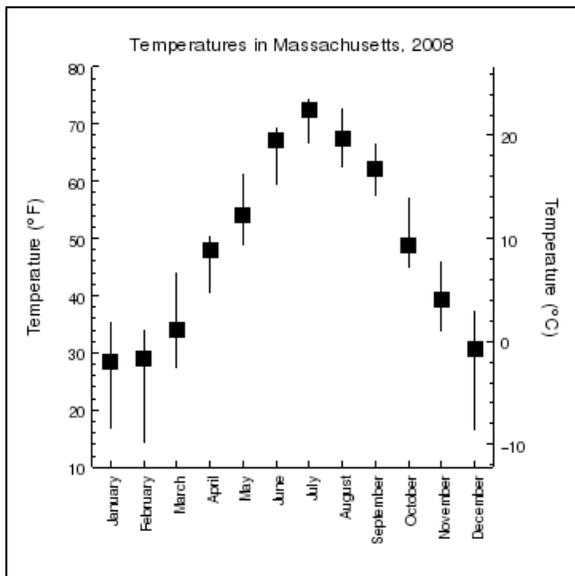
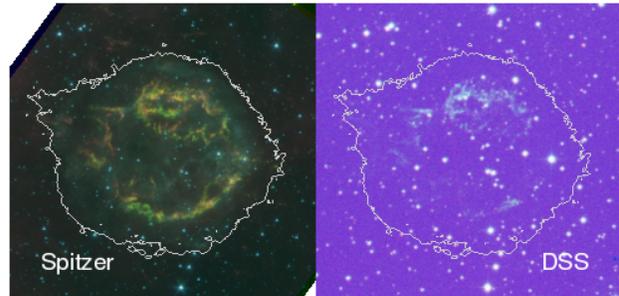
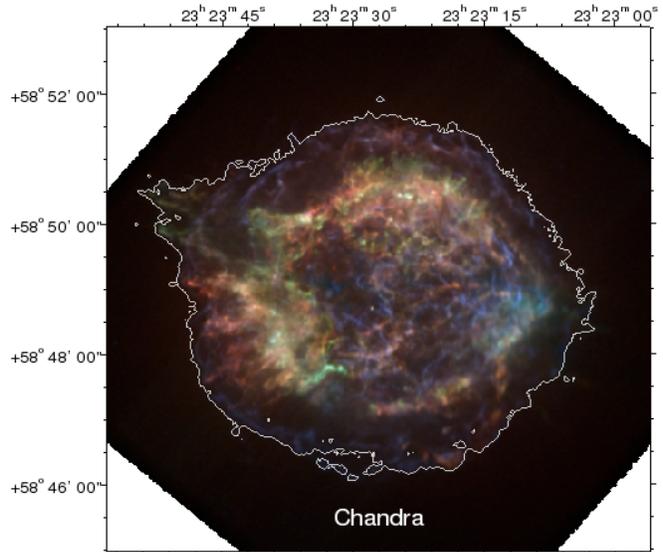
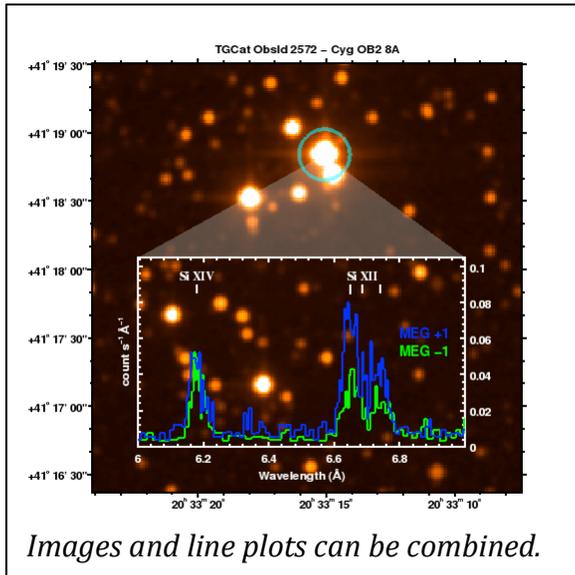


ChIPS

The Chandra Plotting Package

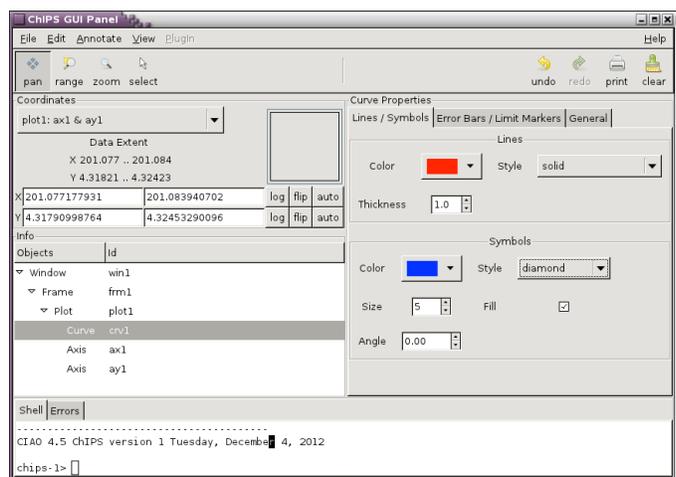
ChIPS is a powerful plotting package that can be integrated into data analysis or used to create publication-quality figures. It offers fine control over the figure display: setting colors, font style, and line types; adding labels, and repositioning objects.



Plots can contain multiple axes and can be displayed with non-numeric labels.



<http://cxc.harvard.edu/chips/>



A range of examples available in the ChIPS Gallery:
<http://cxc.harvard.edu/chips/gallery/>



ChIPS Command Reference

add_axis Creates an axis.
add_colorbar Creates a colorbar for an image.
add_contour Creates a contour.
add_curve Creates a curve.
add_frame Creates a frame.
add_histogram Creates a histogram-style figure.
add_hline Creates a horizontal line.
add_image Adds an image to the current window.
add_label Creates a label.
add_line Creates a line segment.
add_plotarea Creates a plot.
add_plot Creates a plot.
add_point Creates a point.
add_region Creates a region.
add_vline Creates a vertical line.
add_window Creates a window.
adjust_grid_gaps/adjust_grid_xgap/adjust_grid_ygap
Modifies the spacing between plots.
adjust_grid_xresizes Modifies the widths of all columns of plots.
adjust_grid_xresize Modifies the widths of one column of plots.
adjust_grid_yresizes Specify the height of all rows of plots.
adjust_grid_yresize Modifies the height of one row of plots.
arrange_frames Reorder the frames in a window.
aspectratio A discussion of aspect ratio support.
attributes Attributes are used to set object properties.
bind_axes Synchronizes attributes of two axes.
check_server_exists Determines if the server is running.
chipsid The currency state and coordinate system.
chipsopt The ChIPS Dictionary - a glossary of terms.
clear_plot Delete the contents of the plotting area.
clear Deletes all windows.
collapse_depths Merges an array of depths into a new depth.
colors Use of colors in ChIPS.
connect Attaches a chips client to the specified server.
convert_coordinate Converts a point to a different coordinate system.
coordsys ChIPS coordinate systems.
create_server Launches a new ChIPS server.
currency Which objects are presently being accessed.
current_<object> Set the specified object as current.
deiconify_window Deiconifies the ChIPS window.
delete_<object> Delete the specified object.
depthcontrol Rendering objects which overlap.
disconnect Disconnects a client from a chips server.
display_<object> Display the specified object.
display_major_ticks Displays the major tickmarks for the specified axis.
display_minor_ticks Displays the minor tickmarks for the specified axis.
entitycreation Managing the object hierarchy.
erase Remove all frames from the window.
get_<object> Retrieves attribute value(s) for an object.
get_default_depth Retrieves the default depth of the frame.
get_data_aspect_ratio Retrieve the aspect ratio information.
get_pick Returns arrays containing the cursor position.
get_plot_aspect_height /get_plot_aspect_ratio/get_plot_aspect_width
Retrieves the height, width, & aspect ratio of the plot

get_plot_range/get_plot_xrange/get_plot_yrange
Retrieve the range of the current axis/axes of the plot.
get_preferences Retrieves the preference value(s) for the object.
get_preference Retrieves a preference value for the object.
get_server_cwd Get the current directory of the chips server
get_server_id Retrieves the id of the current ChIPS server.
get_xaxis Retrieves the attribute value(s) of the X axis.
get_yaxis Retrieves the attribute value(s) of the y-axis.
grid_objects /col_grid_objects/row_grid_objects
Arranges plots into a grid.
hide_<object> Hide the specified object.
highlight_object The current object(s) briefly flashes
iconify_window Iconifies the ChIPS window.
info_bound_axes Returns a listing of bound axes.
info_coordinate Returns available data coordinate systems.
info_current Returns the current objects.
info_depth Returns objects at the specified depth.
info Returns a listing of all objects.
limits Changes the limits of axes in a plot.
lin_scale Changes the plot axis to linear scale.
log_scale Changes the plot axis to logarithmic scale.
list_servers Displays a list of ChIPS servers.
load_colormap Loads a colormap file for image display.
load_preferences Loads ChIPS preferences from a file.
load_state Restores a ChIPS session from a state file.
lock Locks a ChIPS server.
log_scale Changes the plot axis to log scale.
make_figure Create a curve, contour, image, or histogram plot with labels.
make_script Create a Python script to re-create the ChIPS session.
move_<object> Moves the object to a new location.
move Moves the specified object to a new location.
next_frame Cycle to the next frame in a window.
panto Change the location of the center of the plot.
pick Returns the cursor position.
pick_limits Interactively change the plot limits.
preferences The default attribute values and settings.
prev_frame Cycle to the previous frame in a window.
print_window Prints the window to a file or the printer.
redo Redo the last undone command(s).
reindex_depth Moves items from one depth to a new depth.
remove_image_channel Delete a channel from the image.
reposition_frame Repositions the frame within the window.
reposition_plot Repositions the plot within the frame.
reverse_axes Reverses the direction of the axes.
save_preferences Saves ChIPS preferences to a file.
save_state Saves the ChIPS session into a state file.
setget Obtaining & modifying object attribute values.
set_arbitrary_tick_positions Specifies the location of major tickmarks.
set_attribute Sets the attribute value for the specified object.
set_axis Modifies the attributes of an existing axis.
set_cascading_property Sets attribute within a specified hierarchy.

set_colorbar Modifies the attributes of a colorbar.
set_contour Modifies the attributes of a contour.
set_current Set the specified object as current.
set_<object> Modifies the attributes of an object.
set_data_aspect_ratio Set the aspect ratio information of data.
set_default_depth Sets the default depth of the frame.
set_framemode Specify window as placed or single.
set_image_channel Add a channel to the image.
set_label_text Specify the label text.
set_plot_aspect_ratio Set the aspect ratio information of plot.
set_plot_title Specify the plot title.
set_plot_xlabel/ylabel Specify the labels for the plot axes.
set_preferences Sets the specified preferences.
set_preference_autoload Loads preferences when ChIPS server starts.
set_preference Sets the specified preference.
set_xaxis Modifies the attributes of an x axis.
set_yaxis Modifies the attributes of an y axis.
show_gui Launch the ChIPS GUI
shuffle_<object> Shuffles the order of the object within depth.
shuffle_backward Shuffles the object one step backward in depth.
shuffle_back Shuffles the object to the back of the depth.
shuffle_forward Shuffles the object one step forward in depth.
shuffle_front Shuffles the object to the front of the depth.
split Creates a grid of plot areas
strip_chart Creates a strip chart containing multiple plots.
swap_object_positions Swaps the locations of the specified plots.
tile/col_tile/row_tile Arranges frames into a grid.
unbind_axes Removes the binding between a pair of axes.
undo Undoes the last command or series of commands.
unlock Removes the lock on a server.
view_placed_frame Sets the window display to placed frame mode.
view_single_frame Sets the window display to single frame mode.

Concept files are listed in *italics*.

Type 'ahelp <command>' within CIAO
for the complete help file
or view the online version:
<http://cxc.harvard.edu/chips/ahelp/>

Type 'ahelp("“<command>”')'
from within ChIPS to view the ahelp.