

ASHRAE Technical FAQ

ID 40

Question Where can I get bin weather data for my area?

There are multiple ways to obtain bin weather data.

One approach is to go to a source which has pre-made bin weather data based upon predetermined hours of the day and days of the week. The often used U.S. Air Force 1978 Engineering Weather Data is an example of this. This is now been superseded by the Engineering Weather Data CD_ROM which contains approximately 800 world wide weather stations. It can be found at the [National Climatic Data Center Bookstore](#).

Another approach is to use a software program which allows you to create your own custom bin weather data by specifying the specific hours of the day, days of the week, and months of the year to include in the binning. These programs also provide the capability to:

- * Select the bin size, such as 2F, 5F or 10F
- * Use parameters other than just dry bulb temperature, such as humidity ratio, wet bulb, etc.
- * Determine the average value of other parameters which occurs coincident with that of the binned parameter. For example, determine the average enthalpy coincident with a 75F and 80F dry bulb bin.
- * Copy a TMY2 record from to CD for use in an hourly energy analysis program.

Answer

The [ASHRAE Weather Data Viewer](#) allows you to display the 1degree F frequency of occurrence bins of dry-bulb, wet-bulb, dew-point, temperatures and enthalpy and wind speed for each of the 5,564 locations that are listed in the [2017 ASHRAE Handbook - Fundamentals](#). These values can be determined by month or on an annual basis. The occurrence of another parameter which occurs coincident with that binned parameter can also be displayed.

The ASHRAE publications may be purchased on-line at our website, www.ashrae.org or by calling 1-800-527-4723 in the USA and Canada or 1-404-636-8400 worldwide.

Additional Sources Include:

The Air Conditioning Contractors of America ([ACCA](#)) Manual J has bin weather data for selected US cities. (www.acca.org)

The National Climatic Data Center, Asheville, NC (828) 271-4800,
www.ncdc.noaa.gov

ASHRAE Pubs [ASHRAE Weather Data Viewer](#)

Topic References Bin Data, Degree-hour, weather data

	Cognizant ASHRAE Committees	Refer to Organization
1	TC 4.7	NCDC
2	TC 4.2	ACCA
3		
4		
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