

Example UK-AIR SOS queries

Some examples of how the UK-AIR SOS can be queried are provided in two common bindings (KVP and JSON) below.

Get Capabilities KVP GET request via a browser

<https://uk-air.defra.gov.uk/data/sos/service?service=AQD&request=GetCapabilities>

<https://uk-air.defra.gov.uk/data/sos/service?service=SOS&request=GetCapabilities>

Get Capabilities JSON POST request using cURL

```
curl -X POST -d '{"request": "GetCapabilities", "service": "SOS", "version": "2.0.0"}'
https://uk-air.defra.gov.uk/sos-ukair/service/json"
```

Get Data Availability KVP GET request via a browser

<https://uk-air.defra.gov.uk/data/sos/service?service=SOS&version=2.0.0&request=GetDataAvailability>

Get Data Availability KVP GET request via a browser for a single pollutant

<https://uk-air.defra.gov.uk/data/sos/service?service=SOS&version=2.0.0&request=GetDataAvailability&observedProperty=http://dd.eionet.europa.eu/vocabulary/aq/pollutant/5>

Get Data Availability JSON POST request using cURL

```
curl -X POST -d '{"request": "GetDataAvailability", "service": "SOS", "version": "2.0.0"}'
https://uk-air.defra.gov.uk/sos-ukair/service/json -H "Accept: application/json"
```

Get Data Availability JSON POST request using cURL for a single pollutant

```
curl -X POST -d '{"request": "GetDataAvailability", "service": "SOS", "version": "2.0.0", "observedProperty": "http://dd.eionet.europa.eu/vocabulary/aq/pollutant/5"}'
https://uk-air.defra.gov.uk/sos-ukair/service/json -H "Accept: application/json"
```

Get Observations KVP GET request via a browser after a time instance

Replace the date stamp as needed.

<https://uk-air.defra.gov.uk/data/sos/service?service=AQD&version=1.0.0&request=GetObservation&temporalFilter=om:phenomenonTime,After,yyyy-mm-ddT00:00:00.000Z>

<https://uk-air.defra.gov.uk/data/sos/service?service=SOS&version=2.0.0&request=GetObservation&temporalFilter=om:phenomenonTime,After,yyyy-mm-ddT00:00:00.000Z>

Get Observations KVP GET request via a browser between two time instances

<https://uk-air.defra.gov.uk/data/sos/service?service=AQD&version=1.0.0&request=GetObservation&temporalFilter=om:phenomenonTime,2017-01-01T23:59:59.000Z/2017-01-03T00:01:01.00&observedProperty=http://dd.eionet.europa.eu/vocabulary/aq/pollutant/9>

Get Observations KVP GET request via a browser between two time instances for a single pollutant

<https://uk-air.defra.gov.uk/sos-ukair/service?service=SOS&version=2.0.0&request=GetObservation&temporalFilter=om:phenomenonTime,2017-01-01T23:59:59.000Z/2017-01-03T00:01:01.00&observedProperty=http://dd.eionet.europa.eu/vocabulary/aq/pollutant/9>

Get Observations JSON POST request using cURL between two time instances for a single pollutant

```
$ curl -X POST -d @getObs.json https://uk-air.defra.gov.uk/sos-ukair/service/json -H "Accept: application/json"
```

where file <getObs.json> contains;

```
{
  "request": "GetObservation",
  "service": "SOS",
  "version": "2.0.0",
  "observedProperty": "http://dd.eionet.europa.eu/vocabulary/aq/pollutant/9",
  "temporalFilter": {
    "during": {
      "ref": "om:phenomenonTime",
      "value": [
        "2014-11-19T14:00:00+01:00",
        "2014-11-20T15:00:00+01:00"
      ]
    }
  }
}
```

Get Observations JSON POST request using cURL between two time instances for a single pollutant with a spatial filter

Between two dates for a single pollutant, restricted to a bounding box around, in this case over the Harwell monitoring station in Oxfordshire.

```
curl -X POST -d @getObsBbox.json https://uk-air.defra.gov.uk/sos-ukair/service/json -H "Accept: application/json"
```

where file < getObsBbox.json > contains;

```
{
  "request": "GetObservation",
  "service": "SOS",
  "version": "2.0.0",
  "observedProperty": "http://dd.eionet.europa.eu/vocabulary/aq/pollutant/9",
  "spatialFilter": {
    "bbox": {
      "ref": "om:featureOfInterest/sams:SF_SpatialSamplingFeature/sams:shape",
      "value": {
        "type": "Polygon",

```

```

    "coordinates": [
      [
        [
          51.460,
          -1.436
        ],
        [
          51.665,
          -1.436
        ],
        [
          51.665,
          -1.235
        ],
        [
          51.460,
          -1.235
        ],
        [
          51.460,
          -1.436
        ]
      ]
    ]
  },
  "temporalFilter": {
    "during": {
      "ref": "om:phenomenonTime",
      "value": [
        "2014-11-19T14:00:00+01:00",
        "2014-11-20T15:00:00+01:00"
      ]
    }
  }
}

```