



SUPPLEMENTARY MATERIALS

Table S1. Dates of satellite surveys corresponding to ground-samplings.

Alfianello	Fontanella	Ghedi	Trezzo sull'Adda
24/11/2021	24/11/2021	24/11/2021	07/11/2021
29/11/2021	29/11/2021	29/11/2021	07/12/2021
07/12/2021	07/12/2021	07/12/2021	22/12/2021
12/12/2021	12/12/2021	12/12/2021	06/01/2022
22/12/2021	22/12/2021	22/12/2021	11/01/2022
08/01/2022	06/01/2022	08/01/2022	
11/01/2022	08/01/2022	11/01/2022	
	11/01/2022		

Table S2. Significant differences of the values of vegetation indices (VIs) between dates of satellite surveys, for each VI x site combination. For each VI, dates with different letters are characterized by significantly different values of the VI.

Site	Date	CCCI	MMSR	EVI	NDRE	NDVI
Alfianello	24/11/2021	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>c</i>
	29/11/2021	<i>ab</i>	<i>b</i>	<i>c</i>	<i>a</i>	<i>b</i>
	07/12/2021	<i>a</i>	<i>c</i>	<i>b</i>	<i>a</i>	<i>b</i>
	12/12/2021	<i>b</i>	<i>d</i>	<i>b</i>	<i>a</i>	<i>a</i>
	22/12/2021	<i>c</i>	<i>e</i>	<i>c</i>	<i>b</i>	<i>d</i>
	08/01/2022	<i>d</i>	<i>f</i>	<i>c</i>	<i>c</i>	<i>d</i>
	11/01/2022	<i>d</i>	<i>g</i>	<i>d</i>	<i>c</i>	<i>d</i>
Fontanella	24/11/2021	<i>a</i>	<i>a</i>	<i>a</i>	<i>b</i>	<i>c</i>
	29/11/2021	<i>a</i>	<i>b</i>	<i>b</i>	<i>a</i>	<i>a</i>
	07/12/2021	<i>a</i>	<i>c</i>	<i>b</i>	<i>b</i>	<i>b</i>
	12/12/2021	<i>b</i>	<i>c</i>	<i>c</i>	<i>c</i>	<i>ab</i>
	22/12/2021	<i>bc</i>	<i>d</i>	<i>d</i>	<i>d</i>	<i>e</i>
	06/01/2022	<i>e</i>	<i>g</i>	<i>bc</i>	<i>f</i>	<i>d</i>
	08/01/2022	<i>cd</i>	<i>e</i>	<i>e</i>	<i>e</i>	<i>f</i>
Ghedi	11/01/2022	<i>d</i>	<i>f</i>	<i>f</i>	<i>e</i>	<i>f</i>
	24/11/2021	<i>a</i>	<i>a</i>	<i>a</i>	<i>b</i>	<i>b</i>
	29/11/2021	<i>a</i>	<i>a</i>	<i>c</i>	<i>a</i>	<i>a</i>
	07/12/2021	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>a</i>
	12/12/2021	<i>c</i>	<i>b</i>	<i>c</i>	<i>b</i>	<i>a</i>
	22/12/2021	<i>d</i>	<i>c</i>	<i>b</i>	<i>c</i>	<i>c</i>
	08/01/2022	<i>e</i>	<i>d</i>	<i>d</i>	<i>d</i>	<i>c</i>
Trezzo sull'Adda	11/01/2022	<i>e</i>	<i>e</i>	<i>e</i>	<i>d</i>	<i>d</i>
	07/11/2021	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>
	07/12/2021	<i>a</i>	<i>b</i>	<i>b</i>	<i>a</i>	<i>a</i>
	22/12/2021	<i>b</i>	<i>c</i>	<i>c</i>	<i>b</i>	<i>b</i>
	06/01/2022	<i>b</i>	<i>d</i>	<i>c</i>	<i>b</i>	<i>bc</i>
	11/01/2022	<i>b</i>	<i>c</i>	<i>d</i>	<i>b</i>	<i>c</i>

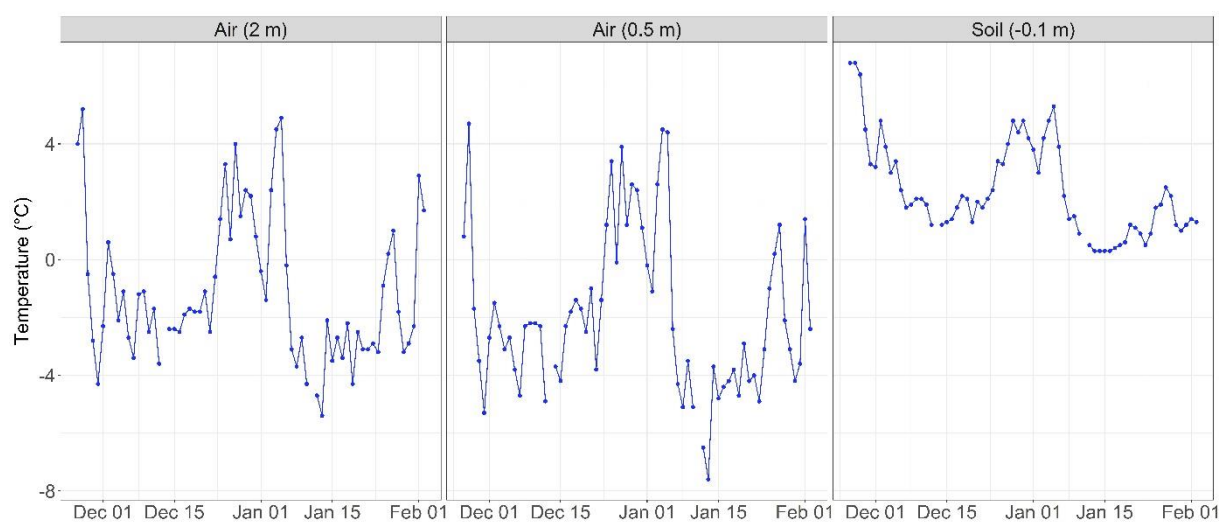


Figure S1. Daily minimum air and soil temperature for the site Alfianello.

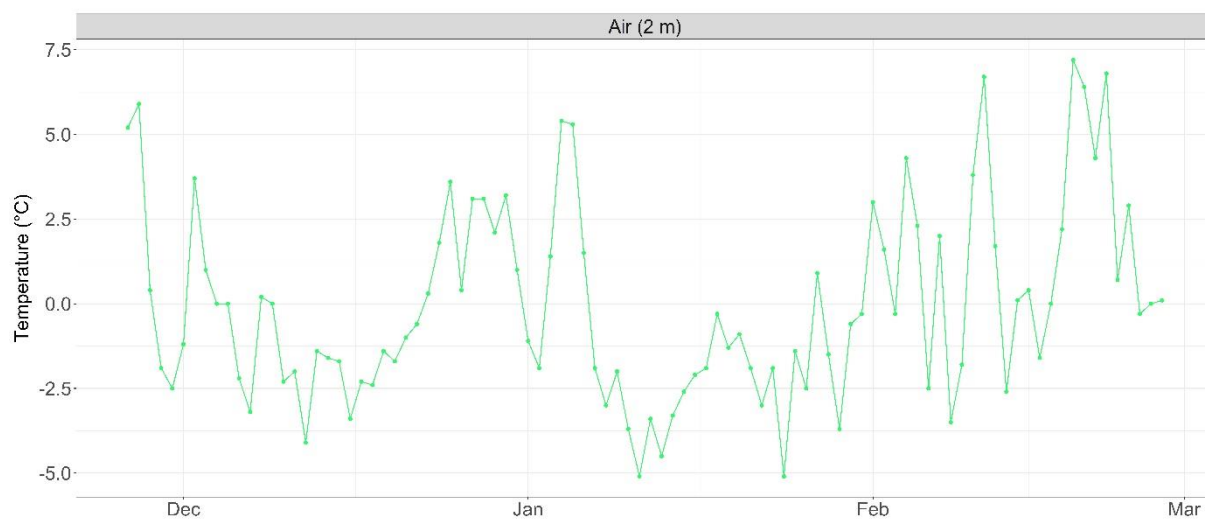


Figure S2. Daily minimum air temperature for the site Fontanella.

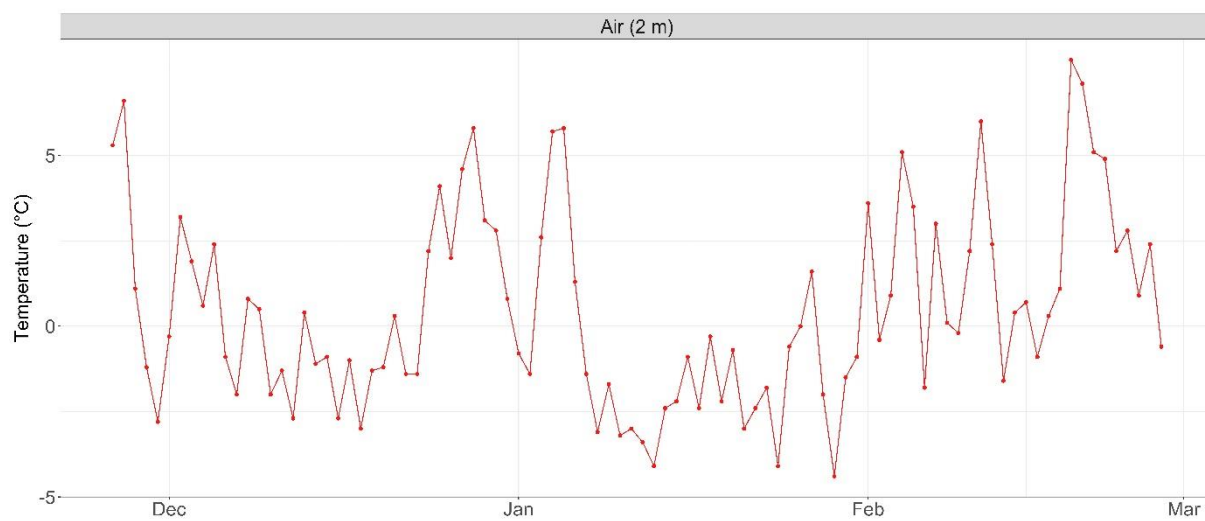


Figure S3. Daily minimum air temperature for the site Ghedi.

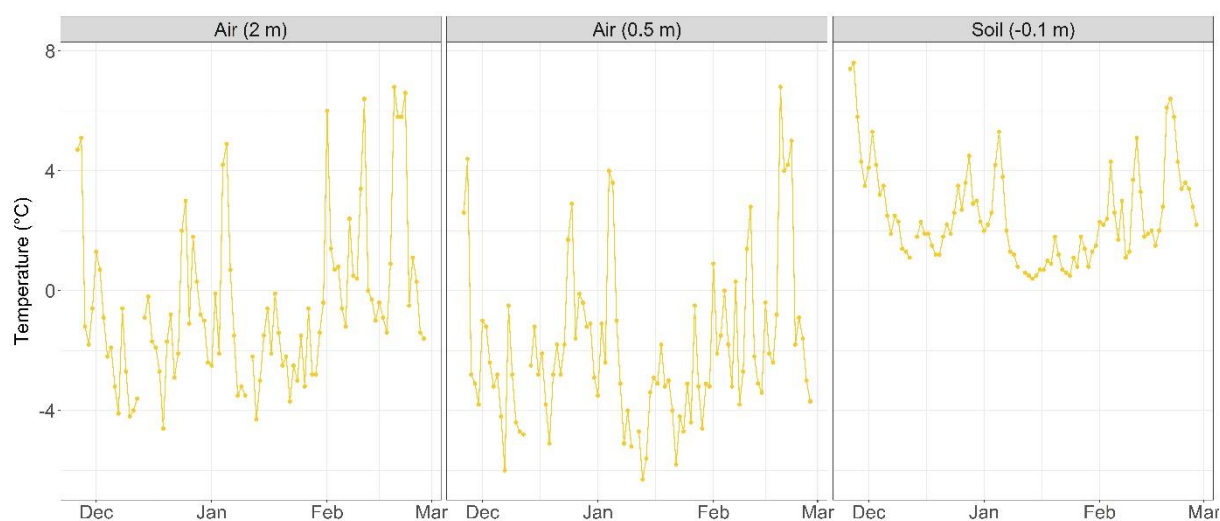


Figure S4. Daily minimum air and soil temperature for the site Trezzo sull'Adda.

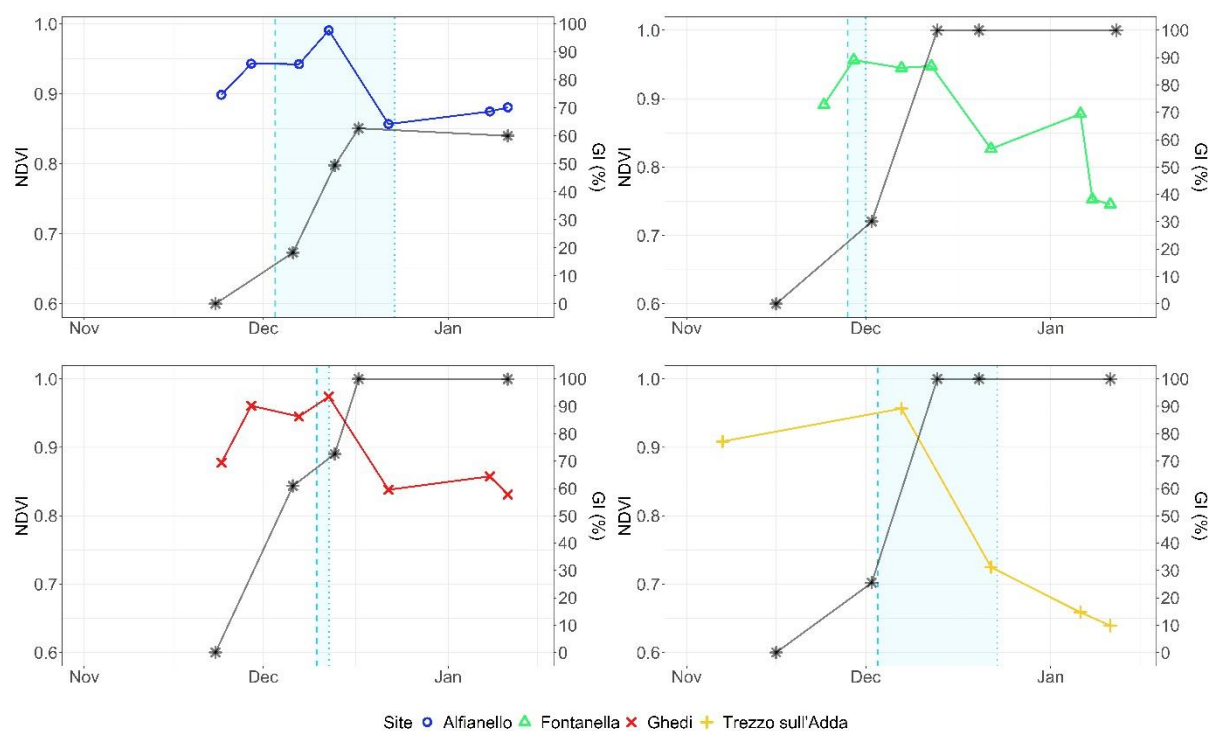


Figure S5. Vegetation index (NDVI) and ground-measured frost index (GI, %) trends during time in the four sites. GI values are reported in grey, the starting date of the first frost event is reported by a light-blue dashed line while the ending date is reported by a light-blue dotted line.

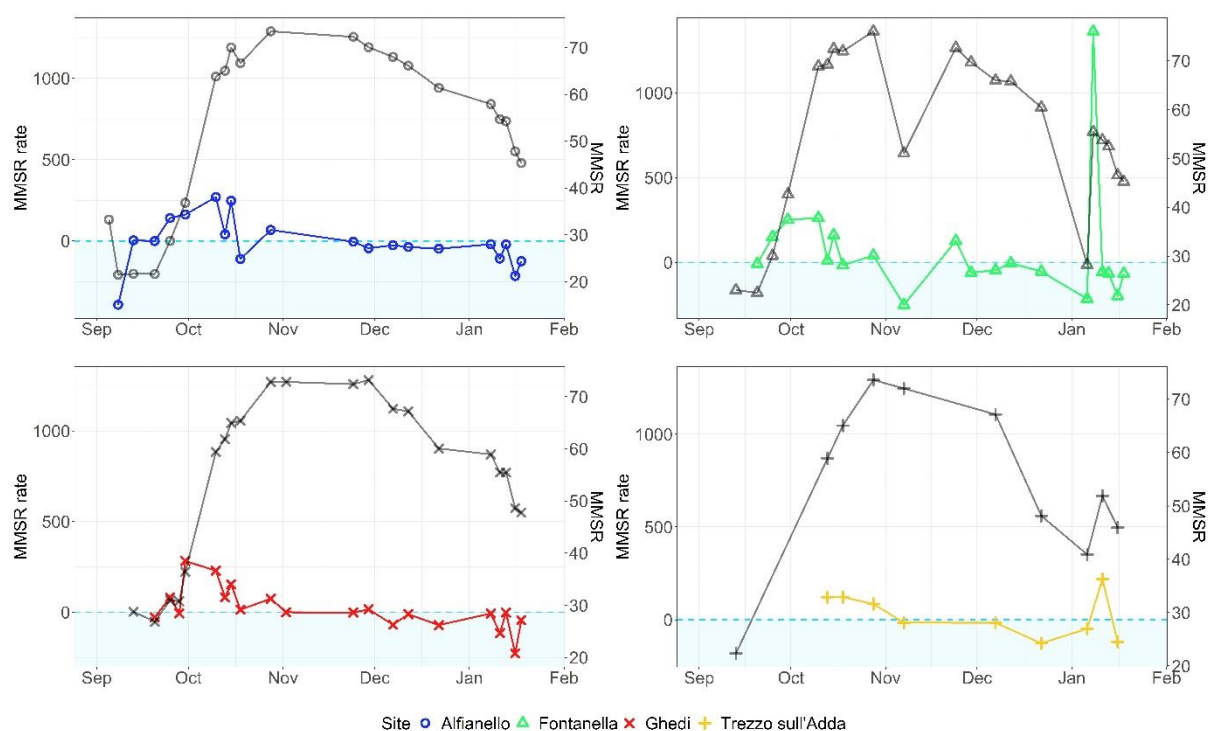


Figure S6. Vegetation index (MMSR rate) rate of variation and vegetation index (MMSR) trends during time in the four sites. The rate is reported with colored lines, the index values are reported with black lines while the lightblue area (delimited by the x-axis and by the dashed line) highlight negative rate values.

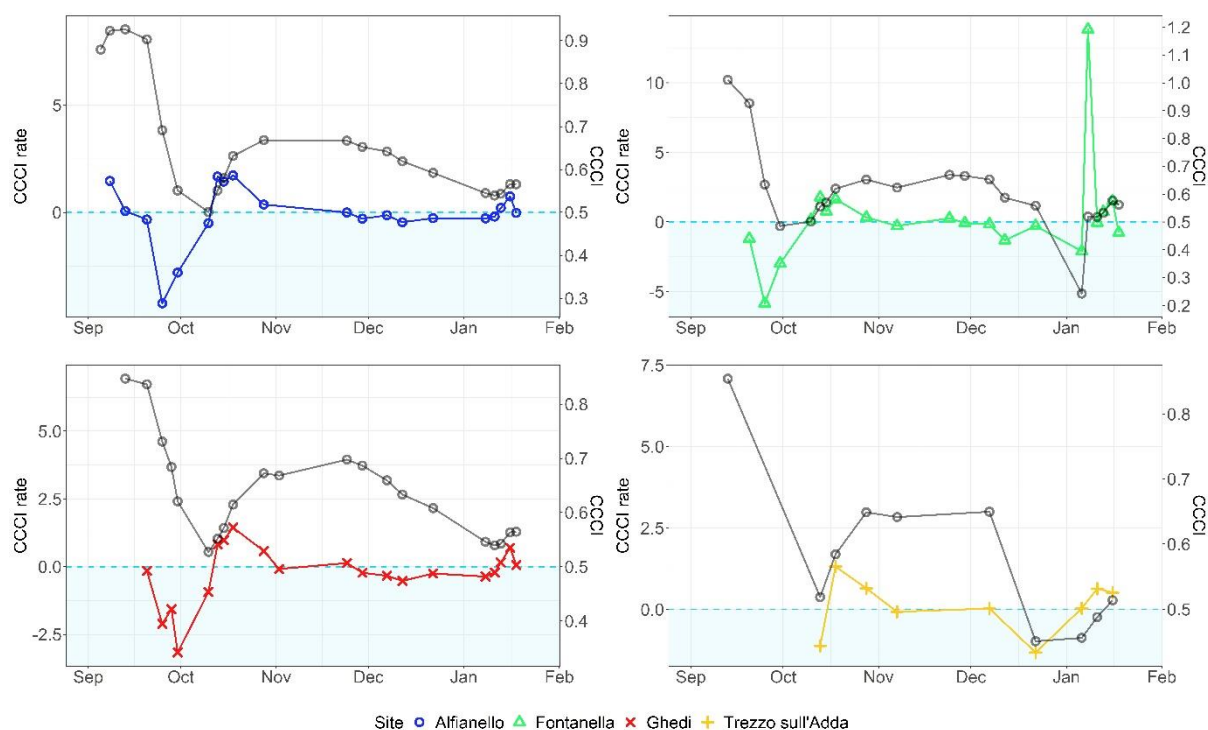


Figure S7. Vegetation index (CCCI rate) rate of variation and vegetation index (CCCI) trends during time in the four sites. The rate is reported with colored lines, the index values are reported with black lines while the lightblue area (delimited by the x-axis and by the dashed line) highlight negative rate values.

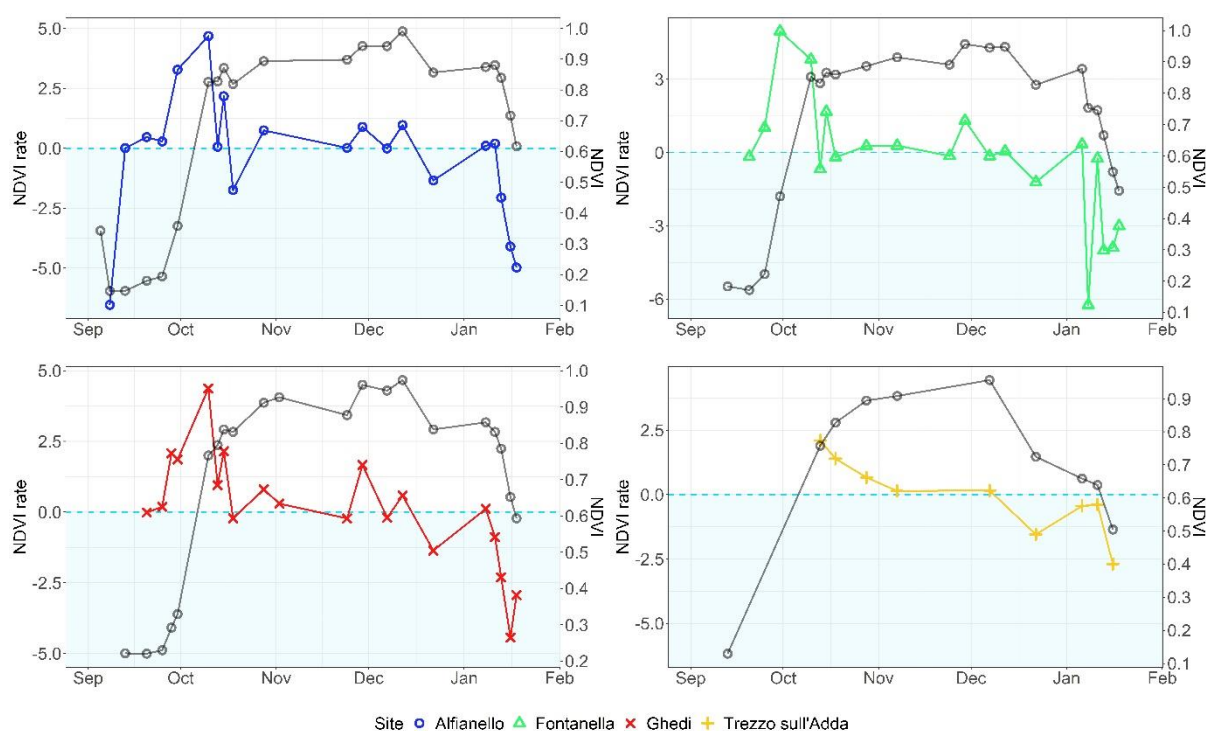


Figure S8. Vegetation index (NDVI rate) rate of variation and vegetation index (NDVI) trends during time in the four sites. The rate is reported with colored lines, the EVI values are reported with black lines. The starting date of the first frost event is reported by a light-blue dashed line while the ending date is reported by a light-blue dotted line.