



## *Supplement of*

# **A method for characterizing the spatial organization of deep convective cores in deep convective systems' cloud shield using idealized elementary convective structure decomposition**

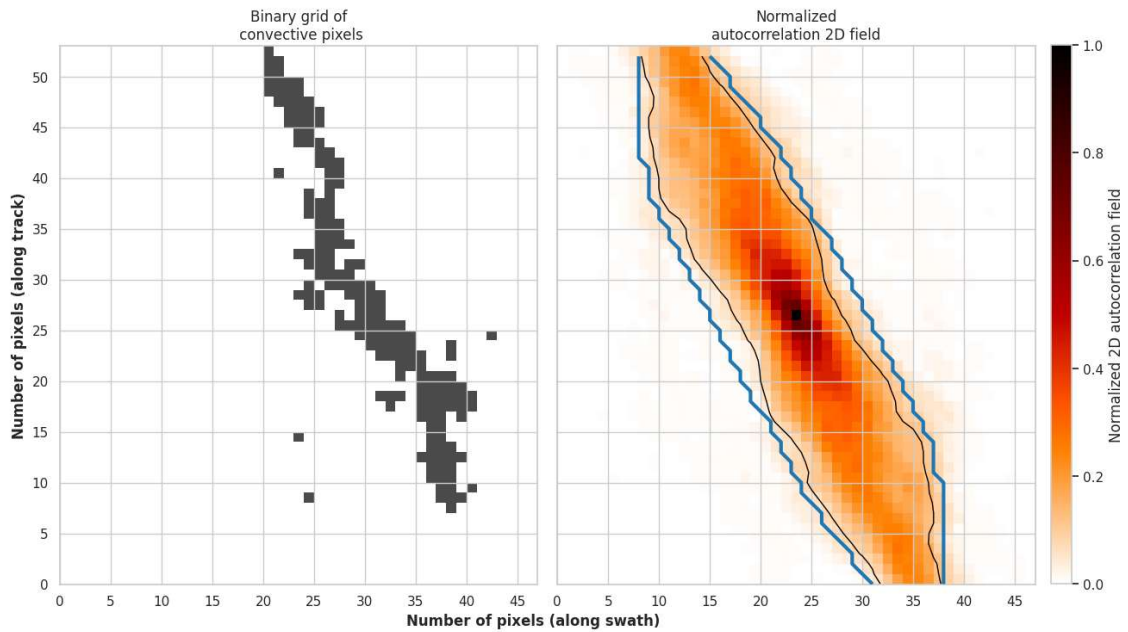
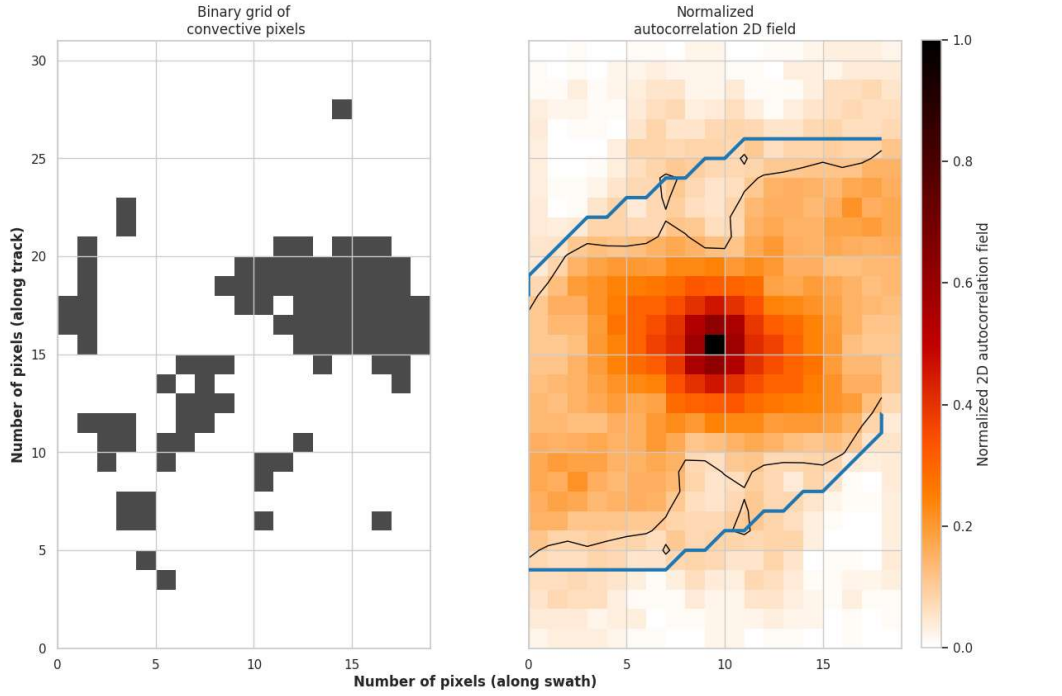
**Louis Netz et al.**

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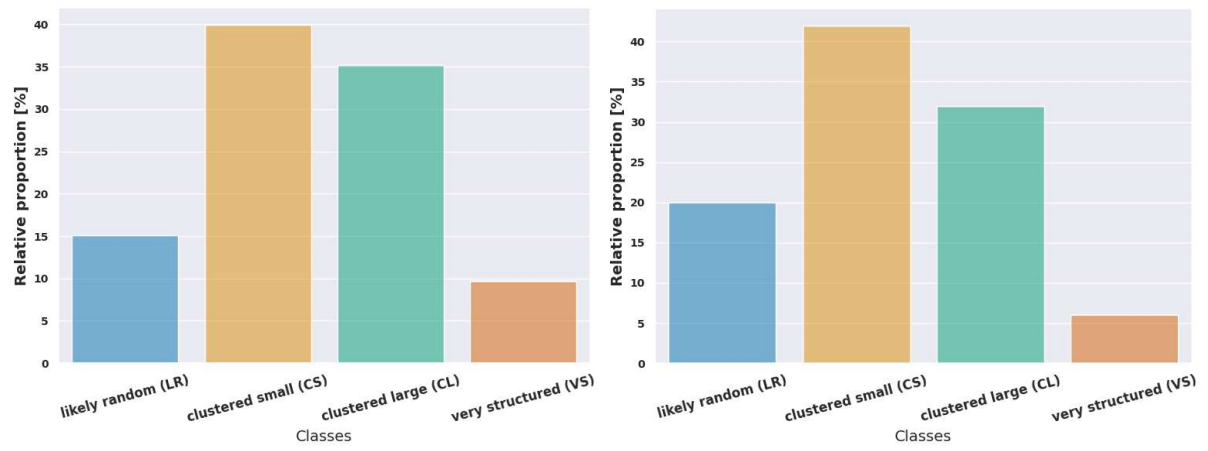
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## Supplementary materials:

### Autocorrelation 2D:

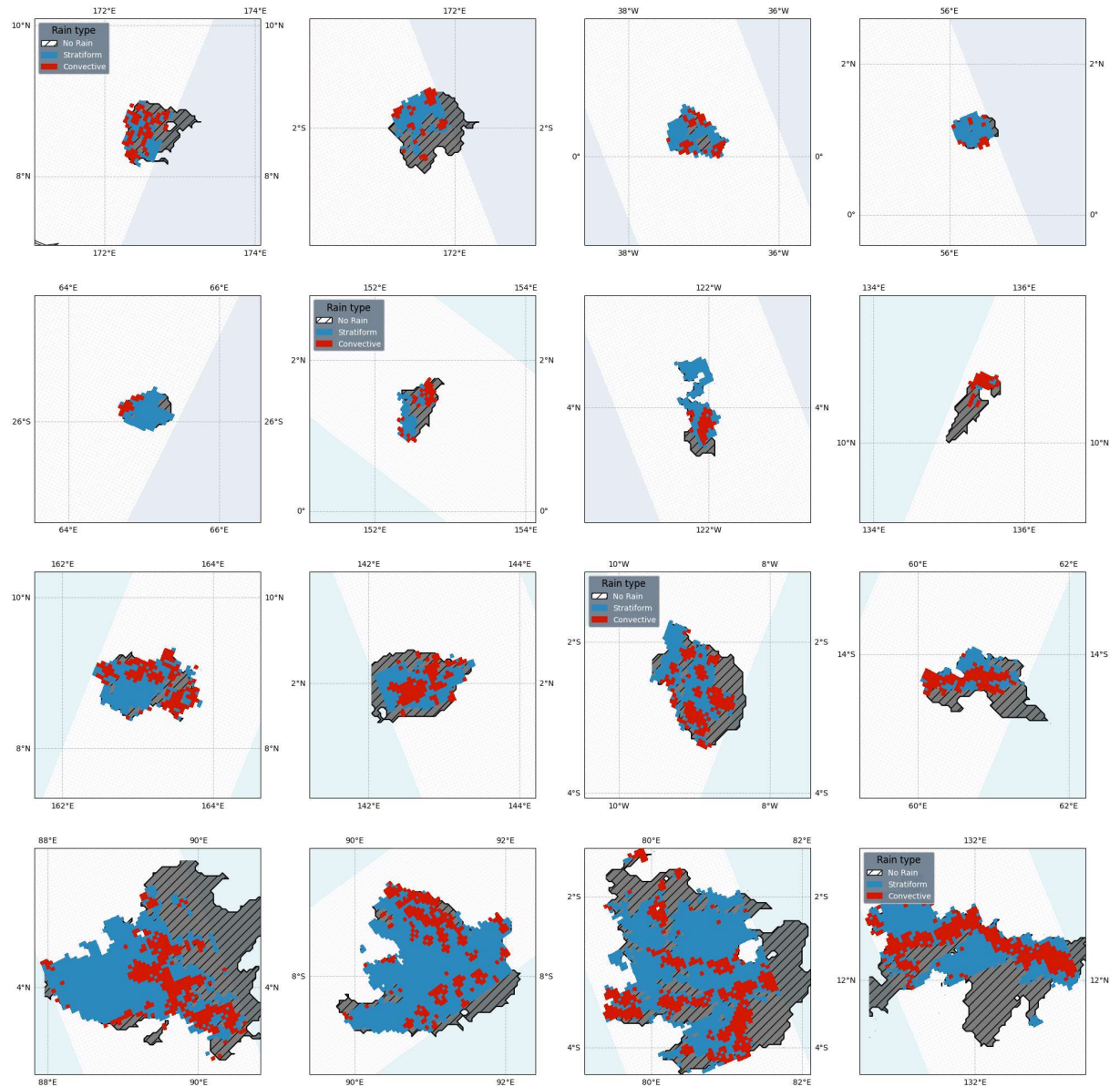


**Figure S1:** Same as Figure 2 for remaining selected scenes of Figure 14. Left: 2D binary scene (black pixels represent convective areas). Right: 2D autocorrelation normalized field, black contour shows the 10% contour and blue contour represents the convex contour that encompasses that 10% contour. The characteristic length  $L$  is the maximum distance between 2 points within the blue contour, here top:  $L \approx 18.44$ , bottom:  $L \approx 14.14$

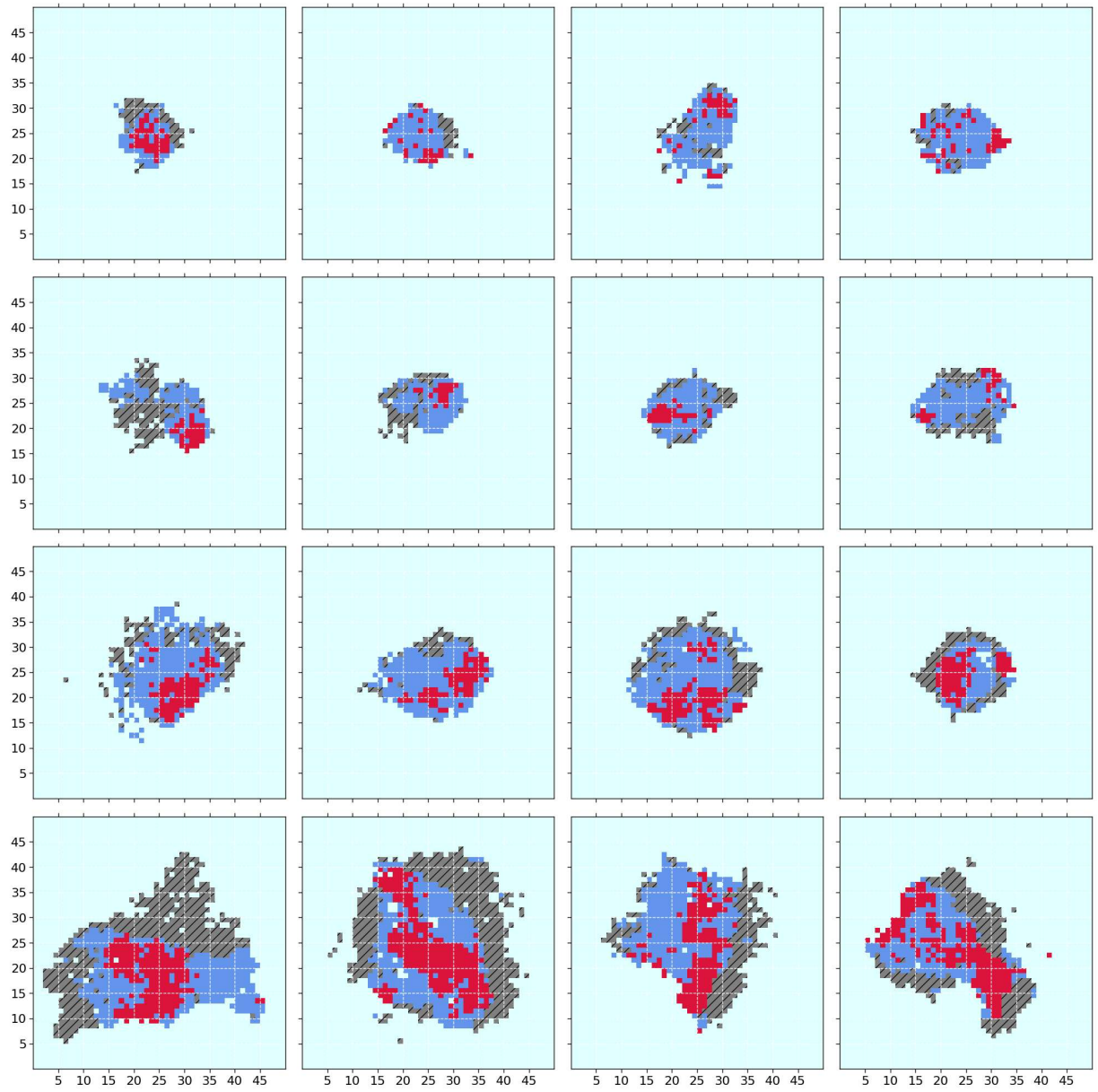
941 **Details of the 4 classes:**

942

943 *Figure S2: Histograms of the 4 classes population for Left: the TOOCAN-radar dataset, Right, the*  
944 *TOOCAN-RCE dataset*



*Figure S3: Same as Figure 1, 4 other examples for the 4 organizational classes by row from top to bottom: likely random (LR), small (CS), clustered large (CL), very structured scenes (VS)*



*Figure S4: Same as Figure 2, 4 other examples for the 4 organizational classes by row from top to bottom: likely random (LR), small (CS), clustered large (CL), very structured scenes (VS)*