

Graphing API

Types of graphs:

```
#define SCATTER 'S'
```

This option creates a scatter plot

```
#define HIST 'H'
```

This option creates a histogram

```
#define LINE 'L'
```

This option creates a line graph

```
#define LINE_LOG_X 'X'
```

This option creates a line graph with a logarithmic x scale

graph_init()

This function is used to initialize the API. It must be called once in your code.

```
void graph_new(char type, float* buffer, int length,  
char* keyvals)
```

This function is used to create HIST, LINE and LINE_LOG_X plots.

keyvals is used to label and format the graph.

For example:

```
keyvals =
```

```
"xlabel=Time,ylabel=Distance,title=Example,legend=traject  
ory1"
```

```
void graph_new(char type, float* buffer_x, float*  
buffer_y, int length, char* keyvals)
```

This is used to plot graphs in the Cartesian co-ordinate. The currently supported type is SCATTER.

void graph_show()

This can be invoked after multiple (or single) invocations of `graph_new`. All the graphs before the invocation will be added to a single plot window. The program will wait for the user to exit the graph window before continuing.

For example,

```
graph_init ();

graph_new(LINE,  points1, 100,
"xlabel=Time,ylabel=Distance,title=Example,legend=traject
ory1");

graph_new(LINE,  points2, 100,
"xlabel=Time,ylabel=Distance,title=Example,legend=traject
ory1");

graph_show();
```

Will create a graph that looks like:

