

Figure R1: Probability density function of the sea level pressure associated with the center of ETC (blue) and MTLC (red) at the time of their maximum intensity.

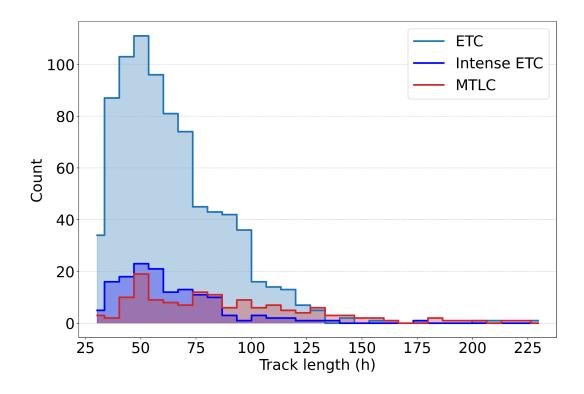


Figure R2: Probability density function of the track length of ETC (blue) and MTLC (red).

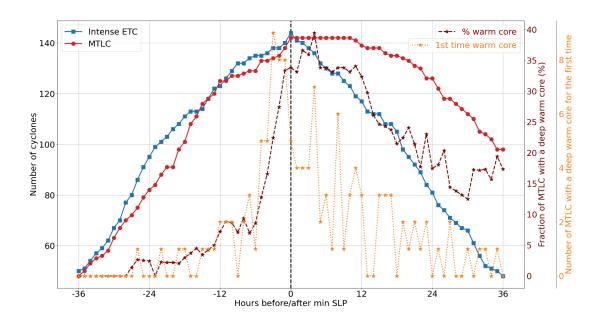


Figure R3: Time evolution with respect to minimum SLP of the number of intense ETC (blue solid line) and MTLC (red solid line), proportion of MTLC that have a warm-core at each time step (maroon dashed line), and number of MTLC that have a deep warm core for the first time (dotted orange line).

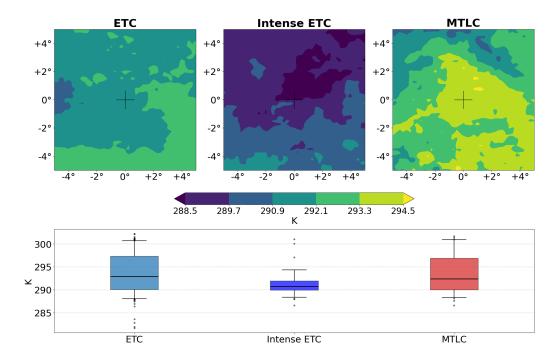


Figure R4: Sea Surface Temperature for the different cyclone classes. Top: 2D composites centered on the cyclones, 36h before the time of minimum SLP. Bottom: boxplots of the mean SST for each cyclone, where the mean is computed on the 10% highest values over the 10°x10° box for each cyclone. Whiskers show the 5th–95th percentiles.

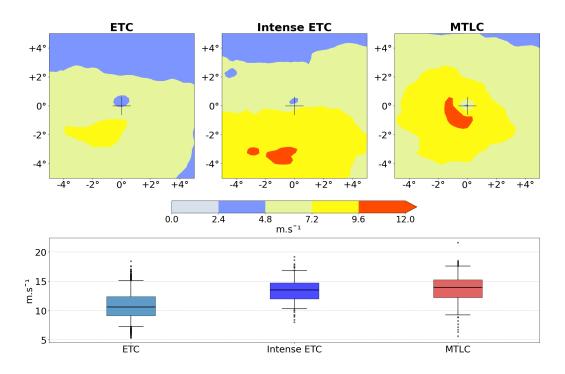


Figure R5: 10m surface wind for the different cyclone classes. Top: 2D composites centered on the cyclones, at the time of minimum SLP. Bottom: boxplots of the mean 10-m wind speed for each cyclone, where the mean is computed on the 10% highest values over the 10°x10° box for each cyclone. Whiskers show the 5th–95th percentiles.

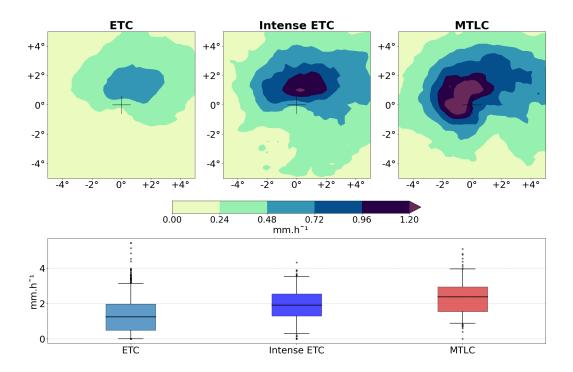


Figure R6: Hourly precipitation for the different cyclone classes. Top: 2D composites centered on the cyclones, at the time of minimum SLP. Bottom: boxplots of the mean

## Figures Answer Referee 1

1-h accumulated precipitation for each cyclone, where the mean is computed on the 10% highest values over the 10°x10° box for each cyclone. Whiskers show the 5th–95th percentiles.

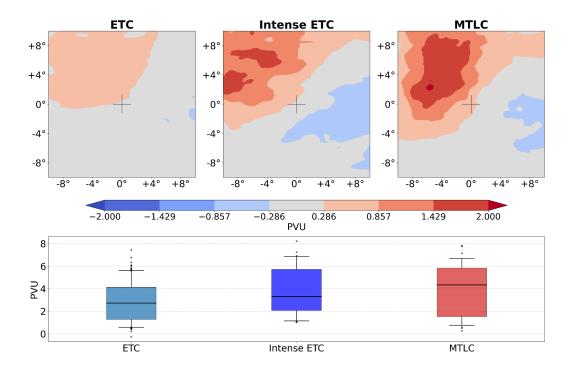


Figure R7: PV anomaly for the different cyclone classes. Top: 2D composites centered on the cyclones, 36h before the time of minimum SLP. Bottom: boxplots of the mean PV anomaly for each cyclone, where the mean is computed on the 10% highest values over the 10°x10° box for each cyclone. Whiskers show the 5th–95th percentiles.

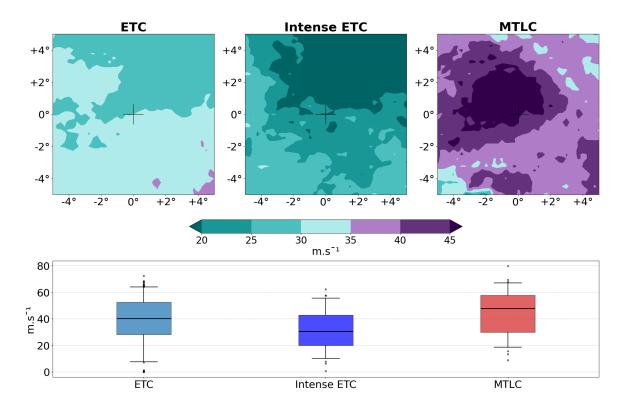


Figure R8: Total PI for the different cyclone classes. Top: 2D composites centered on the cyclones, 36h before the time of minimum SLP. Bottom: boxplots of the mean PI for each cyclone, where the mean is computed on the 10% highest values over the 10°x10° box for each cyclone. Whiskers show the 5th–95th percentiles.

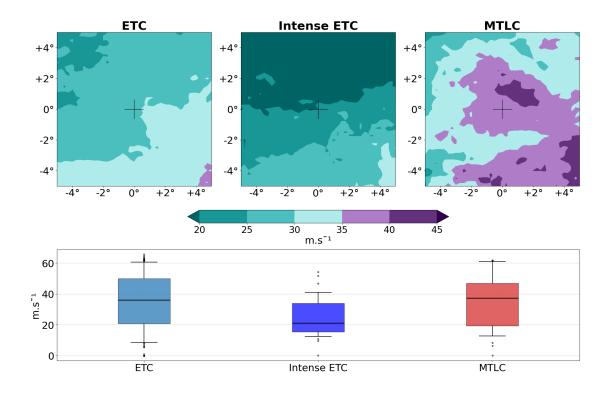


Figure R9: Climatological PI for the different cyclone classes. Top: 2D composites centered on the cyclones, 36h before the time of minimum SLP. Bottom: boxplots of the mean climatological PI for each cyclone, where the mean is computed on the 10% highest values over the 10°x10° box for each cyclone. Whiskers show the 5th–95th percentiles.

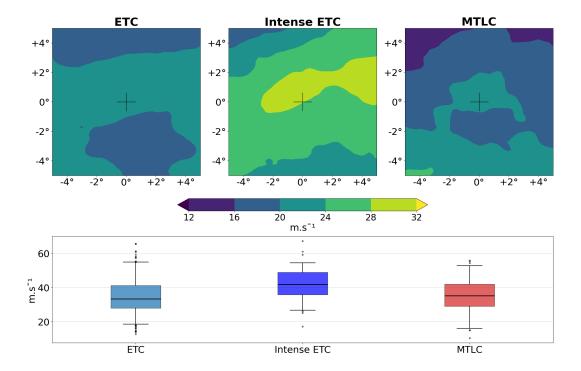


Figure R10: Wind shear for the different cyclone classes. Top: 2D composites centered on the cyclones, 36h before the time of minimum SLP. Bottom: boxplots of the mean wind shear for each cyclone, where the mean is computed on the 10% highest values over the 10°x10° box for each cyclone. Whiskers show the 5th–95th percentiles.