

1 **Supplementary Information to “Reliability Ensemble Averaging of 21st century**
2 **projections of terrestrial net primary productivity”**
3 **by Exbrayat et al.**

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5 Fig S1: Δ NPP for each model

6 Fig S2: mean annual NPP in each observational dataset

7 Fig S3: variability in each observational dataset

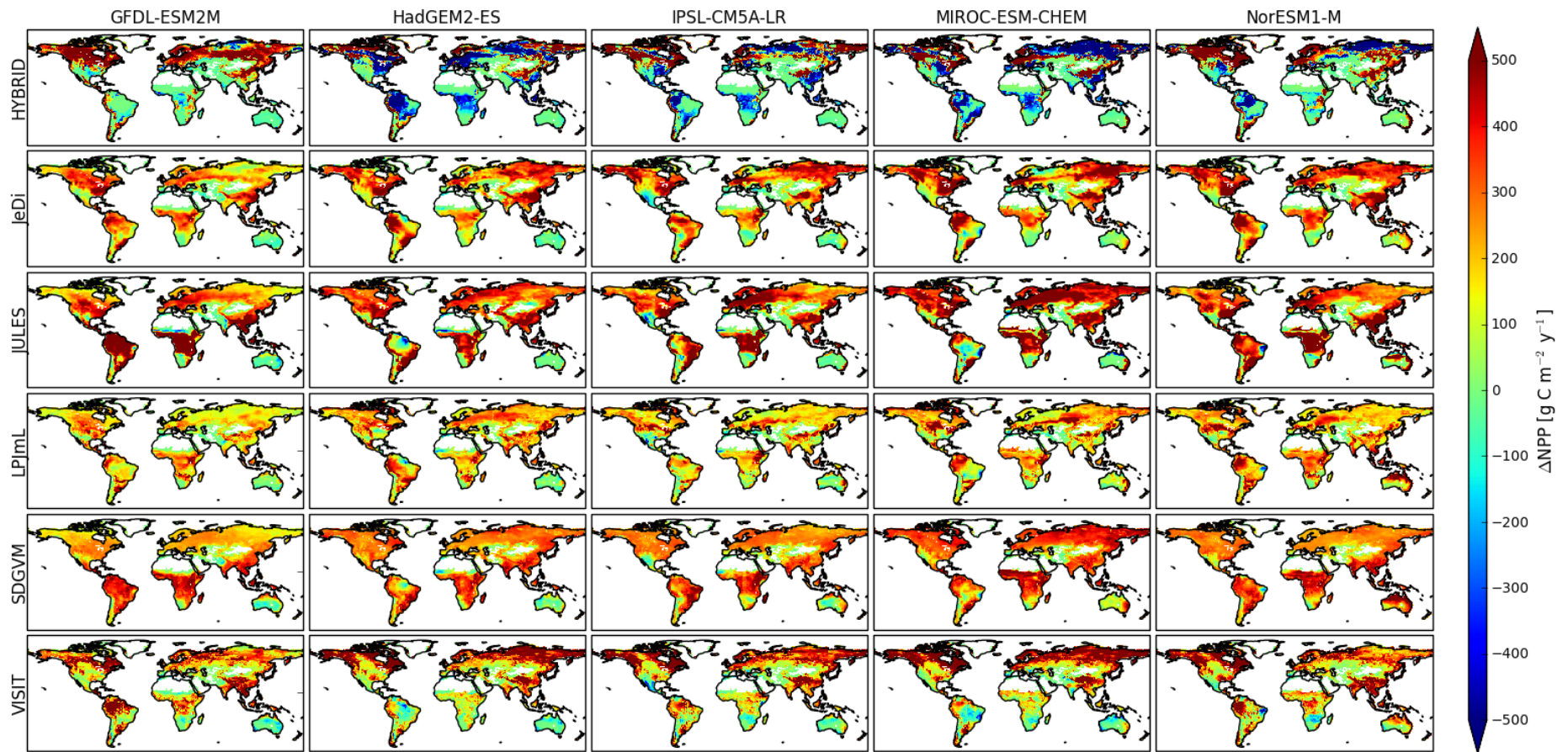
8 Fig S4-12: weights R_i , $R_{B,i}$ and $R_{D,i}$ assigned to each model for each REA_C, REA_F and REA_M

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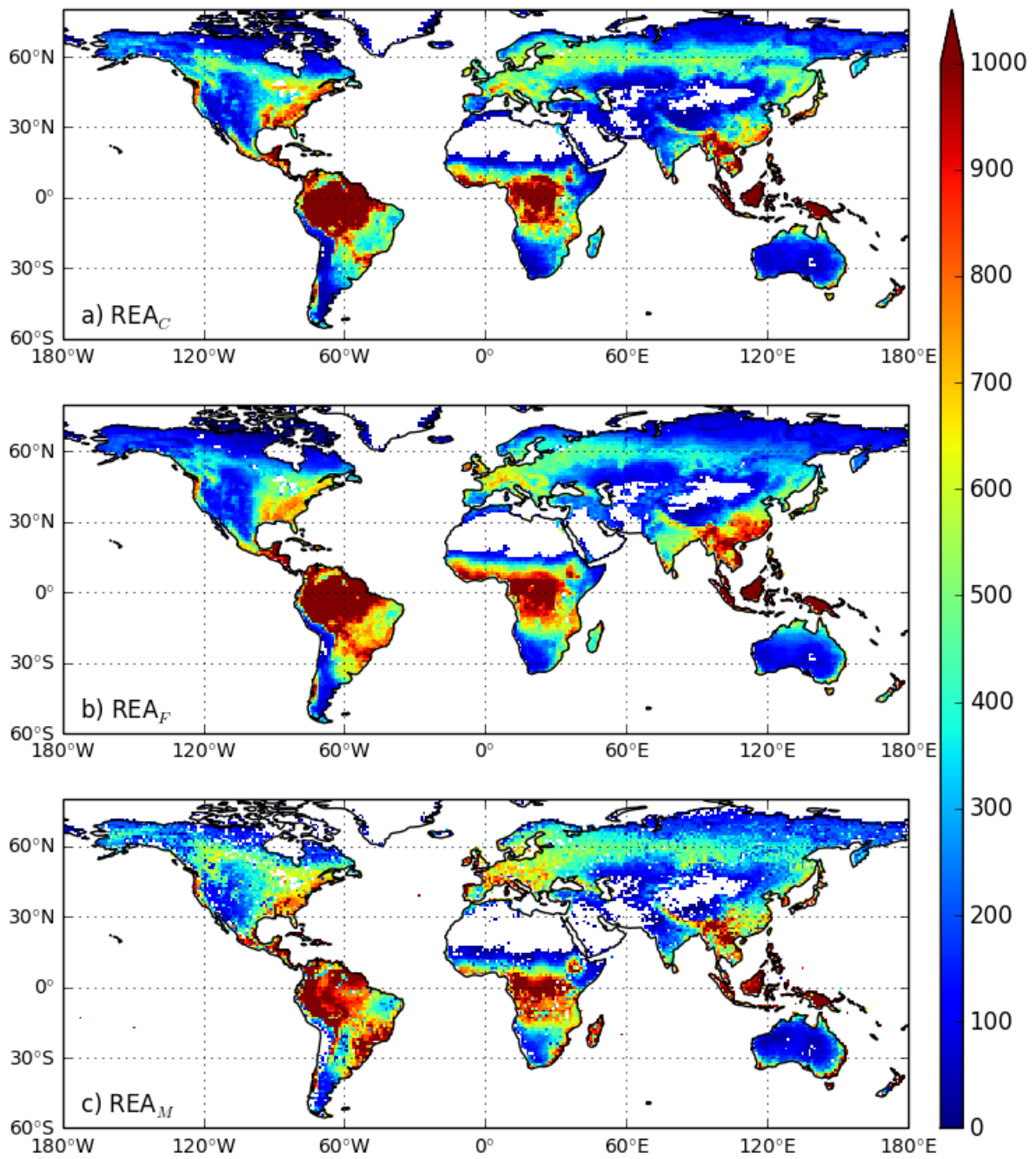
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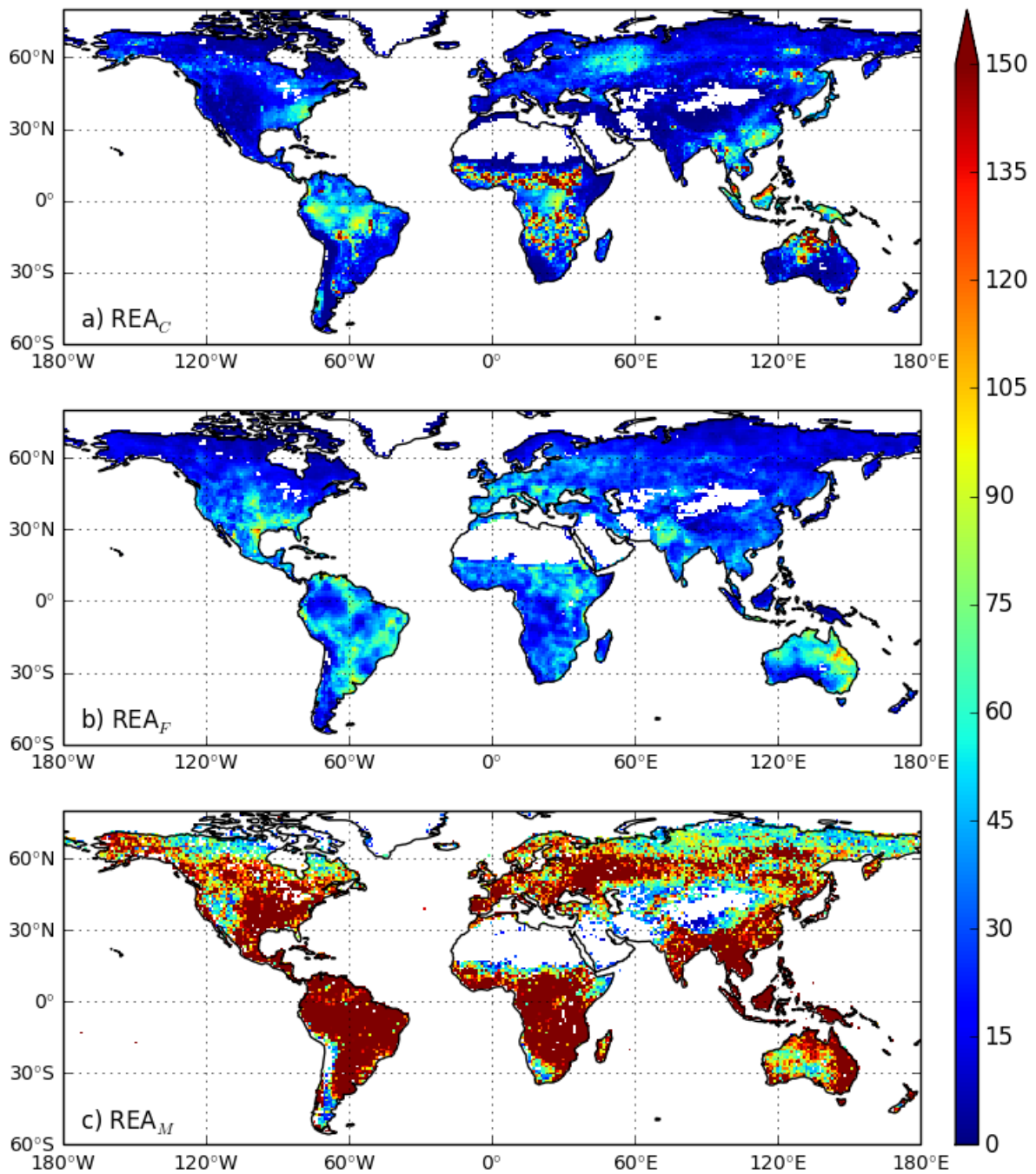
14 Figure S1. Mean annual change in NPP ($\text{g C m}^{-2} \text{y}^{-1}$) for each ensemble members.



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17 Figure S2. Mean annual NPP ($\text{g C m}^{-2} \text{ y}^{-1}$) used in (a) REA_C , (b) REA_F and (c) REA_M .

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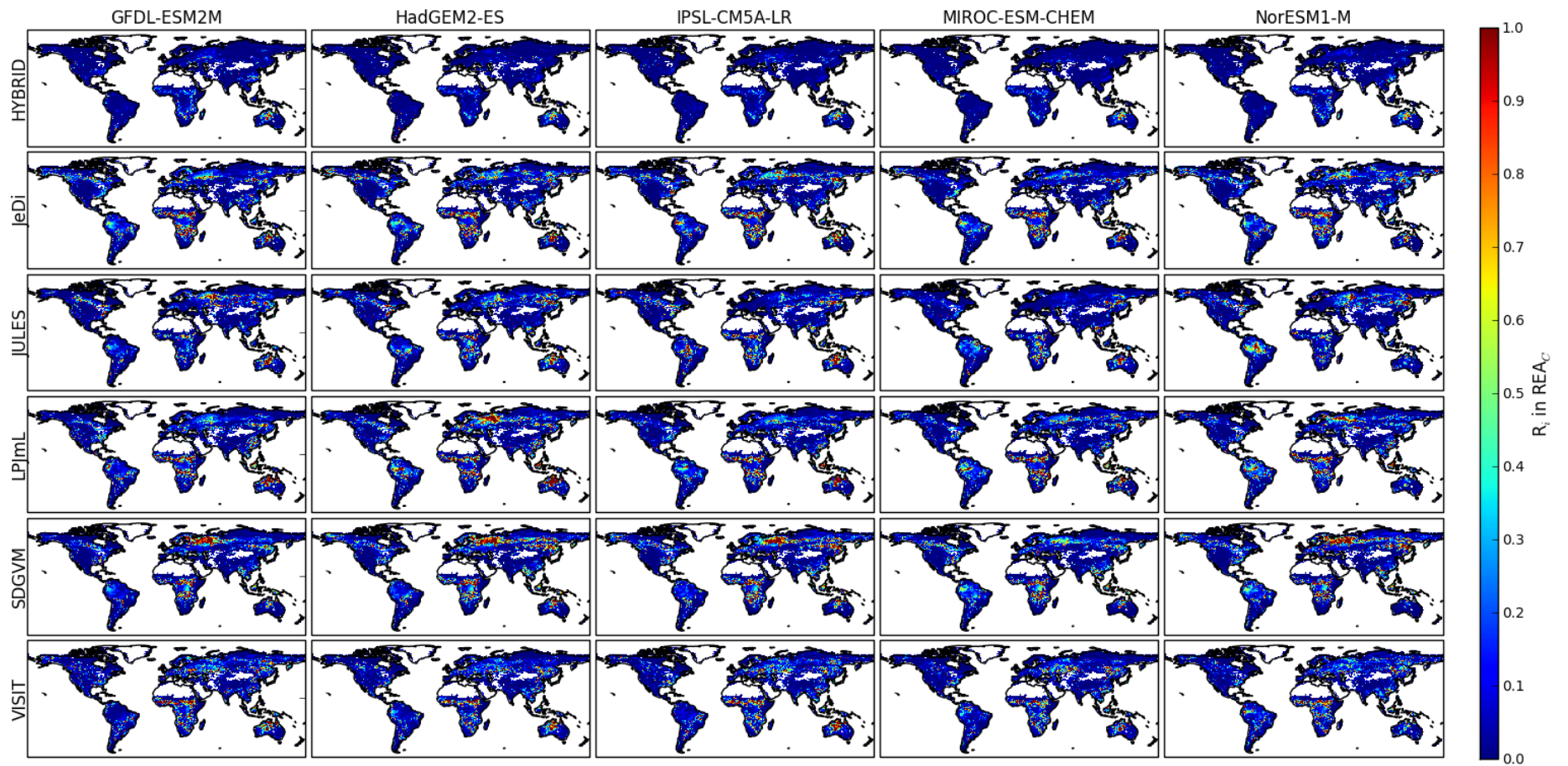


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22 Figure S3. Variability of annual NPP ($\text{g C m}^{-2} \text{y}^{-1}$) used as ε (equation 1) in (a) REA_C , (b)
 23 REA_F and (c) REA_M .

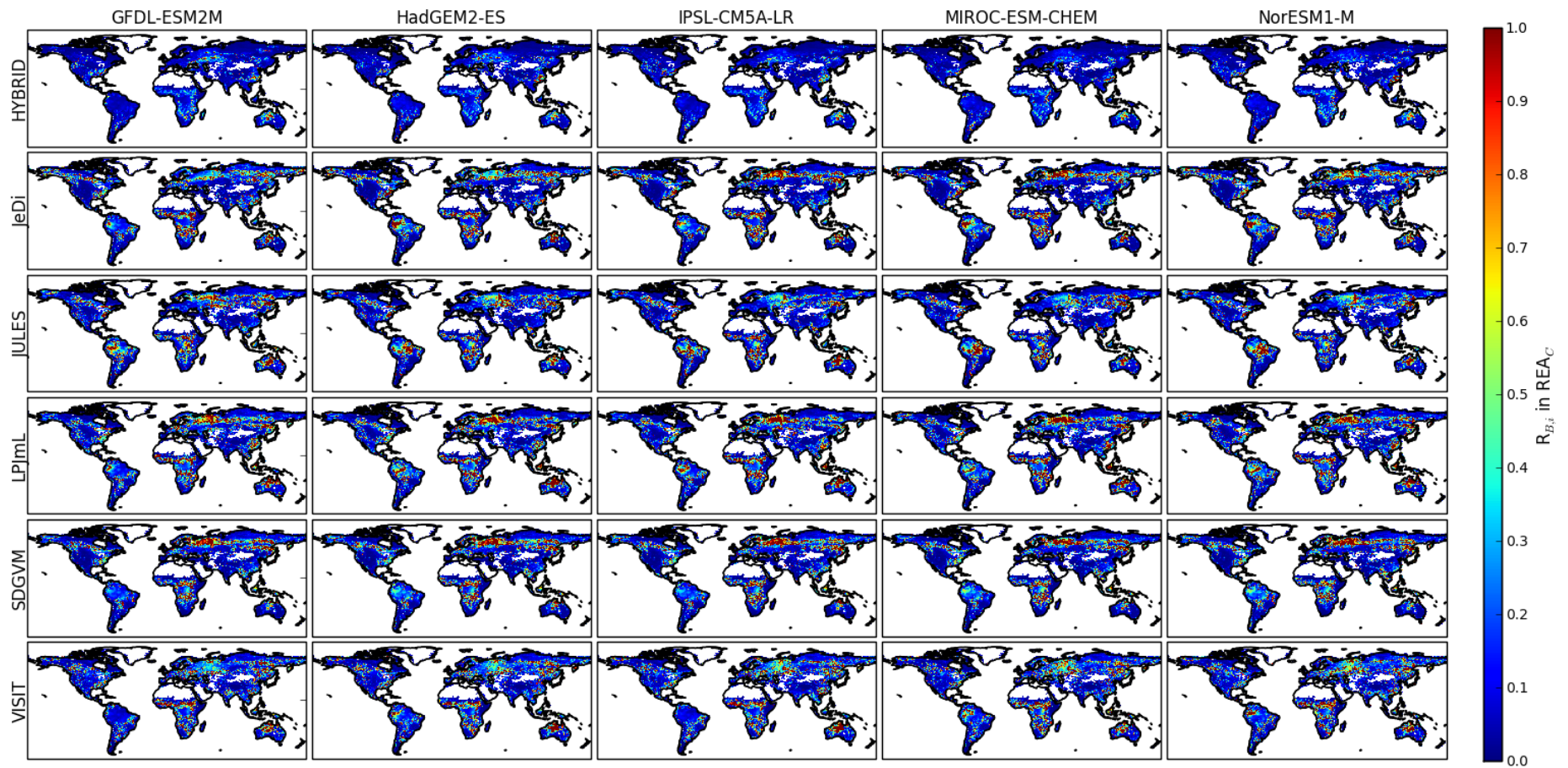
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27 Figure S4. Models weights R_i assigned to each model in the REAc.

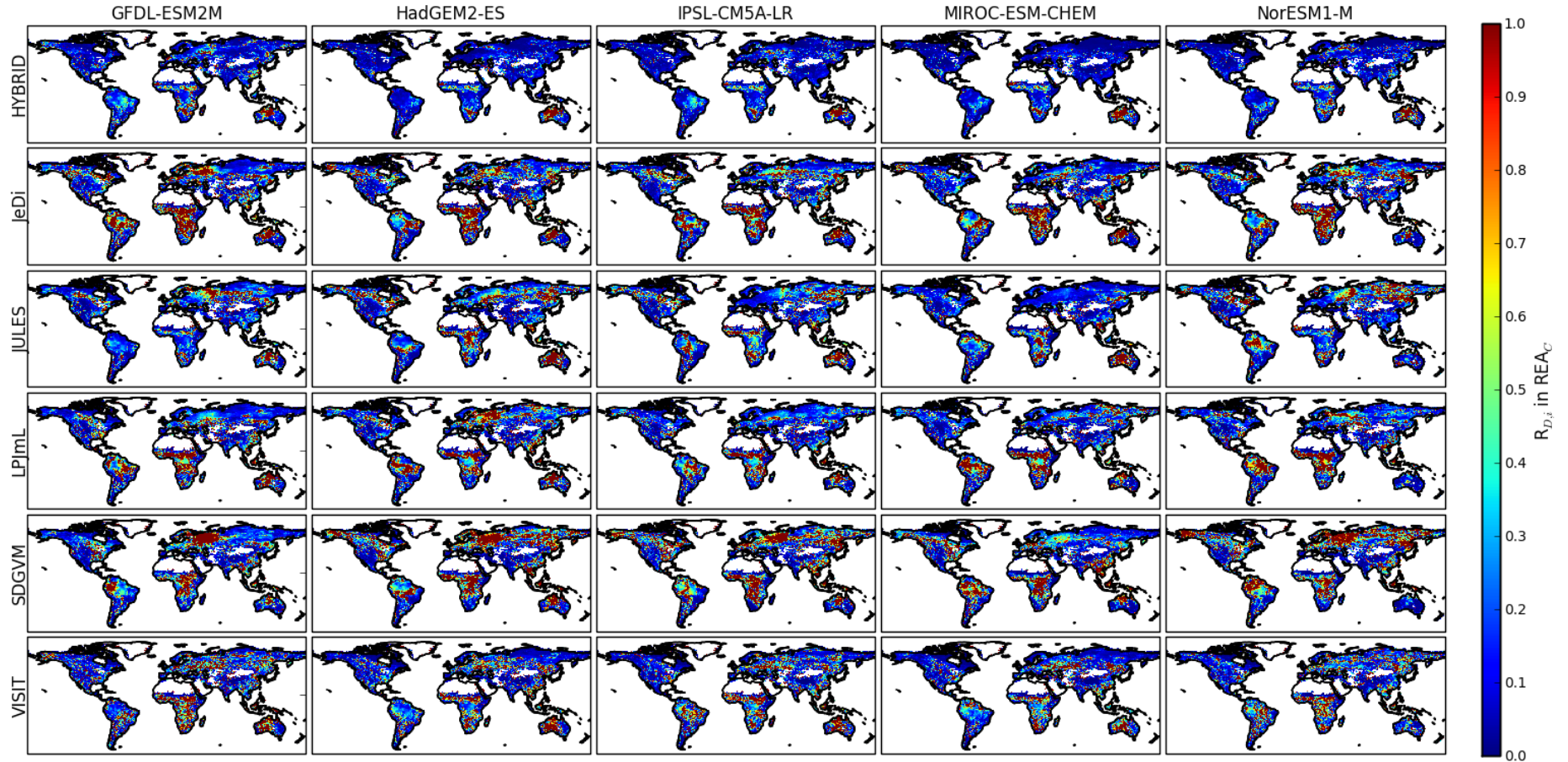
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31 Figure S5. Performance based model weight $R_{B,i}$ assigned to each model in REAC.

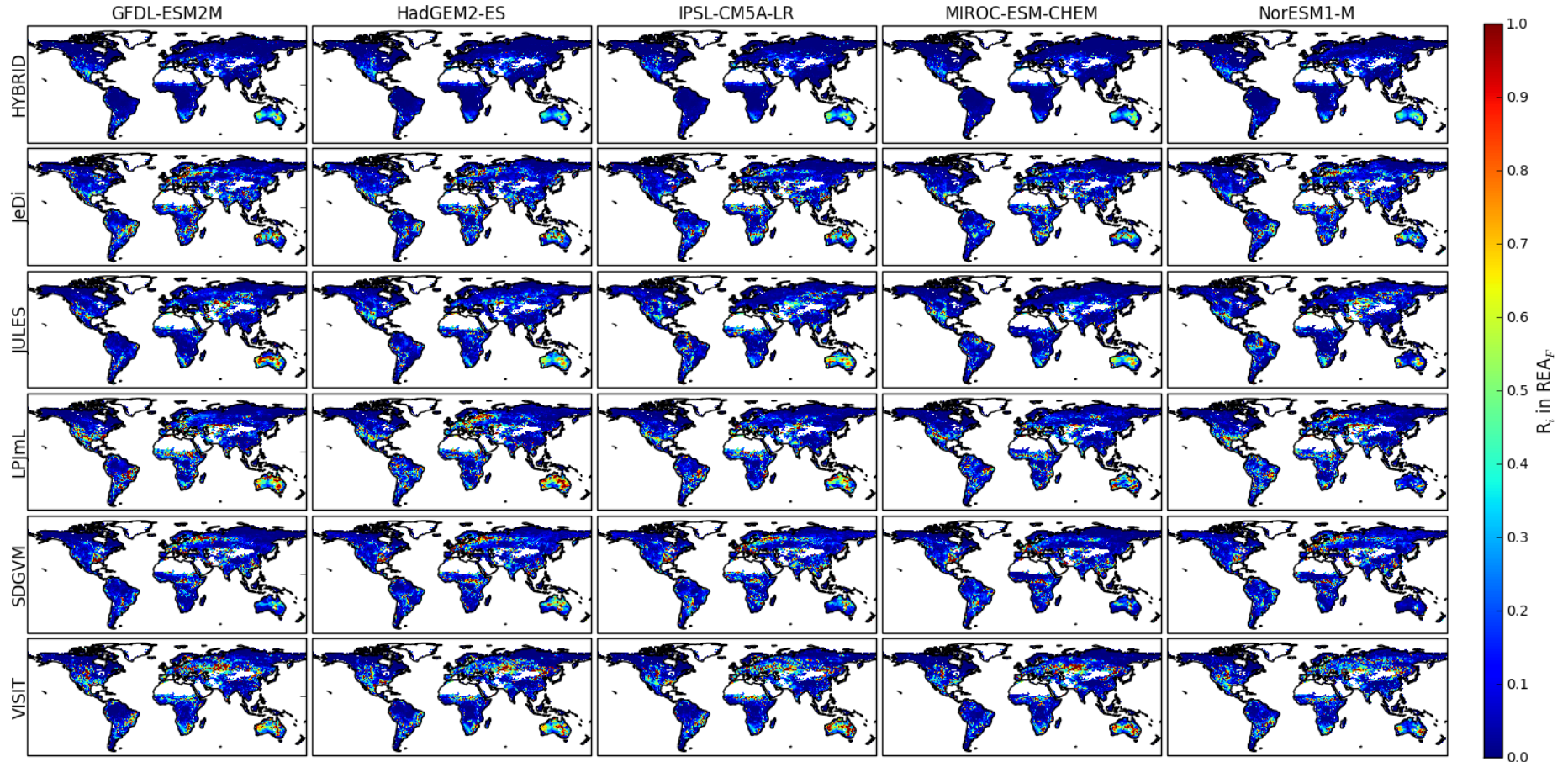
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34 Figure S6. Convergence based weight $R_{D,i}$ assigned to each model in REA_C.

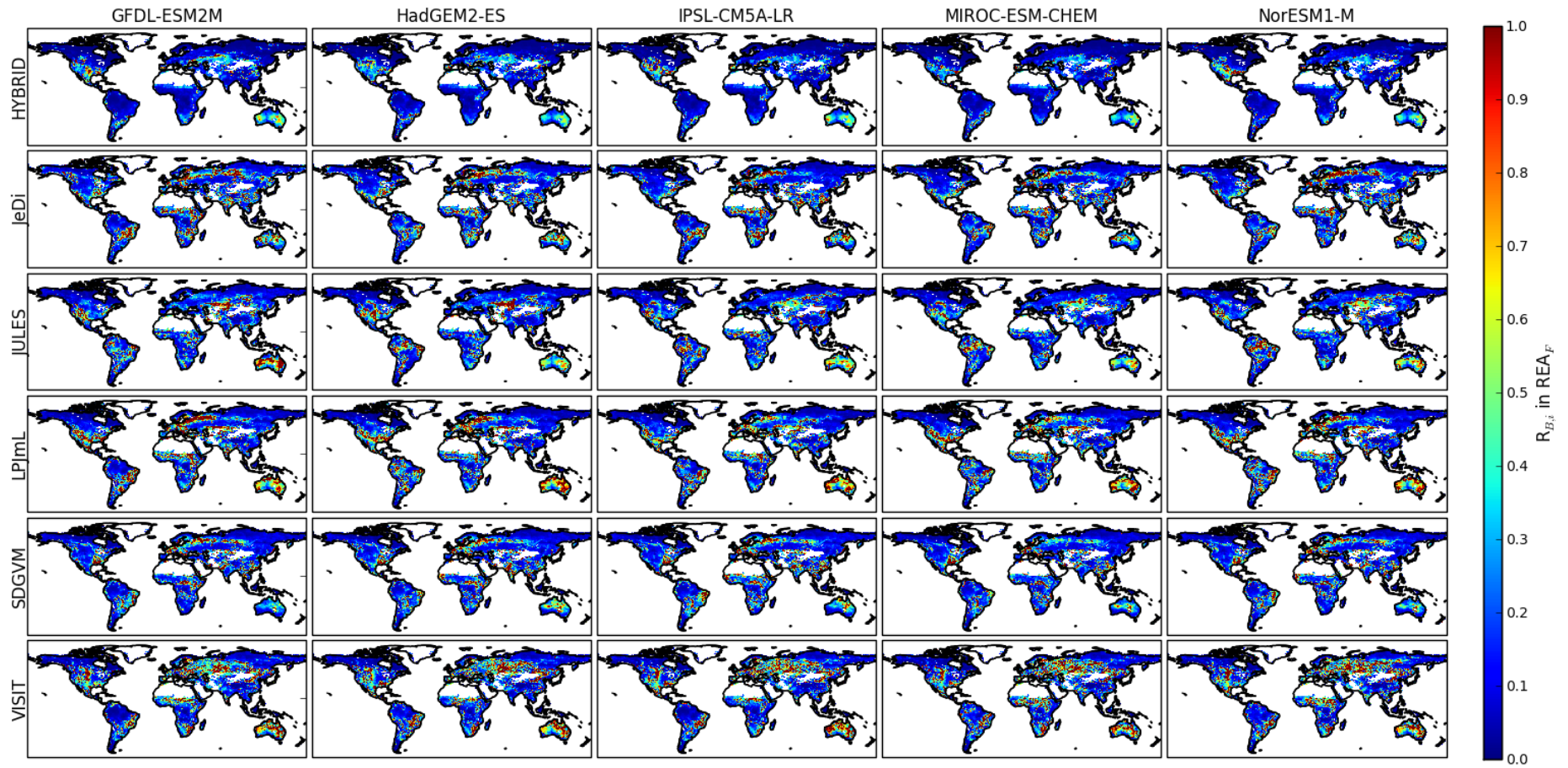
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37 Figure S7. Models weights R_i assigned to each model in the REA_F.

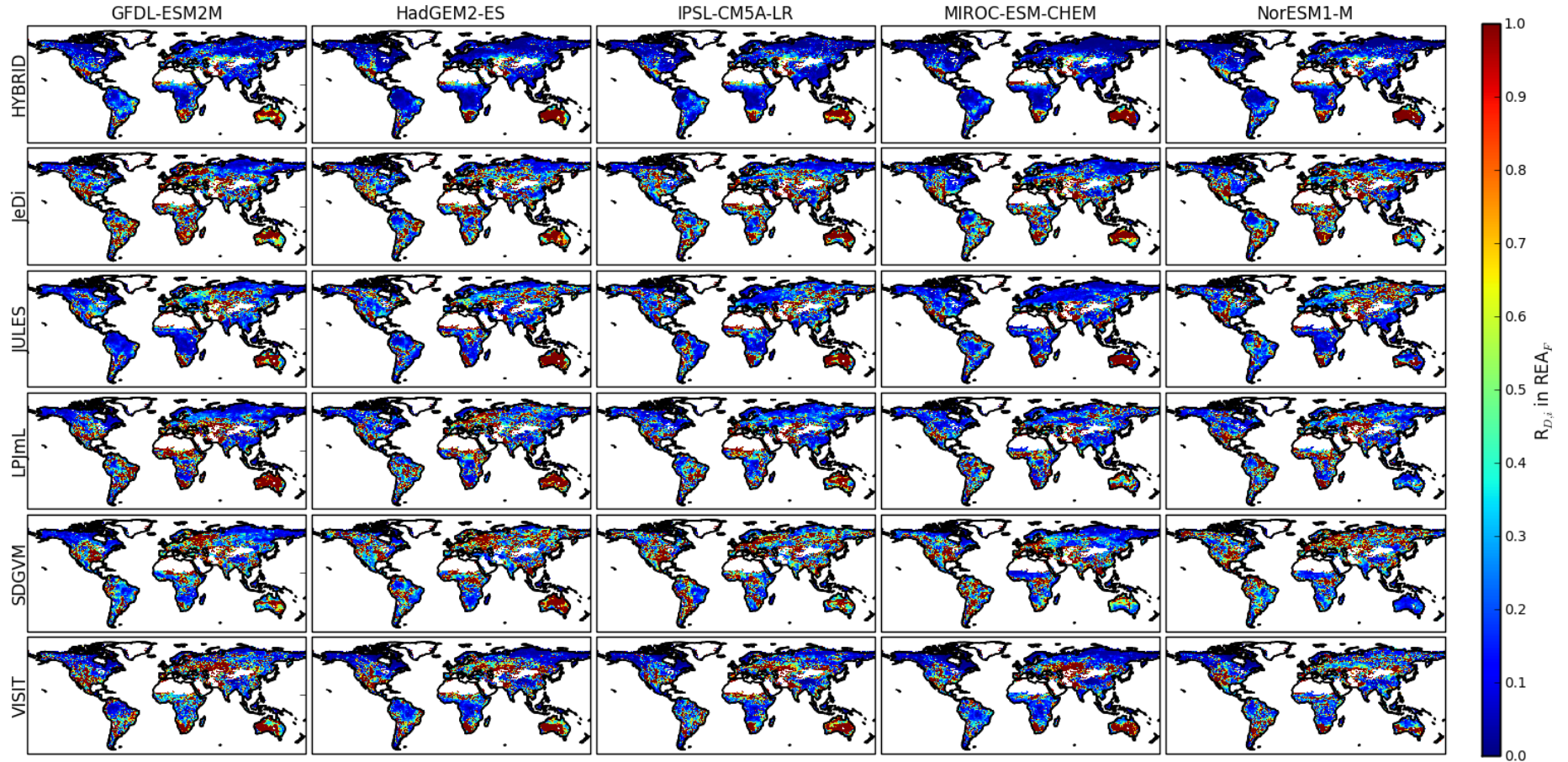
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41 Figure S8. Performance based model weight $R_{B,i}$ assigned to each model in REA_F .

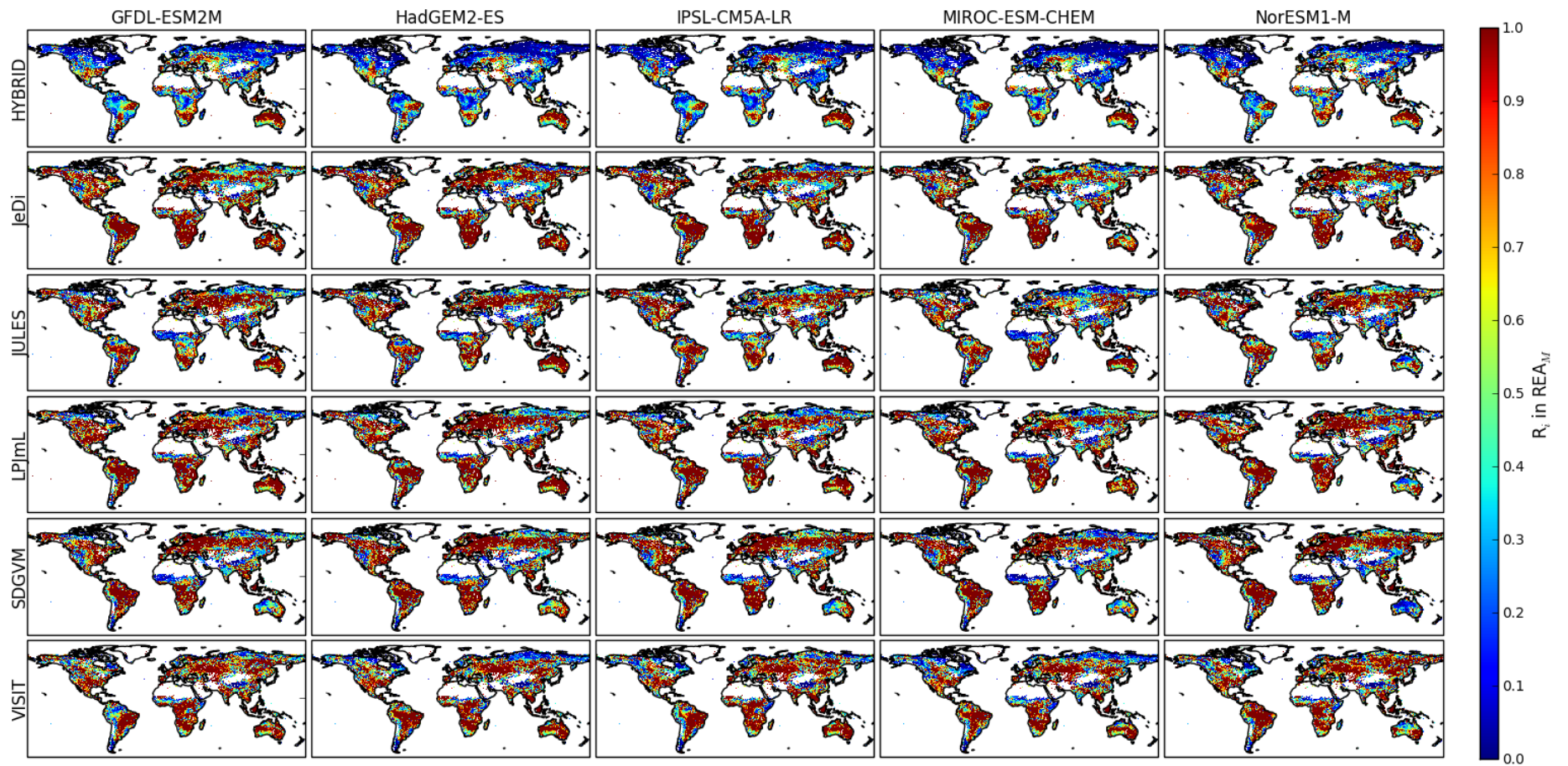
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44 Figure S9. Convergence based weight $R_{D,i}$ assigned to each model in REA_F .

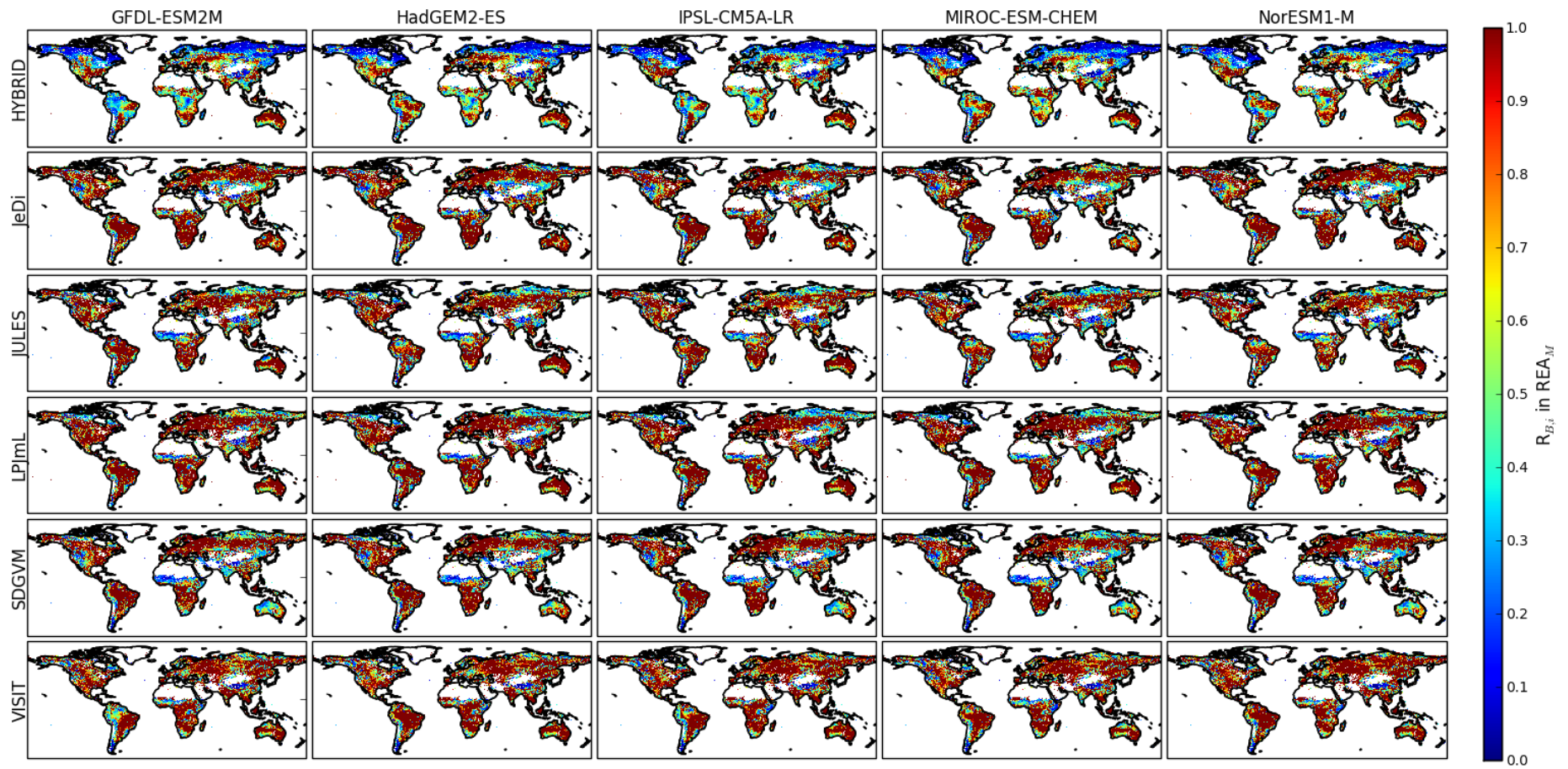
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48 Figure S10. Models weights R_i assigned to each model in the REA_M.

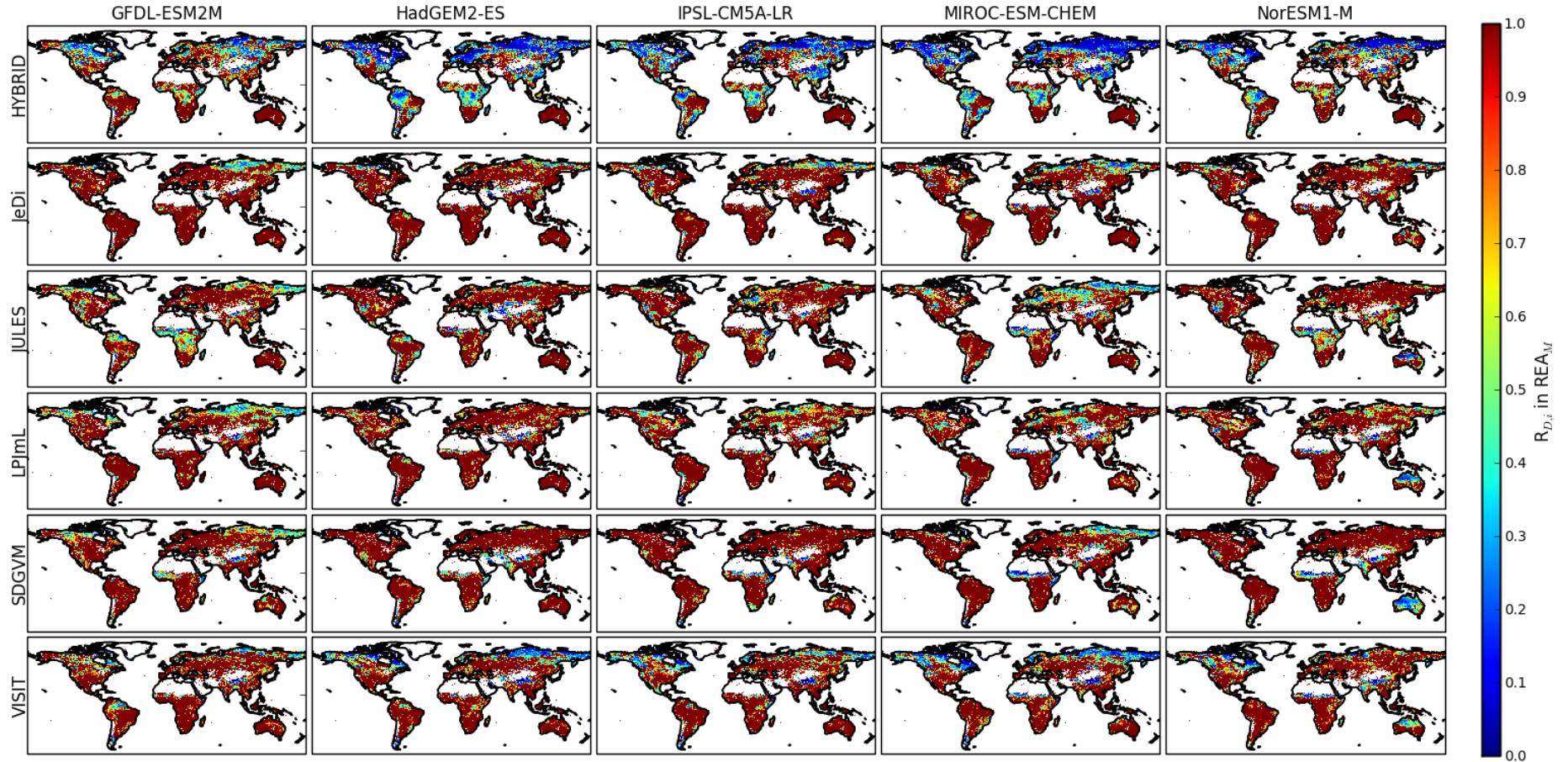
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52 Figure S11. Performance based model weight $R_{B,i}$ assigned to each model in REA_M .

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55 Figure S12. Convergence based weight $R_{D,i}$ assigned to each model in REA_M .

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