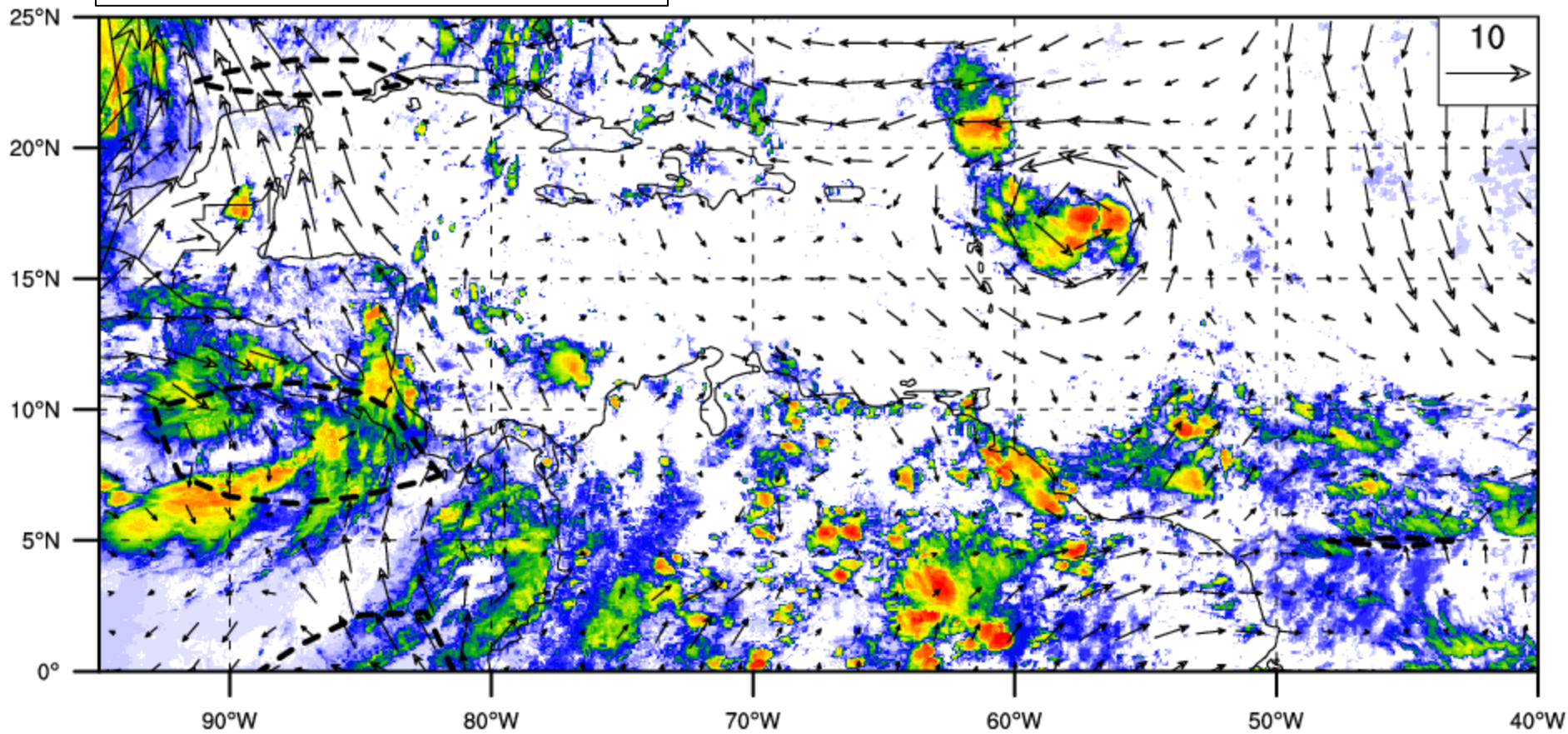


# Genesis of Hurricane Karl

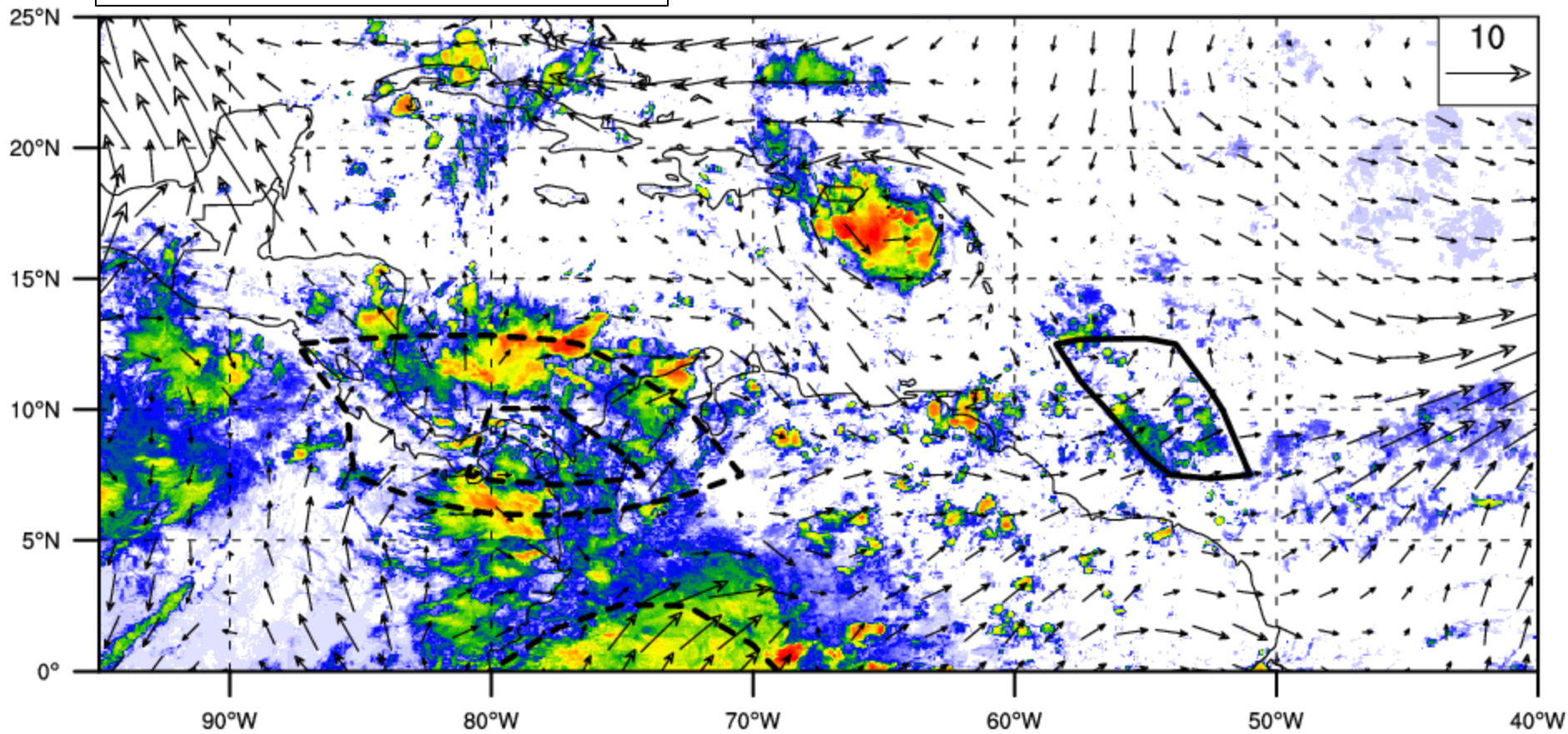
Where did the low-level circulation associated with pre-Karl come from?

**1800 UTC 6 Sep**



NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)

**1800 UTC 7 Sep**

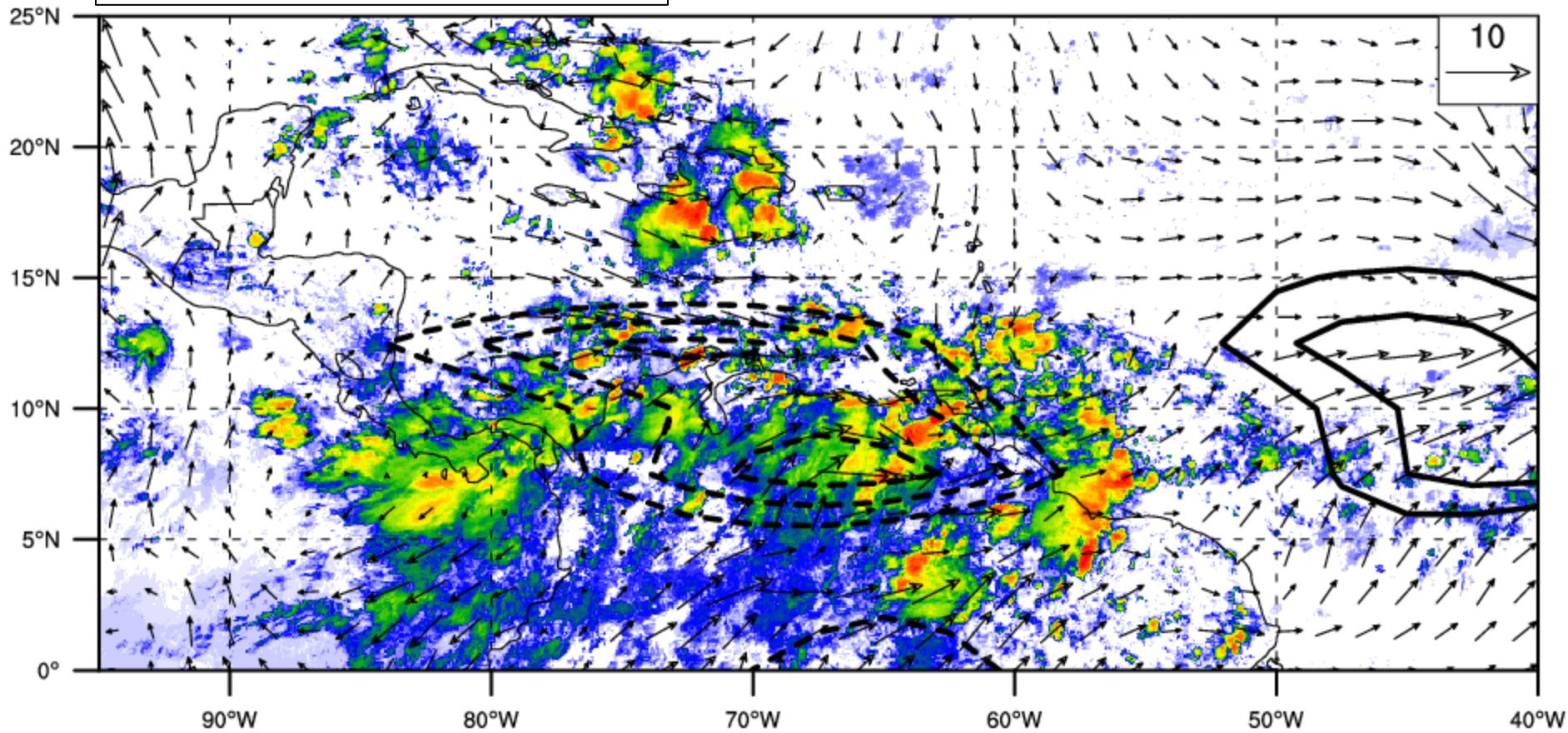


deg K

NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)



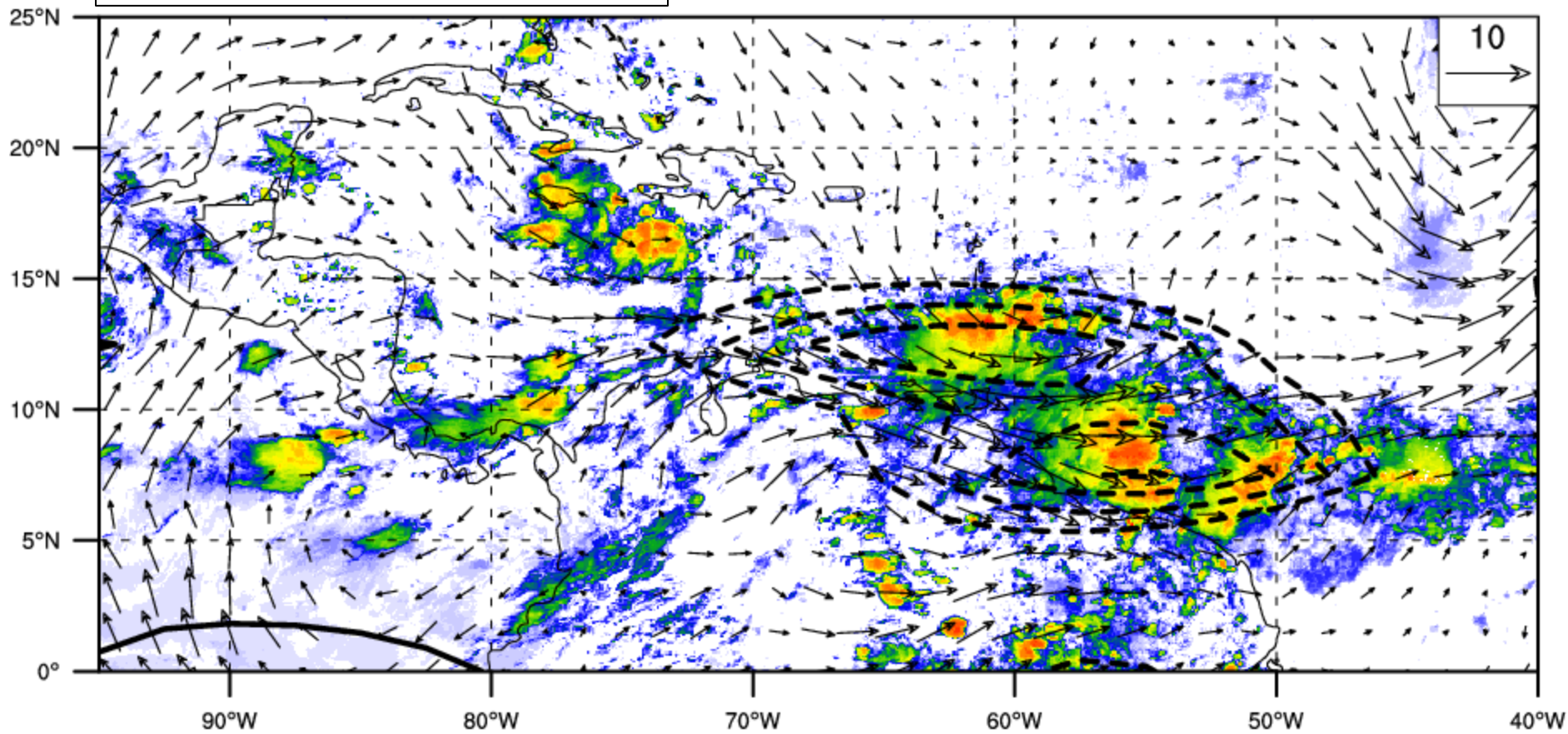
**1800 UTC 8 Sep**



deg K

NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)

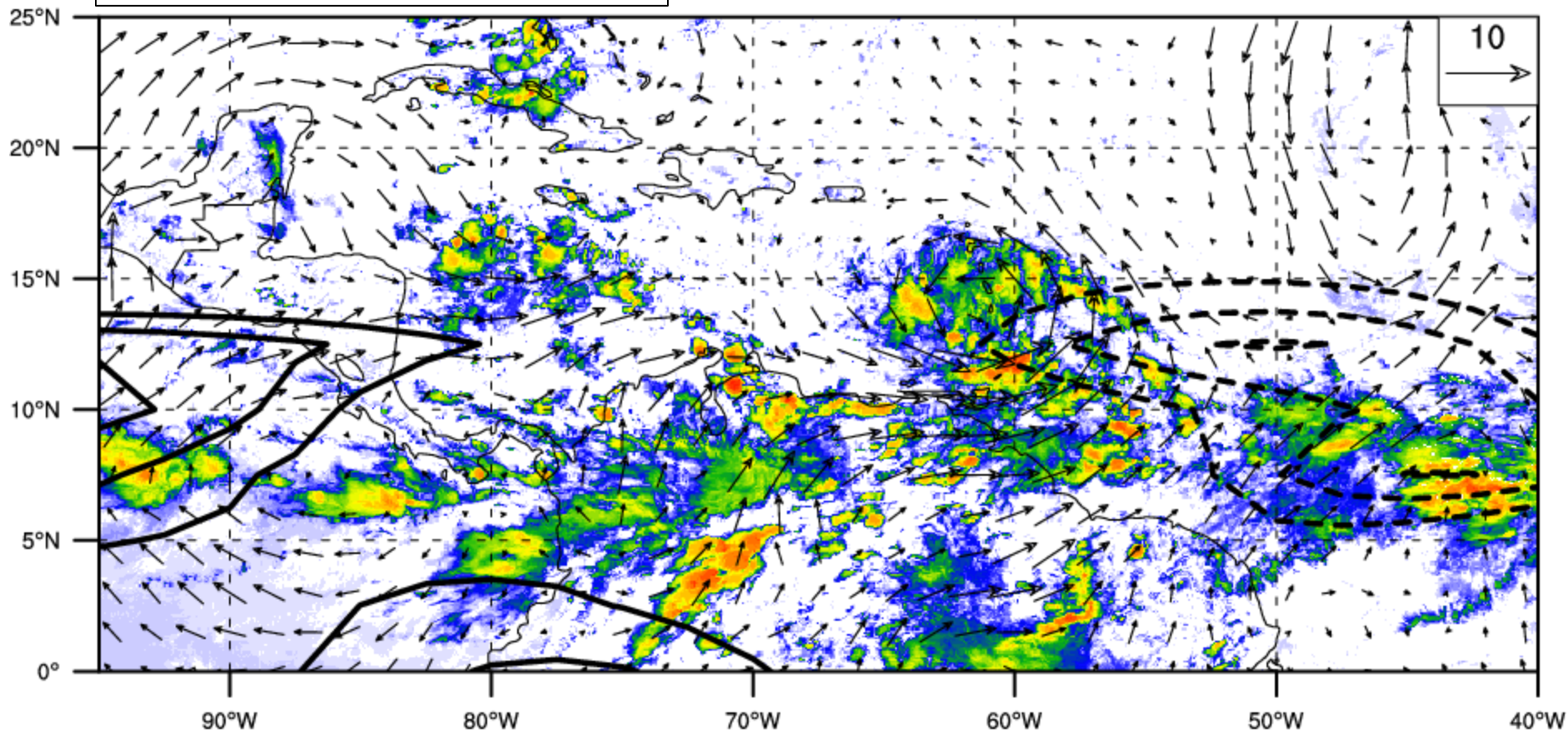
**1800 UTC 9 Sep**



NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)



**1800 UTC 10 Sep**

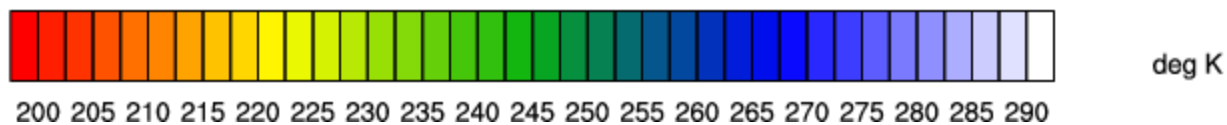
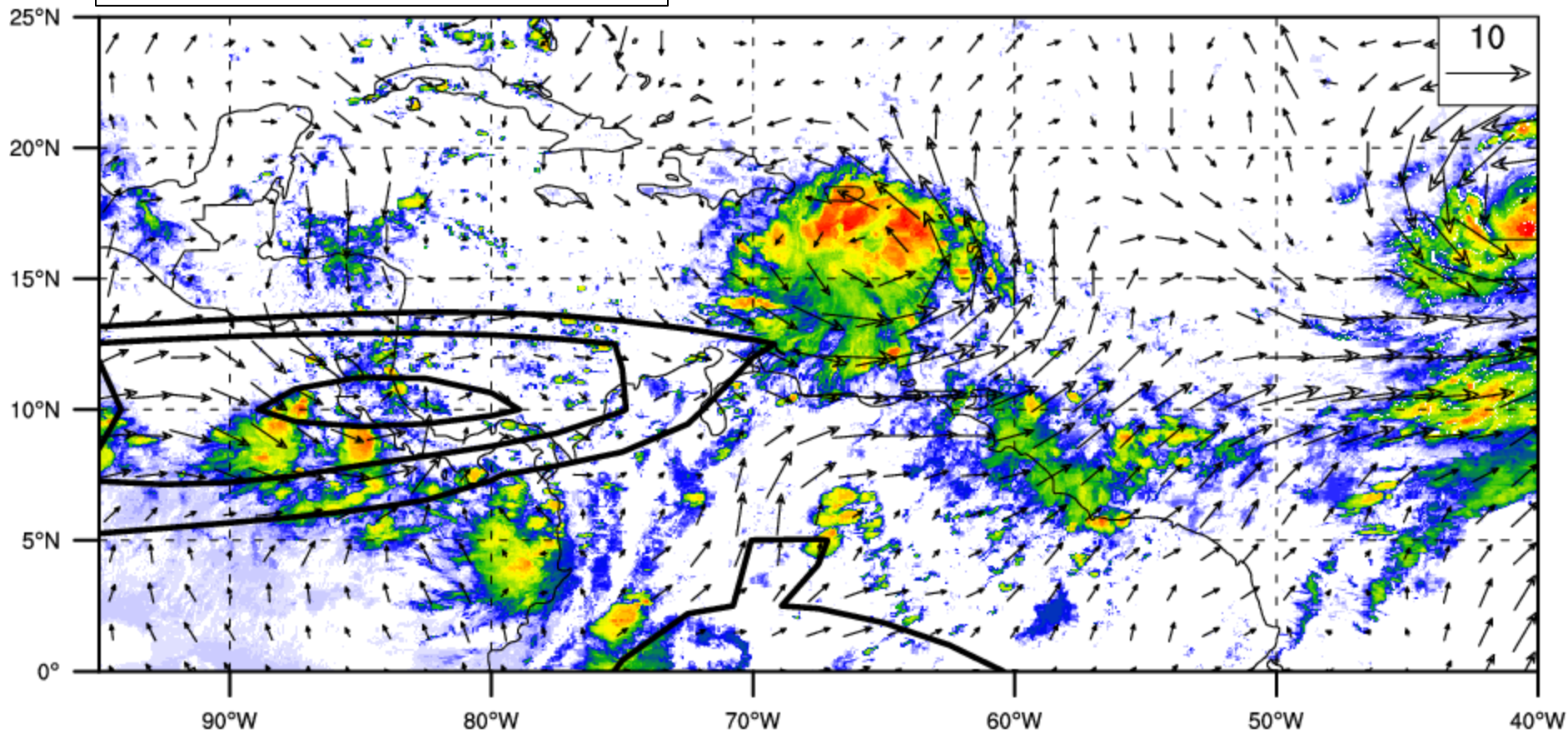


deg K

200 205 210 215 220 225 230 235 240 245 250 255 260 265 270 275 280 285 290

NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)

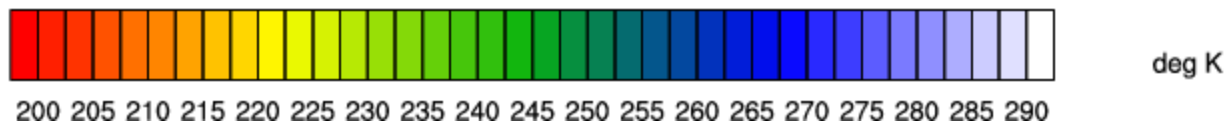
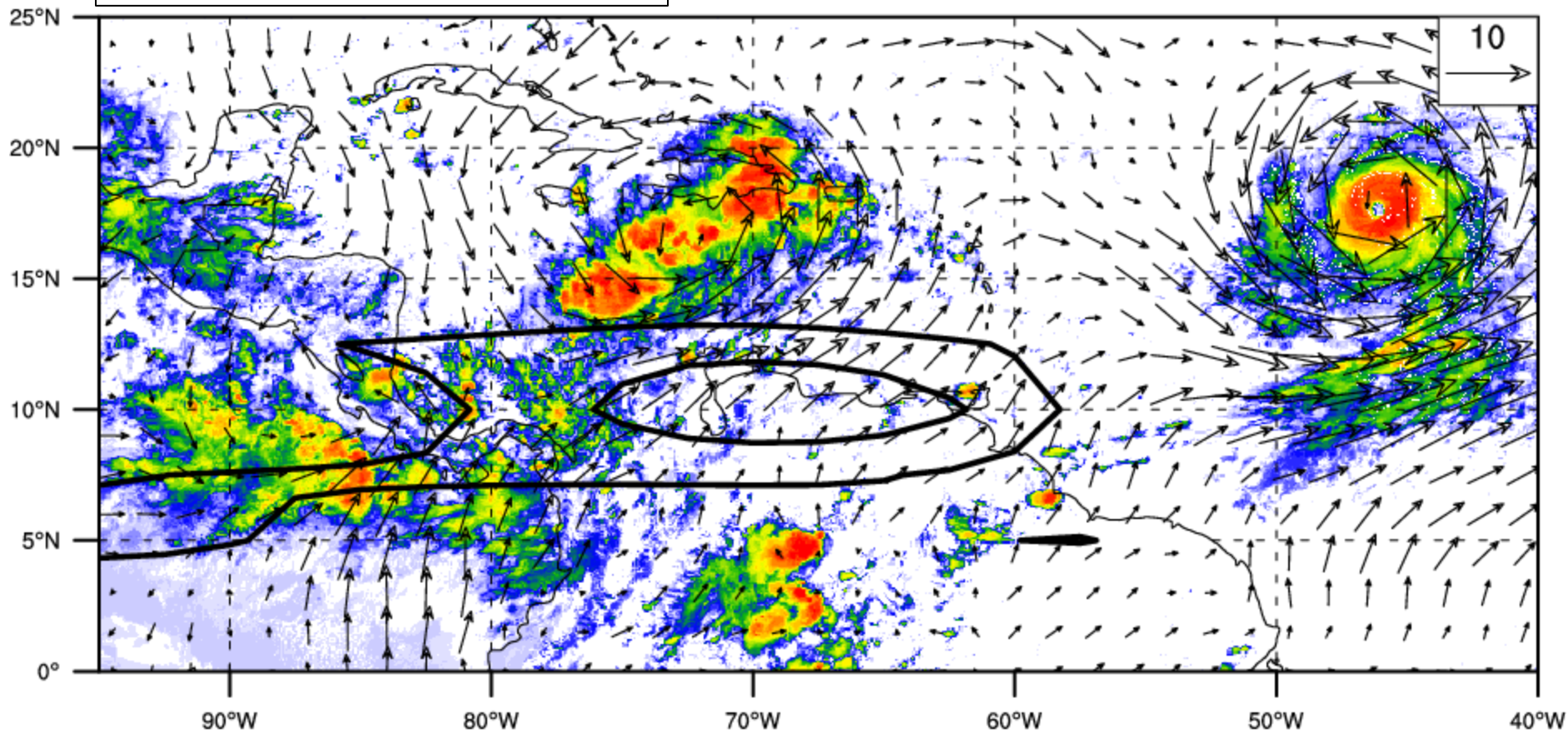
**1800 UTC 11 Sep**



NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)



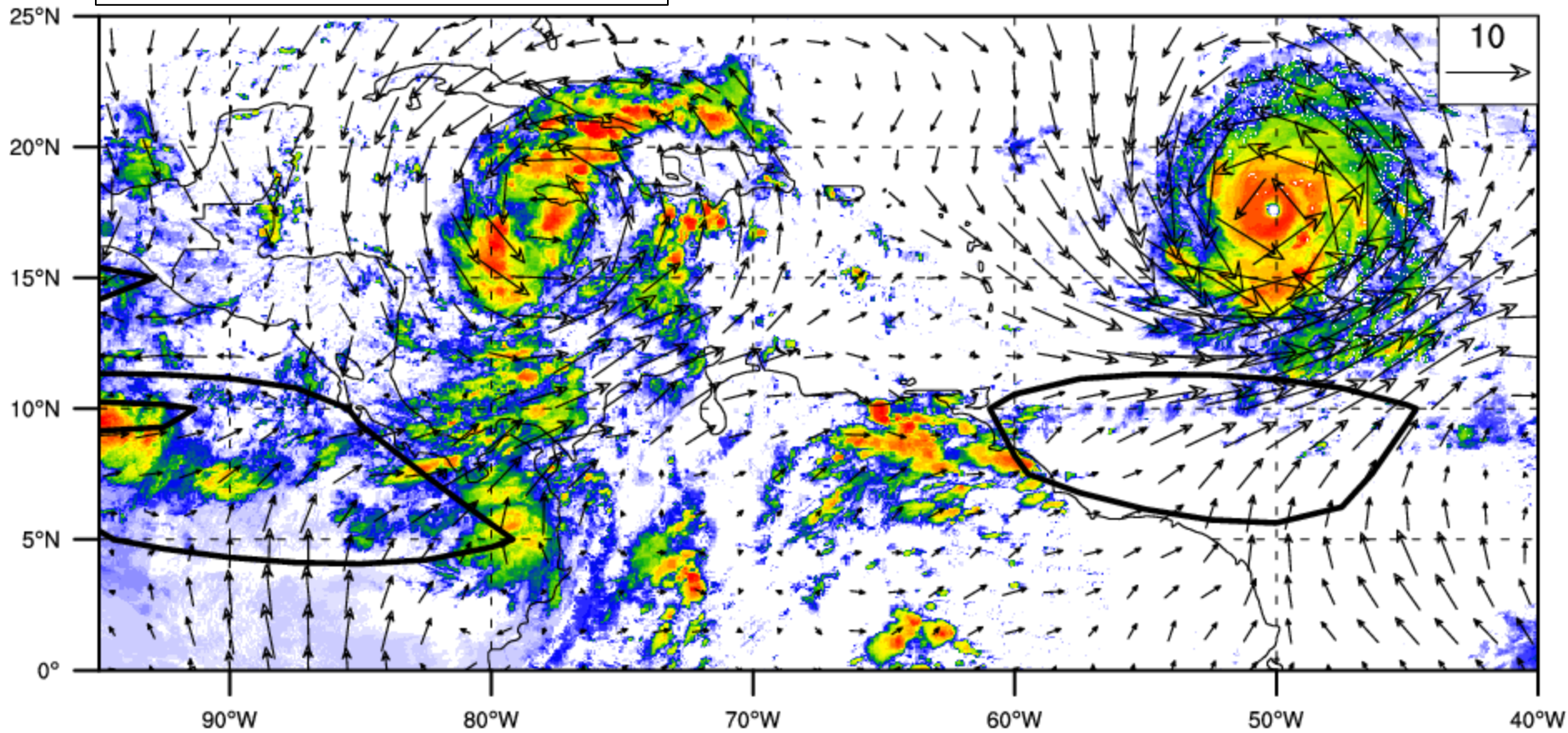
**1800 UTC 12 Sep**



NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)

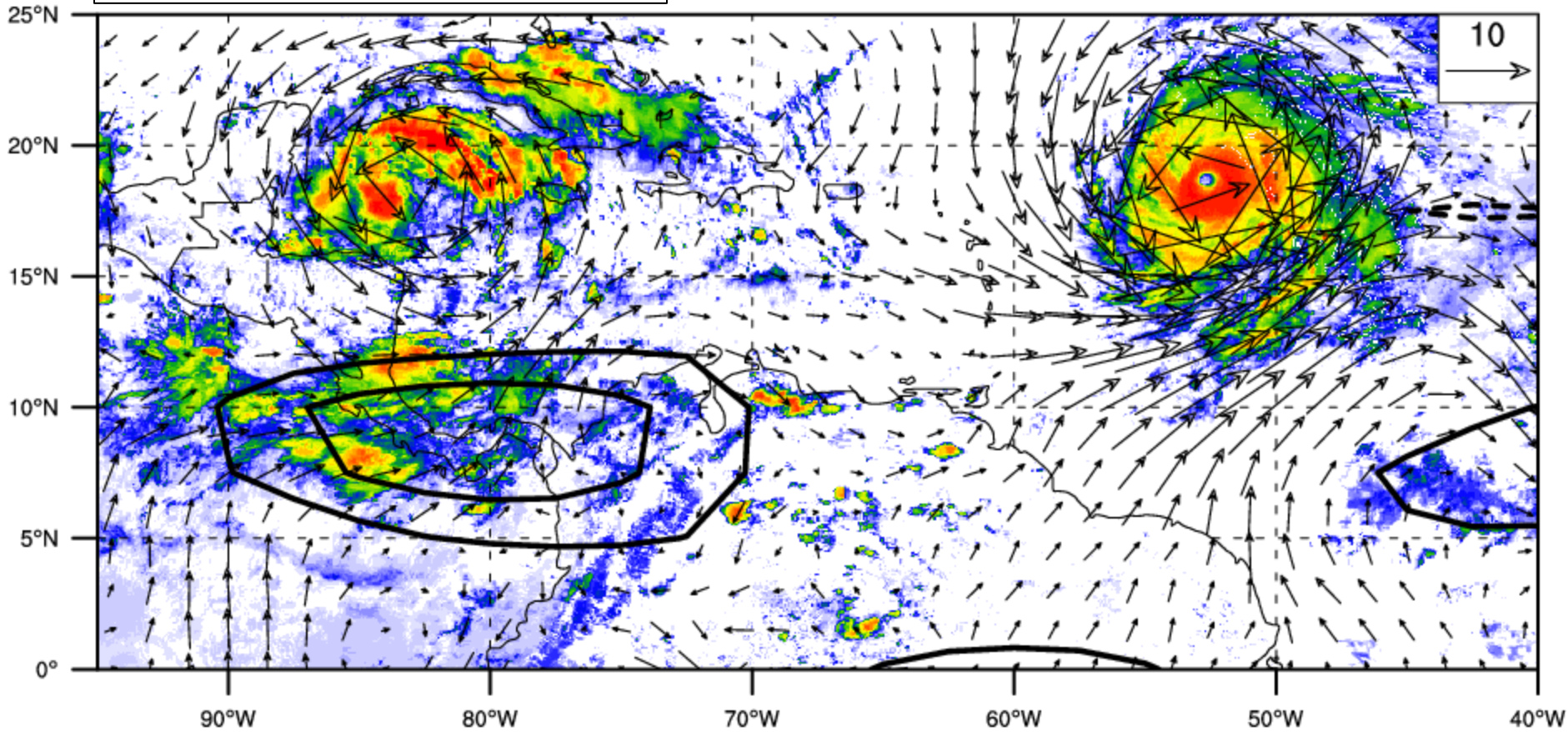


**1800 UTC 13 Sep**



NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)

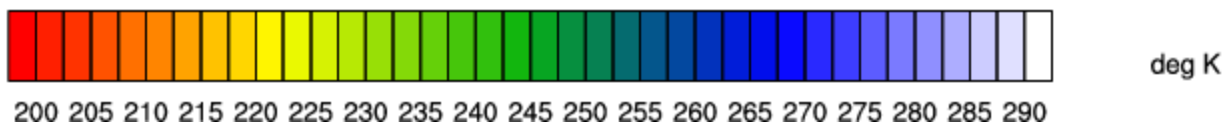
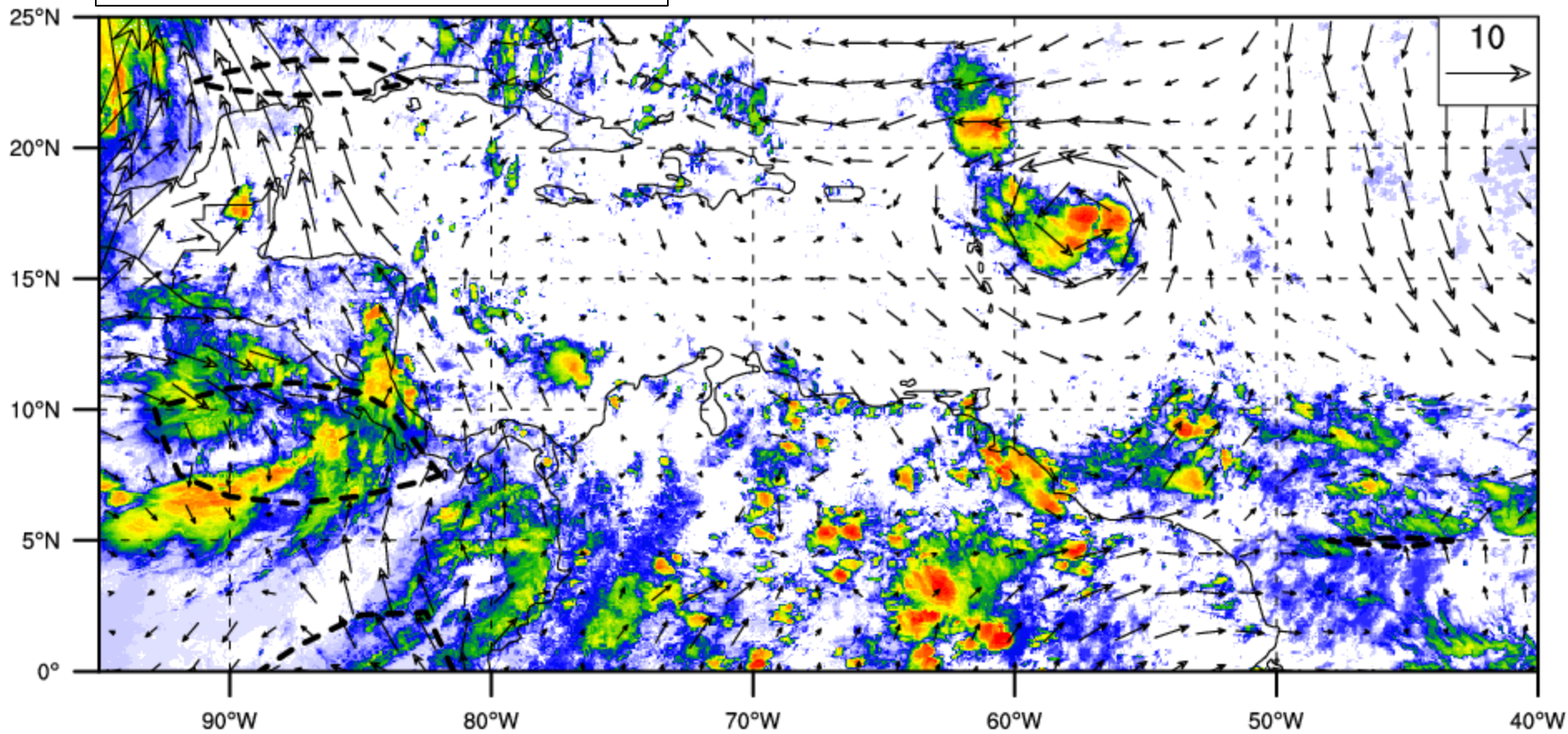
**1800 UTC 14 Sep**



NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)



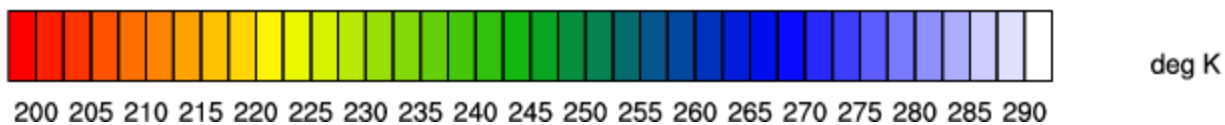
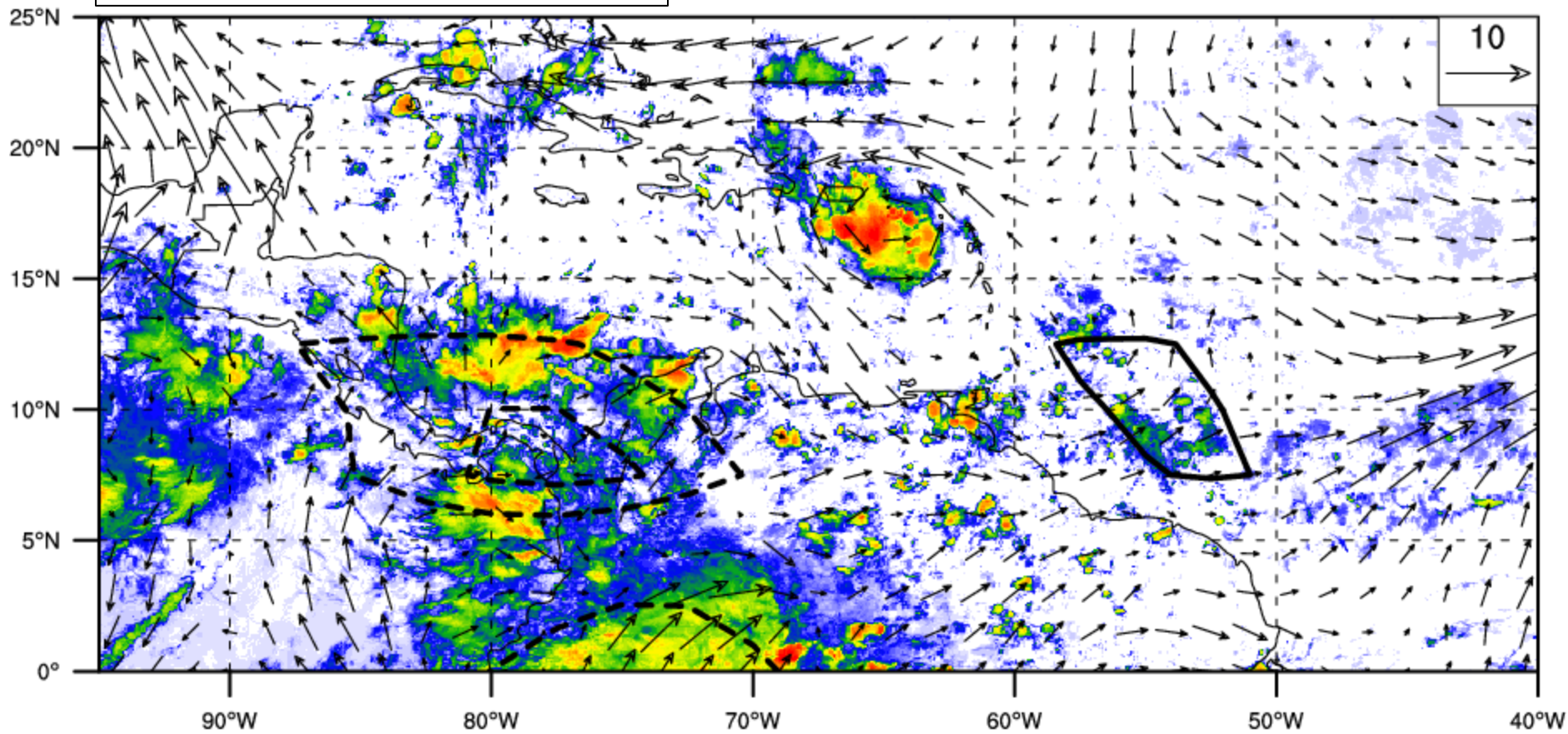
**1800 UTC 6 Sep**



NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)

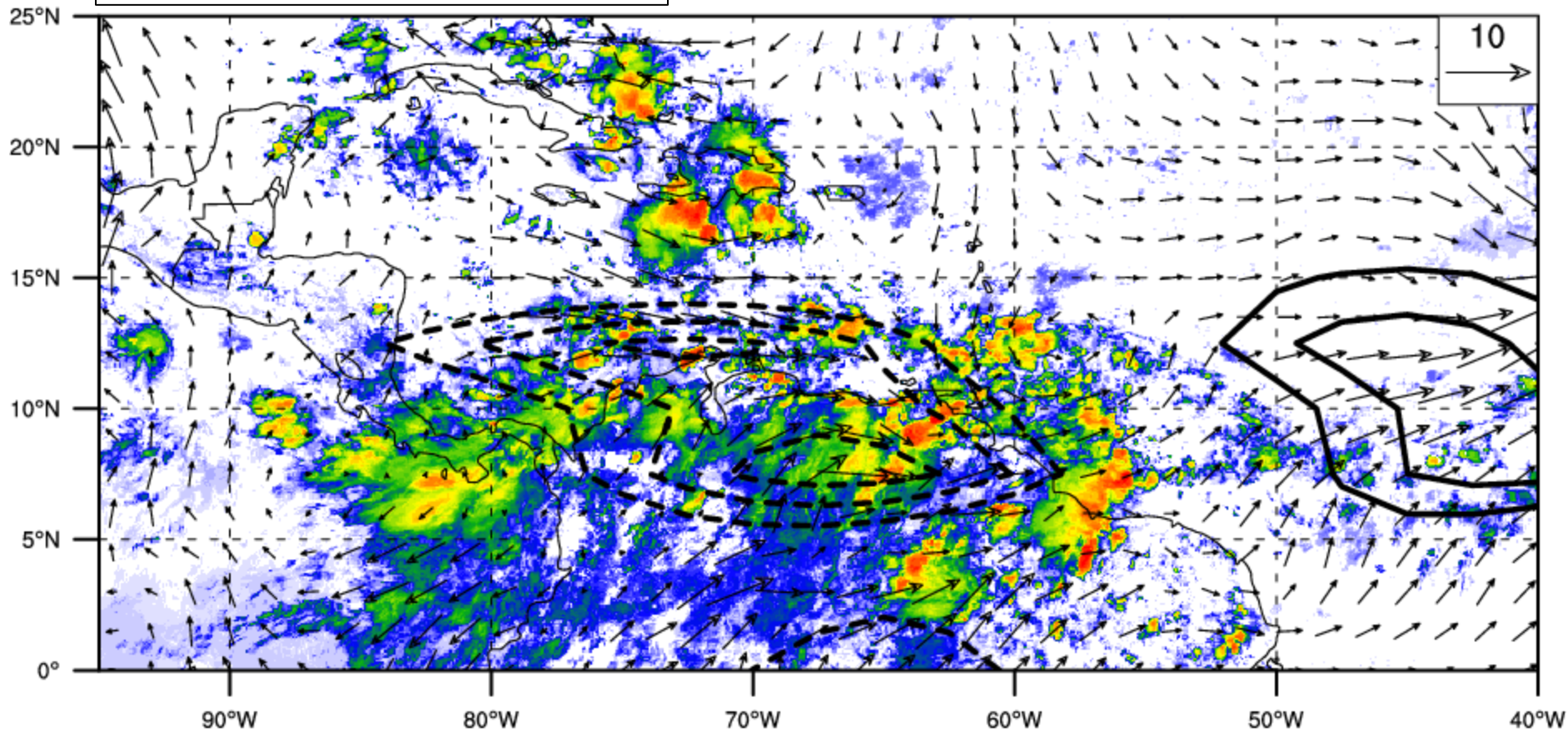


**1800 UTC 7 Sep**



NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)

**1800 UTC 8 Sep**

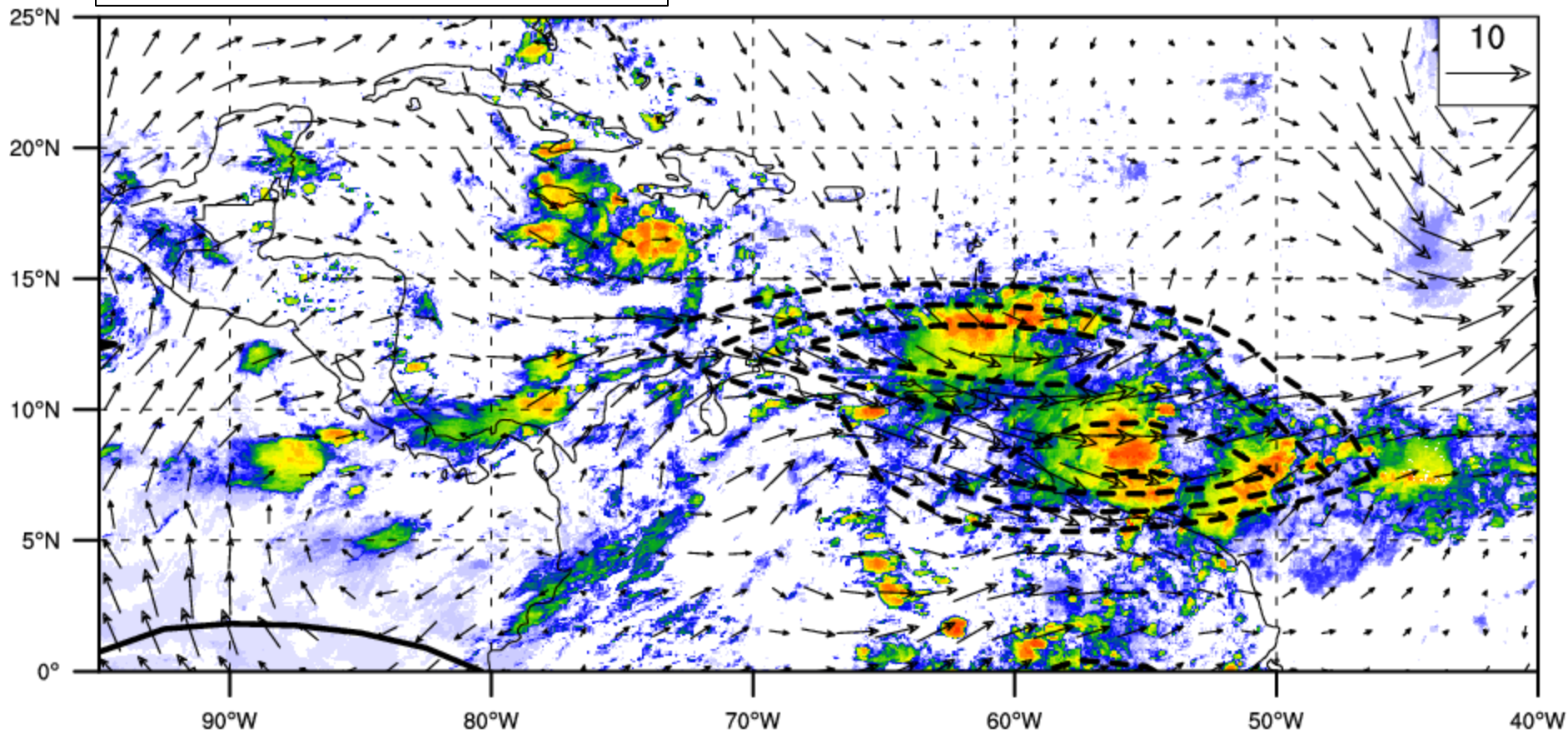


deg K

NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)



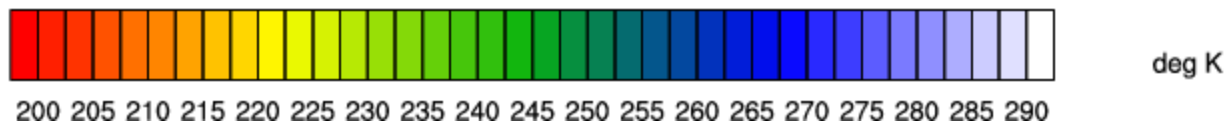
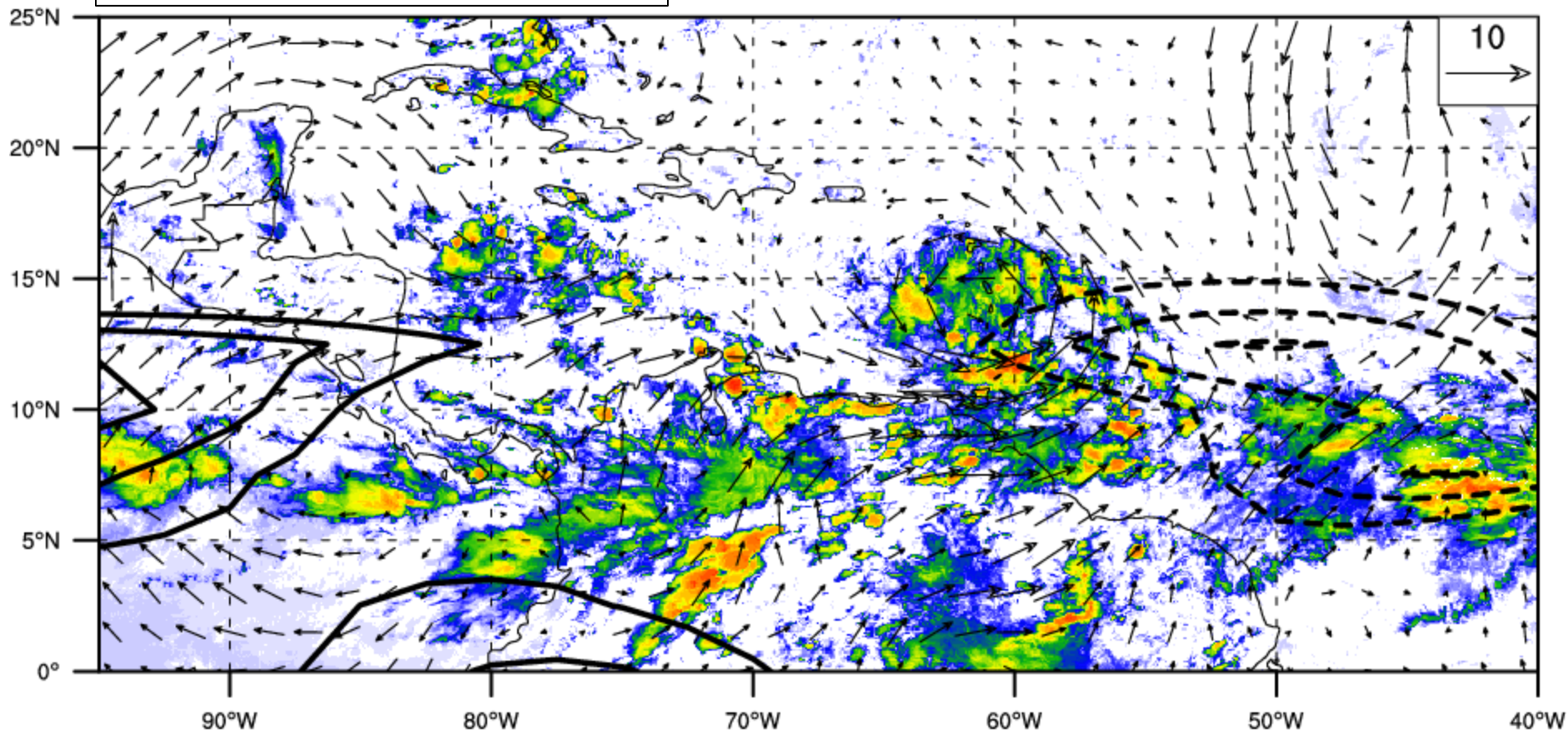
**1800 UTC 9 Sep**



NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)

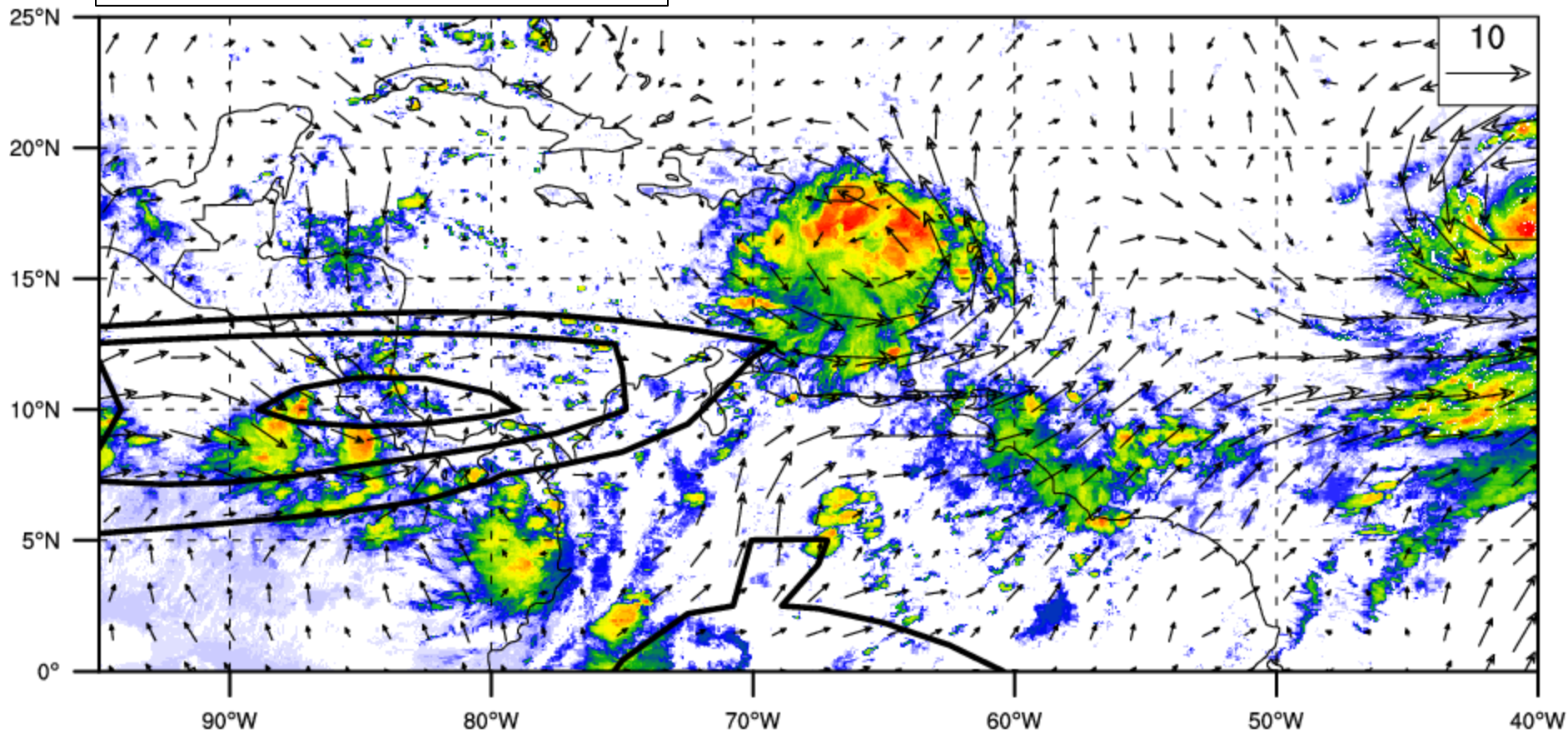


**1800 UTC 10 Sep**



NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)

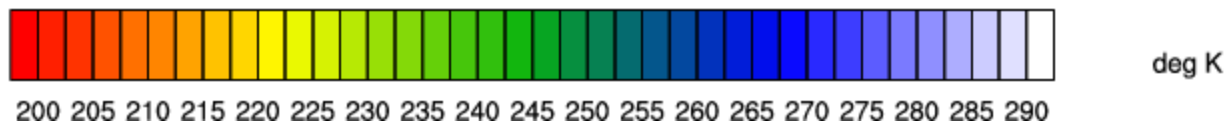
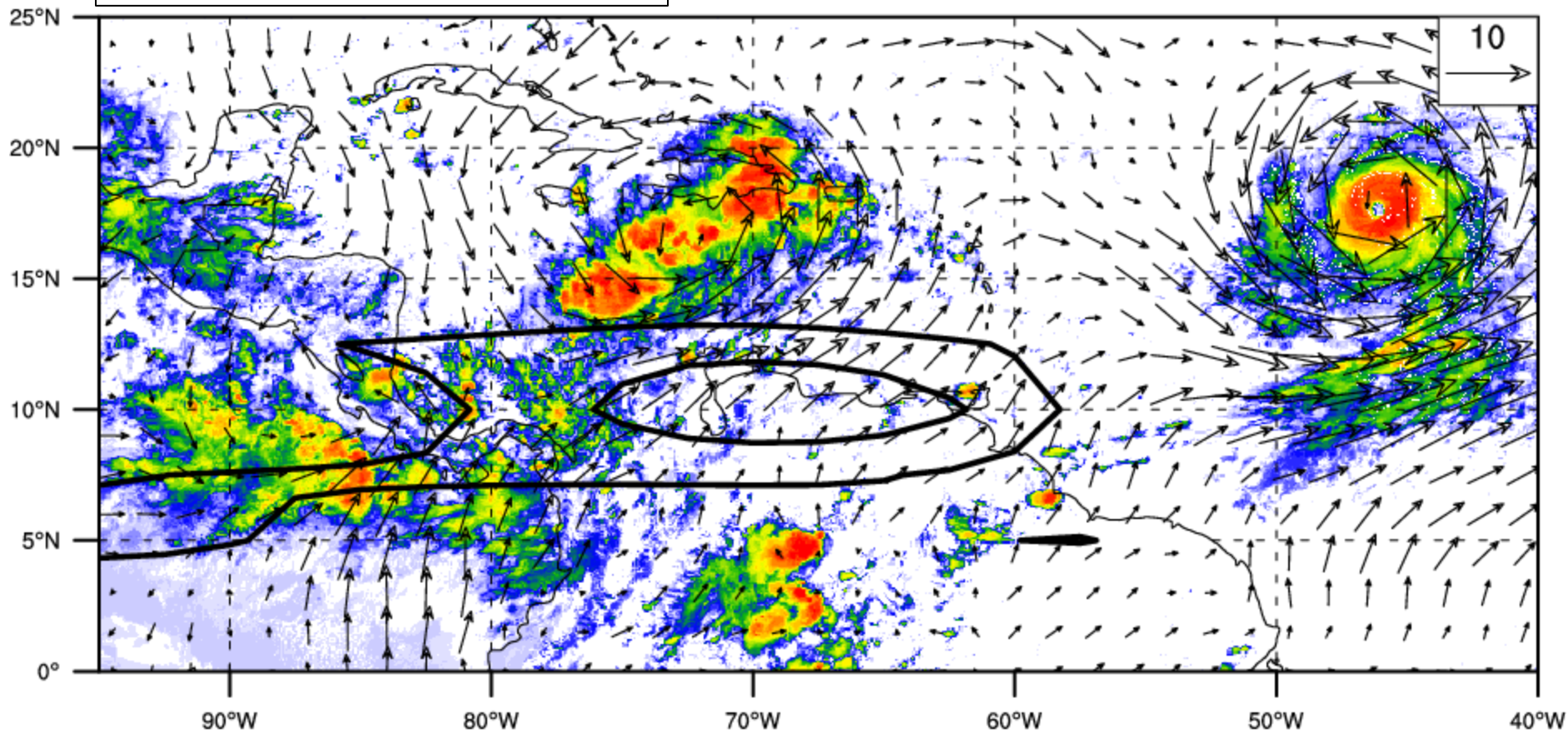
**1800 UTC 11 Sep**



NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)



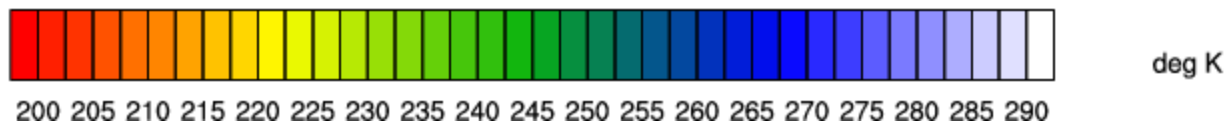
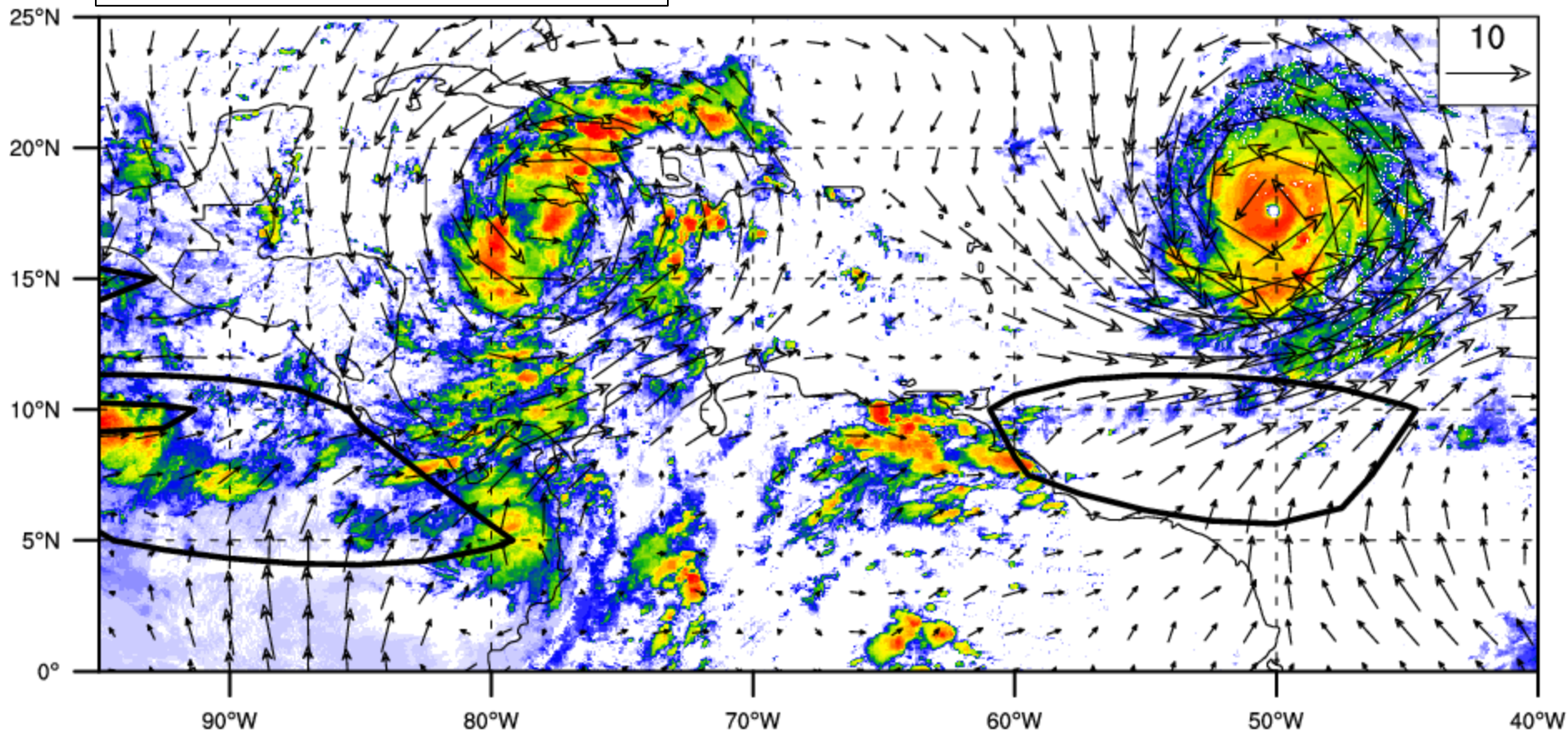
**1800 UTC 12 Sep**



NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)

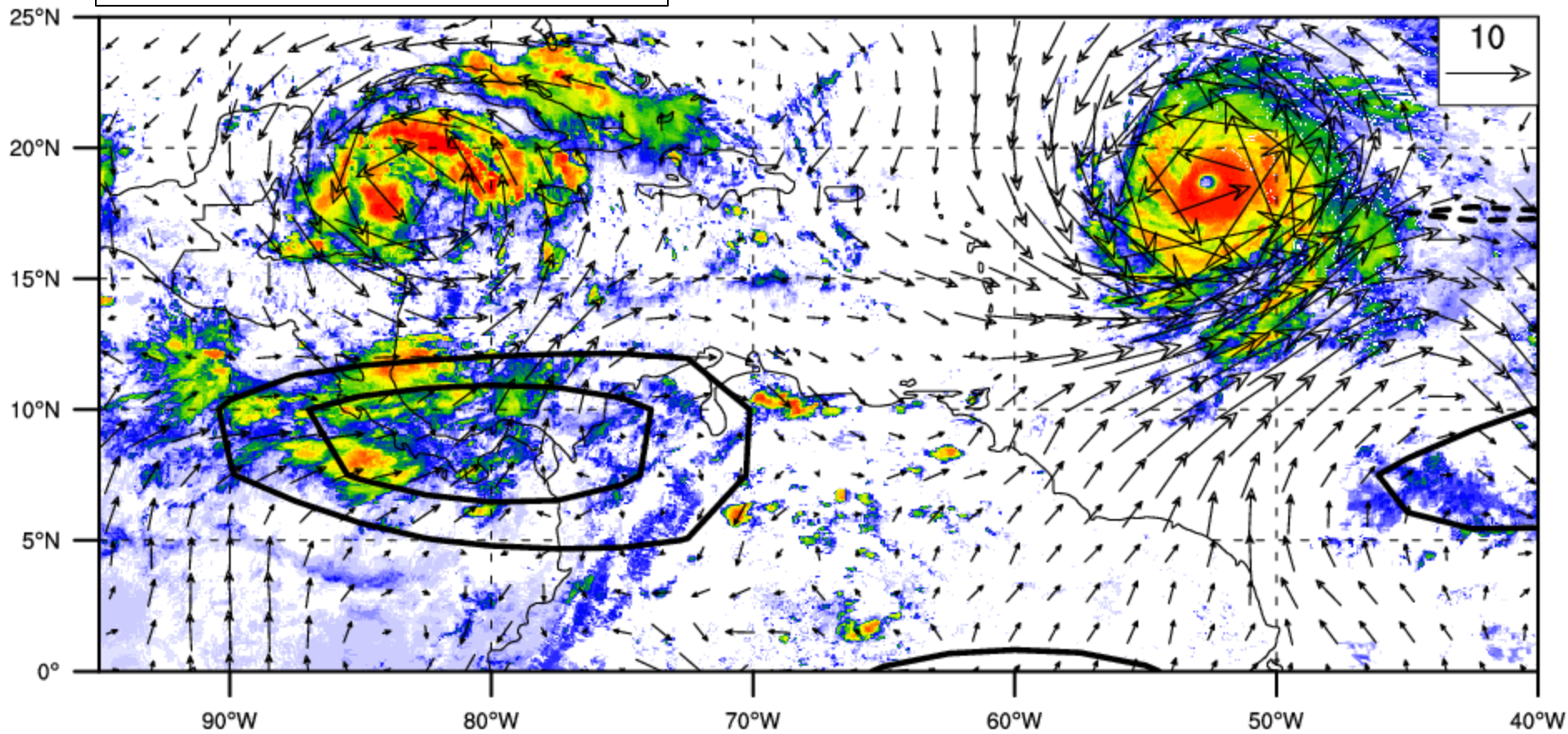


**1800 UTC 13 Sep**



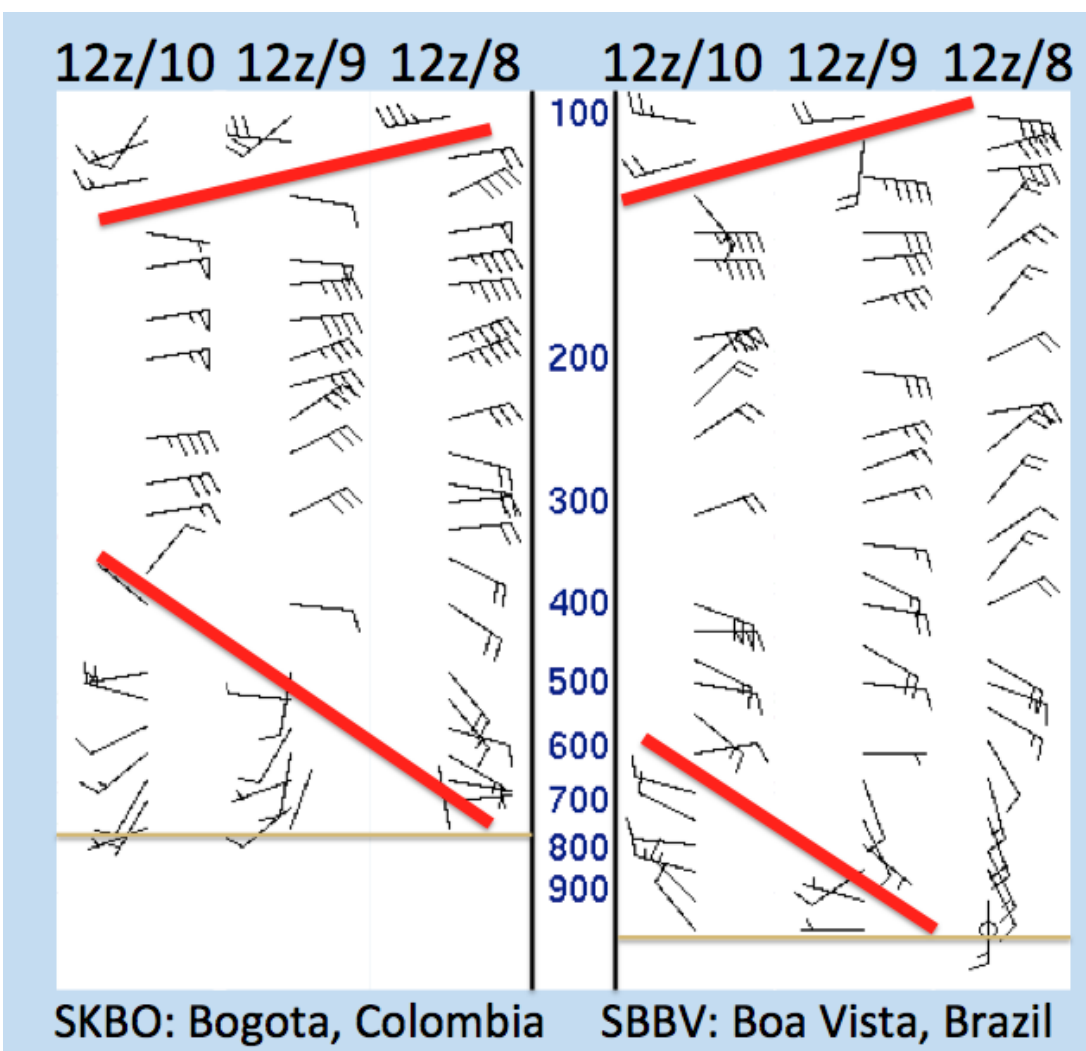
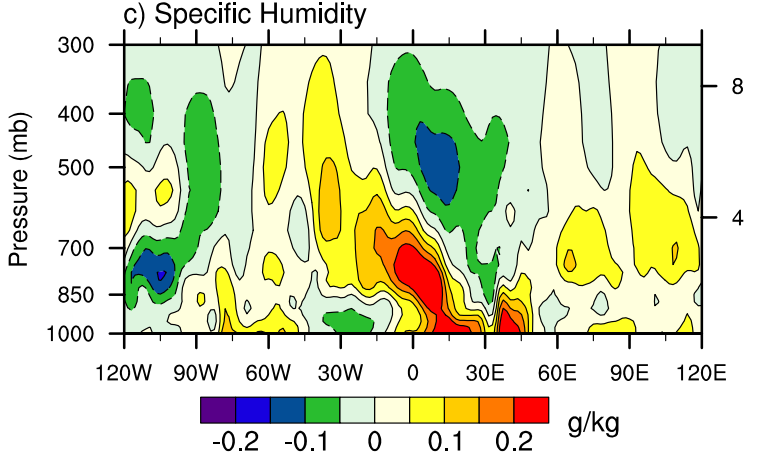
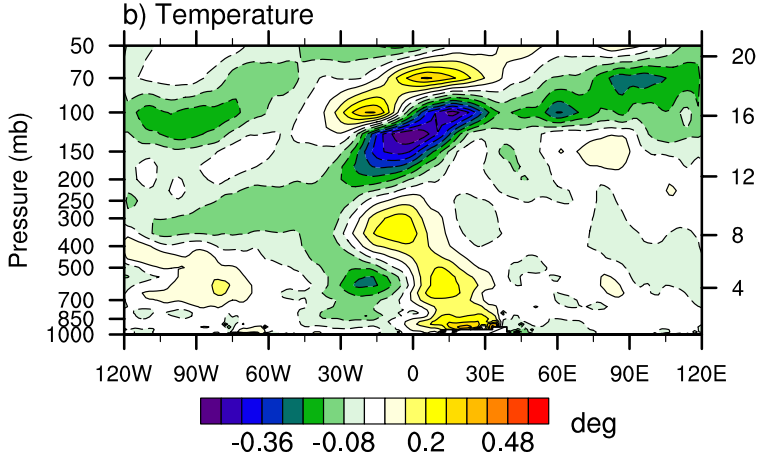
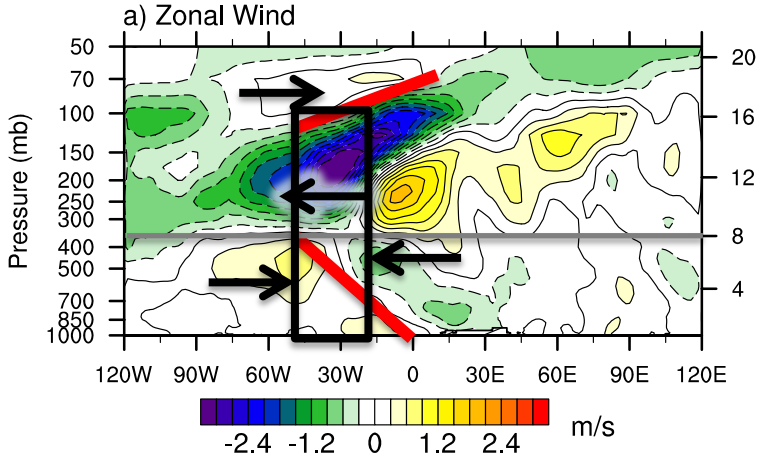
NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)

**1800 UTC 14 Sep**



NASA Merged-IR product (shaded) – 850 hPa zonal wind anomalies (vectors)  
Kelvin filtered NOAA OLR (contours)





Adapted from Fig. 2, Ventrice et al. 2012b  
 Consistent with Kiladis et al. 2009