Supplementary material for: A high-resolution spatial assessment of the impacts of drought variability on vegetation activity in Spain from 1981 to 2015

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Supplementary Figure 1: Density plots summarizing the maximum correlations found between the sNDVI and the SPEI (January-March). Vertical dashed line represents the threshold for significant correlations (p < 0.05).



Supplementary Figure 2: Density plots summarizing the maximum correlations found between the sNDVI and the SPEI (April-June). Vertical dashed line represents the threshold for significant correlations (p < 0.05).



Supplementary Figure 3: Density plots summarizing the maximum correlations found between the sNDVI and the SPEI (July-September). Vertical dashed line represents the threshold for significant correlations (p < 0.05).



Supplementary Figure 4: Density plots summarizing the maximum correlations found between the sNDVI and the SPEI (October-December). Vertical dashed line represents the threshold for significant correlations (p < 0.05).



Supplementary Figure 5: Density plots showing the SPEI time scale at which the maximum correlation between sNDVI and SPEI is recorded for the different 24 semi-monthly periods.



Supplementary Figure 6: Boxplots showing the maximum sNDVI vs. SPEI correlation as a function of the different SPEI time-scales.



Supplementary Figure 7: Boxplots showing the maximum sNDVI vs. SPEI correlation as a function of the different SPEI time-scales. Non-irrigated arable lands



Supplementary Figure 8: Boxplots showing the maximum sNDVI vs. SPEI correlation as a function of the different SPEI time-scales. Irrigated lands



Supplementary Figure 9: Boxplots showing the maximum sNDVI vs. SPEI correlation as a function of the different SPEI time-scales. Vineyards



Supplementary Figure 10: Boxplots showing the maximum sNDVI vs. SPEI correlation as a function of the different SPEI time-scales. Olive groves.



Supplementary Figure 11: Boxplots showing the maximum sNDVI vs. SPEI correlation as a function of the different SPEI time-scales. Mixed agriculture/natural vegetation



Supplementary Figure 12: Boxplots showing the maximum sNDVI vs. SPEI correlation as a function of the different SPEI time-scales. Broad-leaved forests



Supplementary Figure 13: Boxplots showing the maximum sNDVI vs. SPEI correlation as a function of the different SPEI time-scales. Coniferous forests



Supplementary Figure 14: Boxplots showing the maximum sNDVI vs. SPEI correlation as a function of the different SPEI time-scales. Mixed forests



Supplementary Figure 15: Boxplots showing the maximum sNDVI vs. SPEI correlation as a function of the different SPEI time-scales. Natural grassland



Supplementary Figure 16: Boxplots showing the maximum sNDVI vs. SPEI correlation as a function of the different SPEI time-scales. Sclerophillous vegetation



Supplementary Figure 17: Boxplots showing the maximum sNDVI vs. SPEI correlation as a function of the different SPEI time-scales. Transition wood-scrub.

	Negative	Negative	Positive (p	Positive (p
	(p < 0.05)	(p > 0.05)	> 0.05)	< 0.05)
1st Jan	0.1	7.9	47.1	44.9
2nd Jan	0.5	7.8	43.6	48.2
1st Feb	0.2	7.3	43.2	49.3
2sd Feb	0.0	6.1	45.2	48.6
1st Mar	0.0	9.5	48.2	42.2
2sd Mar	0.3	13.0	44.0	42.7
1st Apr	0.0	8.6	35.5	55.9
2sd Apr	0.0	4.7	25.3	69.9
1st May	0.0	1.0	13.7	85.3
2sd May	0.0	0.3	7.2	92.5
1st Jun	0.0	0.1	2.4	97.5
2sd Jun	0.0	0.0	1.3	98.7
1st Jul	0.0	0.0	1.8	98.2
2sd Jul	0.0	0.0	2.3	97.7
1st Aug	0.0	0.0	3.5	96.4
2sd Aug	0.0	0.1	5.6	94.2
1st Sep	0.0	0.2	9.7	90.1
2sd Sep	0.0	0.2	12.7	87.1
1st Oct	0.0	0.5	22.0	77.5
2sd Oct	0.0	1.1	35.9	63.1
1st Nov	0.0	3.1	42.7	54.2
2sd Nov	0.0	3.5	48.5	47.9
1st Dec	0.0	1.9	40.6	57.5
2sd Dec	0.0	4.1	45.8	50.1

Supplementary Table 1: Percentage of the total surface area in Spain showing positive or negative, significant or non-significant Pearson's r correlations between the sNDVI and the SPEI. Non-irrigated arable lands.

	Negative	Negative	Positive (p	Positive (p
	(p < 0.05)	(p > 0.05)	> 0.05)	< 0.05)
1st Jan	0.0	4.0	32.5	63.5
2nd Jan	0.2	5.1	28.0	66.7
1st Feb	0.3	4.4	27.1	68.2
2sd Feb	0.1	2.8	26.1	71.0
1st Mar	0.0	3.3	31.7	65.0
2sd Mar	0.0	4.4	32.8	62.8
1st Apr	0.0	3.5	30.7	65.8
2sd Apr	0.0	3.0	26.3	70.7
1st May	0.0	2.6	24.7	72.7
2sd May	0.0	1.6	16.9	81.5
1st Jun	0.0	1.0	14.4	84.7
2sd Jun	0.0	0.3	11.0	88.7
1st Jul	0.0	0.3	12.0	87.6
2sd Jul	0.0	0.1	9.8	90.1
1st Aug	0.0	0.2	11.6	88.2
2sd Aug	0.0	0.7	17.2	82.1
1st Sep	0.0	1.1	22.1	76.7
2sd Sep	0.0	0.5	20.8	78.7
1st Oct	0.0	0.8	25.8	73.4
2sd Oct	0.0	2.3	35.5	62.2
1st Nov	0.0	1.8	37.0	61.2
2sd Nov	0.0	2.0	40.6	57.3
1st Dec	0.0	1.1	30.6	68.3
2sd Dec	0.0	2.2	32.3	65.4

Supplementary Table 2: Percentage of the total surface area in Spain showing positive or negative, significant or non-significant Pearson's r correlations between the sNDVI and the SPEI. Irrigated lands

	Negative	Negative	Positive (p	Positive (p
	(p < 0.05)	(p > 0.05)	> 0.05)	< 0.05)
1st Jan	0.0	1.6	32.4	66.1
2nd Jan	0.0	1.2	29.3	69.4
1st Feb	0.0	1.1	35.4	63.5
2sd Feb	0.0	0.9	37.0	62.1
1st Mar	0.0	3.8	44.8	51.4
2sd Mar	0.0	6.3	41.2	52.4
1st Apr	0.0	1.0	33.1	65.9
2sd Apr	0.0	0.2	14.1	85.7
1st May	0.0	0.1	9.0	90.9
2sd May	0.0	0.1	4.4	95.5
1st Jun	0.0	0.1	5.3	94.6
2sd Jun	0.0	0.0	1.7	98.3
1st Jul	0.0	0.0	0.9	99.1
2sd Jul	0.0	0.0	0.6	99.4
1st Aug	0.0	0.0	0.8	99.2
2sd Aug	0.0	0.0	1.9	98.1
1st Sep	0.0	0.0	4.1	95.9
2sd Sep	0.0	0.0	2.7	97.3
1st Oct	0.0	0.1	5.0	94.9
2sd Oct	0.0	0.2	11.3	88.5
1st Nov	0.0	0.2	22.7	77.1
2sd Nov	0.0	0.4	40.3	59.4
1st Dec	0.0	0.5	40.1	59.3
2sd Dec	0.0	1.8	45.3	52.9

Supplementary Table 3: Percentage of the total surface area in Spain showing positive or negative, significant or non-significant Pearson's r correlations between the sNDVI and the SPEI. Vineyards

	Negative	Negative	Positive (p	Positive (p
	(p < 0.05)	(p > 0.05)	> 0.05)	< 0.05)
1st Jan	0.0	2.9	43.1	54.0
2nd Jan	0.0	1.6	36.4	61.9
1st Feb	0.0	1.5	31.7	66.8
2sd Feb	0.0	0.6	24.2	75.2
1st Mar	0.0	1.5	28.0	70.5
2sd Mar	0.0	1.5	23.0	75.5
1st Apr	0.0	0.6	11.9	87.5
2sd Apr	0.0	0.2	5.7	94.2
1st May	0.0	0.1	4.6	95.3
2sd May	0.0	0.0	1.2	98.8
1st Jun	0.0	0.0	0.9	99.1
2sd Jun	0.0	0.0	1.7	98.3
1st Jul	0.0	0.0	2.7	97.3
2sd Jul	0.0	0.0	2.6	97.4
1st Aug	0.0	0.0	4.7	95.2
2sd Aug	0.0	0.1	10.9	89.1
1st Sep	0.0	0.1	20.2	79.7
2sd Sep	0.0	0.0	12.6	87.4
1st Oct	0.0	0.0	4.5	95.5
2sd Oct	0.0	0.1	6.8	93.1
1st Nov	0.0	0.2	16.4	83.4
2sd Nov	0.0	0.5	31.2	68.3
1st Dec	0.0	0.5	23.4	76.1
2sd Dec	0.0	1.8	39.6	58.6

Supplementary Table 4: Percentage of the total surface area in Spain showing positive or negative, significant or non-significant Pearson's r correlations between the sNDVI and the SPEI. Olive groves.

	Negative	Negative	Positive (p	Positive (p
	(p < 0.05)	(p > 0.05)	> 0.05)	< 0.05)
1st Jan	0.0	7.7	39.1	53.1
2nd Jan	0.0	5.7	39.7	54.6
1st Feb	0.0	5.6	39.0	55.3
2sd Feb	0.0	6.6	37.4	55.9
1st Mar	0.0	6.9	38.7	54.4
2sd Mar	0.1	12.3	34.4	53.1
1st Apr	0.0	9.6	34.1	56.3
2sd Apr	0.0	4.0	28.9	67.0
1st May	0.0	0.9	20.5	78.5
2sd May	0.0	0.8	15.8	83.4
1st Jun	0.0	1.6	15.1	83.3
2sd Jun	0.0	0.6	9.5	89.9
1st Jul	0.0	0.1	5.4	94.5
2sd Jul	0.0	0.0	4.2	95.8
1st Aug	0.0	0.0	5.4	94.6
2sd Aug	0.0	0.1	8.8	91.1
1st Sep	0.0	0.6	9.4	89.9
2sd Sep	0.0	0.4	15.6	83.9
1st Oct	0.0	1.0	26.4	72.5
2sd Oct	0.0	1.3	32.1	66.6
1st Nov	0.0	4.5	37.6	57.9
2sd Nov	0.0	4.9	42.2	52.9
1st Dec	0.0	4.1	41.0	54.9
2sd Dec	0.0	4.1	39.9	56.0

Supplementary Table 5: Percentage of the total surface area in Spain showing positive or negative, significant or non-significant Pearson's r correlations between the sNDVI and the SPEI. Mixed agriculture/natural vegetation

	Negative	Negative	Positive (p	Positive (p
	(p < 0.05)	(p > 0.05)	> 0.05)	< 0.05)
1st Jan	0.2	15.9	45.5	38.4
2nd Jan	0.2	12.3	49.5	38.0
1st Feb	0.2	11.3	47.5	41.0
2sd Feb	0.1	13.2	44.3	42.3
1st Mar	0.1	13.6	46.7	39.7
2sd Mar	0.2	17.9	41.8	40.1
1st Apr	0.0	12.6	45.3	42.0
2sd Apr	0.0	5.8	42.5	51.7
1st May	0.0	3.3	33.1	63.5
2sd May	0.0	2.6	29.1	68.3
1st Jun	0.0	4.7	25.2	70.2
2sd Jun	0.0	1.9	18.9	79.2
1st Jul	0.0	1.0	13.5	85.5
2sd Jul	0.0	0.2	11.5	88.4
1st Aug	0.0	0.1	14.1	85.8
2sd Aug	0.0	0.4	21.0	78.6
1st Sep	0.0	1.6	20.9	77.5
2sd Sep	0.0	1.7	28.9	69.5
1st Oct	0.0	4.4	37.2	58.3
2sd Oct	0.0	2.9	39.2	57.9
1st Nov	0.0	7.0	43.6	49.4
2sd Nov	0.0	8.1	47.7	44.2
1st Dec	0.0	9.0	46.0	45.0
2sd Dec	0.1	8.8	51.0	40.1

Supplementary Table 6: Percentage of the total surface area in Spain showing positive or negative, significant or non-significant Pearson's r correlations between the sNDVI and the SPEI. Broad-leaved forests

	Negative	Negative	Positive (p	Positive (p
	(p < 0.05)	(p > 0.05)	> 0.05)	< 0.05)
1st Jan	0.4	15.9	46.0	37.7
2nd Jan	0.6	15.1	47.0	37.3
1st Feb	0.3	11.3	45.2	43.3
2sd Feb	0.2	12.1	45.5	42.2
1st Mar	0.3	14.2	51.1	34.5
2sd Mar	0.2	14.0	48.4	37.3
1st Apr	0.0	10.2	48.7	41.1
2sd Apr	0.0	4.8	42.2	53.0
1st May	0.0	2.9	32.7	64.4
2sd May	0.0	1.4	27.2	71.4
1st Jun	0.0	1.5	19.9	78.6
2sd Jun	0.0	0.8	13.6	85.6
1st Jul	0.0	0.3	9.6	90.0
2sd Jul	0.0	0.1	7.2	92.7
1st Aug	0.0	0.1	8.2	91.7
2sd Aug	0.0	0.5	20.3	79.2
1st Sep	0.0	1.6	26.4	72.0
2sd Sep	0.0	0.9	31.3	67.8
1st Oct	0.0	3.7	37.9	58.3
2sd Oct	0.0	5.6	42.8	51.7
1st Nov	0.1	10.8	47.3	41.8
2sd Nov	0.1	9.5	51.2	39.2
1st Dec	0.1	9.5	48.0	42.3
2sd Dec	0.3	10.8	49.2	39.8

Supplementary Table 7: Percentage of the total surface area in Spain showing positive or negative, significant or non-significant Pearson's r correlations between the sNDVI and the SPEI. Coniferous forests

	Negative	Negative	Positive (p	Positive (p
	(p < 0.05)	(p > 0.05)	> 0.05)	< 0.05)
1st Jan	0.9	19.6	53.6	25.9
2nd Jan	1.8	18.4	55.6	24.2
1st Feb	1.5	17.2	55.5	25.8
2sd Feb	0.1	17.8	59.8	22.2
1st Mar	0.1	16.4	62.9	20.7
2sd Mar	0.8	20.8	60.1	18.3
1st Apr	0.0	12.7	62.7	24.6
2sd Apr	0.0	5.4	50.4	44.2
1st May	0.0	3.5	39.4	57.0
2sd May	0.0	1.7	31.3	66.9
1st Jun	0.0	2.8	26.0	71.2
2sd Jun	0.0	1.9	20.5	77.6
1st Jul	0.0	0.4	14.4	85.1
2sd Jul	0.0	0.0	9.7	90.2
1st Aug	0.0	0.1	10.6	89.2
2sd Aug	0.0	0.8	21.5	77.6
1st Sep	0.0	0.9	24.8	74.3
2sd Sep	0.0	0.9	27.4	71.7
1st Oct	0.0	4.1	47.2	48.6
2sd Oct	0.0	6.0	52.8	41.2
1st Nov	0.1	13.4	47.3	39.1
2sd Nov	0.1	12.4	57.6	29.9
1st Dec	0.1	11.9	64.8	23.2
2sd Dec	0.2	13.4	61.4	25.0

Supplementary Table 8: Percentage of the total surface area in Spain showing positive or negative, significant or non-significant Pearson's r correlations between the sNDVI and the SPEI. Mixed forests

	Negative	Negative	Positive (p	Positive (p
	(p < 0.05)	(p > 0.05)	> 0.05)	< 0.05)
1st Jan	1.7	16.2	34.3	47.8
2nd Jan	2.0	13.1	33.2	51.7
1st Feb	1.2	11.5	33.4	54.0
2sd Feb	1.0	11.8	29.5	57.7
1st Mar	1.4	12.2	27.6	58.8
2sd Mar	0.5	13.3	26.5	59.7
1st Apr	0.0	9.1	25.7	65.2
2sd Apr	0.0	2.7	23.2	74.1
1st May	0.0	2.2	16.5	81.3
2sd May	0.0	1.8	13.7	84.4
1st Jun	0.0	2.5	10.7	86.7
2sd Jun	0.0	1.8	7.8	90.4
1st Jul	0.1	1.4	6.5	92.0
2sd Jul	0.0	0.8	6.0	93.1
1st Aug	0.0	0.1	6.8	93.1
2sd Aug	0.0	0.2	10.8	88.9
1st Sep	0.0	0.2	12.4	87.3
2sd Sep	0.0	0.2	13.7	86.0
1st Oct	0.0	1.4	18.9	79.7
2sd Oct	0.0	1.7	22.4	75.9
1st Nov	0.0	6.5	26.7	66.8
2sd Nov	0.2	6.7	32.0	61.1
1st Dec	0.3	7.6	28.7	63.4
2sd Dec	1.3	10.8	36.2	51.8

Supplementary Table 9: Percentage of the total surface area in Spain showing positive or negative, significant or non-significant Pearson's r correlations between the sNDVI and the SPEI. Natural grassland

	Negative	Negative	Positive (p	Positive (p
	(p < 0.05)	(p > 0.05)	> 0.05)	< 0.05)
1st Jan	0.1	7.8	37.4	54.7
2nd Jan	0.1	6.2	36.9	56.8
1st Feb	0.1	4.3	35.6	60.0
2sd Feb	0.0	4.0	33.1	62.9
1st Mar	0.1	5.0	37.8	57.2
2sd Mar	0.1	5.7	34.2	60.0
1st Apr	0.0	5.0	29.8	65.1
2sd Apr	0.0	1.8	21.5	76.7
1st May	0.0	1.1	15.1	83.8
2sd May	0.0	0.4	9.4	90.2
1st Jun	0.0	0.1	4.0	95.9
2sd Jun	0.0	0.0	1.8	98.1
1st Jul	0.0	0.0	1.2	98.8
2sd Jul	0.0	0.0	1.2	98.8
1st Aug	0.0	0.0	2.2	97.8
2sd Aug	0.0	0.1	5.7	94.2
1st Sep	0.0	0.2	8.8	91.1
2sd Sep	0.0	0.2	10.7	89.2
1st Oct	0.0	0.6	15.8	83.6
2sd Oct	0.0	0.9	21.4	77.8
1st Nov	0.0	3.1	28.6	68.3
2sd Nov	0.0	3.2	33.7	63.2
1st Dec	0.0	2.8	31.5	65.8
2sd Dec	0.0	4.7	37.4	57.8

Supplementary Table 10: Percentage of the total surface area in Spain showing positive or negative, significant or non-significant Pearson's r correlations between the sNDVI and the SPEI. Sclerophillous vegetation

	Negative	Negative	Positive (p	Positive (p
	(p < 0.05)	(p > 0.05)	> 0.05)	< 0.05)
1st Jan	0.1	11.7	44.0	44.1
2nd Jan	0.2	9.9	44.1	45.9
1st Feb	0.1	6.8	43.4	49.6
2sd Feb	0.1	6.5	42.6	50.8
1st Mar	0.1	8.1	45.0	46.9
2sd Mar	0.2	10.1	42.9	46.8
1st Apr	0.0	7.7	40.2	52.1
2sd Apr	0.0	2.9	30.3	66.8
1st May	0.0	1.9	23.1	75.0
2sd May	0.0	0.9	17.4	81.7
1st Jun	0.0	0.8	11.7	87.5
2sd Jun	0.0	0.5	7.3	92.2
1st Jul	0.0	0.1	3.7	96.2
2sd Jul	0.0	0.0	2.6	97.3
1st Aug	0.0	0.0	3.9	96.1
2sd Aug	0.0	0.1	8.9	91.0
1st Sep	0.0	0.3	13.4	86.3
2sd Sep	0.0	0.2	18.9	80.9
1st Oct	0.0	1.5	28.5	70.0
2sd Oct	0.0	2.5	33.0	64.5
1st Nov	0.0	5.3	37.1	57.6
2sd Nov	0.0	4.7	43.3	52.0
1st Dec	0.0	4.5	42.8	52.7
2sd Dec	0.1	7.0	46.8	46.1

Supplementary Table 11: Percentage of the total surface area in Spain showing positive or negative, significant or non-significant Pearson's r correlations between the sNDVI and the SPEI. Transition wood-scrub.



Supplementary Figure 18: Relationship between the average aridity (P-AED) and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Non Irrigated arable lands. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 19: Relationship between the average aridity (P-AED) and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Irrigated lands. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 20: Relationship between the average aridity (P-AED) and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Vineyeards. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 21: Relationship between the average aridity (P-AED) and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Olive groves. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 22: Relationship between the average aridity (P-AED) and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Mixed agriculture/natural vegetation. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 23: Relationship between the average aridity (P-AED) and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Broad-leaved forests. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 24: Relationship between the average aridity (P-AED) and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Coniferous forests. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.


Supplementary Figure 25: Relationship between the average aridity (P-AED) and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Mixed forests. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 26: Relationship between the average aridity (P-AED) and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Natural grasslands. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 27: Relationship between the average aridity (P-AED) and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Sclerophillous vegetation. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 28: Relationship between the average aridity (P-AED) and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Transition wood-scrub. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 29: Relationship between the average temperature and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Non Irrigated arable lands. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 30: Relationship between the average temperature and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Irrigated lands. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 31: Relationship between the average temperature and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Vineyeards. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 32: Relationship between the average temperature and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Olive groves. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 33: Relationship between the average temperature and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Mixed agriculture/natural vegetation. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 34: Relationship between the average temperature and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Broad-leaved forests. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 35: Relationship between the average temperature and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Coniferous forests. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 36: Relationship between the average temperature and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Mixed forests. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 37: Relationship between the average temperature and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Natural grasslands. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 38: Relationship between the average temperature and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Sclerophillous vegetation. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 39: Relationship between the average temperature and the maximum correlations obtained between NDVI and the SPEI during the 24 semi-monthly periods of the year. Transition wood-scrub. Given the high number of points the signification of correlation was obtained by means of 1000 random samples of 30 cases from which correlations and p-values were obtained. The final signification was assessed by means of the average of the obtained p-values.



Supplementary Figure 40: Box-plots showing the values of aridity (P-AED) for areas showing maximum correlation between SPEI and sNDVI on different time scales. Non irrigated arable lands.



Supplementary Figure 41: Box-plots showing the values of aridity (P-AED) for areas showing maximum correlation between SPEI and sNDVI on different time scales. Irrigated lands.



Supplementary Figure 42: Box-plots showing the values of aridity (P-AED) for areas showing maximum correlation between SPEI and sNDVI on different time scales. Vineyards.



Supplementary Figure 43: Box-plots showing the values of aridity (P-AED) for areas showing maximum correlation between SPEI and sNDVI on different time scales. Olive groves.



Supplementary Figure 44: Box-plots showing the values of aridity (P-AED) for areas showing maximum correlation between SPEI and sNDVI on different time scales. Mixed agriculture/natural vegetation.



Supplementary Figure 45: Box-plots showing the values of aridity (P-AED) for areas showing maximum correlation between SPEI and sNDVI on different time scales. Broad-leaved forests.



Supplementary Figure 46: Box-plots showing the values of aridity (P-AED) for areas showing maximum correlation between SPEI and sNDVI on different time scales. Coniferous forests.



Supplementary Figure 47: Box-plots showing the values of aridity (P-AED) for areas showing maximum correlation between SPEI and sNDVI on different time scales. Mixed forests.



Supplementary Figure 48: Box-plots showing the values of aridity (P-AED) for areas showing maximum correlation between SPEI and sNDVI on different time scales. Natural grassland.



Supplementary Figure 49: Box-plots showing the values of aridity (P-AED) for areas showing maximum correlation between SPEI and sNDVI on different time scales. Sclerophillous vegetation.



Supplementary Figure 50: Box-plots showing the values of aridity (P-AED) for areas showing maximum correlation between SPEI and sNDVI on different time scales. Transition wood-scrub.



Supplementary Figure 51: Box-plots showing the values of average air temperature for areas showing maximum correlation between SPEI and sNDVI on different time scales. Non irrigated arable lands.



Supplementary Figure 52: Box-plots showing the values of average air temperature for areas showing maximum correlation between SPEI and sNDVI on different time scales. Irrigated lands.



Supplementary Figure 53: Box-plots showing the values of average air temperature for areas showing maximum correlation between SPEI and sNDVI on different time scales. Vineyards.



Supplementary Figure 54: Box-plots showing the values of average air temperature for areas showing maximum correlation between SPEI and sNDVI on different time scales. Olive groves.



Supplementary Figure 55: Box-plots showing the values of average air temperature for areas showing maximum correlation between SPEI and sNDVI on different time scales. Mixed agriculture/natural vegetation.



Supplementary Figure 56: Box-plots showing the values of average air temperature for areas showing maximum correlation between SPEI and sNDVI on different time scales. Broad-leaved forests.



Supplementary Figure 57: Box-plots showing the values of average air temperature for areas showing maximum correlation between SPEI and sNDVI on different time scales. Coniferous forests.



Supplementary Figure 58: Box-plots showing the values of average air temperature for areas showing maximum correlation between SPEI and sNDVI on different time scales. Mixed forests.



Semi-monthly period

Semi-monthly period 9

25-30

13-18 19-24 25-30 31-36 37-42 43-48

13-18 19-24 25-30 31-36 37-42 43-48

Semi-monthly period 13

Semi-monthly period 17

Semi-monthly period 21

19.24

43-48

37-42

1-6

1-6

1-6 7-12

7-12 13-18 19-24 25-30 31-36 37-42 43-48

1-6 7-12 13-18

1.6 7-12

7.12



Semi-monthly period 6

Semi-monthly period 2



Semi-monthly period 10

19-24 25-30 31-36 37-42 43-48

Semi-monthly period 14

7-12 13-18 19-24 25-30 31-36 37-42 43-48

Semi-monthly period 18

Semi-monthly period 22



Semi-monthly period 11

10.24 25-30

Semi-monthly period 15

Semi-monthly period 19

12,18

37-42 43-48

31-36

1-6

1-6

1-6

7-12 13-18 19-24 25-30 31-36 37-42 43-48

Semi-monthly period 3



Semi-monthly period 8











7-12 13-18 19-24 25-30 31-36 37-42 43-48 1-6 7-12 13-18 19-24 25-30 31-36 37-42 43-48





7-12 13-18 19-24 25-30 31-36 37-42 43-48 13-18 19-24 25-30 31-36 37-42 43-48 1-6 7-12 13-18 19-24 25-30 31-36 37-42 43-48 1-6 7-12 13-18 19-24 25-30 31-36 37-42 43-48 1-6 1-6 7-12 Supplementary Figure 59: Box-plots showing the values of average air temperature for areas showing maximum correlation between SPEI and

sNDVI on different time scales. Natural grassland.



Supplementary Figure 60: Box-plots showing the values of average air temperature for areas showing maximum correlation between SPEI and sNDVI on different time scales. Sclerophillous vegetation.


Supplementary Figure 61: Box-plots showing the values of average air temperature for areas showing maximum correlation between SPEI and sNDVI on different time scales. Transition wood-scrub.