```
% read comma delimited ascii file of hourly wind speeds at 6 heights

clear all

load ('1997_hourly_wspd.txt')

% stored in array X1997_hourly_wspd with size (8733,8)

% fields are month, hour of day (MST), wind speed at 6 levels

% find missing records = 25 + 1 + 1 = 27 = 8760 - 8733
% these were added, with missing data

% 8/25/1997,13,-99999,-99999,-99999,-99999,-99999,-99999
% 8/26/1997,15,3.5633,4.0167,4.5167,5.0433,6.0767,6.6767
%
% 10/9/1997,13,2.9100,3.2800,3.5200,3.8050,3.9650,4.0800
% 10/9/1997,15,2.0529,2.2200,2.3800,2.5271,2.6029,2.7371
%
% 10/13/1997,12,11.1480,12.6460,13.9180,15.1160,16.5940,17.2620
% 10/13/1997,14,10.6100,11.9367,13.1050,14.3267,15.8417,16.3700

% missing data -99999

% 10/6/1997,10,-99999,-99999,-99999,-99999,-99999,-99999
%
% 10/7/1997,9,-99999,-99999,-99999,-99999,-99999,-99999
%
% 10/8/1997,13,-99999,-99999,-99999,-99999,-99999,-99999

hour = X1997_hourly_wspd(:,2);

% check for missing records

d = diff(hour);

d(d==-23) = 1;

find(d>1)

% construct a new array without month, and with
% missing data converted to NaN

wspd_hr = X1997_hourly_wspd(:,2:8);

miss = wspd_hr(:,2) == -99999;

sum(miss)

x = wspd_hr;

x(miss,2:7) = NaN;

sum(isnan(x))

clear wspd_hr
```

```
wspd_hr = x;

sum(isnan(wspd_hr))

save 1997_hourly_wspd wspd_hr

miss1 = isnan(wspd_hr(:,2));

mean(wspd_hr(~miss1,2:7))
```