07		09-May-2003	23-May-2003	14	0.30		
19-Dec-2001	20-Dec-2001	1	0.44		23-May-2003	06-Jun-2003	14	0.42		
20-Dec-2001	21-Dec-2001	1	0.96		06-Jun-2003	20-Jun-2003	14	0.38		
21-Dec-2001	22-Dec-2001	1	0.36		20-Jun-2003	04-Jul-2003	14	0.77		
22-Dec-2001	23-Dec-2001	1	0.81		04-Jul-2003	18-Jul-2003	14	0.98		
23-Dec-2001	24-Dec-2001	1	0.40		18-Jul-2003	01-Aug-2003	14	0.16		
24-Dec-2001	25-Dec-2001	1	0.21		01-Aug-2003	15-Aug-2003	14	1.89		
25-Dec-2001	26-Dec-2001	1	2.48		15-Aug-2003	29-Aug-2003	14	1.55		
26-Dec-2001	27-Dec-2001	1	1.29		29-Aug-2003	12-Sep-2003	14	0.42		
27-Dec-2001	28-Dec-2001	1	0.91		12-Sep-2003	26-Sep-2003	14	0.29		
28-Dec-2001	29-Dec-2001	1	2.44		26-Sep-2003	10-Oct-2003	14	0.26		
29-Dec-2001	30-Dec-2001	1	0.60		10-Oct-2003	24-Oct-2003	14	0.75		
30-Dec-2001	31-Dec-2001	1	1.42		24-Oct-2003	07-Nov-2003	14	0.49		
31-Dec-2001	01-Jan-2002	1	0.60		07-Nov-2003	21-Nov-2003	14	0.56		
14-Dec-2001	04-Jan-2002	21	1.11		21-Nov-2003	05-Dec-2003	14	0.46	Filter-Pack, 4 Weekly	
04-Jan-2002	18-Jan-2002	14	0.48		05-Dec-2003	19-Dec-2003	14	N		
18-Jan-2002	01-Feb-2002	14	0.31		19-Dec-2003	02-Jan-2004	14	0.68		
01-Feb-2002	15-Feb-2002	14	0.29		02-Jan-2004	30-Jan-2004	28	0.31		
15-Feb-2002	01-Mar-2002	14	0.30		30-Jan-2004	20-Feb-2004	21	1.07		
01-Mar-2002	15-Mar-2002	14	0.36		20-Feb-2004	26-Mar-2004	35	0.89		
15-Mar-2002	29-Mar-2002	14	0.63		26-Mar-2004	27-Apr-2004	32	0.54		
29-Mar-2002	12-Apr-2002	14	1.06		27-Apr-2004	21-May-2004	24	0.97		
12-Apr-2002	26-Apr-2002	14	0.43		21-May-2004	25-Jun-2004	35	0.74		
26-Apr-2002	10-May-2002	14	1.75		25-Jun-2004	15-Jul-2004	20	0.82		
10-May-2002	24-May-2002	14	0.70		15-Jul-2004	13-Aug-2004	29	0.62		
24-May-2002	07-Jun-2002	14	0.82		13-Aug-2004	17-Sep-2004	35	0.16		
07-Jun-2002	21-Jun-2002	14	N		17-Sep-2004	08-Oct-2004	21	0.22		
21-Jun-2002	05-Jul-2002	14	N		08-Oct-2004	06-Nov-2004	29	0.30		
05-Jul-2002	19-Jul-2002	14	1.68		06-Nov-2004	03-Dec-2004	27	0.31		
19-Jul-2002	02-Aug-2002	14	0.59		03-Dec-2004	30-Dec-2004	27	0.33		
02-Aug-2002	16-Aug-2002	14	0.83		30-Dec-2004	28-Jan-2005	29	0.29		
16-Aug-2002	30-Aug-2002	14	1.06		28-Jan-2005	28-Feb-2005	31	0.75		
30-Aug-2002	13-Sep-2002	14	0.53		28-Feb-2005	24-Mar-2005	24	0.74		
13-Sep-2002	27-Sep-2002	14	1.52		24-Mar-2005	19-Apr-2005	26	0.52		
27-Sep-2002	11-Oct-2002	14	0.38		19-Apr-2005	20-May-2005	31	0.78		
11-Oct-2002	25-Oct-2002	14	0.70		20-May-2005	20-Jun-2005	31	0.36		
25-Oct-2002	08-Nov-2002	14	0.30		20-Jun-2005	14-Jul-2005	24	0.01		
08-Nov-2002	22-Nov-2002	14	0.89		14-Jul-2005	08-Aug-2005	25	0.83		
22-Nov-2002	06-Dec-2002	14	0.64		08-Aug-2005	05-Sep-2005	28	0.53		
06-Dec-2002	20-Dec-2002	14	0.60		05-Sep-2005	06-Oct-2005	31	0.26		
20-Dec-2002	10-Jan-2003	21	0.93		06-Oct-2005	04-Nov-2005	29	0.34		
10-Jan-2003	17-Jan-2003	7	0.53		04-Nov-2005	30-Nov-2005	26	N		
17-Jan-2003	31-Jan-2003	14	0.58		30-Nov-2005	01-Jan-2006	32	N		
31-Jan-2003	14-Feb-2003	14	0.89		Monitoring terminated					
14-Feb-2003	28-Feb-2003	14	1.66							
28-Feb-2003	14-Mar-2003	14	0.37							
14-Mar-2003	28-Mar-2003	14	1.69							
28-Mar-2003	11-Apr-2003	14	0.99							
11-Apr-2003	25-Apr-2003	14	1.34							

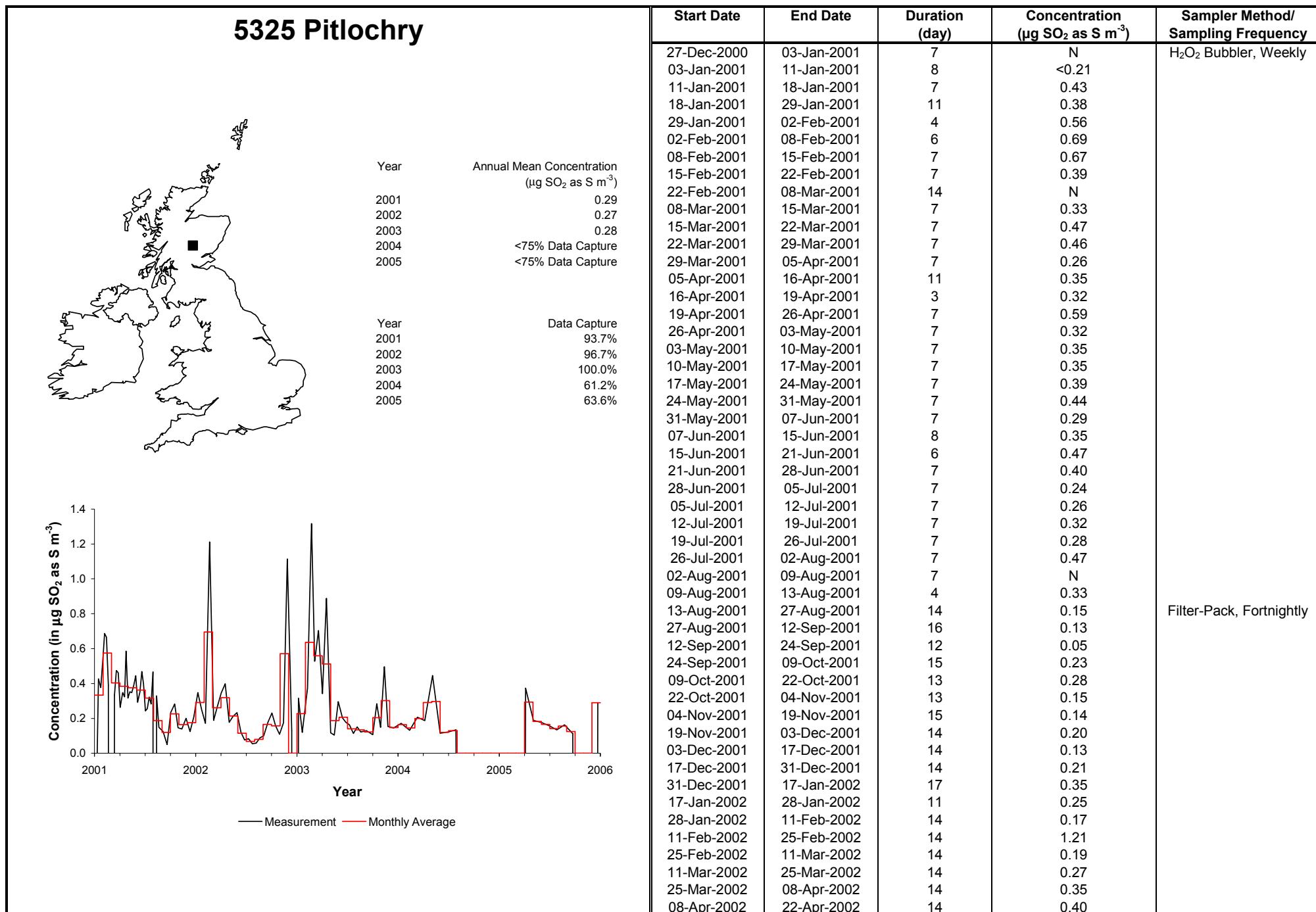
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5320 Loch Leven

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
08-Apr-2002	22-Apr-2002	14	1.32	Filter-Pack, Fortnightly	22-Apr-2005	18-May-2005	26	0.76	
22-Apr-2002	06-May-2002	14	1.00		18-May-2005	15-Jun-2005	28	0.88	
06-May-2002	20-May-2002	14	1.65		15-Jun-2005	21-Jul-2005	36	0.82	
20-May-2002	04-Jun-2002	15	1.18		21-Jul-2005	10-Aug-2005	20	0.52	
04-Jun-2002	17-Jun-2002	13	1.18		10-Aug-2005	08-Sep-2005	29	0.47	
17-Jun-2002	01-Jul-2002	14	1.54		08-Sep-2005	04-Oct-2005	26	0.68	
01-Jul-2002	16-Jul-2002	15	2.12		04-Oct-2005	03-Nov-2005	30	0.48	
16-Jul-2002	16-Aug-2002	31	1.33		03-Nov-2005	02-Dec-2005	29	0.56	
16-Aug-2002	28-Aug-2002	12	0.39		02-Dec-2005	04-Jan-2006	33	0.89	
28-Aug-2002	24-Sep-2002	27	2.39		04-Jan-2006				Monitoring terminated
24-Sep-2002	03-Oct-2002	9	1.43						
03-Oct-2002	21-Oct-2002	18	0.96						
21-Oct-2002	04-Nov-2002	14	0.78						
04-Nov-2002	18-Nov-2002	14	0.90						
18-Nov-2002	16-Dec-2002	28	1.60						
16-Dec-2002	31-Dec-2002	15	0.78						
31-Dec-2002	14-Jan-2003	14	0.87						
14-Jan-2003	28-Jan-2003	14	1.61						
28-Jan-2003	10-Feb-2003	13	1.74						
10-Feb-2003	24-Feb-2003	14	2.06						
24-Feb-2003	10-Mar-2003	14	1.89						
10-Mar-2003	27-Mar-2003	17	3.07						
27-Mar-2003	07-Apr-2003	11	1.94						
07-Apr-2003	21-Apr-2003	14	1.91						
21-Apr-2003	05-May-2003	14	0.48						
05-May-2003	20-May-2003	15	1.25						
20-May-2003	03-Jun-2003	14	1.60						
03-Jun-2003	19-Jun-2003	16	1.52						
19-Jun-2003	28-Jul-2003	39	1.47						
28-Jul-2003	11-Aug-2003	14	1.73						
11-Aug-2003	25-Aug-2003	14	1.64						
25-Aug-2003	08-Sep-2003	14	0.34						
08-Sep-2003	06-Oct-2003	28	1.02						
06-Oct-2003	20-Oct-2003	14	0.87						
20-Oct-2003	04-Nov-2003	15	0.48						
04-Nov-2003	17-Nov-2003	13	1.47						
17-Nov-2003	26-Jan-2004	70	N						
26-Jan-2004	28-Feb-2004	33	1.24	Filter-Pack, 4 Weekly					
28-Feb-2004	28-Mar-2004	29	N						
28-Mar-2004	19-Apr-2004	22	0.41						
19-Apr-2004	17-May-2004	28	1.00						
17-May-2004	14-Jun-2004	28	0.49						
14-Jun-2004	16-Jul-2004	32	0.41						
16-Jul-2004	11-Aug-2004	26	1.11						
11-Aug-2004	06-Oct-2004	56	0.85						
06-Oct-2004	07-Nov-2004	32	0.83						
07-Nov-2004	31-Jan-2005	85	N						
31-Jan-2005	05-Mar-2005	33	0.71						
05-Mar-2005	24-Mar-2005	19	1.08						
24-Mar-2005	22-Apr-2005	29	0.79						

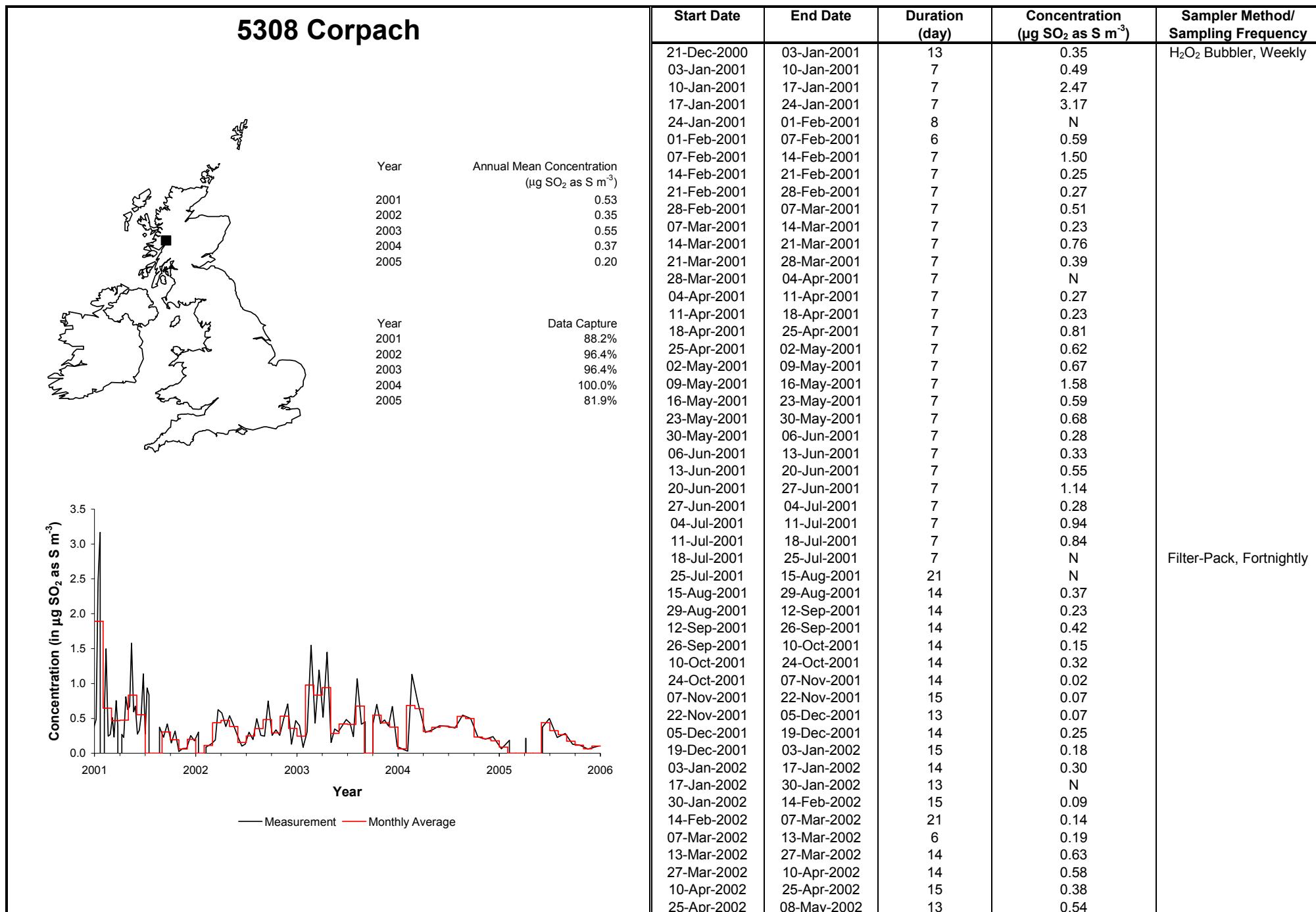
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5325 Pitlochry

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
22-Apr-2002	06-May-2002	14	0.18	Filter-Pack, Fortnightly	12-Aug-2004	01-Jan-2005	142	N	
06-May-2002	20-May-2002	14	0.21		01-Jan-2005	21-Mar-2005	79	N	
20-May-2002	05-Jun-2002	16	0.23		21-Mar-2005	18-Apr-2005	28	0.37	
05-Jun-2002	17-Jun-2002	12	0.12		18-Apr-2005	16-May-2005	28	0.19	
17-Jun-2002	02-Jul-2002	15	0.08		16-May-2005	13-Jun-2005	28	0.18	
02-Jul-2002	15-Jul-2002	13	0.08		13-Jun-2005	11-Jul-2005	28	0.16	
15-Jul-2002	30-Jul-2002	15	0.05		11-Jul-2005	08-Aug-2005	28	0.13	
30-Jul-2002	12-Aug-2002	13	0.06		08-Aug-2005	08-Sep-2005	31	0.16	
12-Aug-2002	26-Aug-2002	14	0.09		08-Sep-2005	06-Oct-2005	28	0.11	
26-Aug-2002	10-Sep-2002	15	0.10		06-Oct-2005	31-Oct-2005	25	N	
10-Sep-2002	25-Sep-2002	15	0.18		31-Oct-2005	29-Nov-2005	29	N	
25-Sep-2002	08-Oct-2002	13	0.23		29-Nov-2005	12-Jan-2006	44	0.29	
08-Oct-2002	21-Oct-2002	13	0.16		12-Jan-2006				Monitoring terminated
21-Oct-2002	06-Nov-2002	16	0.11						
06-Nov-2002	18-Nov-2002	12	0.18						
18-Nov-2002	05-Dec-2002	17	1.11						
05-Dec-2002	19-Dec-2002	14	0.13						
19-Dec-2002	31-Dec-2002	12	N						
31-Dec-2002	13-Jan-2003	13	0.32						
13-Jan-2003	28-Jan-2003	15	0.12						
28-Jan-2003	17-Feb-2003	20	0.37						
17-Feb-2003	24-Feb-2003	7	1.32						
24-Feb-2003	10-Mar-2003	14	0.53						
10-Mar-2003	24-Mar-2003	14	0.70						
24-Mar-2003	09-Apr-2003	16	0.34						
09-Apr-2003	22-Apr-2003	13	0.89						
22-Apr-2003	08-May-2003	16	0.12						
08-May-2003	19-May-2003	11	0.10						
19-May-2003	06-Jun-2003	18	0.30						
06-Jun-2003	18-Jun-2003	12	0.20						
18-Jun-2003	30-Jun-2003	12	0.18						
30-Jun-2003	15-Jul-2003	15	0.16						
15-Jul-2003	29-Jul-2003	14	0.11						
29-Jul-2003	12-Aug-2003	14	0.15						
12-Aug-2003	25-Aug-2003	13	0.12						
25-Aug-2003	23-Sep-2003	29	0.13						
23-Sep-2003	08-Oct-2003	15	0.11						
08-Oct-2003	23-Oct-2003	15	0.28						
23-Oct-2003	05-Nov-2003	13	0.15						
05-Nov-2003	18-Nov-2003	13	0.50						
18-Nov-2003	01-Dec-2003	13	0.15						
01-Dec-2003	29-Dec-2003	28	0.15						
29-Dec-2003	26-Jan-2004	28	0.17	Filter-Pack, 4 Weekly					
26-Jan-2004	25-Feb-2004	30	0.13						
25-Feb-2004	22-Mar-2004	26	0.21						
22-Mar-2004	19-Apr-2004	28	0.19						
19-Apr-2004	18-May-2004	29	0.45						
18-May-2004	14-Jun-2004	27	0.12						
14-Jun-2004	12-Jul-2004	28	0.12						
12-Jul-2004	12-Aug-2004	31	0.13						

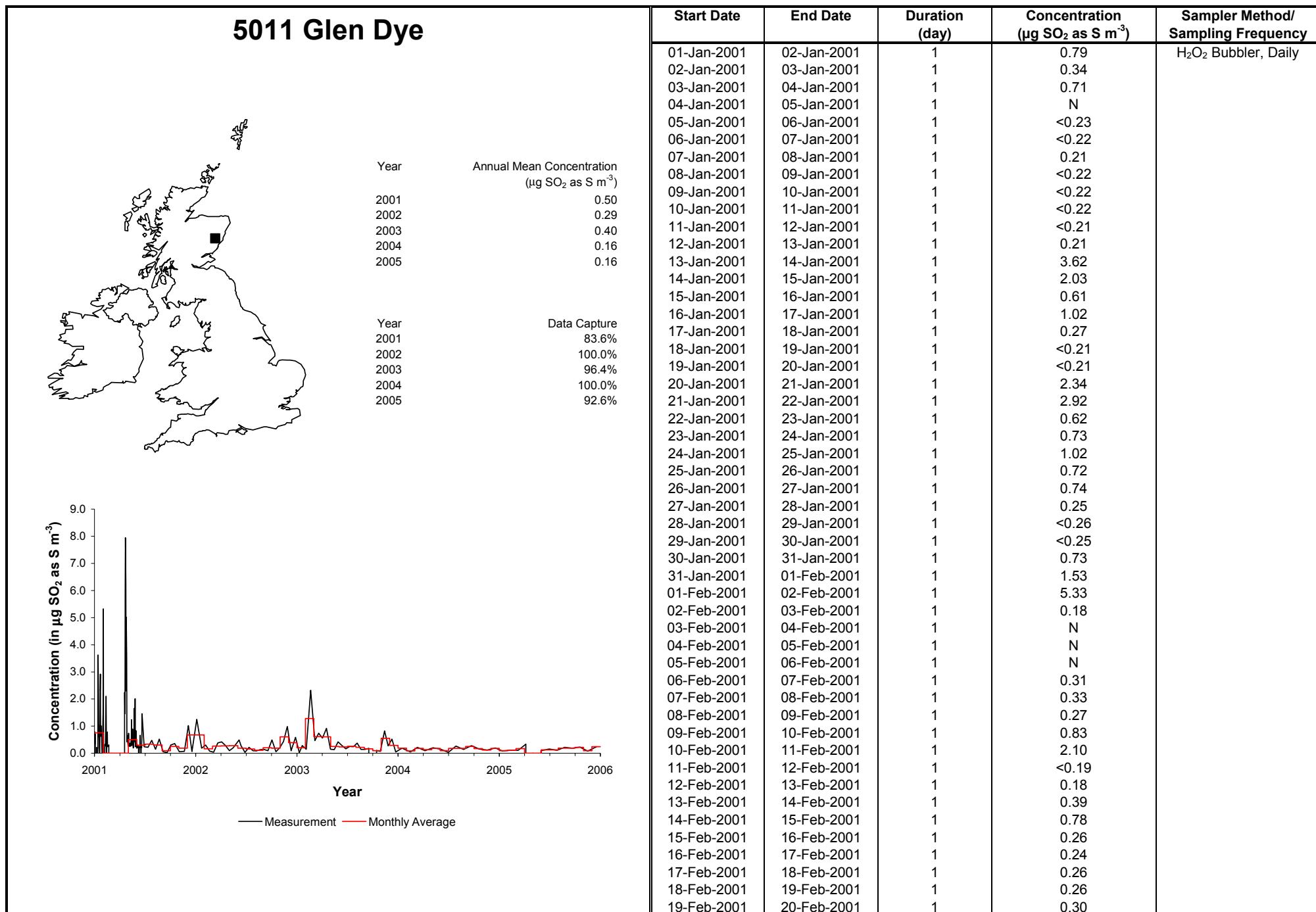
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5308 Corpach

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
08-May-2002	22-May-2002	14	0.41	Filter-Pack, Fortnightly	15-Jun-2004	13-Jul-2004	28	0.38	
22-May-2002	10-Jun-2002	19	0.24		13-Jul-2004	04-Aug-2004	22	0.36	
10-Jun-2002	19-Jun-2002	9	0.10		04-Aug-2004	06-Sep-2004	33	0.55	
19-Jun-2002	03-Jul-2002	14	0.13		06-Sep-2004	30-Sep-2004	24	0.50	
03-Jul-2002	17-Jul-2002	14	0.30		30-Sep-2004	28-Oct-2004	28	0.24	
17-Jul-2002	31-Jul-2002	14	0.20		28-Oct-2004	25-Nov-2004	28	0.20	
31-Jul-2002	14-Aug-2002	14	0.50		25-Nov-2004	21-Dec-2004	26	0.24	
14-Aug-2002	30-Aug-2002	16	0.26		21-Dec-2004	26-Jan-2005	36	0.07	
30-Aug-2002	11-Sep-2002	12	0.25		26-Jan-2005	18-Feb-2005	23	0.18	
11-Sep-2002	25-Sep-2002	14	0.75		18-Feb-2005	22-Mar-2005	32	N	
25-Sep-2002	09-Oct-2002	14	0.26		22-Mar-2005	19-Apr-2005	28	0.22	
09-Oct-2002	23-Oct-2002	14	0.34		19-Apr-2005	23-May-2005	34	N	
23-Oct-2002	06-Nov-2002	14	0.26		23-May-2005	16-Jun-2005	24	0.37	
06-Nov-2002	20-Nov-2002	14	0.50		16-Jun-2005	12-Jul-2005	26	0.50	
20-Nov-2002	05-Dec-2002	15	0.71		12-Jul-2005	11-Aug-2005	30	0.23	
05-Dec-2002	18-Dec-2002	13	0.13		11-Aug-2005	09-Sep-2005	29	0.28	
18-Dec-2002	06-Jan-2003	19	0.47		09-Sep-2005	04-Oct-2005	25	0.13	
06-Jan-2003	15-Jan-2003	9	0.40		04-Oct-2005	02-Nov-2005	29	0.11	
15-Jan-2003	31-Jan-2003	16	0.09		02-Nov-2005	01-Dec-2005	29	0.06	
31-Jan-2003	12-Feb-2003	12	0.31		01-Dec-2005	17-Jan-2006	47	0.10	
12-Feb-2003	27-Feb-2003	15	1.55		17-Jan-2006				Monitoring terminated
27-Feb-2003	12-Mar-2003	13	0.43						
12-Mar-2003	28-Mar-2003	16	1.19						
28-Mar-2003	09-Apr-2003	12	0.52						
09-Apr-2003	25-Apr-2003	16	1.45						
25-Apr-2003	09-May-2003	14	0.15						
09-May-2003	21-May-2003	12	0.35						
21-May-2003	06-Jun-2003	16	0.31						
06-Jun-2003	18-Jun-2003	12	0.40						
18-Jun-2003	02-Jul-2003	14	0.48						
02-Jul-2003	16-Jul-2003	14	0.43						
16-Jul-2003	29-Jul-2003	13	0.24						
29-Jul-2003	13-Aug-2003	15	1.07						
13-Aug-2003	27-Aug-2003	14	0.42						
27-Aug-2003	11-Sep-2003	15	0.45						
11-Sep-2003	24-Sep-2003	13	N						
24-Sep-2003	08-Oct-2003	14	0.42						
08-Oct-2003	22-Oct-2003	14	0.70						
22-Oct-2003	05-Nov-2003	14	0.43						
05-Nov-2003	19-Nov-2003	14	0.48						
19-Nov-2003	03-Dec-2003	14	0.39						
03-Dec-2003	17-Dec-2003	14	0.67						
17-Dec-2003	08-Jan-2004	22	0.10						
08-Jan-2004	29-Jan-2004	21	0.06	Filter-Pack, 4 Weekly					
29-Jan-2004	11-Feb-2004	13	0.03						
11-Feb-2004	25-Feb-2004	14	1.13						
25-Feb-2004	25-Mar-2004	29	0.74						
25-Mar-2004	21-Apr-2004	27	0.30						
21-Apr-2004	13-May-2004	22	0.34						
13-May-2004	15-Jun-2004	33	0.40						

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5011 Glen Dye

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
20-Feb-2001	21-Feb-2001	1	N	H ₂ O ₂ Bubbler, Daily	11-Apr-2001	12-Apr-2001	1	N	H ₂ O ₂ Bubbler, Daily
21-Feb-2001	22-Feb-2001	1	N		12-Apr-2001	13-Apr-2001	1	N	
22-Feb-2001	23-Feb-2001	1	N		13-Apr-2001	14-Apr-2001	1	N	
23-Feb-2001	24-Feb-2001	1	N		14-Apr-2001	15-Apr-2001	1	N	
24-Feb-2001	25-Feb-2001	1	N		15-Apr-2001	16-Apr-2001	1	N	
25-Feb-2001	26-Feb-2001	1	N		16-Apr-2001	17-Apr-2001	1	N	
26-Feb-2001	27-Feb-2001	1	N		17-Apr-2001	18-Apr-2001	1	2.23	
27-Feb-2001	28-Feb-2001	1	N		18-Apr-2001	19-Apr-2001	1	1.46	
28-Feb-2001	01-Mar-2001	1	N		19-Apr-2001	20-Apr-2001	1	6.02	
01-Mar-2001	02-Mar-2001	1	N		20-Apr-2001	21-Apr-2001	1	7.95	
02-Mar-2001	03-Mar-2001	1	N		21-Apr-2001	22-Apr-2001	1	6.23	
03-Mar-2001	04-Mar-2001	1	N		22-Apr-2001	23-Apr-2001	1	2.30	
04-Mar-2001	05-Mar-2001	1	N		23-Apr-2001	24-Apr-2001	1	5.01	
05-Mar-2001	06-Mar-2001	1	N		24-Apr-2001	25-Apr-2001	1	3.55	
06-Mar-2001	07-Mar-2001	1	N		25-Apr-2001	26-Apr-2001	1	0.42	
07-Mar-2001	08-Mar-2001	1	N		26-Apr-2001	27-Apr-2001	1	0.43	
08-Mar-2001	09-Mar-2001	1	N		27-Apr-2001	28-Apr-2001	1	0.64	
09-Mar-2001	10-Mar-2001	1	N		28-Apr-2001	29-Apr-2001	1	0.41	
10-Mar-2001	11-Mar-2001	1	N		29-Apr-2001	30-Apr-2001	1	0.34	
11-Mar-2001	12-Mar-2001	1	N		30-Apr-2001	01-May-2001	1	0.27	
12-Mar-2001	13-Mar-2001	1	N		01-May-2001	02-May-2001	1	0.73	
13-Mar-2001	14-Mar-2001	1	N		02-May-2001	03-May-2001	1	0.41	
14-Mar-2001	15-Mar-2001	1	N		03-May-2001	04-May-2001	1	0.33	
15-Mar-2001	16-Mar-2001	1	N		04-May-2001	05-May-2001	1	0.26	
16-Mar-2001	17-Mar-2001	1	N		05-May-2001	06-May-2001	1	0.33	
17-Mar-2001	18-Mar-2001	1	N		06-May-2001	07-May-2001	1	0.26	
18-Mar-2001	19-Mar-2001	1	N		07-May-2001	08-May-2001	1	0.27	
19-Mar-2001	20-Mar-2001	1	N		08-May-2001	09-May-2001	1	0.39	
20-Mar-2001	21-Mar-2001	1	N		09-May-2001	10-May-2001	1	0.27	
21-Mar-2001	22-Mar-2001	1	N		10-May-2001	11-May-2001	1	0.41	
22-Mar-2001	23-Mar-2001	1	N		11-May-2001	12-May-2001	1	0.53	
23-Mar-2001	24-Mar-2001	1	N		12-May-2001	13-May-2001	1	1.24	
24-Mar-2001	25-Mar-2001	1	N		13-May-2001	14-May-2001	1	0.29	
25-Mar-2001	26-Mar-2001	1	N		14-May-2001	15-May-2001	1	0.36	
26-Mar-2001	27-Mar-2001	1	N		15-May-2001	16-May-2001	1	0.47	
27-Mar-2001	28-Mar-2001	1	N		16-May-2001	17-May-2001	1	0.90	
28-Mar-2001	29-Mar-2001	1	N		17-May-2001	18-May-2001	1	0.29	
29-Mar-2001	30-Mar-2001	1	N		18-May-2001	19-May-2001	1	0.20	
30-Mar-2001	31-Mar-2001	1	N		19-May-2001	20-May-2001	1	0.23	
31-Mar-2001	01-Apr-2001	1	N		20-May-2001	21-May-2001	1	0.40	
01-Apr-2001	02-Apr-2001	1	N		21-May-2001	22-May-2001	1	0.42	
02-Apr-2001	03-Apr-2001	1	N		22-May-2001	23-May-2001	1	1.65	
03-Apr-2001	04-Apr-2001	1	N		23-May-2001	24-May-2001	1	0.62	
04-Apr-2001	05-Apr-2001	1	N		24-May-2001	25-May-2001	1	0.44	
05-Apr-2001	06-Apr-2001	1	N		25-May-2001	26-May-2001	1	2.01	
06-Apr-2001	07-Apr-2001	1	N		26-May-2001	27-May-2001	1	0.24	
07-Apr-2001	08-Apr-2001	1	N		27-May-2001	28-May-2001	1	0.29	
08-Apr-2001	09-Apr-2001	1	N		28-May-2001	29-May-2001	1	0.83	
09-Apr-2001	10-Apr-2001	1	N		29-May-2001	30-May-2001	1	0.31	
10-Apr-2001	11-Apr-2001	1	N		30-May-2001	31-May-2001	1	0.21	

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

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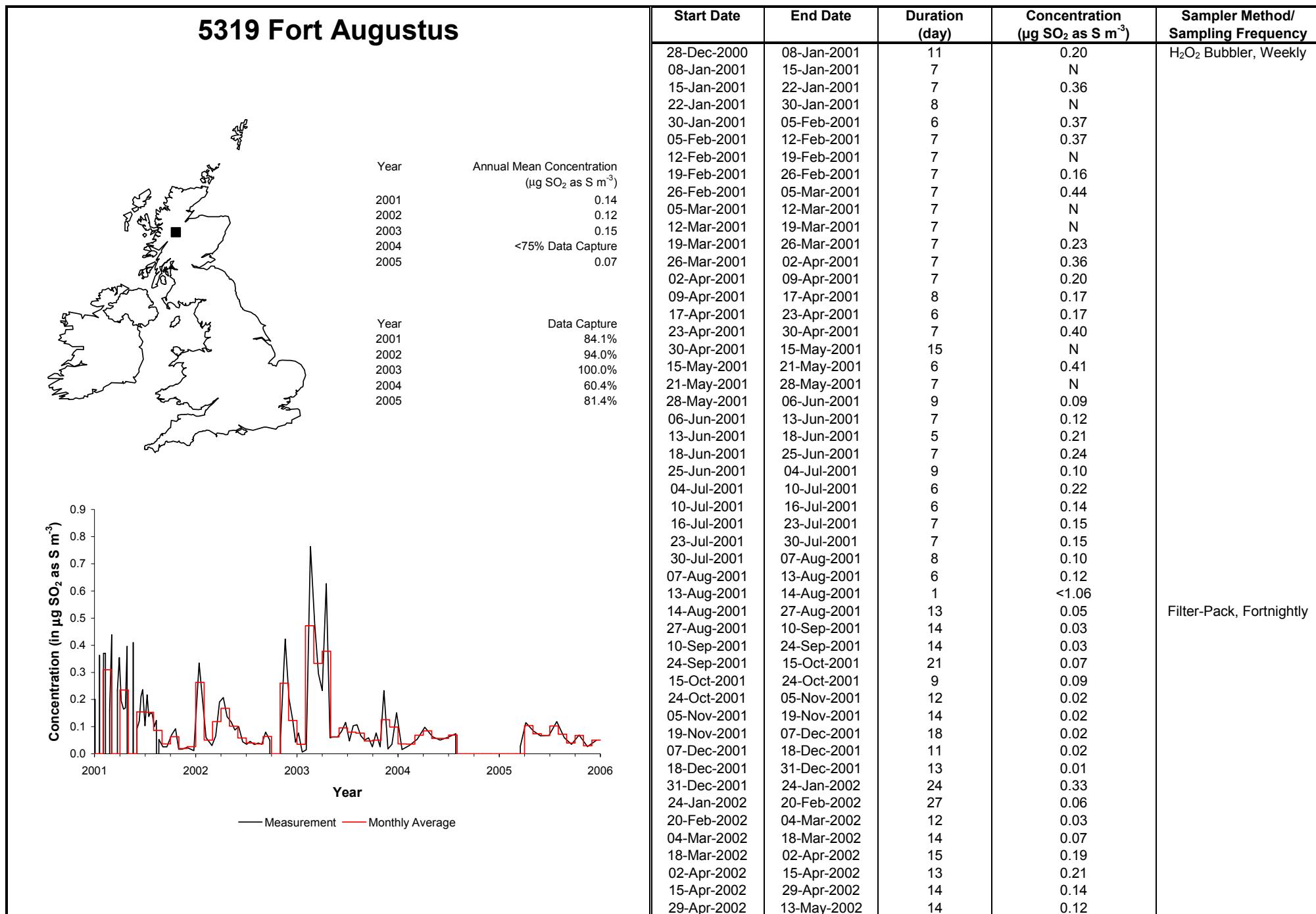
Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
31-May-2001	01-Jun-2001	1	0.19	H ₂ O ₂ Bubbler, Daily	27-Aug-2002	10-Sep-2002	14	0.14	
01-Jun-2001	02-Jun-2001	1	0.34		10-Sep-2002	24-Sep-2002	14	0.10	
02-Jun-2001	03-Jun-2001	1	0.22		24-Sep-2002	08-Oct-2002	14	0.49	
03-Jun-2001	04-Jun-2001	1	0.21		08-Oct-2002	25-Oct-2002	17	0.06	
04-Jun-2001	05-Jun-2001	1	0.20		25-Oct-2002	05-Nov-2002	11	0.21	
05-Jun-2001	06-Jun-2001	1	0.28		05-Nov-2002	20-Nov-2002	15	0.44	
06-Jun-2001	07-Jun-2001	1	0.19		20-Nov-2002	03-Dec-2002	13	0.99	
07-Jun-2001	08-Jun-2001	1	<0.18		03-Dec-2002	17-Dec-2002	14	0.10	
08-Jun-2001	09-Jun-2001	1	<0.18		17-Dec-2002	04-Jan-2003	18	0.58	
09-Jun-2001	10-Jun-2001	1	0.21		04-Jan-2003	14-Jan-2003	10	0.03	
10-Jun-2001	11-Jun-2001	1	0.25		14-Jan-2003	27-Jan-2003	13	0.28	
11-Jun-2001	12-Jun-2001	1	0.20		27-Jan-2003	11-Feb-2003	15	0.15	
12-Jun-2001	13-Jun-2001	1	0.67		11-Feb-2003	25-Feb-2003	14	2.32	
13-Jun-2001	14-Jun-2001	1	0.30		25-Feb-2003	11-Mar-2003	14	0.47	
14-Jun-2001	15-Jun-2001	1	0.25		11-Mar-2003	25-Mar-2003	14	0.74	
15-Jun-2001	16-Jun-2001	1	<0.22		25-Mar-2003	08-Apr-2003	14	0.56	
16-Jun-2001	17-Jun-2001	1	0.23		08-Apr-2003	22-Apr-2003	14	0.92	
17-Jun-2001	18-Jun-2001	1	0.21		22-Apr-2003	07-May-2003	15	0.15	
18-Jun-2001	19-Jun-2001	1	0.67		07-May-2003	20-May-2003	13	0.14	
19-Jun-2001	20-Jun-2001	1	1.45		20-May-2003	03-Jun-2003	14	0.42	
20-Jun-2001	03-Jul-2001	13	0.25	Filter-Pack, Fortnightly	03-Jun-2003	17-Jun-2003	14	0.29	
03-Jul-2001	17-Jul-2001	14	0.22		17-Jun-2003	01-Jul-2003	14	0.16	
17-Jul-2001	31-Jul-2001	14	0.48		01-Jul-2003	15-Jul-2003	14	0.25	
31-Jul-2001	14-Aug-2001	14	0.15		15-Jul-2003	29-Jul-2003	14	0.24	
14-Aug-2001	28-Aug-2001	14	0.52		29-Jul-2003	12-Aug-2003	14	0.37	
28-Aug-2001	11-Sep-2001	14	0.06		12-Aug-2003	26-Aug-2003	14	0.14	
11-Sep-2001	25-Sep-2001	14	0.03		26-Aug-2003	09-Sep-2003	14	0.14	
25-Sep-2001	09-Oct-2001	14	0.30		09-Sep-2003	24-Sep-2003	15	0.18	
09-Oct-2001	23-Oct-2001	14	0.36		24-Sep-2003	07-Oct-2003	13	N	
23-Oct-2001	13-Nov-2001	21	0.06		07-Oct-2003	21-Oct-2003	14	0.10	
13-Nov-2001	27-Nov-2001	14	0.07		21-Oct-2003	04-Nov-2003	14	0.08	
27-Nov-2001	11-Dec-2001	14	1.02		04-Nov-2003	20-Nov-2003	16	0.82	
11-Dec-2001	24-Dec-2001	13	0.06		20-Nov-2003	01-Dec-2003	11	0.27	
24-Dec-2001	15-Jan-2002	22	1.25		01-Dec-2003	16-Dec-2003	15	0.52	
15-Jan-2002	29-Jan-2002	14	0.19		16-Dec-2003	29-Dec-2003	13	0.05	
29-Jan-2002	12-Feb-2002	14	0.30		29-Dec-2003	02-Feb-2004	35	0.19	
12-Feb-2002	25-Feb-2002	13	0.09		02-Feb-2004	24-Feb-2004	22	0.05	
25-Feb-2002	12-Mar-2002	15	0.04		24-Feb-2004	23-Mar-2004	28	0.22	
12-Mar-2002	26-Mar-2002	14	0.38		23-Mar-2004	20-Apr-2004	28	0.10	
26-Mar-2002	09-Apr-2002	14	0.42		20-Apr-2004	19-May-2004	29	0.21	
09-Apr-2002	23-Apr-2002	14	0.29		19-May-2004	16-Jun-2004	28	0.15	
23-Apr-2002	07-May-2002	14	0.09		16-Jun-2004	13-Jul-2004	27	0.04	
07-May-2002	21-May-2002	14	0.21		13-Jul-2004	10-Aug-2004	28	0.27	
21-May-2002	18-Jun-2002	28	0.49		10-Aug-2004	07-Sep-2004	28	0.14	
04-Jun-2002	18-Jun-2002	14	0.28		07-Sep-2004	05-Oct-2004	28	0.28	
18-Jun-2002	02-Jul-2002	14	0.03		05-Oct-2004	02-Nov-2004	28	0.16	
02-Jul-2002	18-Jul-2002	16	0.22		02-Nov-2004	03-Dec-2004	31	0.12	
18-Jul-2002	30-Jul-2002	12	0.09		03-Dec-2004	29-Dec-2004	26	0.20	
30-Jul-2002	13-Aug-2002	14	0.09		29-Dec-2004	25-Jan-2005	27	0.09	
13-Aug-2002	27-Aug-2002	14	0.13		25-Jan-2005	22-Feb-2005	28	0.11	

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

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Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
22-Feb-2005	23-Mar-2005	29	0.11	Filter-Pack, 4 Weekly					
23-Mar-2005	19-Apr-2005	27	0.34						
19-Apr-2005	16-May-2005	27	N						
16-May-2005	14-Jun-2005	29	0.10						
14-Jun-2005	12-Jul-2005	28	0.15						
12-Jul-2005	09-Aug-2005	28	0.11						
09-Aug-2005	06-Sep-2005	28	0.22						
06-Sep-2005	05-Oct-2005	29	0.18						
05-Oct-2005	01-Nov-2005	27	0.23						
01-Nov-2005	29-Nov-2005	28	0.08						
29-Nov-2005	04-Jan-2006	36	0.25	Monitoring terminated					
04-Jan-2006									

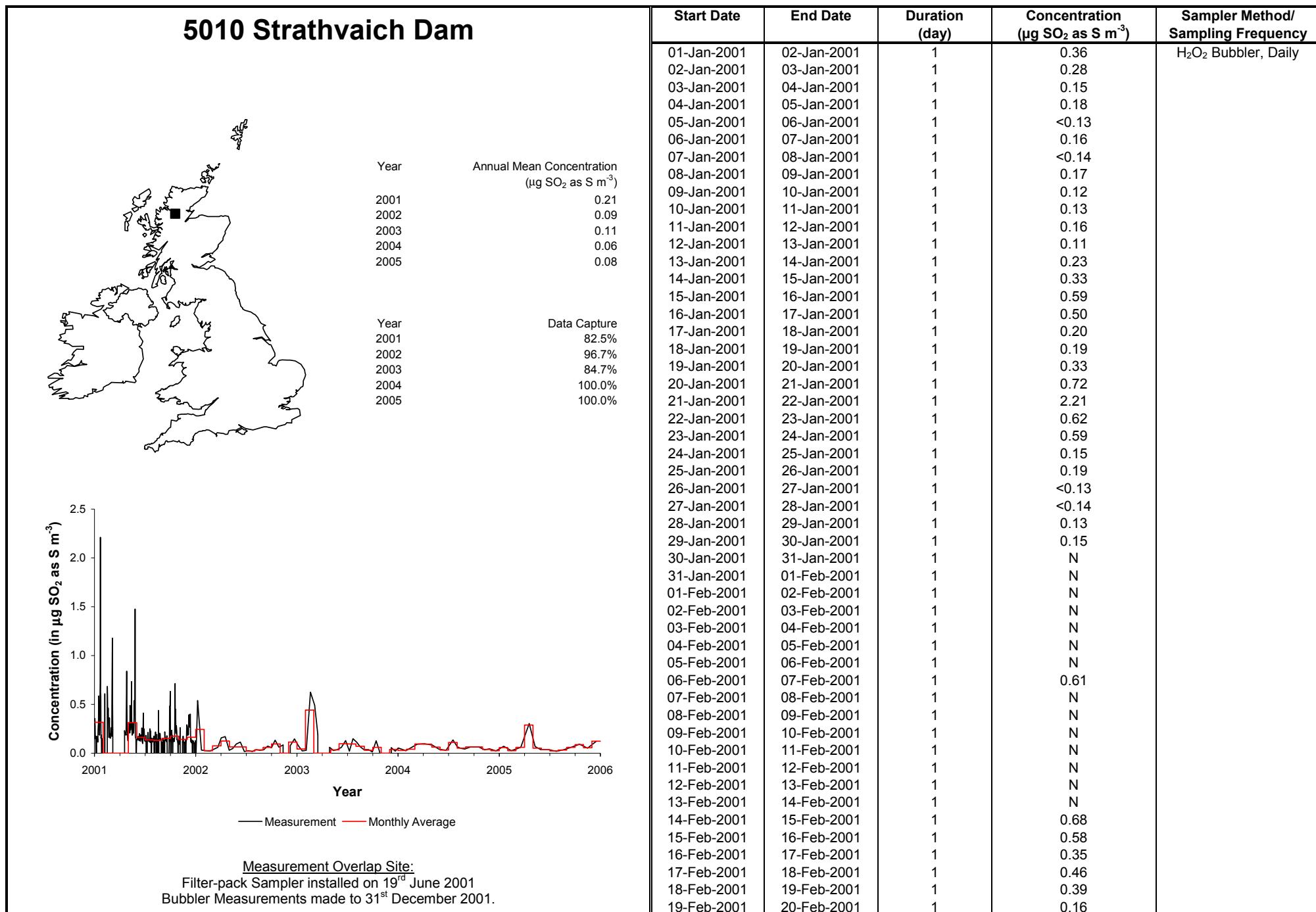
Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



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Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
13-May-2002	27-May-2002	14	0.09	Filter-Pack, Fortnightly	12-Jul-2004	09-Aug-2004	28	0.07	
27-May-2002	10-Jun-2002	14	0.10		09-Aug-2004	07-Sep-2004	29	N	
10-Jun-2002	24-Jun-2002	14	0.04		07-Sep-2004	01-Jan-2005	116	N	
24-Jun-2002	08-Jul-2002	14	0.04		01-Jan-2005	10-Mar-2005	68	N	
08-Jul-2002	21-Jul-2002	13	0.05		10-Mar-2005	21-Mar-2005	11	0.03	
21-Jul-2002	08-Aug-2002	18	0.03		21-Mar-2005	20-Apr-2005	30	0.12	
08-Aug-2002	19-Aug-2002	11	0.04		20-Apr-2005	13-May-2005	23	0.09	
19-Aug-2002	02-Sep-2002	14	0.04		13-May-2005	13-Jun-2005	31	0.07	
02-Sep-2002	16-Sep-2002	14	0.08		13-Jun-2005	11-Jul-2005	28	0.07	
16-Sep-2002	03-Oct-2002	17	0.05		11-Jul-2005	08-Aug-2005	28	0.12	
03-Oct-2002	10-Oct-2002	7	N		08-Aug-2005	05-Sep-2005	28	0.06	
10-Oct-2002	25-Oct-2002	15	N		05-Sep-2005	30-Sep-2005	25	0.04	
25-Oct-2002	11-Nov-2002	17	0.07		30-Sep-2005	31-Oct-2005	31	0.07	
11-Nov-2002	25-Nov-2002	14	0.42		31-Oct-2005	28-Nov-2005	28	0.03	
25-Nov-2002	09-Dec-2002	14	0.20		28-Nov-2005	04-Jan-2006	37	0.05	
09-Dec-2002	23-Dec-2002	14	0.12		04-Jan-2006				Monitoring terminated
23-Dec-2002	30-Dec-2002	7	0.04						
30-Dec-2002	13-Jan-2003	14	0.08						
13-Jan-2003	27-Jan-2003	14	0.01						
27-Jan-2003	10-Feb-2003	14	0.02						
10-Feb-2003	24-Feb-2003	14	0.76						
24-Feb-2003	10-Mar-2003	14	0.48						
10-Mar-2003	24-Mar-2003	14	0.30						
24-Mar-2003	07-Apr-2003	14	0.23						
07-Apr-2003	22-Apr-2003	15	0.63						
22-Apr-2003	05-May-2003	13	0.06						
05-May-2003	19-May-2003	14	0.06						
19-May-2003	03-Jun-2003	15	0.06						
03-Jun-2003	16-Jun-2003	13	0.08						
16-Jun-2003	30-Jun-2003	14	0.12						
30-Jun-2003	14-Jul-2003	14	0.05						
14-Jul-2003	28-Jul-2003	14	0.10						
28-Jul-2003	11-Aug-2003	14	0.11						
11-Aug-2003	25-Aug-2003	14	0.07						
25-Aug-2003	08-Sep-2003	14	0.05						
08-Sep-2003	22-Sep-2003	14	0.06						
22-Sep-2003	06-Oct-2003	14	0.03						
06-Oct-2003	21-Oct-2003	15	0.08						
21-Oct-2003	03-Nov-2003	13	0.03						
03-Nov-2003	18-Nov-2003	15	0.23						
18-Nov-2003	01-Dec-2003	13	0.02						
01-Dec-2003	15-Dec-2003	14	0.04						
15-Dec-2003	05-Jan-2004	21	0.15						
05-Jan-2004	26-Jan-2004	21	0.02	Filter-Pack, 4 Weekly					
26-Jan-2004	23-Feb-2004	28	0.03						
23-Feb-2004	22-Mar-2004	28	0.05						
22-Mar-2004	20-Apr-2004	29	0.10						
20-Apr-2004	17-May-2004	27	0.06						
17-May-2004	15-Jun-2004	29	0.05						
15-Jun-2004	12-Jul-2004	27	0.06						

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.



5010 Strathvaich Dam

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
20-Feb-2001	21-Feb-2001	1	0.16	H ₂ O ₂ Bubbler, Daily	11-Apr-2001	12-Apr-2001	1	N	H ₂ O ₂ Bubbler, Daily
21-Feb-2001	22-Feb-2001	1	0.36		12-Apr-2001	13-Apr-2001	1	N	
22-Feb-2001	23-Feb-2001	1	0.20		13-Apr-2001	14-Apr-2001	1	N	
23-Feb-2001	24-Feb-2001	1	0.20		14-Apr-2001	15-Apr-2001	1	N	
24-Feb-2001	25-Feb-2001	1	0.15		15-Apr-2001	16-Apr-2001	1	N	
25-Feb-2001	26-Feb-2001	1	0.20		16-Apr-2001	17-Apr-2001	1	N	
26-Feb-2001	27-Feb-2001	1	0.19		17-Apr-2001	18-Apr-2001	1	0.23	
27-Feb-2001	28-Feb-2001	1	0.26		18-Apr-2001	19-Apr-2001	1	0.19	
28-Feb-2001	01-Mar-2001	1	0.19		19-Apr-2001	20-Apr-2001	1	0.22	
01-Mar-2001	02-Mar-2001	1	0.17		20-Apr-2001	21-Apr-2001	1	0.19	
02-Mar-2001	03-Mar-2001	1	0.54		21-Apr-2001	22-Apr-2001	1	0.20	
03-Mar-2001	04-Mar-2001	1	1.18		22-Apr-2001	23-Apr-2001	1	0.19	
04-Mar-2001	05-Mar-2001	1	0.48		23-Apr-2001	24-Apr-2001	1	0.38	
05-Mar-2001	06-Mar-2001	1	0.24		24-Apr-2001	25-Apr-2001	1	0.84	
06-Mar-2001	07-Mar-2001	1	N		25-Apr-2001	26-Apr-2001	1	0.52	
07-Mar-2001	08-Mar-2001	1	N		26-Apr-2001	27-Apr-2001	1	0.27	
08-Mar-2001	09-Mar-2001	1	N		27-Apr-2001	28-Apr-2001	1	0.18	
09-Mar-2001	10-Mar-2001	1	N		28-Apr-2001	29-Apr-2001	1	0.13	
10-Mar-2001	11-Mar-2001	1	N		29-Apr-2001	30-Apr-2001	1	0.13	
11-Mar-2001	12-Mar-2001	1	N		30-Apr-2001	01-May-2001	1	0.14	
12-Mar-2001	13-Mar-2001	1	N		01-May-2001	02-May-2001	1	0.30	
13-Mar-2001	14-Mar-2001	1	N		02-May-2001	03-May-2001	1	0.31	
14-Mar-2001	15-Mar-2001	1	N		03-May-2001	04-May-2001	1	0.24	
15-Mar-2001	16-Mar-2001	1	N		04-May-2001	05-May-2001	1	0.21	
16-Mar-2001	17-Mar-2001	1	N		05-May-2001	06-May-2001	1	0.25	
17-Mar-2001	18-Mar-2001	1	N		06-May-2001	07-May-2001	1	0.21	
18-Mar-2001	19-Mar-2001	1	N		07-May-2001	08-May-2001	1	0.49	
19-Mar-2001	20-Mar-2001	1	N		08-May-2001	09-May-2001	1	0.24	
20-Mar-2001	21-Mar-2001	1	N		09-May-2001	10-May-2001	1	0.29	
21-Mar-2001	22-Mar-2001	1	N		10-May-2001	11-May-2001	1	0.28	
22-Mar-2001	23-Mar-2001	1	N		11-May-2001	12-May-2001	1	0.40	
23-Mar-2001	24-Mar-2001	1	N		12-May-2001	13-May-2001	1	0.73	
24-Mar-2001	25-Mar-2001	1	N		13-May-2001	14-May-2001	1	0.29	
25-Mar-2001	26-Mar-2001	1	N		14-May-2001	15-May-2001	1	0.19	
26-Mar-2001	27-Mar-2001	1	N		15-May-2001	16-May-2001	1	0.19	
27-Mar-2001	28-Mar-2001	1	N		16-May-2001	17-May-2001	1	0.20	
28-Mar-2001	29-Mar-2001	1	N		17-May-2001	18-May-2001	1	0.31	
29-Mar-2001	30-Mar-2001	1	N		18-May-2001	19-May-2001	1	0.20	
30-Mar-2001	31-Mar-2001	1	N		19-May-2001	20-May-2001	1	0.21	
31-Mar-2001	01-Apr-2001	1	N		20-May-2001	21-May-2001	1	0.21	
01-Apr-2001	02-Apr-2001	1	N		21-May-2001	22-May-2001	1	0.36	
02-Apr-2001	03-Apr-2001	1	N		22-May-2001	23-May-2001	1	0.54	
03-Apr-2001	04-Apr-2001	1	N		23-May-2001	24-May-2001	1	0.41	
04-Apr-2001	05-Apr-2001	1	N		24-May-2001	25-May-2001	1	0.40	
05-Apr-2001	06-Apr-2001	1	N		25-May-2001	26-May-2001	1	1.48	
06-Apr-2001	07-Apr-2001	1	N		26-May-2001	27-May-2001	1	0.17	
07-Apr-2001	08-Apr-2001	1	N		27-May-2001	28-May-2001	1	0.15	
08-Apr-2001	09-Apr-2001	1	N		28-May-2001	29-May-2001	1	0.15	
09-Apr-2001	10-Apr-2001	1	N		29-May-2001	30-May-2001	1	<0.14	
10-Apr-2001	11-Apr-2001	1	N		30-May-2001	31-May-2001	1	0.14	

Notes: (1) These are the actual measurements and no correction has been made following the change in sampling methodology; (2) N = no or non valid measurement; (3) Measurements preceded by < are below the Limit of Detection. They are included in the calculation of the statistical parameters at 50% of its value; (4) Statistical parameters calculated only if data capture is greater than 75%.

5010 Strathvaich Dam

Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
31-May-2001	01-Jun-2001	1	0.13	H ₂ O ₂ Bubbler, Daily	20-Jul-2001	21-Jul-2001	1	0.23	H ₂ O ₂ Bubbler, Daily
01-Jun-2001	02-Jun-2001	1	0.14		21-Jul-2001	22-Jul-2001	1	0.15	
02-Jun-2001	03-Jun-2001	1	0.16		22-Jul-2001	23-Jul-2001	1	0.12	
03-Jun-2001	04-Jun-2001	1	0.14		23-Jul-2001	24-Jul-2001	1	<0.13	
04-Jun-2001	05-Jun-2001	1	0.14		24-Jul-2001	25-Jul-2001	1	0.15	
05-Jun-2001	06-Jun-2001	1	0.17		25-Jul-2001	26-Jul-2001	1	0.13	
06-Jun-2001	07-Jun-2001	1	0.15		26-Jul-2001	27-Jul-2001	1	0.13	
07-Jun-2001	08-Jun-2001	1	0.15		27-Jul-2001	28-Jul-2001	1	0.12	
08-Jun-2001	09-Jun-2001	1	0.13		28-Jul-2001	29-Jul-2001	1	0.13	
09-Jun-2001	10-Jun-2001	1	0.16		29-Jul-2001	30-Jul-2001	1	0.12	
10-Jun-2001	11-Jun-2001	1	0.20		30-Jul-2001	31-Jul-2001	1	0.16	
11-Jun-2001	12-Jun-2001	1	0.17		31-Jul-2001	01-Aug-2001	1	0.14	
12-Jun-2001	13-Jun-2001	1	0.16		01-Aug-2001	02-Aug-2001	1	0.18	
13-Jun-2001	14-Jun-2001	1	0.12		02-Aug-2001	03-Aug-2001	1	<0.14	
14-Jun-2001	15-Jun-2001	1	0.19		03-Aug-2001	04-Aug-2001	1	<0.12	
15-Jun-2001	16-Jun-2001	1	0.15		04-Aug-2001	05-Aug-2001	1	0.12	
16-Jun-2001	17-Jun-2001	1	0.15		05-Aug-2001	06-Aug-2001	1	<0.11	
17-Jun-2001	18-Jun-2001	1	0.14		06-Aug-2001	07-Aug-2001	1	0.12	
18-Jun-2001	19-Jun-2001	1	0.26		07-Aug-2001	08-Aug-2001	1	0.22	
19-Jun-2001	20-Jun-2001	1	0.12		08-Aug-2001	09-Aug-2001	1	0.13	
20-Jun-2001	21-Jun-2001	1	0.11		09-Aug-2001	10-Aug-2001	1	0.11	
21-Jun-2001	22-Jun-2001	1	0.10		10-Aug-2001	11-Aug-2001	1	0.12	
22-Jun-2001	23-Jun-2001	1	0.12		11-Aug-2001	12-Aug-2001	1	<0.12	
23-Jun-2001	24-Jun-2001	1	0.41		12-Aug-2001	13-Aug-2001	1	0.19	
24-Jun-2001	25-Jun-2001	1	0.21		13-Aug-2001	14-Aug-2001	1	N	
25-Jun-2001	26-Jun-2001	1	0.17		14-Aug-2001	15-Aug-2001	1	0.15	
26-Jun-2001	27-Jun-2001	1	0.25		15-Aug-2001	16-Aug-2001	1	<0.11	
27-Jun-2001	28-Jun-2001	1	0.15		16-Aug-2001	17-Aug-2001	1	0.14	
28-Jun-2001	29-Jun-2001	1	0.13		17-Aug-2001	18-Aug-2001	1	<0.12	
29-Jun-2001	30-Jun-2001	1	0.12		18-Aug-2001	19-Aug-2001	1	0.44	
30-Jun-2001	01-Jul-2001	1	0.13		19-Aug-2001	20-Aug-2001	1	<0.13	
01-Jul-2001	02-Jul-2001	1	0.12		20-Aug-2001	21-Aug-2001	1	0.15	
02-Jul-2001	03-Jul-2001	1	0.18		21-Aug-2001	22-Aug-2001	1	0.18	
03-Jul-2001	04-Jul-2001	1	0.13		22-Aug-2001	23-Aug-2001	1	0.15	
04-Jul-2001	05-Jul-2001	1	<0.14		23-Aug-2001	24-Aug-2001	1	0.21	
05-Jul-2001	06-Jul-2001	1	0.12		24-Aug-2001	25-Aug-2001	1	0.20	
06-Jul-2001	07-Jul-2001	1	0.12		25-Aug-2001	26-Aug-2001	1	0.14	
07-Jul-2001	08-Jul-2001	1	<0.12		26-Aug-2001	27-Aug-2001	1	0.15	
08-Jul-2001	09-Jul-2001	1	0.13		27-Aug-2001	28-Aug-2001	1	0.14	
09-Jul-2001	10-Jul-2001	1	0.14		28-Aug-2001	29-Aug-2001	1	0.14	
10-Jul-2001	11-Jul-2001	1	0.22		29-Aug-2001	30-Aug-2001	1	<0.13	
11-Jul-2001	12-Jul-2001	1	0.14		30-Aug-2001	31-Aug-2001	1	<0.11	
12-Jul-2001	13-Jul-2001	1	0.13		31-Aug-2001	01-Sep-2001	1	0.10	
13-Jul-2001	14-Jul-2001	1	0.12		01-Sep-2001	02-Sep-2001	1	0.11	
14-Jul-2001	15-Jul-2001	1	0.13		02-Sep-2001	03-Sep-2001	1	<0.13	
15-Jul-2001	16-Jul-2001	1	0.12		03-Sep-2001	04-Sep-2001	1	0.11	
16-Jul-2001	17-Jul-2001	1	0.16		04-Sep-2001	05-Sep-2001	1	0.15	
17-Jul-2001	18-Jul-2001	1	0.25		05-Sep-2001	06-Sep-2001	1	<0.11	
18-Jul-2001	19-Jul-2001	1	0.12		06-Sep-2001	07-Sep-2001	1	0.10	
19-Jul-2001	20-Jul-2001	1	0.11		07-Sep-2001	08-Sep-2001	1	0.13	

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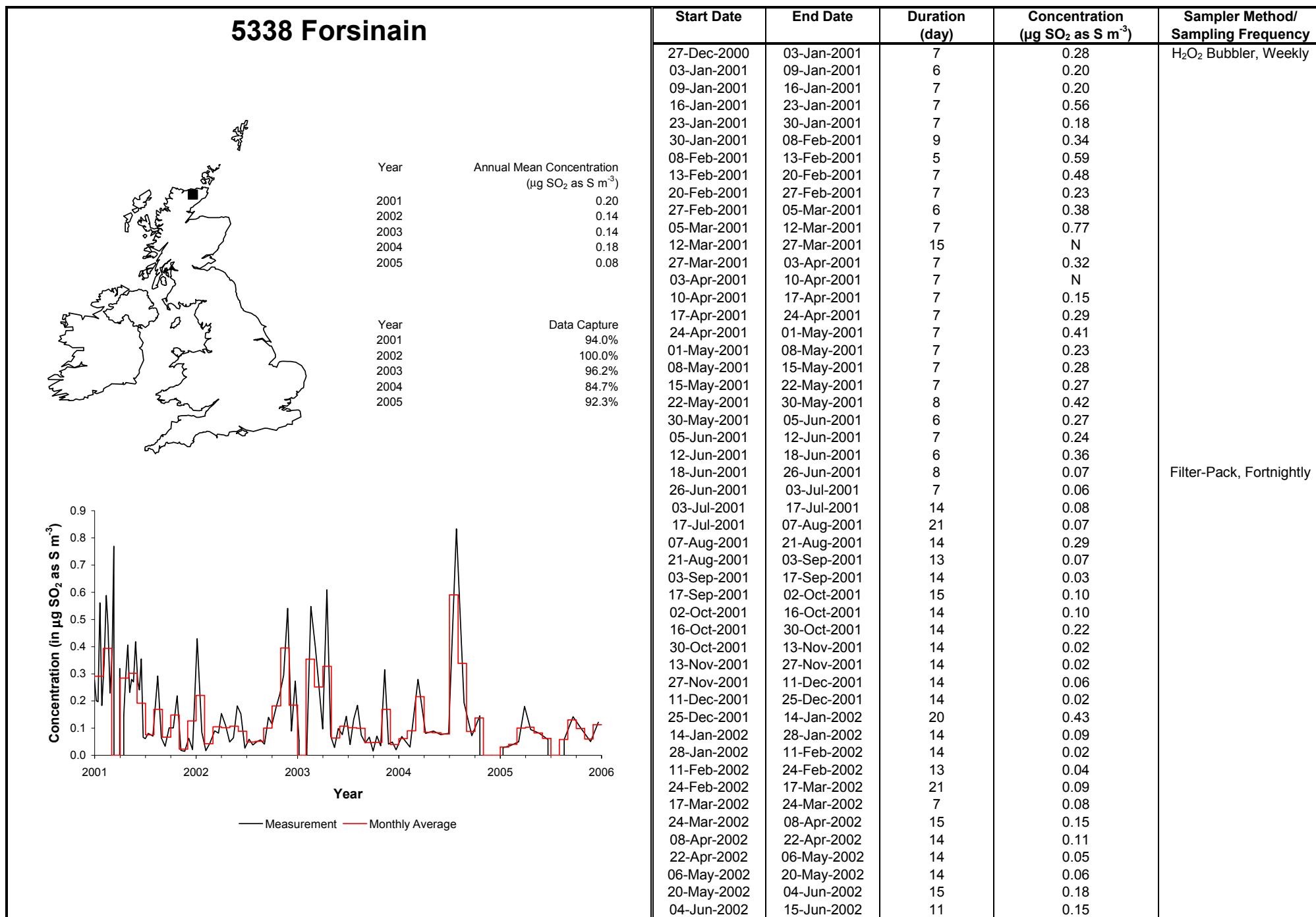
Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
08-Sep-2001	09-Sep-2001	1	0.10	H ₂ O ₂ Bubbler, Daily	28-Oct-2001	29-Oct-2001	1	<0.13	H ₂ O ₂ Bubbler, Daily
09-Sep-2001	10-Sep-2001	1	<0.10		29-Oct-2001	30-Oct-2001	1	0.12	
10-Sep-2001	11-Sep-2001	1	0.22		30-Oct-2001	31-Oct-2001	1	0.17	
11-Sep-2001	12-Sep-2001	1	0.13		31-Oct-2001	01-Nov-2001	1	0.14	
12-Sep-2001	13-Sep-2001	1	0.14		01-Nov-2001	02-Nov-2001	1	0.16	
13-Sep-2001	14-Sep-2001	1	0.13		02-Nov-2001	03-Nov-2001	1	0.12	
14-Sep-2001	15-Sep-2001	1	0.14		03-Nov-2001	04-Nov-2001	1	0.09	
15-Sep-2001	16-Sep-2001	1	0.12		04-Nov-2001	05-Nov-2001	1	0.11	
16-Sep-2001	17-Sep-2001	1	0.16		05-Nov-2001	06-Nov-2001	1	0.26	
17-Sep-2001	18-Sep-2001	1	0.18		06-Nov-2001	07-Nov-2001	1	N	
18-Sep-2001	19-Sep-2001	1	0.15		07-Nov-2001	08-Nov-2001	1	N	
19-Sep-2001	20-Sep-2001	1	<0.12		08-Nov-2001	09-Nov-2001	1	N	
20-Sep-2001	21-Sep-2001	1	<0.11		09-Nov-2001	10-Nov-2001	1	N	
21-Sep-2001	22-Sep-2001	1	<0.11		10-Nov-2001	11-Nov-2001	1	N	
22-Sep-2001	23-Sep-2001	1	<0.12		11-Nov-2001	12-Nov-2001	1	N	
23-Sep-2001	24-Sep-2001	1	<0.11		12-Nov-2001	13-Nov-2001	1	N	
24-Sep-2001	25-Sep-2001	1	<0.11		13-Nov-2001	14-Nov-2001	1	0.12	
25-Sep-2001	26-Sep-2001	1	0.14		14-Nov-2001	15-Nov-2001	1	0.14	
26-Sep-2001	27-Sep-2001	1	0.12		15-Nov-2001	16-Nov-2001	1	0.18	
27-Sep-2001	28-Sep-2001	1	0.48		16-Nov-2001	17-Nov-2001	1	0.16	
28-Sep-2001	29-Sep-2001	1	0.49		17-Nov-2001	18-Nov-2001	1	0.11	
29-Sep-2001	30-Sep-2001	1	0.64		18-Nov-2001	19-Nov-2001	1	<0.10	
30-Sep-2001	01-Oct-2001	1	0.14		19-Nov-2001	20-Nov-2001	1	0.11	
01-Oct-2001	02-Oct-2001	1	<0.12		20-Nov-2001	21-Nov-2001	1	0.11	
02-Oct-2001	03-Oct-2001	1	<0.11		21-Nov-2001	22-Nov-2001	1	0.11	
03-Oct-2001	04-Oct-2001	1	0.11		22-Nov-2001	23-Nov-2001	1	0.11	
04-Oct-2001	05-Oct-2001	1	0.12		23-Nov-2001	24-Nov-2001	1	<0.12	
05-Oct-2001	06-Oct-2001	1	0.23		24-Nov-2001	25-Nov-2001	1	0.14	
06-Oct-2001	07-Oct-2001	1	0.13		25-Nov-2001	26-Nov-2001	1	<0.10	
07-Oct-2001	08-Oct-2001	1	0.18		26-Nov-2001	27-Nov-2001	1	0.11	
08-Oct-2001	09-Oct-2001	1	<0.13		27-Nov-2001	28-Nov-2001	1	0.14	
09-Oct-2001	10-Oct-2001	1	0.14		28-Nov-2001	29-Nov-2001	1	0.27	
10-Oct-2001	11-Oct-2001	1	0.13		29-Nov-2001	30-Nov-2001	1	0.29	
11-Oct-2001	12-Oct-2001	1	0.12		30-Nov-2001	01-Dec-2001	1	0.27	
12-Oct-2001	13-Oct-2001	1	0.16		01-Dec-2001	02-Dec-2001	1	0.20	
13-Oct-2001	14-Oct-2001	1	0.12		02-Dec-2001	03-Dec-2001	1	0.18	
14-Oct-2001	15-Oct-2001	1	0.13		03-Dec-2001	04-Dec-2001	1	0.25	
15-Oct-2001	16-Oct-2001	1	0.16		04-Dec-2001	05-Dec-2001	1	0.19	
16-Oct-2001	17-Oct-2001	1	0.20		05-Dec-2001	06-Dec-2001	1	0.26	
17-Oct-2001	18-Oct-2001	1	0.71		06-Dec-2001	07-Dec-2001	1	0.40	
18-Oct-2001	19-Oct-2001	1	0.24		07-Dec-2001	08-Dec-2001	1	0.30	
19-Oct-2001	20-Oct-2001	1	0.45		08-Dec-2001	09-Dec-2001	1	0.28	
20-Oct-2001	21-Oct-2001	1	0.21		09-Dec-2001	10-Dec-2001	1	0.28	
21-Oct-2001	22-Oct-2001	1	0.20		10-Dec-2001	11-Dec-2001	1	0.27	
22-Oct-2001	23-Oct-2001	1	0.28		11-Dec-2001	12-Dec-2001	1	0.40	
23-Oct-2001	24-Oct-2001	1	0.22		12-Dec-2001	13-Dec-2001	1	0.12	
24-Oct-2001	25-Oct-2001	1	0.14		13-Dec-2001	14-Dec-2001	1	0.15	
25-Oct-2001	26-Oct-2001	1	0.15		14-Dec-2001	15-Dec-2001	1	0.15	
26-Oct-2001	27-Oct-2001	1	0.11		15-Dec-2001	16-Dec-2001	1	0.12	
27-Oct-2001	28-Oct-2001	1	0.11		16-Dec-2001	17-Dec-2001	1	0.11	

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Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
17-Dec-2001	18-Dec-2001	1	0.12	H ₂ O ₂ Bubbler, Daily	03-May-2003	17-May-2003	14	0.03	Filter-Pack, Fortnightly
18-Dec-2001	19-Dec-2001	1	0.13		17-May-2003	01-Jun-2003	15	0.04	
19-Dec-2001	20-Dec-2001	1	<0.10		01-Jun-2003	15-Jun-2003	14	0.06	
20-Dec-2001	21-Dec-2001	1	<0.10		15-Jun-2003	01-Jul-2003	16	0.13	
21-Dec-2001	22-Dec-2001	1	0.10		01-Jul-2003	13-Jul-2003	12	0.02	
22-Dec-2001	23-Dec-2001	1	0.13		13-Jul-2003	27-Jul-2003	14	0.15	
23-Dec-2001	24-Dec-2001	1	0.11		27-Jul-2003	10-Aug-2003	14	0.11	
24-Dec-2001	25-Dec-2001	1	0.11		10-Aug-2003	23-Aug-2003	13	0.07	
25-Dec-2001	26-Dec-2001	1	0.11		23-Aug-2003	07-Sep-2003	15	0.04	
26-Dec-2001	27-Dec-2001	1	<0.11		07-Sep-2003	23-Sep-2003	16	0.04	
27-Dec-2001	28-Dec-2001	1	0.11		23-Sep-2003	06-Oct-2003	13	0.02	
28-Dec-2001	29-Dec-2001	1	0.10		06-Oct-2003	19-Oct-2003	13	0.13	
29-Dec-2001	30-Dec-2001	1	0.09		19-Oct-2003	01-Nov-2003	13	0.01	
30-Dec-2001	31-Dec-2001	1	0.13		01-Nov-2003	29-Nov-2003	28	N	
31-Dec-2001	01-Jan-2002	1	<0.10		29-Nov-2003	13-Dec-2003	14	0.06	
01-Jan-2002	14-Jan-2002	13	0.54	Filter-Pack, Fortnightly	13-Dec-2003	29-Dec-2003	16	0.02	Filter-Pack, 4 Weekly
14-Jan-2002	29-Jan-2002	15	0.03		29-Dec-2003	04-Jan-2004	6	0.05	
29-Jan-2002	12-Feb-2002	14	0.03		04-Jan-2004	23-Feb-2004	50	0.03	
12-Feb-2002	27-Feb-2002	15	0.02		23-Feb-2004	23-Mar-2004	29	0.09	
27-Feb-2002	13-Mar-2002	14	0.05		23-Mar-2004	17-Apr-2004	25	0.10	
13-Mar-2002	25-Mar-2002	12	0.06		17-Apr-2004	16-May-2004	29	0.09	
25-Mar-2002	09-Apr-2002	15	0.16		16-May-2004	08-Jun-2004	23	0.04	
09-Apr-2002	22-Apr-2002	13	0.17		08-Jun-2004	05-Jul-2004	27	0.03	
22-Apr-2002	06-May-2002	14	0.03		05-Jul-2004	27-Jul-2004	22	0.14	
06-May-2002	19-May-2002	13	0.05		27-Jul-2004	06-Aug-2004	10	0.07	
19-May-2002	03-Jun-2002	15	0.10		06-Aug-2004	22-Aug-2004	16	0.05	
03-Jun-2002	16-Jun-2002	13	0.12		22-Aug-2004	03-Sep-2004	12	0.05	
16-Jun-2002	01-Jul-2002	15	0.02		03-Sep-2004	03-Oct-2004	30	0.07	
01-Jul-2002	14-Jul-2002	13	0.03		03-Oct-2004	31-Oct-2004	28	0.07	
14-Jul-2002	31-Jul-2002	17	0.02		31-Oct-2004	17-Nov-2004	17	0.03	
31-Jul-2002	11-Aug-2002	11	0.04		17-Nov-2004	03-Dec-2004	16	0.05	
11-Aug-2002	25-Aug-2002	14	0.03		03-Dec-2004	05-Jan-2005	33	0.02	
25-Aug-2002	08-Sep-2002	14	0.04		05-Jan-2005	27-Jan-2005	22	0.07	
08-Sep-2002	25-Sep-2002	17	0.08		27-Jan-2005	28-Feb-2005	32	0.03	
25-Sep-2002	06-Oct-2002	11	0.06		28-Feb-2005	03-Apr-2005	34	0.06	
06-Oct-2002	20-Oct-2002	14	0.13		03-Apr-2005	01-May-2005	28	0.31	
20-Oct-2002	04-Nov-2002	15	0.06		01-May-2005	15-May-2005	14	0.07	
04-Nov-2002	19-Nov-2002	15	0.09		15-May-2005	12-Jun-2005	28	0.04	
19-Nov-2002	01-Dec-2002	12	N		12-Jun-2005	10-Jul-2005	28	0.04	
01-Dec-2002	14-Dec-2002	13	0.08		10-Jul-2005	07-Aug-2005	28	0.02	
14-Dec-2002	31-Dec-2002	17	0.15		07-Aug-2005	04-Sep-2005	28	0.04	
31-Dec-2002	12-Jan-2003	12	0.08		04-Sep-2005	02-Oct-2005	28	0.06	
12-Jan-2003	28-Jan-2003	16	0.03		02-Oct-2005	30-Oct-2005	28	0.09	
28-Jan-2003	09-Feb-2003	12	0.03		30-Oct-2005	29-Nov-2005	30	0.05	
09-Feb-2003	26-Feb-2003	17	0.63		29-Nov-2005	02-Jan-2006	34	0.12	
26-Feb-2003	08-Mar-2003	10	0.49		02-Jan-2006				Monitoring terminated
08-Mar-2003	23-Mar-2003	15	0.19						
23-Mar-2003	06-Apr-2003	14	N						
06-Apr-2003	20-Apr-2003	14	N						
20-Apr-2003	03-May-2003	13	0.06						

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Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency	Start Date	End Date	Duration (day)	Concentration ($\mu\text{g SO}_2 \text{ as S m}^{-3}$)	Sampler Method/ Sampling Frequency
15-Jun-2002	01-Jul-2002	16	0.03	Filter-Pack, Fortnightly	04-Oct-2004	01-Nov-2004	28	0.15	
01-Jul-2002	15-Jul-2002	14	0.06		01-Nov-2004	28-Nov-2004	27	N	
15-Jul-2002	29-Jul-2002	14	0.04		28-Nov-2004	27-Dec-2004	29	N	
29-Jul-2002	12-Aug-2002	14	0.05		27-Dec-2004	24-Jan-2005	28	0.03	
12-Aug-2002	26-Aug-2002	14	0.06		24-Jan-2005	20-Feb-2005	27	0.04	
26-Aug-2002	11-Sep-2002	16	0.04		20-Feb-2005	20-Mar-2005	28	0.05	
11-Sep-2002	23-Sep-2002	12	0.14		20-Mar-2005	04-Apr-2005	15	0.18	
23-Sep-2002	07-Oct-2002	14	0.11		04-Apr-2005	02-May-2005	28	0.10	
07-Oct-2002	21-Oct-2002	14	0.18		02-May-2005	06-Jun-2005	35	0.08	
21-Oct-2002	04-Nov-2002	14	0.23		06-Jun-2005	04-Jul-2005	28	0.06	
04-Nov-2002	18-Nov-2002	14	0.30		04-Jul-2005	01-Aug-2005	28	N	
18-Nov-2002	02-Dec-2002	14	0.54		01-Aug-2005	05-Sep-2005	35	0.06	
02-Dec-2002	16-Dec-2002	14	0.09		05-Sep-2005	03-Oct-2005	28	0.14	
16-Dec-2002	30-Dec-2002	14	0.27		03-Oct-2005	07-Nov-2005	35	0.10	
30-Dec-2002	13-Jan-2003	14	0.05		07-Nov-2005	05-Dec-2005	28	0.05	
13-Jan-2003	27-Jan-2003	14	N		05-Dec-2005	02-Jan-2006	28	0.12	
27-Jan-2003	10-Feb-2003	14	0.03		02-Jan-2006				Monitoring terminated
10-Feb-2003	23-Feb-2003	13	0.55						
24-Feb-2003	10-Mar-2003	14	0.40						
10-Mar-2003	23-Mar-2003	13	0.26						
23-Mar-2003	07-Apr-2003	15	0.10						
07-Apr-2003	21-Apr-2003	14	0.61						
21-Apr-2003	05-May-2003	14	0.07						
05-May-2003	19-May-2003	14	0.03						
19-May-2003	02-Jun-2003	14	0.10						
02-Jun-2003	16-Jun-2003	14	0.08						
16-Jun-2003	30-Jun-2003	14	0.14						
30-Jun-2003	14-Jul-2003	14	0.04						
14-Jul-2003	27-Jul-2003	13	0.13						
27-Jul-2003	10-Aug-2003	14	0.18						
10-Aug-2003	25-Aug-2003	15	0.07						
25-Aug-2003	08-Sep-2003	14	0.05						
08-Sep-2003	22-Sep-2003	14	0.07						
22-Sep-2003	06-Oct-2003	14	0.02						
06-Oct-2003	19-Oct-2003	13	0.07						
19-Oct-2003	03-Nov-2003	15	0.04						
03-Nov-2003	17-Nov-2003	14	0.32						
17-Nov-2003	30-Nov-2003	13	0.04						
30-Nov-2003	15-Dec-2003	15	0.05						
15-Dec-2003	28-Dec-2003	13	0.02						
28-Dec-2003	26-Jan-2004	29	0.07						
26-Jan-2004	23-Feb-2004	28	0.03						
23-Feb-2004	22-Mar-2004	28	0.28						
22-Mar-2004	19-Apr-2004	28	0.08						
19-Apr-2004	17-May-2004	28	0.09						
17-May-2004	13-Jun-2004	27	0.08						
13-Jun-2004	11-Jul-2004	28	0.08						
11-Jul-2004	08-Aug-2004	28	0.83						
08-Aug-2004	05-Sep-2004	28	0.19						
05-Sep-2004	04-Oct-2004	29	0.07	Filter-Pack, 4 Weekly					

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Appendix 4

GEOSTATISTICS

GEOSTATISTICS

The use of geostatistics in the analysis of United Kingdom precipitation composition concentrations is described by Webster *et al.* (1991). A geostatistics analysis may also be made of UK sulphur dioxide concentrations. A brief discussion is reproduced here. In a geostatistical treatment of spatial variability the concentration of sulphur dioxide in ambient air, averaged over a time period of one year, is treated as a regionalised random variable. It is assumed that the values at the sites are drawn from the distribution of a random variable with a constant mean. The variance, however, depends on the separation of the sites. For example, within one 20 km grid square the variance would probably be smaller than within a 200 km square. The dependence of the variance on separation (usually termed the lag) is described by a quantity known as the semi-variance:

$$\gamma(h) = \frac{1}{2} \frac{\sum(z_1 - z_2)^2}{n} \quad 1$$

Where there are n pairs of data z_1, z_2 separated by a distance h. A plot of the semi-variance against lag is called a **variogram**.

It can be shown that the variogram function (usually termed the variogram model) must be selected from one of a few allowed forms, each of which has one or more variable parameters which must be fitted to the experimental data. Models that are allowed are:

Exponential

$$\gamma(h) = c_0 + c_1(1 - e^{-\frac{h}{a}}) \quad 2$$

Spherical

$$\gamma(h) = c_0 + c_1\left(\frac{3}{2}\frac{h}{a} - \frac{1}{2}\left(\frac{h}{a}\right)^3\right) \quad 3$$

Linear

$$\gamma(h) = c_0 + \omega h^\theta \quad 4$$

The parameter c_0 , known as the "nugget", is the residual variance for collocated measurements and is a result of measurement error or variability on a scale smaller than the separation of the measurement sites. The "range", "a", is a measure of the separation beyond which the measurements are uncorrelated, and the "sill", " c_0+c_1 ", is the maximum semi-variance. The linear model applies when the regionalised varia has an unlimited capacity for spatial dispersion. There is no sill and the parameter w is called the factor and q the exponent.

Once a variogram model has been found it can be used in an interpolation procedure known as kriging to produce contour maps from irregularly spaced data. In the kriging process the interpolated value is expressed as a linear combination of the measured data $l_1 z_1 + l_2 z_2 + \dots$. Using the variogram model the variance of the interpolated estimate can be expressed in terms of the l_i and this variance is then minimised subject to the constraint that the l_i sum to 1. The result is the best unbiased linear estimate in that it has the smallest error in the statistical sense. A further advantage of using kriging is that the interpolation variance is known for each interpolated estimate and this can be mapped along with the concentration to provide a measure of the reliability of the map.

An exponential model is fitted to the experimental points in the variogram for SO₂, using a sill of 1.5 ppb, a range of 280 km and a nugget of 0.35 ppb.