

Observed & Day-1 Forecast Percentiles: JJAS (2007-18)

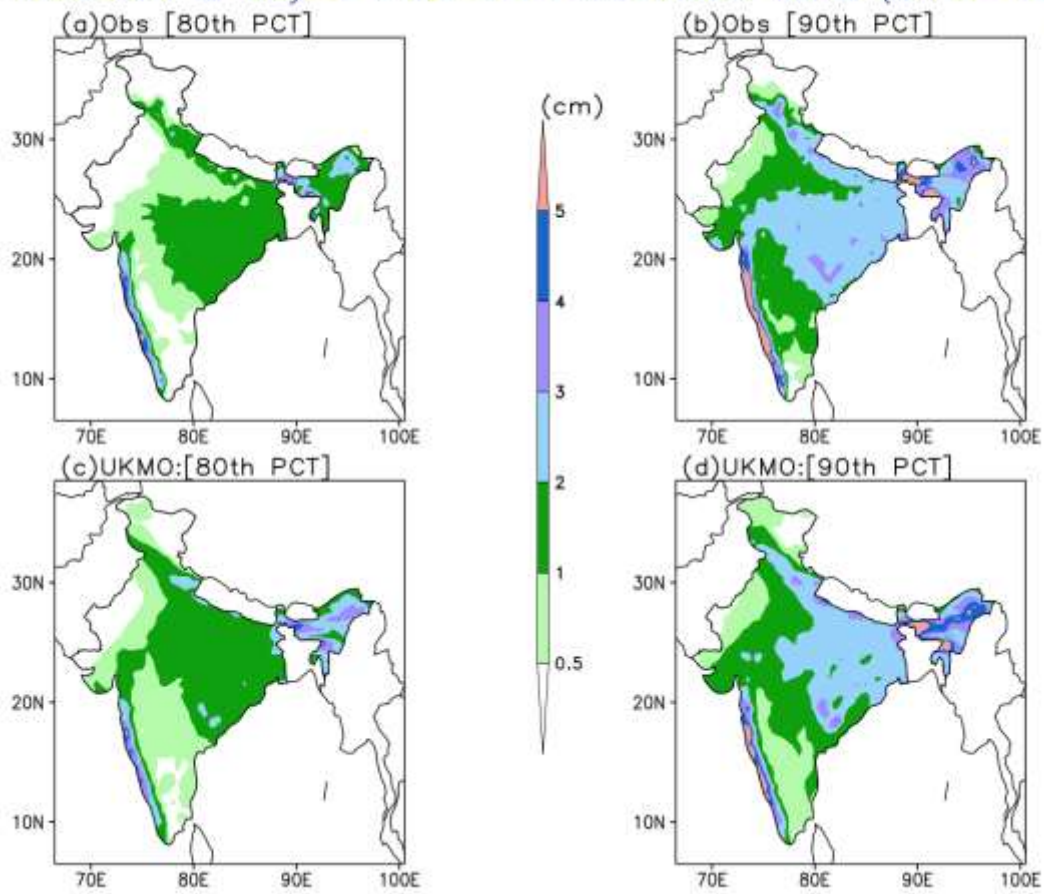


Figure S1 Observed 80 and 90th percentiles (a and c) and 80th and 90th percentiles of Day-1 rainfall forecast (b and d) during JJAS 2007-18 (cm)

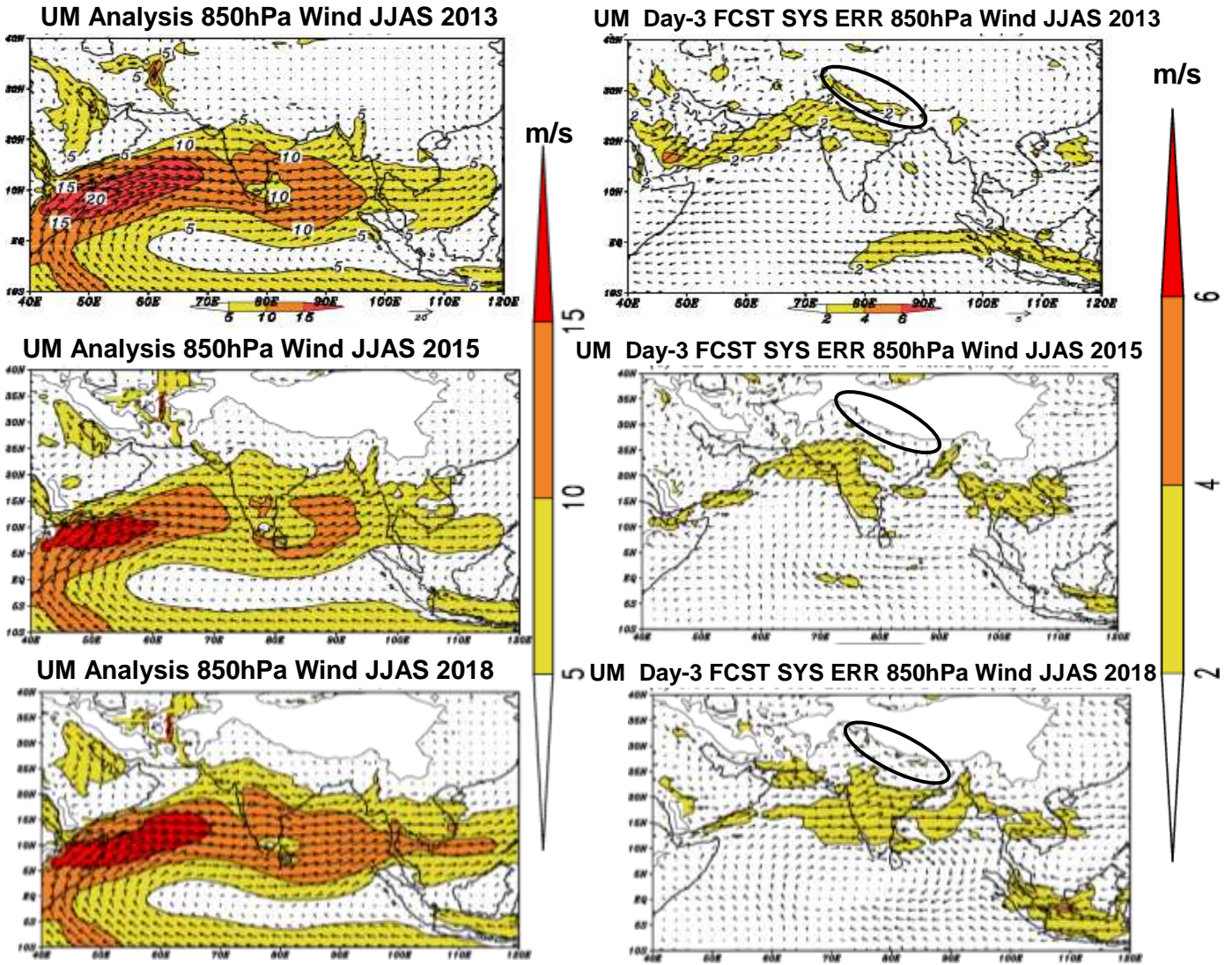


Figure S2 . UM analysis of wind at 850hPa (left panel) and Systematic Error (right panel) in m/s over India during JJAS 2013, 2015 and 2018.

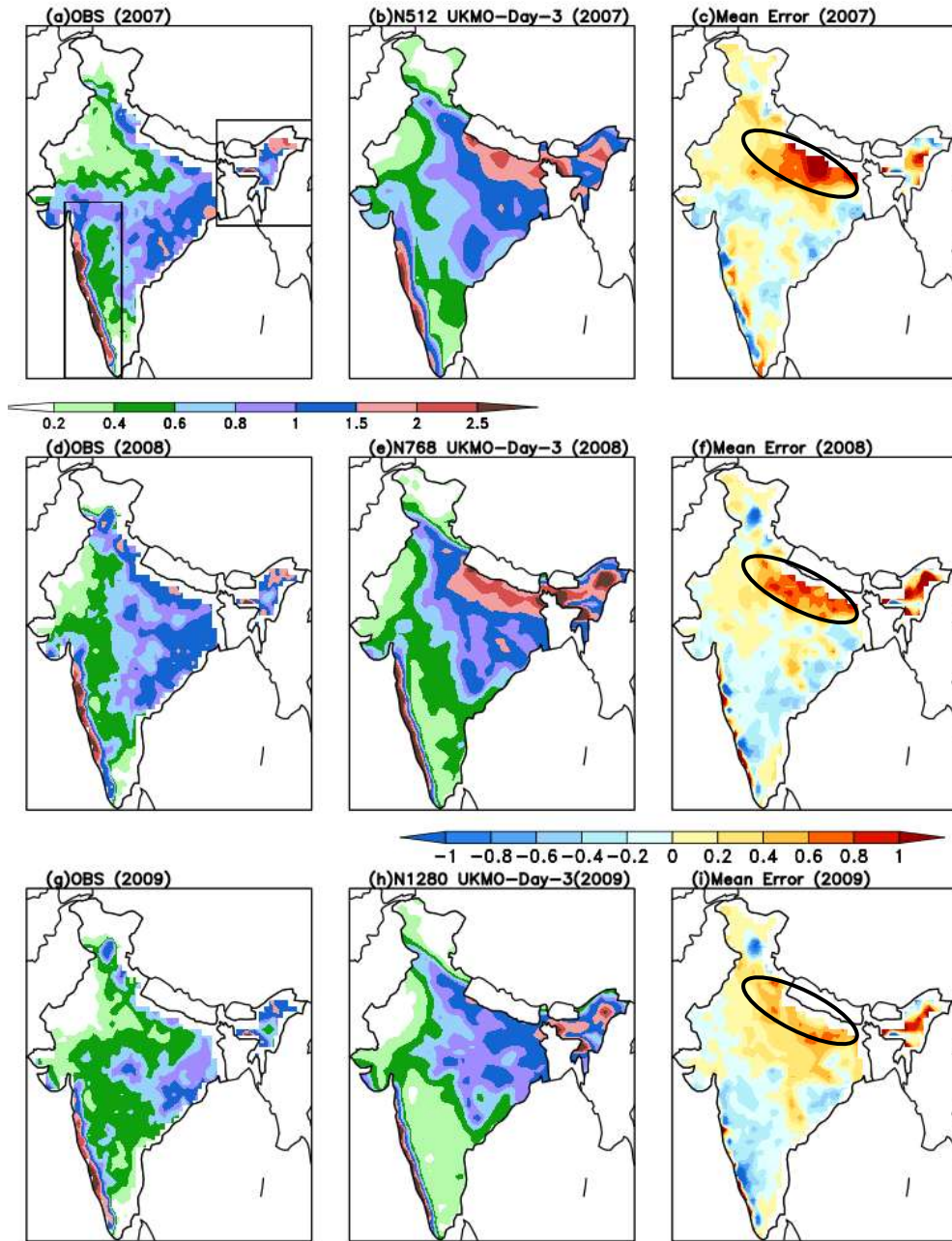


Figure S3. Observed (left panel), Day-3 Forecast mean rainfall (middle panel) and Mean Error (right panel) in  $\text{cm day}^{-1}$  over India during JJAS 2007, 2008 and 2009.

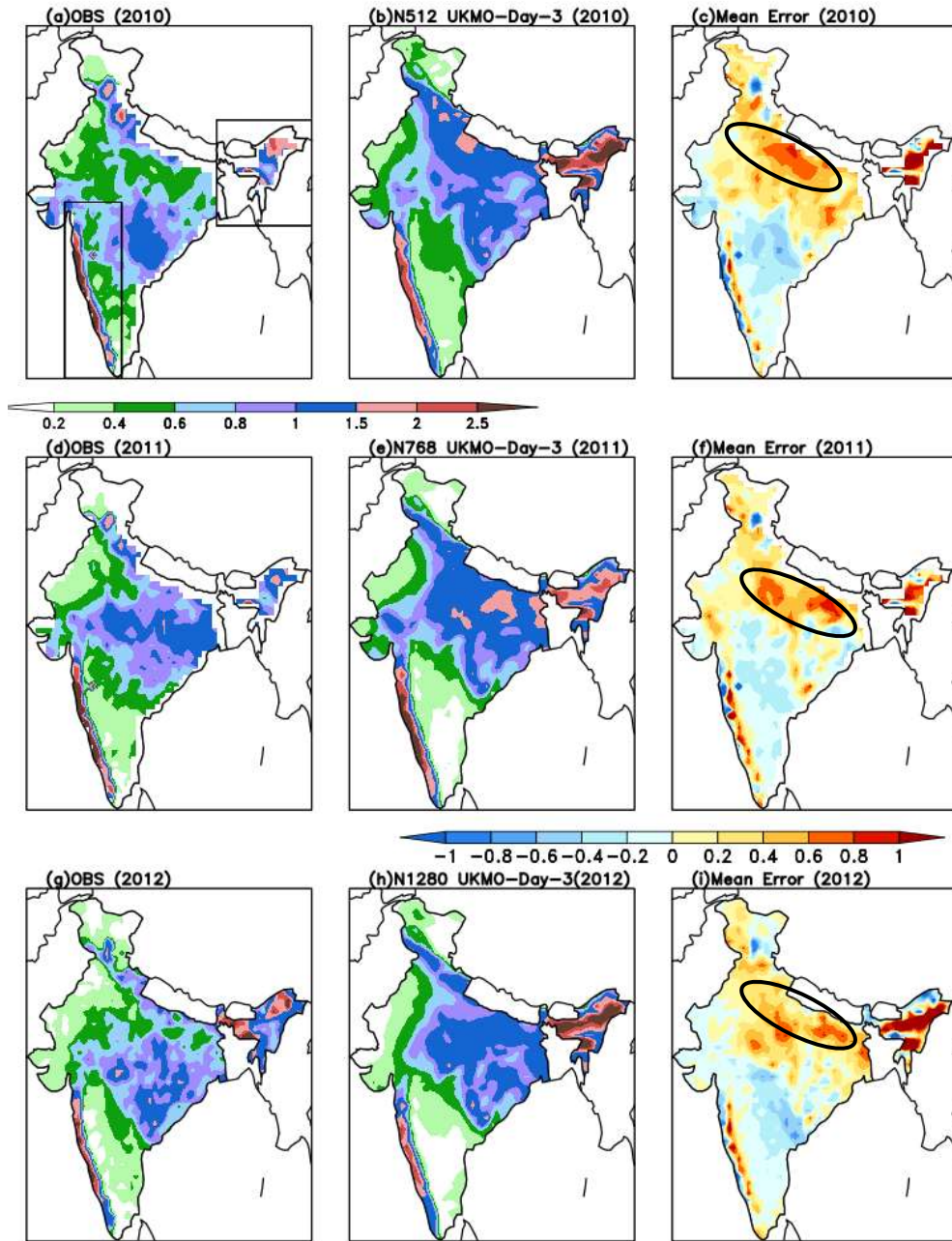


Figure S4. Observed (left panel), Day-3 Forecast mean rainfall (middle panel) and Mean Error (right panel) in  $\text{cm day}^{-1}$  over India during JJAS 2010, 2011 and 2012.

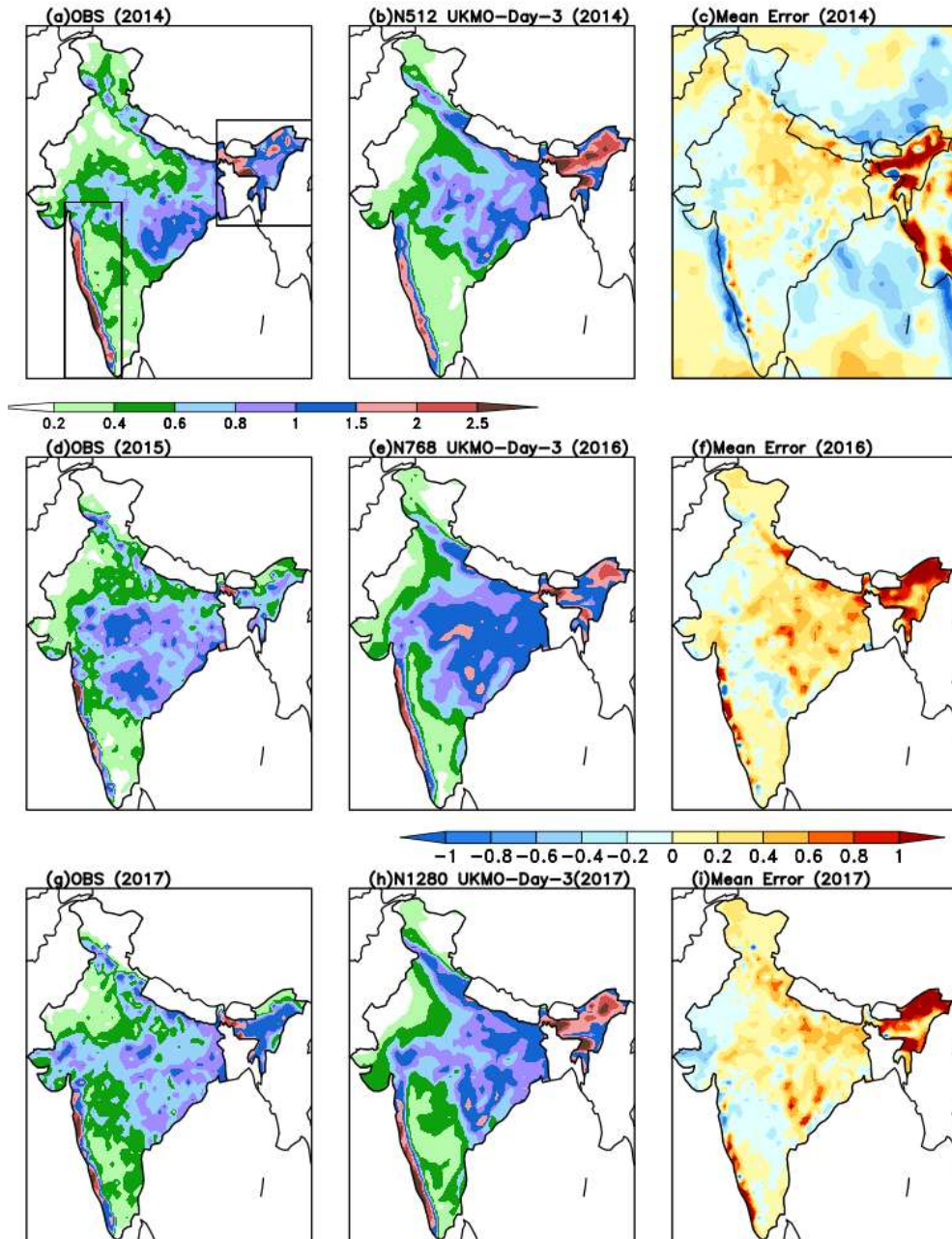


Figure S5. Observed (left panel), Day-3 Forecast mean rainfall (middle panel) and Mean Error (right panel) in cm day<sup>-1</sup> over India during JJAS 2014, 2016 and 2017.

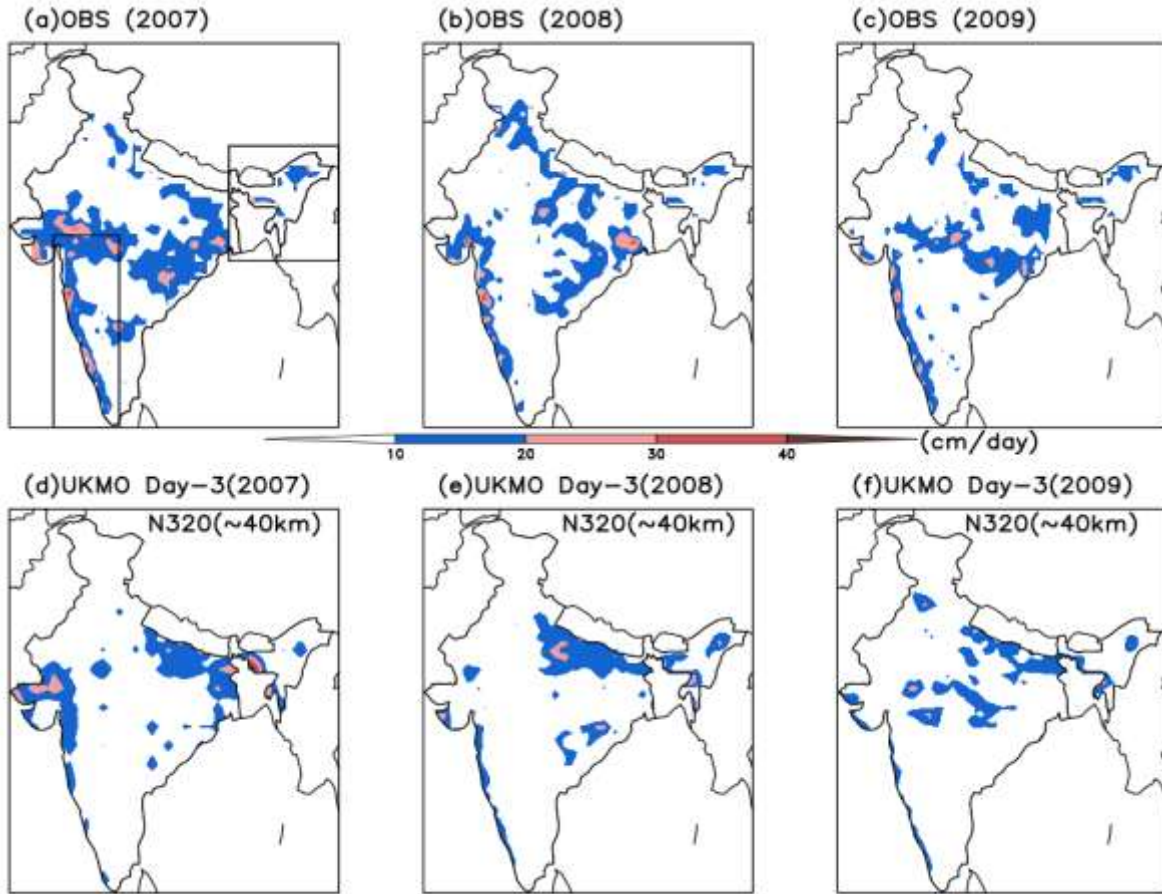


Figure S6. Observed (upper panel) and UM Day-3 highest rainfall Forecast (lower panel) at each grid point during JJAS 2007 , 2008 and 2009 over india

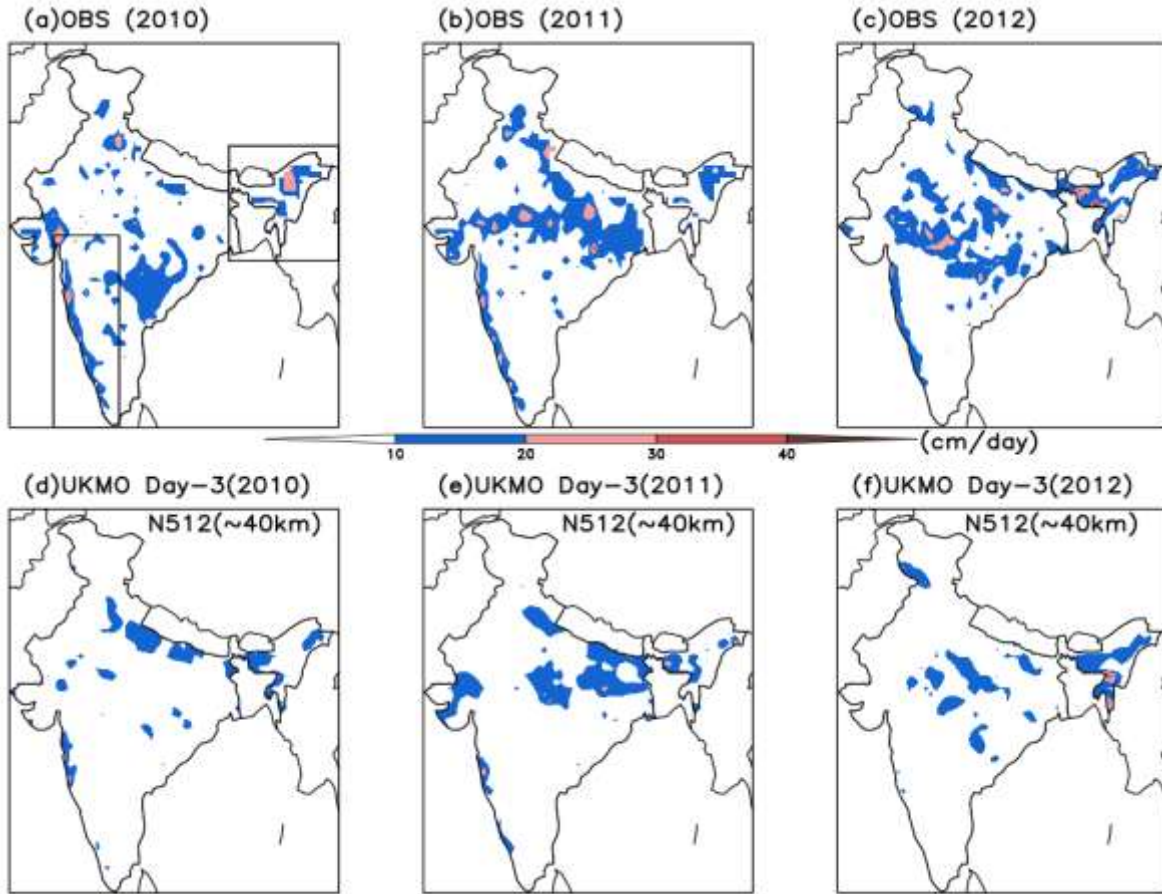


Figure S7. Observed (upper panel) and UM Day-3 highest rainfall Forecast (lower panel) at each grid point during JJAS 2010 , 2011 and 2012 over India

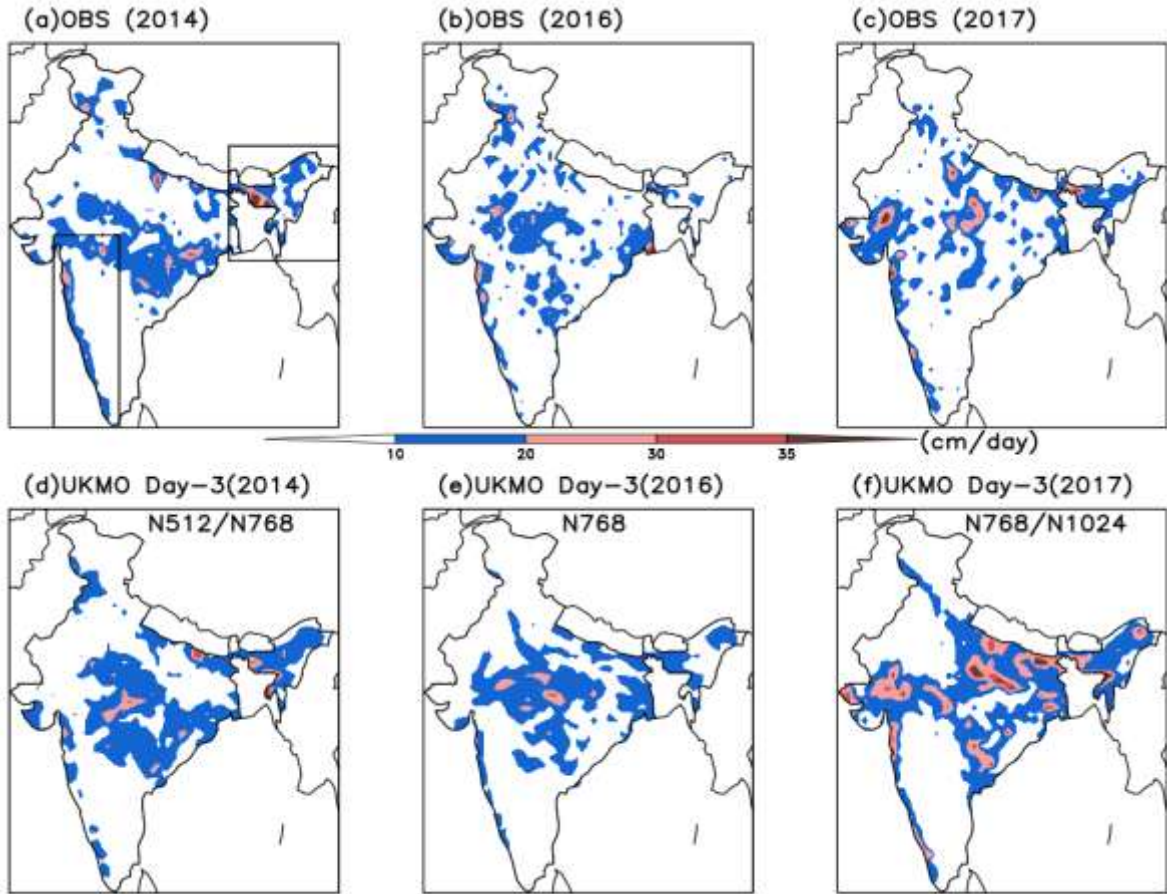


Figure S8. Observed (upper panel) and UM Day-3 highest rainfall Forecast (lower panel) at each grid point during JJAS 2007 , 2008 and 2009 over India