

Table 1. Description of NorESM2 experiments. All experiments have a simulation length of 18 years running from the year 1200 to 1217.

| Experiment | | piControl | CYC6DUV | CYC6DUV60D | CYC6DUV60D_PS30D | CLIM6DUV |
|-------------|-----------|----------------------------|---|--------------------------------|--|----------|
| Description | | Pre-industrial control run | Nudging run | | | |
| Model | | NorESM2 | | | | |
| Nudging | Variables | N/A | U and V currents | | | |
| | Data | | Annual cycle from piControl | | | |
| | | | 48-day MJO anomalies from ECCO | 60-day MJO anomalies from ECCO | 60-day MJO anomalies from ECCO (shifted by 30 days relative to CYC6DUV60D) | N/A |
| | | | Timescale | Daily with 6-day relaxation | | |
| | Domain | | 40°E – 120°E, 10°S – 10°N Tapering 2 degrees from boundaries | | | |