vandg	van der Grinten
laea	Lambert Azimuthal Equal Area
mbtfpq	McBryde-Thomas Flat-Polar Quartic
sinu	Sinusoidal
spstere	South-Polar Stereographic
lcc	Lambert Conformal
npaeqd	North-Polar Azimuthal Equidistant
eqdc	Equidistant Conic
cyl	Cylindrical Equidistant
aea	Albers Equal Area
spaeqd	South-Polar Azimuthal Equidistant
ortho	Orthographic
cass	Cassini-Soldner
splaea	South-Polar Lambert Azimuthal
robin	Robinson

projection can be followed by a comma-separated list of option-value pairs *projoptions*. Supported projection options are:

boundinglat	Bounding latitude for polar projections.
lat_0	Central latitude.
lat_1	First standard parallel.
lat_2	Second standard parallel.
lat_ts	Latitude of true scale.
lon_1	Longitude of one of the two points on the projection centerline for oblique mercator.
lon_2	Longitude of one of the two points on the projection centerline for oblique mercator.

Longitude and latitude have to be valid positive decimal numbers followed by E or W, or S or N literal (respectively) to indicate direction.

Use -p help to get a list of available projections.

-r radius Interpolation radius in pixels. In profile products radius specifies vertical extent which a data point is mapped onto. If such vertical regions of two data points overlap value is determined by averaging with a weight coefficient of 1 over distance squared. The same holds for swath products, but here radius specifies a square. If radius is too low with respect to **dpi** data will be sparsely distributed on the image. Default is 3 for swath swath and a sensible value calculated from resolution for profile products.

-v Enable verbose mode.

-V Print version information and exit.

-x extent Horizontal region to be plotted. extent can be specified in a number of formats depending on the plot type.

For profile and layer products extent can either be specified by rays or by a time interval. In the first case it takes the form from..to where from and to are the first and the last ray (resp.) to be plotted. In the latter case, extent can be an absolute time interval in the form hour:min[:sec]..hour:min[:sec]. or a relative time interval in the form +|-[hour:]min:sec..+|-[hour:]min:sec.

For swath products extent can be specified by scanlines (along-track) and samples (across-track), or by geographical coordinates. In the first case extent takes the form from..to,from..to where the first term is the first and the last scanline to be plotted, and the second term is the first and the last sample to be plotted. In the latter case extent takes the form lon(E|W)..lon(E|W),lat(S|N)..lat(S|N) where lon, lat are numbers (in degrees) and E, W, S, N are literals, (A|B) means either A or B.

-y extent Vertical extent of CloudSat and CALIPSO profiles in meters in the form from..to.

-z options Miscellaneous options that modifiy plot formatting. options is a list of comma separeted key=value pairs with no spaces in between. Supported general options are:

cbfontsize	color bar font size (defaults to 8)
cbspacing	spacing between the axes and color bar (defaults to 0.4)
drawelev (default to 1)	draw surface elevation line (CALIPSO)
elevlw (defaults to 0.5)	surface elevation line width
elevcolor (defaults to #FF0000)	surface elevation line color
fontsize	font size (defaults to 10)
padding	padding around the axes and color bar in inches (defaults to 1)
plotheight	plot height in inches (defaults to 6)
title	figure title (set automatically by default)

Supported options for orbit plots are:

coastlinescolor	coastlines color (defaults to #46396D)
coastlineslw	coastlines line width (defaults to 0.4)
countriescolor	countries outlines color (defaults to #46396D)
countrieslw	countries outlines line width (defaults to 0.2)
drawcoastlines	draw coastlines (defaults to 1)