

SUPPLEMENTARY INFORMATION
Skilful forecasting of global fire activity using
seasonal climate predictions

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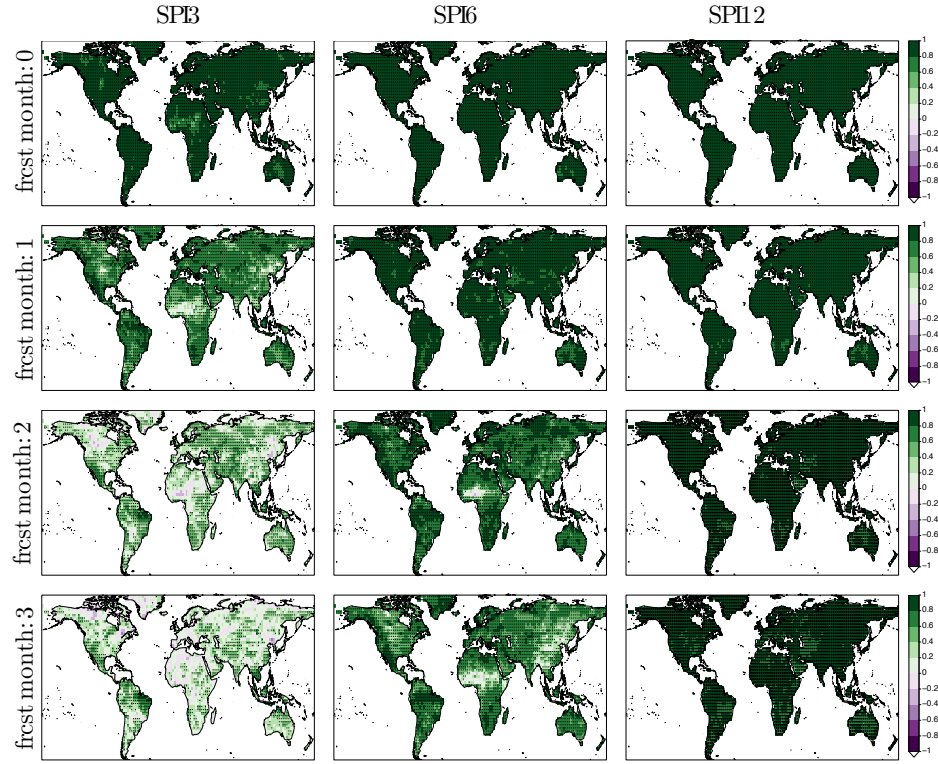
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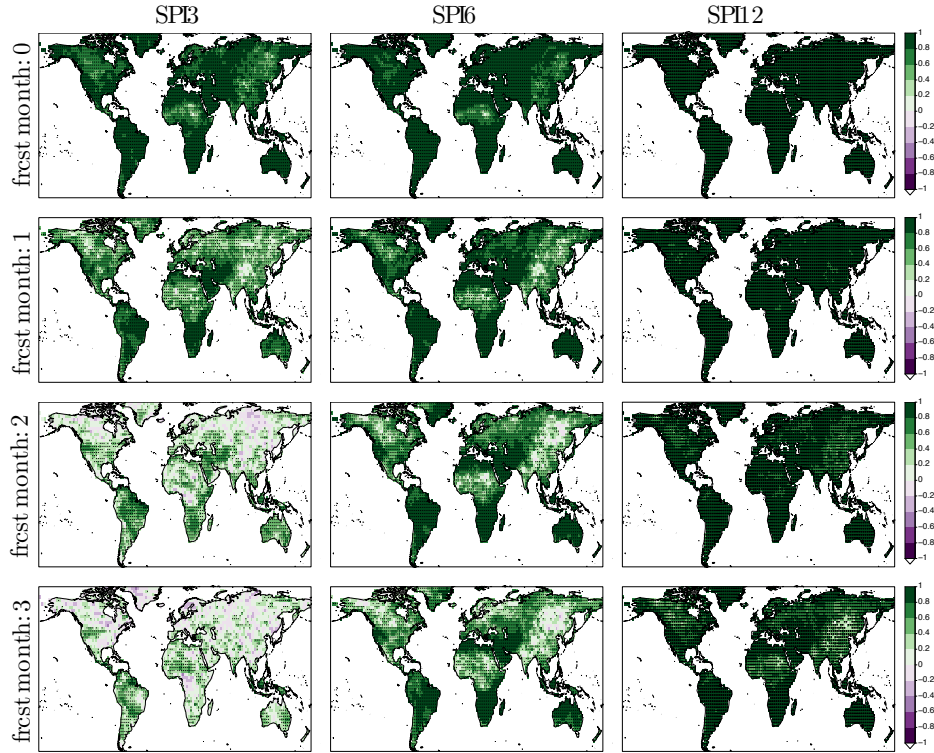
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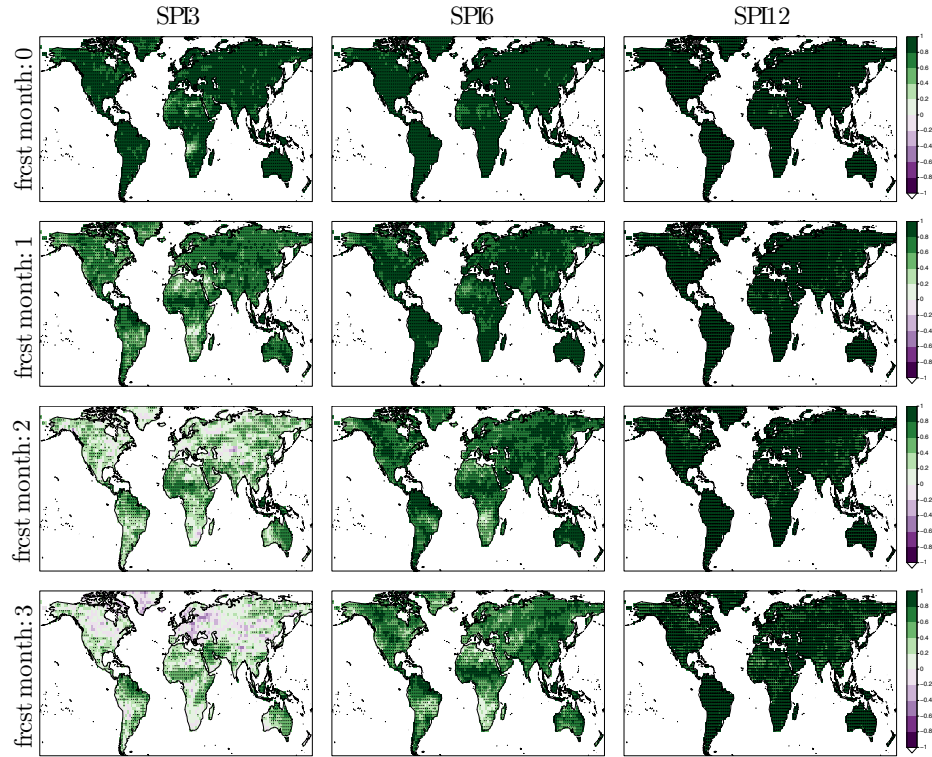
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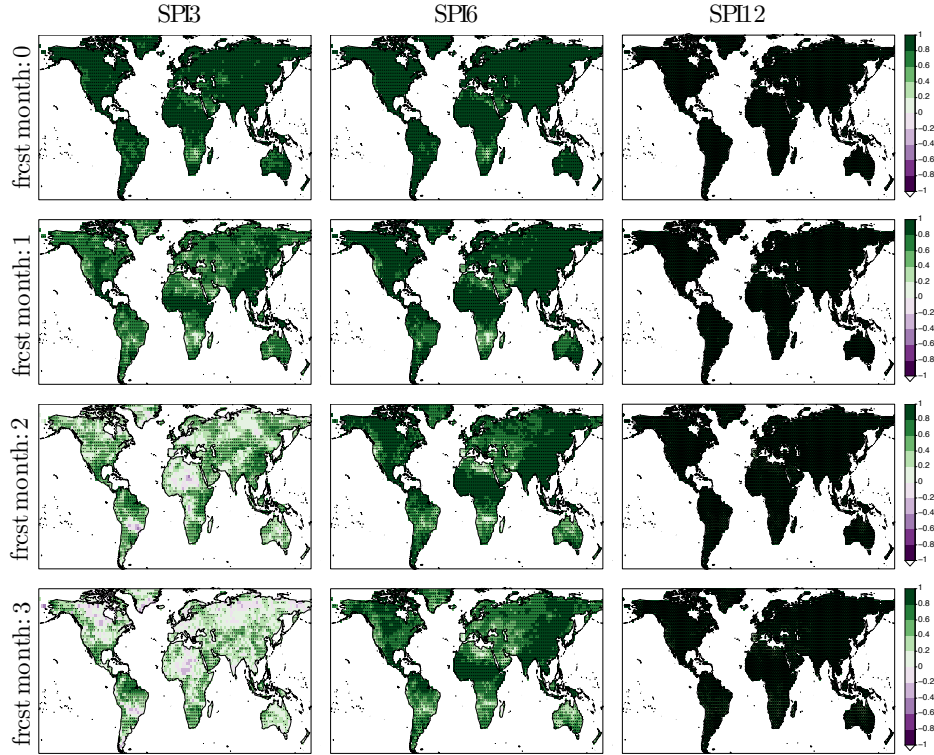
Supplementary Figure 1: Correlation of BESTENS forecasts wrt observed SPI for different forecast months (from 0 to +3) and different accumulation time scales (3, 6 and 12) over the period 1981-2016. The forecasts are initialized in February. Black circles indicate correlations that are significant (pvalue < 0.05).



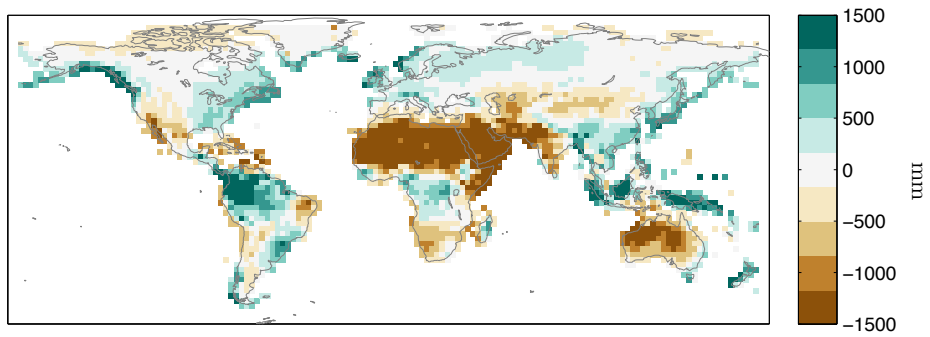
Supplementary Figure 2: Correlation of BESTENS forecasts wrt observed SPI for different forecast months (from 0 to +3) and different accumulation time scales (3, 6 and 12) over the period 1981-2015. The forecasts are initialized in May. Black circles indicate correlations that are significant (pvalue < 0.05).



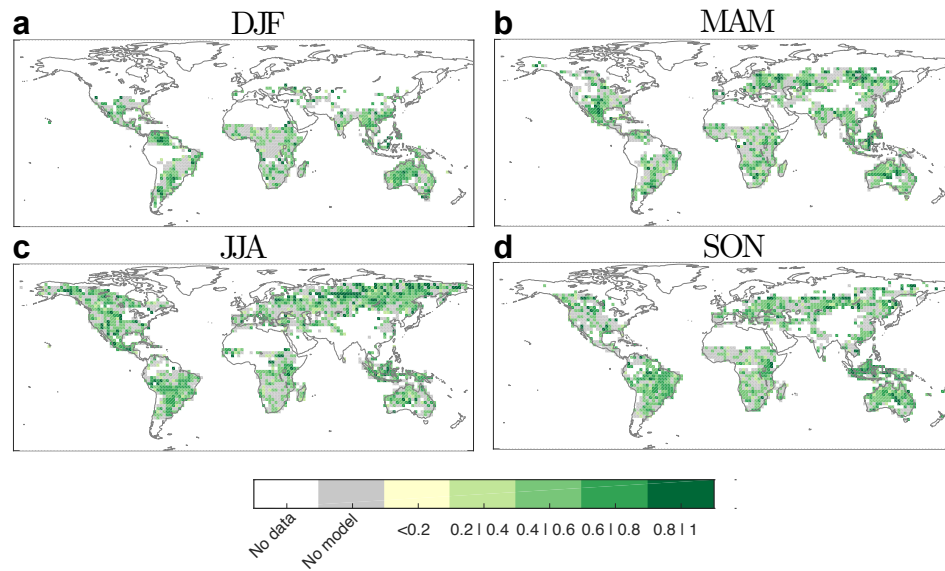
Supplementary Figure 3: Correlation of BESTENS forecasts wrt observed SPI for different forecast months (from 0 to +3) and different accumulation time scales (3, 6 and 12) over the period 1981-2015. The forecasts are initialized in August. Black circles indicate correlations that are significant (pvalue < 0.05).



Supplementary Figure 4: Correlation of BESTENS forecasts wrt observed SPI for different forecast months (from 0 to +3) and different accumulation time scales (3, 6 and 12) over the period 1981-2016. The forecasts are initialized in November. Black circles indicate correlations that are significant (pvalue < 0.05).



Supplementary Figure 5: Spatial distribution of the average annual water balance (precipitation minus potential evapotranspiration) for the period June 1995 - May 2016.



Supplementary Figure 6: Skill of BA predictions obtained using observed climate without detrending the data. Correlations of out-of-sample BA predictions using the SPI-BA model with observed data for (a) December-January-February (DJF), (b) March-April-May, (c) June-July-August (JJA) and (d) September-October-November (SON). Only correlations that are significant (p -value < 0.05) are shown.