AIRMAZING DATABASE

Connection details:

url = 37.59.121.18:5432

user = power\_user

password = Ucl2015-pu&

database name = londonair1

Contains 4 tables :

* site (londonair)
  + information about air quality monitoring sites
  + includes site **name**, **coordinates**, **opening** and **closing** dates
* species (londonair)
  + information about pollutants
  + includes pollutant **name**, **description** and **impact on health**
* pollution (londonair)
  + data captured by the air quality monitoring sites
  + has 4 columns: **site, species, datetime, value**
    - e.g. Bloomsbury, NO2, 05.11.2015 12:00, 13.5
  + contains hourly NO2, PM2.5, PM10 levels in μg / m3 for 2013, 2014, 2015
* weather (worldweatheronline)
  + data returned by the worldweatheronline API using the coordinates of the monitoring sites
  + weather data is about the location of the monitoring site or the nearest location where weather data has been recorded
  + has multiple columns: **site, datetime, pressure, temperature, humidity** etc

Example queries

* Information about all the monitoring sites for which there is recorded data

|  |
| --- |
| select pol.site\_id, s.name, s.type, s.lat, s.lng, s.date\_opened, s.date\_closed  from (  select distinct site\_id from pollution  ) pol  left join site s  on pol.site\_id = s.site\_id  order by site\_id |

* NO2 levels, temperature and precipitations for Bloomsbury for 03.05.2014

|  |
| --- |
| select  pol.site\_id, pol.species\_id, pol.date, pol.value, w.temperature\_c, w.precip\_mm  from  pollution pol  left join  weather w  on  pol.site\_id = w.site\_id  and pol.date = w.date  where  pol.site\_id = 'BL0'  and pol.species\_id = 'NO2'  and pol.date >= '2014-05-03'  and pol.date < '2014-05-04' |

* weather info about Bloomsbury from 29.09.2014

|  |
| --- |
| select  w.\*  from  weather w  where  w.site\_id = 'BL0'  and w.date >= '2014-09-29'  and w.date < '2014-09-30' |