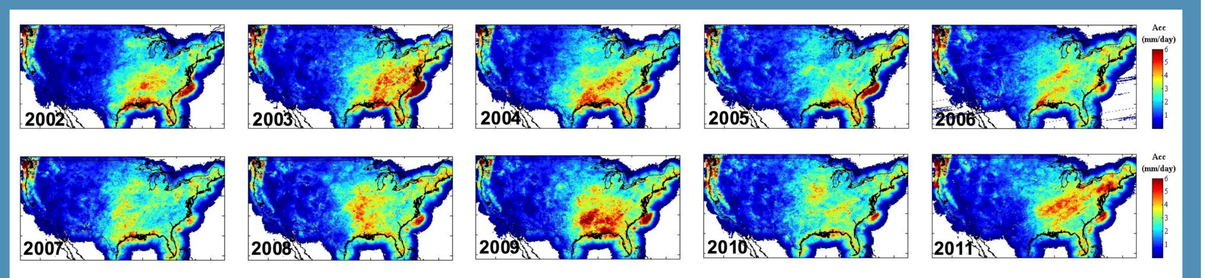
Poster Number here

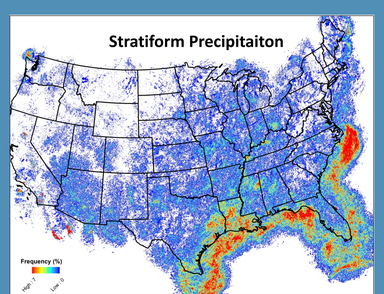
NOAA NEXRAD Reanalysis

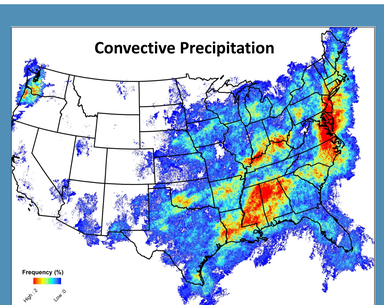
Brian Nelson NOAA/NESDIS/NCEI

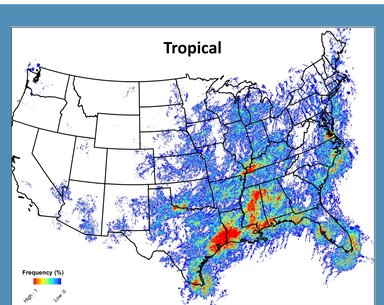
CDR Image

NOAA NEXRAD Reanalysis



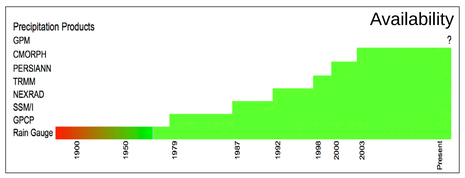






CDR Description

NOAA NEXRAD Reanalysis



What is the NOAA NEXRAD Reanalysis?

- National Mosaic and Multi-sensor QPE (NMQ)
- 15 year reprocessing applying updated algorithm
- Improvement on operational product in quality and resolution

Weather Decision Support System – Integrated Information (WDSS-II)

-Engine to work with Base NEXRAD data

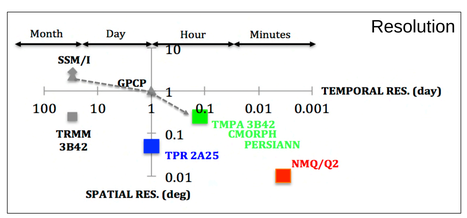
-Generates severe weather products and reflectivity composites

National Mosaic and Multi-sensor QPE (NMQ)

-Precipitation Estimation algorithm

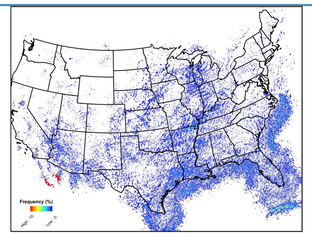
-Represents significant increase in resolution

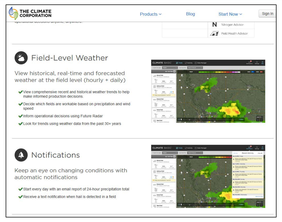
- 0.01 degree (1 km spatial resolution)
- 5-minute temporal resolution

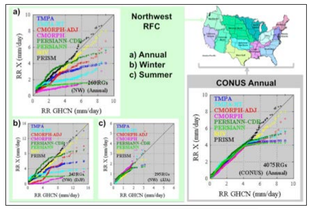


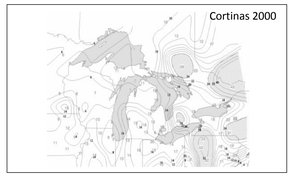
Current applications based on the CDR

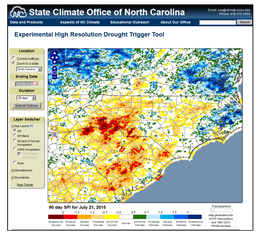
- Hail – Insurance
- Forecasting - NCEP
- Verification – Satellite based precipitation
- USGS – GeoData Portal
- Precipitation Indices – Drought
- Agriculture – AWhere, Climate Corp
- Freezing Rain – Airline Industry
- Flood Mapping

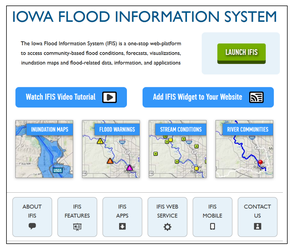


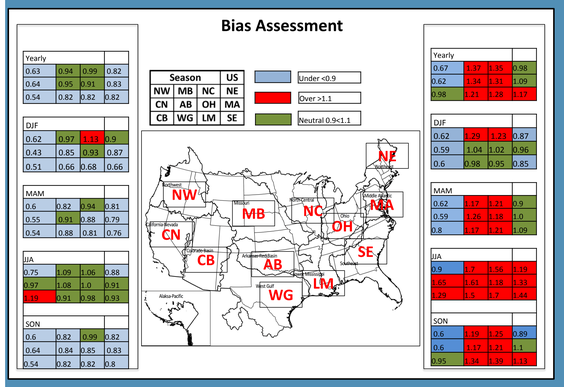
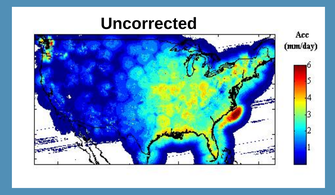
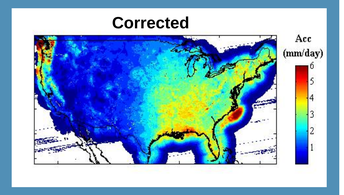
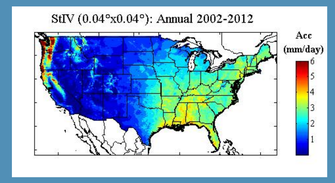
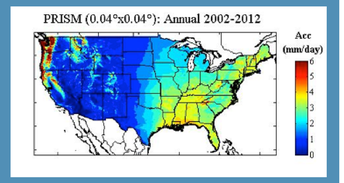










Future improvements of the CDR and anticipated applications

- Bias correction of the radar-only reanalysis estimates
- Algorithm development for best case
- Uncertainty estimation
- Advance product maturity
- Documentation