# Example Air Quality Scotland SOS queries

Some examples of how the Air Quality Scotland SOS can be queried are provided in two common bindings (KVP and JSON) below.

## Get Capabilities KVP GET request via a browser

[http://www.scottishairquality.scot/sos-scotland](http://www.scottishairquality.co.uk/sos-scotland)[/service?service=AQD&request=GetCapabilities](http://tomcat.staging.ricardo-aea.com/sos-scotland/service?service=AQD&request=GetCapabilities)

[http://www.scottishairquality.scot/sos-scotland/service?service=SOS&request=GetCapabilities](http://tomcat.staging.ricardo-aea.com/sos-scotland/service?service=SOS&request=GetCapabilities)

## Get Capabilities JSON POST request using cURL

curl -X POST -d "{\"request\": \"GetCapabilities\",\"service\":\"SOS\",\"version\":\"2.0.0\"}” http://www.scottishairquality.scot/sos-scotland/service/json

## Get Data Availability KVP GET request via a browser

[http://www.scottishairquality.scot/sos-scotland/service?service=SOS&version=2.0.0&request=GetDataAvailability](http://tomcat.staging.ricardo-aea.com/sos-scotland/service?service=SOS&version=2.0.0&request=GetDataAvailability)

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

[http://www.scottishairquality.scot/sos-scotland/service?service=SOS&version=2.0.0&request=GetDataAvailability&observedProperty=http://dd.eionet.europa.eu/vocabulary/aq/pollutant/5](http://tomcat.staging.ricardo-aea.com/sos-scotland/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\"}” http://www.scottishairquality.scot/sos-scotland/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\"}" http://www.scottishairquality.scot/sos-scotland/service/json -H "Accept: application/json"

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

[http://www.scottishairquality.scot/sos-scotland/service?service=AQD&version=1.0.0&request=GetObservation&temporalFilter=om:phenomenonTime,After,2016-02-18T00:00:00.000Z](http://tomcat.staging.ricardo-aea.com/sos-scotland/service?service=AQD&version=1.0.0&request=GetObservation&temporalFilter=om:phenomenonTime,After,2016-02-18T00:00:00.000Z)

[http://www.scottishairquality.scot/sos-scotland/service?service=SOS&version=2.0.0&request=GetObservation&temporalFilter=om:phenomenonTime,After,2016-02-18T00:00:00.000Z](http://tomcat.staging.ricardo-aea.com/sos-scotland/service?service=SOS&version=2.0.0&request=GetObservation&temporalFilter=om:phenomenonTime,After,2016-02-18T00:00:00.000Z)

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

[http://www.scottishairquality.scot/sos-scotland/service?service=AQD&version=1.0.0&request=GetObservation&temporalFilter=om:phenomenonTime,2015-07-01T23:59:59.000Z/2015-07-03T00:01:01.00](http://tomcat.staging.ricardo-aea.com/sos-scotland/service?service=AQD&version=1.0.0&request=GetObservation&temporalFilter=om:phenomenonTime,2015-07-01T23:59:59.000Z/2015-07-03T00:01:01.00)

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

[http://www.scottishairquality.scot/sos-scotland/service?service=SOS&version=2.0.0&request=GetObservation&temporalFilter=om:phenomenonTime,2015-07-01T23:59:59.000Z/2015-07-03T00:01:01.00&observedProperty=http://dd.eionet.europa.eu/vocabulary/aq/pollutant/9](http://tomcat.staging.ricardo-aea.com/sos-scotland/service?service=SOS&version=2.0.0&request=GetObservation&temporalFilter=om:phenomenonTime,2015-07-01T23:59:59.000Z/2015-07-03T00:01:01.00&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 http://www.scottishairquality.scot/sos-scotland/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": [

"2016-03-19T14:00:00+01:00",

"2016-03-20T15:00:00+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 Edinburgh city area.

curl -X POST -d @getObsBbox.json http://www.scottishairquality.scot/sos-scotland/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": [

 [

 [

 55.800,

 -3.320

 ],

 [

 56.000,

 -3.320

 ],

 [

 56.000,

 -3.070

 ],

 [

 55.800,

 -3.070

 ],

 [

 55.800,

 -3.320

 ]

 ]

 ]

 }

 }

 },

 "temporalFilter": {

 "during": {

 "ref": "om:phenomenonTime",

 "value": [

 "2016-03-19T14:00:00+01:00",

 "2016-03-20T15:00:00+01:00"

 ]

 }

 }

}