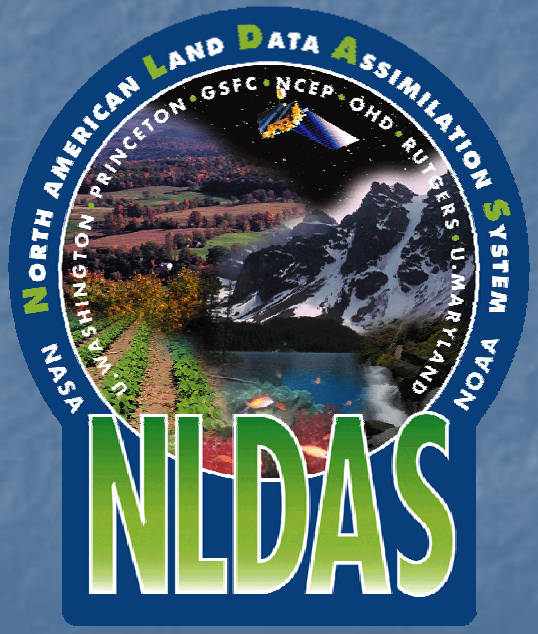
Bias Correction of NARR Downward Shortwave Radiation Fluxes Using GOES Data



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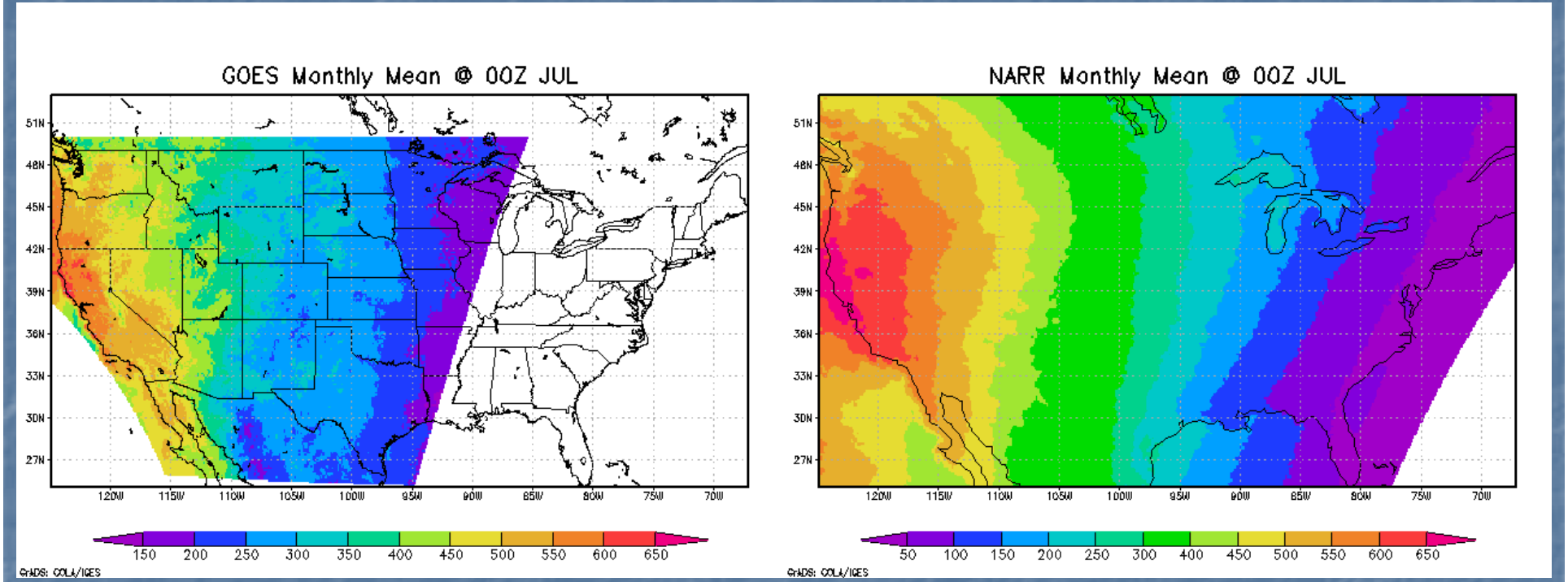
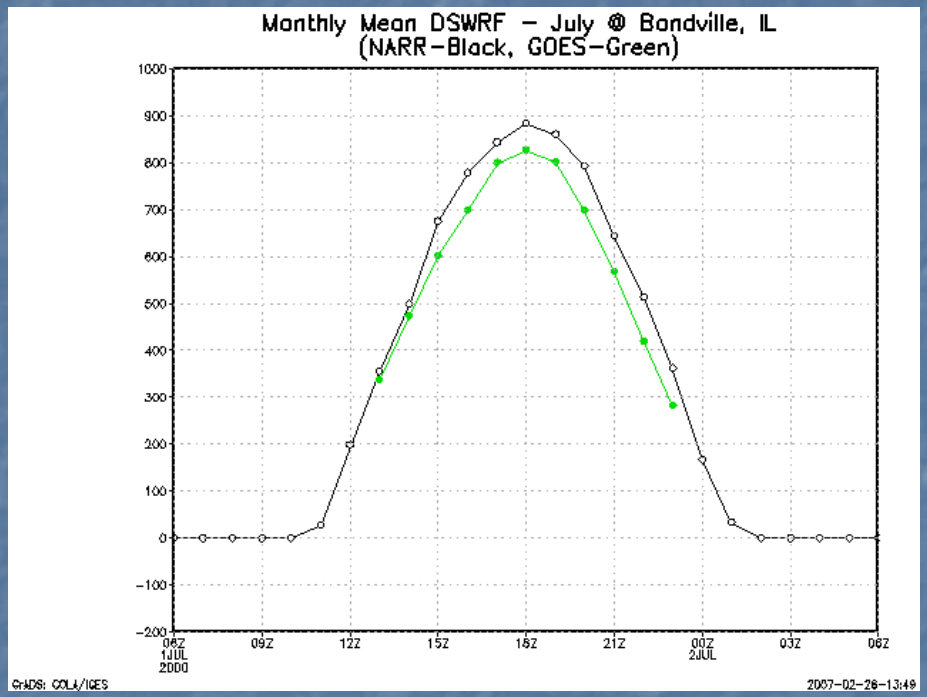
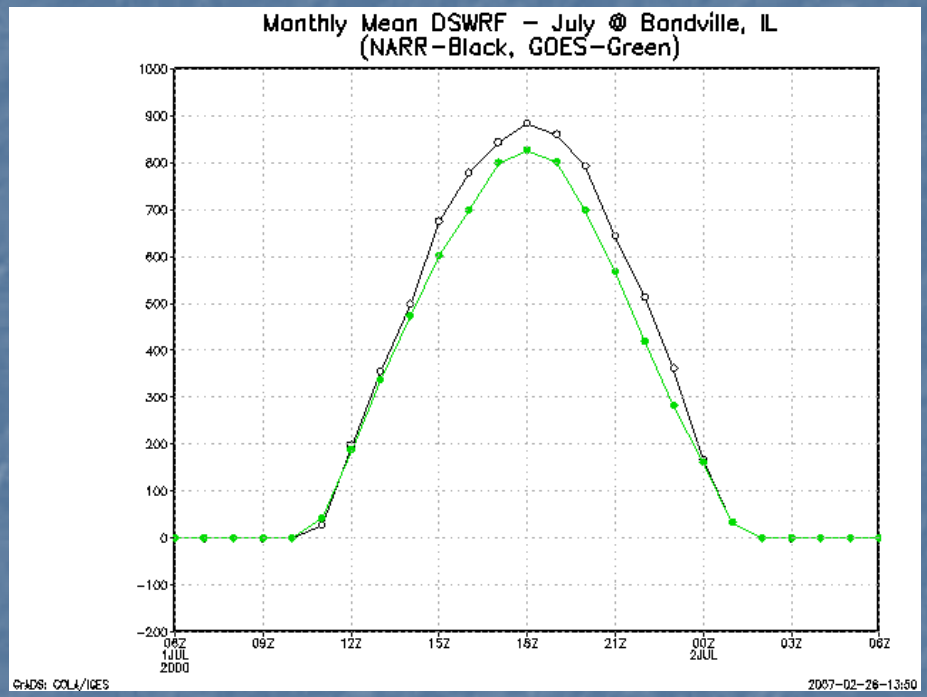
Creation of Bias Correction Ratios



- 1/8th degree GOES product not defined for low zenith angles and pole-ward of 50N and east of 70W

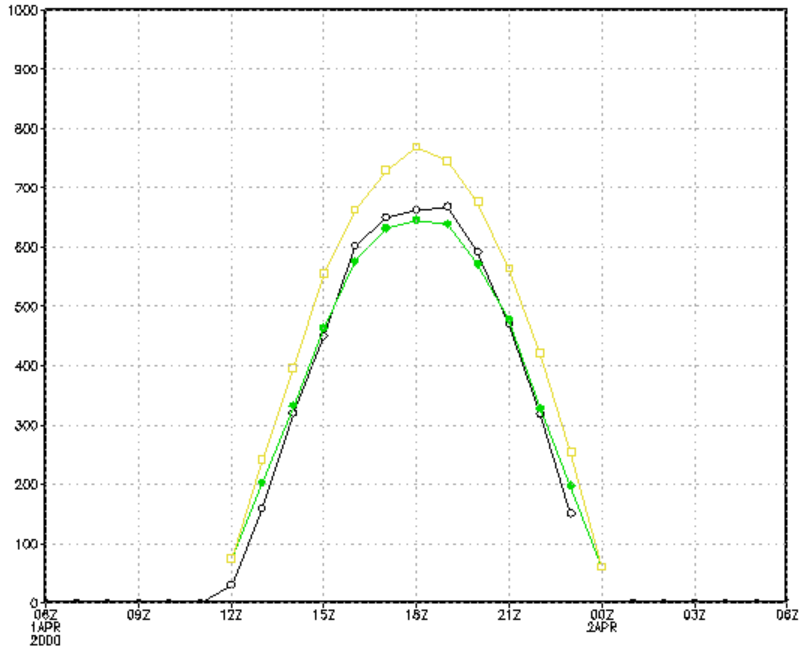
Creation of Bias Correction Ratios

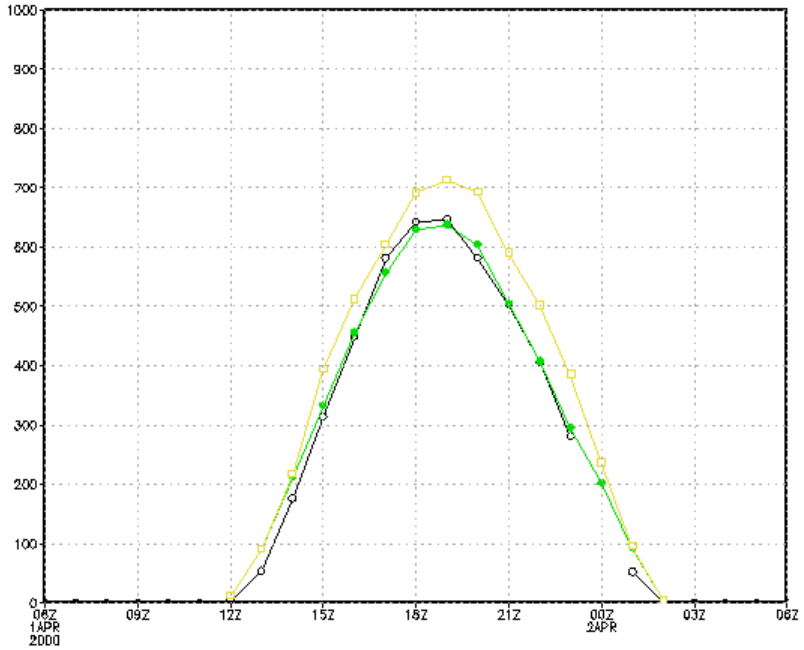




- Use zenith angle interpolation of mean fields to fill the gaps in areas located at low zenith angles

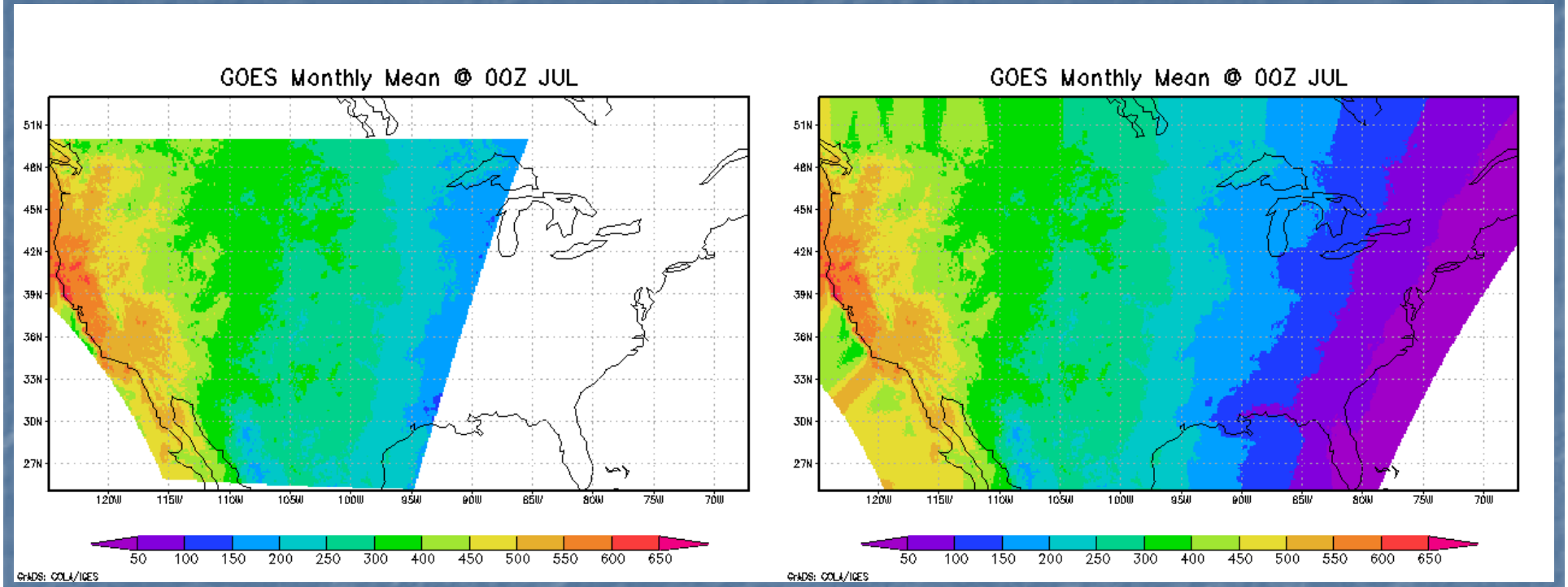
Verification of GOES Data (w/SURFRAD)





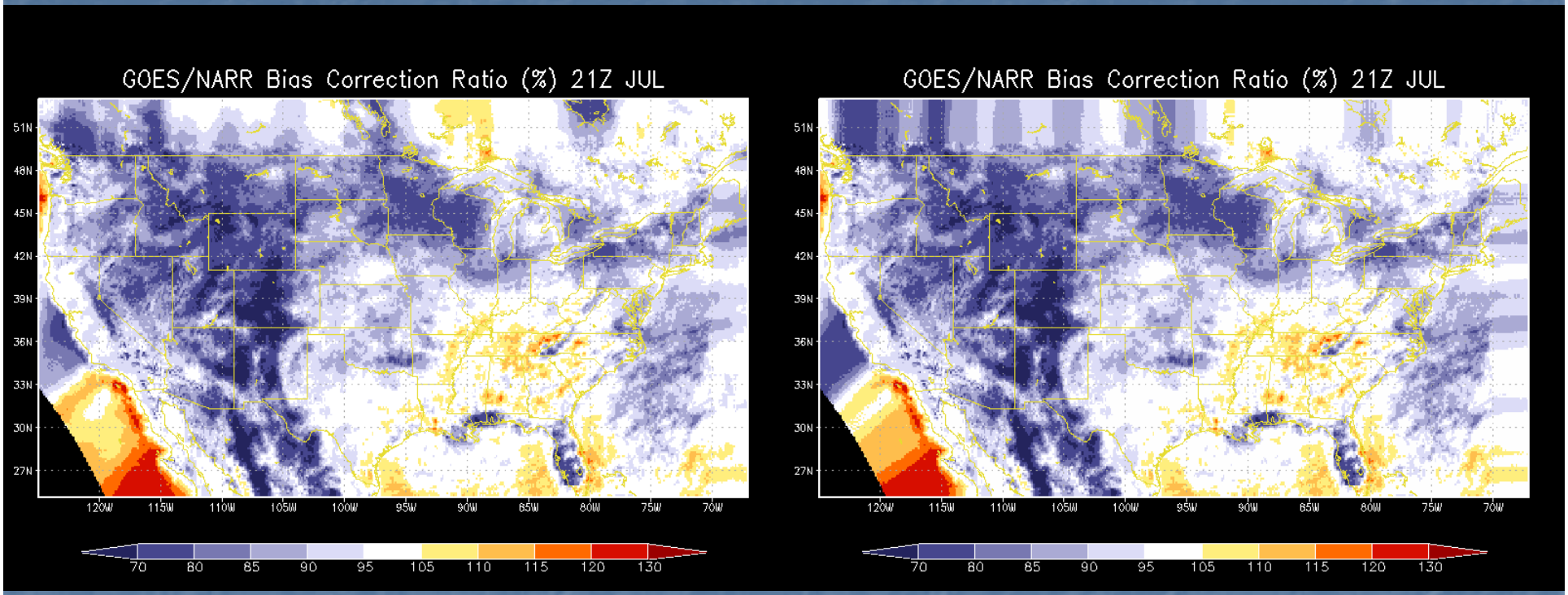
- Goodwin Creek, MS (left) and Fort Peck, MT (right)
- April 1997 monthly mean data
- SURFRAD – black, GOES – green, and NARR - yellow

Creation of Bias Correction Ratios



- We can also extend data northward and eastward using neighbor search and zenith angle correction

Creation of Bias Correction Ratios



Extend GOES mean data

Extend Ratio using closest 16 points

- Note: only one month used in producing this data

Sample Bias Correction Ratios

- Please visit the following url to view samples:

  http://ldas.gsfc.nasa.gov/rad/