

OSCAE.Initiative: Octave for Experimental Data Analysis

Abu Hasan Abdullah
20190219

Overview

- 1. Simple 2-D plot**
- 2. Error bars**
- 3. Common graphs**
- 4. Putting multiple plots on a page**
- 5. Simple “descriptive statistics” commands**
- 6. Std deviation & std error**
- 7. Mean & std deviation on bar graph**
- 8. Std errors compared**
- 9. Polynomial curve fitting**

Simple 2-D plot

- **Octave commands: min, max, plot, axis, xlabel, ylabel, title, grid, saveas**
- **See M-file(s): [page027a.m](#)**

Error bars

- **Octave commands:** min, max, errorbar, axis, xlabel, ylabel, title, grid
- **See M-file(s):** [page027b.m](#), [page027c.m](#)
[page027d.m](#), [page027z.m](#)

Common graphs

- **Octave commands:** min, max, plot, axis, text, strcat, xlabel, ylabel, title, grid
- **See M-file(s):** [page034a.m](#), [page034b.m](#)
[page034c.m](#), [page034d.m](#) ...

Plotting multiple plots on a page

- **Octave commands: subplot, min, max, plot, axis, xlabel, ylabel, title, grid, log10**
- **See M-file(s): [page035a.m](#), [page035b.m](#)**

“Descriptive statistics” commands

- Octave commands: `length`, `mean`, `std`
- See M-file(s): [page078a.m](#), [page078b.m](#), [page078c.m](#)

Std deviation & std error

- Octave commands: `disp`, `length`, `mean`, `std`
- Computing standard error
- See M-file(s): [page055a.m](#)

Mean & std deviation on bar graph

- **Octave commands: disp, length, mean, std, percentiles, median, bar, sort, axis, line, legend, grid, fprintf**
- **Bar graphing a data set**
- **See M-file(s): [page055b.m](#)**

Std errors compared

- Octave commands: `disp`, `length`, `mean`, `std`
- Computing standard error
- See M-file(s): [page084a.m](#), [page084b.m](#)

Polynomial curve fitting

- Octave commands: `length`, `polyfit`, `polyval`, `linspace`, `plot`, `title`, `xlabel`, `ylabel`, `legend`, `hold`, `pause`
- Plotting multiple curves on same graph
- See M-file(s): [polycurvefit.m](#)