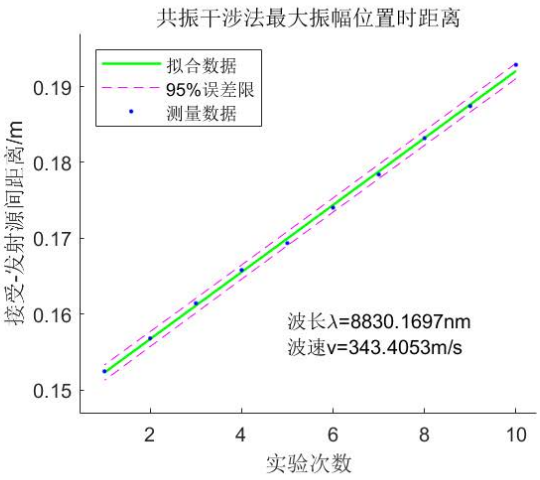

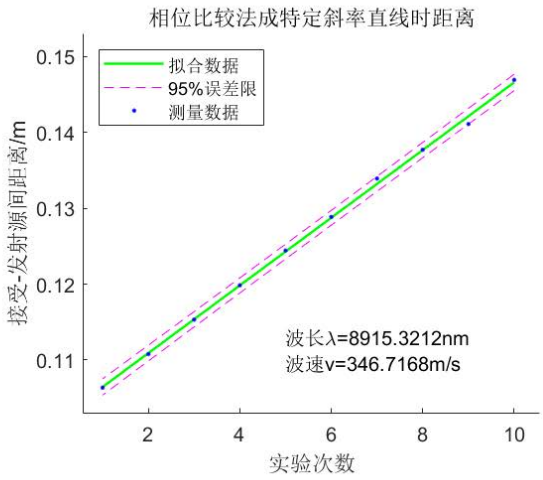

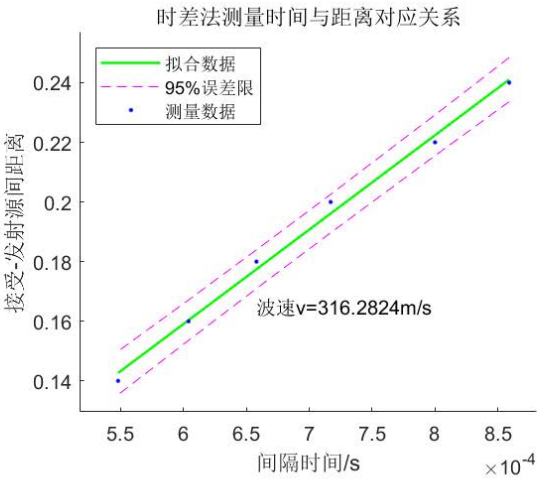


```
%% 处理绘图
subplot(2,2,1);
hold on
[p,S] = polyfit(1:10,X1,1);
[yfit,delta]=polyval(p,1:10,S);
plot(times,yfit,'g-','LineWidth',1.2);
plot(times,yfit+2*delta,'m--',times,yfit-2*delta,'m--');
plot(times,X1,'b.');
legend("拟合数据","95%误差限","","测量数据",'Location','northwest');
ylabel('接受-发射源间距离/m','Interpreter','none');
xlabel('实验次数','Interpreter','none');
title("共振干涉法最大振幅位置时距离");
v=abs(p(1)*f0*2);
lamda=abs(p(1)*2e6);
str={strcat("波长\lambda=",num2str(lamda),"nm"),strcat("波速v=",num2str(v),"m/s")};
text(5,min(X1)+0.005,str);
hold off
```