Figure S1: The training and validation accuracy curves. Validation accuracy reaches its maximum around epoch 65.

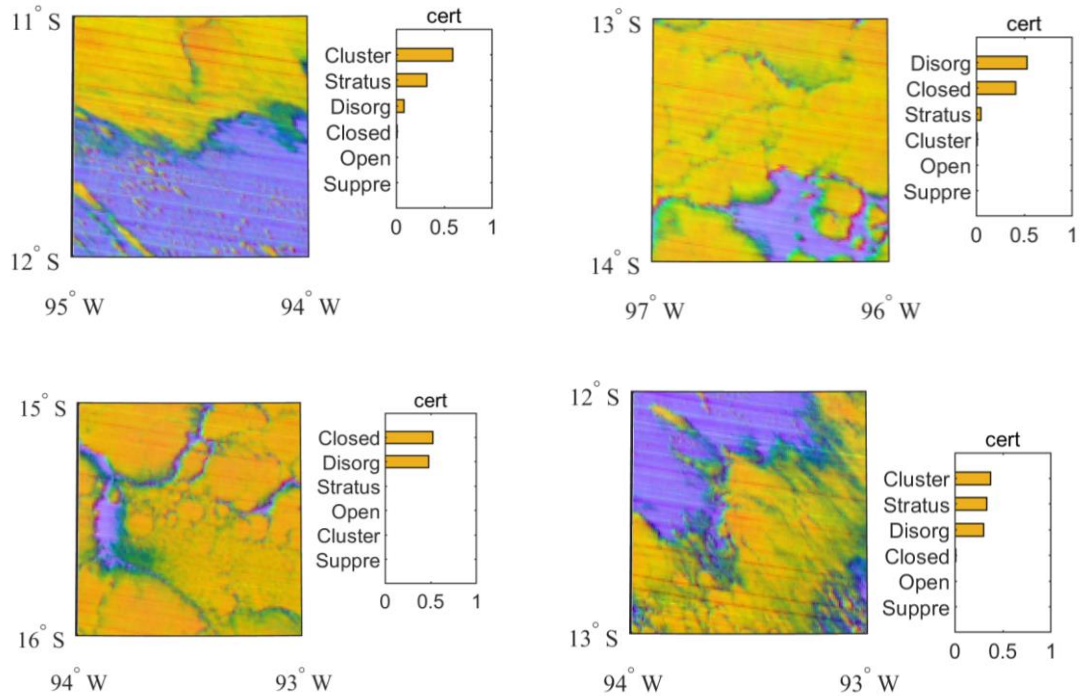



Figure S2: Examples of some mixed and transition scenes. Here, 'cert' represents the confidence level of each category. The sum of the confidence levels for the six categories equals to 1.

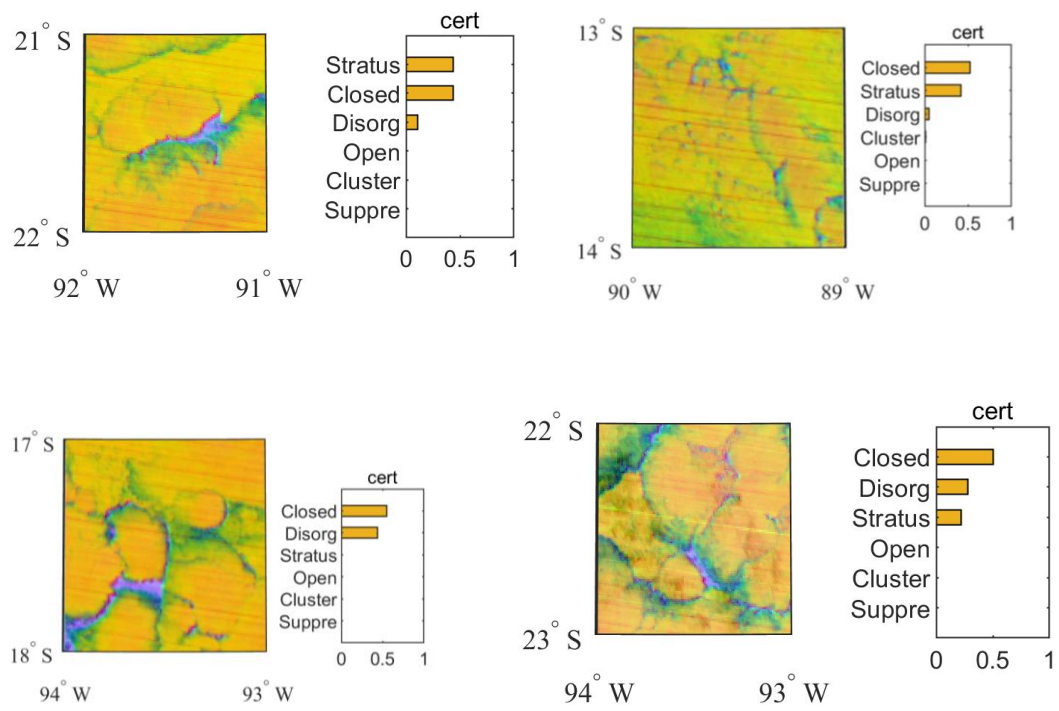
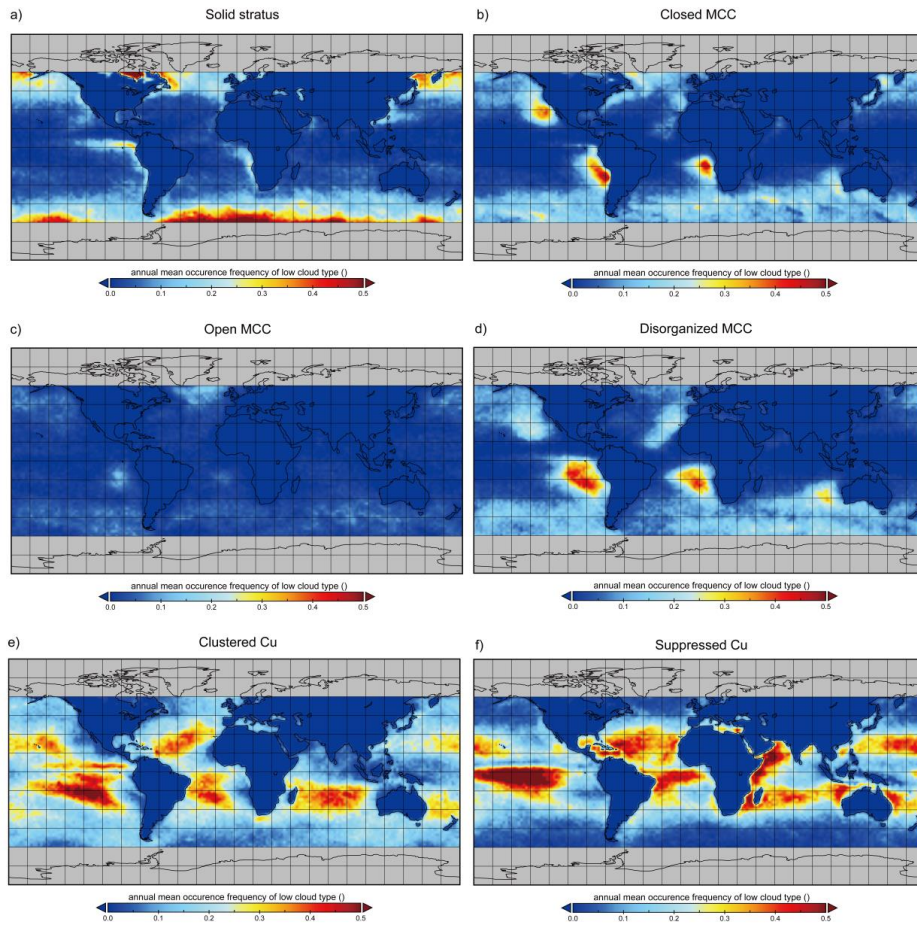



Figure S3: Same as Fig. S2. Examples of some misclassified scenes because of model's limited capacity to distinguish between stratiform structures and convective cells.

2018 annual mean occurrence frequency of low cloud types

Climatology of daytime relative frequencies of occurrence (RFO) in 2018

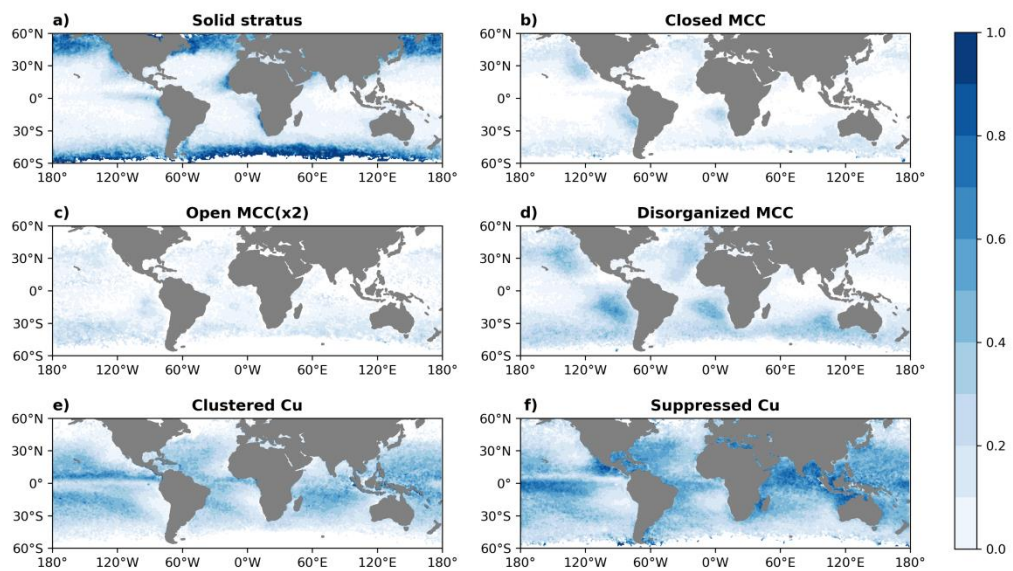



Figure S4: 2018 annual mean occurrence frequency of low cloud types from Yuan et al. (2020) and from our model.