

# Cooperative Institute for Climate and Satellites (CICS)

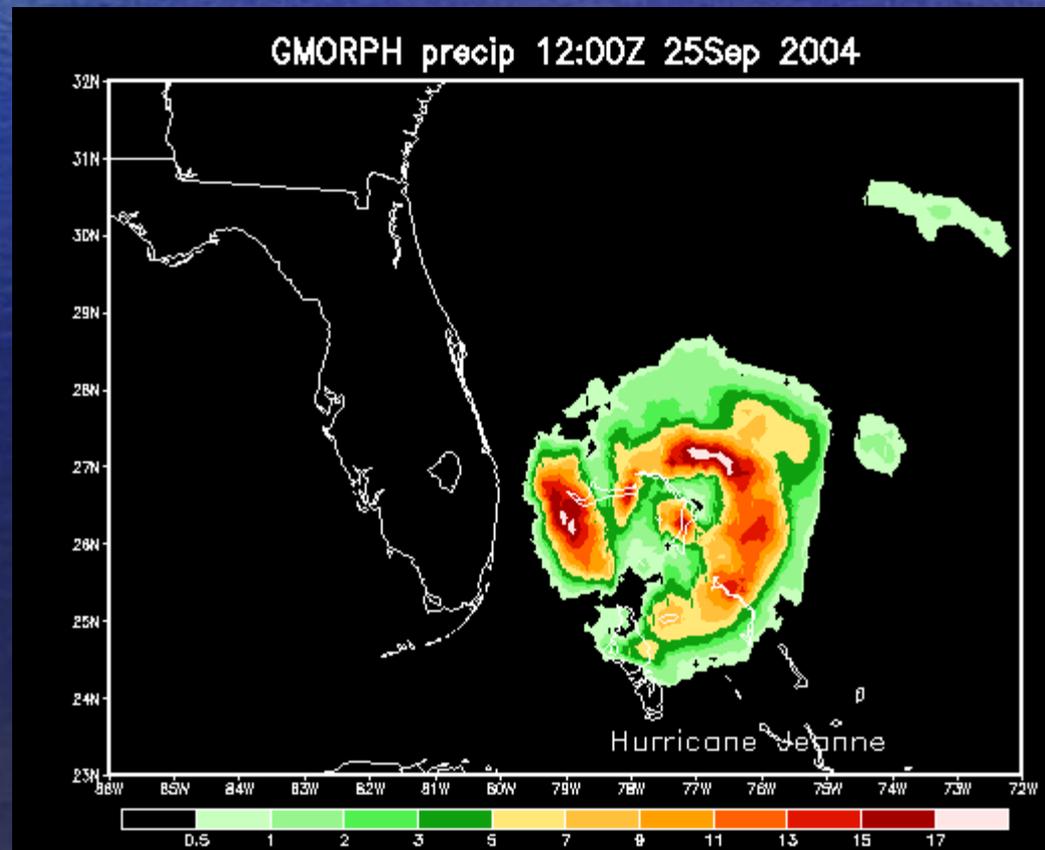
- One of the newest of NOAA's CIs
- With a very long heritage
- Two main centers: CICS-MD and CICS-NC
- With partners from many other academic, non-profit, and private institutions, including
  - JGCRI, Princeton, UCI, Howard, Columbia/IRI and CUNY
  - OSU, Miami, Duke, UNC Chapel Hill, CSU and RSS
  - Climate Central, NC Arboretum, CECI, RENCi and ORNL
- Provides foci for collaborative research and associated activities in support of NOAA mission goals related to meteorological satellite and climate data and information research and development
- CICS-MD and Satellite Climate Studies Branch (Ralph Ferraro) deeply engaged in GOES-R work: GLM, precipitation, radiation budget, land surface parameters...
- CICS-NC and other Consortium partners are a rich potential resource for GOES-R and other STAR research programs

# Blended Products

- One specific area of emphasis for CICS-MD relevant to GOES-R is the development of products that combine information from sensors on both GEO and LEO platforms
  - Lightning and microwave to improve precipitation (Wang, Adler)
  - Microwave estimates and cloud motions to improve spatial/temporal resolution (CMORPH)

- CMORPH (developed at NCEP/CPC):

- Precipitation estimates from TRMM, SSM/I, AMSU
- Storm motion from GEO IR
- Resolution 10 km/30 minutes
- 60° N-60° S beginning 1998



# Satellite-Climate Products

- CICS themes emphasize Climate and Satellites
- Climate monitoring products based on satellite observations rely on:
  - Intercalibration: only way to assure users that events/trends are real and not artifacts of instrument/satellite changes – STAR plans calibration center
  - Reprocessing: only way to ensure that advances in sensor/algorithm science are reflected in climate products
- GOES-R (and JPSS) need reprocessing strategy to facilitate NOAA's climate monitoring/prediction mission