**All Graph options document**

# Options Values

# Analysis Options:

# 0: DFT

# 1: CSP

# 2: CSP Normalised (Relative)

# Graph Options:

# 0: Plot X graph

# 1: Plot Y graph

# 2: Plot both X and Y graphs on the same plot

# Hardware options

# 0: A specific hardware - will be prompted to put the hardware name as well

# 1: A few select hardware - will be prompted to select which ones

# 2: All the hardware available

# Capture options

# 0: A specific capture - will be prompted to put which file is wanted

# 1: A range of captures unaveraged - will be prompted to put the range of files wanted

# 2: A range of captures averaged - will be prompted to put the range of files wanted

# 3: All files (this comes averaged by default)

# 4: All files average ONLY

# Stacked options

# 0: nonstacked

# 1: stacked

Different Graph Options and Corresponding Graph types:

(Alphabetical indexing scheme used in the **Analysis\_Grapher.py** code file, and when deciding the kind of graph specified by the user checkbox options in **Set\_Up\_Diagnostics\_Hybrid.py**)

A – Single Plot, Single Position, Single Hardware

B – Single Plot, Single Position, Multiple Hardware

C – Single Plot, Double Position, Single Hardware

D – Single Plot, Double Position, Multiple Hardware

E – Multiple Plot, Single Position, Single Hardware (DOES NOT EXIST)

F – Multiple Plot, Single Position, Multiple Hardware

G – Multiple Plot, Double Position, Single Hardware

H – Multiple Plot, Double Position, Multiple Hardware

**Graph Display Options Based on Checkbox Choice**

| Analysis Options | Graph Options | Hardware Options | Stacked  Option | Capture Options: | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 0 (one capt) / 4 (only average displayed) | 1 (range) | 2 (range avg) | 3 (all) |
| 0 (DFT)  **A** | 0 (x)  1 (y)  (could be either) | 0 (1 hw) | 0 |  |  |  |  |
| 0 (DFT) | 0 (x)  1 (y)  (could be either) | 0 (1 hw) | **1** | **X** | **X** | **X** | **X** |
| 0 (DFT)  **B** | 0 (x)  1 (y)  (could be either) | 1 (more hw) | 0 |  |  |  |  |
| 0 (DFT)  **F** | 0 (x)  1 (y)  (could be either) | 1 (more hw) | 1 |  |  |  |  |
| 0 (DFT)  **B** | 0 (x)  1 (y)  (could be either) | 2 (all hw) | 0 |  |  |  |  |
| 0 (DFT)  **F** | 0 (x)  1 (y)  (could be either) | 2 (all hw) | 1 |  |  |  |  |
| 0 (DFT)  **C** | 2 (both) | 0 (1 hw) | 0 |  |  |  |  |
| 0 (DFT)  **G** | 2 (both) | 0 (1 hw) | 1 |  |  |  |  |
| 0 (DFT)  **D** | 2 (both) | 1 (more hw) | 0 |  |  |  |  |
| 0 (DFT)  **H** | 2 (both) | 1 (more hw) | 1 | X Data:  Y Data: | X Data:  Y Data: | X Data:    Y Data: | X Data:    Y Data: |
| 0 (DFT)  **D** | 2 (both) | 2 (all hw) | 0 |  |  |  |  |
| 0 (DFT)  **H** | 2 (both) | 2 (all hw) | 1 | X Data:  Y Data: | X Data:    Y Data: | X Data:    Y Data: | X Data:    Y Data: |
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| 1 (CSP) | --- | --- | --- | Same Graph layout and orientation as the DFT graphs, only that the graph shape now looks like this: | | | |
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| 2 (CSP\_N) | --- | --- | --- | Same Graph layout and orientation as the DFT graphs, only that the graph shape now looks like this: | | | |
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| 4 (Waterfall) | --- | --- | --- | Waterfall plot can only produce plot for one hardware, one position, for either all the files or a range of files | | | |
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