








Customizing Point-Stat and Grid-Stat Output

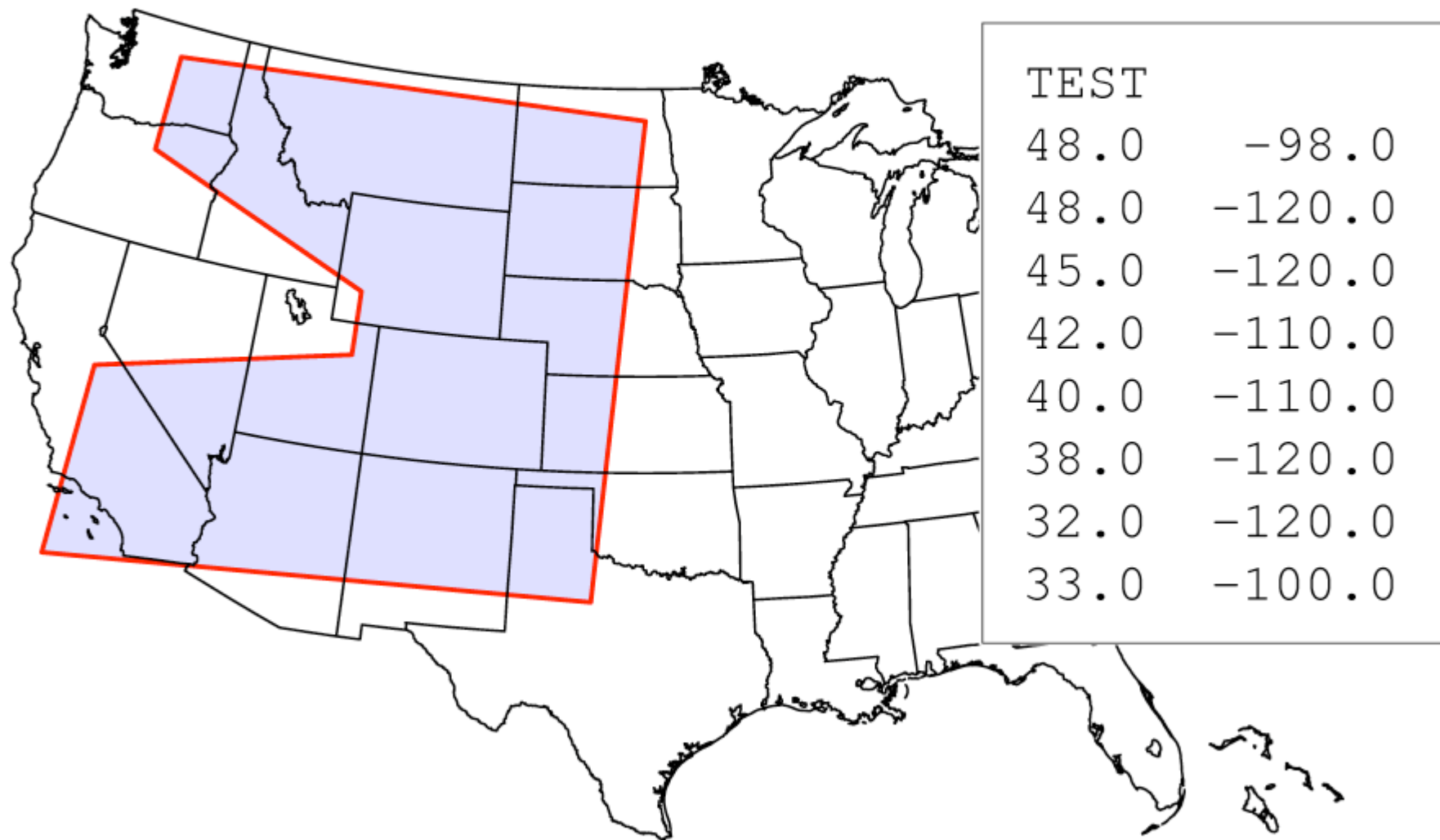
We'll restrict this discussion to an explanation of masking and interpolation.

Masking Methods

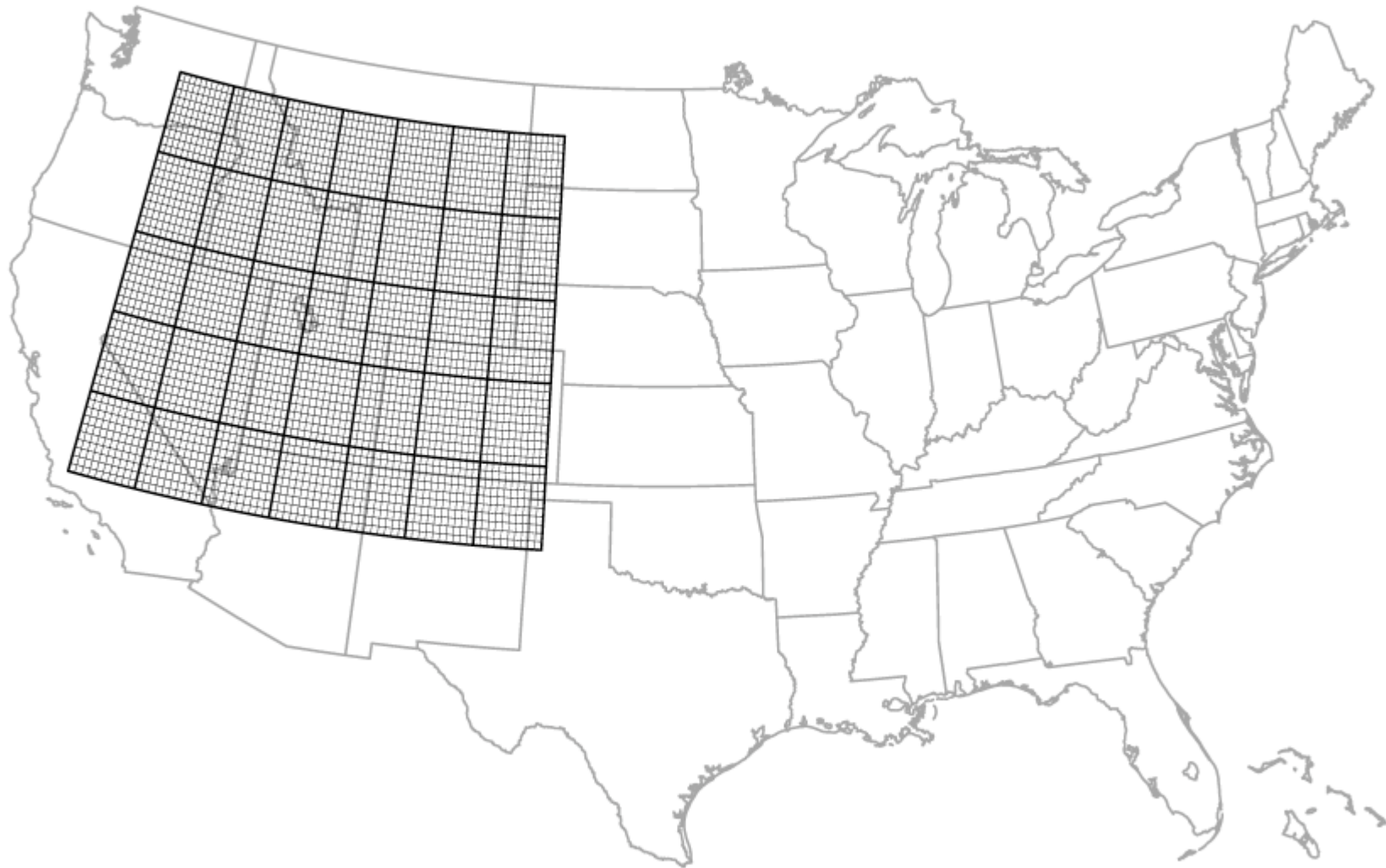
	Polyline	Grid	Stations	On/Off Bit Map
Point Stat				
Grid Stat			N/A	

Masking by stations doesn't apply to Grid Stat.

Polyline Masking

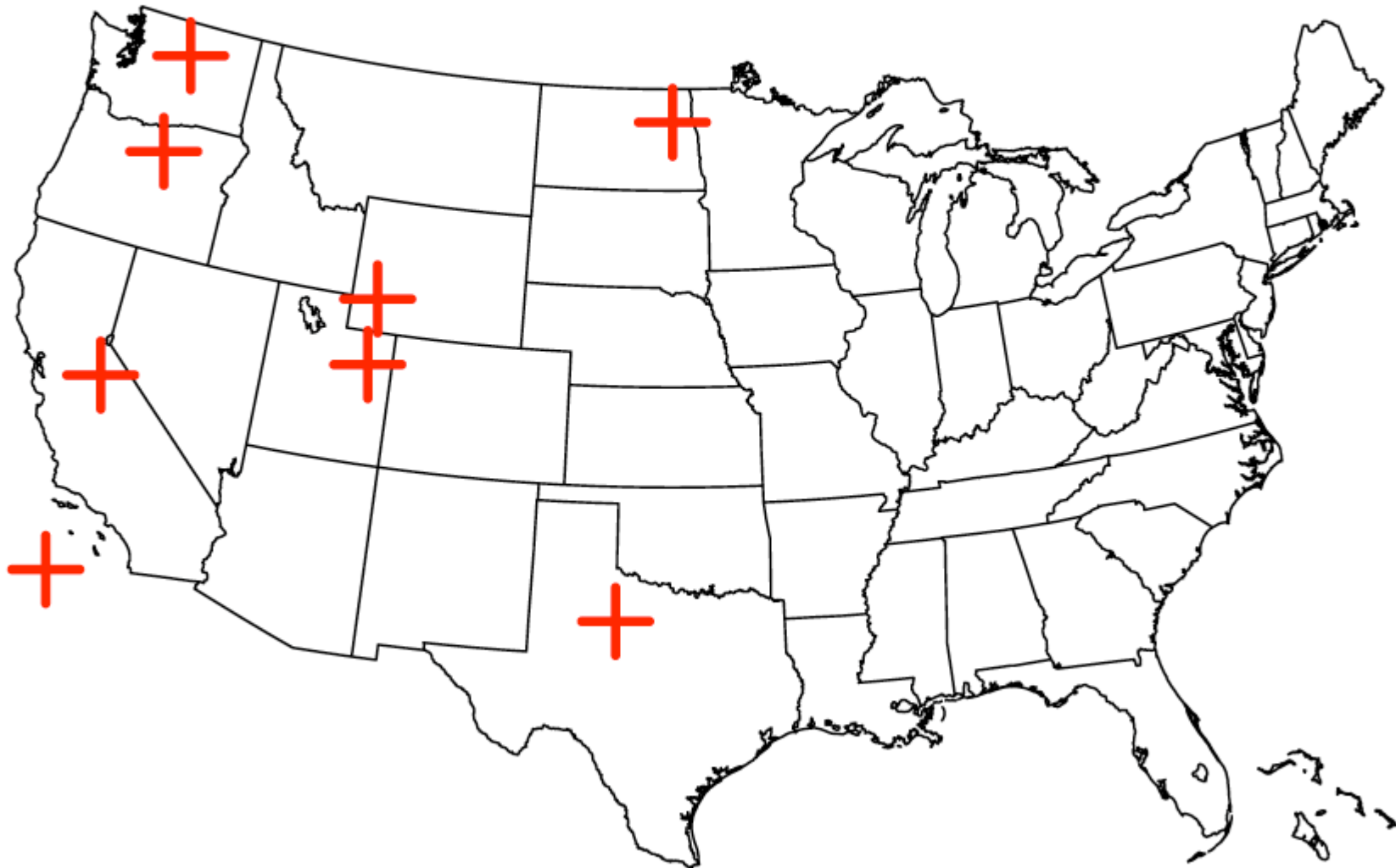


Grid Masking

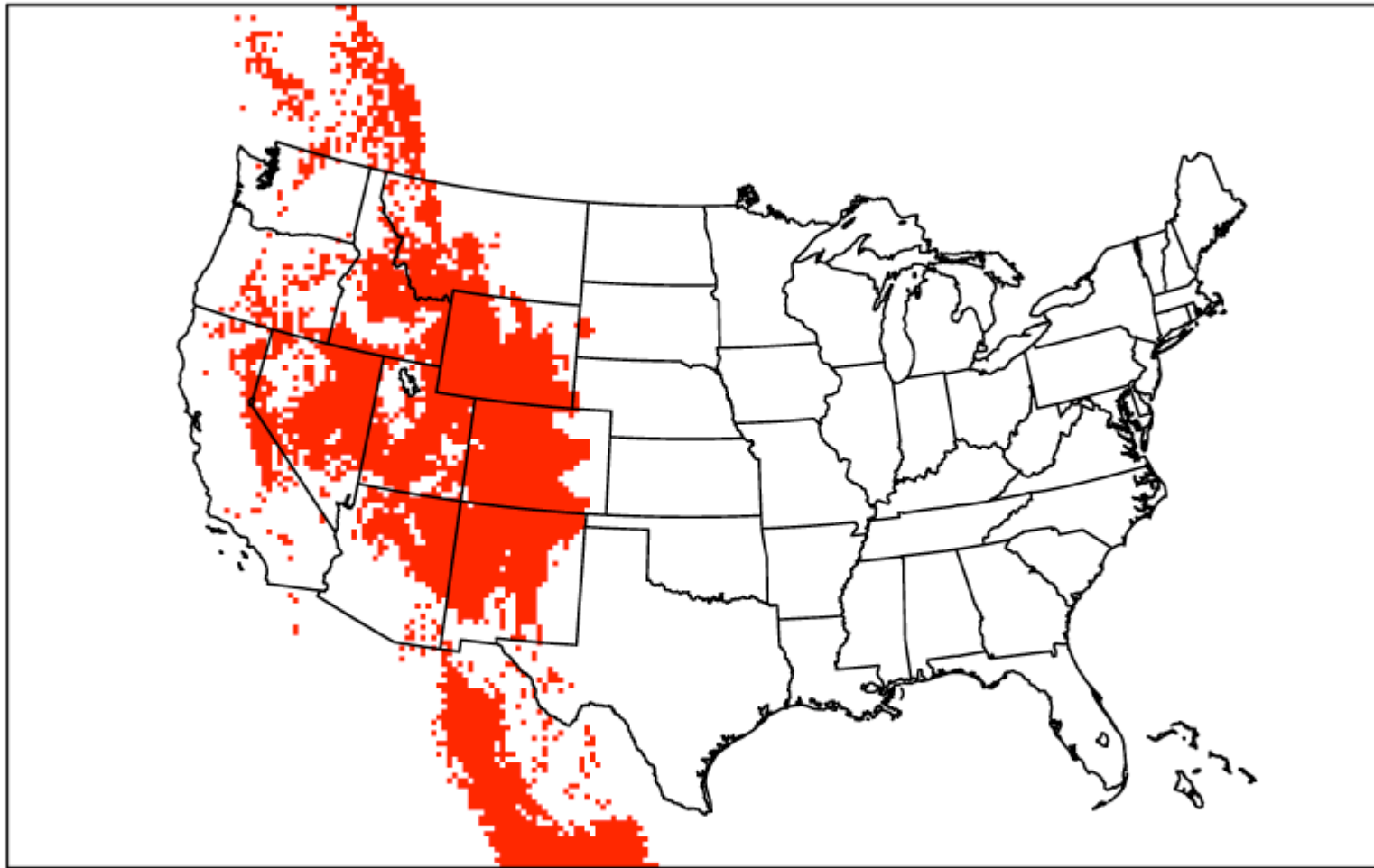


NCEP grids link: www.nco.ncep.noaa.gov/pmb/docs/on388/tableb.html

Station Masking



Data Threshold Mask



Topography > 5000 feet

Interpolation Methods

	Min	Max	Median	UW Mean	DW Mean	Nearest Nbr	Least Square
Point Stat	✓	✓	✓	✓	✓	✓	✓
Grid Stat	✓	✓	✓	✓	N/A	N/A	N/A

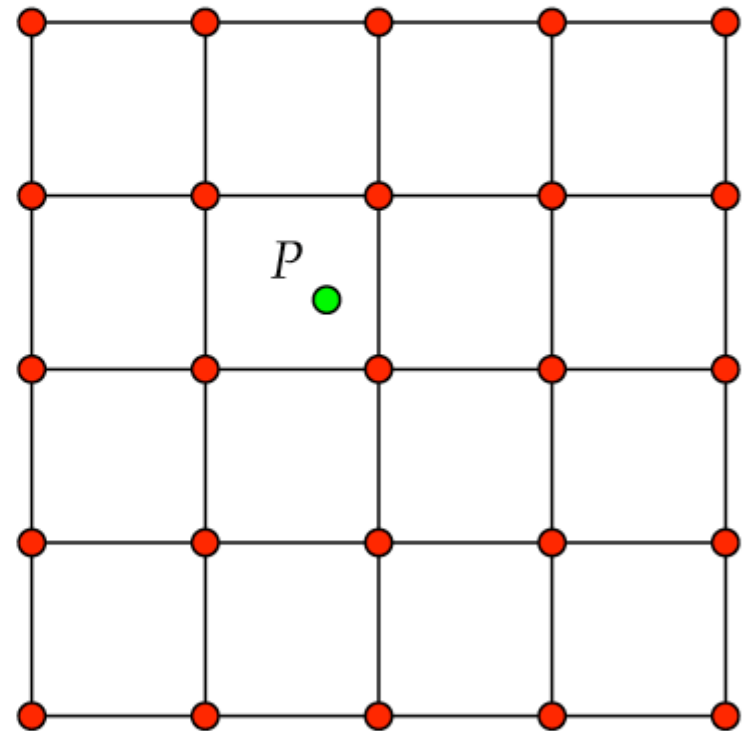
For Grid Stat, these are smoothing methods.

Interpolation

Need to Choose:

(1) Method

(2) Width



Min, Max, Median

Takes minimum, maximum or median of values in interpolation square.

Median separates the upper half of data values from the lower half. This is different from the mean, which is an average.

Nearest Neighbor

Essentially, no interpolation
is performed.

Value at interpolation point
is simply the data value at
the closest grid point.

Unweighted Mean Distance-Weighted Mean

Unweighted Mean is the average.

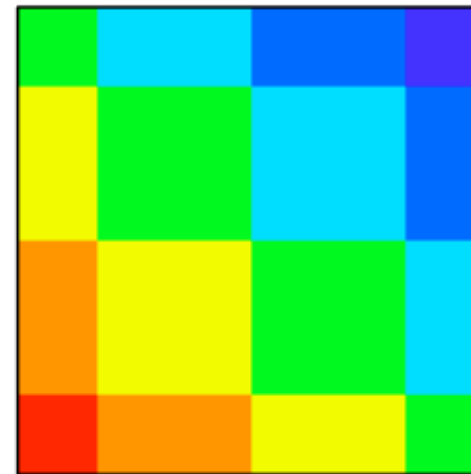
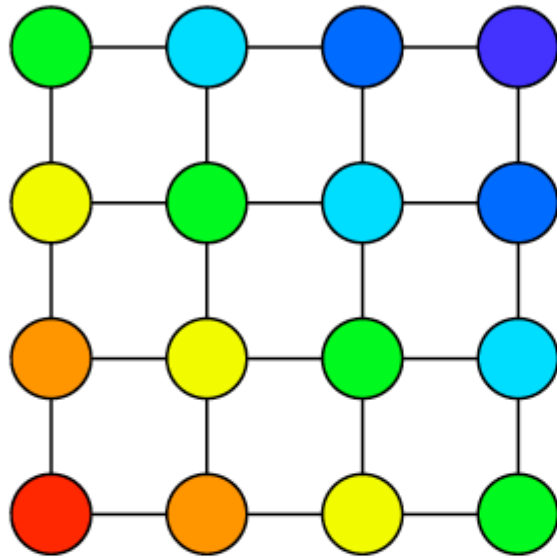
Distance-Weighted Mean is an average
weighted according to distance
from nearby grid points.

Least Squares

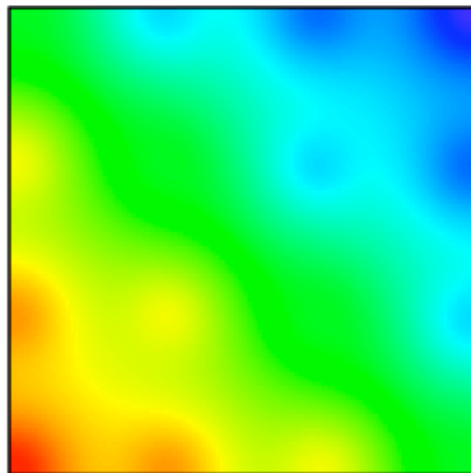
Performs a local Least-Squares linear fit in interpolation square.

$$z = Ax + By + C$$

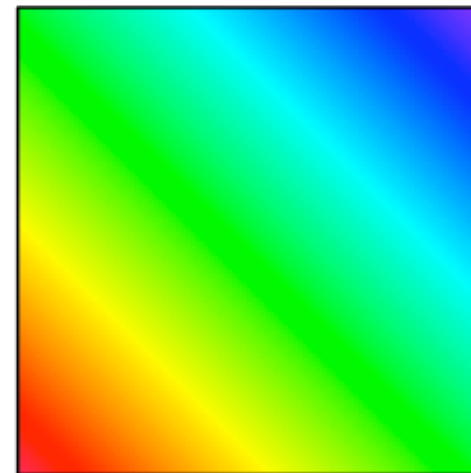
Interpolation Examples



Nearest Neighbor



Distance Weighted Mean



Least Squares

Wrap Up



Questions?

Comments?

Requests?

Opinions?