**Plotting data offline**

**History:**

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| --- | --- | --- |
| **Version** | **Date** | **Description** |
| 1 | 2017-jun-16 | Created |
|  |  |  |
|  |  |  |

**Overview:**This document describes how to:

.1 automatically collect data and write file to fr

.2 display data file with excel macro

Refer to plot\_data\_on\_tp.doc to plot data on teach pendant.

**Note:**

Data file format for tp chart is different than excel chart  
Data files are stored in a subdirectory, based on task / instruction that executed it.

If task is not known (i.e, not manual weld, pressure cal, or one of the other task types in sglog), then logtype of spot, press\_motn, user\_press is checked. See streamlog spec for more details.

**Instructions:**create robot based on this backup

Restore variables and programs

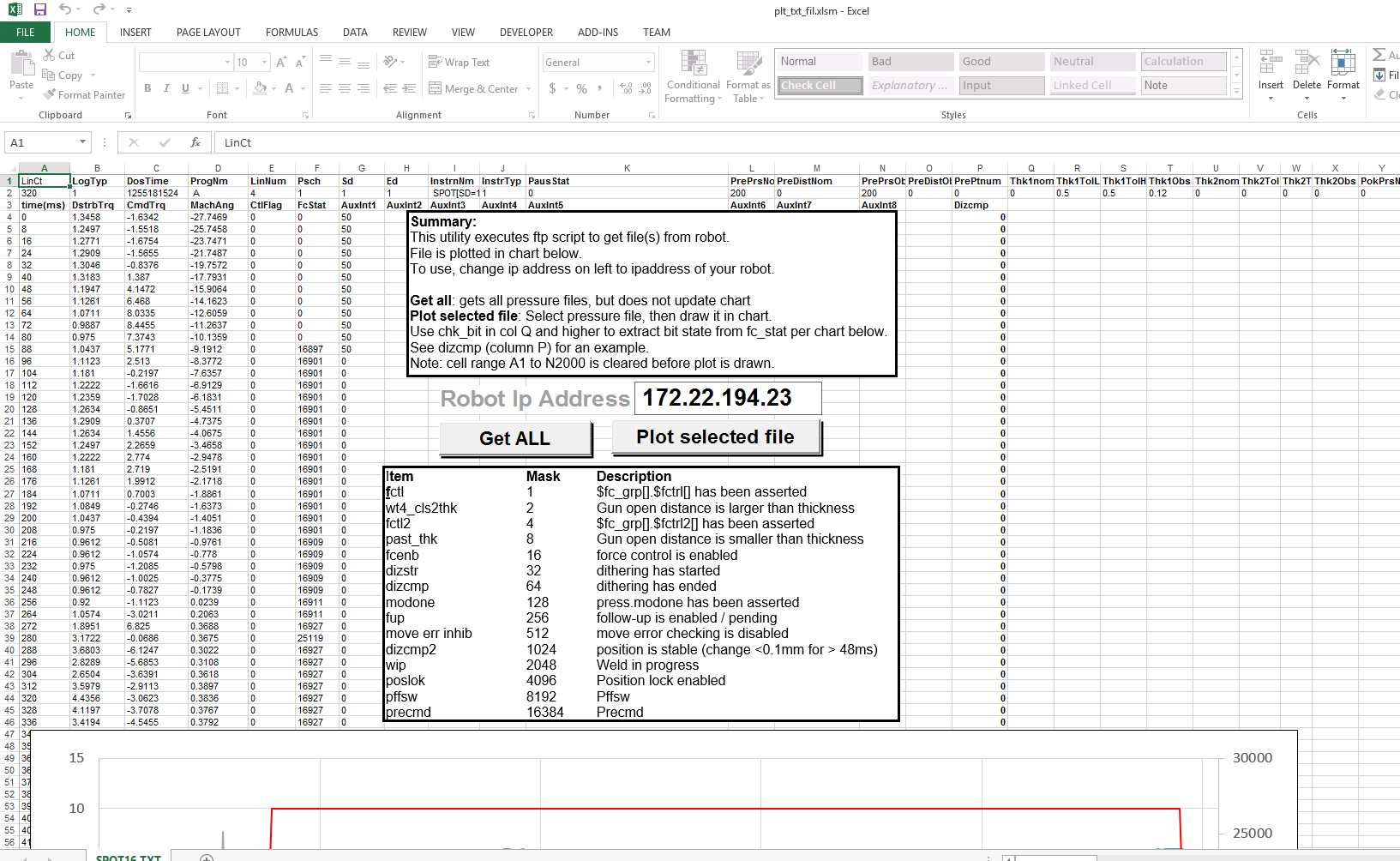
Note:

See info in appendix for explanation of key settings in the backup.

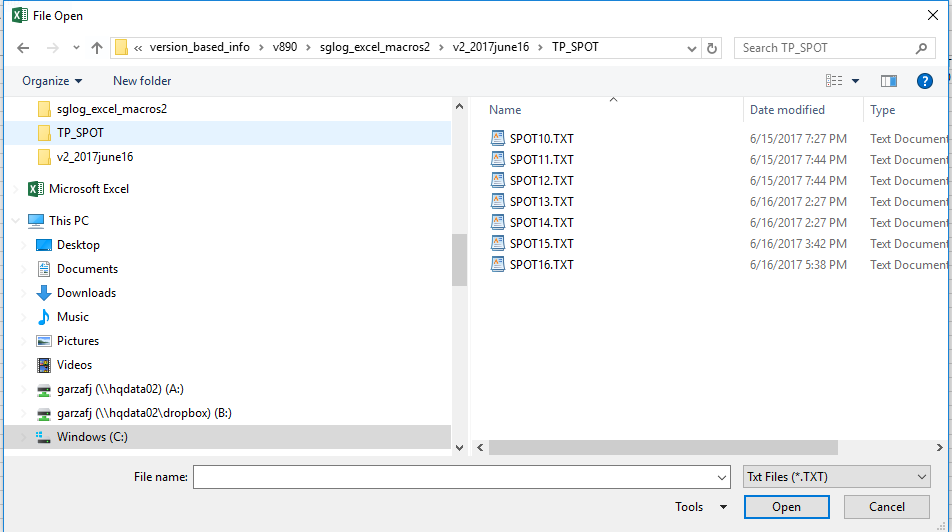
This info is provided for sake of reference, it should not be necessary to set items in the appendix.

**Procedure to record data and display it with excel**

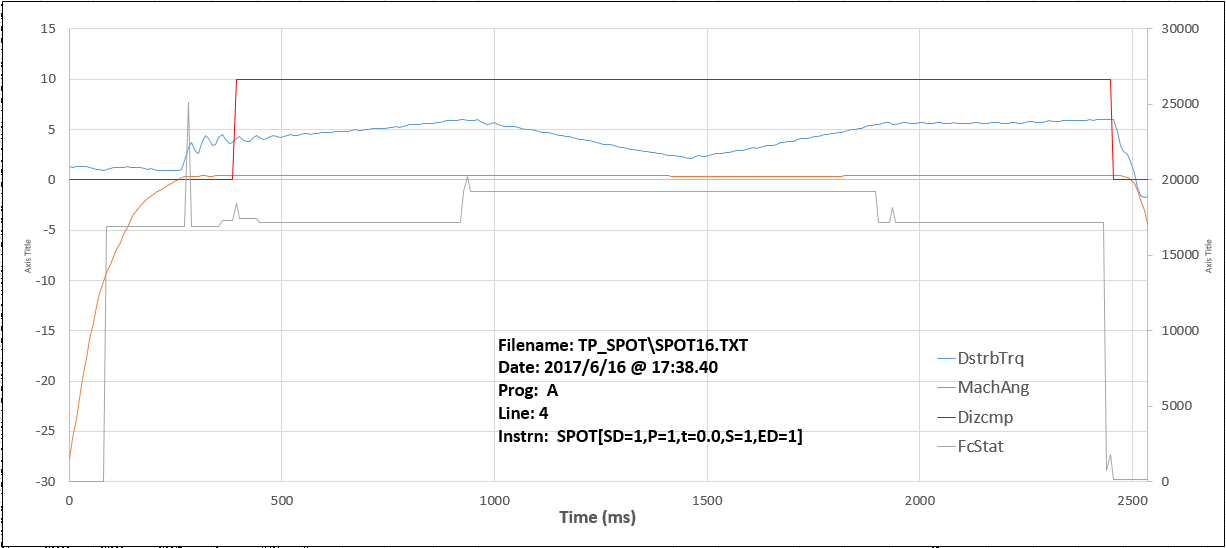
* Copy sglog\_macros\_2017june16.zip to a directory on pc
* Unzip file
* Change ip address in files to ip address of your robot
* Execute program a.tp
* open plt\_txt\_fil.xls
* Press button “get all” in excel screen
* Press button “Plot selected file” in excel screen



* Select directory tp\_spot
* Select desired txt file



* Plot is drawn automatically
* Note: txt file includes aux data, but aux data (line) is not automatically drawn on chart

**Appendix:**

set $sgppdcfg.$num\_steps = 3 to expand profile steps

set $sgppdcfg.$stepinitmod = 2 to make profile transitions more obvious

set $sglogcfg.$num\_int\_vars= 1 to add aux int

set $SGLOGTYPS[1].$LOG\_ENB = true (or use screen below)

cycle power

create bg program with following lines and setup bg to run it.

<bg.tp>

1: R[100]=$FC\_STAT[2].$STEP\_ID[1] ;

2: $SGLOGMONINT[1]=R[100] ;

Setup pressure schedule 1 as shown below

PROFILE / EQ:1 Gun:1 No:1 10/12

3 Init Press: 200.0[kgf] (100.0[%])

(Pressure Control Start)

4 500[msec] 300.0[kgf] (150.0[%])

5 0[msec] 200.0[kgf] (100.0[%])

6 0[msec] 200.0[kgf] (100.0[%])

(Weld Start)

7 500[msec] 100.0[kgf] ( 50.0[%])

8 500[msec] 300.0[kgf] (150.0[%])

9 0[msec] 100.0[kgf] ( 50.0[%])

(Weld Complete)

10 500[msec] 300.0[kgf] (150.0[%])

# TYPE ] EQUIP GUN END

Create program to execute spot

<a.tp>

1: $spotconfig.$weld\_enbl=0 ;

2: $spotconfig.$sim\_enbl=1 ;

3: $spotconfig.$sim\_wdur=1000 ;

4: SPOT[SD=1,P=1,t=0.0,S=1,ED=1] ;

**Sglog config main screen**

SERVO GUN DATA

LOGTYPE DISPLAY 1/33

SETUP Servogun

EDIT LOGTYPE:1(System logtyp) 10/10

Log name: SPOT[] log

Log enable: **Enable**

Instruction type: SPOT

Log start event: PressStart

Log end event: PressEnd

Program name: \*\*\*

Log extend time(ms): 50

Max file number: 99

Subdirectory name: TP\_SPOT

Filename base: SPOT

File spec: FR:\GUN#\TP\_SPOT\SPOT#.TXT

No Name Decription Enable?

1 SPOT[] log Enable

2 PRESS\_MOTN[] log Enable

3 POK\*[] log Enable

4 Acceltime tunlog Enable

5 P113(dyn friction) tunlog Enable

6 P47(inertia) tunlog Enable

7 P183(close thresh) tunlog Enable

8 P183(thresh fctl2) tunlog Enable

9 P189(close thresh2) tunlog Enable

10 P181(spring constant) tunlog Enable

11 P182(pressure gain) tunlog Enable

12 FCTRL2 parm tuning Enable

: : :

32 Reserved7 Disable

33 Xtra1 Disable

# TYPE ] Edit Plot