

```
options center nodate pagesize=100 ls=70;
libname mydat '/home/u63545689/KDE and Box Cox';

/*ods graphics on*/;
title 'Sheather KDE Simulated Data';
ods graphics on;
data bimodal; set mydat.bimodal; run;
proc kde data=bimodal;
    univar x(bwm=.2) x(bwm=0.4) x(bwm=.6) x(bwm=0.8);
run;
/* As you increase the bandwidth, the peaks become fewer in
number. Put differently, the line looks more like a normal
distribution and less like a bimodal distribution. */

proc sgplot data=bimodal;
    histogram x;
    density x/type=kernel;
run;

title 'Old Faithful Data';
data faithful; set mydat.faithful; run;

proc sgplot data=faithful;
    scatter y=wait x=duration;
    reg y=wait x=duration/ clm;
    loess y=wait x=duration;
run;
proc sgplot data=faithful;
    histogram wait;
    density wait;
run;
ods graphics on;
proc kde data=faithful;
    univar wait;
run;

proc kde data=faithful;
    bivar wait duration ;
run;
quit;
```