

Supplementary Information of paper “Impacts of Air–sea Coupling on Systematic Errors in Medium-Range Winter Forecasts over the North Pacific and North Atlantic”

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This document contains 2 tables and 2 figures.

1. TABLES

Table S1. GEPS5 data count. Note that there are 20 years and 4 ensemble members.

Month	Count per year per member	Valid dates
Jan	5	3, 10, 17, 24, 31
Feb	4	7, 14, 21, 28
Mar	4	7, 14, 21, 28
Apr	4	4, 11, 18, 25
May	5	2, 9, 16, 23, 30
Jun	4	6, 13, 20, 27
Jul	0	N/A
Aug	0	N/A
Sep	1	27
Oct	4	4, 11, 18, 25
Nov	5	1, 8, 15, 22, 29
Dec	4	6, 13, 20, 27

Table S2. GEPS6 data count and their start dates. The count of subsampled GEPS6 is documented in parentheses, and the start dates are underlined. Note that there are 20 years and 4 ensemble members.

Month	Count per year per member	Valid dates
Jan	9 (5)	<u>2</u> , 7, <u>9</u> , 14, <u>16</u> , 21, <u>23</u> , 28, <u>30</u>
Feb	8 (4)	4, <u>6</u> , 11, <u>13</u> , 18, <u>20</u> , 25, <u>27</u>
Mar	8 (4)	4, <u>5</u> , 11, <u>12</u> , 18, <u>19</u> , 25, <u>26</u>
Apr	10 (5)	1, <u>2</u> , 8, <u>9</u> , 15, <u>16</u> , 22, <u>23</u> , 29, <u>30</u>
May	8 (4)	6, <u>7</u> , 13, <u>14</u> , 20, <u>21</u> , 27, <u>28</u>
Jun	8 (4)	3, <u>4</u> , 10, <u>11</u> , 17, <u>18</u> , 24, <u>25</u>
Jul	11 (0)	1, 2, 8, 9, 15, 16, 22, 23, 25, 29, 30
Aug	13 (0)	1, 5, 6, 8, 12, 13, 15, 19, 20, 22, 26, 27, 29
Sep	13 (1)	2, 3, 5, 9, 10, 12, 16, 17, 19, 23, 24, <u>26</u> , 30
Oct	13 (5)	1, <u>3</u> , 7, <u>10</u> , 14, 15, <u>17</u> , 21, 22, <u>24</u> , 28, 29, <u>31</u>
Nov	12 (4)	4, 5, <u>7</u> , 11, 12, <u>14</u> , 18, 19, <u>21</u> , 25, 26, <u>28</u>
Dec	9 (4)	3, <u>5</u> , 10, <u>12</u> , 17, <u>19</u> , 24, <u>26</u> , 31

2. PLOTS

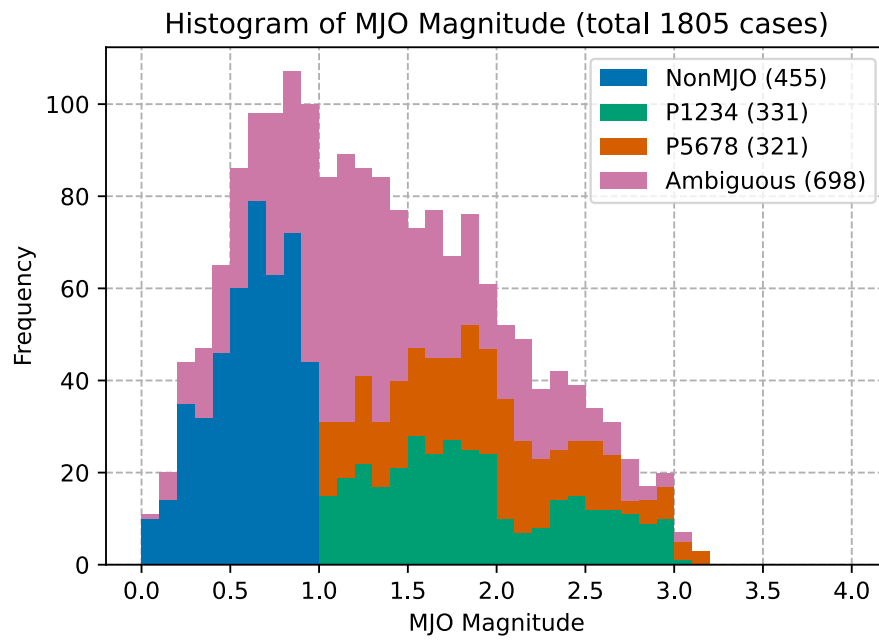


Fig. S1. Histogram of start dates classified with MJO groups: NonMJO, P1234, P5678, and Ambiguous.