

1 **Supplemental material for the manuscript**

2 “Atmospheric circulation and boundary layer processes modulating aerosol and
3 cloud characteristics over the coastal Northeast Pacific during April to October of
4 ARM EPCAPE field campaign”

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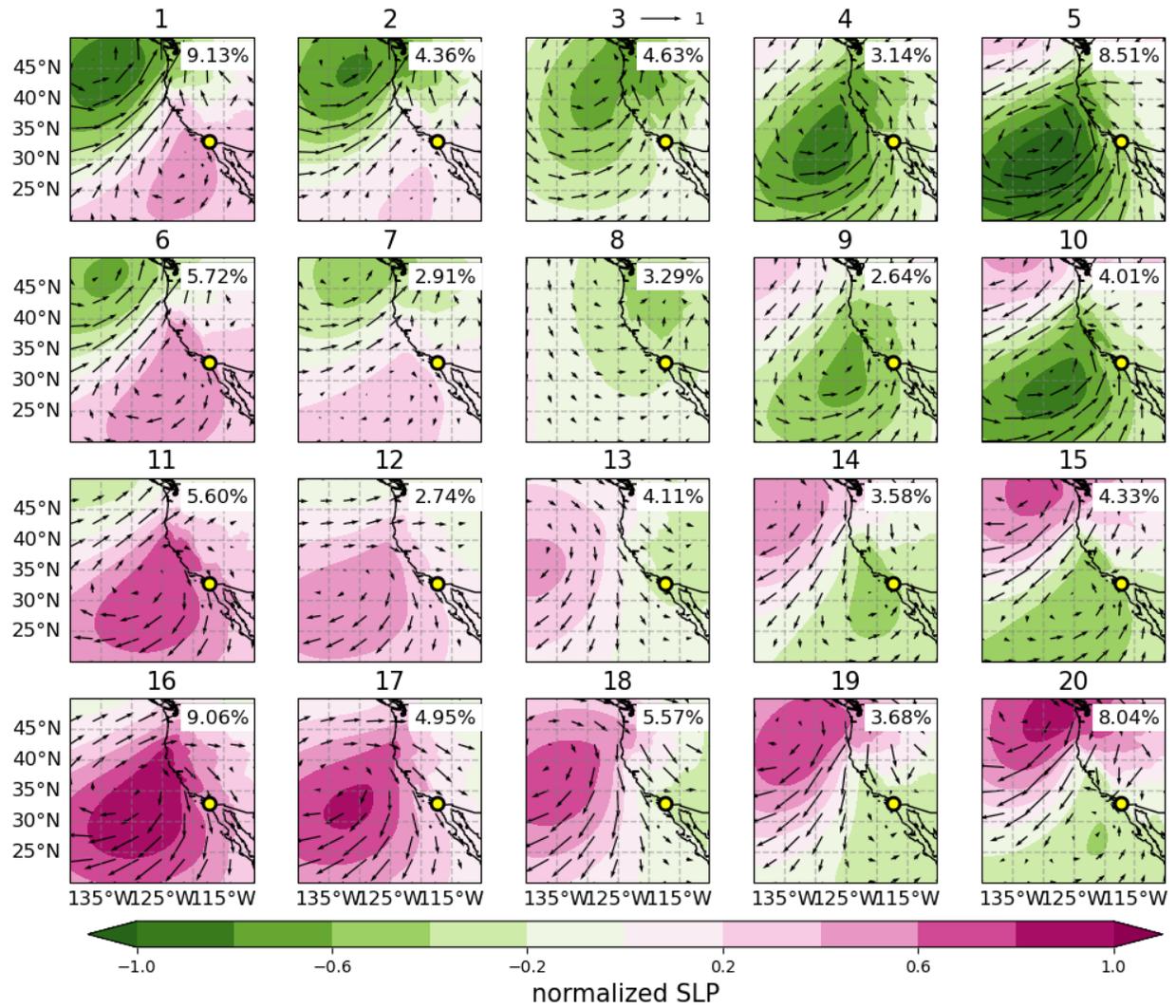
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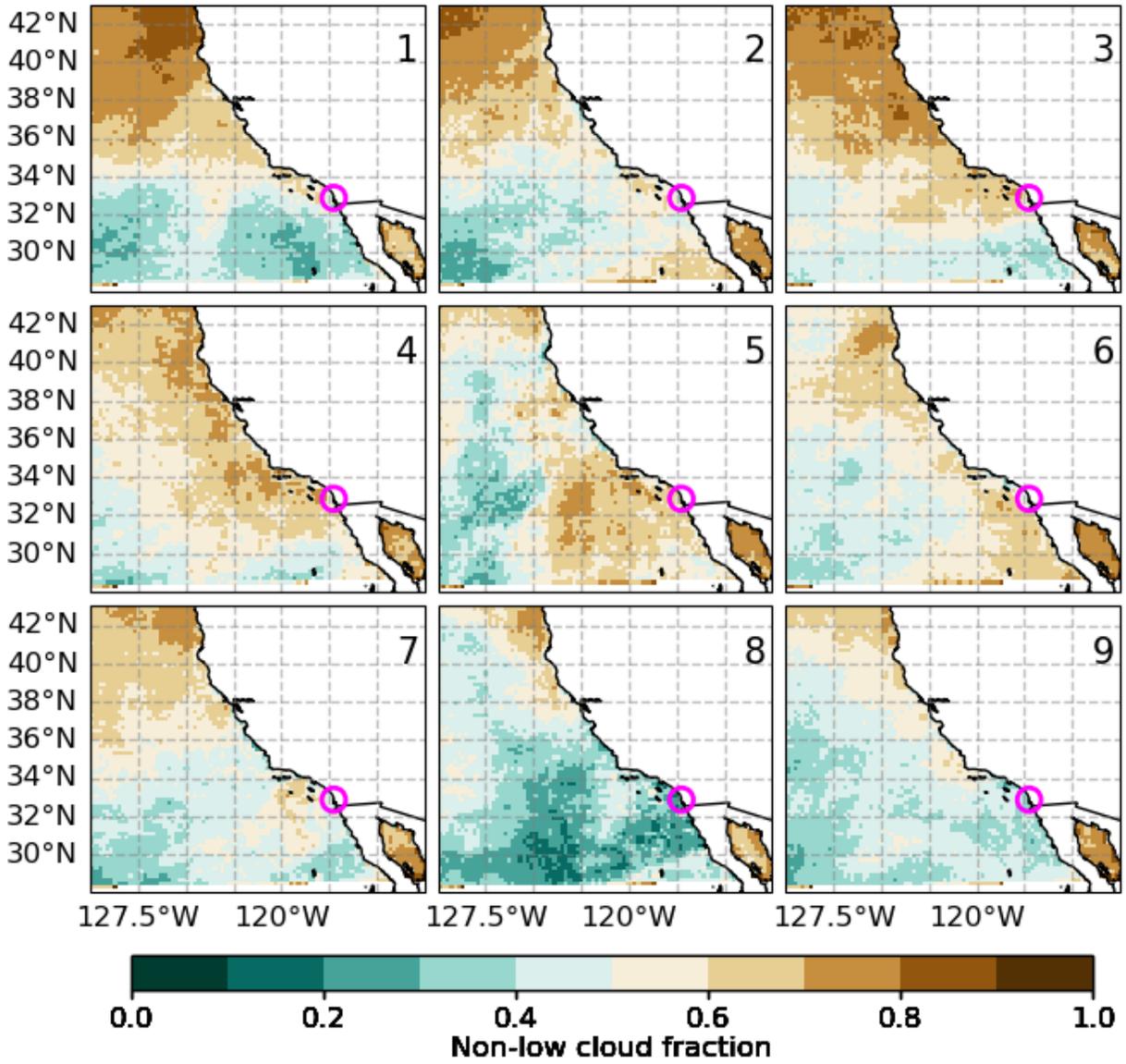
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Figure S1: 4x5 SOM composite of the normalized field



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Figure S2: Non-low cloud fraction derived from SatCORPS GOES-18 cloud fraction for the nine synoptic classifications.

45 **Table S1:** The number of days in each node reflecting the contribution from individual months.

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| Regimes/ Months | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Apr | 4 | 2 | 5 | 3 | 0 | 2 | 5 | 2 | 7 |
| May | 5 | 3 | 4 | 2 | 3 | 4 | 3 | 3 | 4 |
| Jun | 5 | 2 | 2 | 4 | 2 | 2 | 3 | 5 | 5 |
| Jul | 1 | 3 | 3 | 3 | 5 | 7 | 3 | 2 | 4 |
| Aug | 5 | 3 | 1 | 5 | 3 | 7 | 5 | 1 | 1 |
| Sep | 4 | 7 | 1 | 1 | 4 | 2 | 5 | 2 | 4 |
| Oct | 2 | 2 | 5 | 3 | 0 | 6 | 5 | 2 | 5 |
| Total | 26/214 | 22/214 | 21/214 | 21/214 | 17/214 | 31/214 | 29/214 | 17/214 | 30/214 |

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