1   **Supplementary Information**

2   **Climatological occurrences of hail and tornado associated with mesoscale convective**

3   **systems in the United States**

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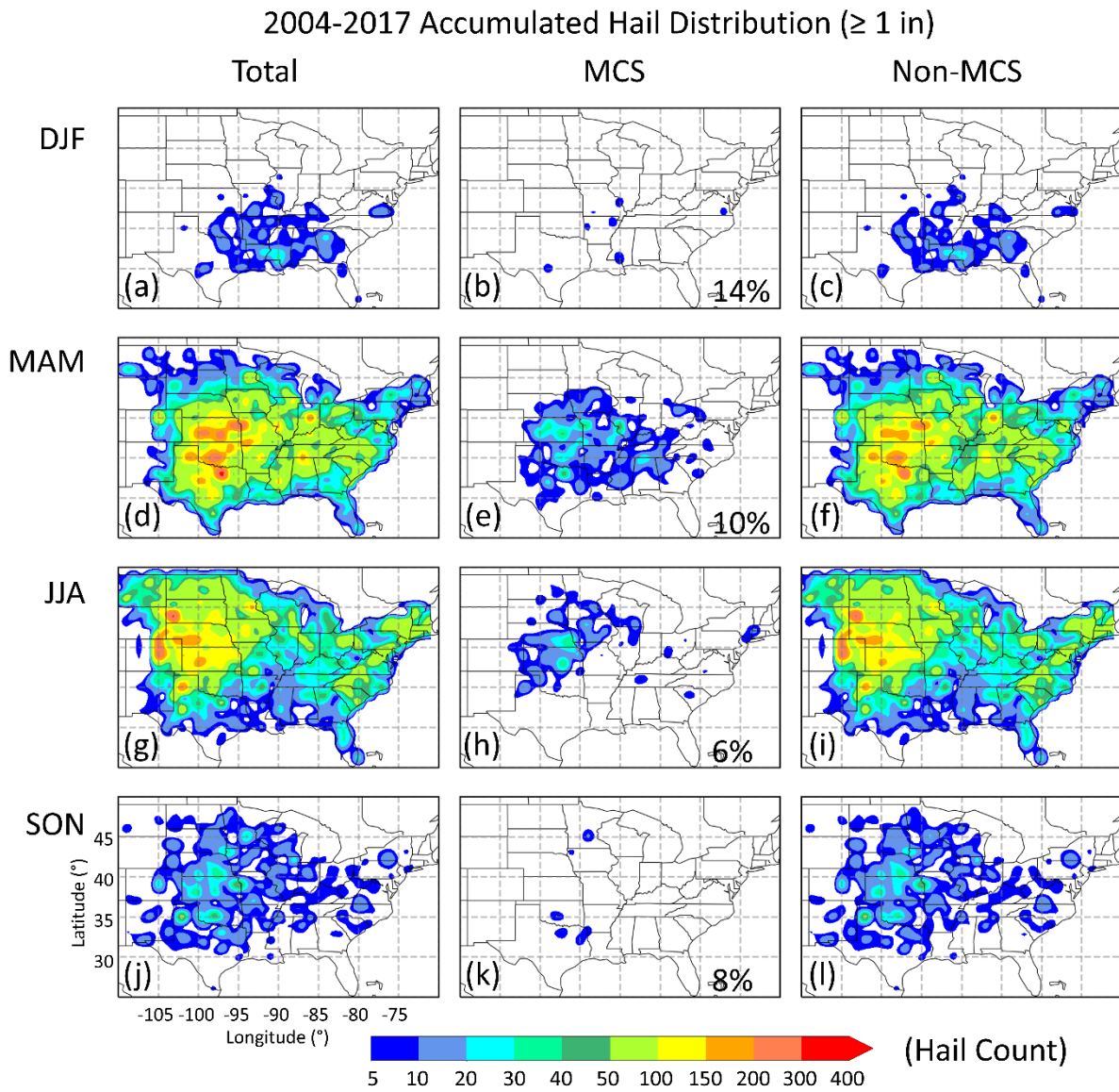
2004-2017 Accumulated Hail Distribution (≥ 1 in)

13

14 **Figure S1**. Same as Figure 3 but using 8 km convective aggregation radius.

15

16   **Figure S2**. Same as Figure 4 but using 8 km convective aggregation radius.

17

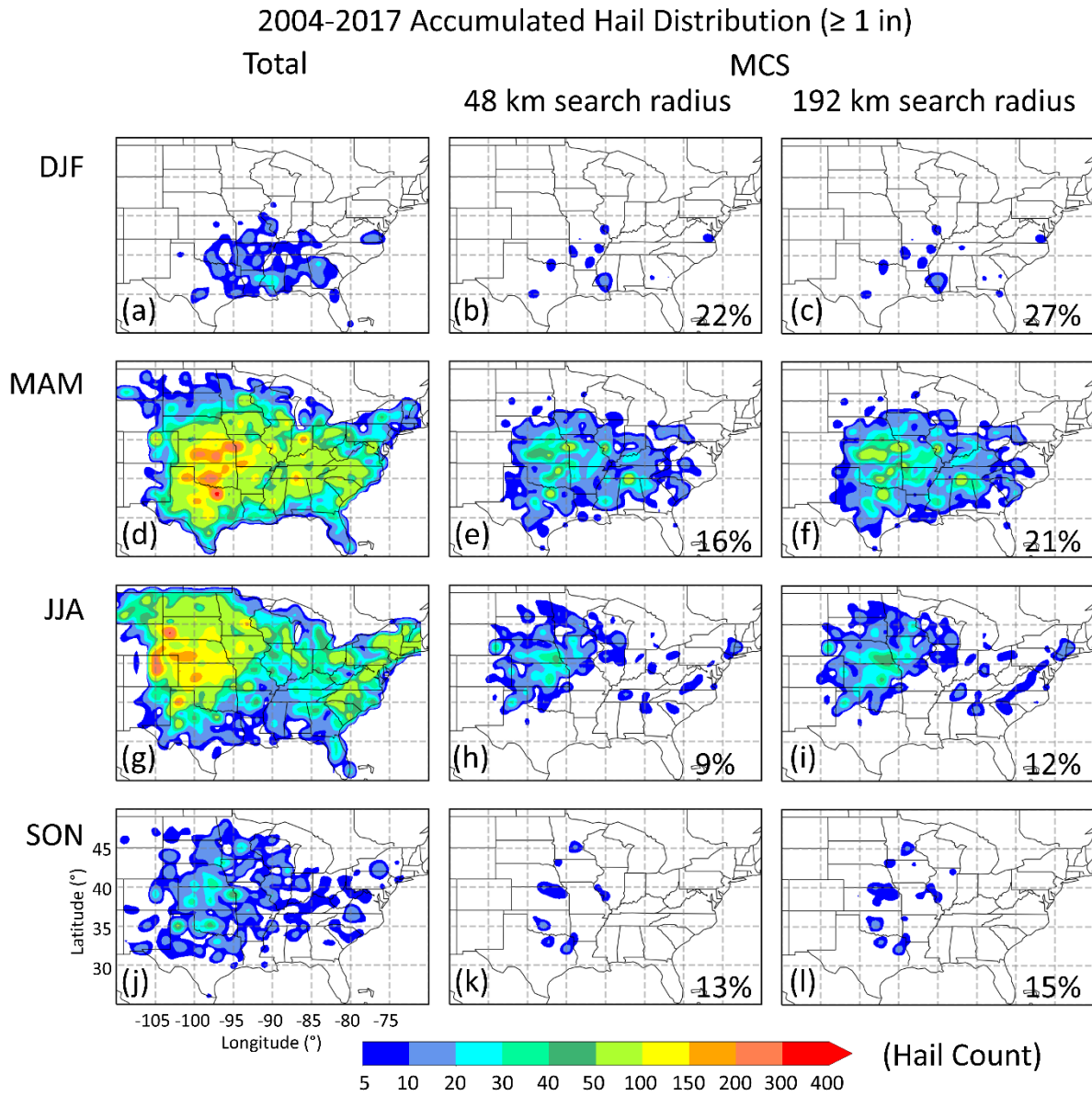



Figure S3. Same as Figure 3 but using varying stratiform search radius.

2004-2017 Accumulated Tornado Distribution (≥ EF0)

19

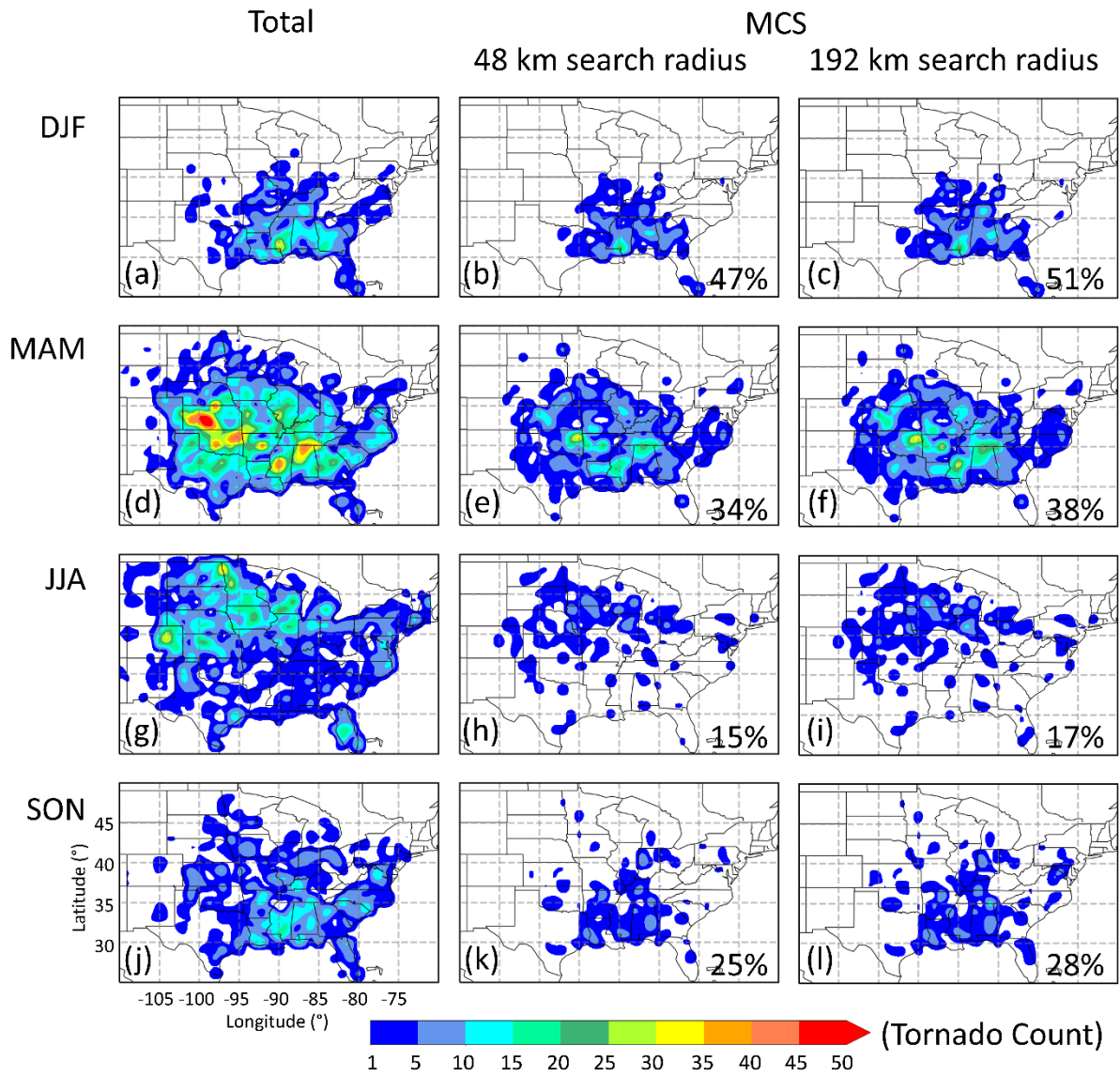
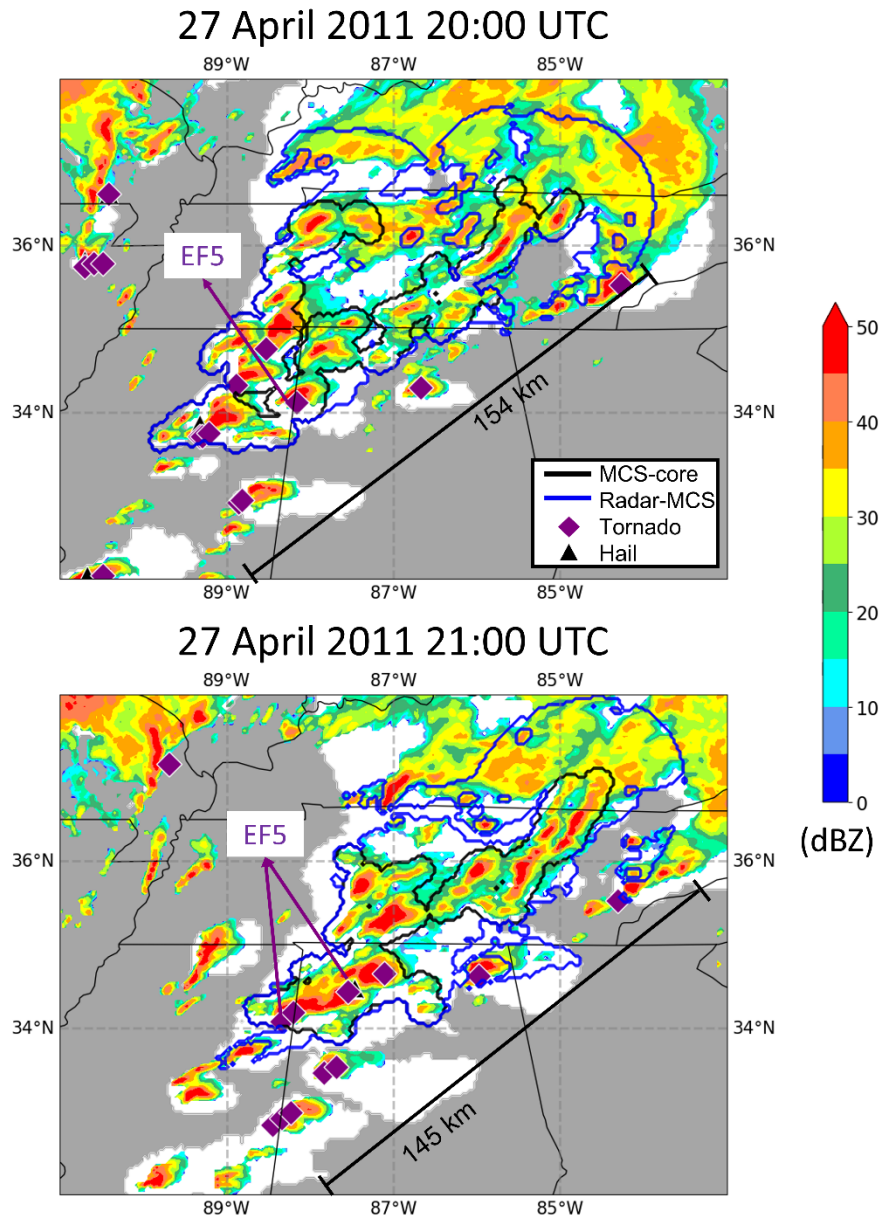
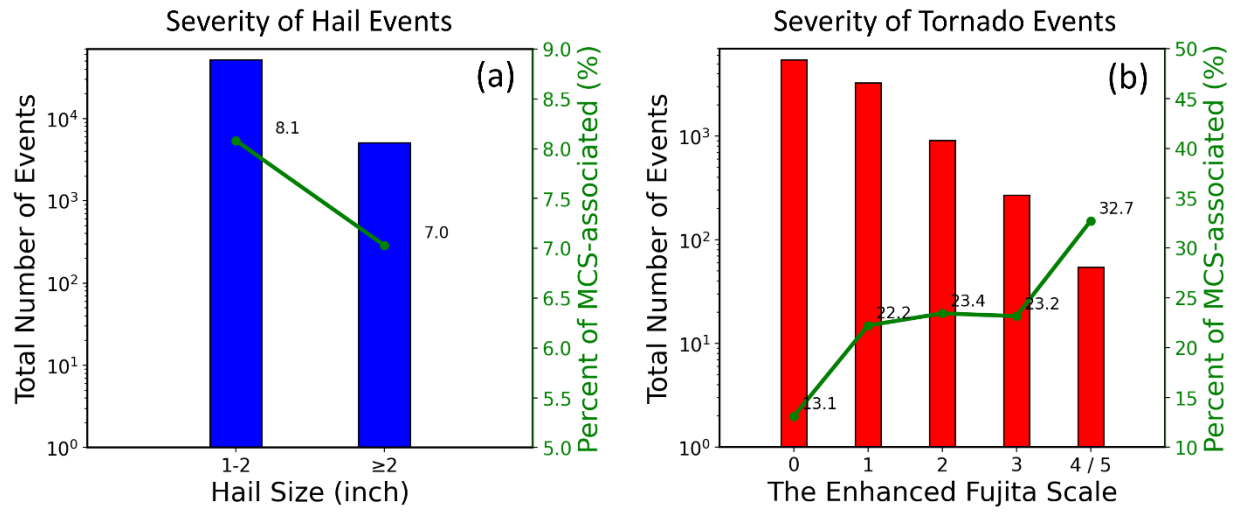



Figure S4. Same as Figure 4 but using varying stratiform search radius.

21

22   **Figure S5**. Same as Figure 2 but for (a) 20:00 UTC, 27 April 2011 and (b) 21:00 UTC, 27 April

23   2011.

24

25   **Figure S6**. Same as Figure 7 but convective aggregation radius of 8 km.

26

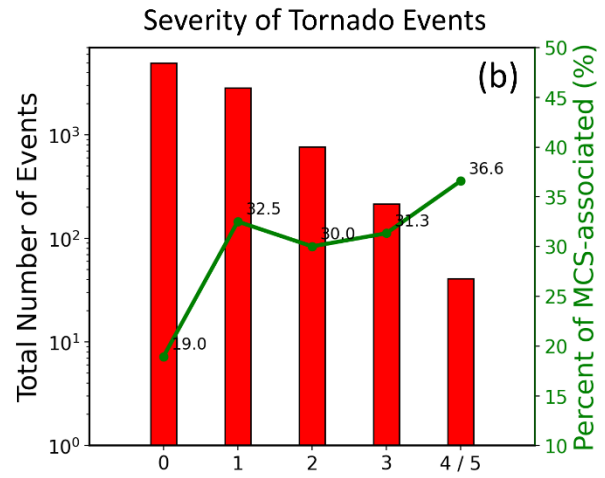
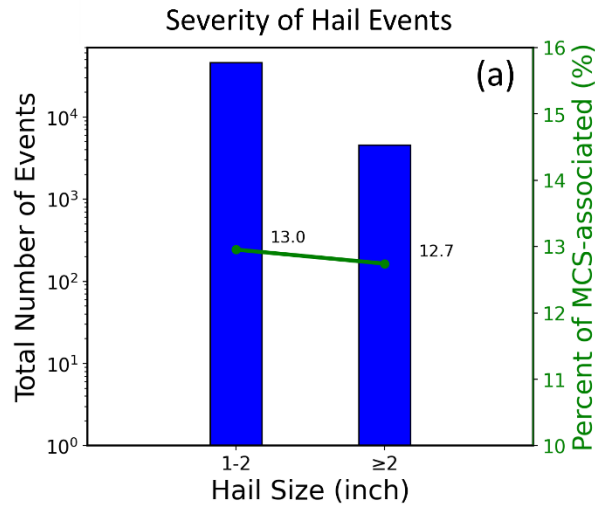



Figure S7. Same as Figure 7 but excluding the year of 2011.

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