

Create tables with box chart stats (every hour):

1. step1

truncate table b

2. step2

```
insert into b select tag_name as tag_name, left(ts_utc, 13) as day, tag_value as tag_value , ts as ts,
(case isnumeric(tag_value) when 1 then cast(tag_value as float) else null end) as value
from pi_data_lily where ts_utc > '2013-01-01 00:00:00'
```

step3.

```
alter table pi_data_stat2 alter column day varchar(30)
```

step4.

```
insert into pi_data_stat2 SELECT DISTINCT
tag_name,
day,n = Min(value) OVER (PARTITION BY [day], tag_name),
Maxx = Max(value) OVER (PARTITION BY [day], tag_name),
StdDev = STDEV(value) OVER (PARTITION BY [day], tag_name),
P10 = PERCENTILE_CONT(0.10) WITHIN GROUP (ORDER BY value) OVER (PARTITION BY [day],
tag_name),
P25 = PERCENTILE_CONT(0.25) WITHIN GROUP (ORDER BY value) OVER (PARTITION BY [day],
tag_name),
P50 = PERCENTILE_CONT(0.50) WITHIN GROUP (ORDER BY value) OVER (PARTITION BY [day],
tag_name),
P75 = PERCENTILE_CONT(0.75) WITHIN GROUP (ORDER BY value) OVER (PARTITION BY [day],
tag_name),
P90 = PERCENTILE_CONT(0.9) WITHIN GROUP (ORDER BY value) OVER (PARTITION BY [day],
tag_name)
```

```
FROM b where value IS NOT NULL
```

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Query for lookup likely tags:

```
select * from dbo.pi_data2_partition where (tag_name = 'ABC')
and (ts_utc > '2017-06-01 00:00:00')
```