



# 7km GEOS-5 Nature Run (7km-G5NR)

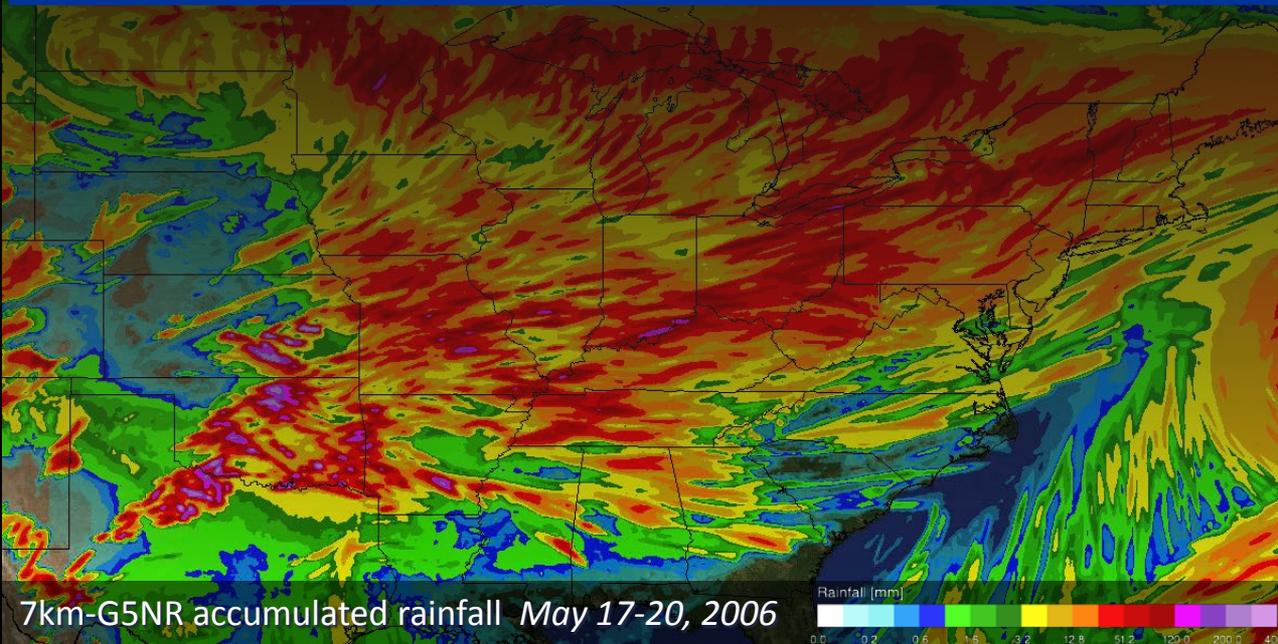
*mesoscale convective complexes*

Global Modeling and Assimilation Office

An observed mesoscale convective complex (MCC) on April 28, 2014 at 02Z, as seen by Advanced Very High Resolution Radiometer (AVHRR) imagery [top-right], shows the classic large circular cloud shield of an MCC. These events commonly contain heavy rainfall, strong winds, frequent lighting, hail and often tornadoes.

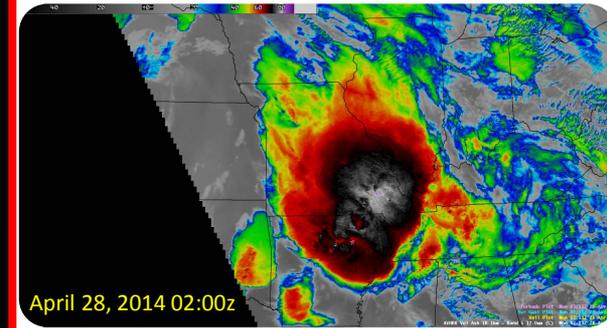
A similar storm system is observed from outgoing longwave radiation (OLR) in the 7km GEOS-5 Nature Run on May 19, 2006 at 04Z [bottom-right].

MCCs produce a large portion of total Midwest rainfall during spring/summer months.



## AVHRR 1-km IR Observed MCC

Several large MCCs moved across the US from April 27-30, 2014. These storms produced several long-track tornadoes in Kansas, Arkansas, Mississippi and Tennessee, along with major flooding in the southeast.



## OLR 7-km GEOS-5 Nature Run

Similar storm systems are seen in the GEOS-5 Nature Run

