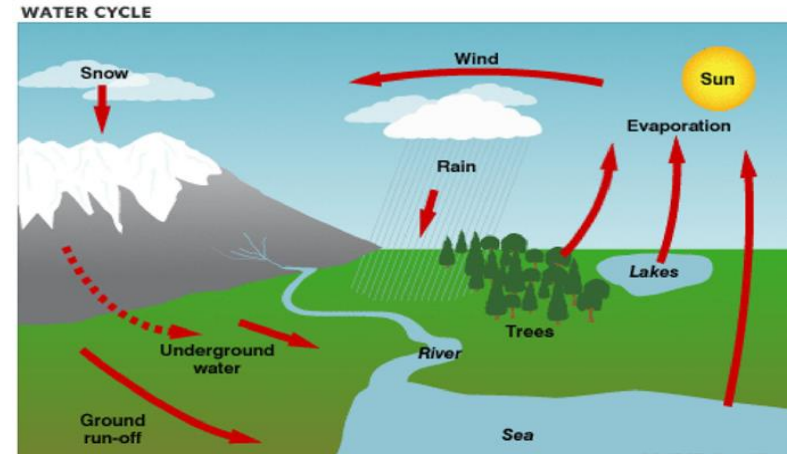




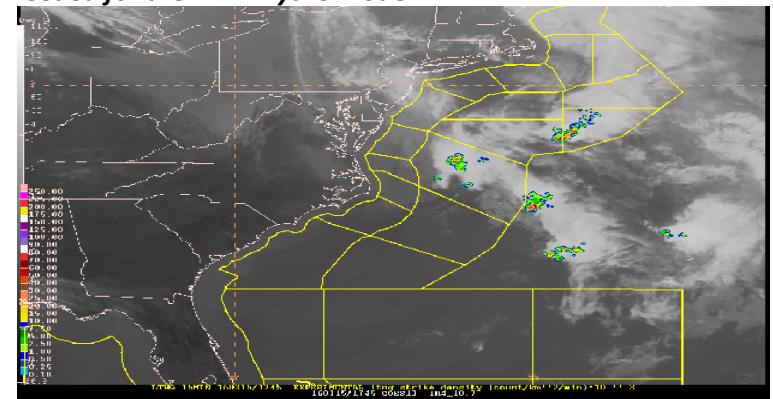
GOES-R Water Cycle Products and Services to Support the National Weather Service



- Specific NWS Centers have particular needs
 - National Water Center
 - WRF-Hydro and National Water Models
 - Situational Awareness
 - NWS/Pacific Region
 - Unique precipitation characteristics
 - Weather Prediction Center
 - QPE/QPF, including snowfall rates
 - Ocean Prediction Center
 - Off-shore weather hazards
- Advances in land surface forcings and QPE/QPF will be realized by exploiting GOES-R sensors
 - ABI – rapid update and high spatial resolution information
 - GLM – lightning related to most active convection, precipitation area, intensity, motion
- FY16
 - Precipitation
 - Off-shore weather hazards
- FY17 and FY18
 - Model forcings (Surface temperature, moisture and vegetative state)
 - Water Quality



GOES-R satellite products can help fill in observational data voids needed for the WRF-Hydro model



Off-shore lightning information provides mariners insight into hazardous weather.

Exploitation of ABI and GLM to improve water cycle products for use by NWS national centers and local forecast offices.

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Several collaborators from NESDIS-STAR, UMD-ESSIC-CICS and NWS National Centers