```
Proc Import datafile = "/home/u60672671/PolarVortex.xlsx"
        out = PolarVortex
    DBMS = xlsx
    replace;
getnames = yes;
run;

Data Vortex;
Set PolarVortex:;
AvgWindMPH = 2.2369*AvgWind;
AvgTempF = ((9/5)*AvgTemp) + 32;
windChill = 35.74 + 0.6125*(AvgTempF) - 35.37*(AvgWindMPH**0.16) + 0.4274*(AvgTempF)*(AvgWindMPH**0.16);
run;

Proc Means data = Vortex;
Var windChill;
run;

symbol value = "circle" color = blue I = join;
Proc Gplot data = Vortex;
plot windChill *date/vref = 15.3774209;
run;

Proc Sort data = Vortex;
by windChill;
run;

Proc Print data = Vortex;
var Date windChill;
run;

Data normaldist;
do i =1 to 1000;
x = 25 + rannor(-1) * 2.7;
output;
end;
drop i;
run;

Proc Means data = normaldist;
Var x;
run;

Proc Univariate data = normaldist noprint;
hist x/kernel;
run;

Data exponentialdist;
do i =1 to 1000;
x = -10 * log(ranuni(-1));
output;
end;
drop i;
run;

Proc Means data = exponentialdist;
Var x;
run;

Proc Univariate data = exponentialdist noprint;
hist x/kernel;
run;
```