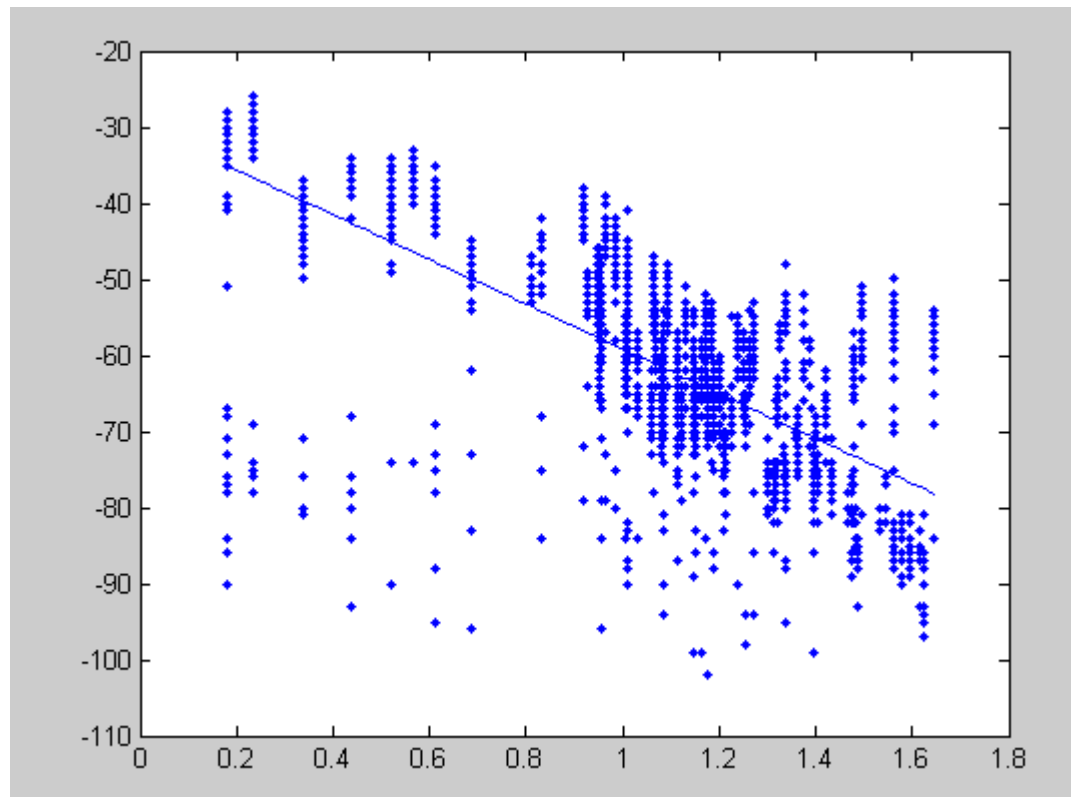


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Eta = 2.9414, K = -2.7851, standard_diviation = 9.9298

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clear all;
receiver=importdata('receiverXY.csv');
transmitter=importdata('transmitterXY.csv');
exp7=importdata('wifiExp7.csv');%1st experiment
exp8=importdata('wifiExp8.csv');%2st experiment
exp9=importdata('wifiExp9.csv');%3st experiment
exp10=importdata('wifiExp10.csv');%4st experiment
exp11=importdata('wifiExp11.csv');%5st experiment
exp12=importdata('wifiExp12.csv');%6st experiment
exp13=importdata('wifiExp13.csv');%7st experiment
exp14=importdata('wifiExp14.csv');%8st experiment
exp15=importdata('wifiExp15.csv');%9st experiment
exp16=importdata('wifiExp16.csv');%10st experiment
exp17=importdata('wifiExp17.csv');%11st experiment
exp18=importdata('wifiExp18.csv');%12st experiment
distance0=zeros(12,8);
for i=1:12
    for j=1:8
        %distance(i,j) = log(((transmitter(i,1)-
receiver(j,1))^2+(transmitter(i,2)-receiver(j,2))^2)^0.5);
        distance0(i,j)= sqrt((transmitter(i,1)-
receiver(j,1))^2+(transmitter(i,2)-receiver(j,2))^2);

    end
end
x0 = [];
x = [];
y = [];
length(exp8)
%exp 7
distance = log10(distance0);
for i=1:8
    for j=1:length(exp7)
        if( exp7(j,i+1)~=500 )
            x0 = [x0,distance0(1,i)];
            x = [x,distance(1,i)];
            y = [y,-exp7(j,i+1)];
        end
    end
end
% exp 8
for i=1:8
    for j=1:length(exp8)
        if( exp8(j,i+1)~=500 )
            x0 = [x0,distance0(2,i)];
            x = [x,distance(2,i)];
            y = [y,-exp8(j,i+1)];
        end
    end
end
%exp 9
for i=1:8

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        for j=1:length(exp9)
            if( exp9(j,i+1)~=500 )
                x0 = [x0,distance0(3,i)];
                x = [x,distance(3,i)];
                y = [y,-exp9(j,i+1)];
            end
        end
    end

%exp 10
for i=1:8
    for j=1:length(exp10)
        if( exp10(j,i+1)~=500 )
            x0 = [x0,distance0(4,i)];
            x = [x,distance(4,i)];
            y = [y,-exp10(j,i+1)];
        end
    end
end

%exp 11
for i=1:8
    for j=1:length(exp11)
        if( exp11(j,i+1)~=500 )
            x0 = [x0,distance0(5,i)];
            x = [x,distance(5,i)];
            y = [y,-exp11(j,i+1)];
        end
    end
end

%exp 12
for i=1:8
    for j=1:length(exp12)
        if( exp12(j,i+1)~=500 )
            x0 = [x0,distance0(6,i)];
            x = [x,distance(6,i)];
            y = [y,-exp12(j,i+1)];
        end
    end
end

%exp 13
for i=1:8
    for j=1:length(exp13)
        if( exp13(j,i+1)~=500 )
            x0 = [x0,distance0(7,i)];
            x = [x,distance(7,i)];
            y = [y,-exp13(j,i+1)];
        end
    end
end

%exp 14
for i=1:8
    for j=1:length(exp14)
        if( exp14(j,i+1)~=500 )
            x0 = [x0,distance0(8,i)];
            x = [x,distance(8,i)];
            y = [y,-exp14(j,i+1)];
        end
    end
end

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        end
    end
    %exp 15
    for i=1:8
        for j=1:length(exp15)
            if( exp15(j,i+1)~=500 )
                x0 = [x0,distance0(9,i)];
                x = [x,distance(9,i)];
                y = [y,-exp15(j,i+1)];
            end
        end
    end
    %exp 16
    for i=1:8
        for j=1:length(exp16)
            if( exp16(j,i+1)~=500 )
                x0 = [x0,distance0(10,i)];
                x = [x,distance(10,i)];
                y = [y,-exp16(j,i+1)];
            end
        end
    end
    %exp 17
    for i=1:8
        for j=1:length(exp17)
            if( exp17(j,i+1)~=500 )
                x0 = [x0,distance0(11,i)];
                x = [x,distance(11,i)];
                y = [y,-exp17(j,i+1)];
            end
        end
    end
    %exp 18
    for i=1:8
        for j=1:length(exp18)
            if( exp18(j,i+1)~=500 )
                x0 = [x0,distance0(12,i)];
                x = [x,distance(12,i)];
                y = [y,-exp18(j,i+1)];
            end
        end
    end

    p = polyfit(x,y,1);
    x1 = linspace(min(x),max(x));
    y1 = polyval(p,x1);
    plot( x,y, '.');
    hold on
    plot(x1,y1);

    hold off
    eta = -p(1)/10
    K = p(2) + 27
    standard_diviation = std(x0)

```

output:

eta =

2.9414

K =

-2.7851

standard_diviation =

9.9298