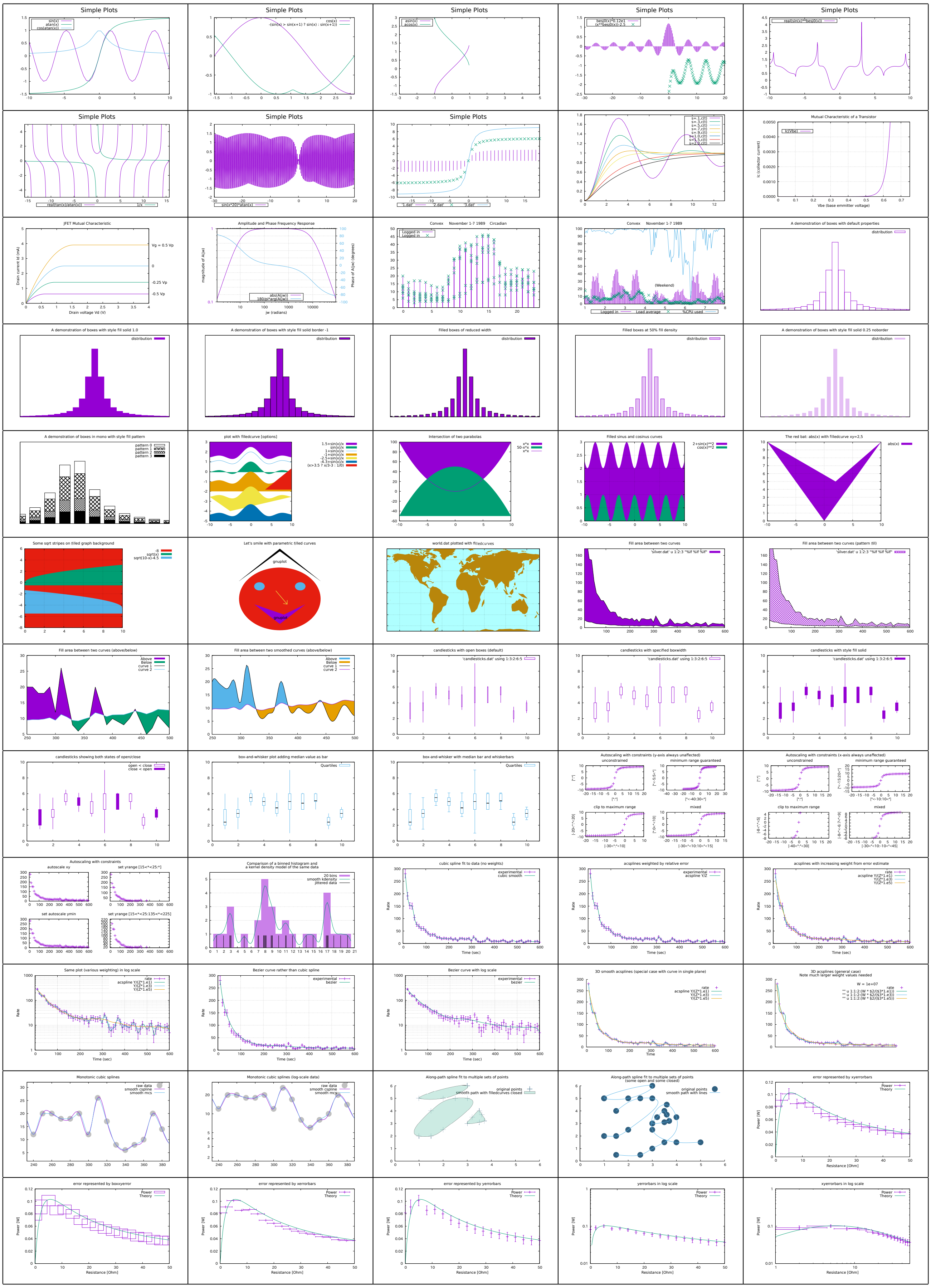
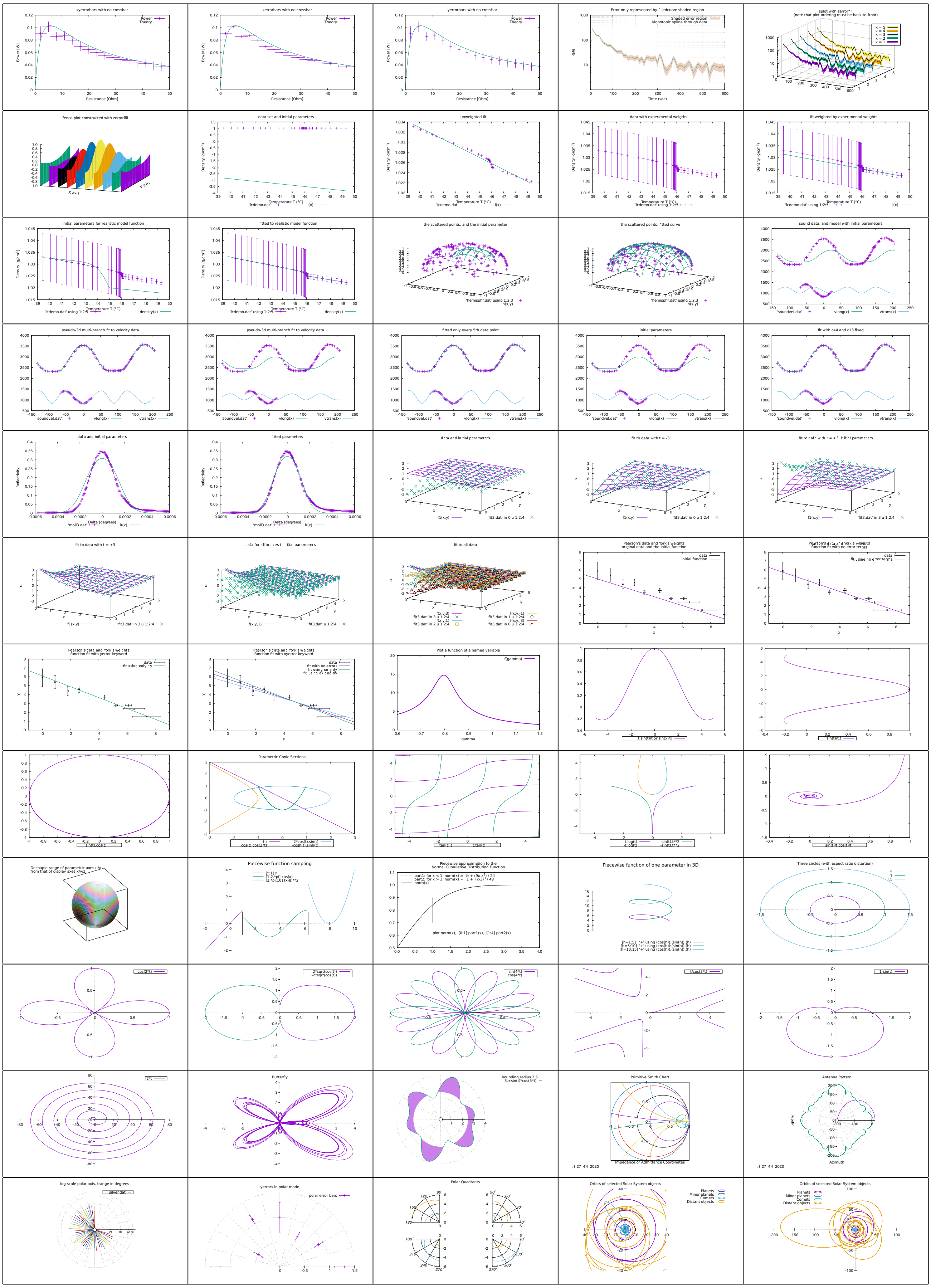
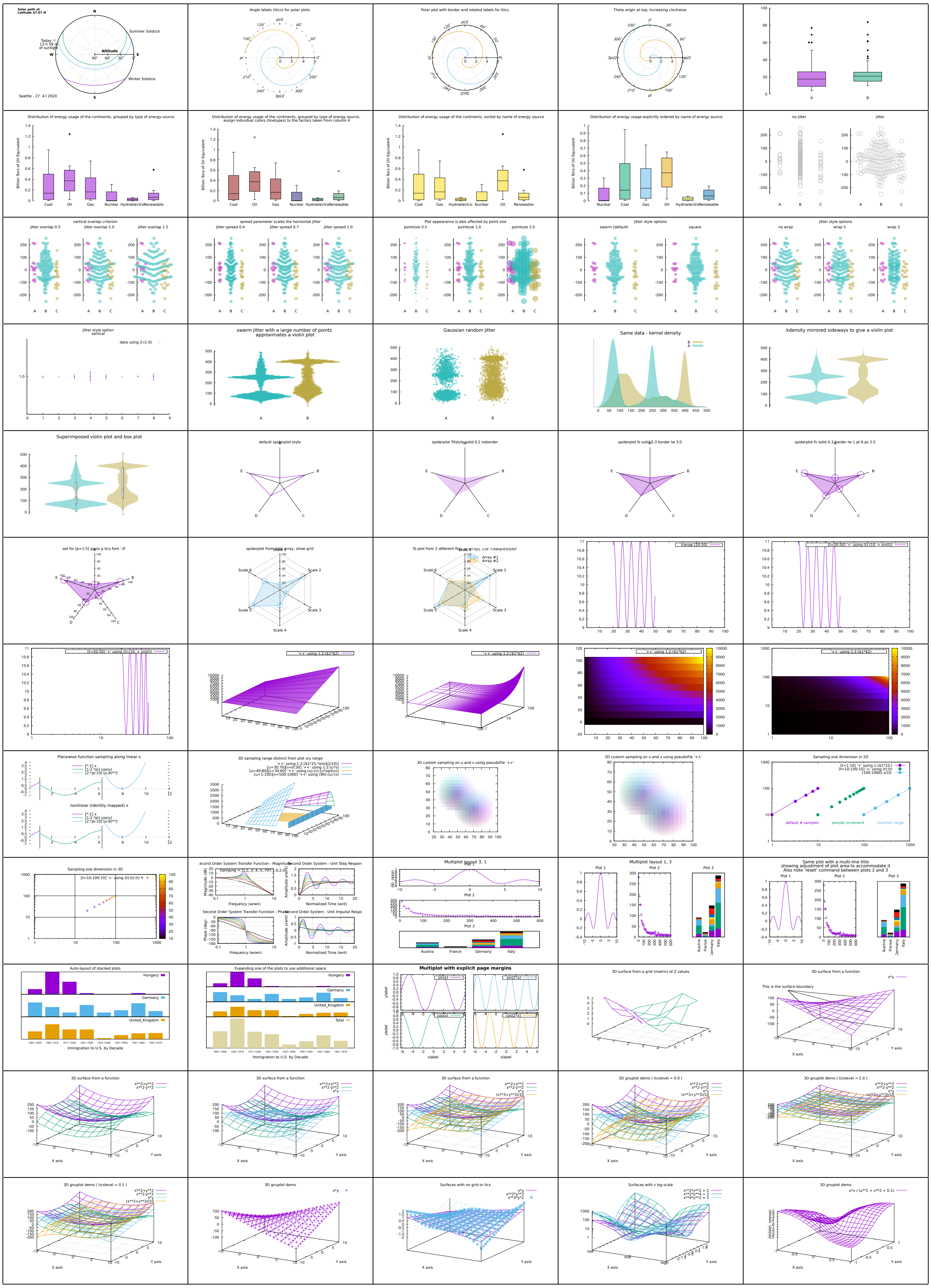
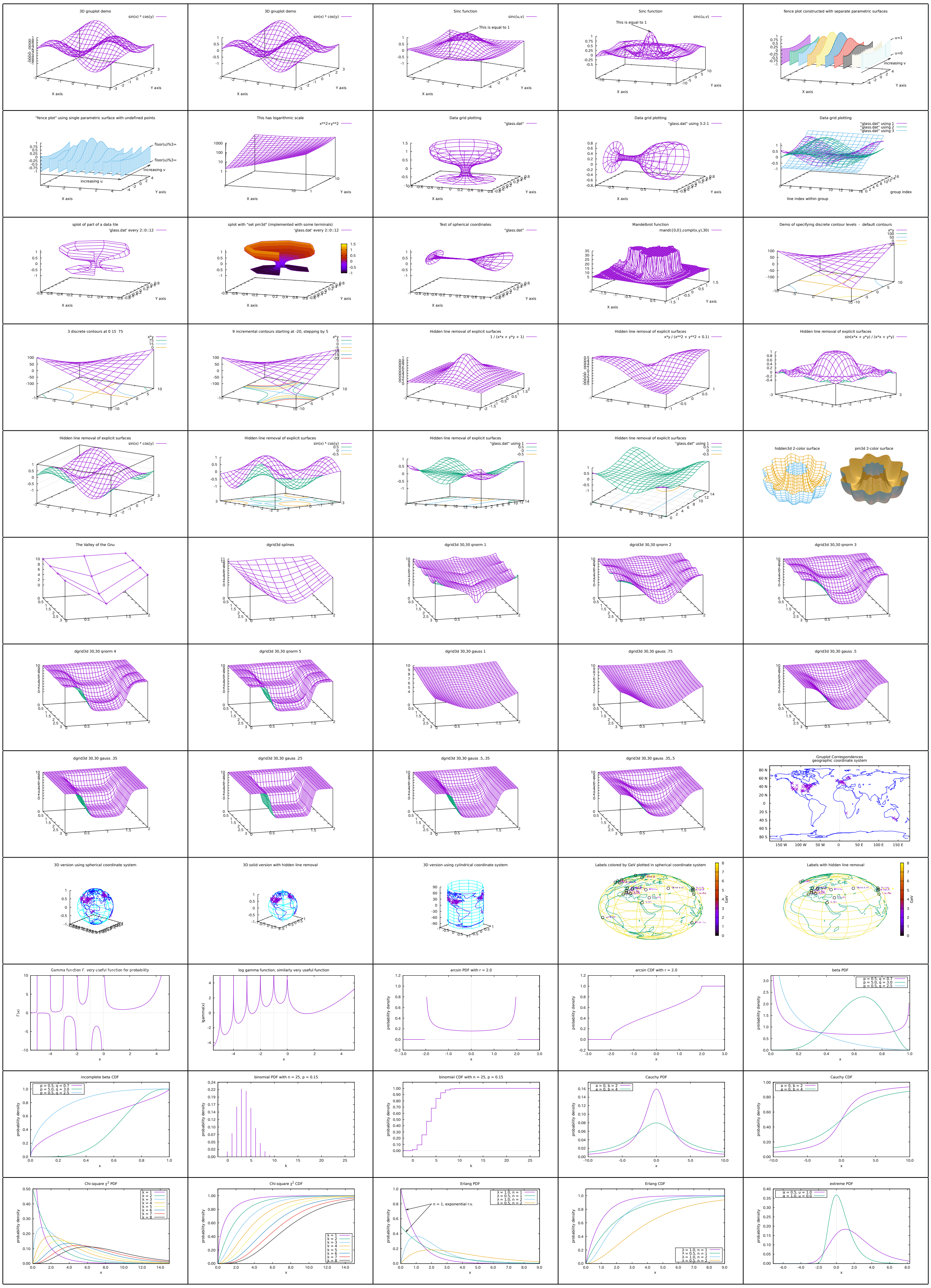

Simple Plots
Simple Plots
Simple Plots
Simple Plots
Simple Plots
Simple Plots
Simple Plots
Simple Plots
Mutual Characteristic of a Transistor
JFET Mutual Characteristic
Amplitude and Phase Frequency Response
Convex November 1-7 1989 Circadian
Convex November 1-7 1989
A demonstration of boxes with default properties
A demonstration of boxes with style fill solid 1.0
A demonstration of boxes with style fill solid border -1
Filled boxes of reduced width
Filled boxes at 50% fill density
A demonstration of boxes with style fill solid 0.25 noborder
A demonstration of boxes in mono with style fill pattern
plot with filledcurve [options]
Intersection of two parabolas
Filled sinus and cosinus curves
The red bat: abs(x) with filledcurve xy=2,5
Some sqrt stripes on filled graph background
Let's smile with parametric filled curves
world.dat plotted with filledcurves
Fill area between two curves
Fill area between two curves (pattern fill)
Fill area between two curves (above/below)
Fill area between two smoothed curves (above/below)
candlesticks with open boxes (default)
candlesticks with specified boxwidth
candlesticks with style fill solid
candlesticks showing both states of open/close
box-and-whisker plot adding median value as bar
box-and-whisker with median bar and whiskerbars
Autoscaling with constraints (y-axis always unaffected)
Autoscaling with constraints (x-axis always unaffected)
Autoscaling with constraints
Comparison of a binned histogram and
a kernel density model of the same data
cubic spline fit to data (no weights)
acsplines weighted by relative error
acsplines with increasing weight from error estimate
Same plot (various weighting) in log scale
Bezier curve rather than cubic spline
Bezier curve with log scale
3D smooth acsplines (special case with curve in single plane)
3D acsplines (general case)
Note much larger weight values needed
Monotonic cubic splines
Monotonic cubic splines (log-scale data)
Along-path spline fit to multiple sets of points
Along-path spline fit to multiple sets of points
(some open and some closed)
error represented by xyerrorbars
error represented by boxxyerror
error represented by xerrorbars
error represented by yerrorbars
yerrorbars in log scale
xyerrorbars in log scale

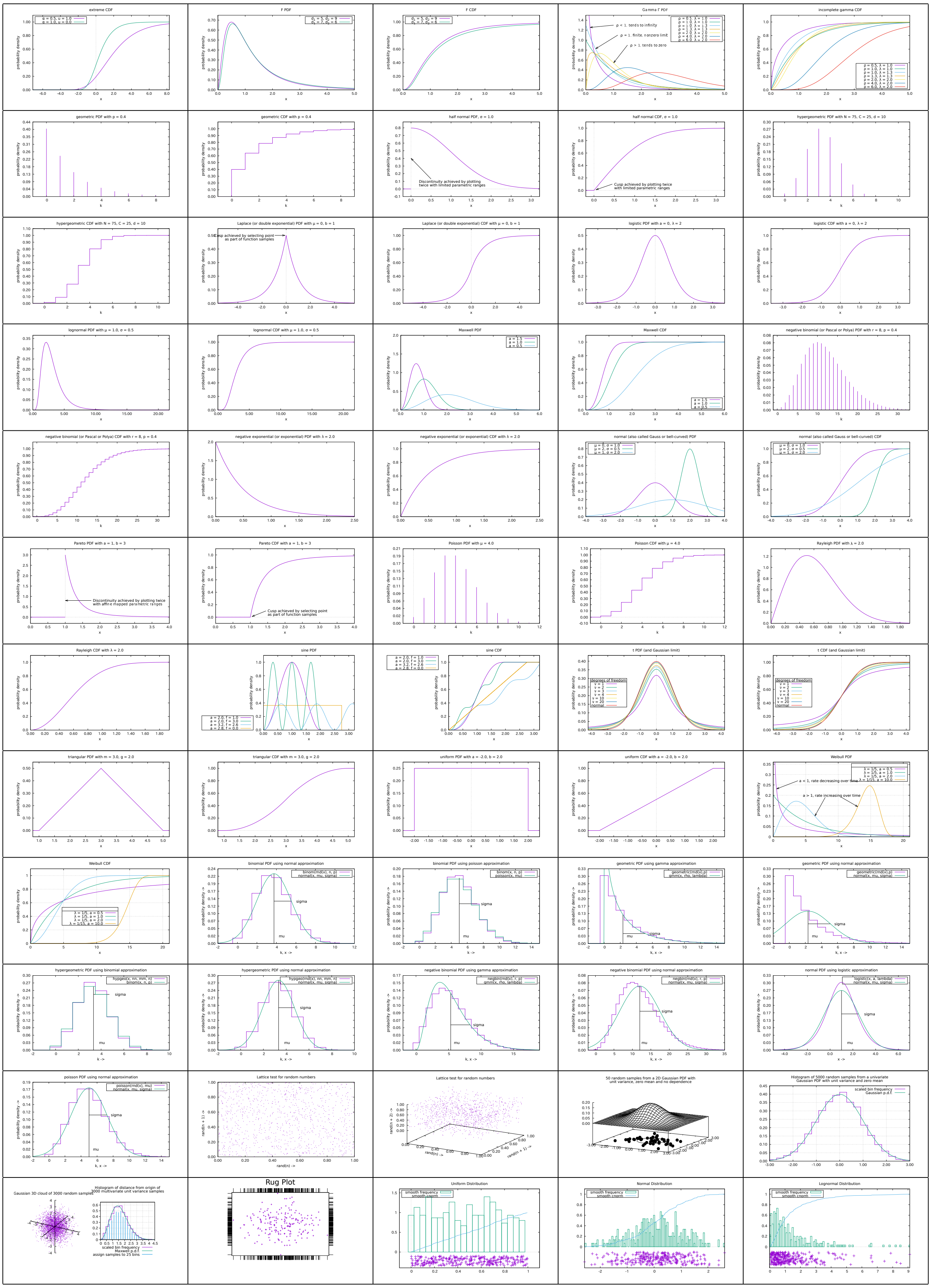


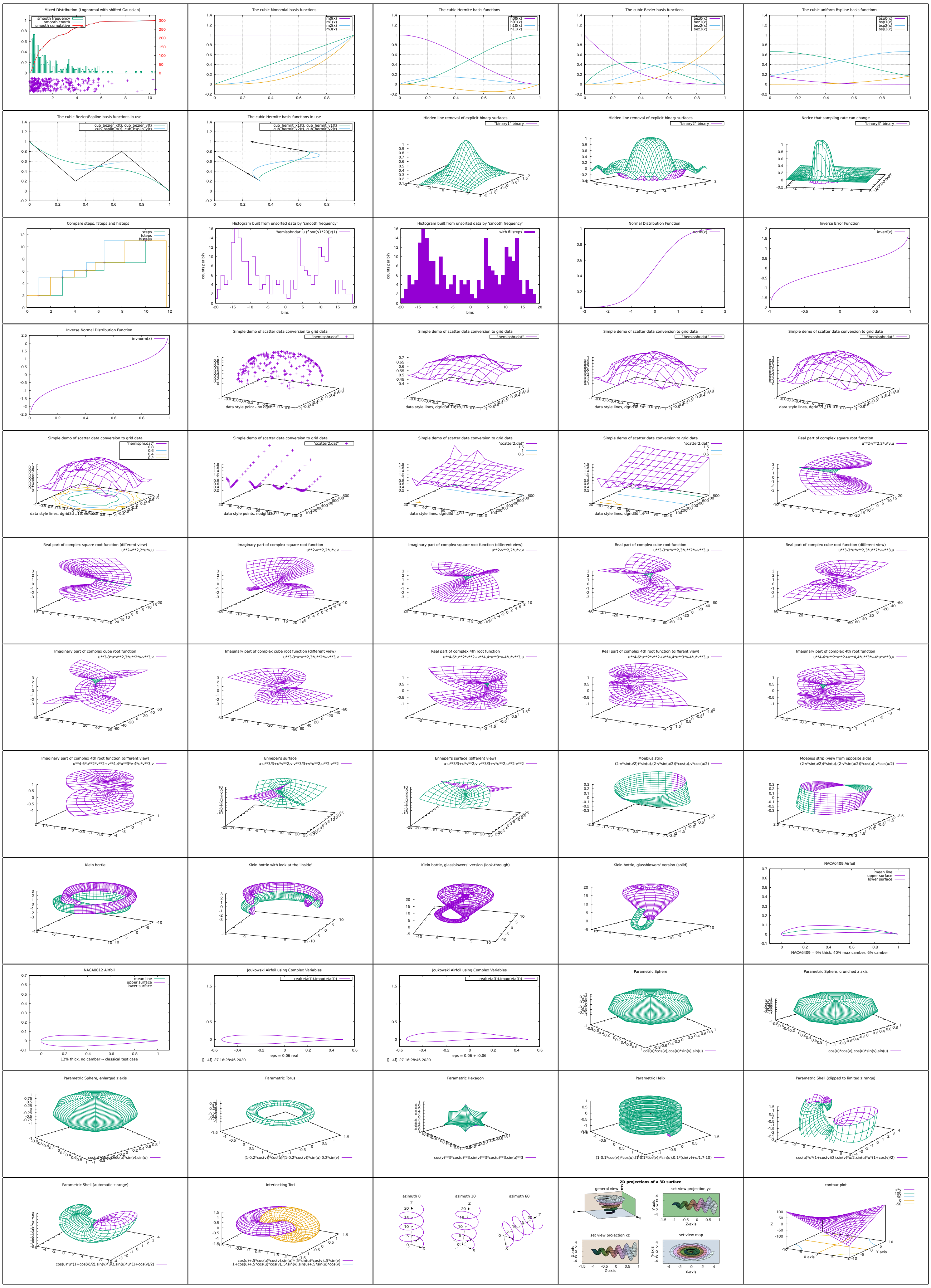
xyerrorbars with no crossbar
xerrorbars with no crossbar
yerrorbars with no crossbar
Error on y represented by filledcurve shaded region
splot with zerrorfill
(note that plot ordering must be back-to-front)
fence plot constructed with zerrorfill
data set and initial parameters
unweighted fit
data with experimental weights
fit weighted by experimental weights
initial parameters for realistic model function
fitted to realistic model function
the scattered points, and the initial parameter
the scattered points, fitted curve
sound data, and model with initial parameters
pseudo-3d multi-branch fit to velocity data
pseudo-3d multi-branch fit to velocity data
fitted only every 5th data point
initial parameters
fit with c44 and c13 fixed
data and initial parameters
fitted parameters
data and initial parameters
fit to data with t = -3
fit to data with t = +3, initial parameters
fit to data with t = +3
data for all indices t, initial parameters
fit to all data
Pearson's data and York's weights
Plot a function of a named variable
Parametric Conic Sections
Piecewise function sampling
Piecewise approximation to the
Normal Cumulative Distribution Function
Piecewise function of one parameter in 3D
Three circles (with aspect ratio distortion)
Butterfly
Primitive Smith Chart
Antenna Pattern
log scale polar axis, trange in degrees
yerrors in polar mode
Polar Quadrants
Orbits of selected Solar System objects
Orbits of selected Solar System objects

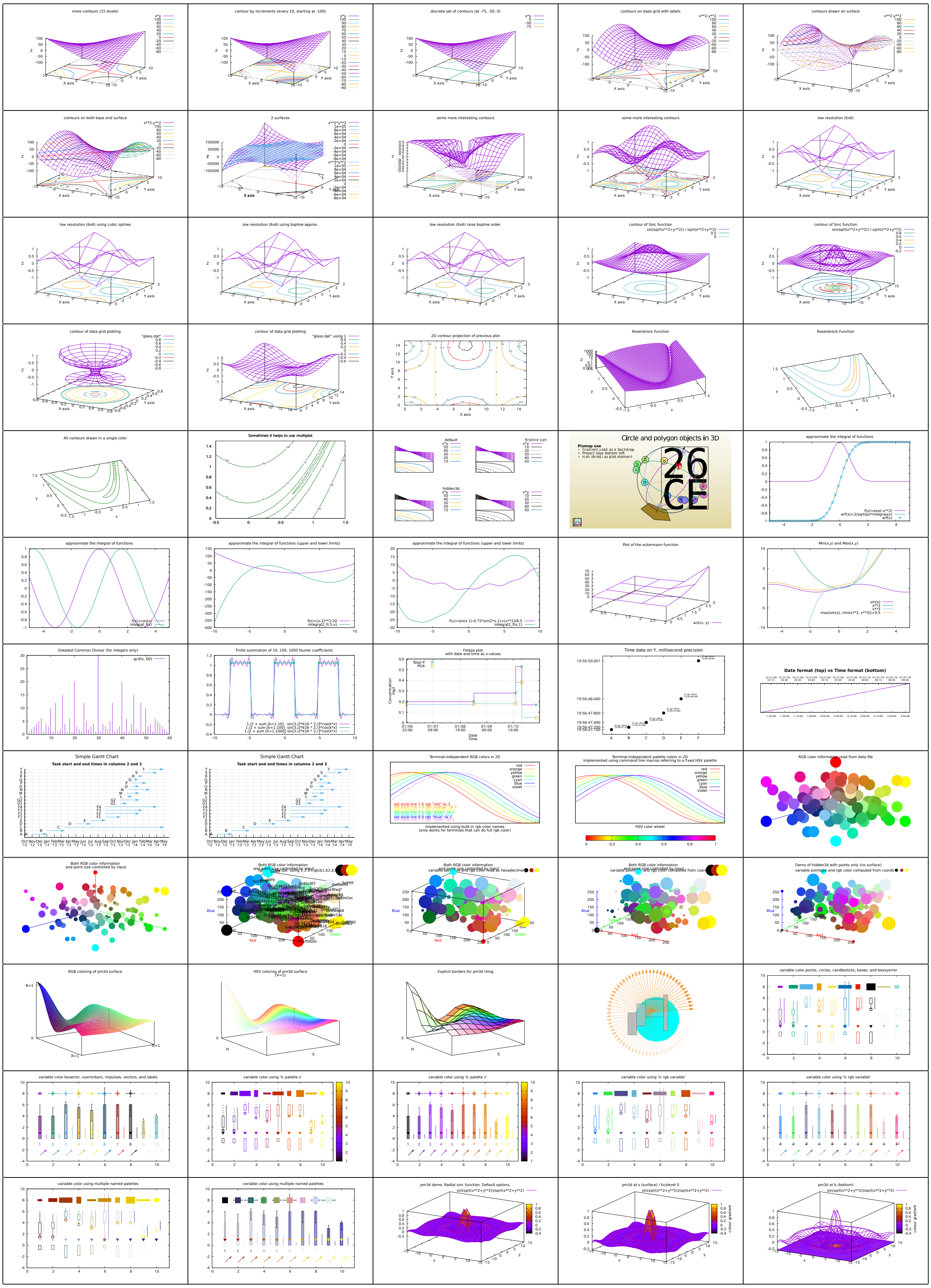


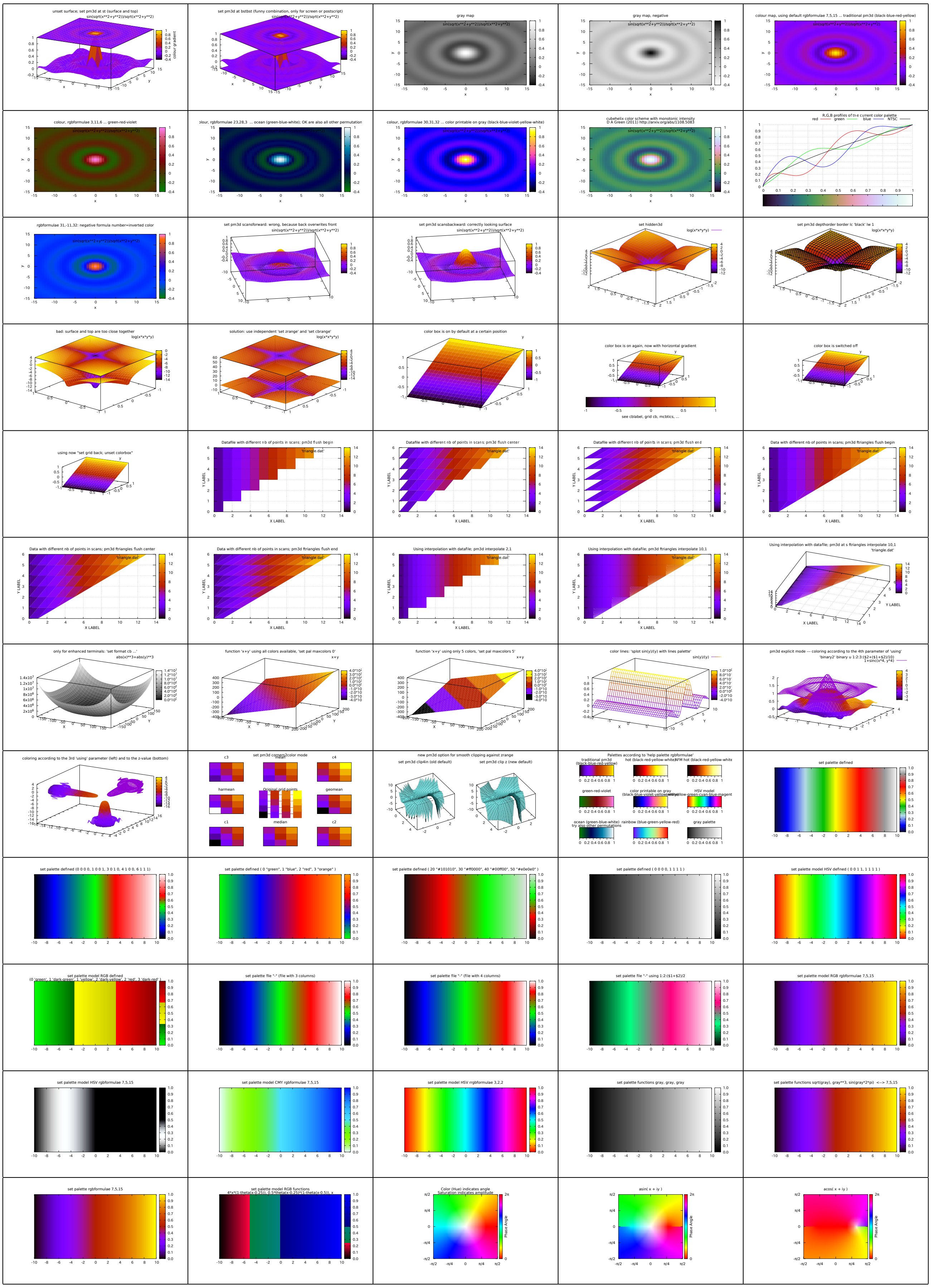
Angle labels (ttics) for polar plots
Polar plot with border and rotated labels for ttics
Theta origin at top, increasing clockwise
Distribution of energy usage of the continents, grouped by type of energy source
Distribution of energy usage of the continents, sorted by name of energy source
Distribution of energy usage explicitly ordered by name of energy source
swarm jitter with a large number of points approximates a violin plot
Gaussian random jitter
Same data - kernel density
kdensity mirrored sideways to give a violin plot
Superimposed violin plot and box plot
default spiderplot style
Piecewise function sampling along linear x
3D custom sampling on u and v using pseudofile '++'
2D custom sampling on u and v using pseudofile '++'
Sampling one dimension in 2D
Sampling one dimension in 3D
Multiplot layout 3, 1
Multiplot layout 1, 3
Auto-layout of stacked plots
Expanding one of the plots to use additional space
Multiplot with explicit page margins
3D surface from a grid (matrix) of Z values
3D surface from a function
3D gnuplot demo
Surfaces with no grid or tics
Surfaces with z log scale

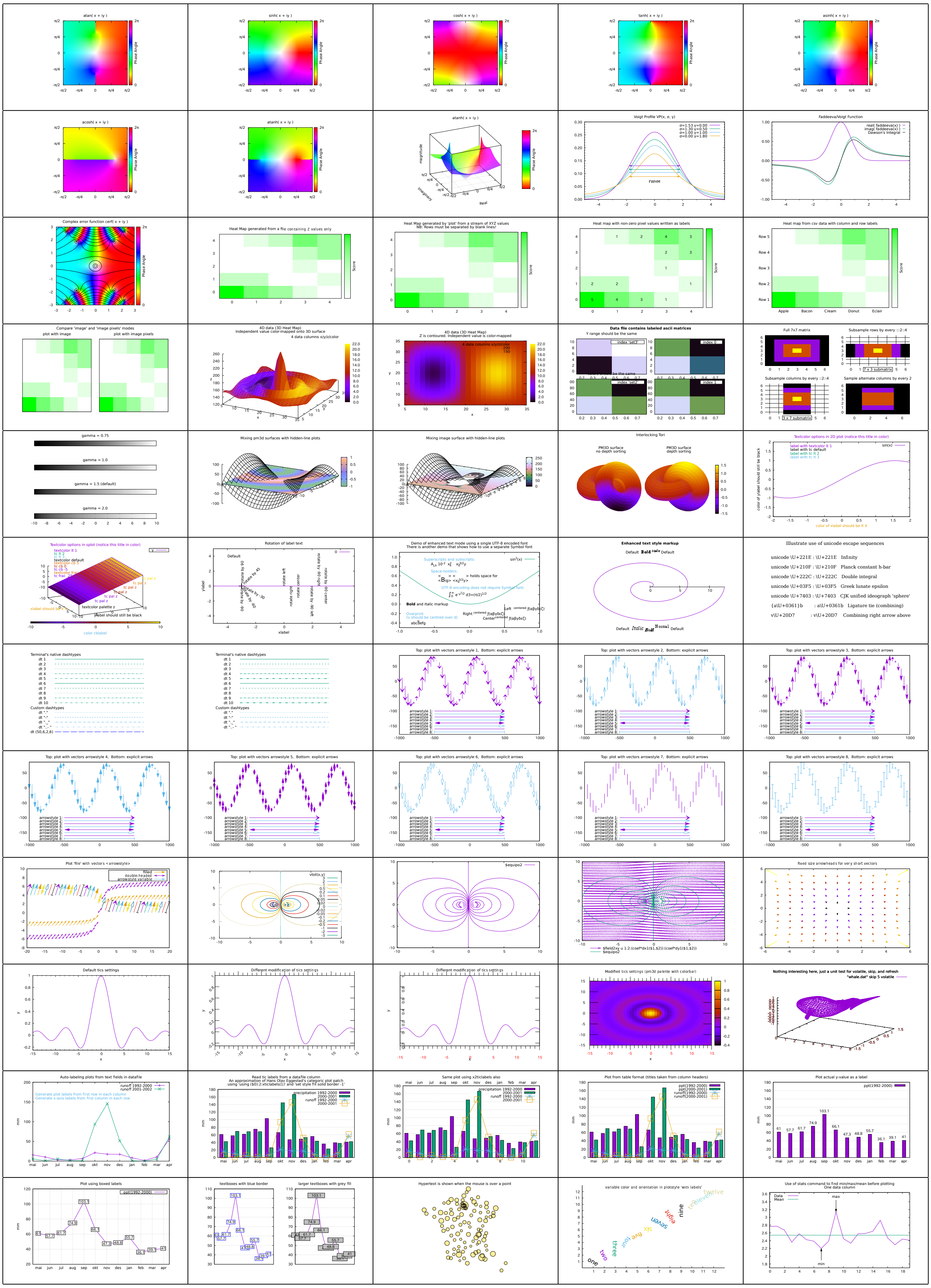

3D gnuplot demo
Sinc function
fence plot constructed with separate parametric surfaces
"fence plot" using single parametric surface with undefined points
This has logarithmic scale
Data grid plotting
splot of part of a data file
splot with "set pm3d" (implemented with some terminals)
Test of spherical coordinates
Mandelbrot function
3 discrete contours at 0 15 75
9 incremental contours starting at -20, stepping by 5
Hidden line removal of explicit surfaces
hidden3d 2-color surface
pm3d 2-color surface
The Valley of the Gnu
dgrid3d splines
dgrid3d 30,30 qnorm 1
dgrid3d 30,30 qnorm 2
dgrid3d 30,30 qnorm 3
dgrid3d 30,30 qnorm 4
dgrid3d 30,30 qnorm 5
dgrid3d 30,30 gauss 1
dgrid3d 30,30 gauss .75
dgrid3d 30,30 gauss .5
dgrid3d 30,30 gauss .35
dgrid3d 30,30 gauss .25
dgrid3d 30,30 gauss .5,.35
dgrid3d 30,30 gauss .35,.5
Gnuplot Correspondences
geographic coordinate system
3D version using spherical coordinate system
3D solid version with hidden line removal
3D version using cylindrical coordinate system
Labels colored by GeV plotted in spherical coordinate system
Labels with hidden line removal
log gamma function, similarly very useful function
arcsin PDF with r = 2.0
arcsin CDF with r = 2.0
beta PDF
incomplete beta CDF
binomial PDF with n = 25, p = 0.15
binomial CDF with n = 25, p = 0.15
Cauchy PDF
Cauchy CDF
Erlang PDF
Erlang CDF
extreme PDF

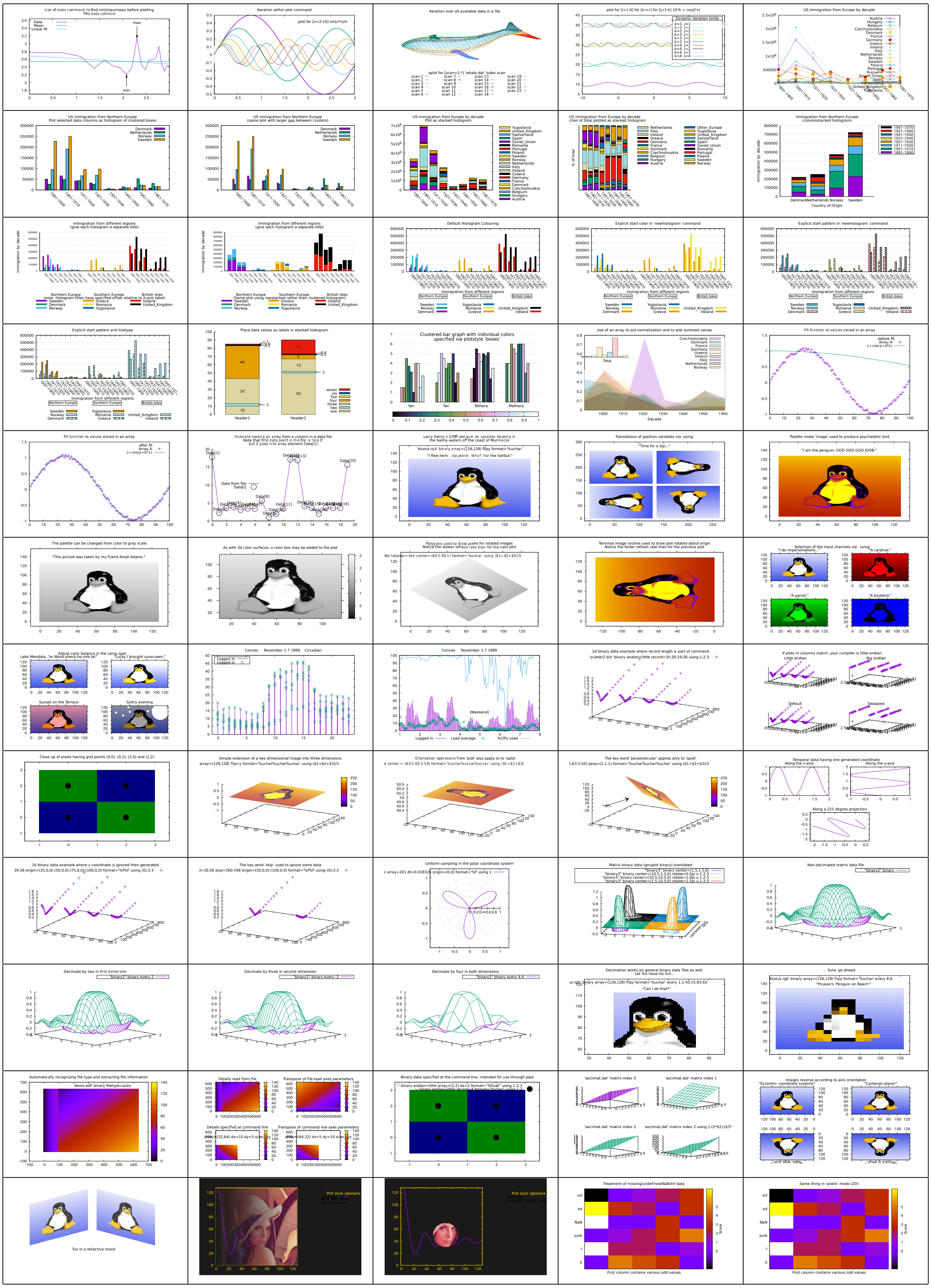

extreme CDF
F PDF
F CDF
incomplete gamma CDF
geometric PDF with p = 0.4
geometric CDF with p = 0.4
half normal PDF, σ = 1.0
half normal CDF, σ = 1.0
hypergeometric PDF with N = 75, C = 25, d = 10
hypergeometric CDF with N = 75, C = 25, d = 10
Laplace (or double exponential) PDF with μ = 0, b = 1
Laplace (or double exponential) CDF with μ = 0, b = 1
logistic PDF with a = 0, λ = 2
logistic CDF with a = 0, λ = 2
lognormal PDF with μ = 1.0, σ = 0.5
lognormal CDF with μ = 1.0, σ = 0.5
Maxwell PDF
Maxwell CDF
negative binomial (or Pascal or Polya) PDF with r = 8, p = 0.4
negative binomial (or Pascal or Polya) CDF with r = 8, p = 0.4
negative exponential (or exponential) PDF with λ = 2.0
negative exponential (or exponential) CDF with λ = 2.0
normal (also called Gauss or bell-curved) PDF
normal (also called Gauss or bell-curved) CDF
Pareto PDF with a = 1, b = 3
Pareto CDF with a = 1, b = 3
Poisson PDF with μ = 4.0
Poisson CDF with μ = 4.0
Rayleigh PDF with λ = 2.0
Rayleigh CDF with λ = 2.0
sine PDF
sine CDF
t PDF (and Gaussian limit)
t CDF (and Gaussian limit)
triangular PDF with m = 3.0, g = 2.0
triangular CDF with m = 3.0, g = 2.0
uniform PDF with a = -2.0, b = 2.0
uniform CDF with a = -2.0, b = 2.0
Weibull PDF
Weibull CDF
binomial PDF using normal approximation
binomial PDF using poisson approximation
geometric PDF using gamma approximation
geometric PDF using normal approximation
hypergeometric PDF using binomial approximation
hypergeometric PDF using normal approximation
negative binomial PDF using gamma approximation
negative binomial PDF using normal approximation
normal PDF using logistic approximation
poisson PDF using normal approximation
Lattice test for random numbers
Lattice test for random numbers
50 random samples from a 2D Gaussian PDF with unit variance, zero mean and no dependence
Histogram of 5000 random samples from a univariate Gaussian PDF with unit variance and zero mean
Gaussian 3D cloud of 3000 random samples
Histogram of distance from origin of 3000 multivariate unit variance samples
Rug Plot
Uniform Distribution
Normal Distribution
Lognormal Distribution

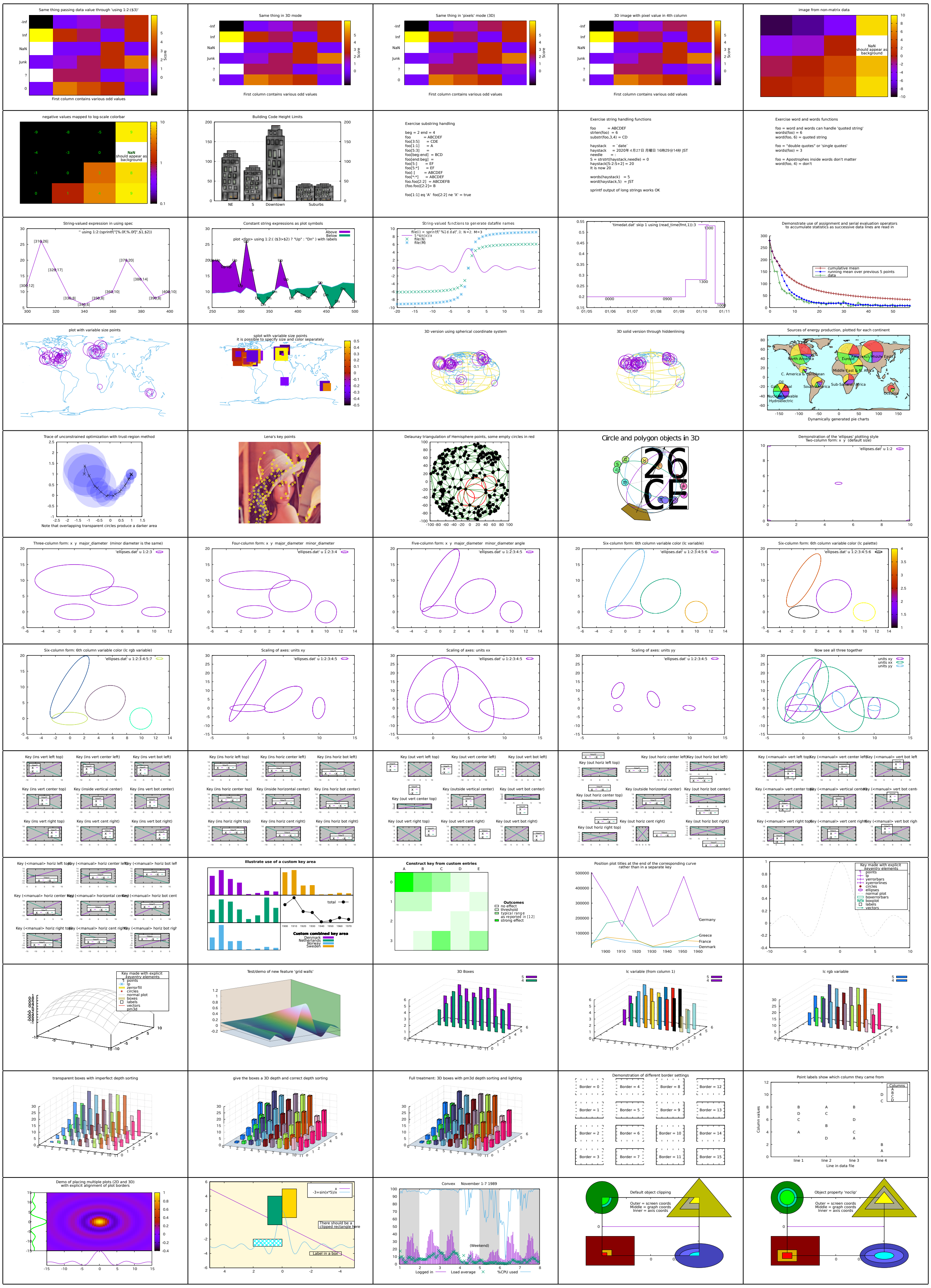

Mixed Distribution (Lognormal with shifted Gaussian)
The cubic Monomial basis functions
The cubic Hermite basis functions
The cubic Bezier basis functions
The cubic uniform Bspline basis functions
The cubic Bezier/Bspline basis functions in use
The cubic Hermite basis functions in use
Hidden line removal of explicit binary surfaces
Hidden line removal of explicit binary surfaces
Notice that sampling rate can change
Compare steps, fsteps and histeps
Histogram built from unsorted data by 'smooth frequency'
Histogram built from unsorted data by 'smooth frequency'
Normal Distribution Function
Inverse Error Function
Inverse Normal Distribution Function
Simple demo of scatter data conversion to grid data
Simple demo of scatter data conversion to grid data
Simple demo of scatter data conversion to grid data
Simple demo of scatter data conversion to grid data
Simple demo of scatter data conversion to grid data
Simple demo of scatter data conversion to grid data
Simple demo of scatter data conversion to grid data
Simple demo of scatter data conversion to grid data
Real part of complex square root function
Real part of complex square root function (different view)
Imaginary part of complex square root function
Imaginary part of complex square root function (different view)
Real part of complex cube root function
Real part of complex cube root function (different view)
Imaginary part of complex cube root function
Imaginary part of complex cube root function (different view)
Real part of complex 4th root function
Real part of complex 4th root function (different view)
Imaginary part of complex 4th root function
Imaginary part of complex 4th root function (different view)
Enneper's surface
Enneper's surface (different view)
Moebius strip
Moebius strip (view from opposite side)
Klein bottle
Klein bottle with look at the 'inside'
Klein bottle, glassblowers' version (look-through)
Klein bottle, glassblowers' version (solid)
NACA6409 Airfoil
NACA0012 Airfoil
Joukowski Airfoil using Complex Variables
Joukowski Airfoil using Complex Variables
Parametric Sphere
Parametric Sphere, crunched z axis
Parametric Sphere, enlarged z axis
Parametric Torus
Parametric Hexagon
Parametric Helix
Parametric Shell (clipped to limited z range)
Parametric Shell (automatic z range)
Interlocking Tori
azimuth 0
azimuth 10
azimuth 60
2D projections of a 3D surface
contour plot

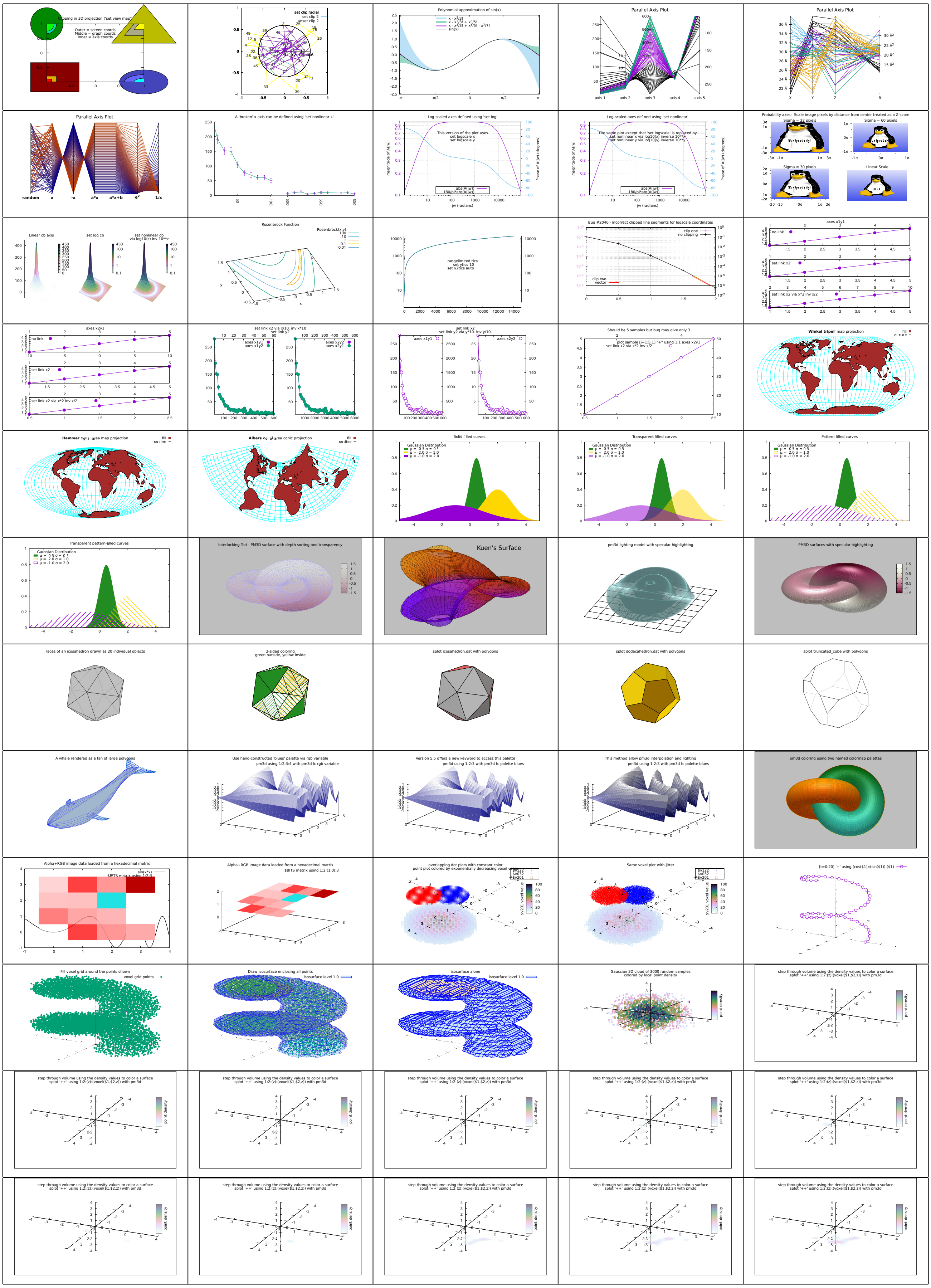

more contours (15 levels)
contour by increments (every 10, starting at -100)
discrete set of contours (at -75, -50, 0)
contours on base grid with labels
contours drawn on surface
contours on both base and surface
2 surfaces
some more interesting contours
some more interesting contours
low resolution (6x6)
low resolution (6x6) using cubic splines
low resolution (6x6) using bspline approx.
low resolution (6x6) raise bspline order.
contour of Sinc function
contour of Sinc function
contour of data grid plotting
contour of data grid plotting
2D contour projection of previous plot
Rosenbrock Function
Rosenbrock Function
All contours drawn in a single color
Sometimes it helps to use multiplot
Circle and polygon objects in 3D
approximate the integral of functions
approximate the integral of functions
approximate the integral of functions (upper and lower limits)
approximate the integral of functions (upper and lower limits)
Plot of the ackermann function
Min(x,y) and Max(x,y)
Greatest Common Divisor (for integers only)
Finite summation of 10, 100, 1000 fourier coefficients
Fsteps plot
with date and time as x-values
Time data on Y, millisecond precision
Date format (top) vs Time format (bottom)
Simple Gantt Chart
Task start and end times in columns 2 and 3
Simple Gantt Chart
Task start and end times in columns 2 and 3
Terminal-independent RGB colors in 2D
Terminal-independent palette colors in 2D
RGB color information read from data file
Both RGB color information
and point size controlled by input
Demo of hidden3d with points only (no surface)
RGB coloring of pm3d surface
HSV coloring of pm3d surface
Explicit borders for pm3d tiling
variable color points, circles, candlesticks, boxes, and boxxyerror
variable color boxerror, xyerrorbars, impulses, vectors, and labels
variable color using 'lc palette z'
variable color using 'lc palette z'
variable color using 'lc rgb variable'
variable color using 'lc rgb variable'
variable color using multiple named palettes
variable color using multiple named palettes
pm3d demo. Radial sinc function. Default options.
pm3d at s (surface) / ticslevel 0
pm3d at b (bottom)

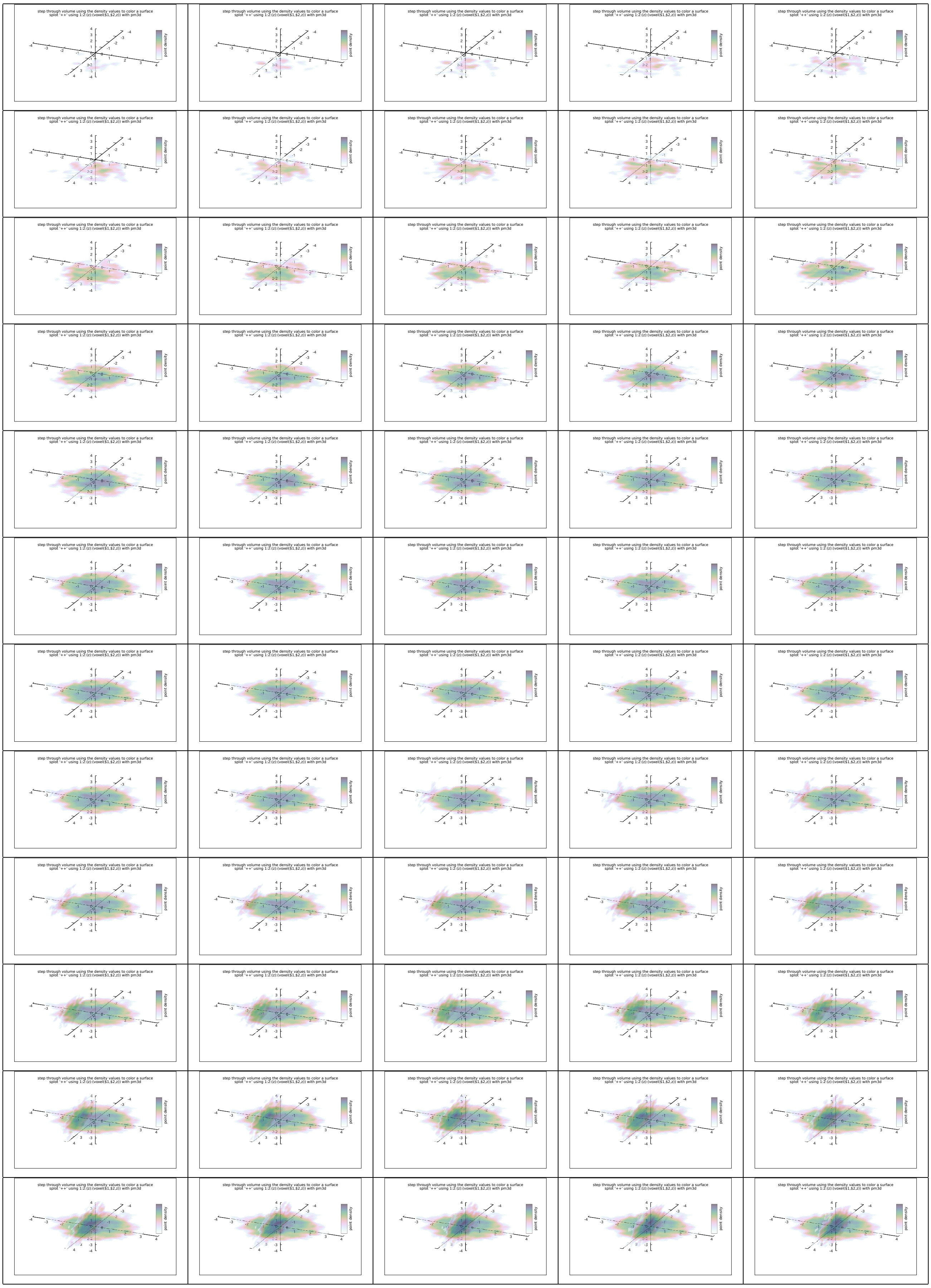

unset surface; set pm3d at st (surface and top)
set pm3d at bottbot (funny combination, only for screen or postscript)
gray map
gray map, negative
colour map, using default rgbformulae 7,5,15 ... traditional pm3d (black-blue-red-yellow)
colour, rgbformulae 3,11,6 ... green-red-violet
colour, rgbformulae 30,31,32 ... color printable on gray (black-blue-violet-yellow-white)
cubehelix color scheme with monotonic intensity
D A Green (2011) http://arxiv.org/abs/1108.5083
R,G,B profiles of the current color palette
rgbformulae 31,-11,32: negative formula number=inverted color
set pm3d scansforward: wrong, because back overwrites front
set pm3d scansbackward: correctly looking surface
set hidden3d
set pm3d depthorder border lc 'black' lw 1
bad: surface and top are too close together
solution: use independent 'set zrange' and 'set cbrange'
color box is on by default at a certain position
color box is on again, now with horizontal gradient
see cblabel, grid cb, mcbtics, ...
color box is switched off
using now "set grid back; unset colorbox"
Datafile with different nb of points in scans; pm3d flush begin
Datafile with different nb of points in scans; pm3d flush center
Datafile with different nb of points in scans; pm3d flush end
Data with different nb of points in scans; pm3d ftriangles flush begin
Data with different nb of points in scans; pm3d ftriangles flush center
Data with different nb of points in scans; pm3d ftriangles flush end
Using interpolation with datafile; pm3d interpolate 2,1
Using interpolation with datafile; pm3d ftriangles interpolate 10,1
Using interpolation with datafile; pm3d at s ftriangles interpolate 10,1
only for enhanced terminals: 'set format cb ...'
function 'x+y' using all colors available, 'set pal maxcolors 0'
function 'x+y' using only 5 colors, 'set pal maxcolors 5'
color lines: 'splot sin(y)/(y) with lines palette'
coloring according to the 3rd 'using' parameter (left) and to the z-value (bottom)
set pm3d corners2color mode
new pm3d option for smooth clipping against zrange
set pm3d clip4in (old default)
set pm3d clip z (new default)
Palettes according to 'help palette rgbformulae'
set palette defined
set palette defined (0 0 0 0, 1 0 0 1, 3 0 1 0, 4 1 0 0, 6 1 1 1)
set palette defined (0 "green", 1 "blue", 2 "red", 3 "orange")
set palette defined (20 "#101010", 30 "#ff0000", 40 "#00ff00", 50 "#e0e0e0")
set palette defined (0 0 0 0, 1 1 1 1)
set palette model HSV defined (0 0 1 1, 1 1 1 1)
set palette model RGB defined
set palette file "-" (file with 3 columns)
set palette file "-" (file with 4 columns)
set palette file "-" using 1:2:($1+$2)/2
set palette model RGB rgbformulae 7,5,15
set palette model HSV rgbformulae 7,5,15
set palette model CMY rgbformulae 7,5,15
set palette model HSV rgbformulae 3,2,2
set palette functions gray, gray, gray
set palette functions sqrt(gray), gray**3, sin(gray*2*pi) <--> 7,5,15
set palette rgbformulae 7,5,15
set palette model RGB functions
Color (Hue) indicates angle
Saturation indicates amplitude
asin(x + iy)
acos(x + iy)

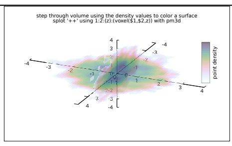


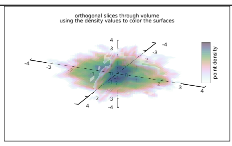





Parallel Axis Plot
Rosenbrock Function
Kuen's Surface
Solid filled curves
Transparent filled curves
Pattern-filled curves
Transparent pattern-filled curves


step through volume using the density values to color a surface
splot '++' using 1:2:(z):(voxel($1,$2,z)) with pm3d
point density


step through volume using the density values to color a surface
splot '++' using 1:2:(z):(voxel($1,$2,z)) with pm3d
point density


orthogonal slices through volume
using the density values to color the surfaces
point density