

```

fclose(instrfind);
s=serial('COM6','BaudRate',9600,'Terminator','CR/LF'); %inicializar port
fopen(s);
fid=fopen('resultats_final.txt','w');
t=datetime('now'); pause(2);
i=0;
flushinput(s);

```

```

figure
h = animatedline;
ax = gca; %current axes

```

```

%Modify axes
ax.YGrid = 'on';
ax.YLim = [0 4];
xlabel('Time');
ylabel('Depth[m]');
title('REAL TIME DEPTH');

```

```

maxval=0;
minval=4;

```

```

variable=input('Ingrese el valor de la variable: ','s');
fwrite(s,variable);
if(variable=='S')
startTime = datetime('now');
end
while(variable=='S')

```

```

    lectura_bits=fscanf(s, '%c')
    bits=str2double(lectura_bits);
    depth=bits*0.0143540-8.92822;

```

```

    if(depth>maxval)
        maxval=depth;
    if(depth<minval)
        minval=depth;
    end
end

```

```

    t=datetime('now') - startTime;
    datenum(t);
    depth;
    addpoints(h,datenum(t),depth);

```

```
% Update axes
ax.XLim = datenum([t-seconds(10) t]); datetick('x','keeplimits')
drawnow

pause (0.02);
% Check stop condition
i=i+1;

end

fprintf(fid,'\nVALOR MAXIM: $f m', maxval);
fprintf(fid,'\nVALOR MINIM: $f m', minval);
fprintf(s,'%s\n','e');
fclose(fid);
```