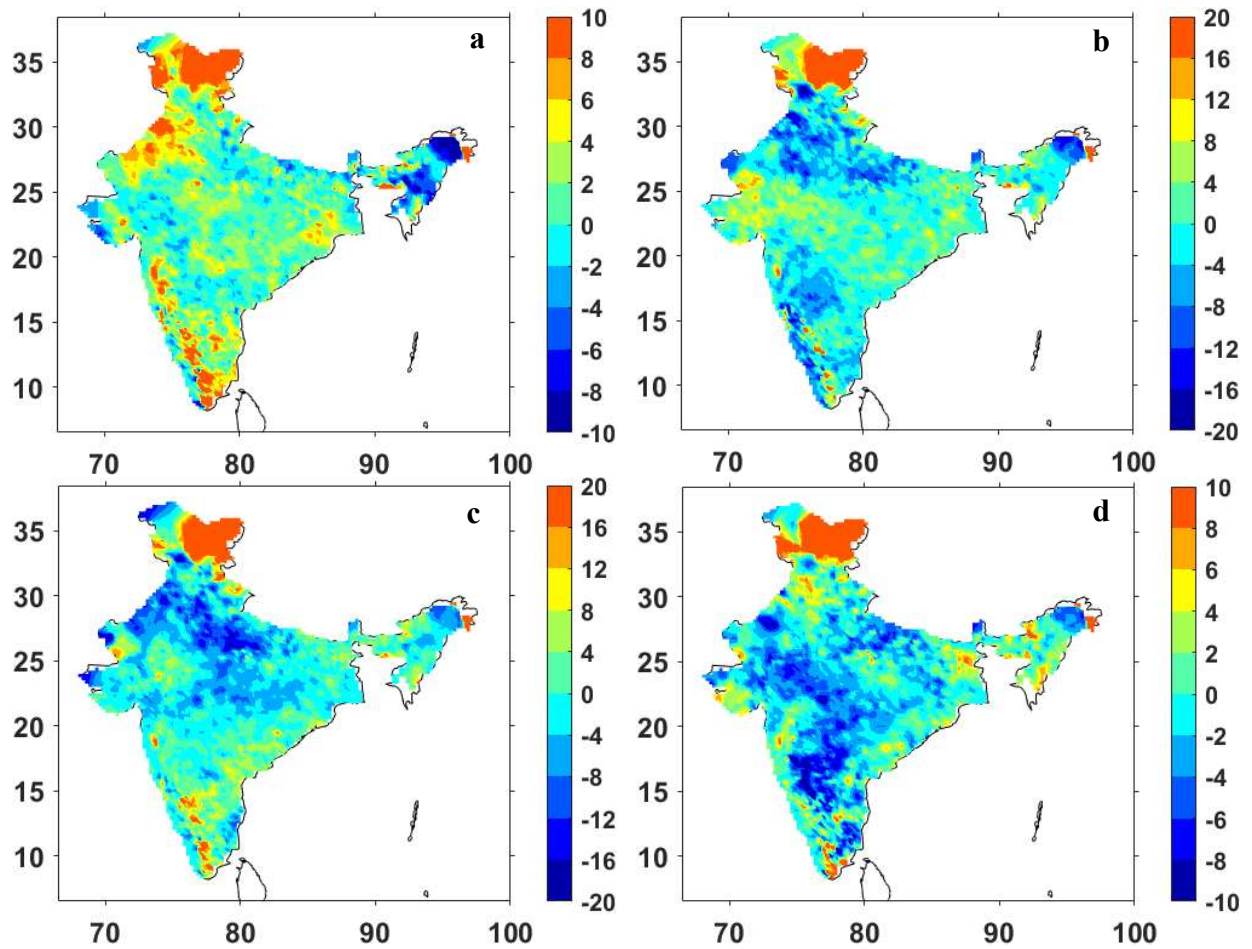
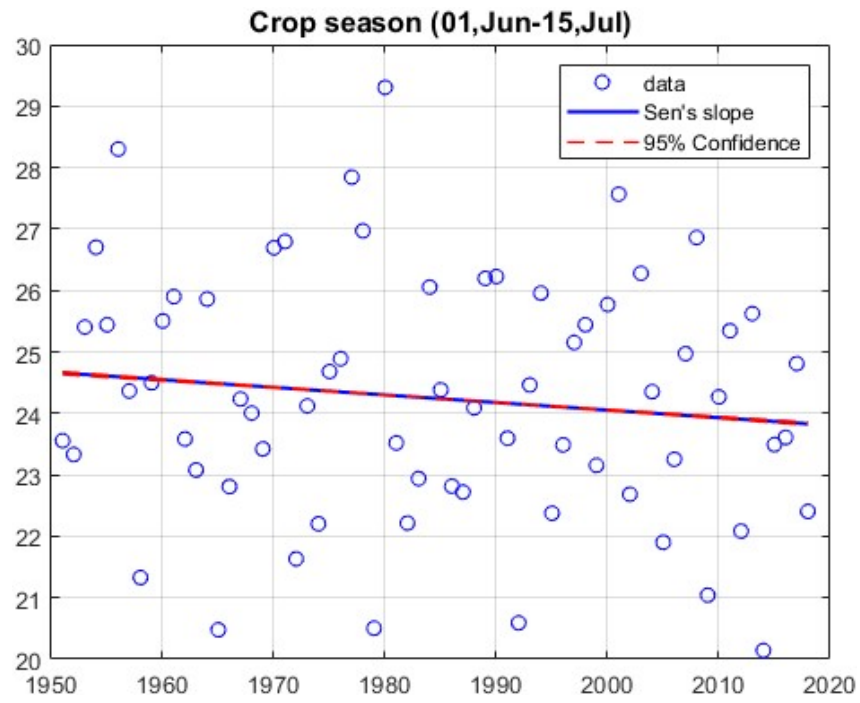


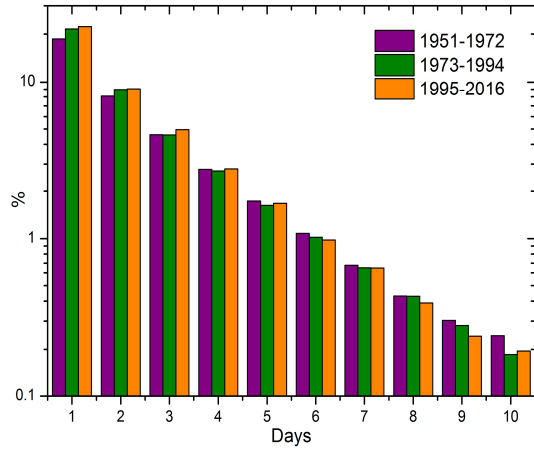
**Fig. S1.** MK test for the number of rainy days (rainfall  $\geq 2.5$ mm) over 5 homogeneous regions of India. The Blue line shows the trend, while red dotted lines show confidence at 95% significance level here and in the rest of the figures. On each panel prefix, “E” means, data considered from 1951 to 1984, while prefix “L” means, data consideration from 1985 to 2018 in this figure and the following figures. The same nomenclature is followed in all the figures.



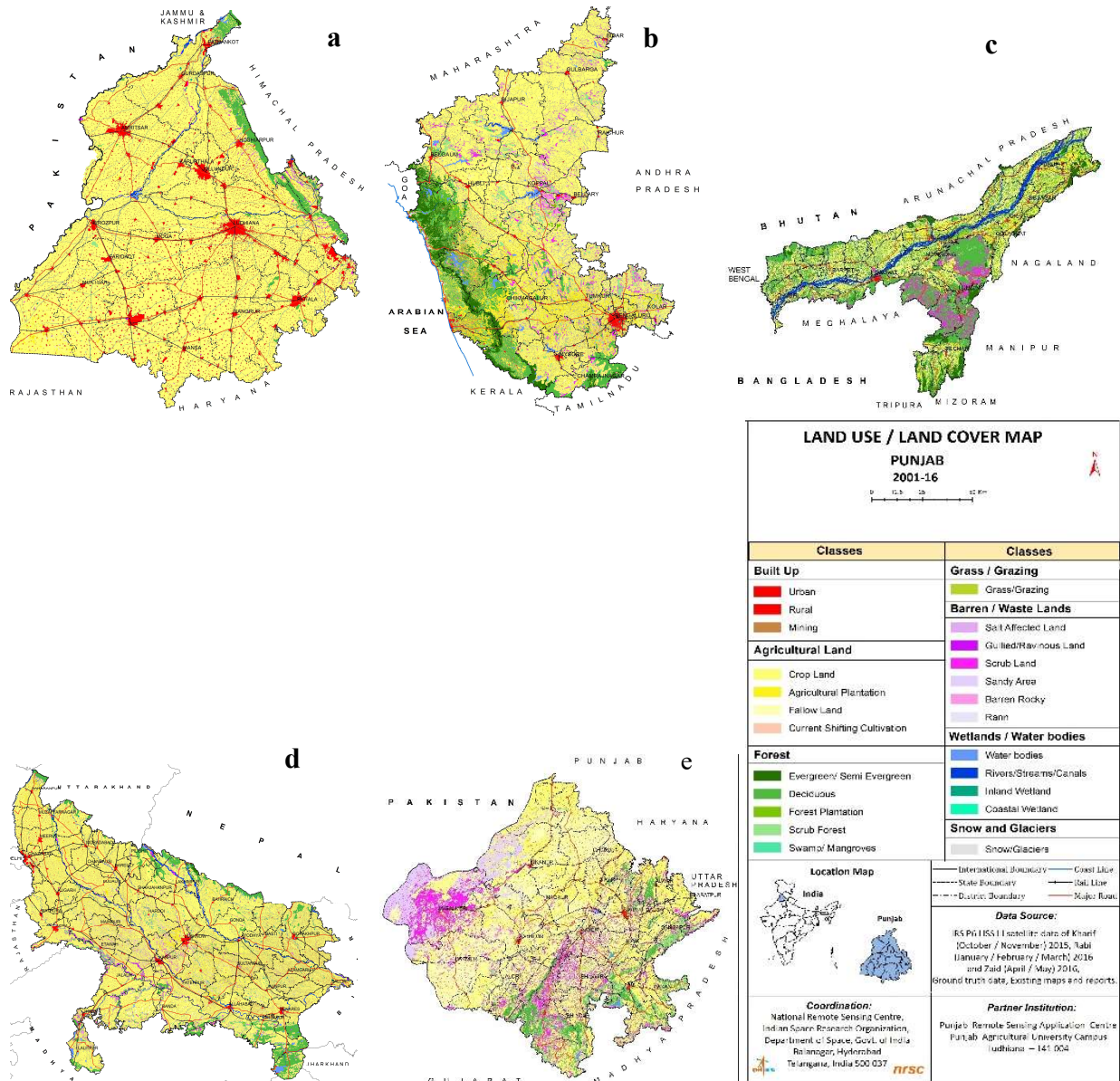
**Fig. S2.** Difference in the rainfall fraction between two periods 1951-1984 and 1985-2018 (a) June, (b) July, (c) August, (d) September.



**Fig. S3.** MK test for continuous rain days over India from June 1 to July 15 during 1951-2018.



**Fig. S4.** Rainfall contribution to monsoon season (JJAS) in percentage from the number of continuous rainfall days from IMD rainfall for almost average of two-decades over Central India.



**Fig. S5.** Land Cover and Land Use (2015-16) for (a) Punjab, (b) Karnataka, (c) Assam, (d) Uttar Pradesh, (e) Rajasthan states of India. Figures were plotted online from <https://bhuvan-app1.nrsc.gov.in/thematic/thematic/index.php#>