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Supplemental Information

2 **Ensemble streamflow prediction considering the influence of**
3 **reservoirs in India**

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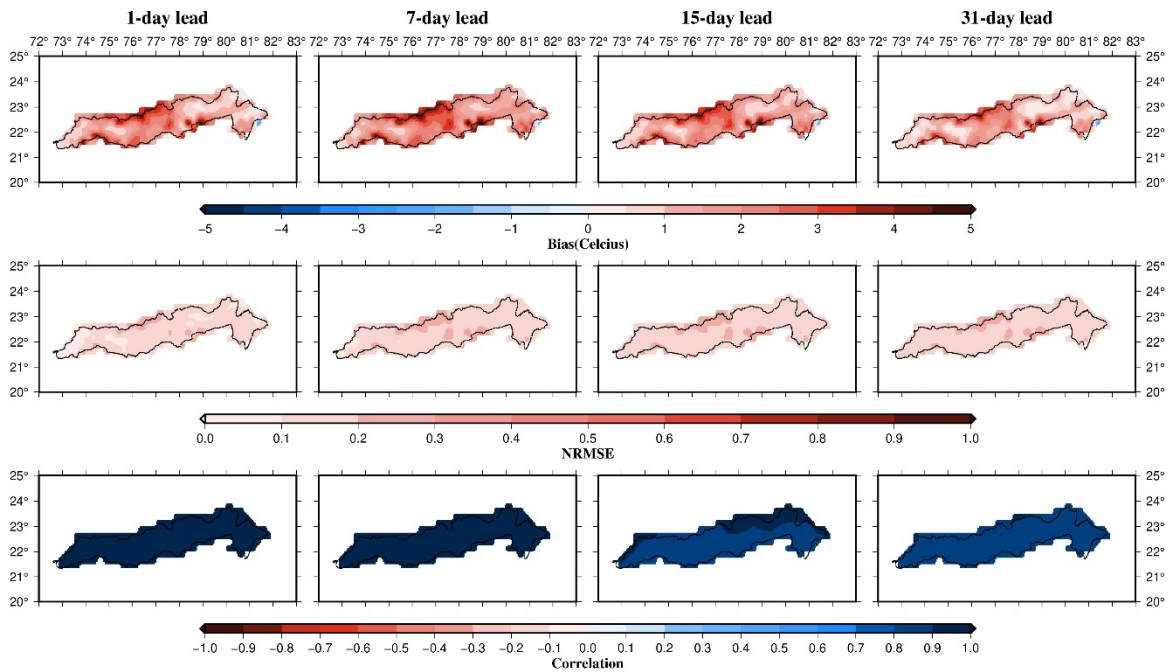
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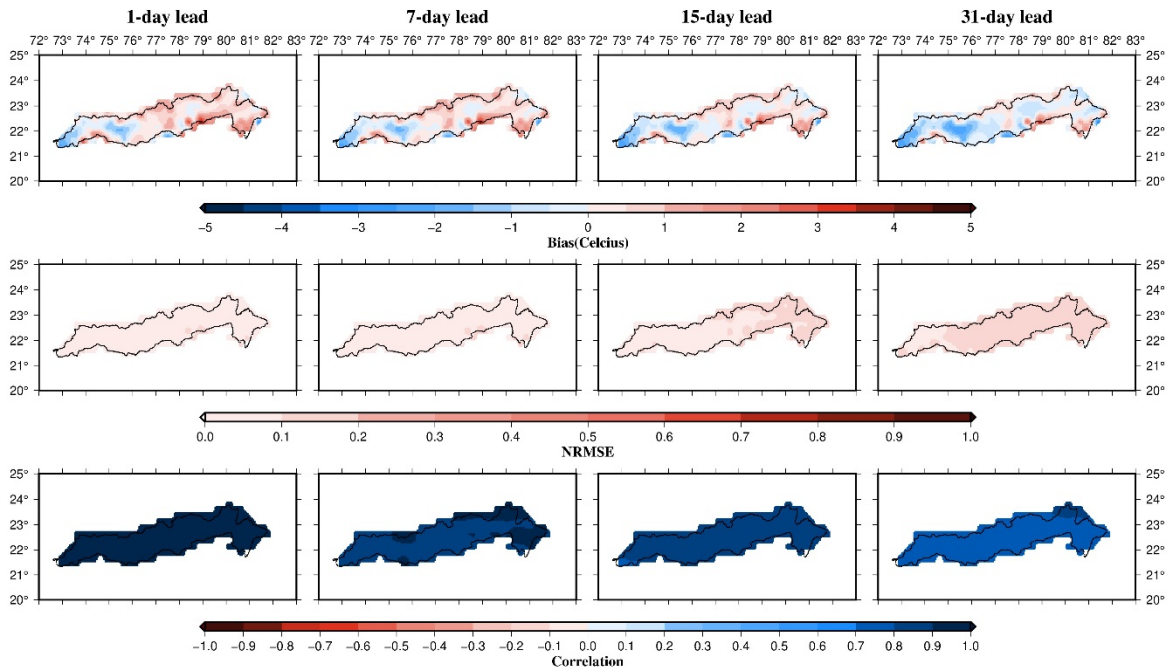


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11 Fig. S1 - Evaluation of ERFS meteorological forecast minimum temperature data for
12 period of 2003-2018. The median of all members' skill at a grid is represented.

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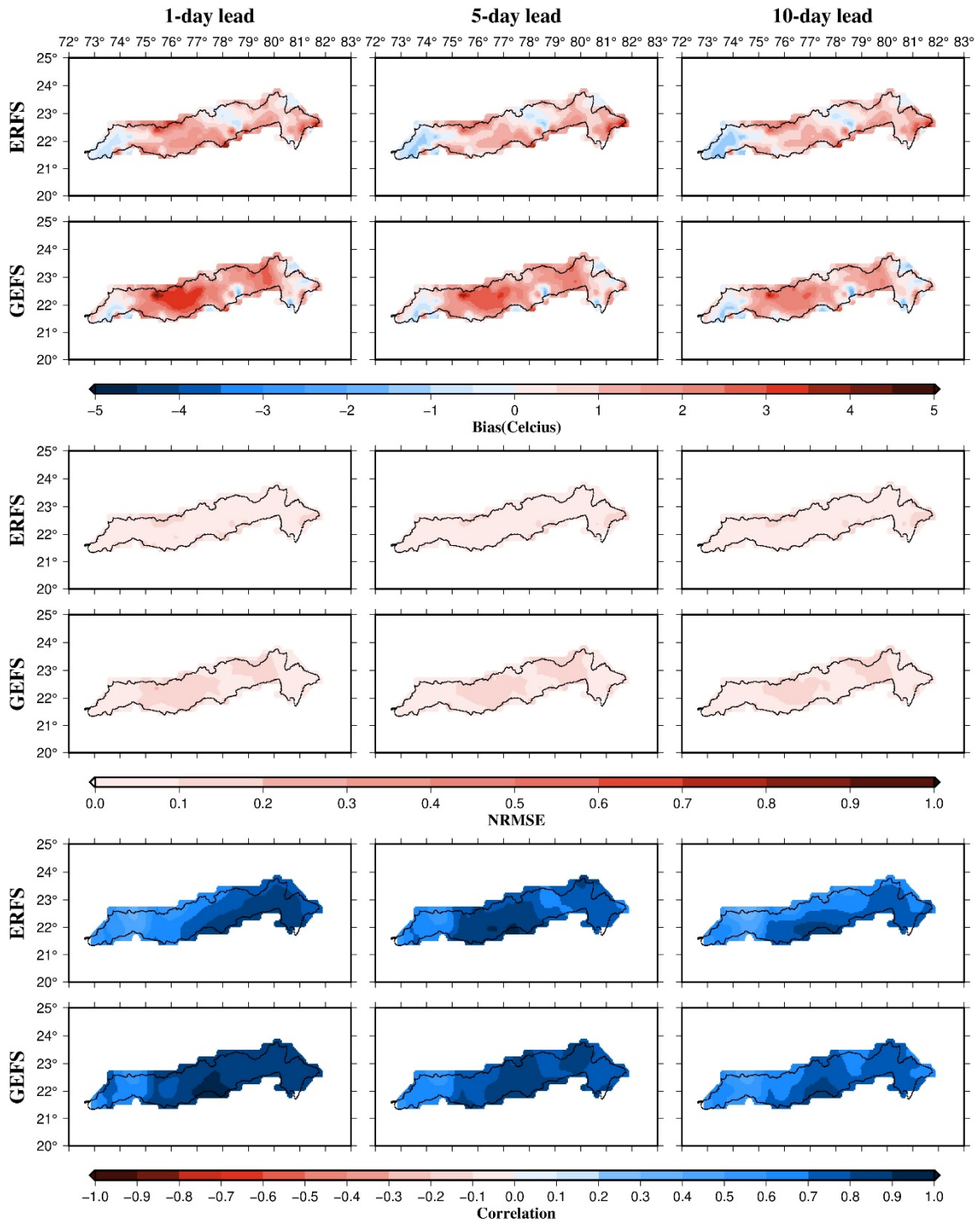
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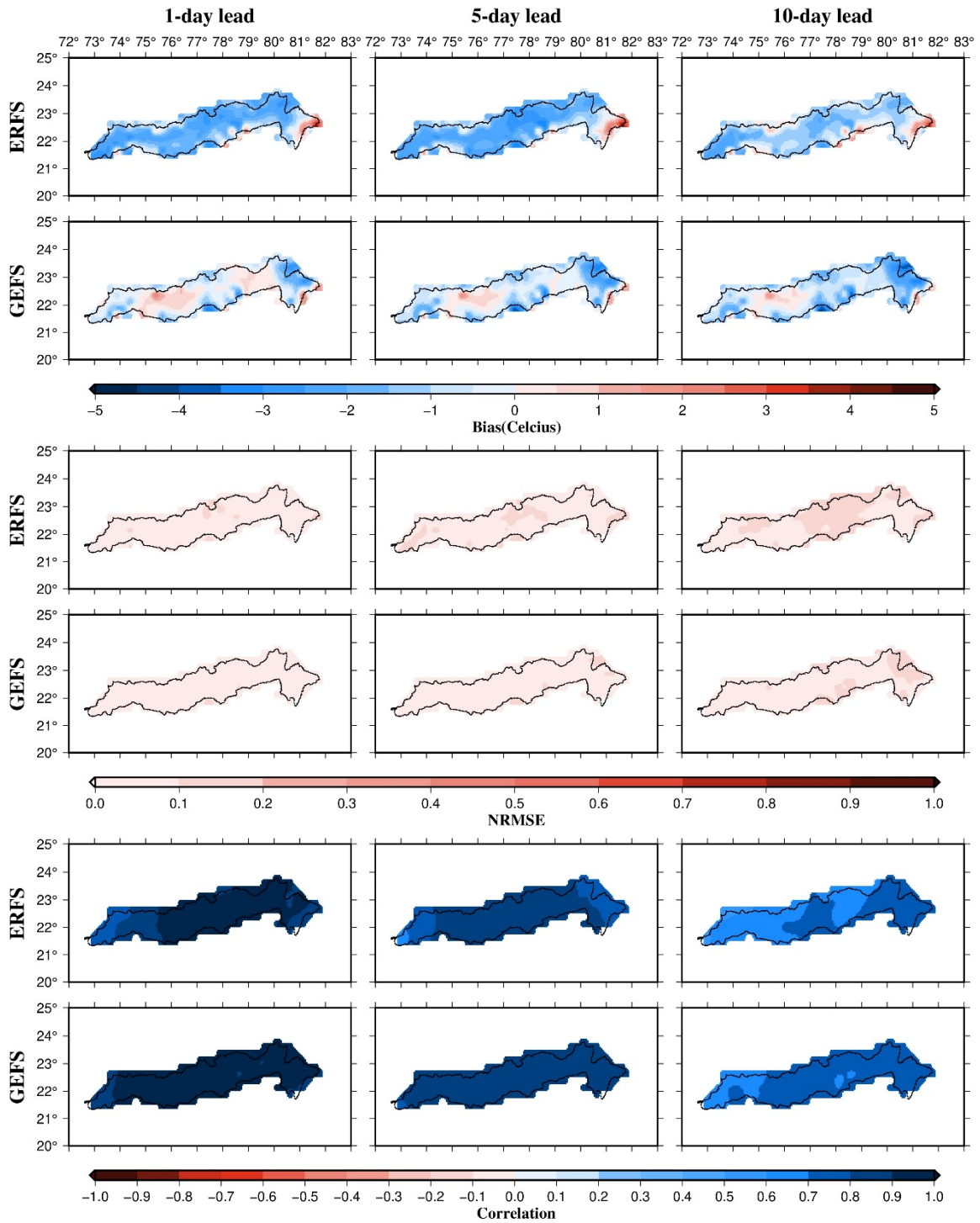
16 Fig. S2 - Evaluation of ERFs meteorological forecast maximum temperature data for
17 period of 2003-2018. The median of all members' skill at a grid is represented.

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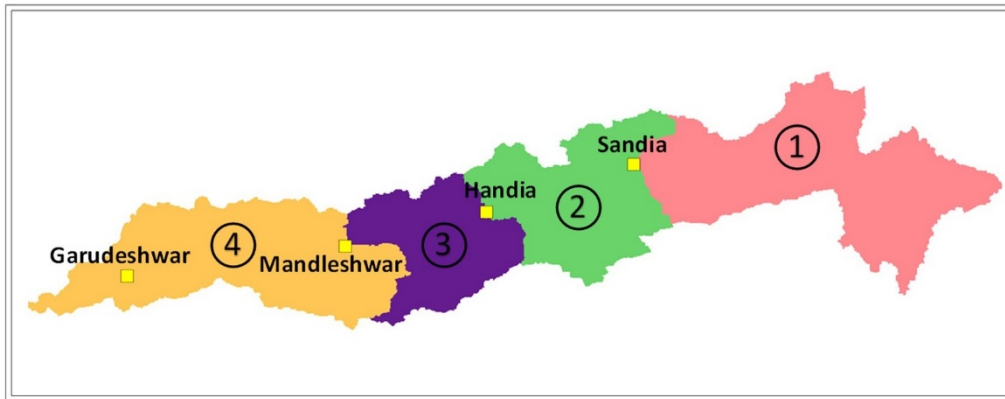
20 Fig. S3 - Evaluation & comparison of ERFS and GEFS meteorological forecast minimum
 21 temperature data for summer monsoon period of 2019-2020. The median of all members'
 22 skill at a grid is represented.



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24 Fig. S4 - Evaluation & comparison of ERFS and GEFS meteorological forecast maximum
 25 temperature data for summer monsoon period of 2019-2020. The median of all members'
 26 skill at a grid is represented.

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Parameter	1	2	3	4
b_{inf}	0.18	0.26	0.15	0.89
D_s	0.91	0.94	0.34	0.29
D_{smax}	0.01	1.2	3.49	11.65
W_s	0.58	0.74	0.01	0.01
d1	0.05	0.24	0.12	0.05
d2	0.46	0.79	1.31	0.1
d3	0.14	0.1	0.11	0.1

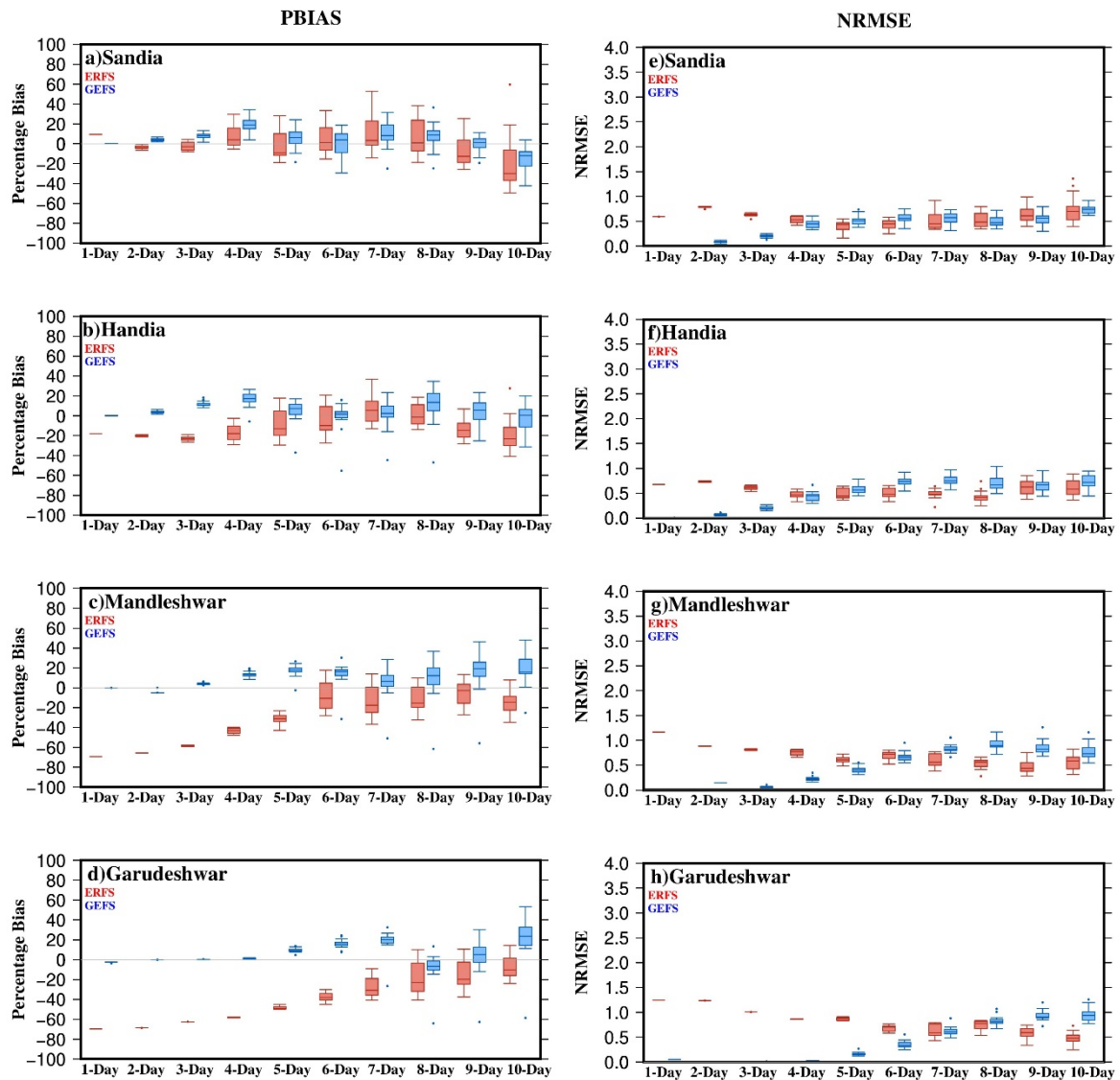
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30 Fig. S5 – VIC-Res calibration parameters in the respective upstream region of each

31 station.

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35 Fig. S6 - Comparison of PBIAS & NRMSE of high flows (>75th percentile) simulated
 36 using ERF5 and GEFS dataset members for 2019-2020. Due to the unavailability of
 37 observed streamflow data, we used daily streamflow simulated by the VIC-Res model
 38 using IMD forcing as input.

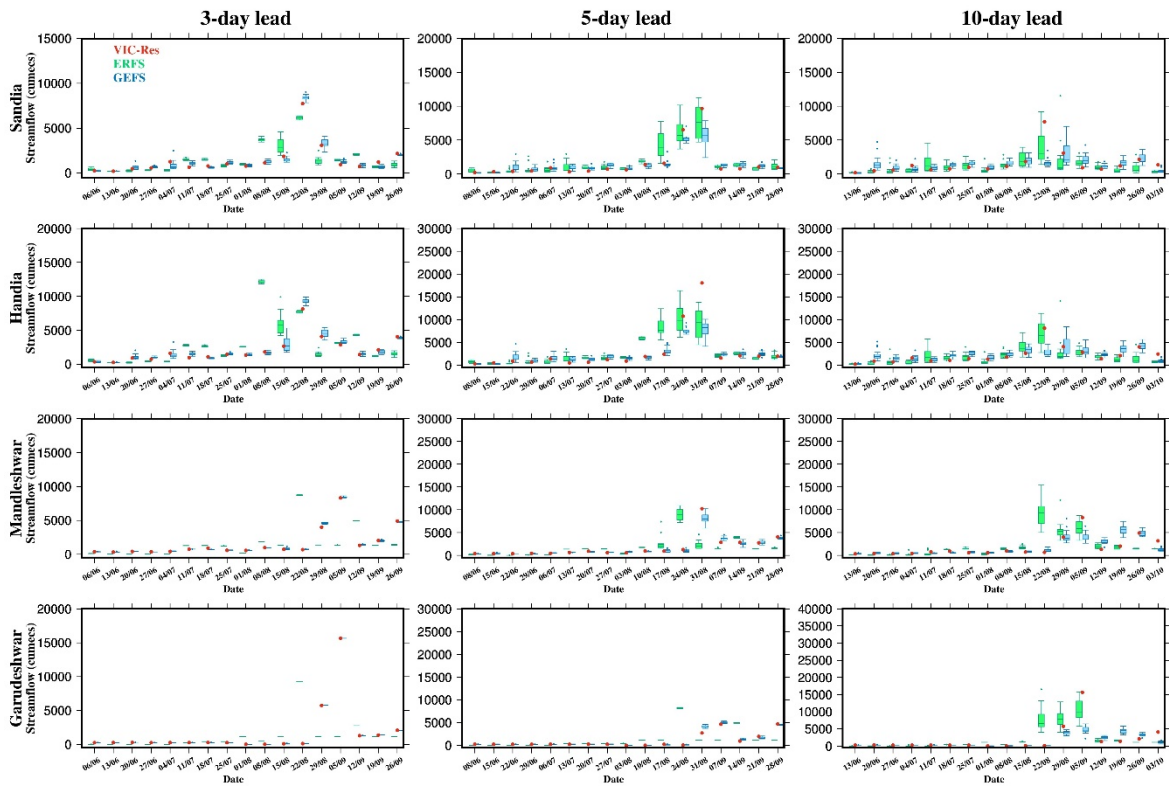
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45 Fig. S7 – Box & whisker plot comparing streamflow simulated from ERF5 and GEFS
46 meteorological forecast against VIC-Res simulated streamflow at 3-day, 5-day and 10-day
47 leads from weekly forecast dates of 2020 monsoon.