



AirBase - Exchange of information - maps methodology

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Concentration maps were created using AirBase version8 as data source:

<http://www.eea.europa.eu/data-and-maps/data/airbase-the-european-air-quality-database-8>

Two tables have been used: Airbase_v8_station and Airbase_v8_statistic, both are available for download and documented at the URL mentioned above.

Concentration maps: observed concentration maps for which 2012 air quality data for components O3, PM10, NO2, SO2, C6H6, PM2.5, CO, Bap, Pb, Cd, As and Ni have been reported.

Distinction is shown by specific relevant thresholds for each component. Depending on the components, specific rounding precisions have been applied for concentrations' thresholds assignation.

SQL query used:

```
/*NO2 - Rounding to integer for all classes*/
--<=20
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'<=20' as station_legend, 1 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0) as statistic_value_rounded, measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='8' and statistics_year=2012 and
statistic_shortname='mean' and round(statistic_value,0)<=20
union
-->20 - <=30
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'20 - <=30' as station_legend, 2 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0),measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='8' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,0)>20 and round(statistic_value,0)<=30)
union
-->30 - <=40
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'30 - <=40' as station_legend, 3 as station_legend_label, statistics_average_group, statistics_year,
statistic_shortname,statistic_value,round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='8' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,0)>30 and round(statistic_value,0)<=40)
union
-->40 - <=50 select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'40 - <=50' as station_legend, 4 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0),measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='8' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,0)>40 and round(statistic_value,0)<=50)
union
-->50 select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'>50' as station_legend, 5 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0),measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='8' and statistics_year=2012 and
statistic_shortname='mean' and round(statistic_value,0)>50
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/*SO2 - Rounding to integer for all classes*/
--<=5
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'<=5' as station_legend, 1 as station_legend_label, statistics_average_group, statistics_year,
statistic_shortname,statistic_value,round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='1' and statistics_year=2012 and
statistic_shortname='mean' and round(statistic_value,0)<=5
union
-->5 - <=10
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'5 - <=10' as station_legend, 2 as station_legend_label,statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='1' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,0)>5 and round(statistic_value,0)<=10)
union
-->10 - <=20
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'10 - <=20' as station_legend, 3 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='1' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,0)>10 and round(statistic_value,0)<=20)
union
--> 20 - <=25
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'20 - <=25' as station_legend, 4 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='1' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,0)>20 and round(statistic_value,0)<=25)
union
-->25
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'>25' as station_legend, 5 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='1' and statistics_year=2012 and
statistic_shortname='mean' and round(statistic_value,0)>25

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/*PM10 - Rounding to integer for all classes*/
--<=20
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'<=20' as station_legend, 1 as station_legend_label,statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='5' and statistics_year=2012 and
statistic_shortname='mean' and round(statistic_value,0)<=20
union
-->20 - <=31
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'20 - <=31' as station_legend, 2 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='5' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,0)>20 and round(statistic_value,0)<=31)
union
-->31 - <=40
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'31 - <=40' as station_legend, 3 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='5' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,0)>31 and round(statistic_value,0)<=40)
union
-->40 - <=50
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'40 - <=50' as station_legend, 4 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='5' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,0)>40 and round(statistic_value,0)<=50)
union
-->50
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'>50' as station_legend, 5 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='5' and statistics_year=2012 and
statistic_shortname='mean' and round(statistic_value,0)>50

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/*PM10 P[90.4] - Rounding to integer for all classes*/
--<=20
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'<=20' as station_legend, 1 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='5' and statistics_year=2012 and
statistic_shortname='P90.4' and round(statistic_value,0)<=20
union
-->20 - <=40
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'20 - <=40' as station_legend, 2 as station_legend_label,statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='5' and statistics_year=2012 and
statistic_shortname='P90.4' and round(statistic_value,0)>20 and round(statistic_value,0)<=40
union
-->40 - <=50
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'40 - <=50' as station_legend, 3 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='5' and statistics_year=2012 and
statistic_shortname='P90.4' and (round(statistic_value,0)>40 and round(statistic_value,0)<=50)
union
-->50 - <=75
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'50 - <=75' as station_legend, 4 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='5' and statistics_year=2012 and
statistic_shortname='P90.4' and (round(statistic_value,0)>50 and round(statistic_value,0)<=75)
union
-->75
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'>75' as station_legend, 5 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='5' and statistics_year=2012 and
statistic_shortname='P90.4' and round(statistic_value,0)>75

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/*PM2.5 - Rounding to integer for all classes*/
--<=10
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'<=10' as station_legend, 1 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='6001' and statistics_year=2012 and
statistic_shortname='mean' and round(statistic_value,0)<=10
union
-->10 - <=20
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'10 - <=20' as station_legend, 2 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='6001' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,0)>10 and round(statistic_value,0)<=20)
union
-->20 - <=25
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'20 - <=25' as station_legend, 3 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='6001' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,0)>20 and round(statistic_value,0)<=25)
union
--> New threshold: 25 - <=30 --dots for this threhold should be dark orange
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'25 - <=30' as station_legend, 4 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='6001' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,0)>25 and round(statistic_value,0)<=30)
union
-->30 --color of these dots?
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'>30' as station_legend, 5 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='day' and statistics_percentage_valid>=75 and component_code='6001' and statistics_year=2012 and
statistic_shortname='mean' and round(statistic_value,0)>30

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/*CO - Rounding to one decimal for all classes*/
--<0.5
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'<=0.5' as station_legend, 1 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,1), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='dymax' and statistics_percentage_valid>=75 and component_code='10' and statistics_year=2012 and
statistic_shortname='mean' and round(statistic_value,1)<=0.5
union
-->0.5 - <=1
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'0.5 - <=1.0' as station_legend, 2 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,1), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='dymax' and statistics_percentage_valid>=75 and component_code='10' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,1)>0.5 and round(statistic_value,1)<=1)
union
-->1 - <=2
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'1.0 - <=2.0' as station_legend, 3 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,1), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='dymax' and statistics_percentage_valid>=75 and component_code='10' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,1)>1 and round(statistic_value,1)<=2)
union
-->2 - <=2.5
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'2.0 - <=2.5' as station_legend, 4 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,1), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='dymax' and statistics_percentage_valid>=75 and component_code='10' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,1)>2 and round(statistic_value,1)<=2.5)
union
-->2.5 --dark orange
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'>2.5' as station_legend, 5 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,1), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='dymax' and statistics_percentage_valid>=75 and component_code='10' and statistics_year=2012 and
statistic_shortname='mean' and round(statistic_value,1)>2.5

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/*C6H6 - Rounding to one decimal for all classes*/
--<=1.7
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'<=1.7' as station_legend, 1 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,1),measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=50 and component_code='20' and statistics_year=2012 and statistic_shortname='mean' and
round(statistic_value,1)<=1.7
union
-->1.7 - <=2
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'1.7 - <=2.0' as station_legend, 2 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,1), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=50 and component_code='20' and statistics_year=2012 and statistic_shortname='mean' and
(round(statistic_value,1)>1.7 and round(statistic_value,1)<=2)
union
-->2 - <=3.5
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'2.0 - <=3.5' as station_legend, 3 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,1), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=50 and component_code='20' and statistics_year=2012 and statistic_shortname='mean' and
(round(statistic_value,1)>2 and round(statistic_value,1)<=3.5)
union
-->3.5 - <=5 --dark orange
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'3.5 - <=5.0' as station_legend, 4 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,1), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=50 and component_code='20' and statistics_year=2012 and statistic_shortname='mean' and
(round(statistic_value,1)>3.5 and round(statistic_value,1)<=5)
union
-->5 --color of these dots?
select
Airbase_v8_station.station_european_code,component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'>5.0' as station_legend, 5 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,1), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=50 and component_code='20' and statistics_year=2012 and statistic_shortname='mean' and
round(statistic_value,1)>5

```

```

/*O3 - Rounding to integer for all classes*/
--<=60
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'<=60' as station_legend, 1 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='dymax' and statistics_percentage_valid>=75 and component_code='7' and statistics_year=2012 and
statistic_shortname='mean' and round(statistic_value,0)<=60
union
-->60 - <=80
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'60 - <=80' as station_legend, 2 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='dymax' and statistics_percentage_valid>=75 and component_code='7' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,0)>60 and round(statistic_value,0)<=80)
union
-->80 - <=100
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'80 - <=100' as station_legend, 3 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='dymax' and statistics_percentage_valid>=75 and component_code='7' and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,0)>80 and round(statistic_value,0)<=100)
union
-->100
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'>100' as station_legend, 4 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='dymax' and statistics_percentage_valid>=75 and component_code='7' and statistics_year=2012 and
statistic_shortname='mean' and round(statistic_value,0)>100

```

```

/*Bap, list of component_code: 6015,5029,5129,1029 - Rounding to two decimals for all classes*/
--<=0.12
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'<=0.12' as station_legend, 1 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,2), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('6015','5029','5129','1029') and statistics_year=2012 and
statistic_shortname='mean' and round(statistic_value,2)<=0.12
union
-->0.12 - <=0.4
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'0.12 - <=0.40' as station_legend, 2 as station_legend_label, statistics_average_group, statistics_year,
statistic_shortname,statistic_value, round(statistic_value,2), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('6015','5029','5129','1029') and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,2)>0.12 and round(statistic_value,2)<=0.4)
union
-->0.4 - <=0.6
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'0.40 - <=0.60' as station_legend, 3 as station_legend_label, statistics_average_group, statistics_year,
statistic_shortname,statistic_value, round(statistic_value,2), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('6015','5029','5129','1029') and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,2)>0.4 and round(statistic_value,2)<=0.6)
union
-->06 - <=1.0
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'0.60 - <=1.00' as station_legend, 4 as station_legend_label, statistics_average_group, statistics_year,
statistic_shortname,statistic_value, round(statistic_value,2), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('6015','5029','5129','1029') and statistics_year=2012 and
statistic_shortname='mean' and (round(statistic_value,2)>0.6 and round(statistic_value,2)<=1.0)
union
-->1.0
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'>1.00' as station_legend, 5 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,2), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('6015','5029','5129','1029') and statistics_year=2012 and
statistic_shortname='mean' and round(statistic_value,2)>1.0

```

```

/*O3 P[93.2] - Rounding to integer for all classes*
--<80
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'<=80' as station_legend, 1 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='dymax' and statistics_percentage_valid>=75 and component_code='7' and statistics_year=2012 and
statistic_shortname='P93.2' and round(statistic_value,0)<=80
union
-->80 - <=100
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'80 - <=100' as station_legend, 2 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='dymax' and statistics_percentage_valid>=75 and component_code='7' and statistics_year=2012 and
statistic_shortname='P93.2' and (round(statistic_value,0)>80 and round(statistic_value,0)<=100)
union
-->100 - <=120
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'100 - <=120' as station_legend, 3 as station_legend_label, statistics_average_group, statistics_year,
statistic_shortname,statistic_value, round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='dymax' and statistics_percentage_valid>=75 and component_code='7' and statistics_year=2012 and
statistic_shortname='P93.2' and (round(statistic_value,0)>100 and round(statistic_value,0)<=120)
union
-->120 - <=140
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'120 - <=140' as station_legend, 4 as station_legend_label, statistics_average_group, statistics_year,
statistic_shortname,statistic_value, round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='dymax' and statistics_percentage_valid>=75 and component_code='7' and statistics_year=2012 and
statistic_shortname='P93.2' and (round(statistic_value,0)>120 and round(statistic_value,0)<=140)
union
-->140
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'>140' as station_legend, 5 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_average_group='dymax' and statistics_percentage_valid>=75 and component_code='7' and statistics_year=2012 and
statistic_shortname='P93.2' and round(statistic_value,0)>140

```

```

/*Pb - Rounding to two decimals for all classes*/
--<=0.02
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'<=0.02' as station_legend, 1 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,2), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('12','5012') and statistics_year=2012 and statistic_shortname='mean'
and round(statistic_value,2)<=0.02
union
--0.02 --<=0.1
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'0.02 - <=0.10' as station_legend, 2 as station_legend_label, statistics_average_group, statistics_year,
statistic_shortname,statistic_value, round(statistic_value,2), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('12','5012') and statistics_year=2012 and statistic_shortname='mean'
and (round(statistic_value,2)>0.02 and round(statistic_value,2)<=0.1)
union
--0.1 --<=0.5
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'0.10 - <=0.50' as station_legend, 3 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,2), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('12','5012') and statistics_year=2012 and statistic_shortname='mean'
and (round(statistic_value,2)>0.1 and round(statistic_value,2)<=0.5)
union
--0.5 --<=1
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'0.50 - <=1.00' as station_legend, 4 as station_legend_label, statistics_average_group, statistics_year,
statistic_shortname,statistic_value, round(statistic_value,2), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('12','5012') and statistics_year=2012 and statistic_shortname='mean'
and (round(statistic_value,2)>0.5 and round(statistic_value,2)<=1)
union
-->1
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'>1.00' as station_legend, 5 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,2), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('12','5012') and statistics_year=2012 and statistic_shortname='mean'
and round(statistic_value,2)>1

```

```

/*Cd - Rounding to integer for all classes*/
--<=1
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'<=1' as station_legend, 1 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('14','5014') and statistics_year=2012 and statistic_shortname='mean'
and round(statistic_value,0)<=1
union
--1 -<=2
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'1 - <=2' as station_legend, 2 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('14','5014') and statistics_year=2012 and statistic_shortname='mean'
and (round(statistic_value,0)>1 and round(statistic_value,0)<=2)
union
--2 -<=5
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'2 - <=5' as station_legend, 3 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('14','5014') and statistics_year=2012 and statistic_shortname='mean'
and (round(statistic_value,0)>2 and round(statistic_value,0)<=5)
union
--5 -<=8
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'5 - <=8' as station_legend, 4 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('14','5014') and statistics_year=2012 and statistic_shortname='mean'
and (round(statistic_value,0)>5 and round(statistic_value,0)<=8)
union
-->8
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'>8' as station_legend, 5 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('14','5014') and statistics_year=2012 and statistic_shortname='mean'
and round(statistic_value,0)>8

```

```

/*As - Rounding to integer for all classes*/
--<=1
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'<=1' as station_legend, 1 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('18','5018') and statistics_year=2012 and statistic_shortname='mean'
and round(statistic_value,0)<=1
union
--1 -<=3
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'1 - <=3' as station_legend, 2 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('18','5018') and statistics_year=2012 and statistic_shortname='mean'
and (round(statistic_value,0)>1 and round(statistic_value,0)<=3)
union
--3 -<=6
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'3 - <=6' as station_legend, 3 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('18','5018') and statistics_year=2012 and statistic_shortname='mean'
and (round(statistic_value,0)>3 and round(statistic_value,0)<=6)
union
--6 -<=9
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'6 - <=9' as station_legend, 4 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('18','5018') and statistics_year=2012 and statistic_shortname='mean'
and (round(statistic_value,0)>6 and round(statistic_value,0)<=9)
union
-->9
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'>9' as station_legend, 5 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('18','5018') and statistics_year=2012 and statistic_shortname='mean'
and round(statistic_value,0)>9

```

```

/*Ni - Rounding to integer for all classes*/
--<=5
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'<=5' as station_legend, 1 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('15','5015') and statistics_year=2012 and statistic_shortname='mean'
and round(statistic_value,0)<=5
union
--5 -<=10
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'5 - <=10' as station_legend, 2 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('15','5015') and statistics_year=2012 and statistic_shortname='mean'
and (round(statistic_value,0)>5 and round(statistic_value,0)<=10)
union
--10 -<=20
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'10 - <=20' as station_legend, 3 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('15','5015') and statistics_year=2012 and statistic_shortname='mean'
and (round(statistic_value,0)>10 and round(statistic_value,0)<=20)
union
--20 -<=30
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'20 - <=30' as station_legend, 4 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('15','5015') and statistics_year=2012 and statistic_shortname='mean'
and (round(statistic_value,0)>20 and round(statistic_value,0)<=30)
union
-->30
select Airbase_v8_station.station_european_code,
component_code,component_caption,component_name,station_longitude_deg,station_latitude_deg,
'>30' as station_legend, 5 as station_legend_label, statistics_average_group, statistics_year, statistic_shortname,statistic_value,
round(statistic_value,0), measurement_unit, statistics_percentage_valid
from Airbase_v8_station
inner join dbo.Airbase_v8_statistic
on Airbase_v8_station.station_european_code=Airbase_v8_statistic.station_european_code
where statistics_percentage_valid>=14 and component_code in ('15','5015') and statistics_year=2012 and statistic_shortname='mean'
and round(statistic_value,0)>30
order by component_code, Airbase_v8_station.station_european_code

```