

Climate Dimension
<u>Year (PK)</u>
<u>Month (PK)</u>
<u>Day (PK)</u>
Daily Average Temperature
Weather

Climate Dimension
<u>Climate Surrogate (PK)</u>
<u>Year (PK)</u>
<u>Month (PK)</u>
<u>Day (PK)</u>

Method#2 使用Partition  
 select year, month, day, time, temperature,  
 sum(temperature) over (partition by year,month,day) from  
 weather\_source\_table

Surrogate Table (lookup key)
<u>Neighborhood Surrogate (PK)</u>
Hood ID (PK)

Neighborhood Dimension
<u>Hood ID (PK)</u>
Neighbourhood Name

Occurrence Date Dimension
<u>Year (PK)</u>
<u>Month (PK)</u>
<u>Day (PK)</u>
Occurrence Day of Week

Climate Dimension
<u>Occurrence Date Surrogate (PK)</u>
<u>Year (PK)</u>
<u>Month (PK)</u>
<u>Day (PK)</u>

Method#1  
 刚做好的Fact Table没有Total Number of Crime。需要从  
 Fact Table的提取tmp table : aggreate count(Event) group  
 by Date  
 然后tmp table和Fact table 进行join , using ( Date ) 才是最  
 最终Fact Table

Fact Table
<u>Occurrence Date Surrogate (PFK)</u>
<u>Climate Surrogate (PFK)</u>
<u>Neighborhood Surrogate (PFK)</u>
<u>Event Surrogate (PFK)</u>
Total Number of Crime Events
Daily Average Temperature

Surrogate Table (lookup key)
<u>Event Surrogate (PK)</u>
Event ID (PK)

Crime Event Dimension
<u>Event ID (PK)</u>
Crime Category
Occurrence Date
Location Type