```
%reads the data from simulation
CL = load('Cylindrical_Results_Detailed')
```

```
CL =
      Analytic: [1x996 double]
          CORE: {2x13 cell}
             L: 1
        MCarlo: [1x996 double]
             i: 13
          r2_L: [0.3000 0.4000 0.6000 0.8000 1 1.2500 1.5000 2 3 4 5 6 8]
     rangeL_r1: [1x996 double]
         total: 90000
```

```
r2_L = CL.r2_L;
rangeL_r1 = CL.rangeL_r1;
h = figure('units','normalized','Name','View Factors','Position',[0.11201 0.2513 0.40996 0.54688]);
for i = 1:length(r2_L)
semilogx(CL.rangeL_r1,CL.CORE{1,i},'b.')
hold on
semilogx(CL.rangeL_r1,CL.CORE{2,i})
end
xlim([0.1,rangeL_r1(length(rangeL_r1))]);
xlabel('L/r1')
ylabel('r2/L')
title('View Factors')
```
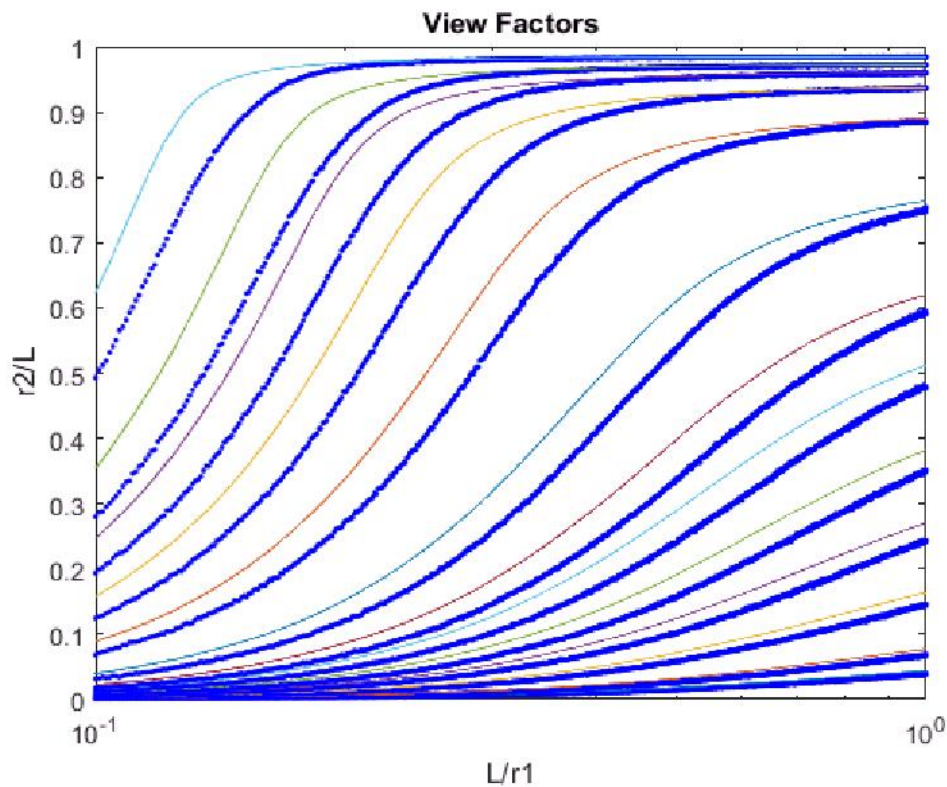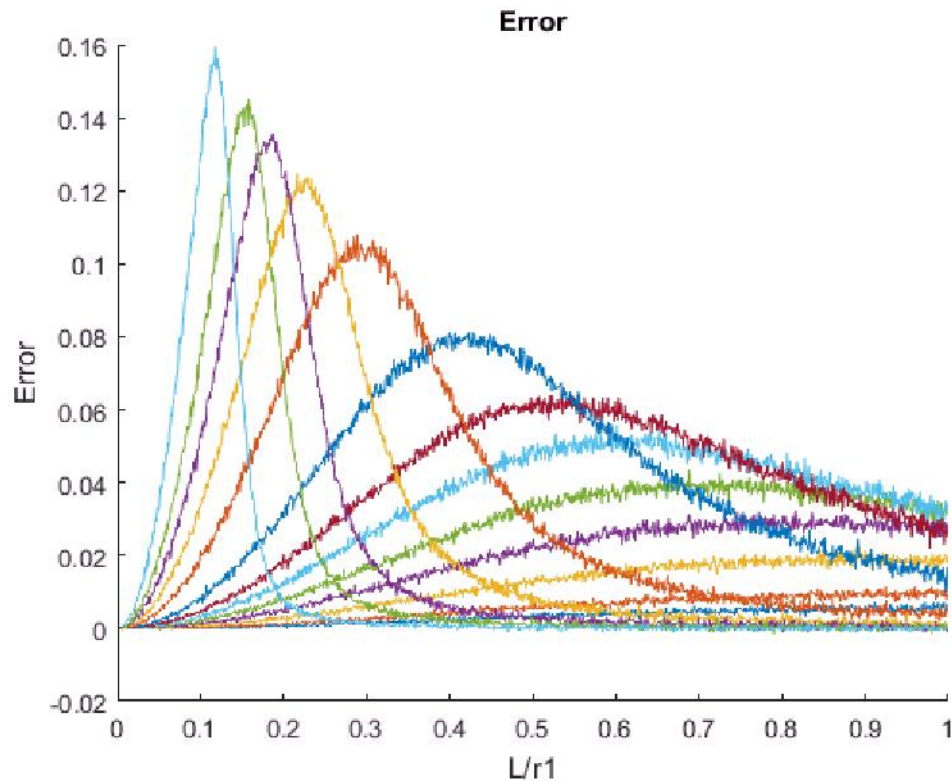


```
f = figure('units','pixels','Name','Error','position',[724 194 560 420]);
hold on
for i = 1:length(r2_L)
    C = CL.CORE{2,i}-CL.CORE{1,i};
```

```
        Err(i,:) = [max(C),rangeL_r1(find(C == max(C))),r2_L(i)];
        plot(CL.rangeL_r1,C);
end
xlabel('L/r1')
ylabel('Error')
title('Error')
```



```
e1 = figure();
Q(:,1) = Err(:,1);
Q(:,2) = Err(:,3)./Err(:,2);
f2 = fit(Q(:,1),Q(:,2),'exp1')
```

```
  f2 =
      General model Exp1:
      f2(x) = a*exp(b*x)
      Coefficients (with 95% confidence bounds):
        a =       0.1742  (0.1288, 0.2197)
        b =        37.33  (35.61, 39.05)
```

```
f1 = @(x)((log(x)-log(f2.a))/f2.b);
range = [0:0.001:70];
F = [range',f1(range)'];
plot(F(:,1),F(:,2)*100);
hold on
plot(Q(:,2),Q(:,1)*100,'r.');
hold off
xlabel('r2/r1')
ylabel('%Error')
title('Error')
```

Error