

Supplementary material

Table S1. Percentage of pixels of bare soil frequency classes for the monthly-average over the four-years of Ferrara region.

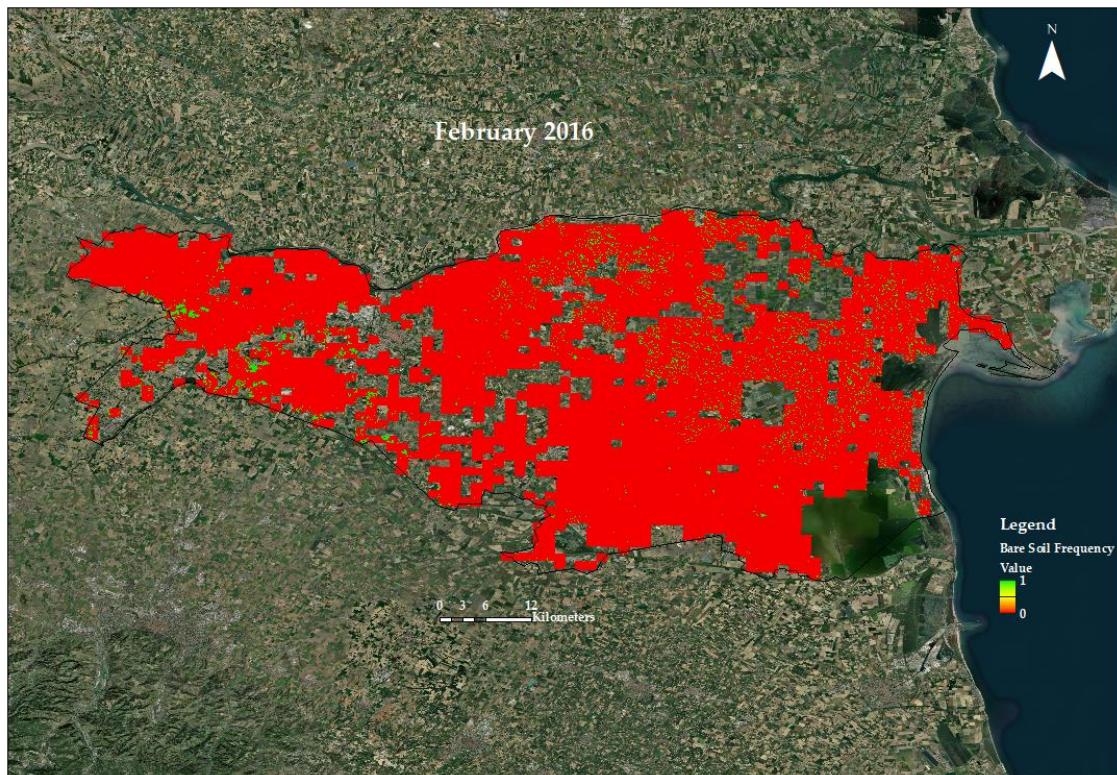
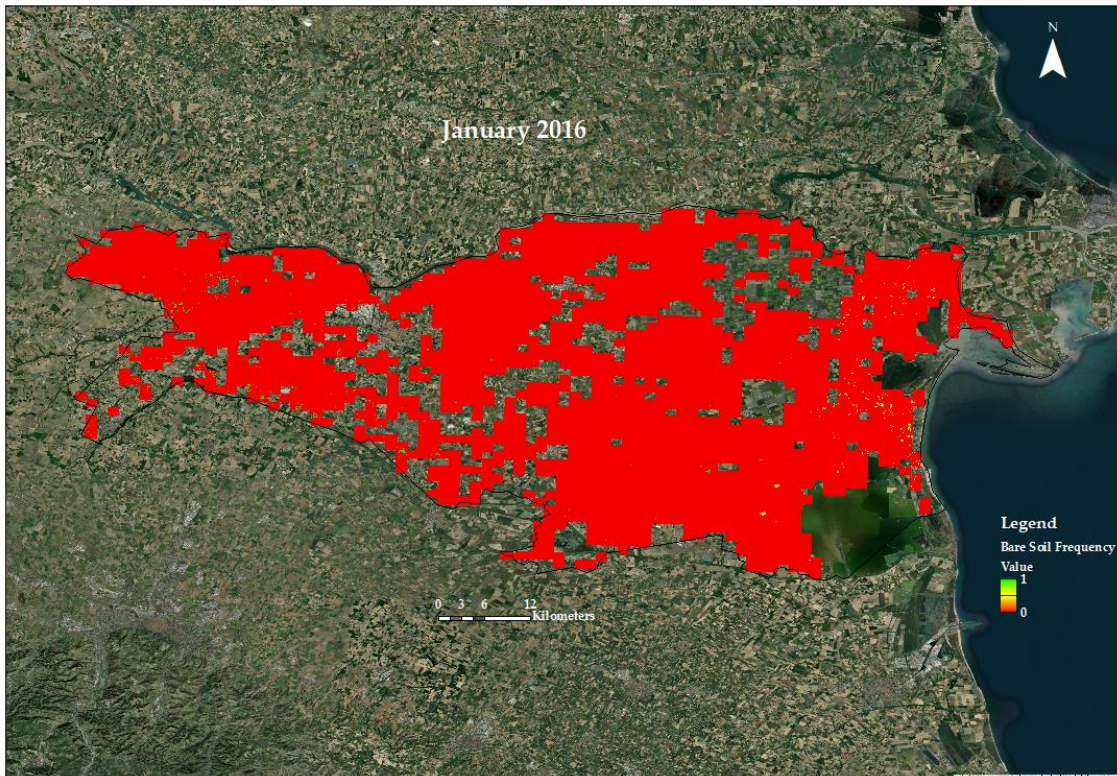
Bare soil frequency class	January	February	March	April	May	June	July	August	September	October	November	December
100%	0.01	0.94	7.67	13.06	0.06	0.49	4.02	10.32	8.23	0.82	0.68	0.00
75%	0.09	4.96	5.66	2.26	0.42	1.70	7.30	6.41	9.75	9.21	0.07	0.01
50%	0.19	4.99	3.68	2.15	4.71	6.51	1.83	7.58	7.80	7.78	0.87	0.09
25%	1.27	6.35	4.56	1.69	2.90	7.49	9.67	4.13	10.04	17.36	0.02	3.89
0%	98.45	82.76	78.43	80.84	91.90	83.81	77.19	71.56	64.18	64.83	98.36	96.01

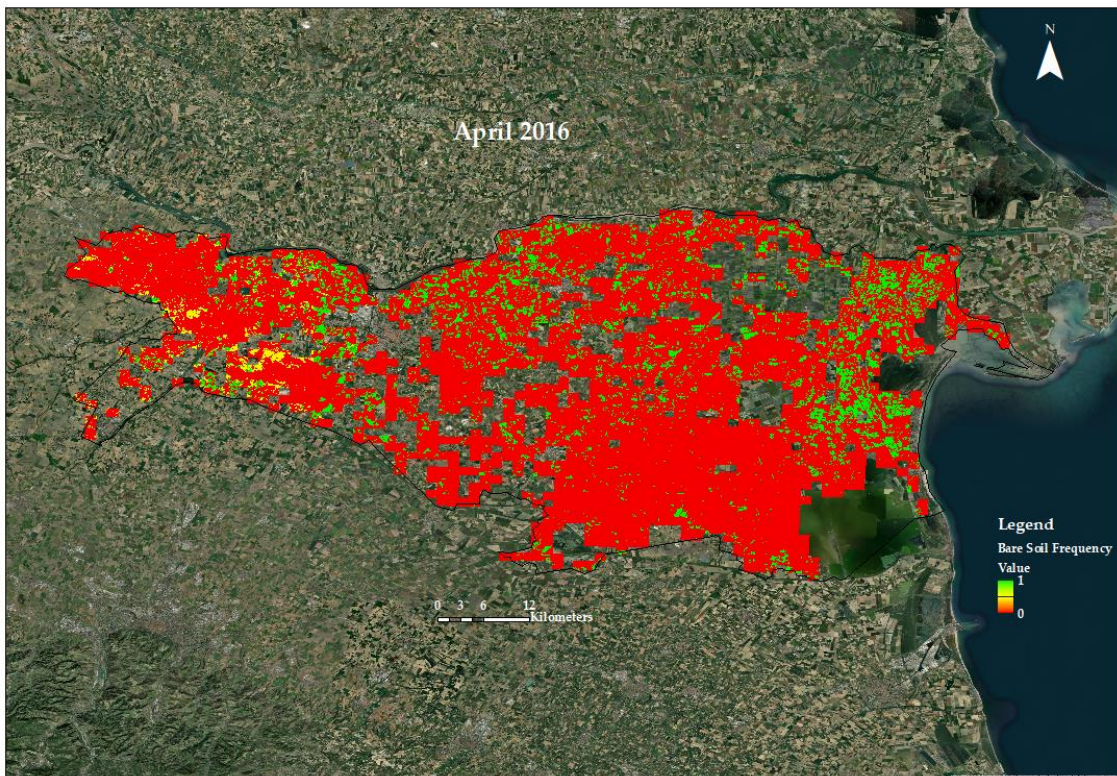
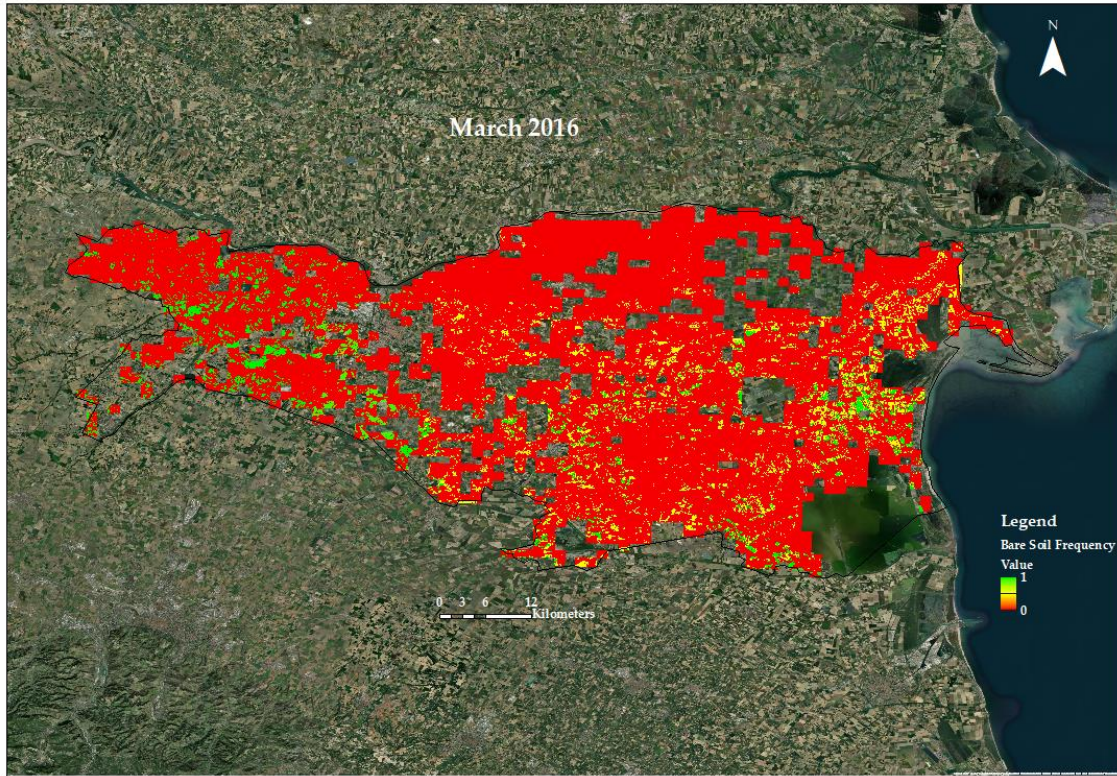
Table S2. Percentage of pixels of bare soil frequency classes for the monthly-average over the four-years of Roma region.

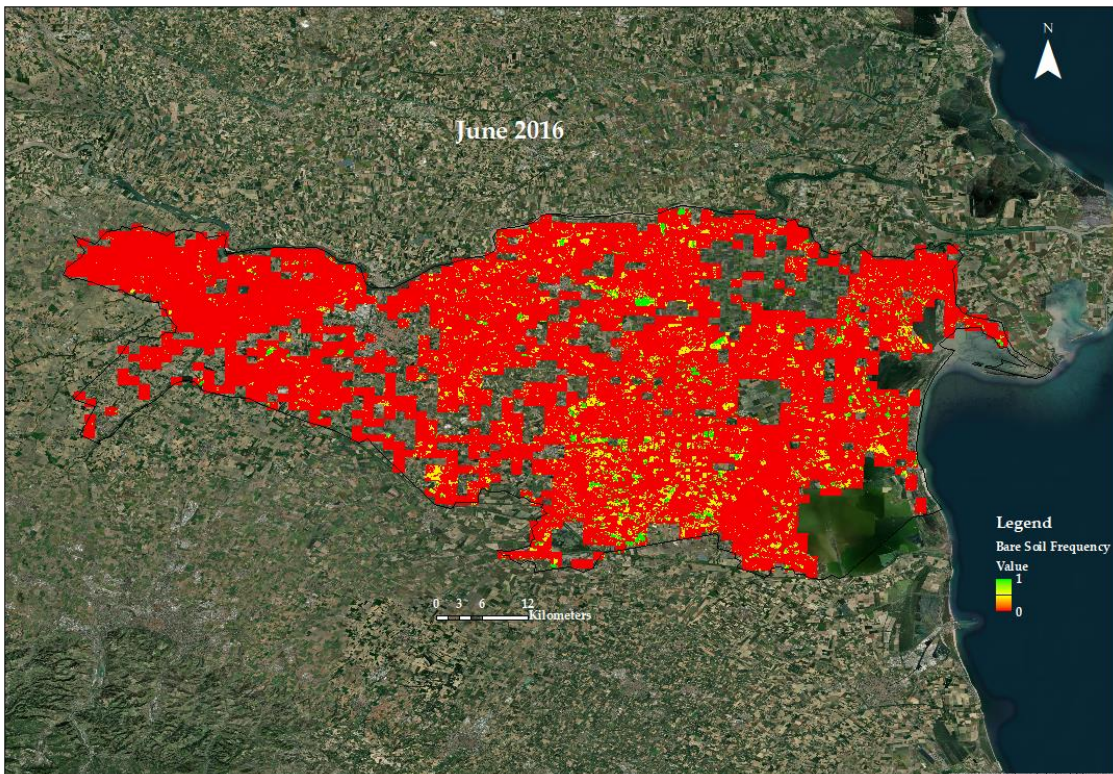
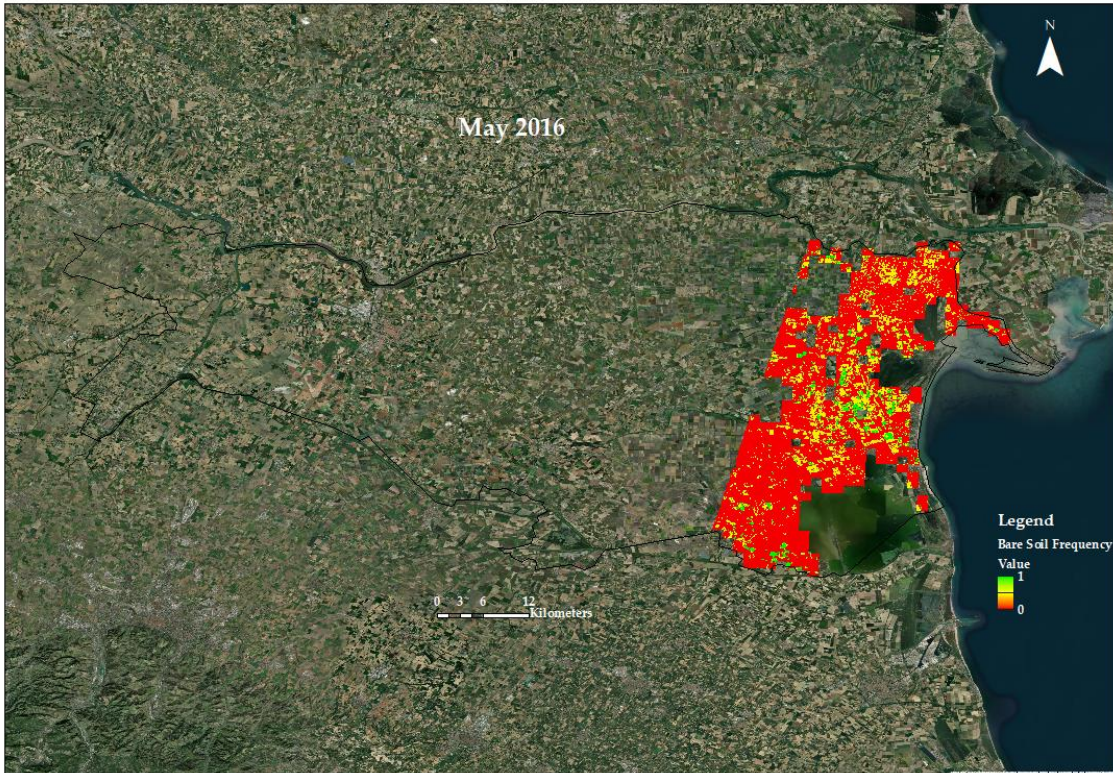
Bare soil frequency class	January	February	March	April	May	June	July	August	September	October	November	December
100%	0.00	0.37	0.79	0.55	0.22	0.62	5.74	4.16	1.34	1.03	1.06	0.00
75%	0.08	1.01	1.51	0.32	0.20	2.19	6.12	5.65	4.21	3.34	0.12	0.08
50%	0.60	0.83	0.86	0.71	0.46	2.27	7.99	6.17	7.42	4.32	1.22	0.60
25%	0.65	2.48	2.10	0.72	0.84	4.55	6.25	6.82	8.02	4.08	0.35	0.65
0%	98.66	95.31	94.74	97.70	98.28	90.38	73.91	77.20	79.01	87.23	97.24	98.66

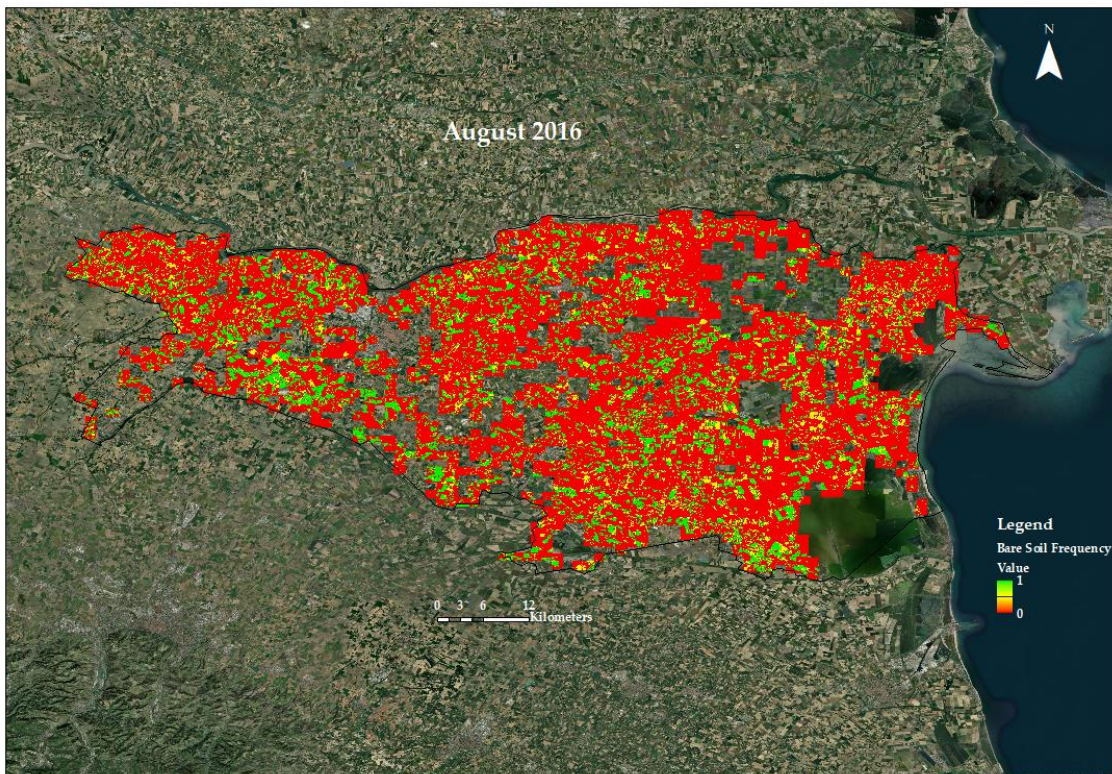
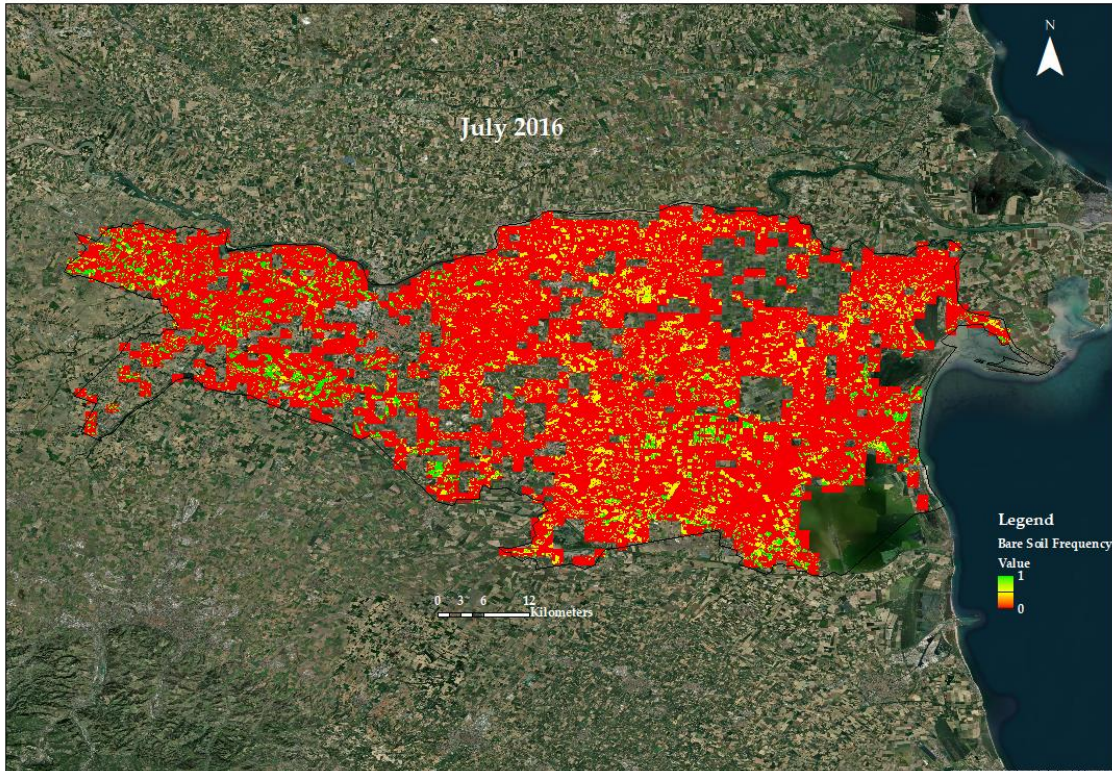
Table S3. Percentage of pixels of bare soil frequency classes for the monthly-average over the four-years of Capitanata region.

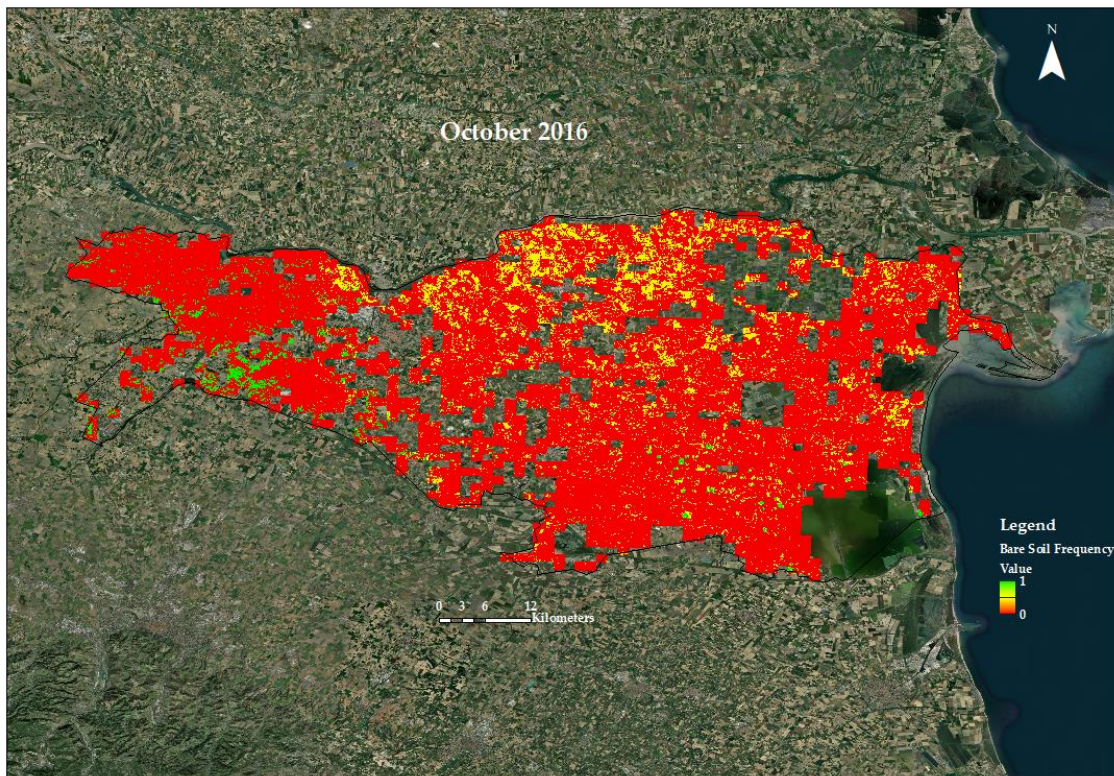
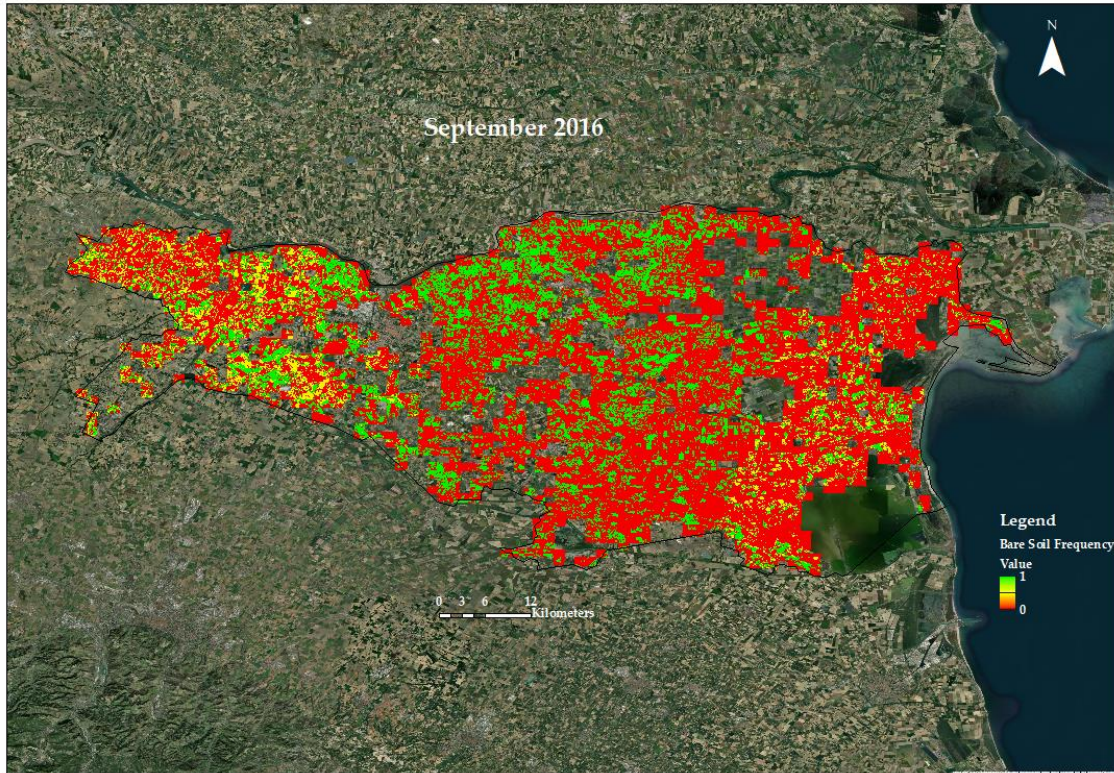
Bare soil frequency class	January	February	March	April	May	June	July	August	September	October	November	December
100%	0.04	0.24	2.12	0.00	2.14	14.87	40.67	54.74	54.33	13.70	5.11	0.04
75%	0.29	1.68	2.81	0.00	2.13	36.49	24.63	14.48	17.14	27.55	1.69	0.29
50%	1.88	4.48	3.36	5.36	3.79	0.03	3.32	3.01	0.02	27.92	0.63	1.88
25%	11.61	4.47	4.10	0.01	3.44	24.22	7.17	5.55	9.59	5.45	0.75	11.61
0%	86.18	89.13	87.62	94.63	88.50	24.40	24.22	22.22	18.93	25.38	91.81	86.18











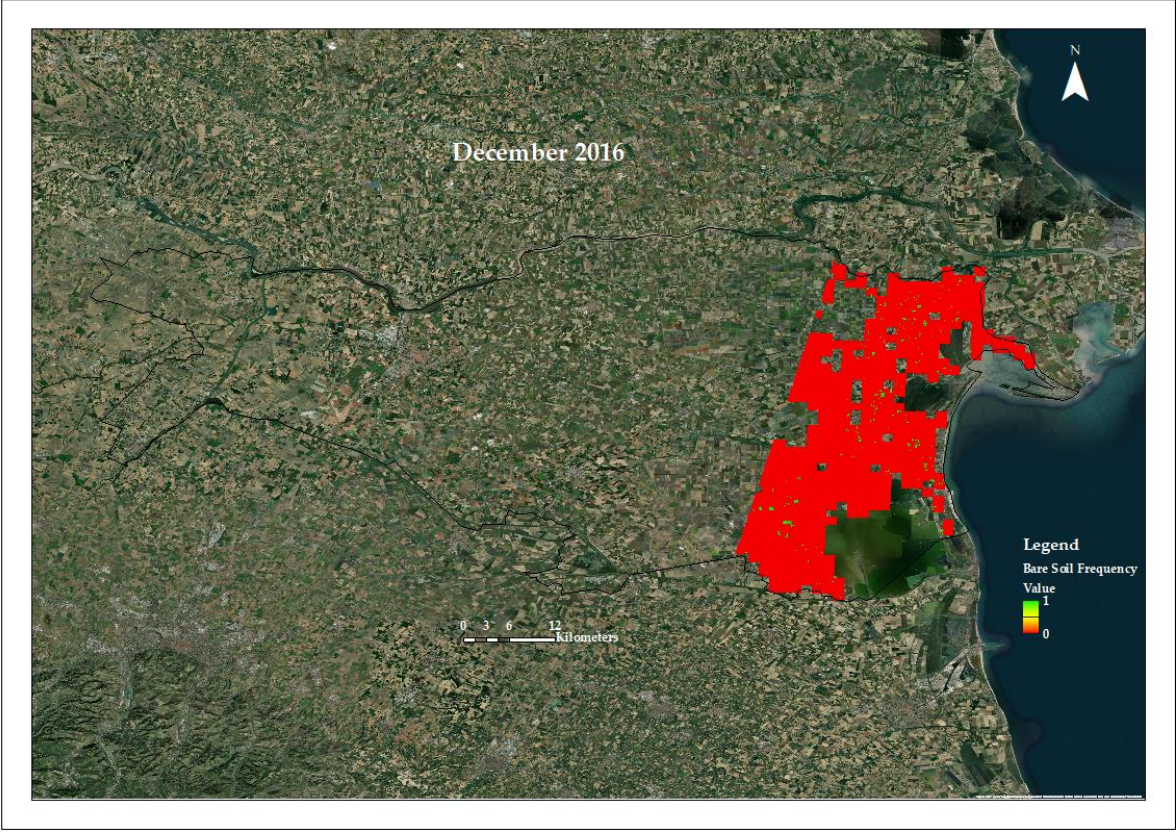
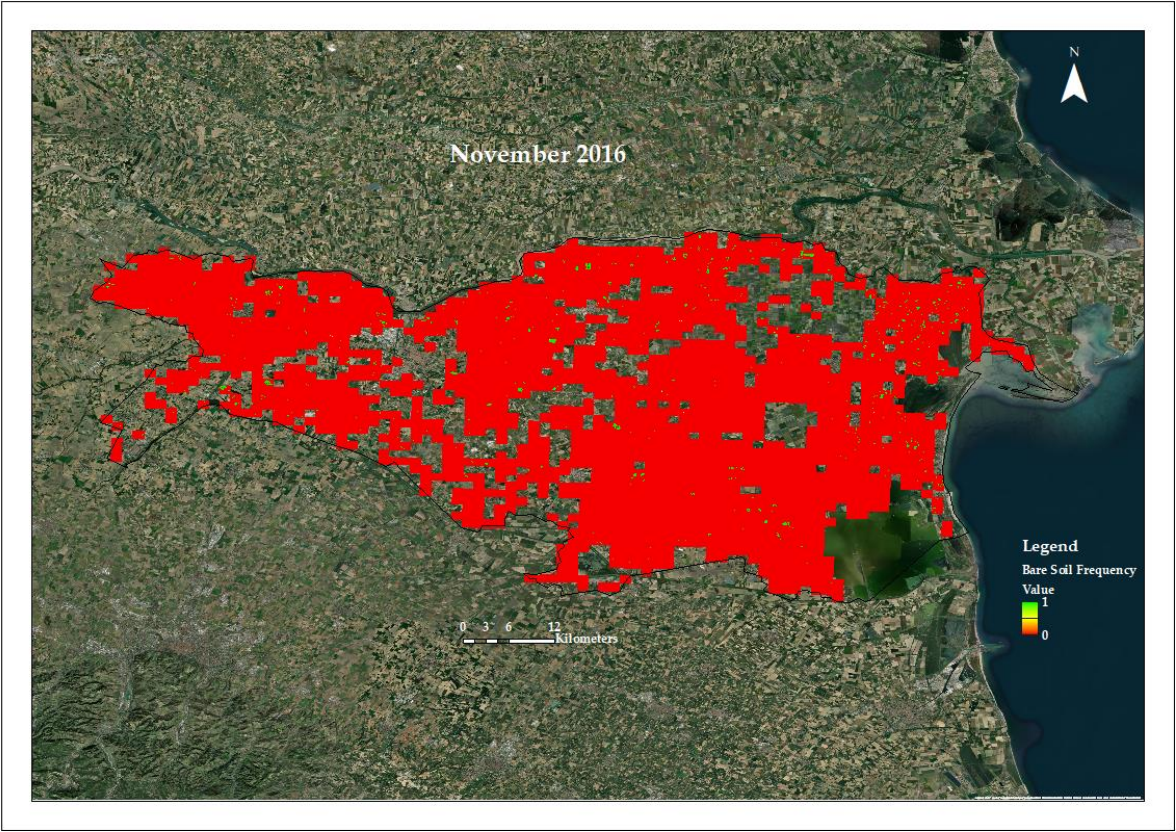
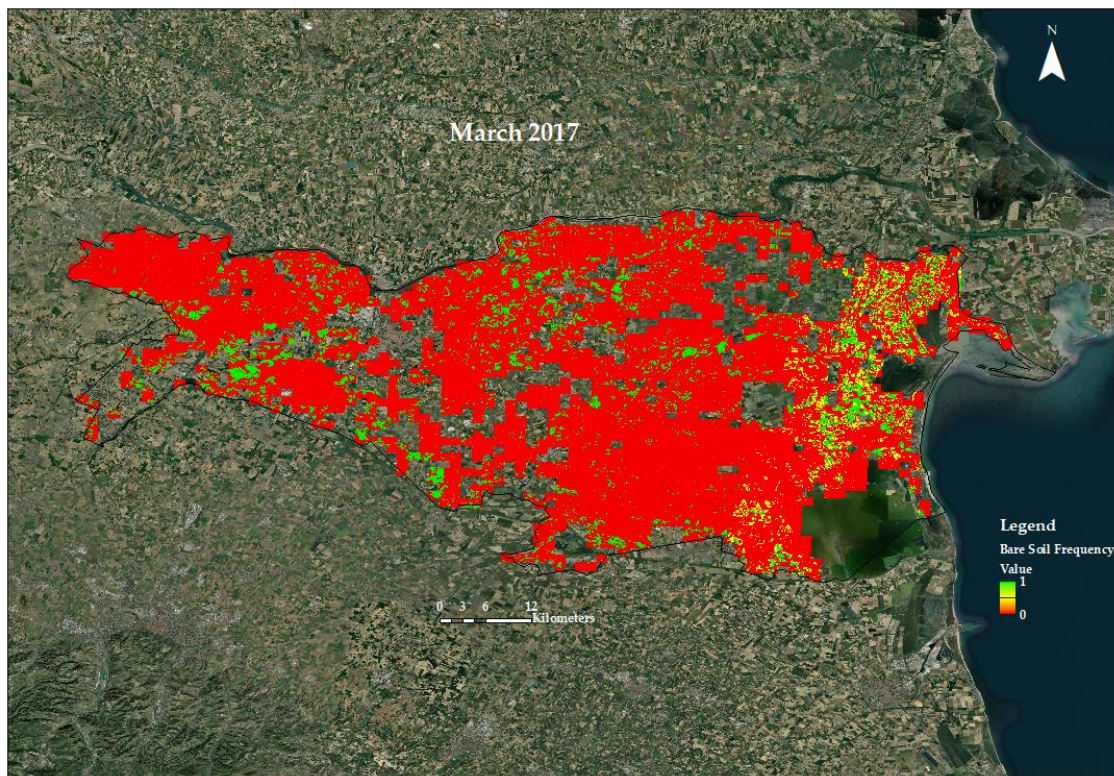
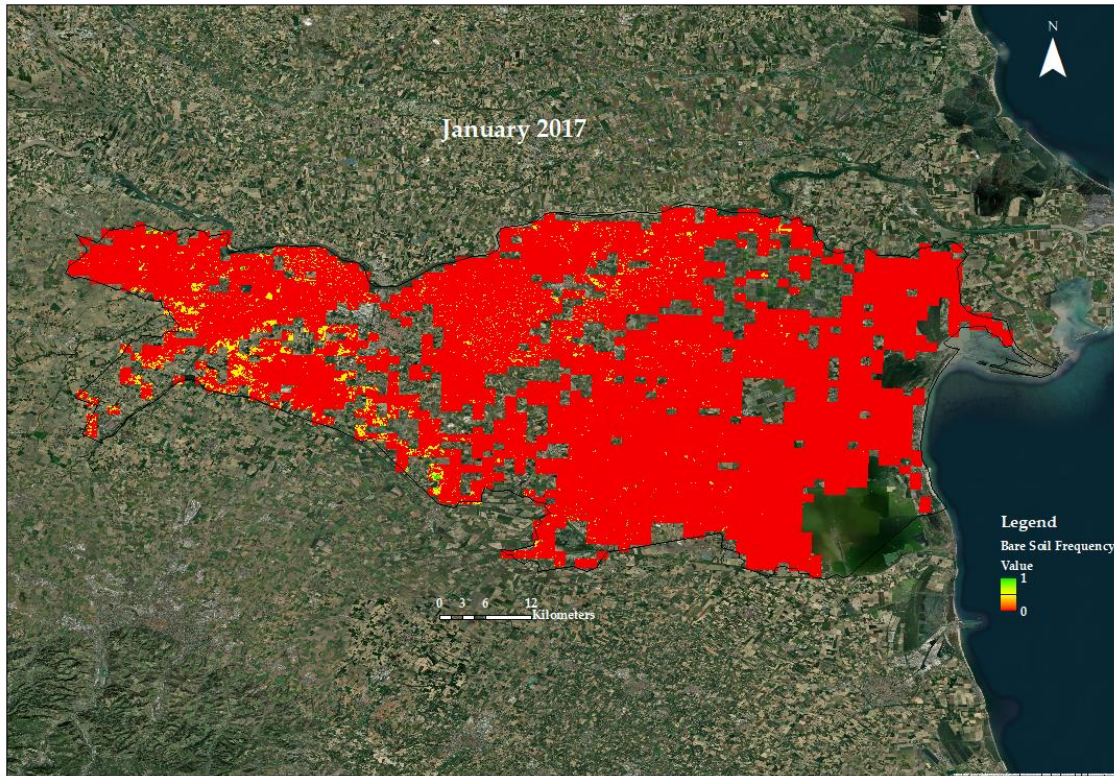
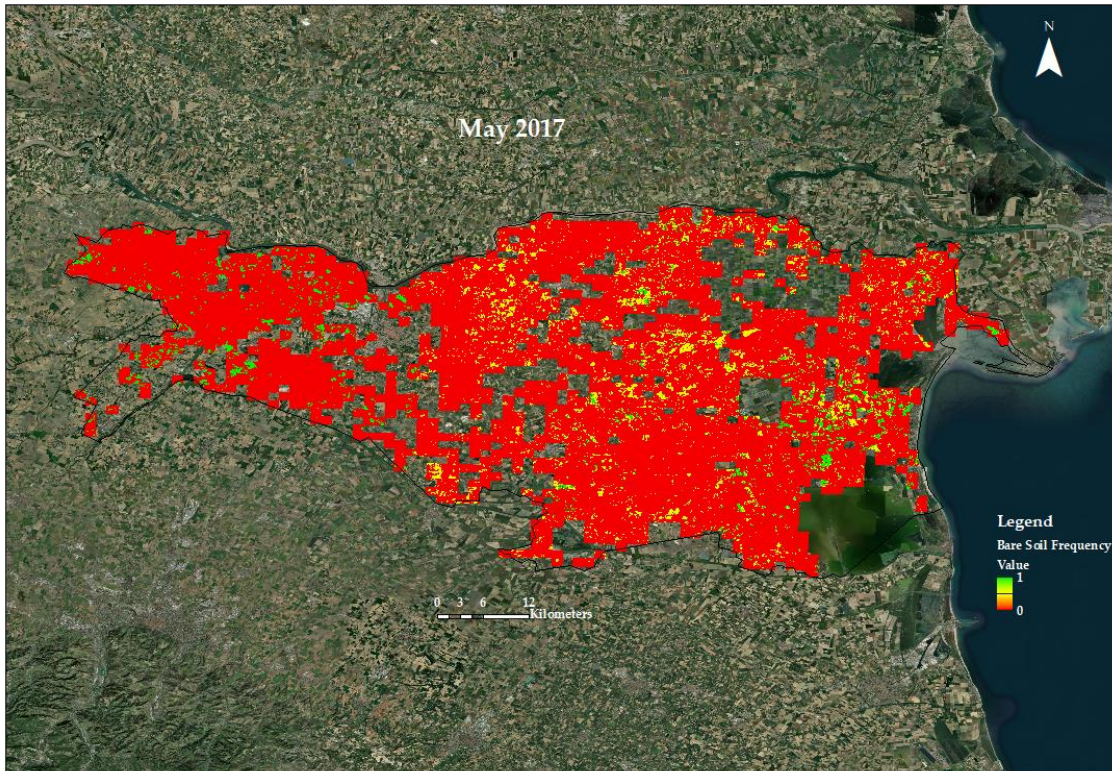
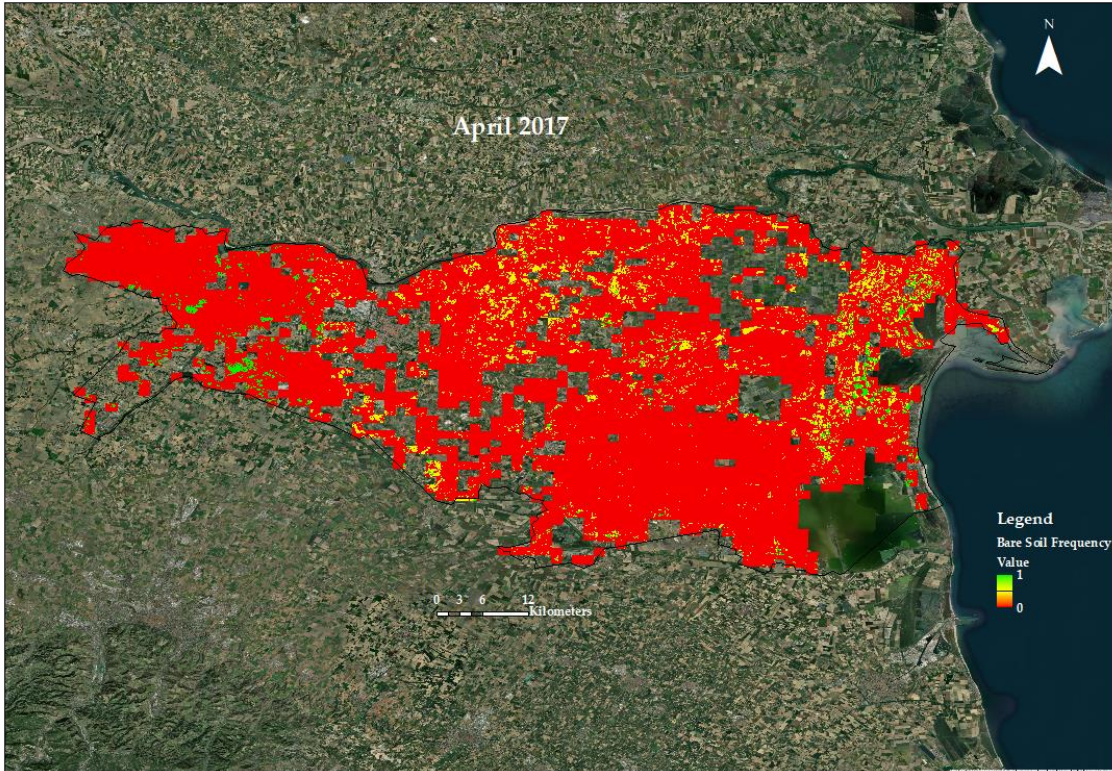
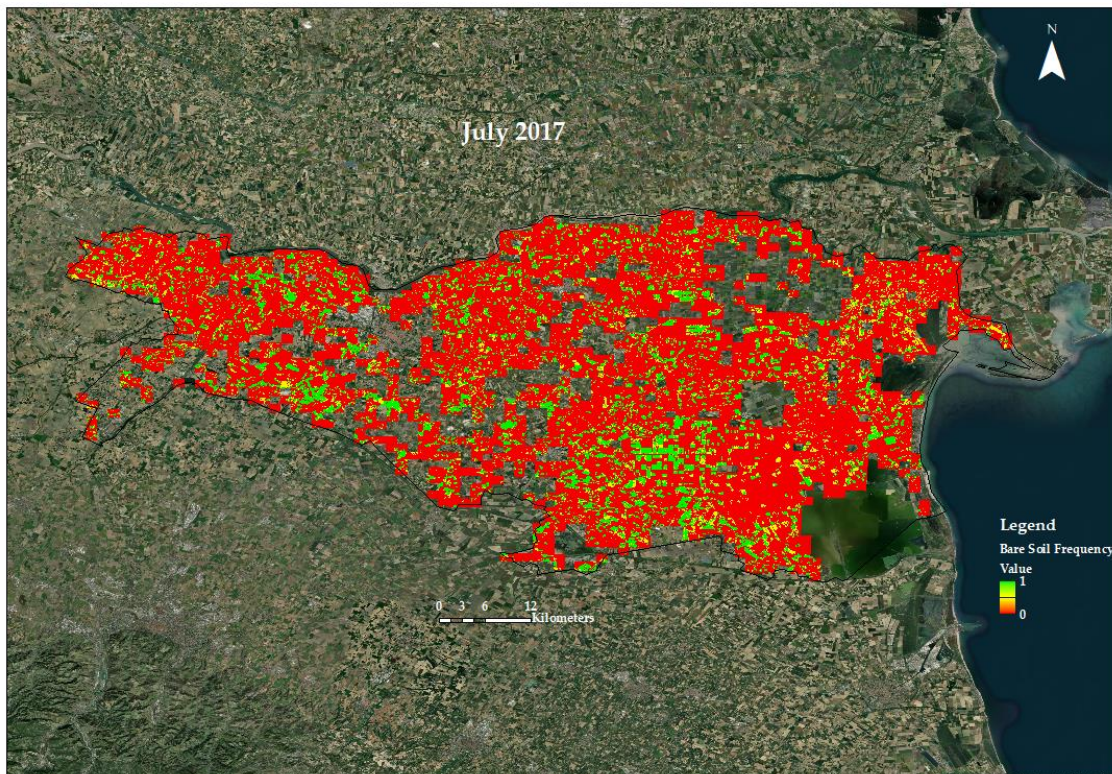
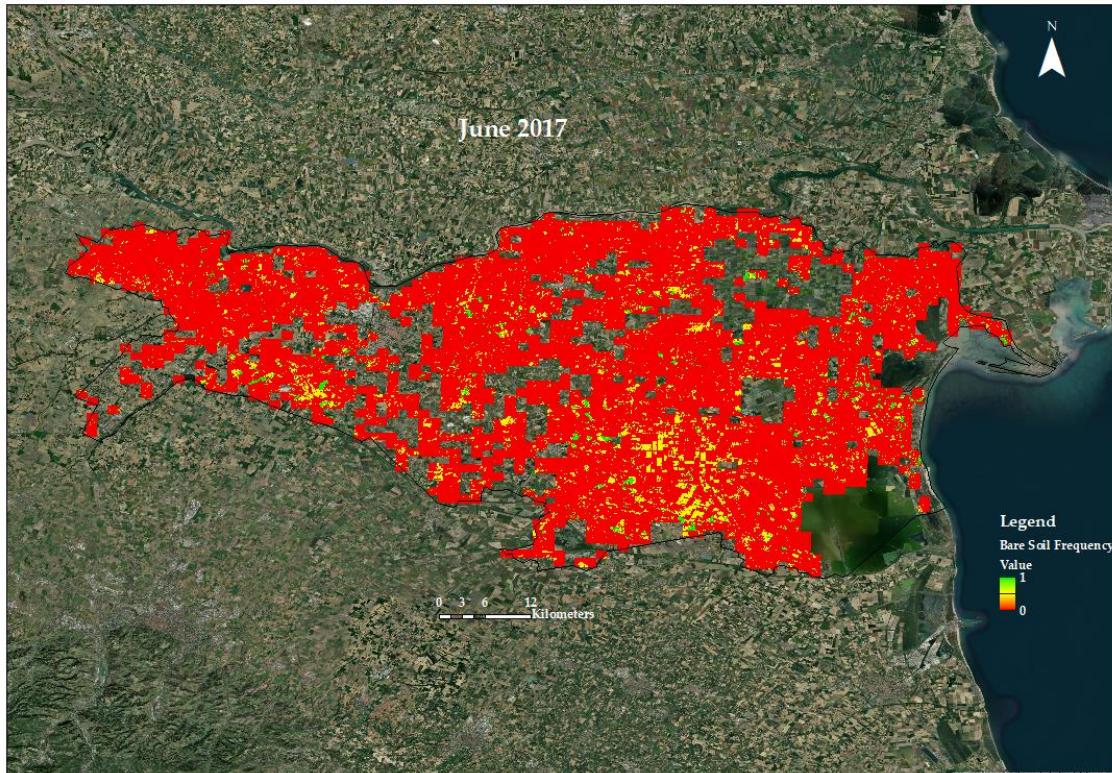
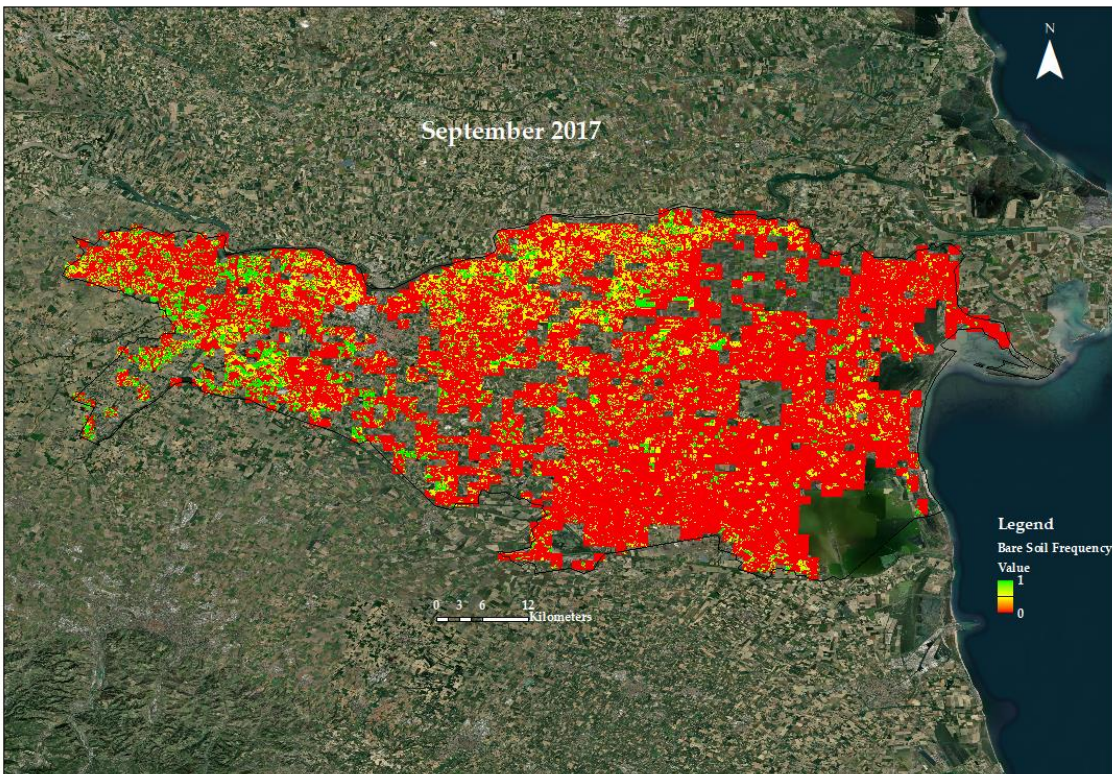
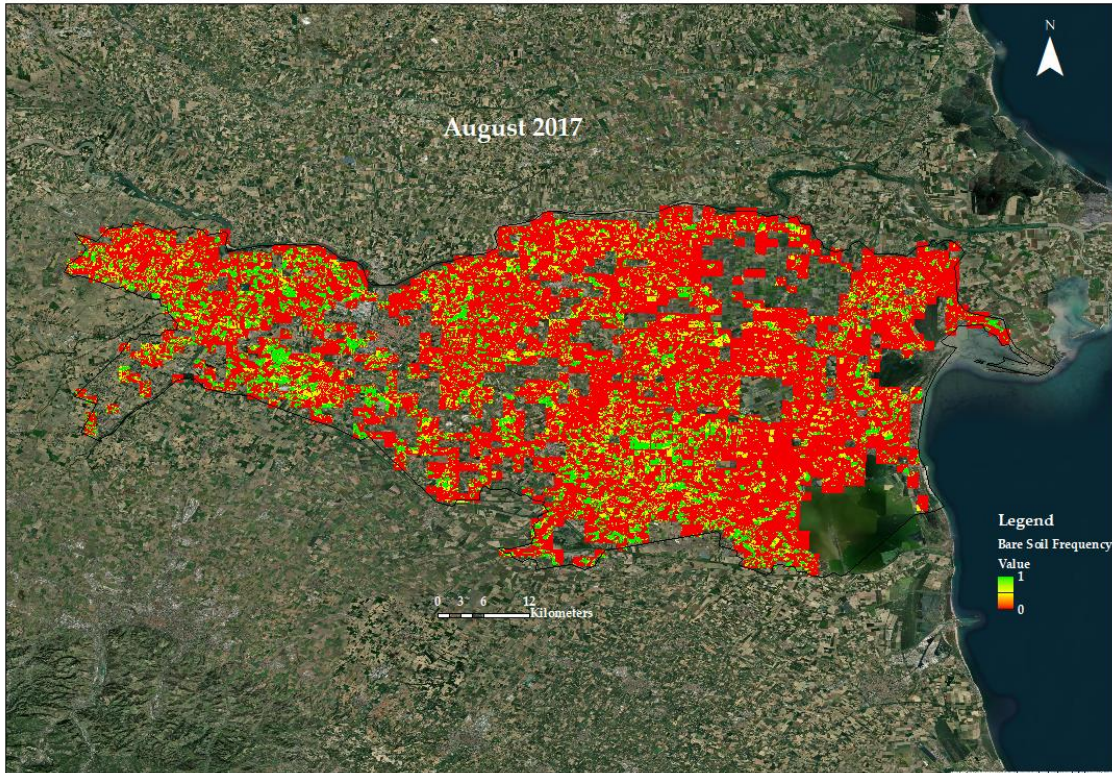


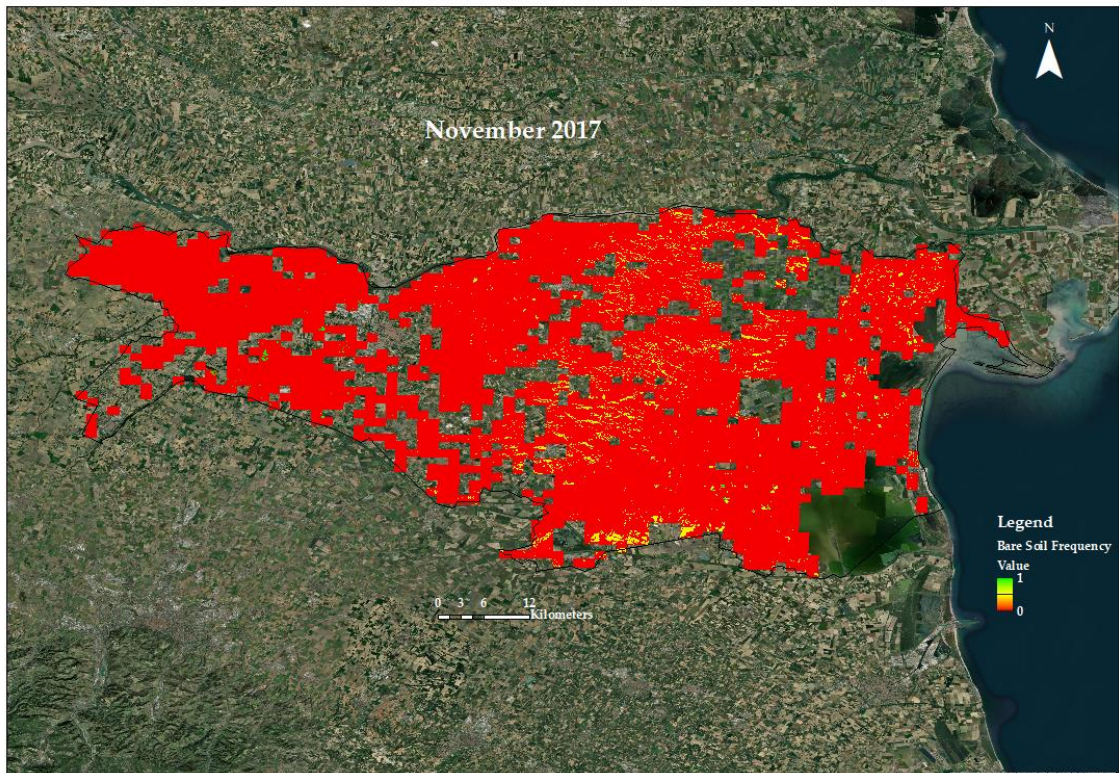
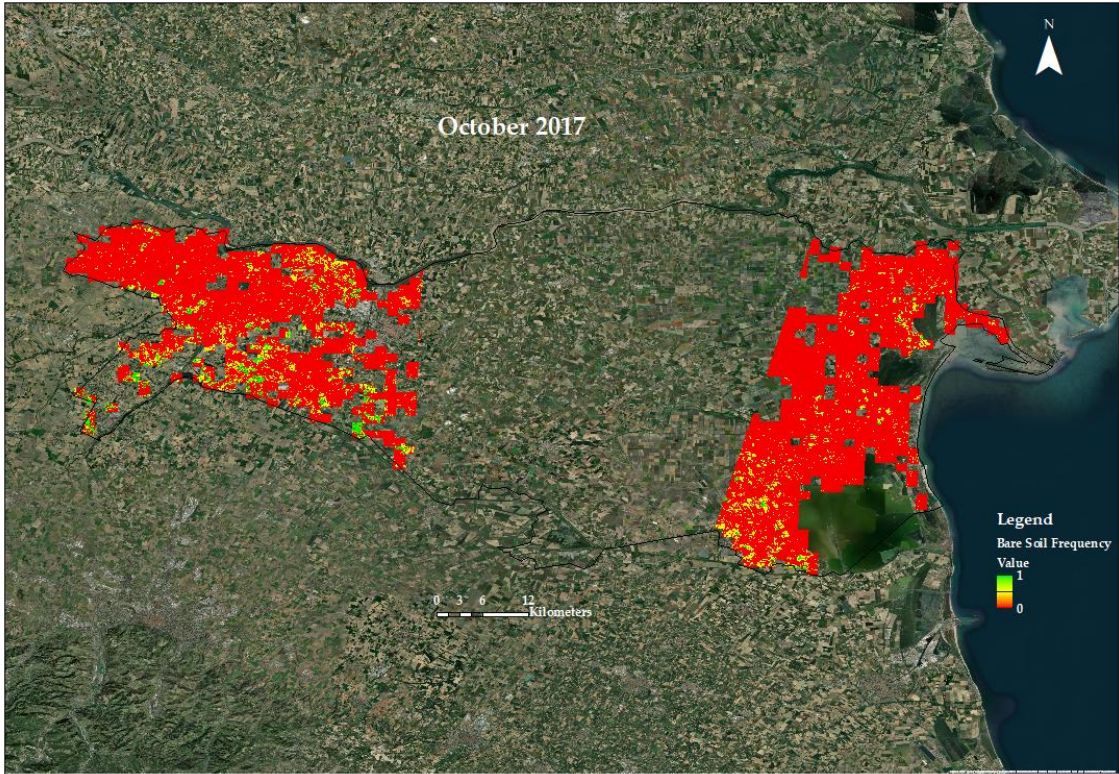
Figure S1. Yearly Bare Soil Frequency of the Ferrara region for the agricultural year 2016.











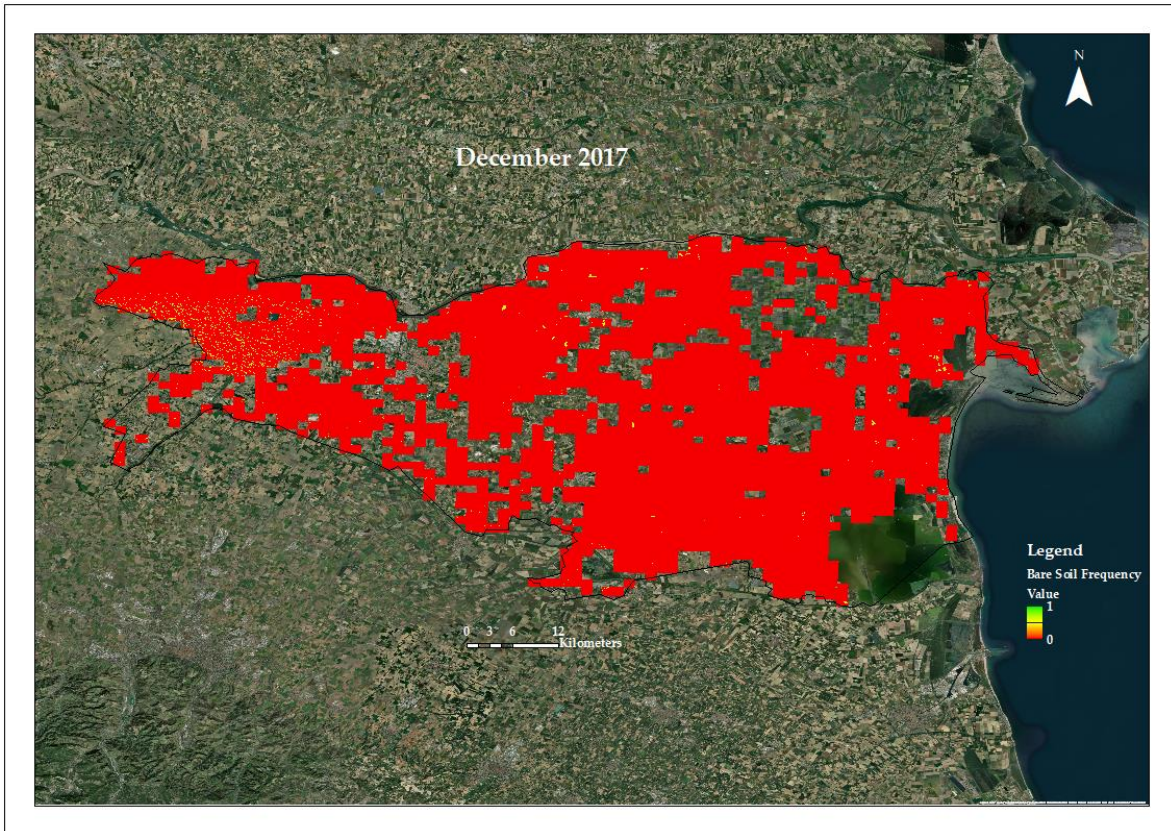
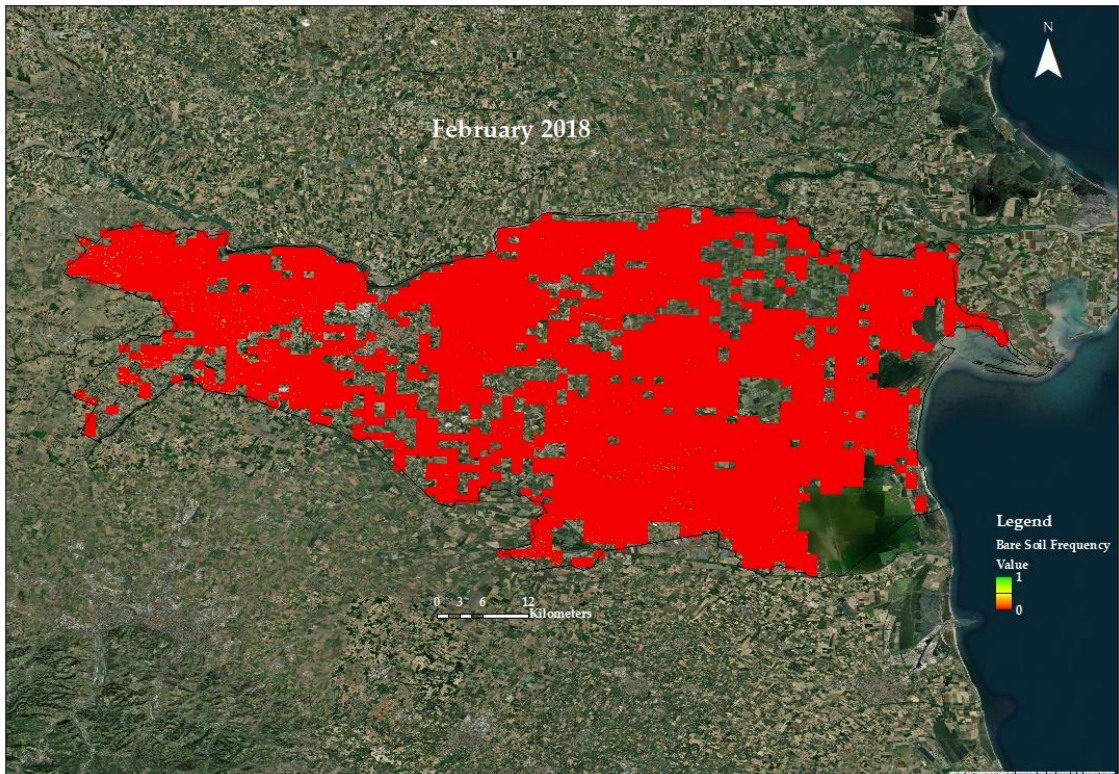
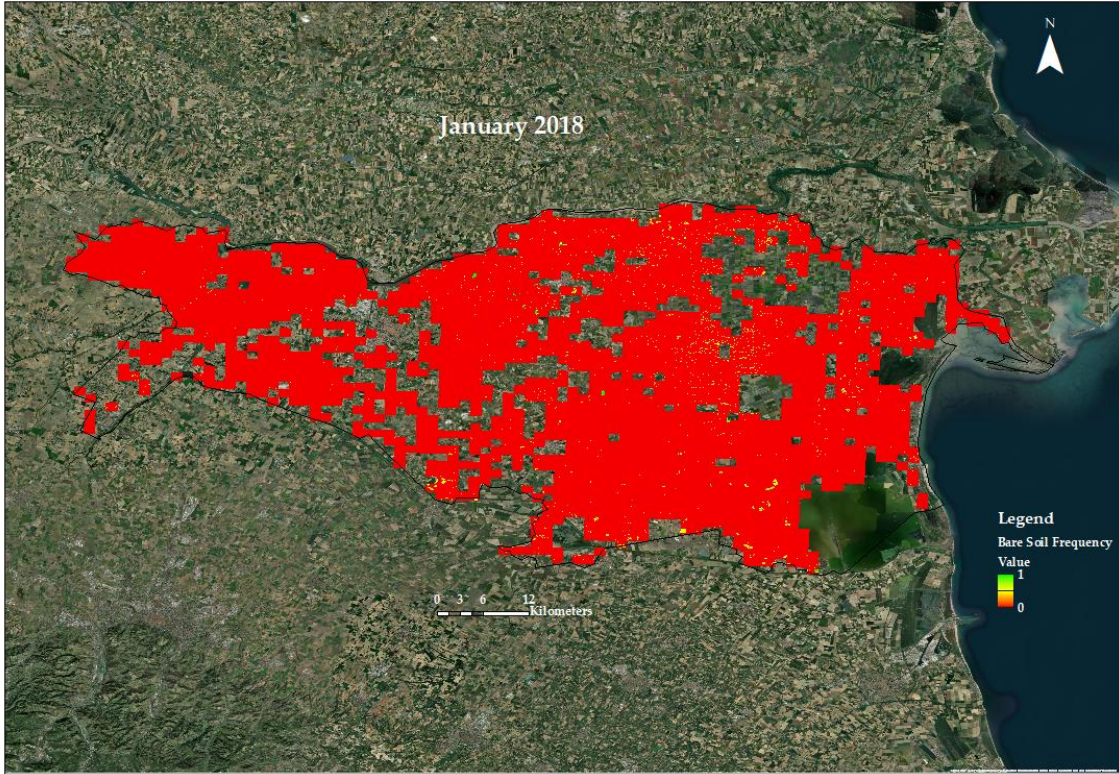
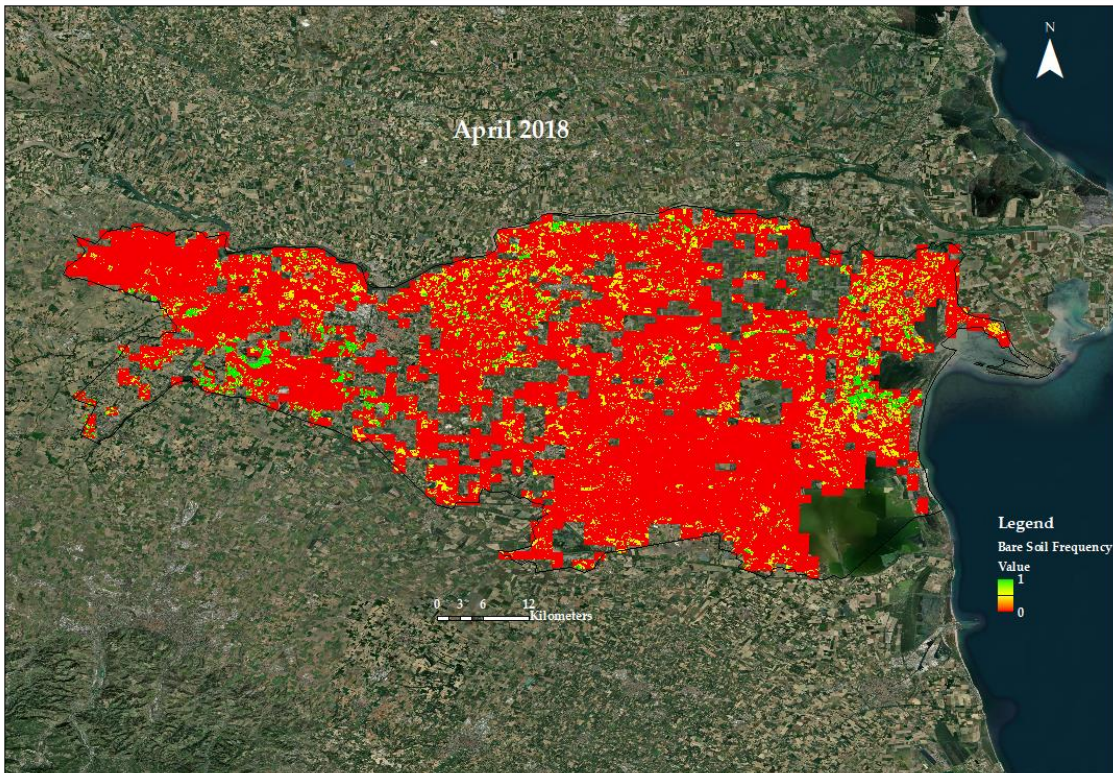
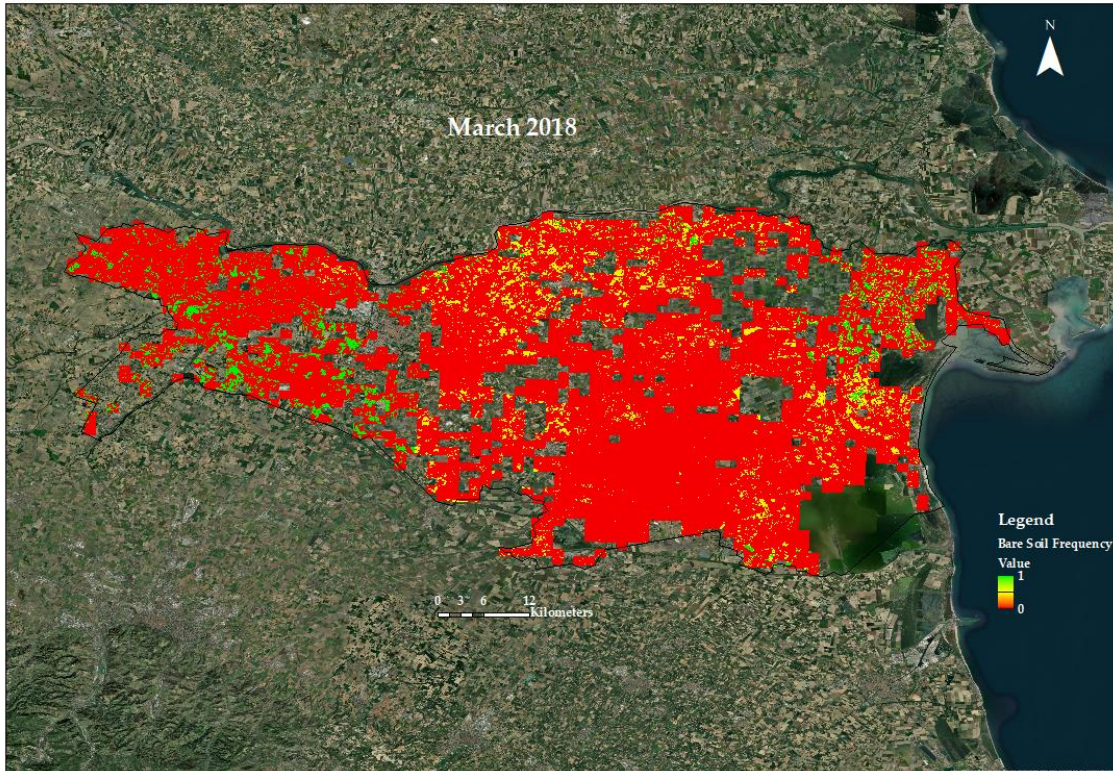
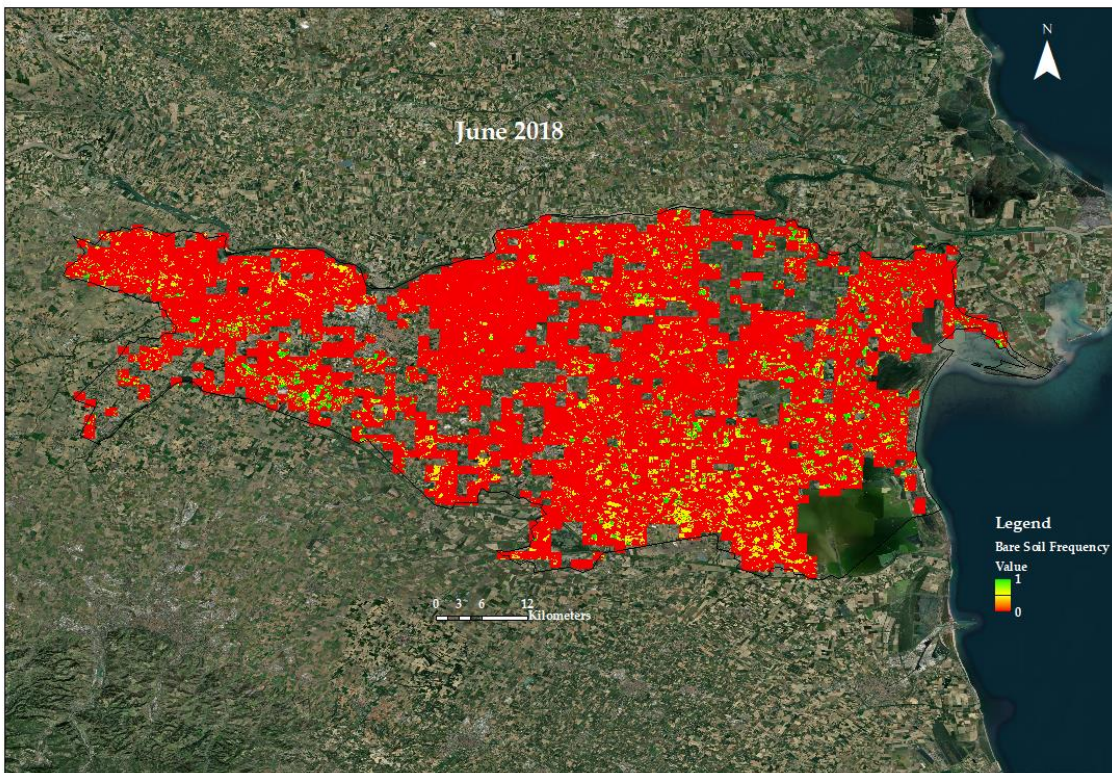
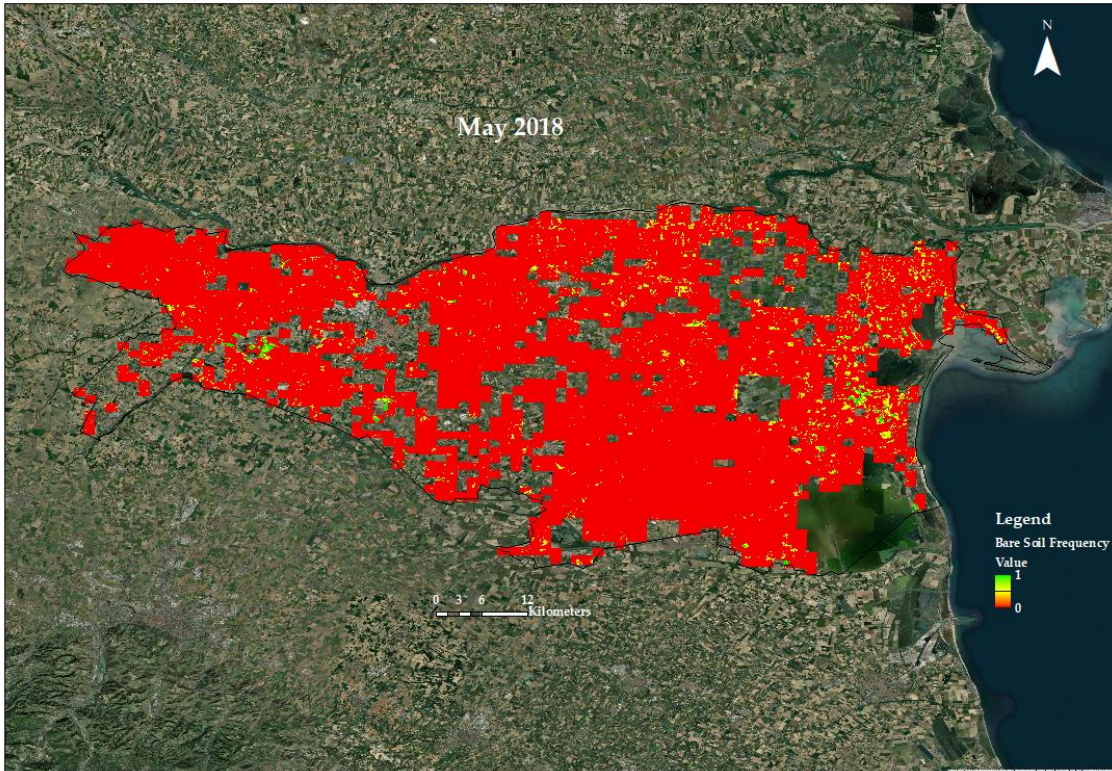
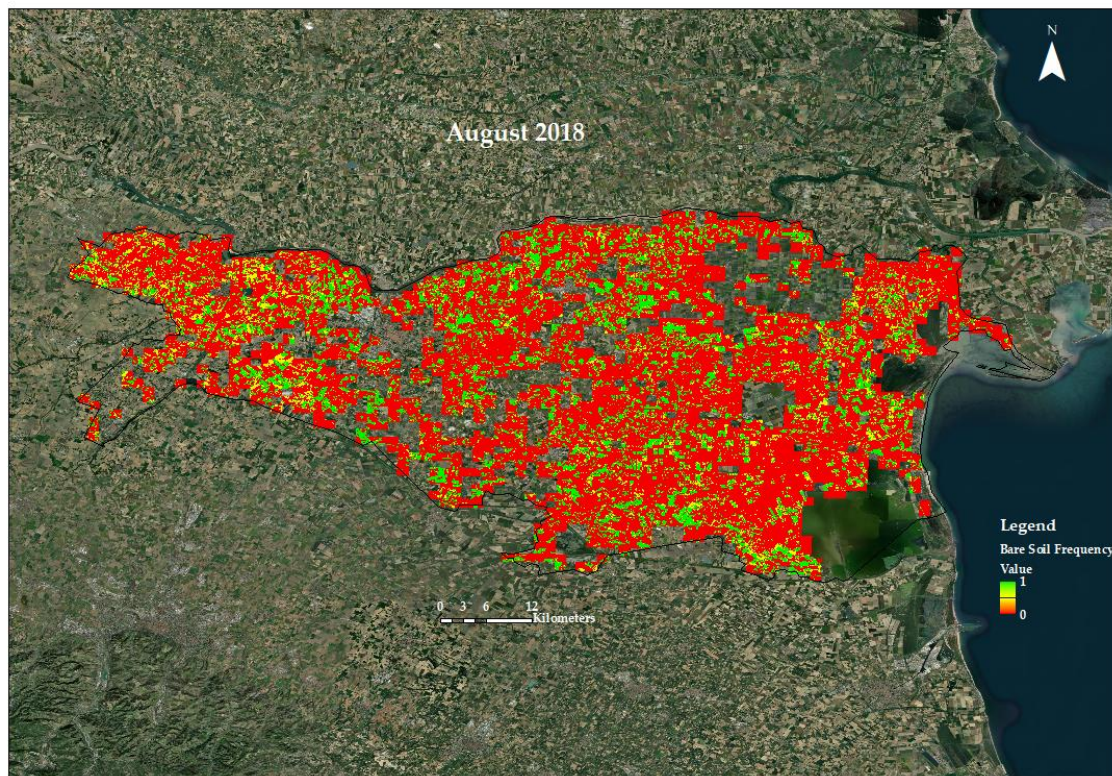
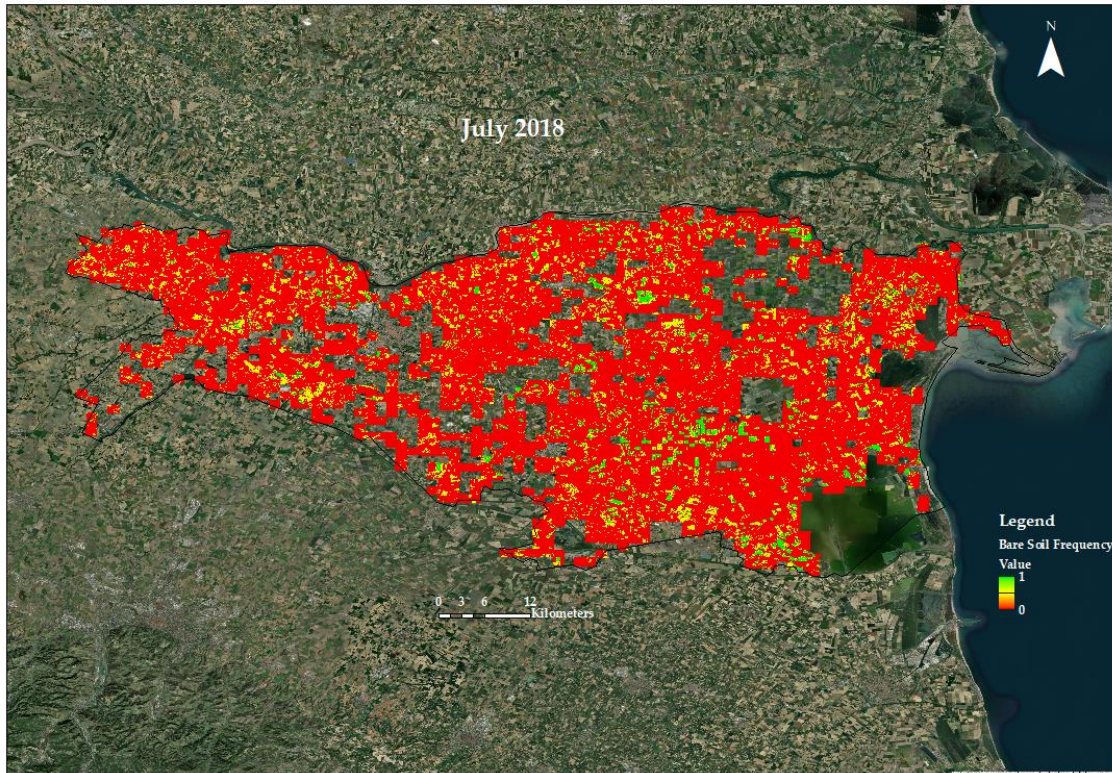


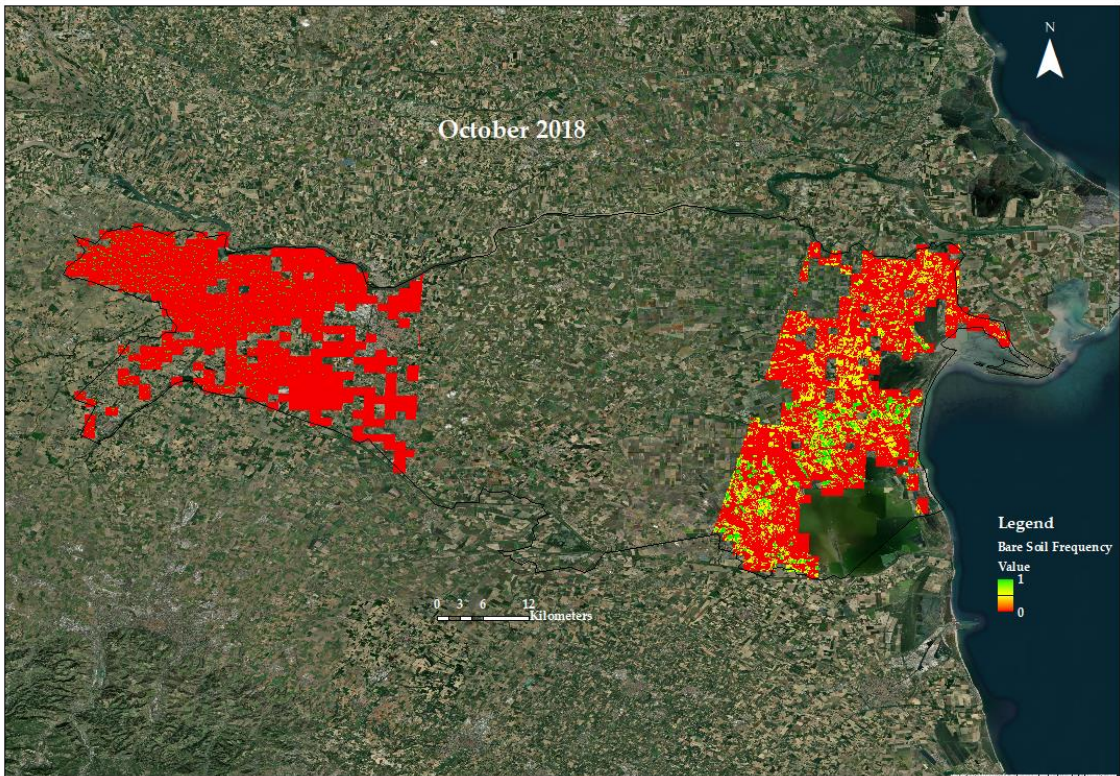
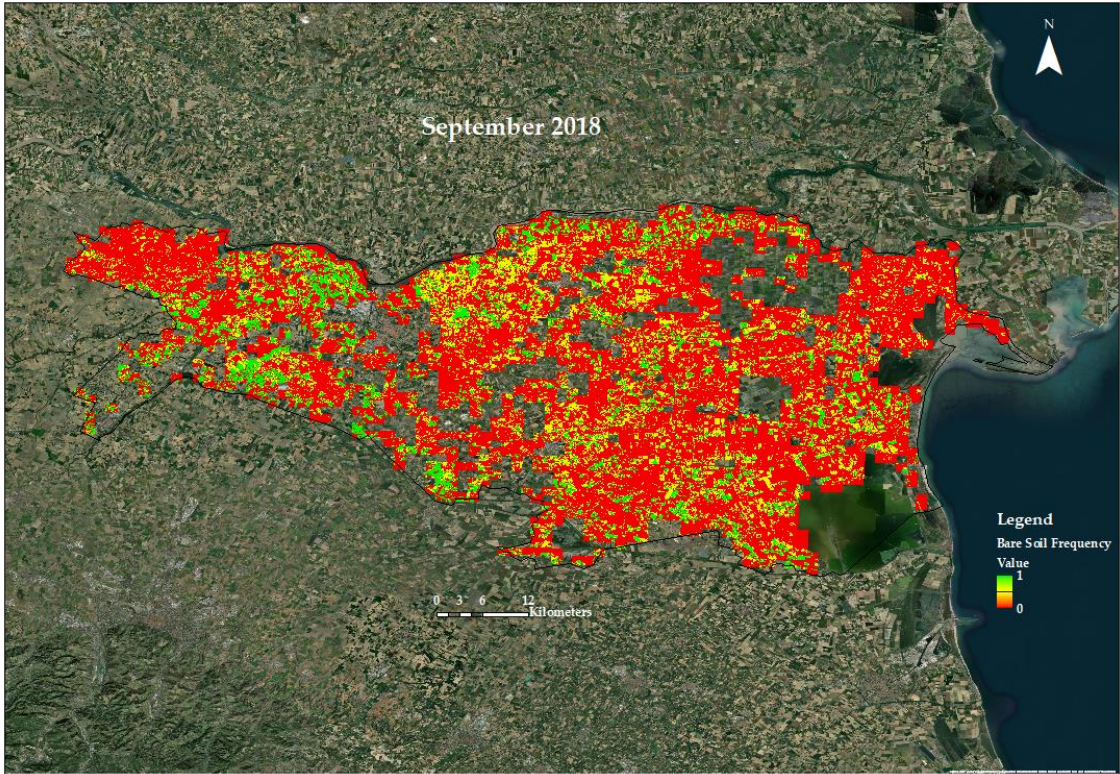
Figure S2. Yearly Bare Soil Frequency of the Ferrara region for the agricultural year 2017.











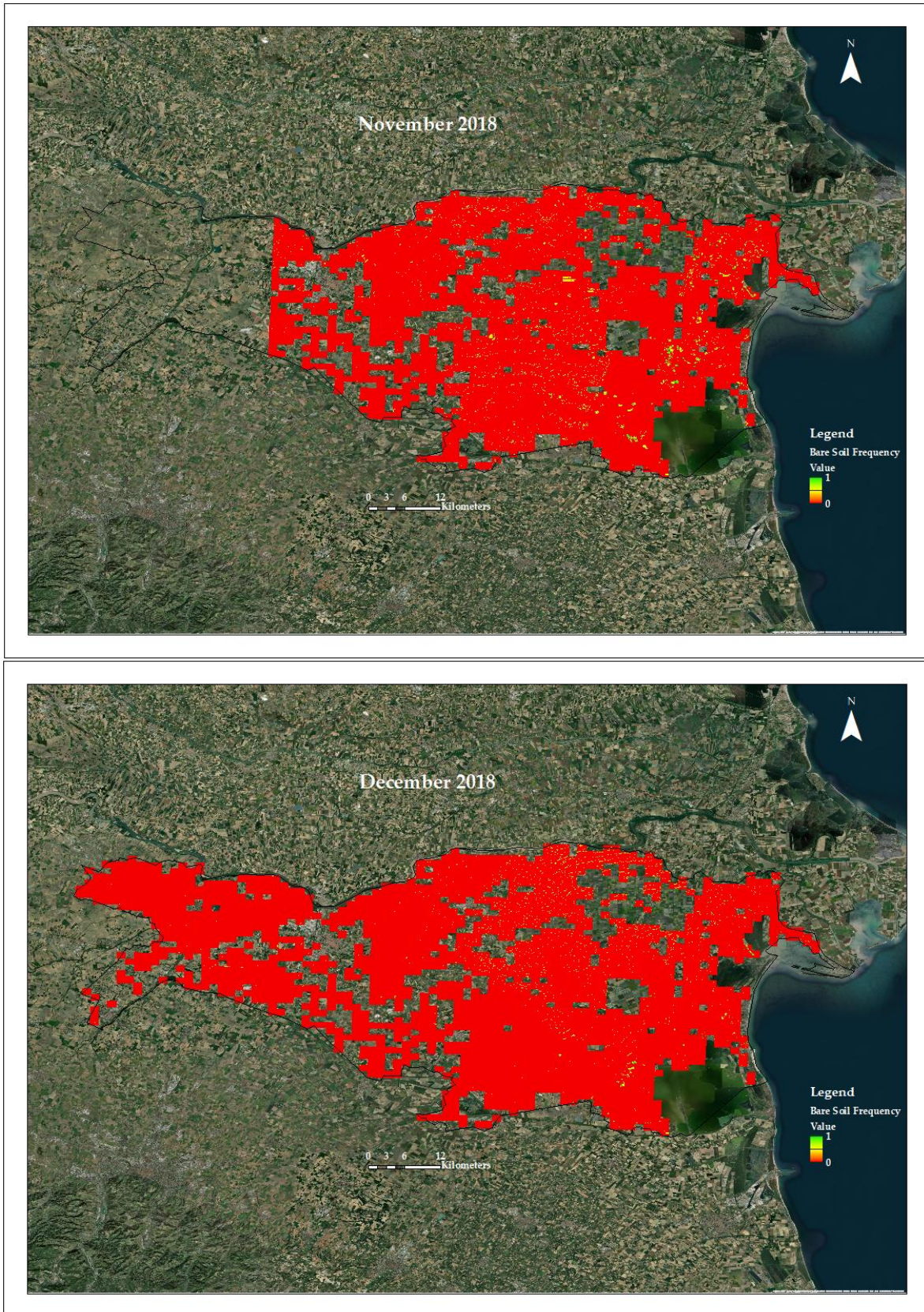
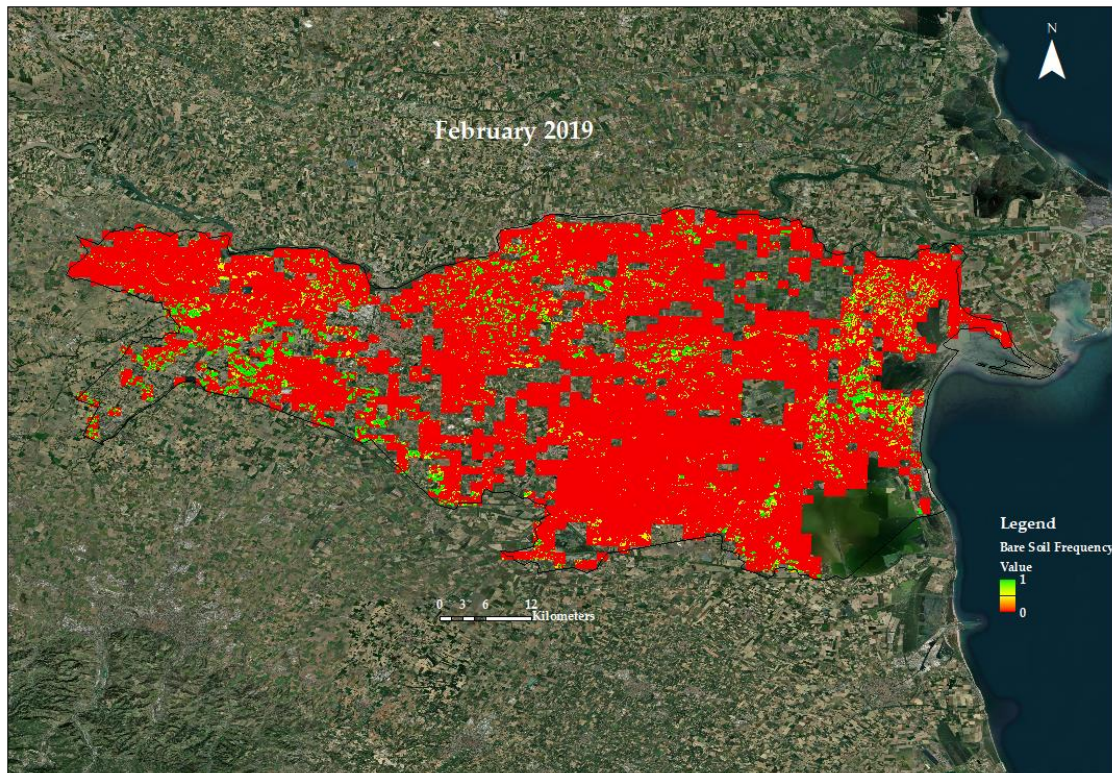
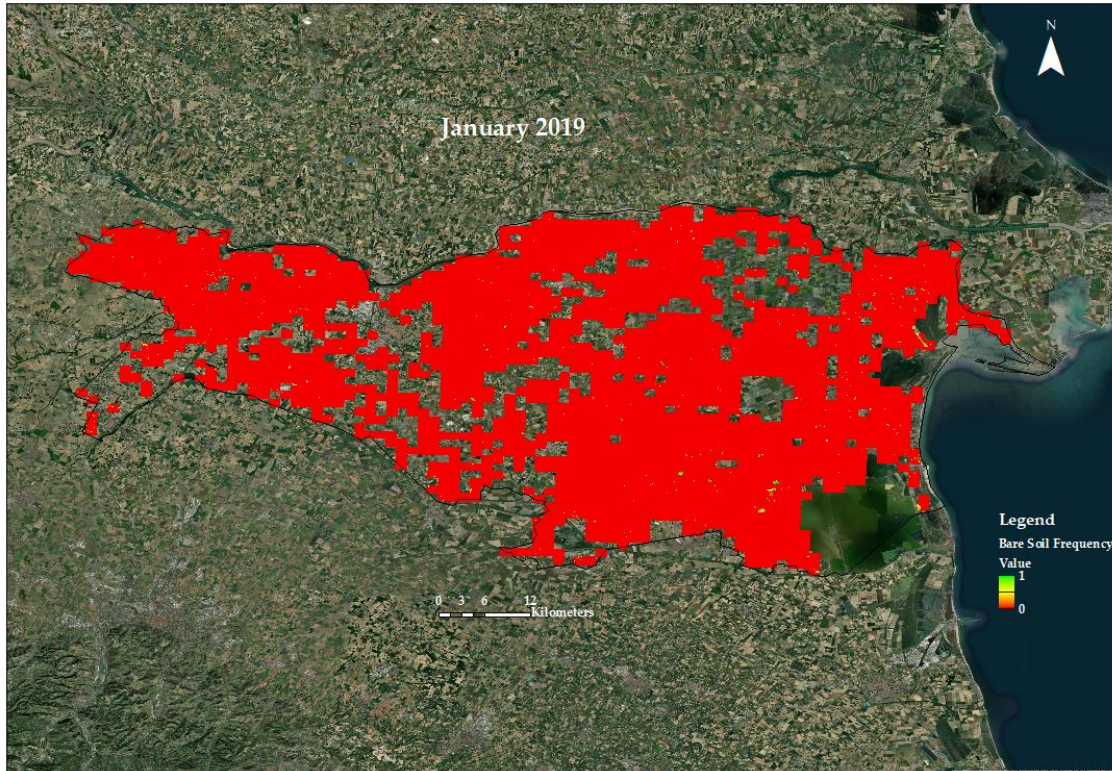
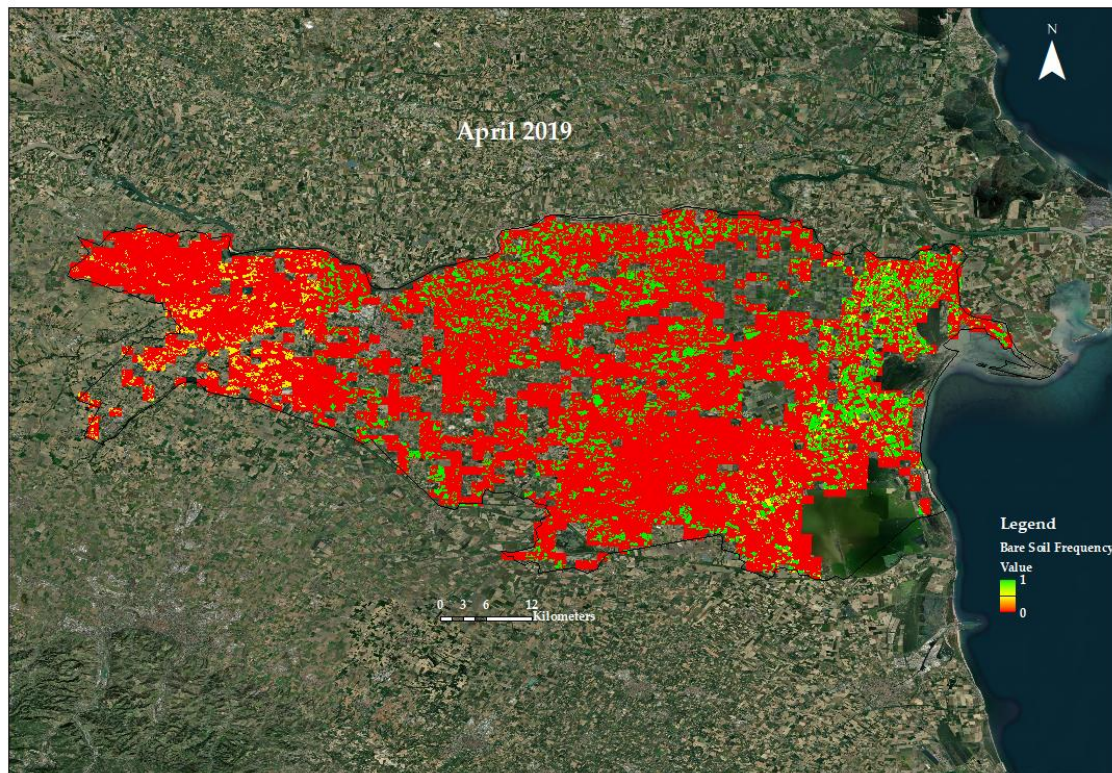
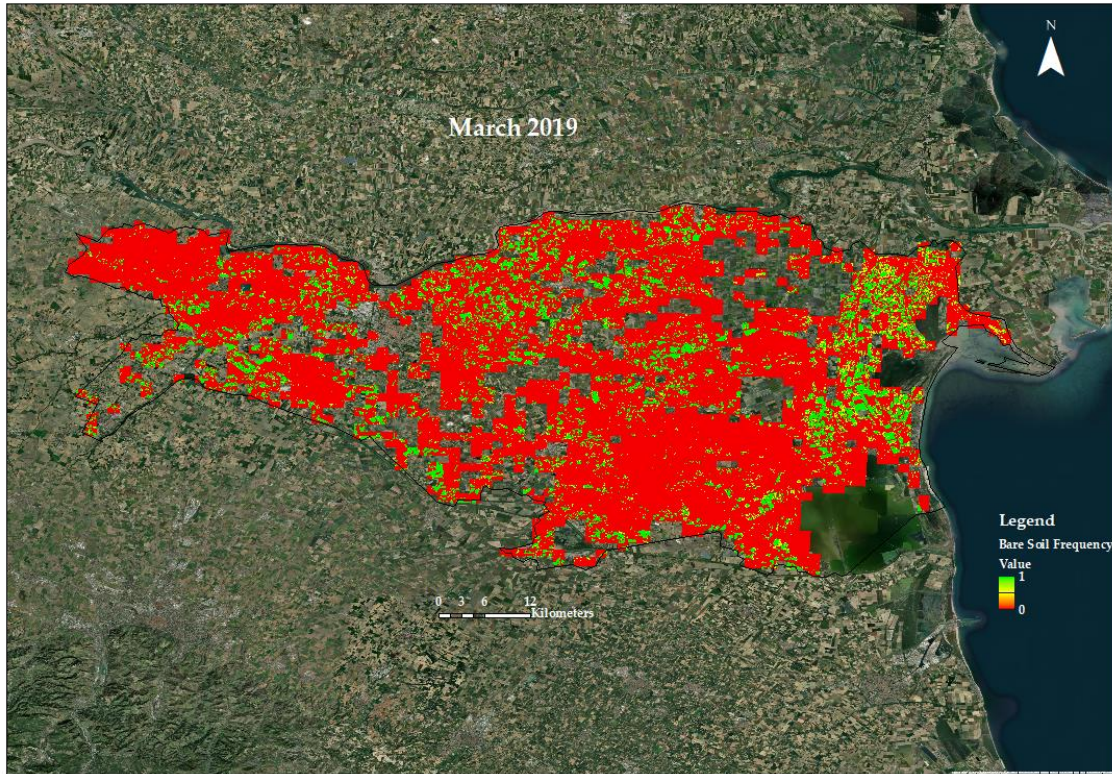
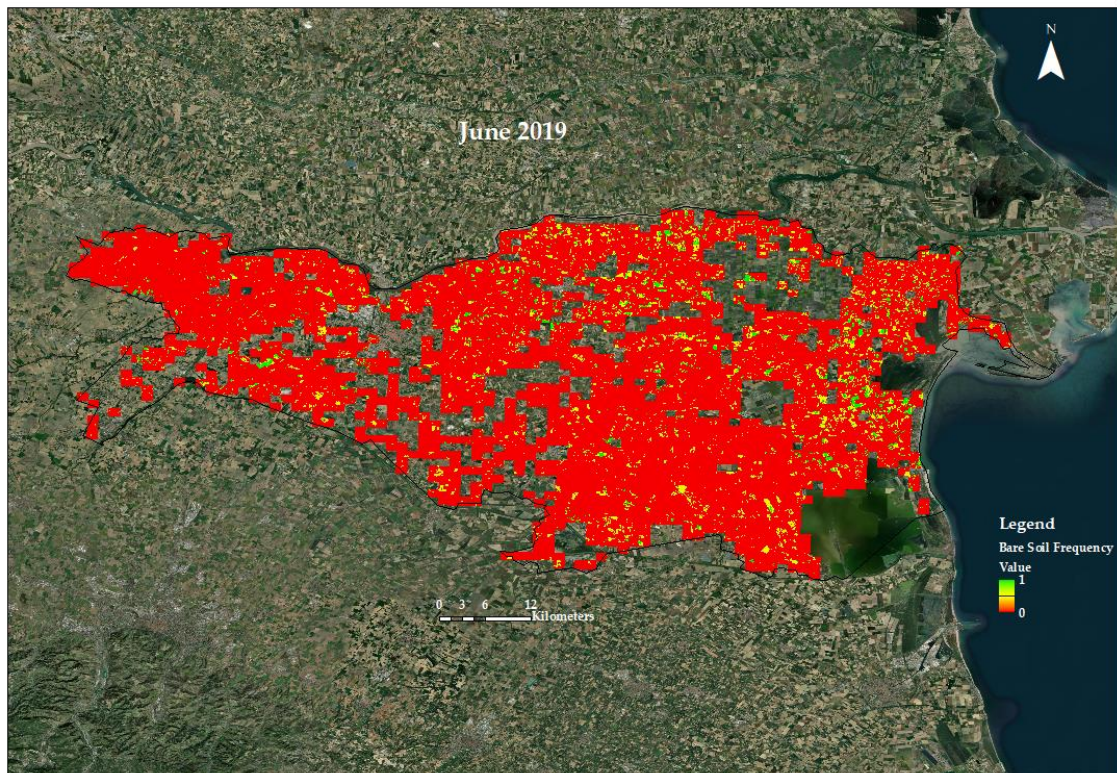
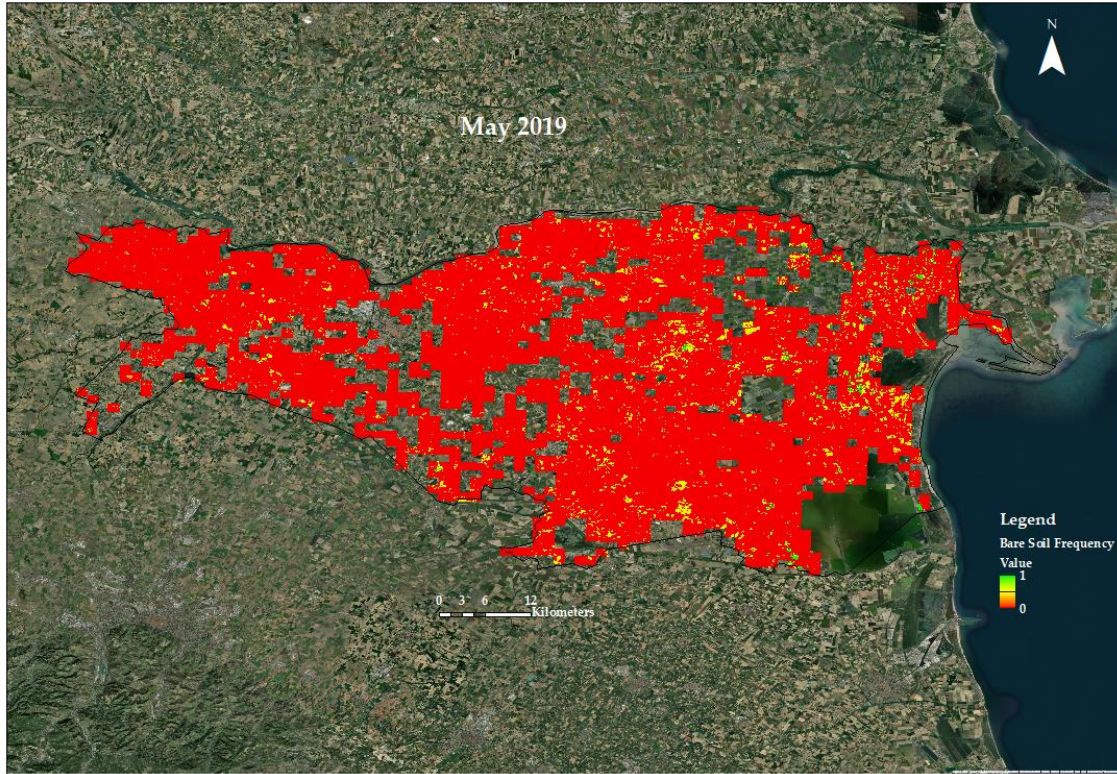
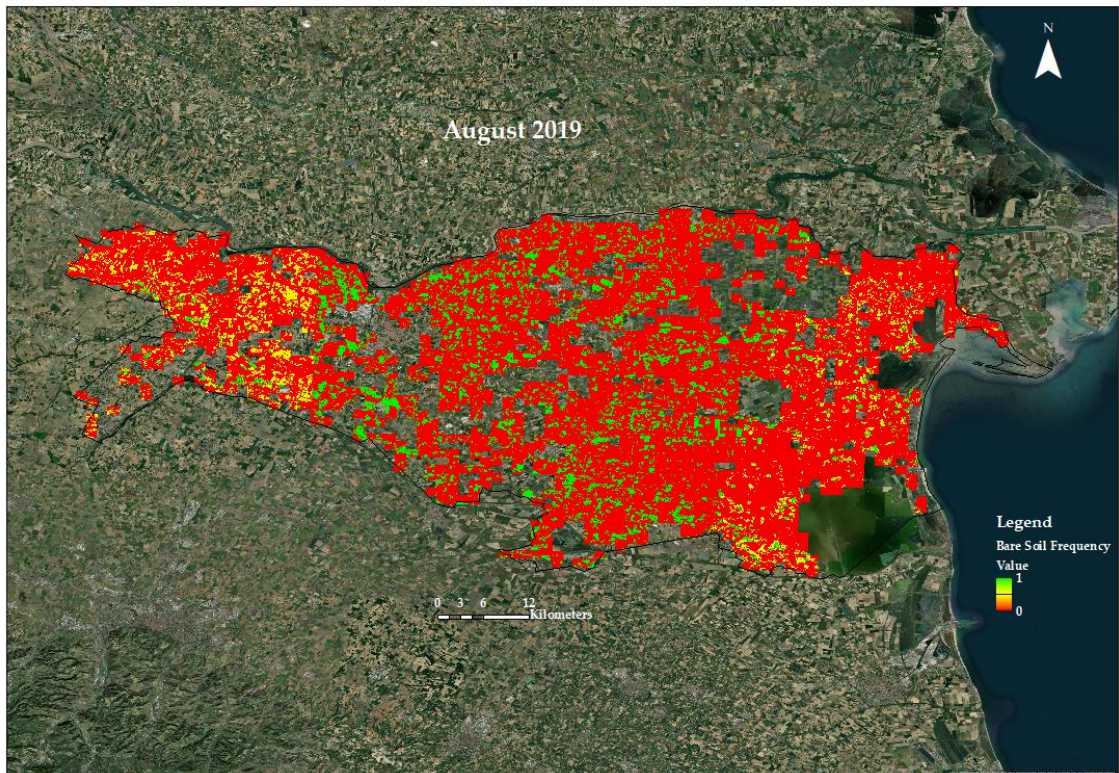
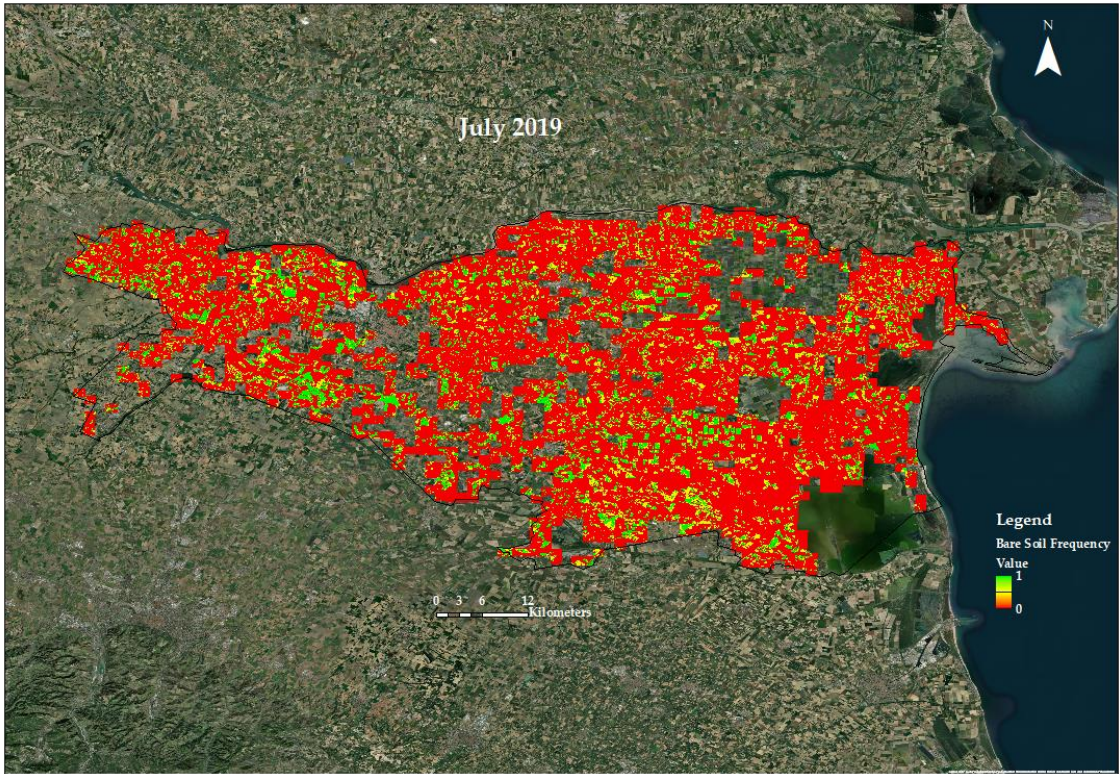


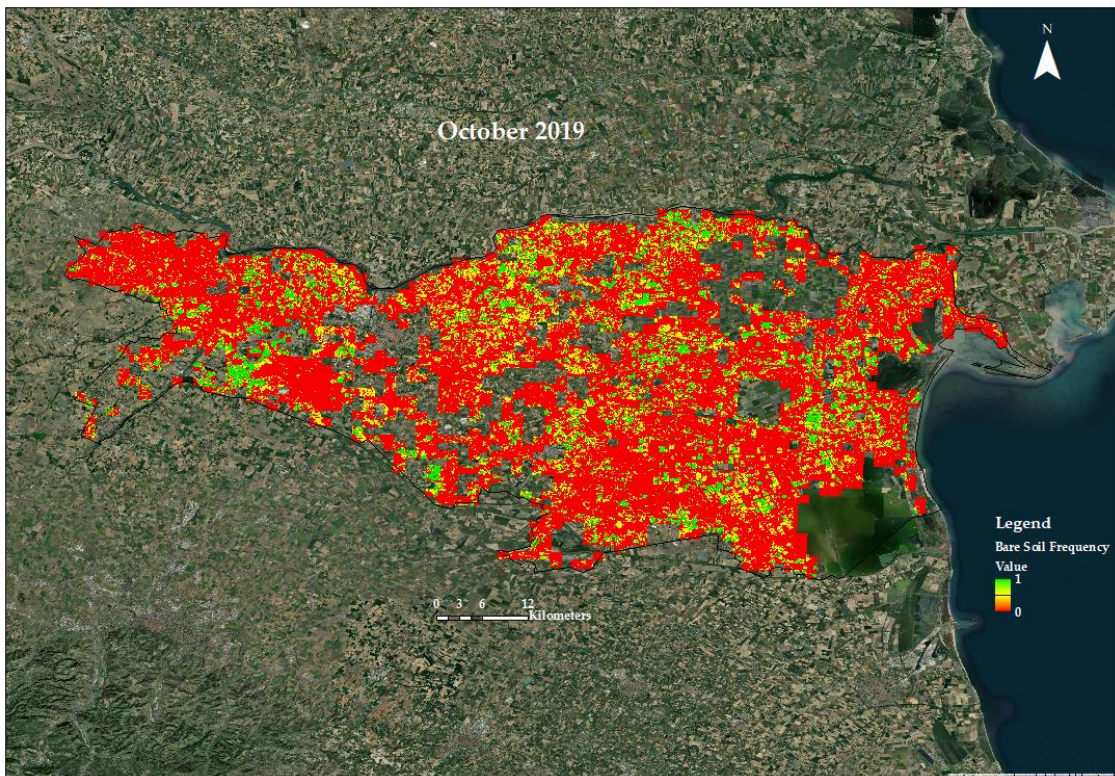
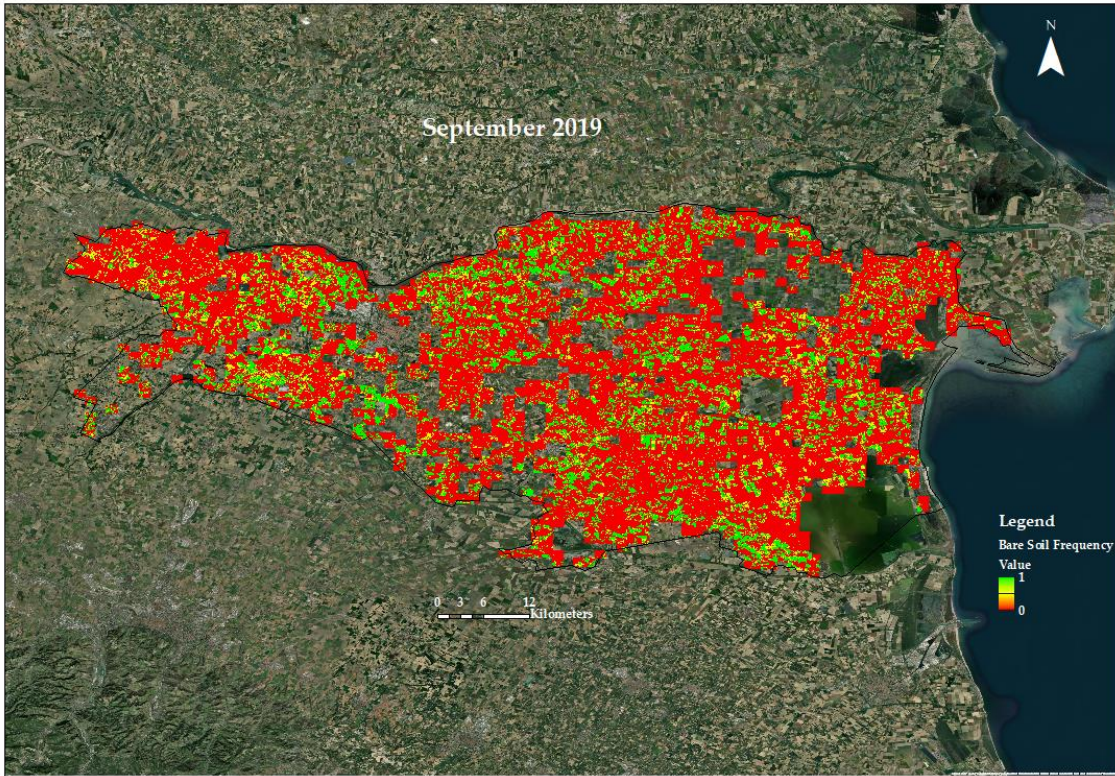
Figure S3. Yearly Bare Soil Frequency of the Ferrara region for the agricultural year 2018.











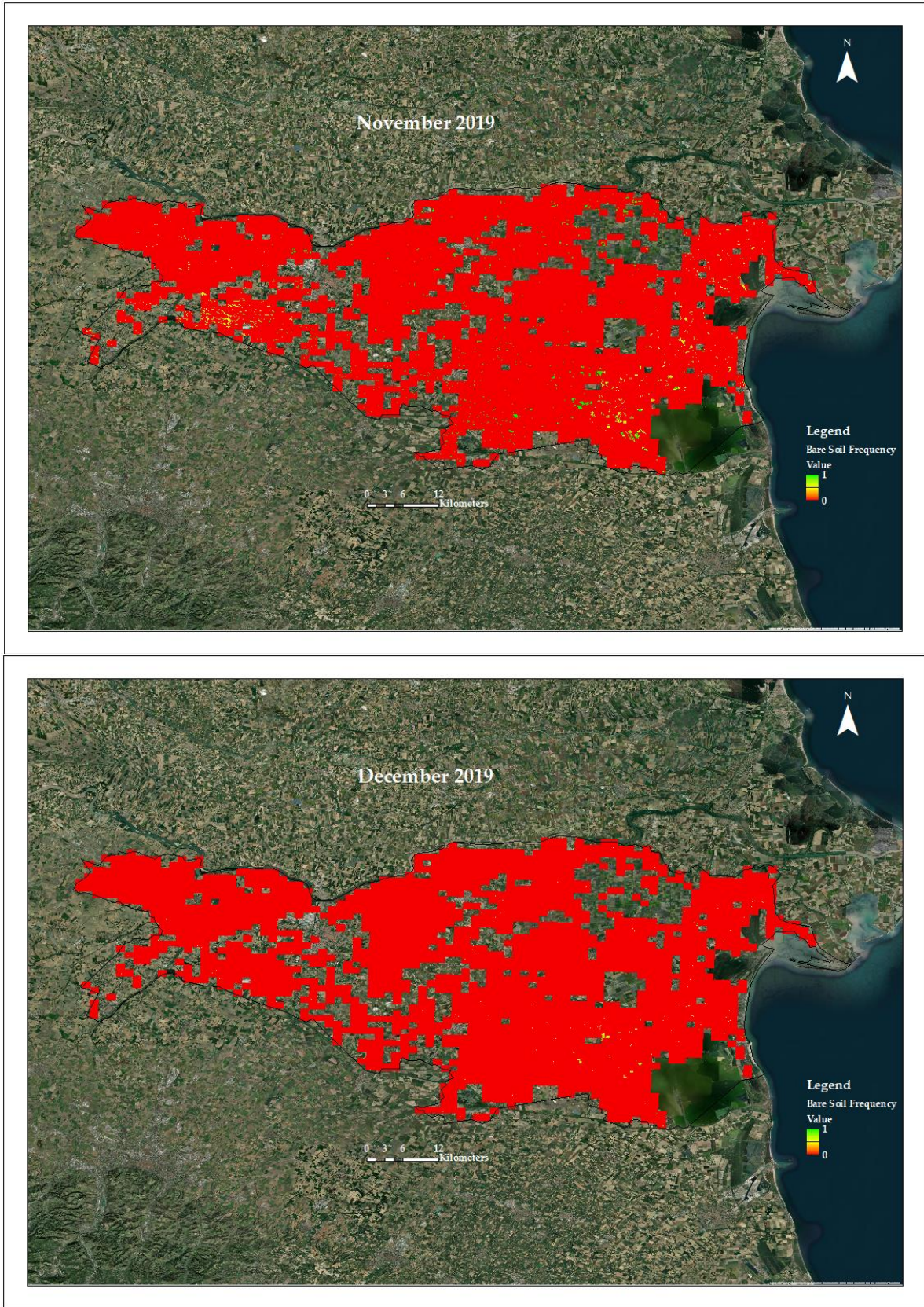
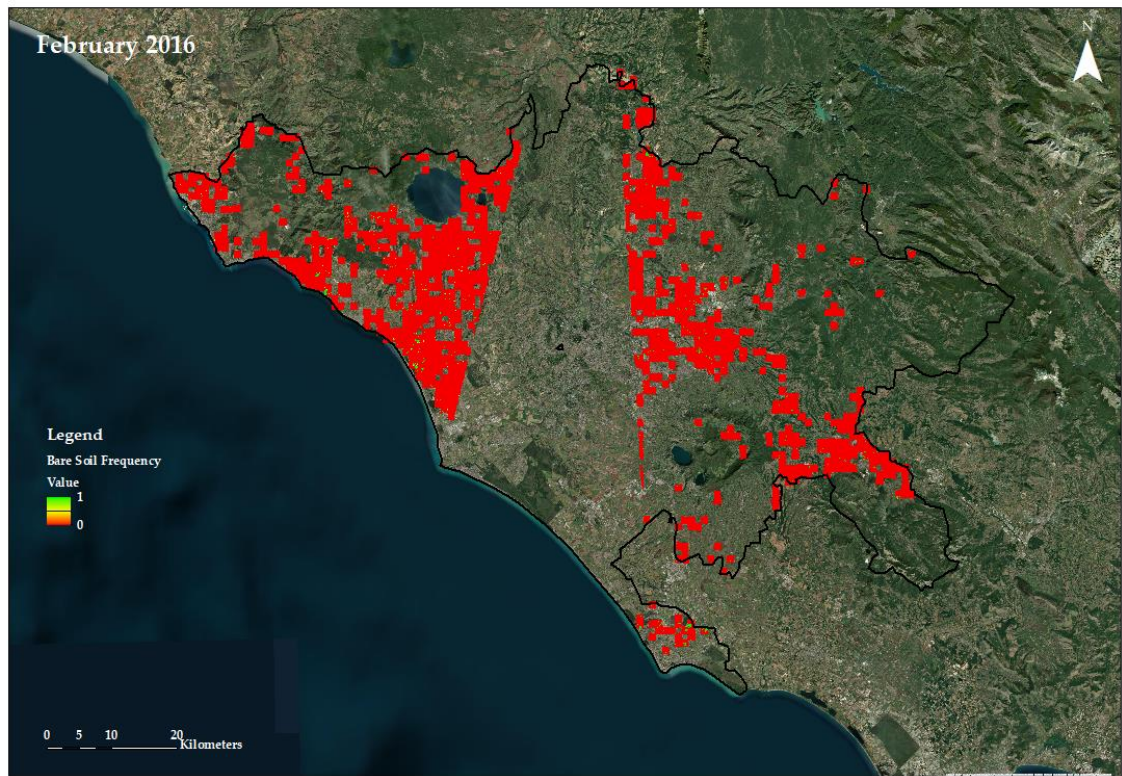
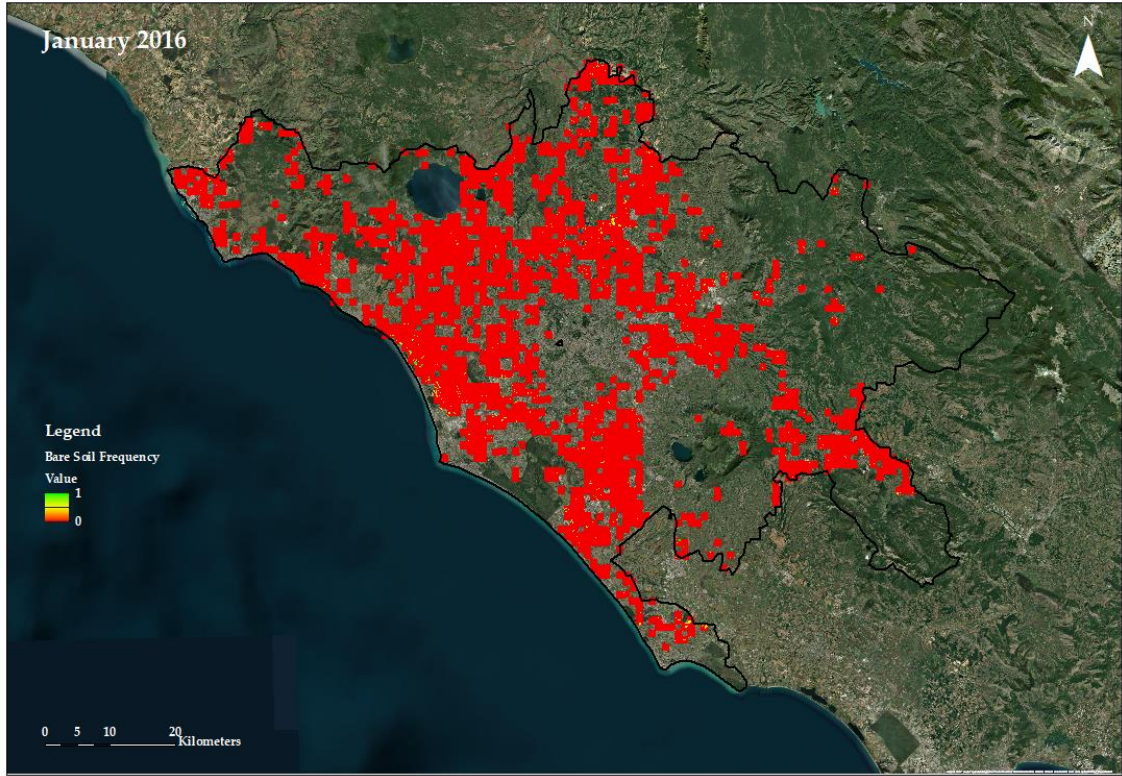
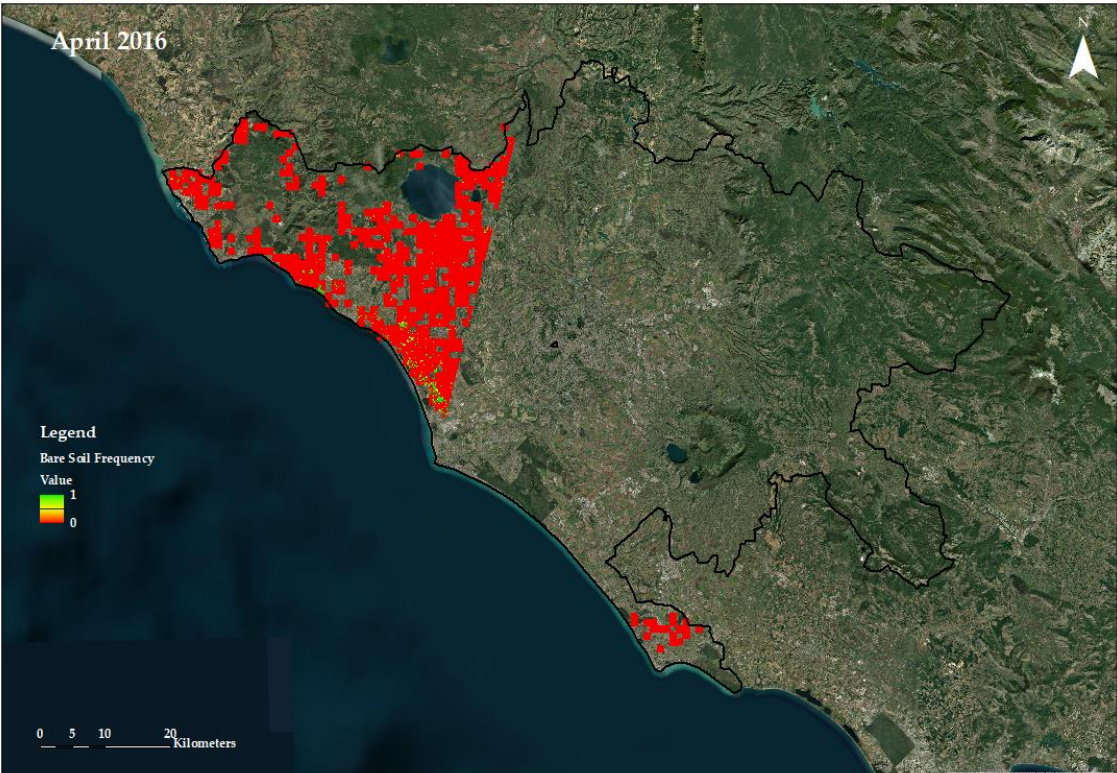
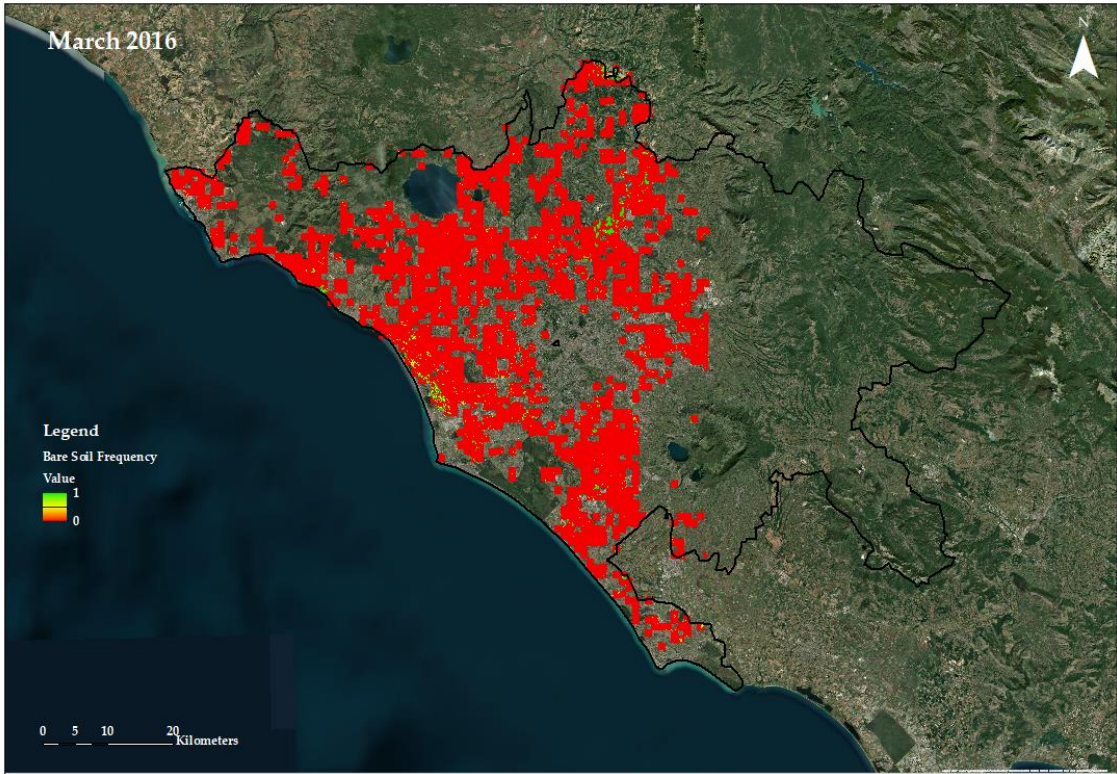
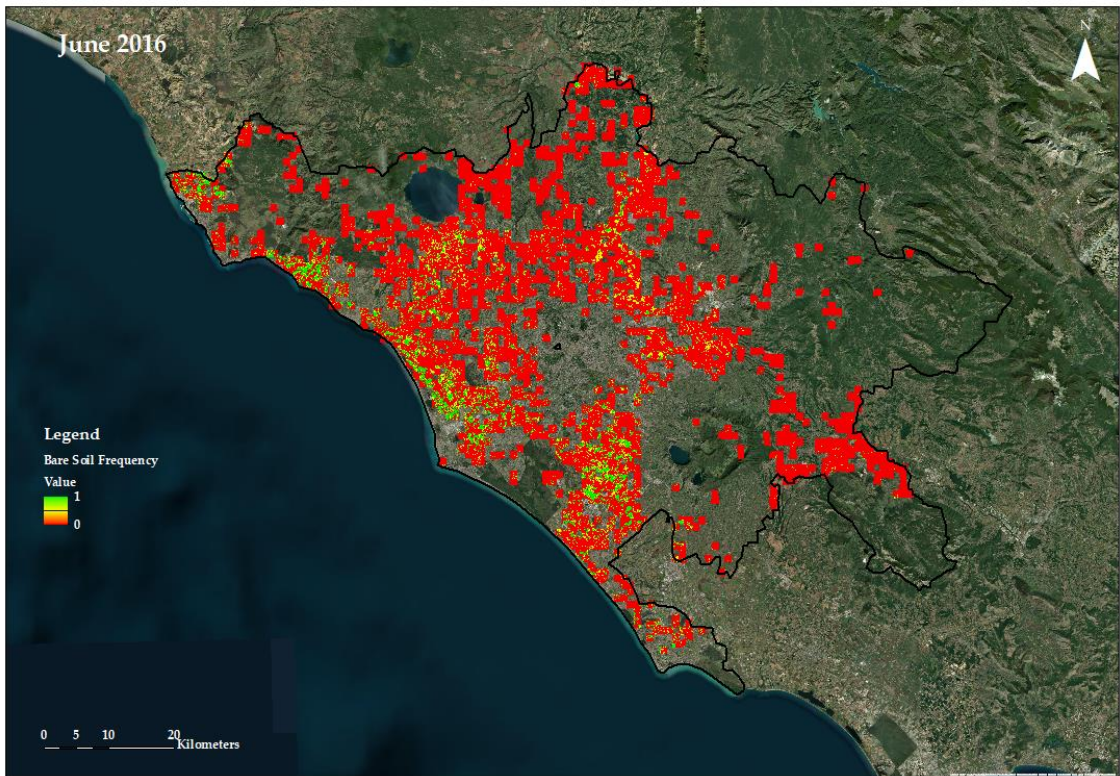
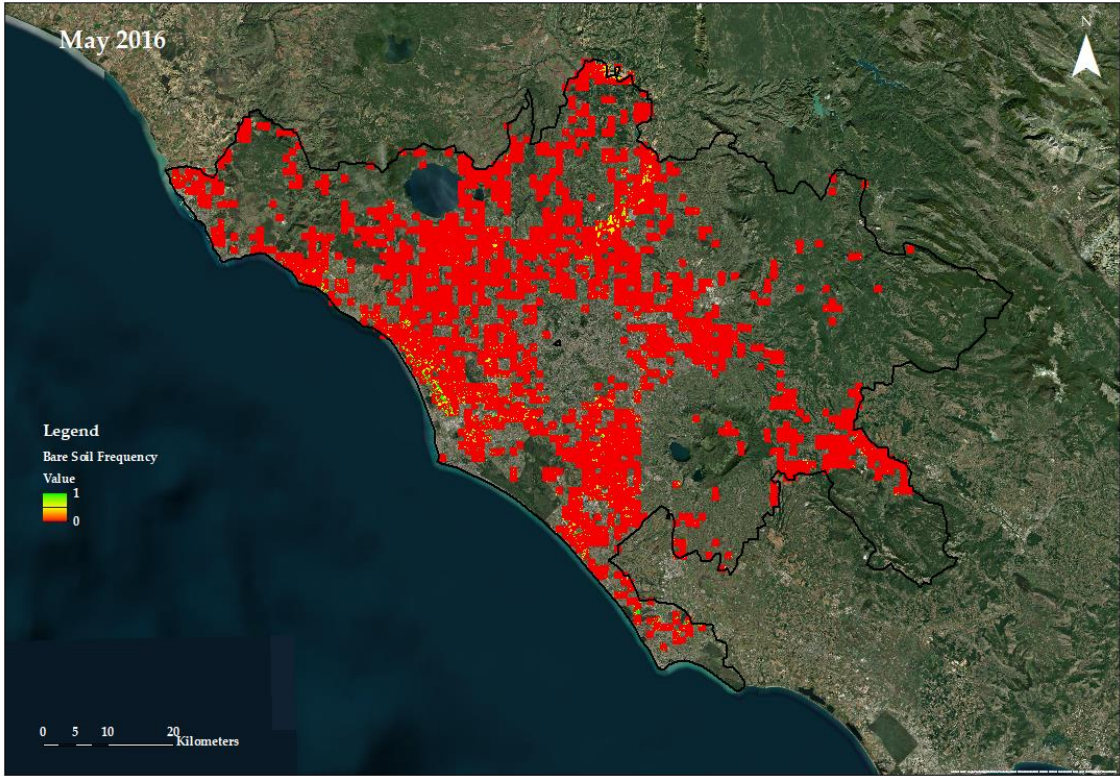


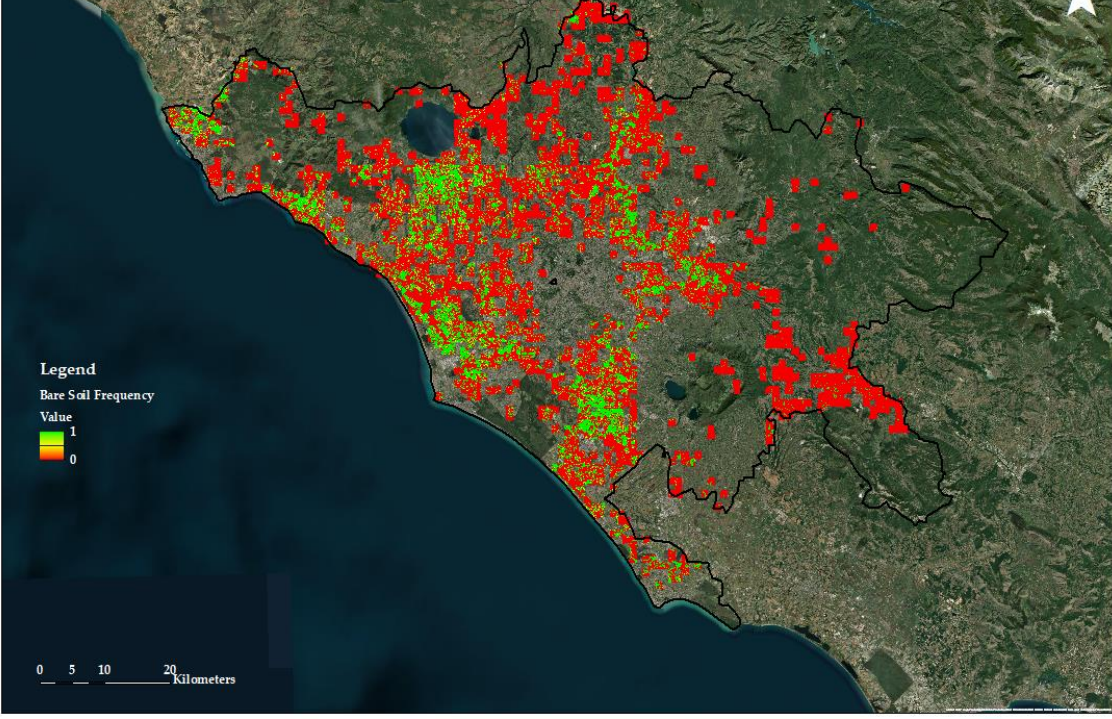
Figure S4. Yearly Bare Soil Frequency of the Ferrara region for the agricultural year 2019.



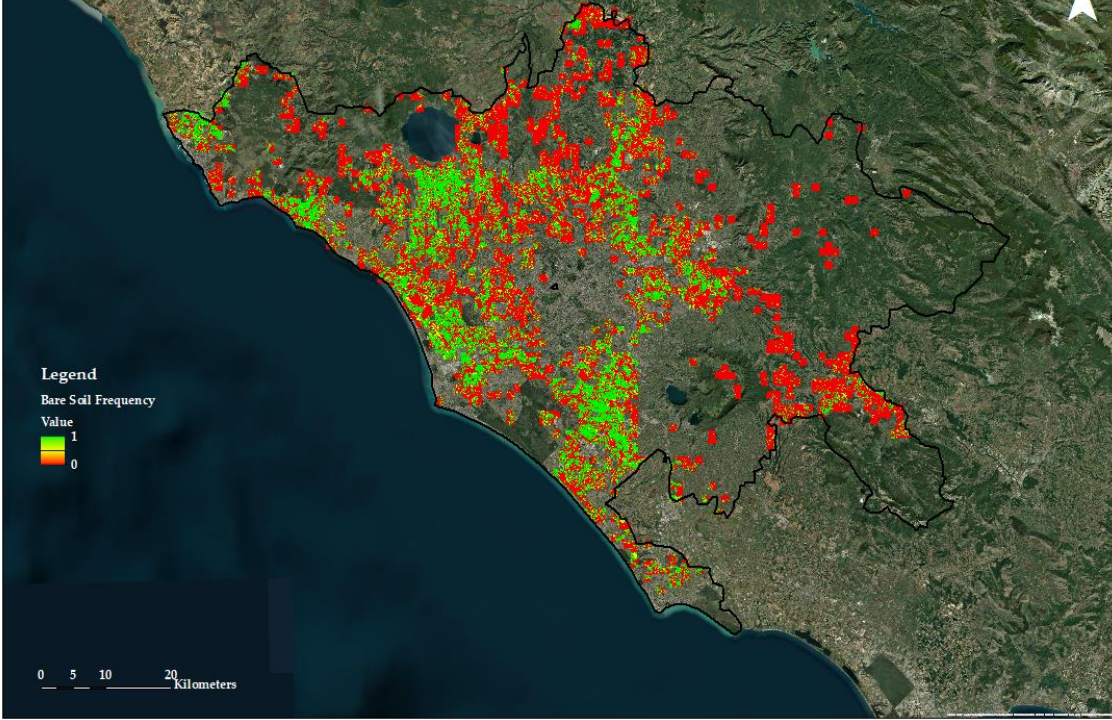




July 2016



August 2016



September 2016

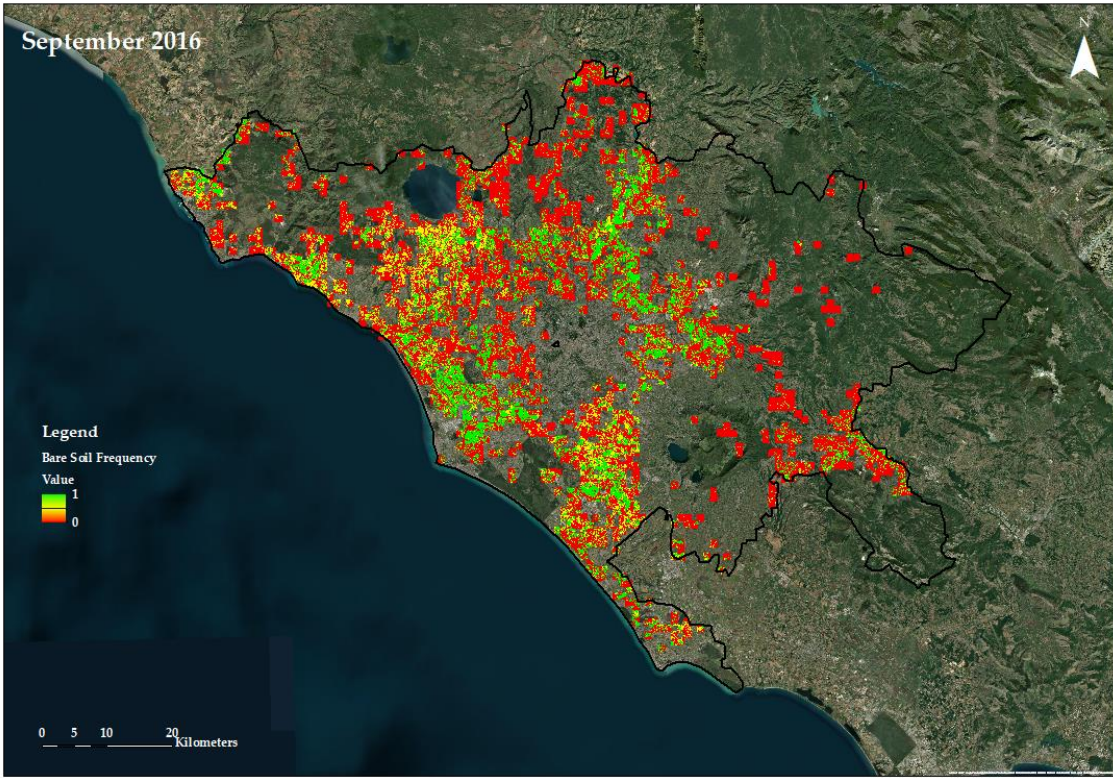
Legend

Bare Soil Frequency

Value



0 5 10 20 Kilometers



October 2016

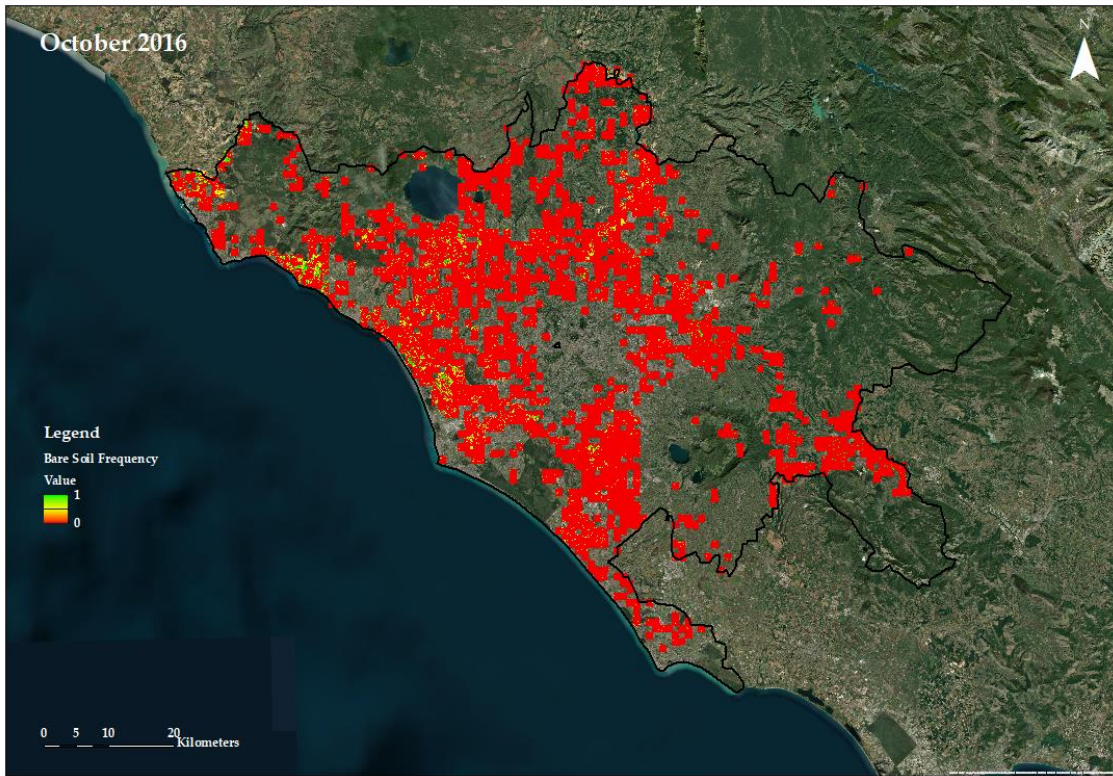
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Bare Soil Frequency

Value



0 5 10 20 Kilometers



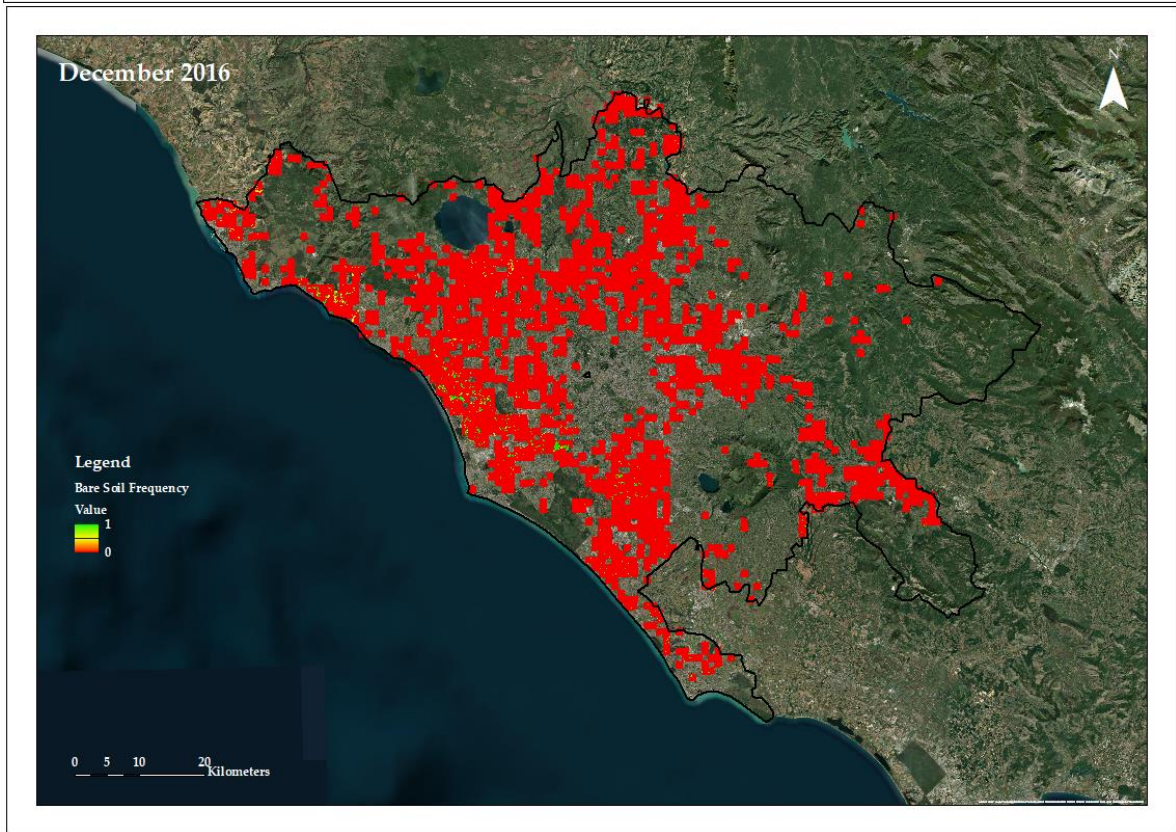
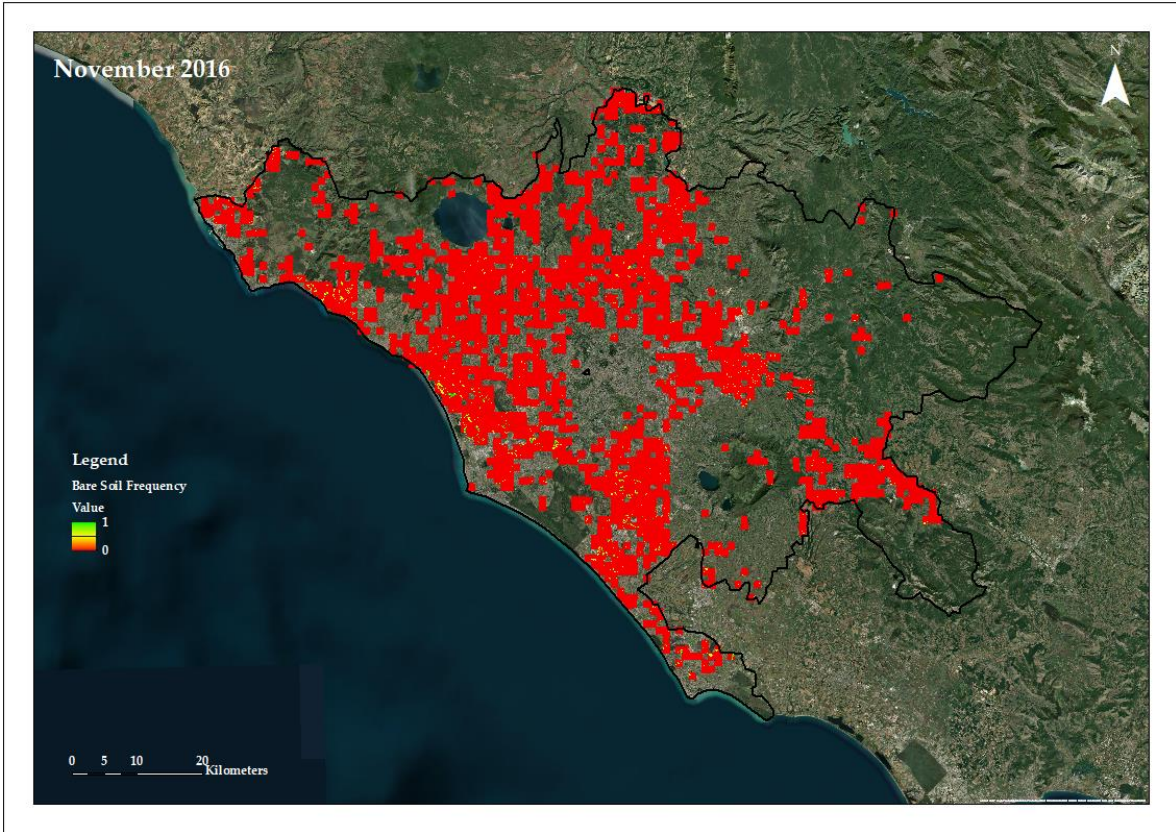
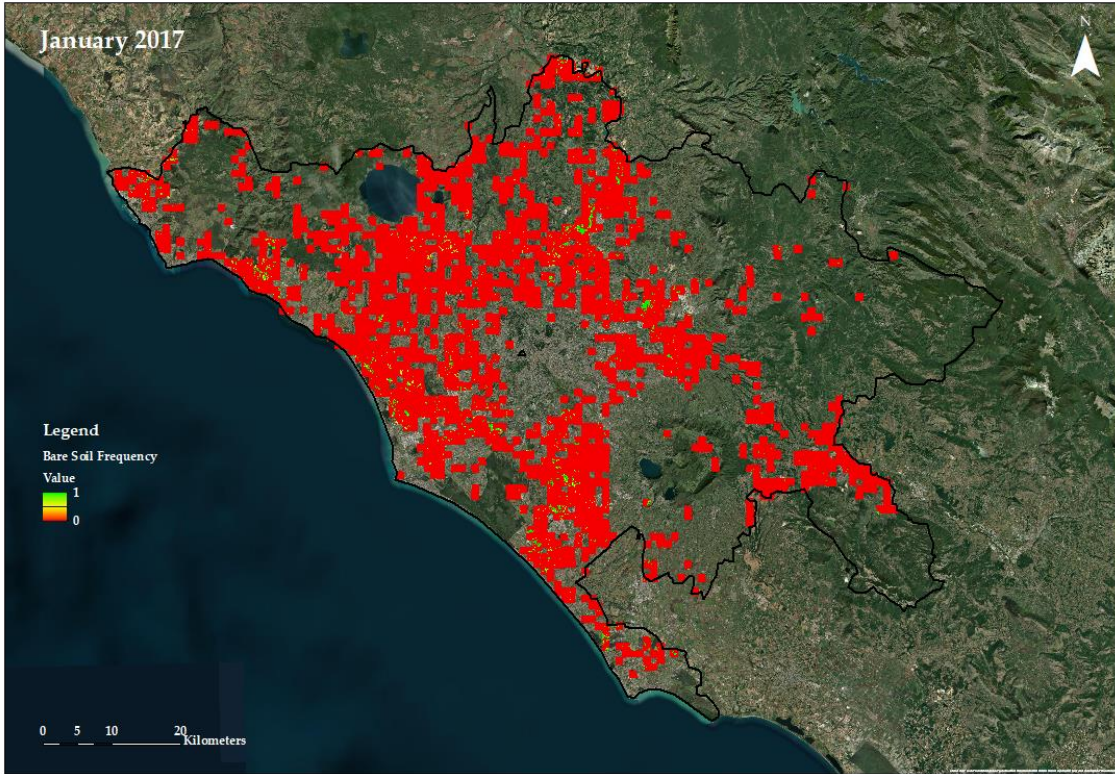
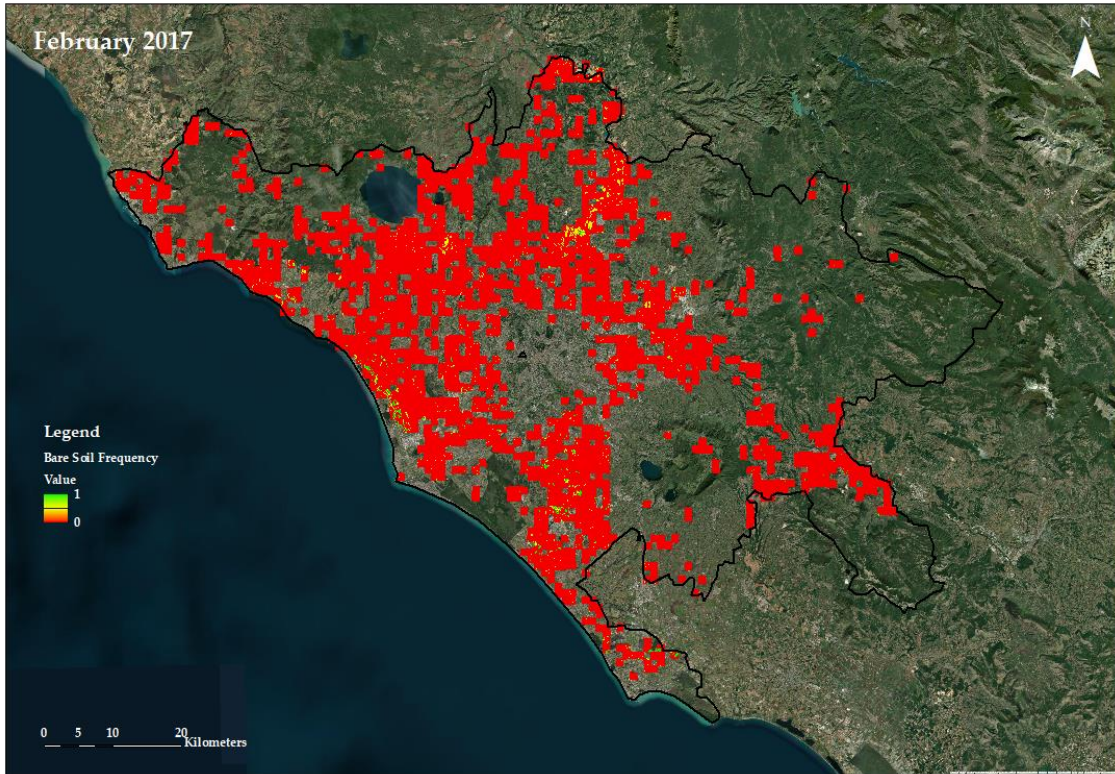


Figure S5. Yearly Bare Soil Frequency of the Roma region for the agricultural year 2016.

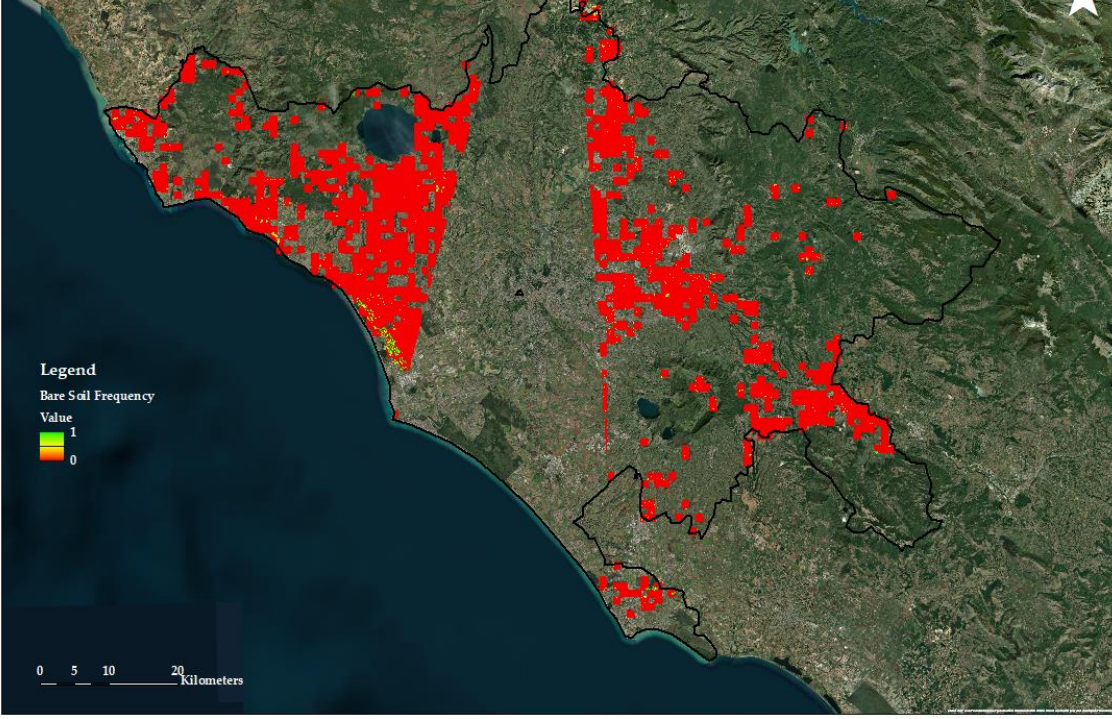
January 2017



February 2017



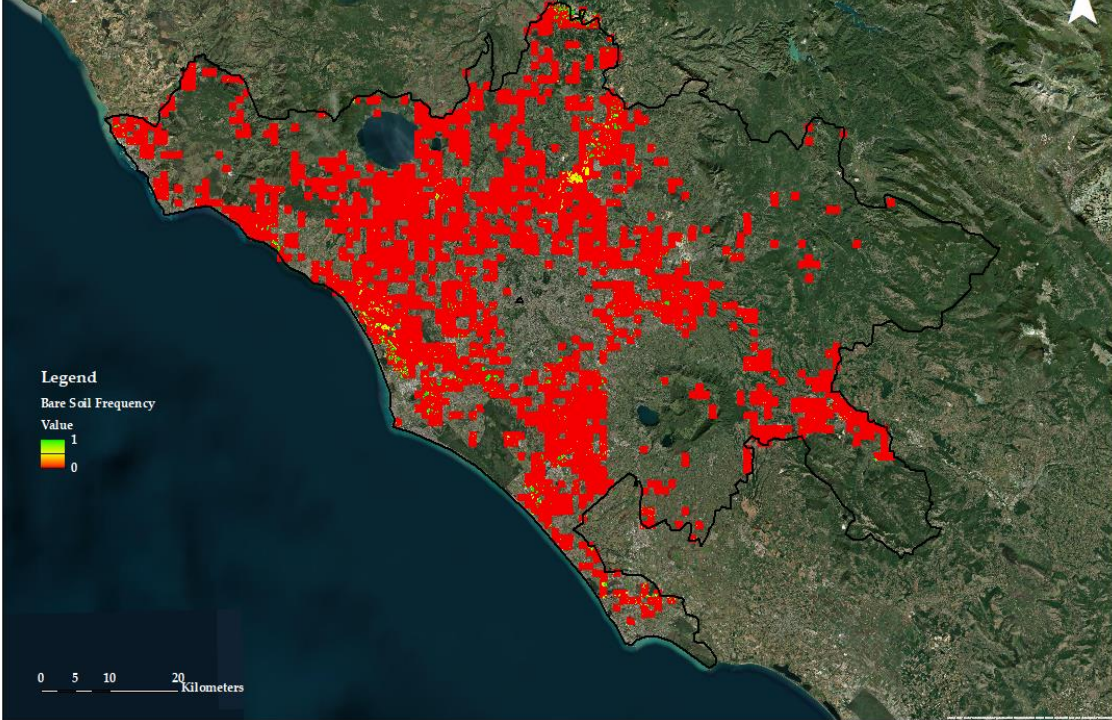
March 2017



Legend
Bare Soil Frequency
Value
1
0

0 5 10 20 Kilometers

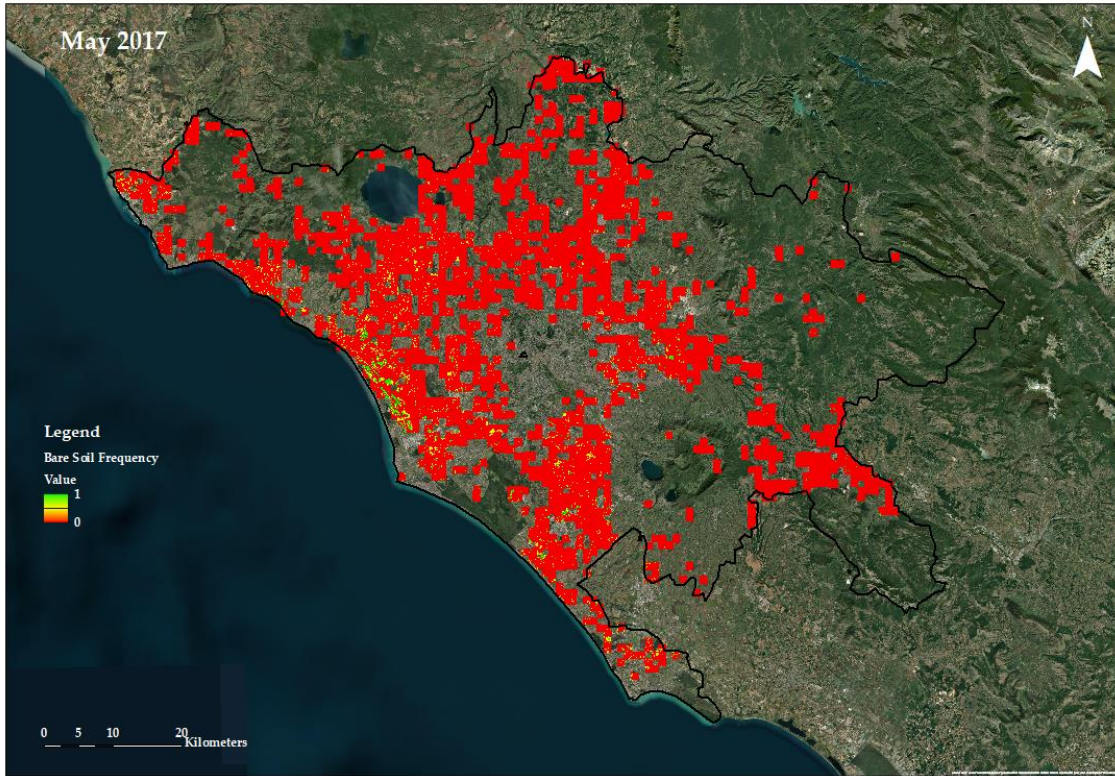
April 2017



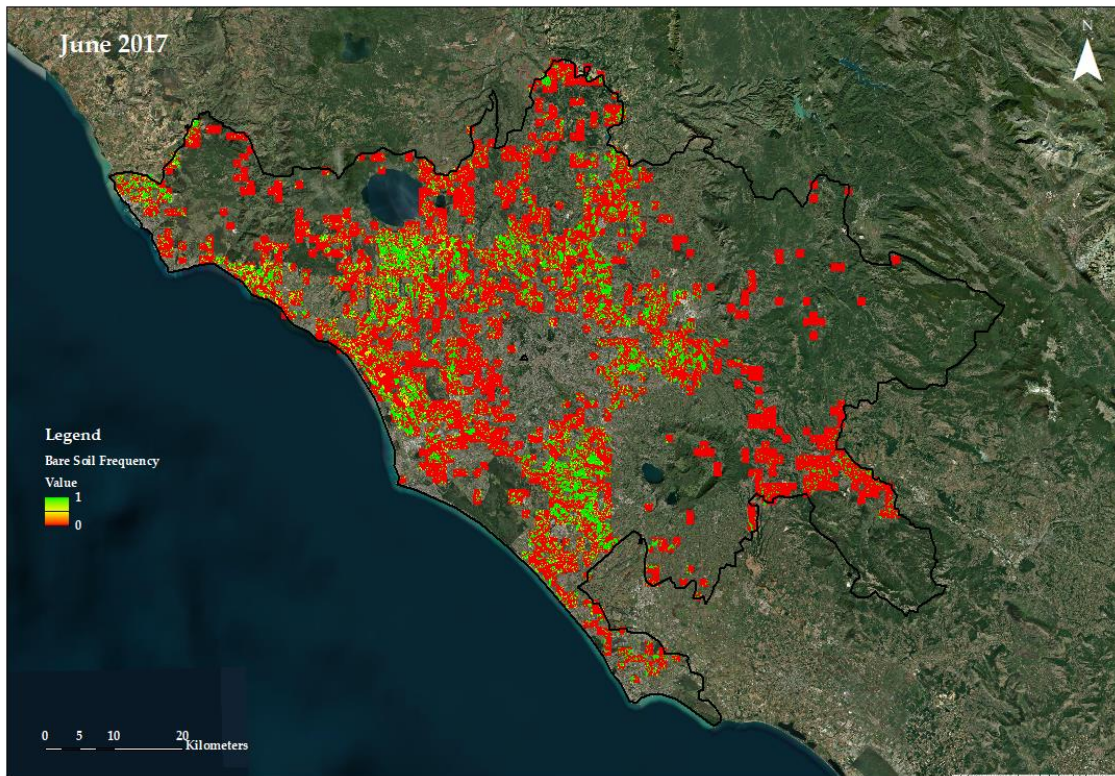
Legend
Bare Soil Frequency
Value
1
0

0 5 10 20 Kilometers

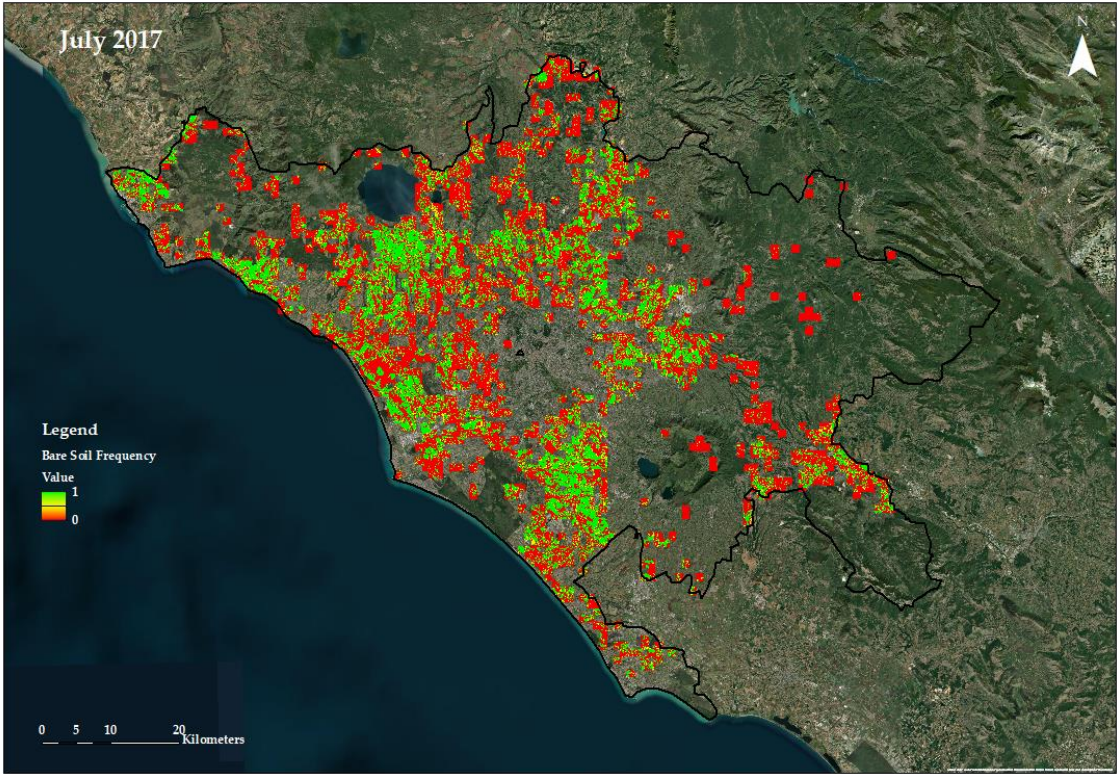
May 2017



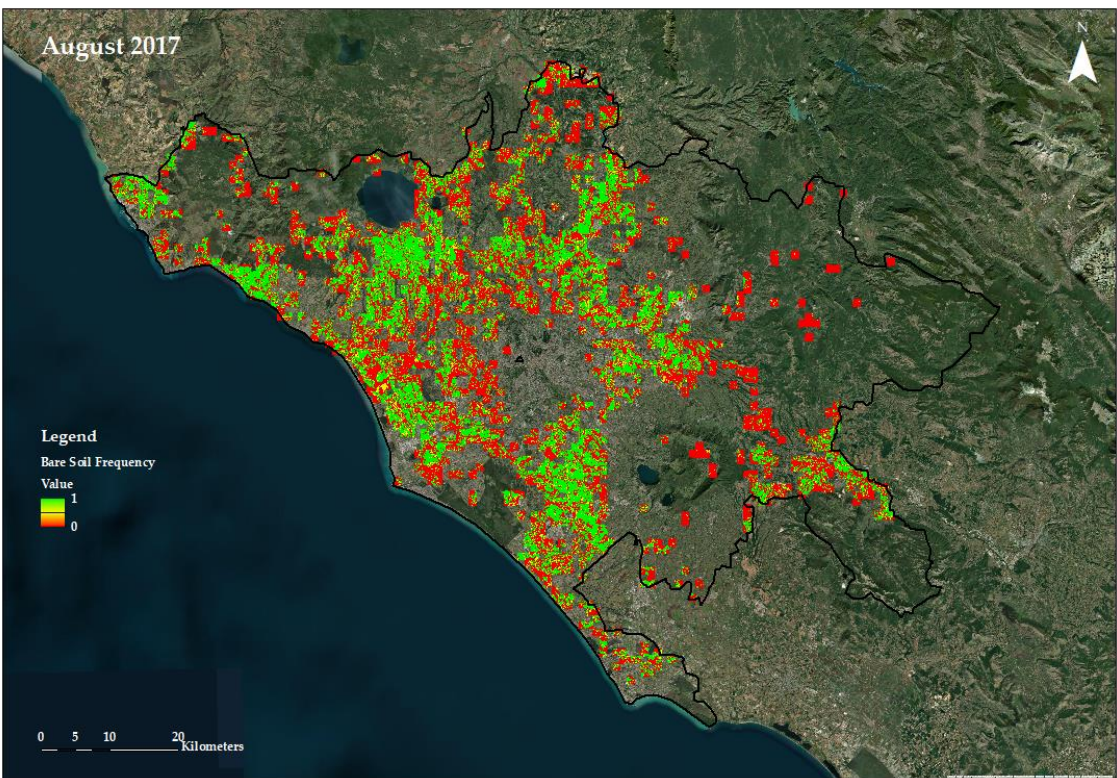
June 2017



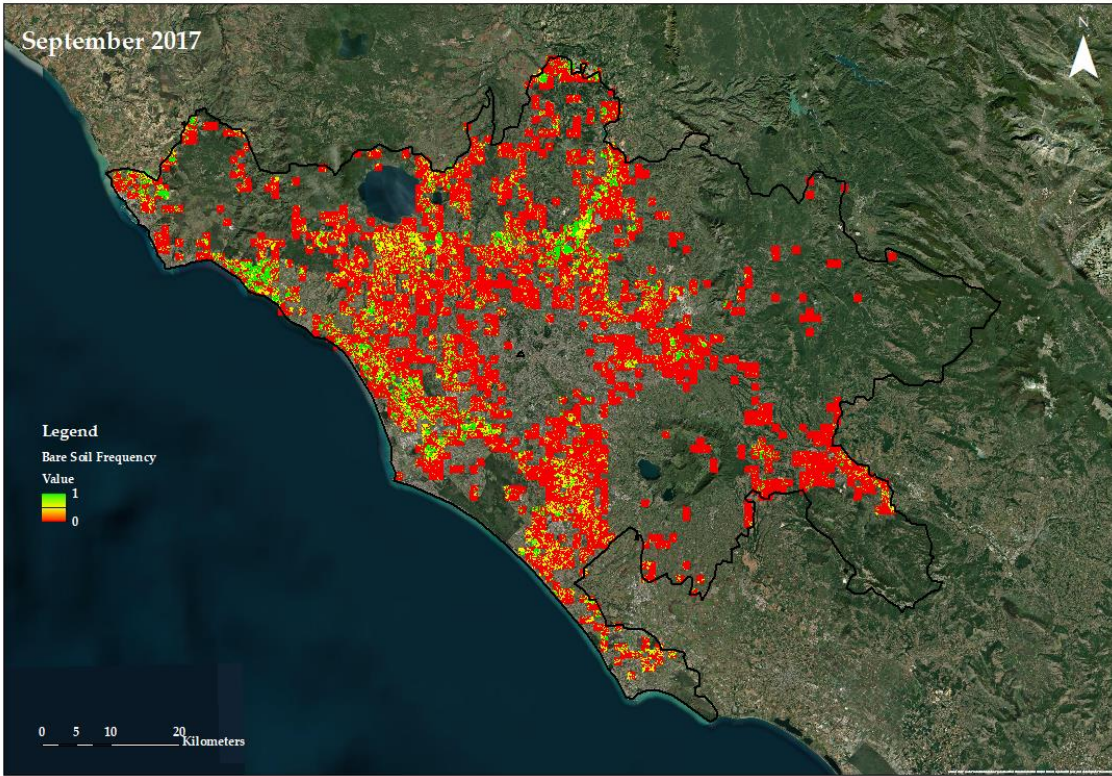
July 2017



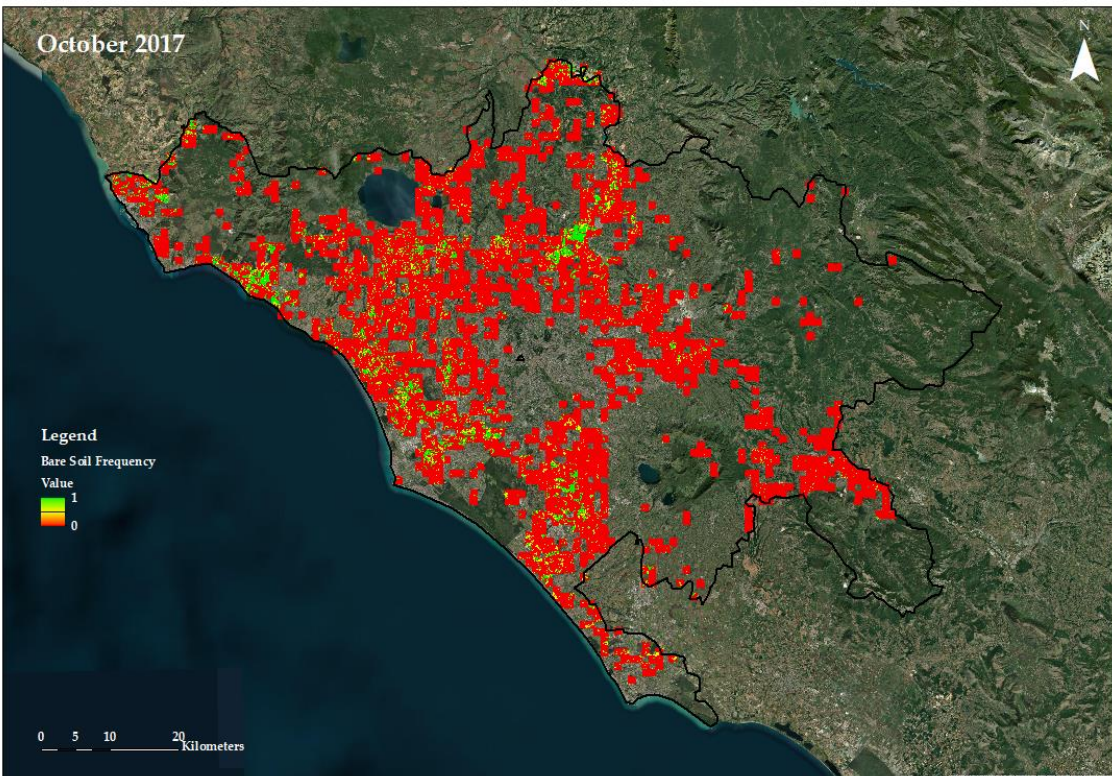
August 2017



September 2017



October 2017



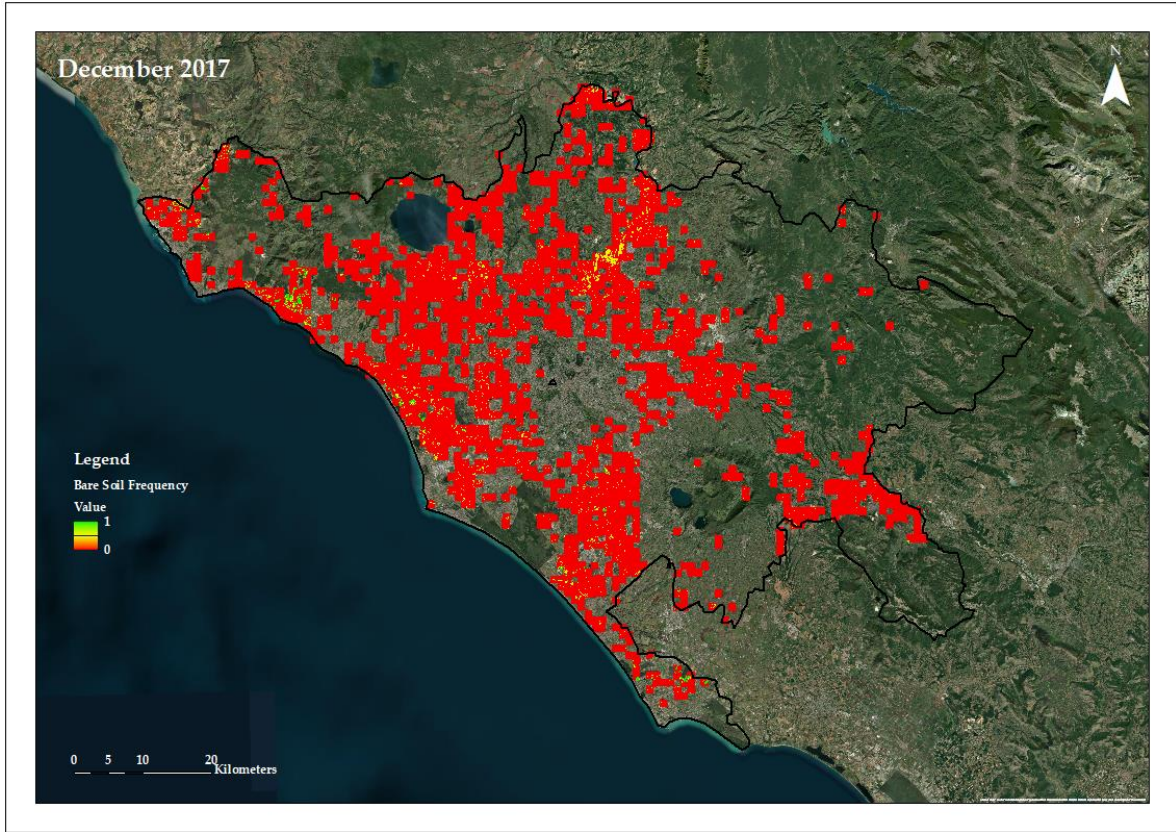
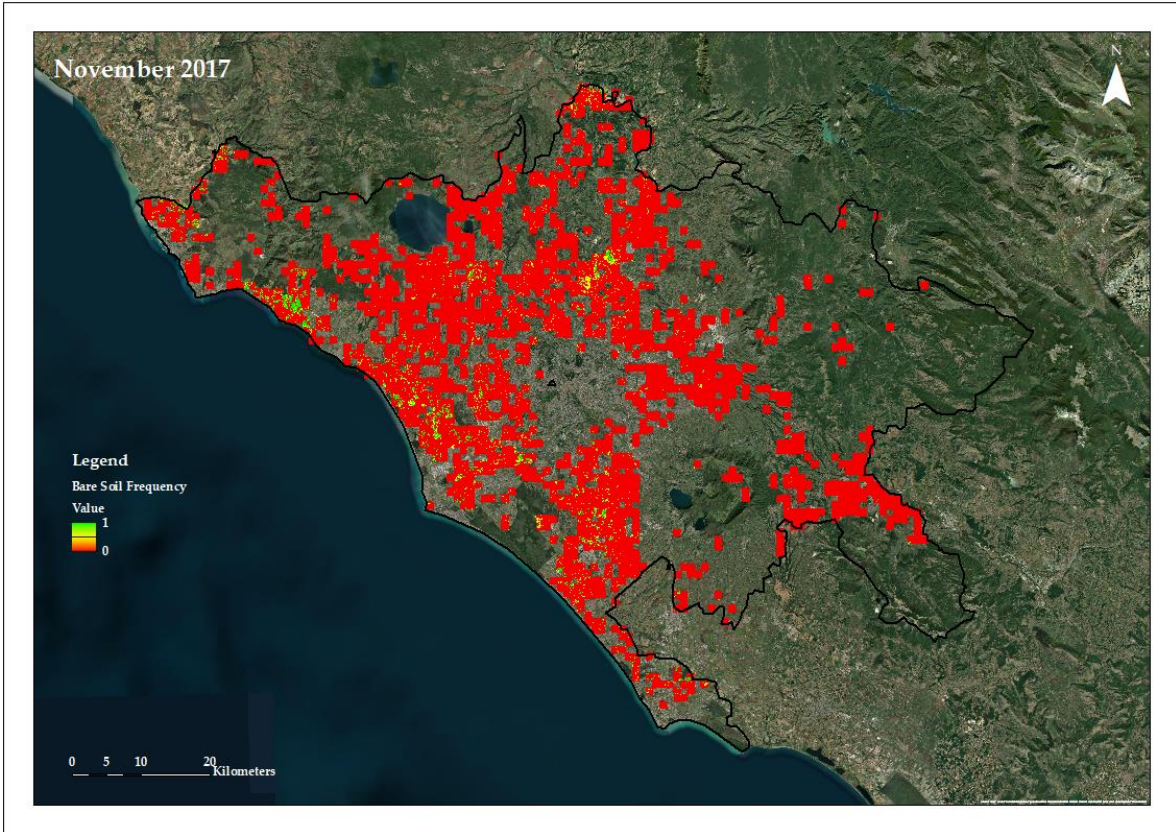
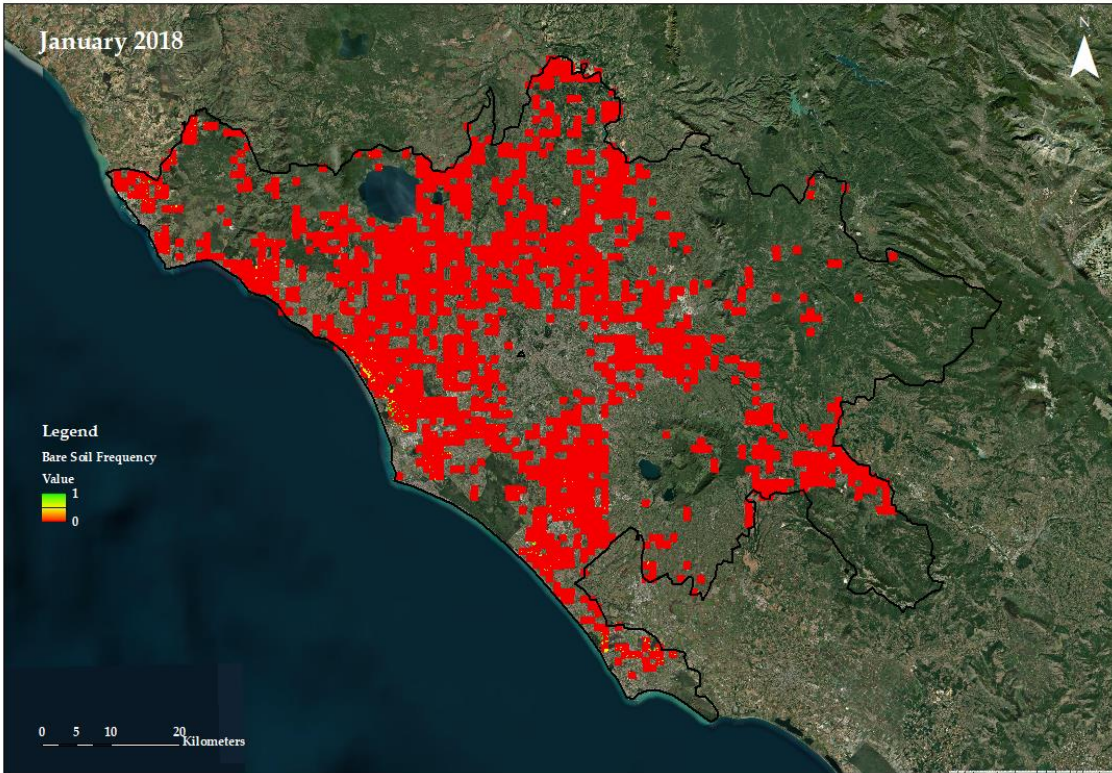
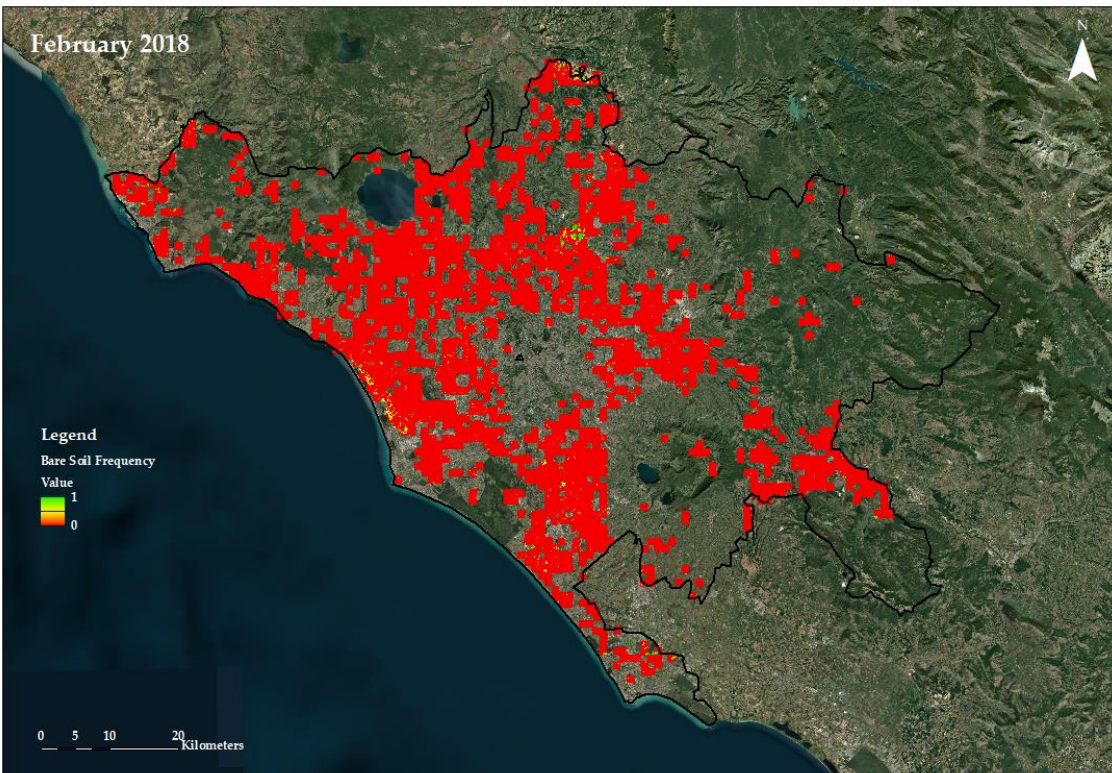


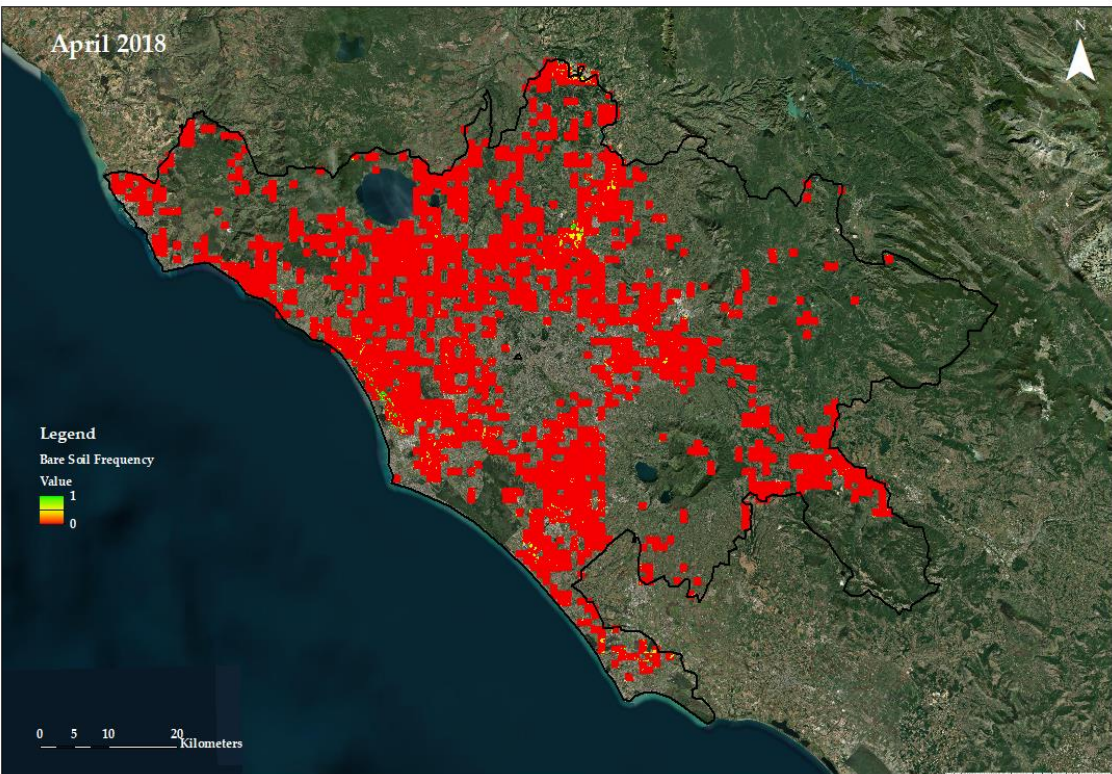
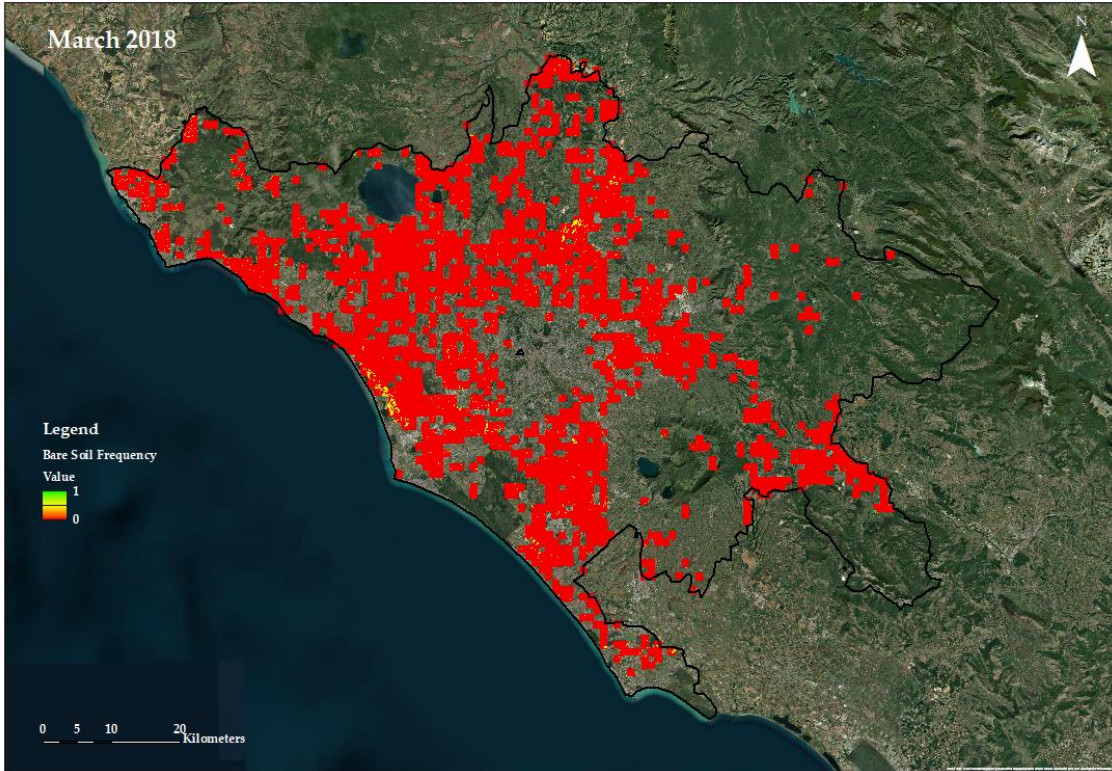
Figure S6. Yearly Bare Soil Frequency of the Roma region for the agricultural year 2017.

January 2018

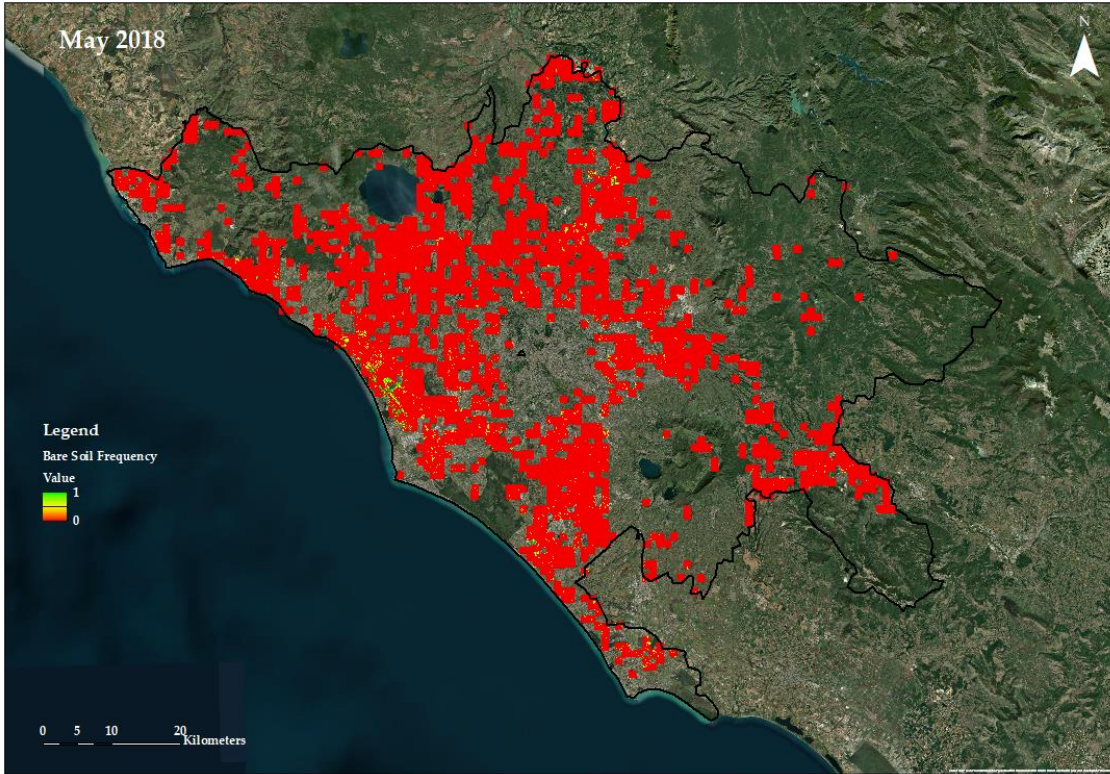


February 2018

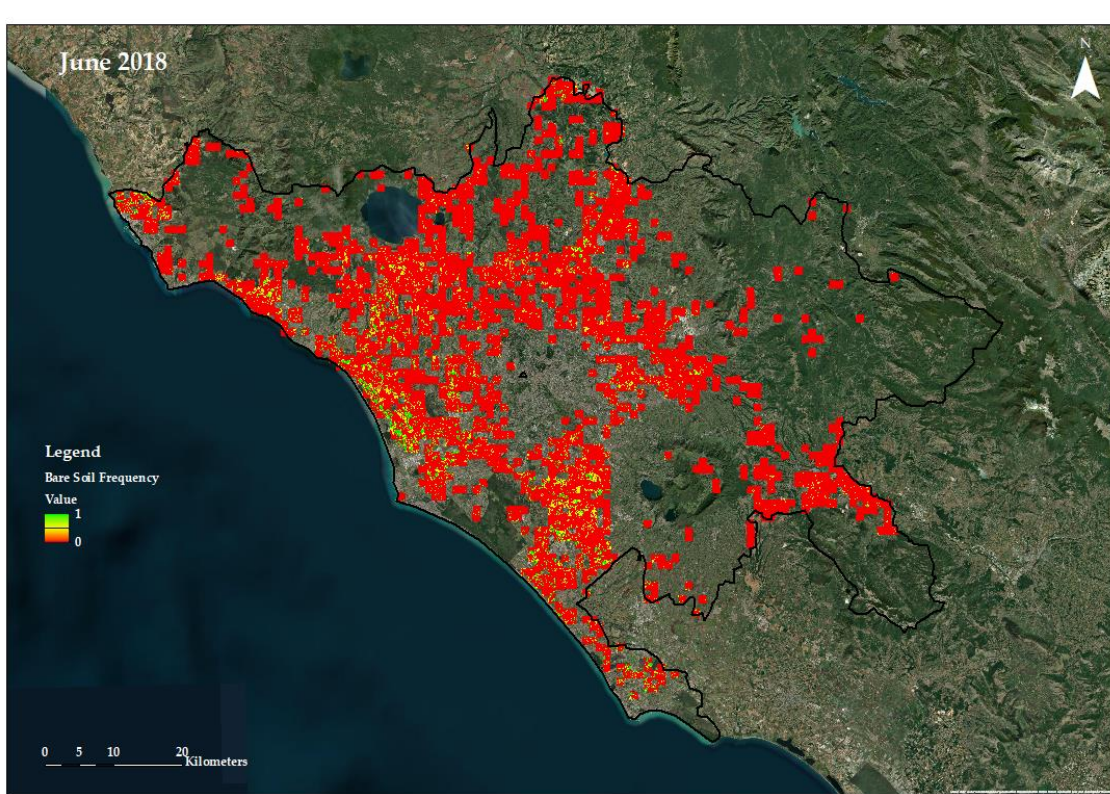




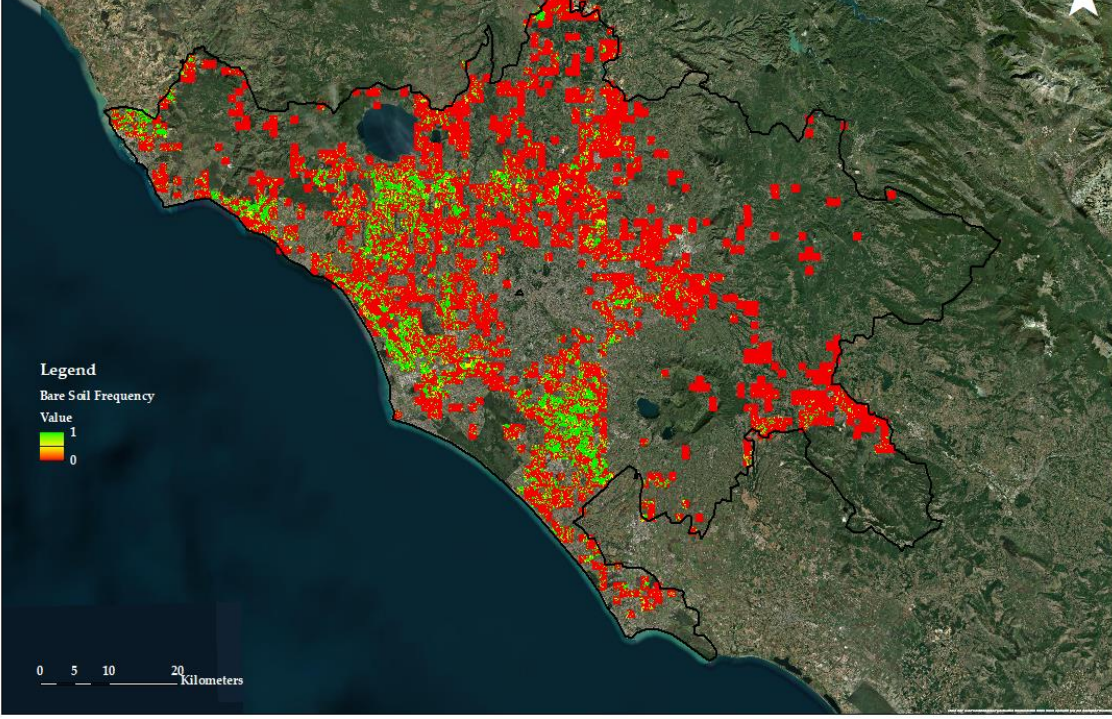
May 2018



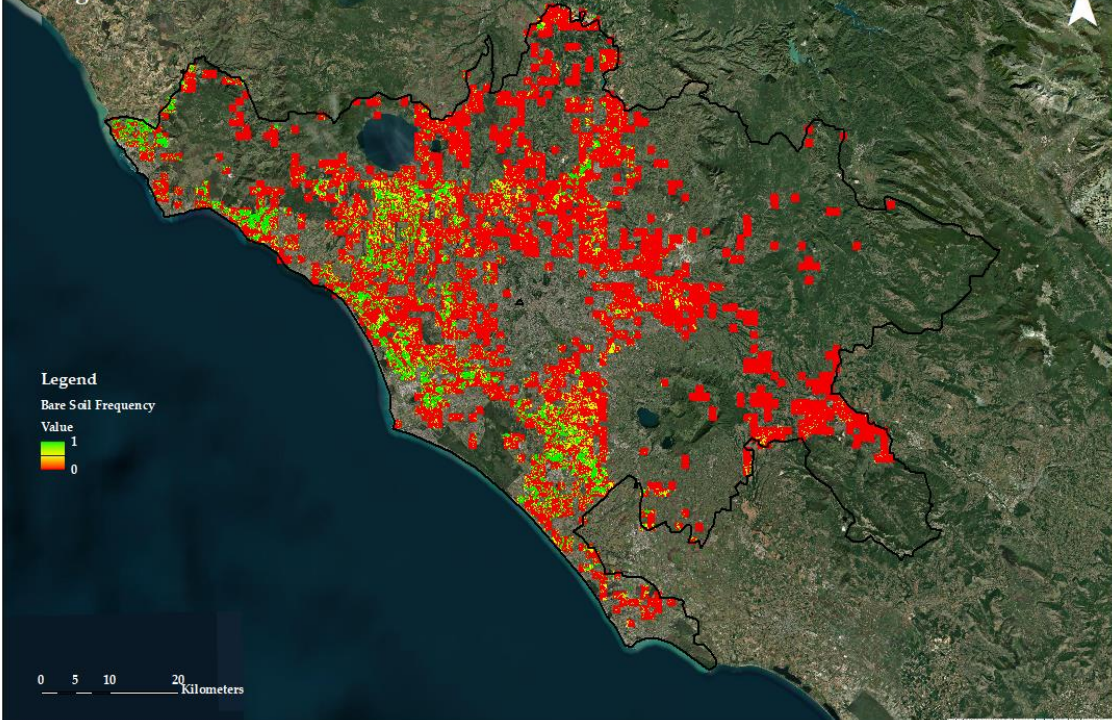
June 2018



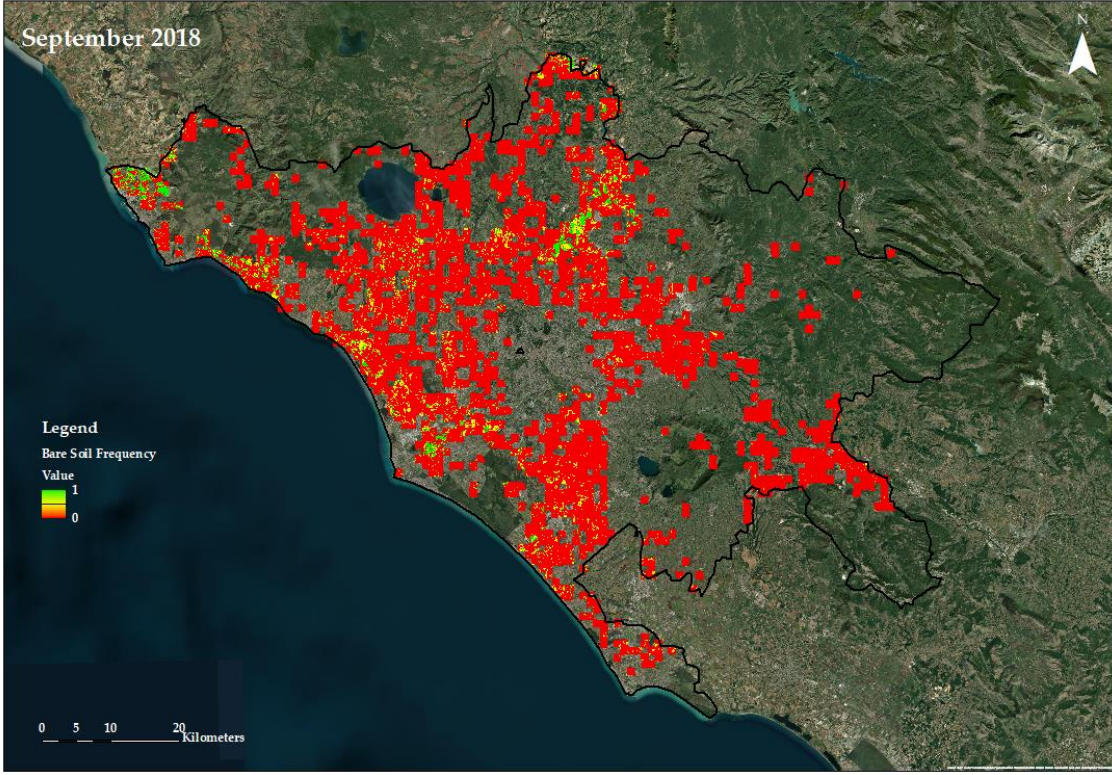
July 2018



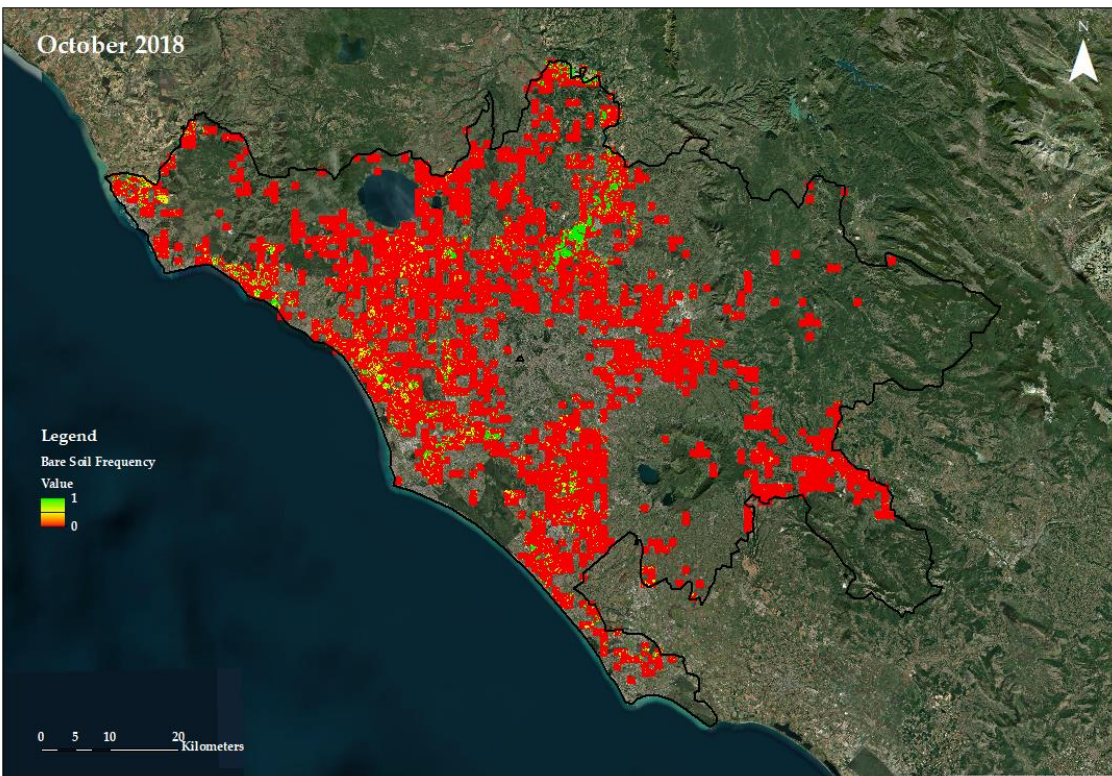
August 2018



September 2018



October 2018



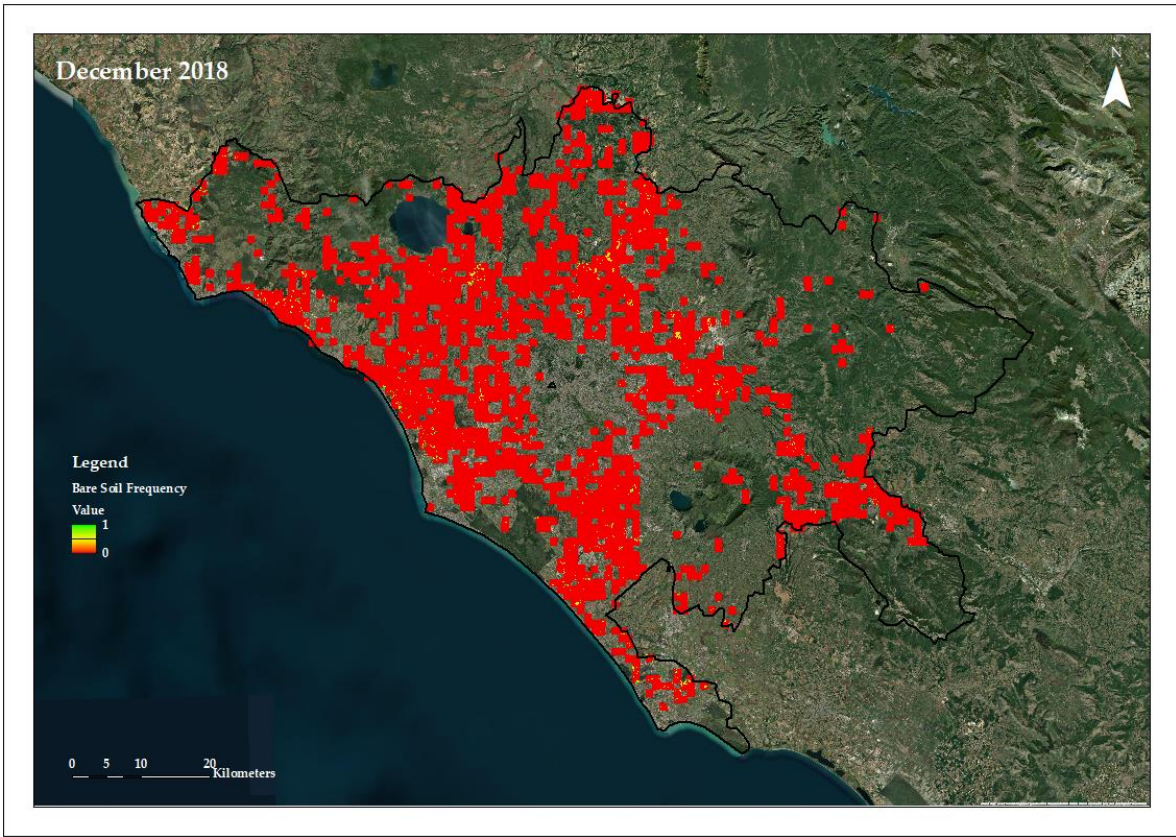
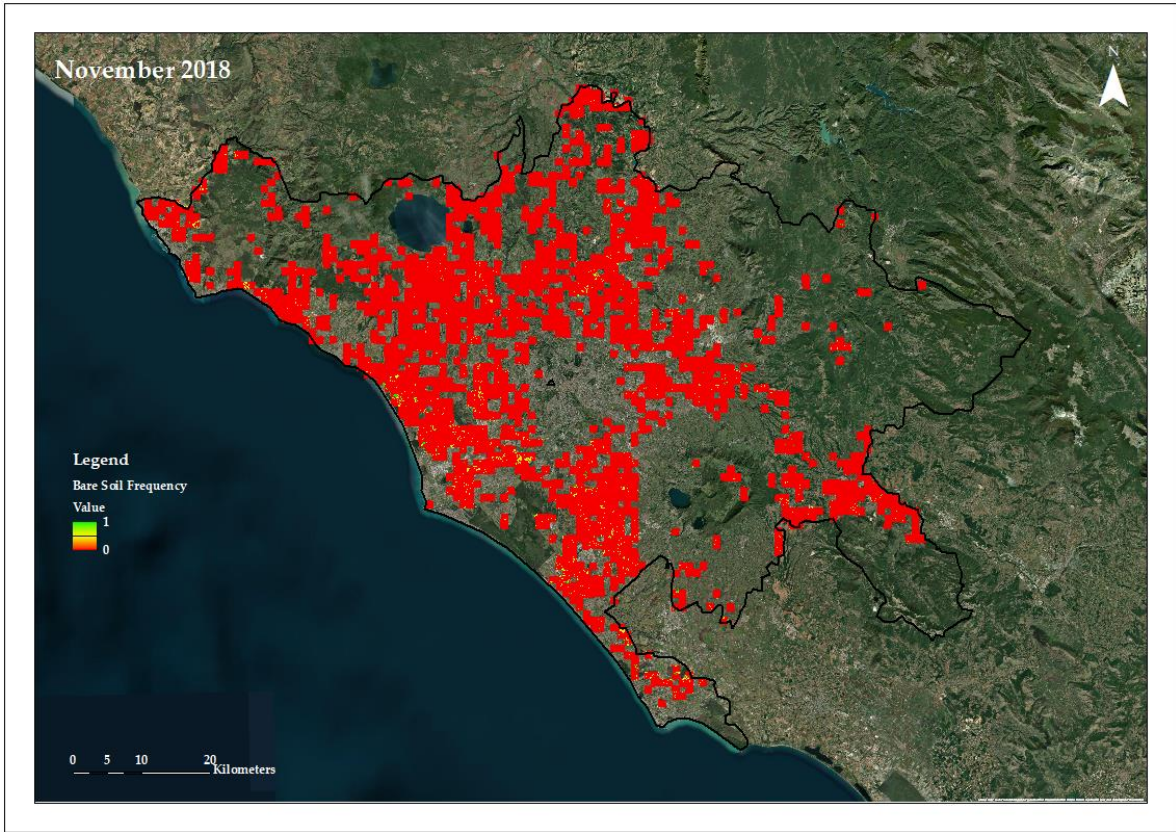
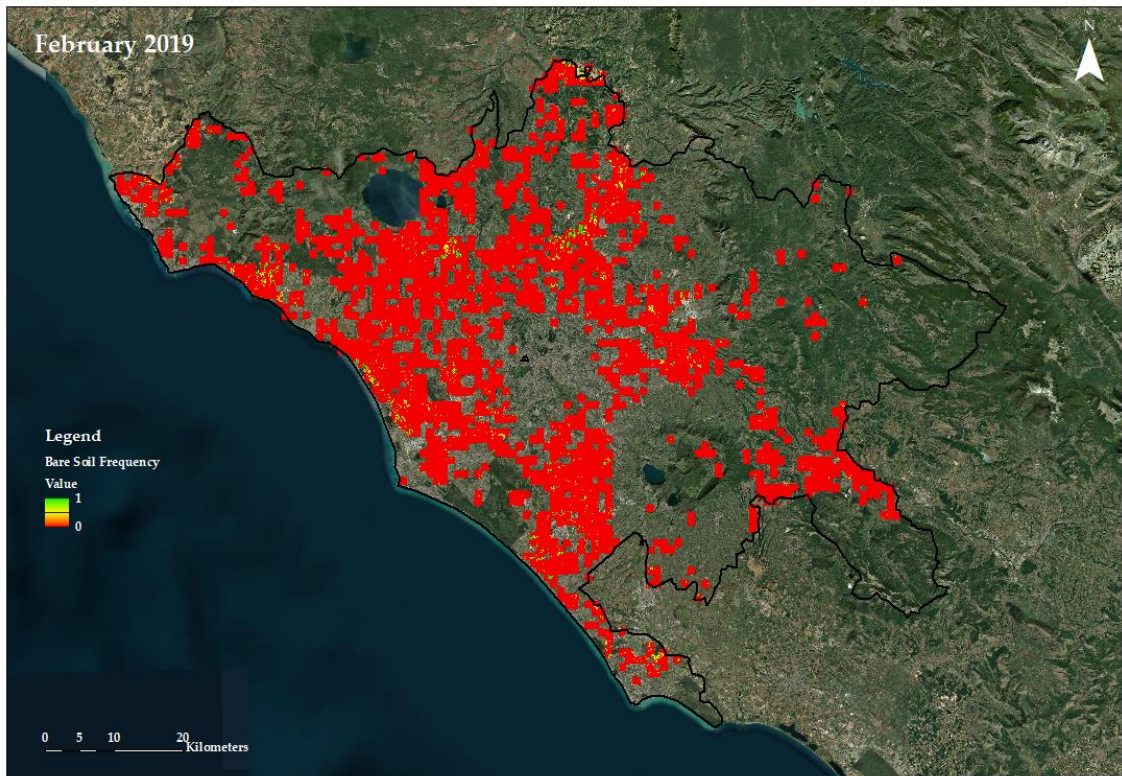
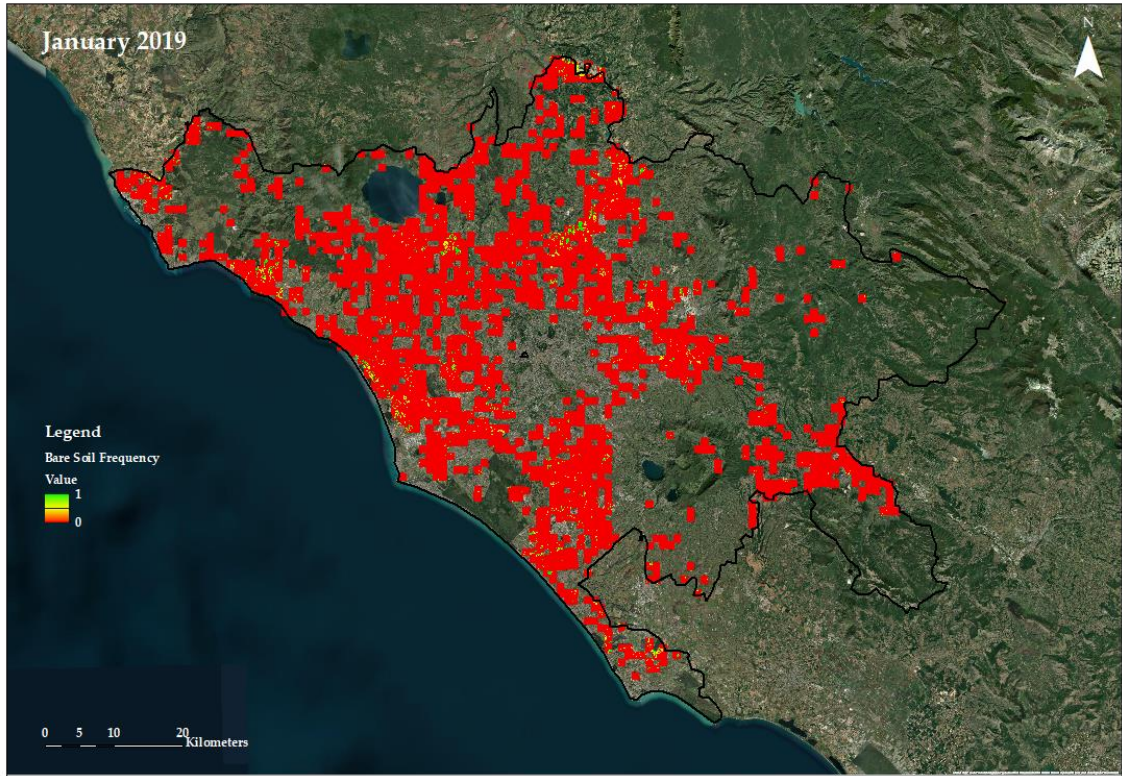
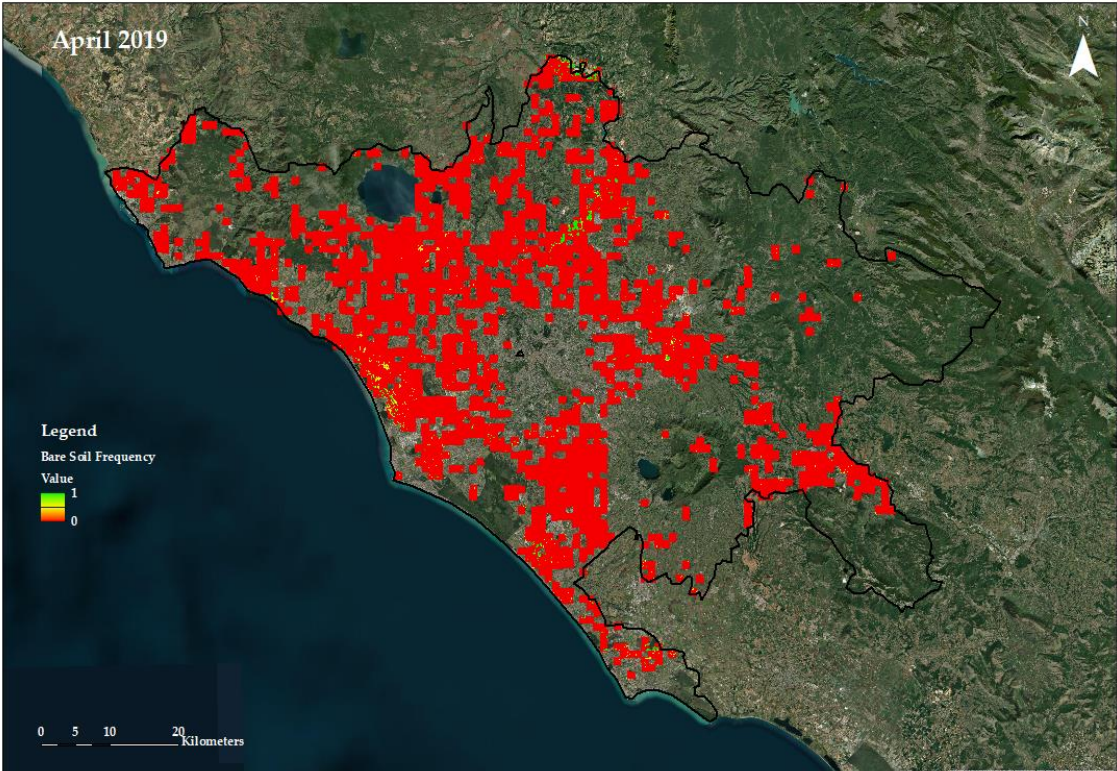
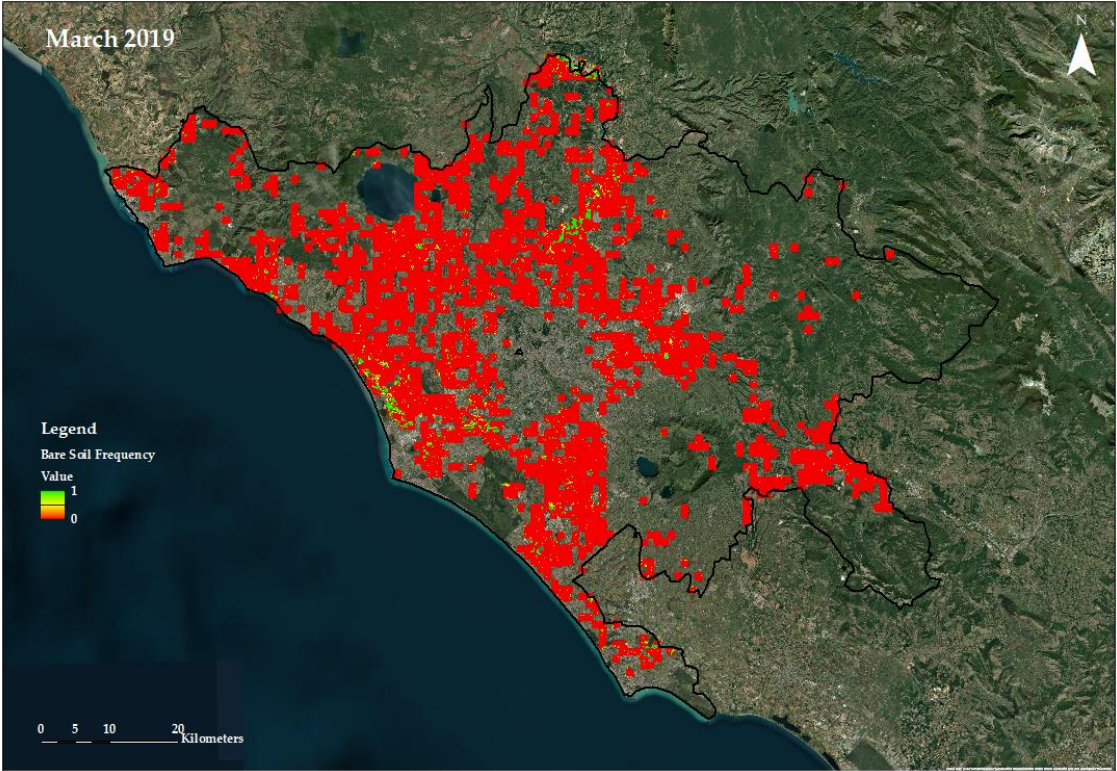
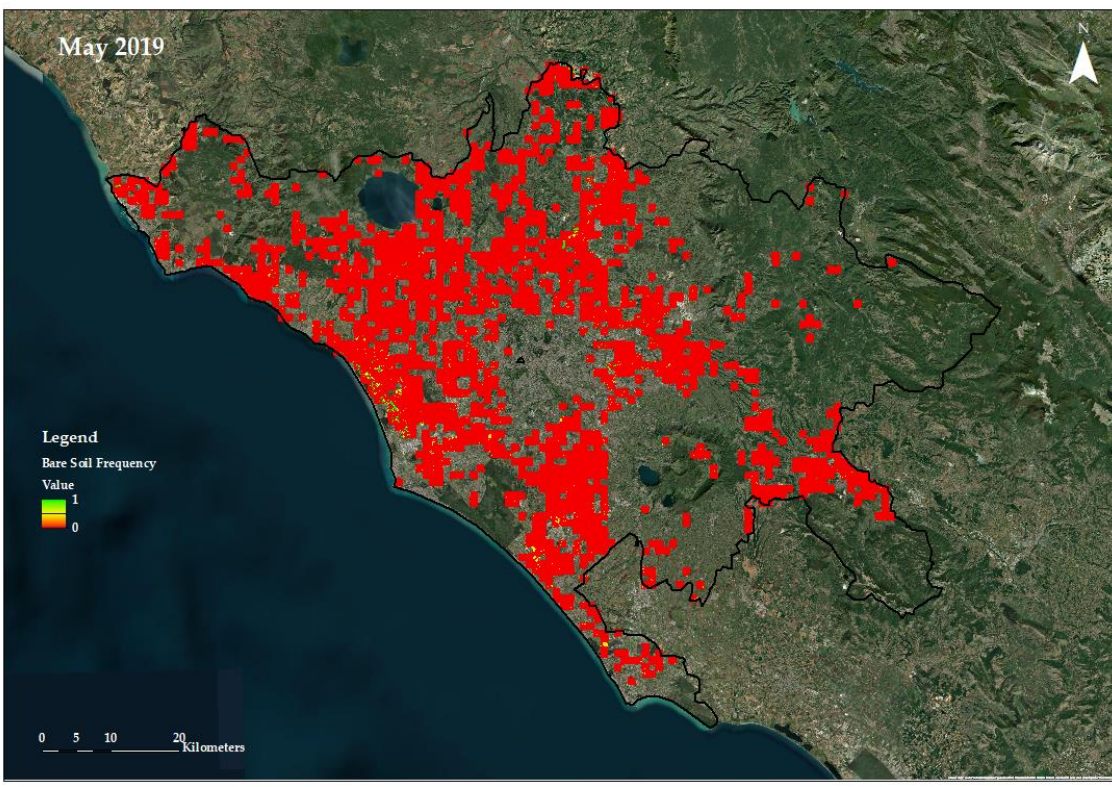


Figure S7. Yearly Bare Soil Frequency of the Roma region for the agricultural year 2018.

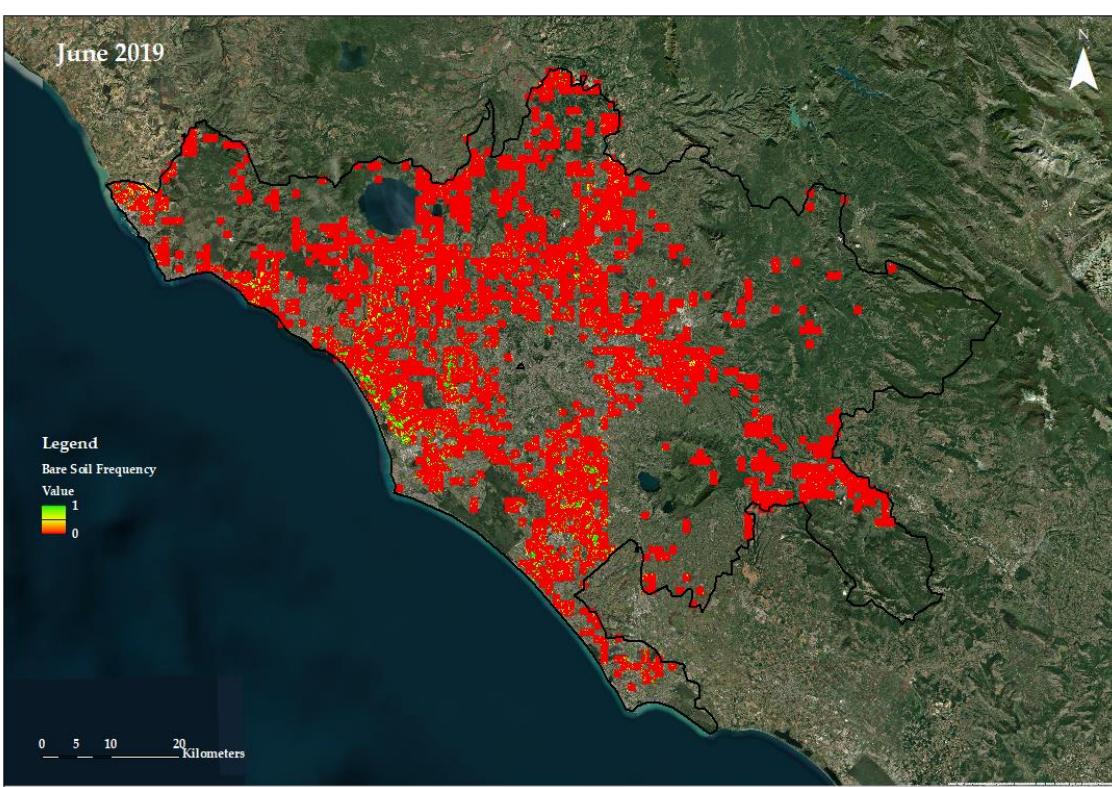


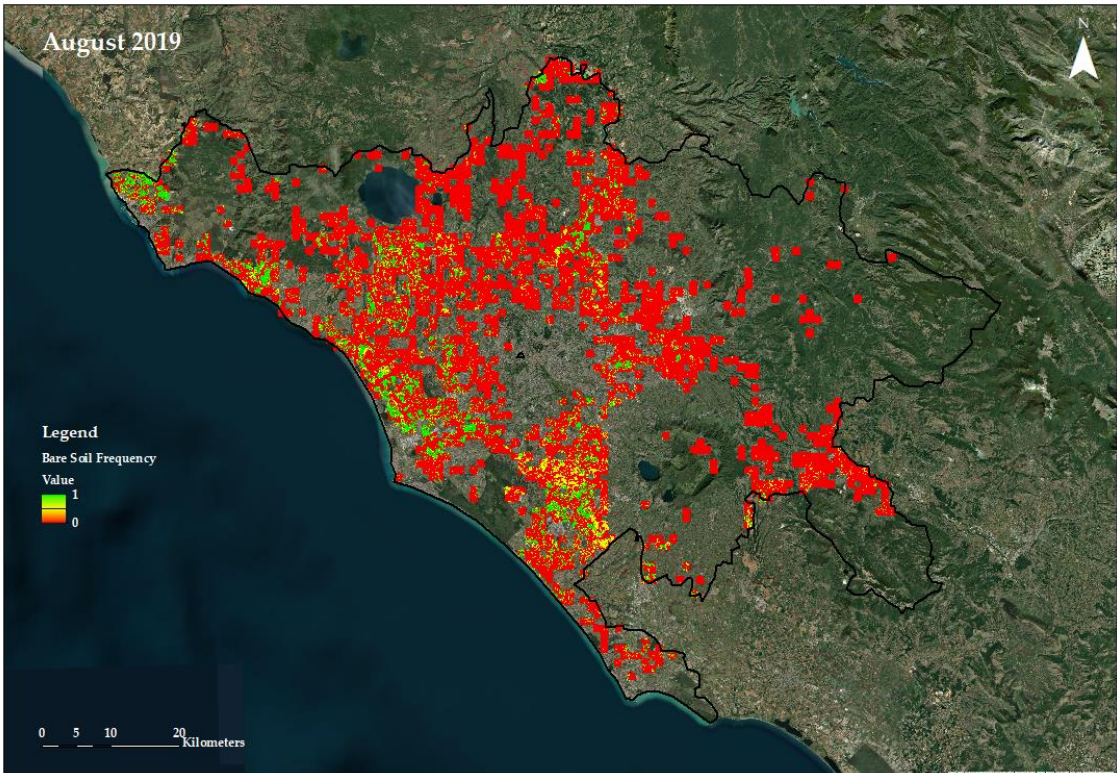
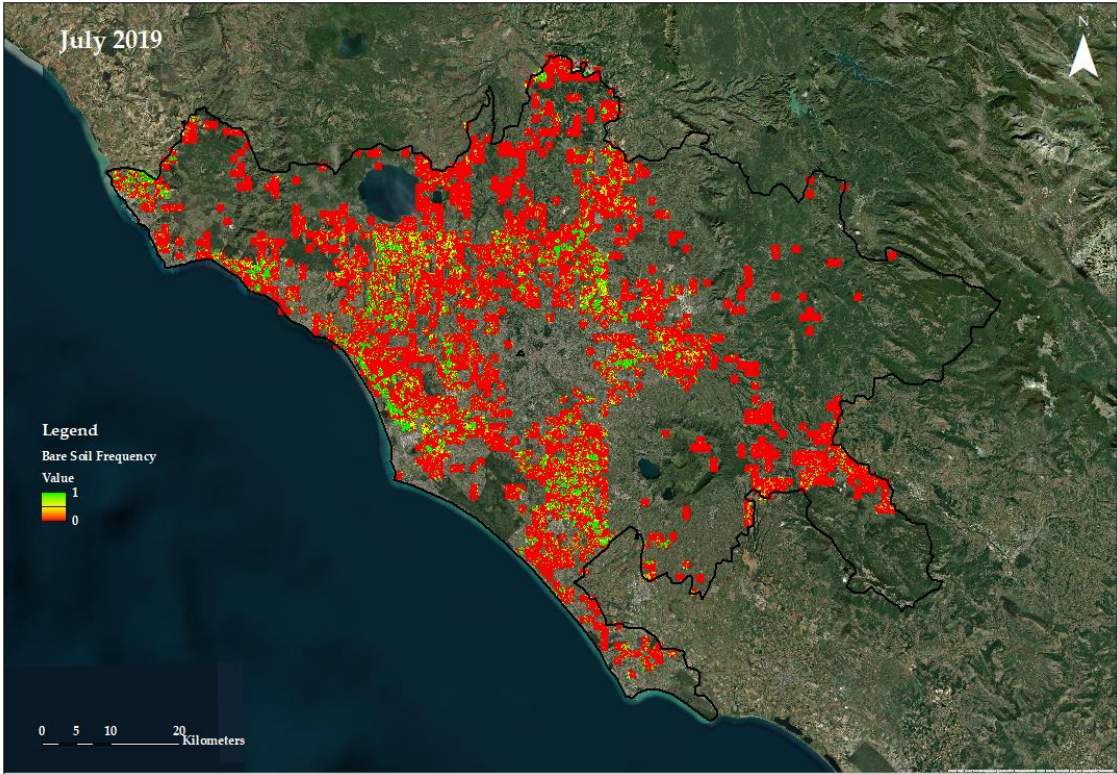


May 2019

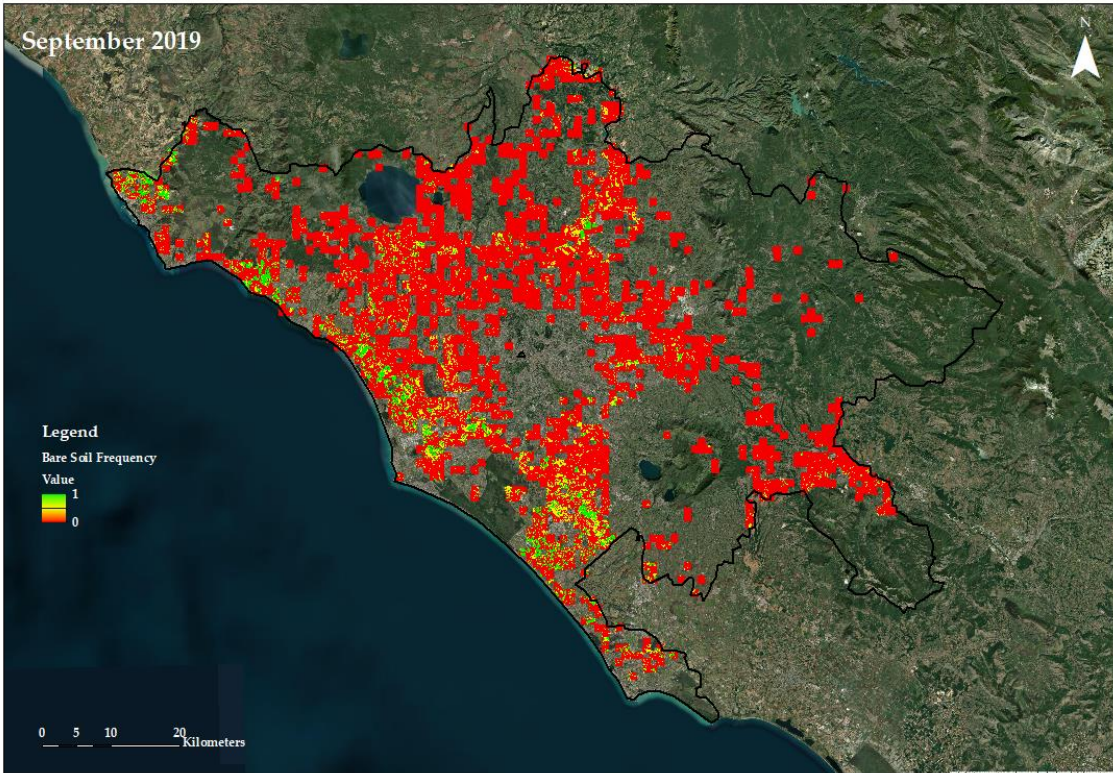


June 2019

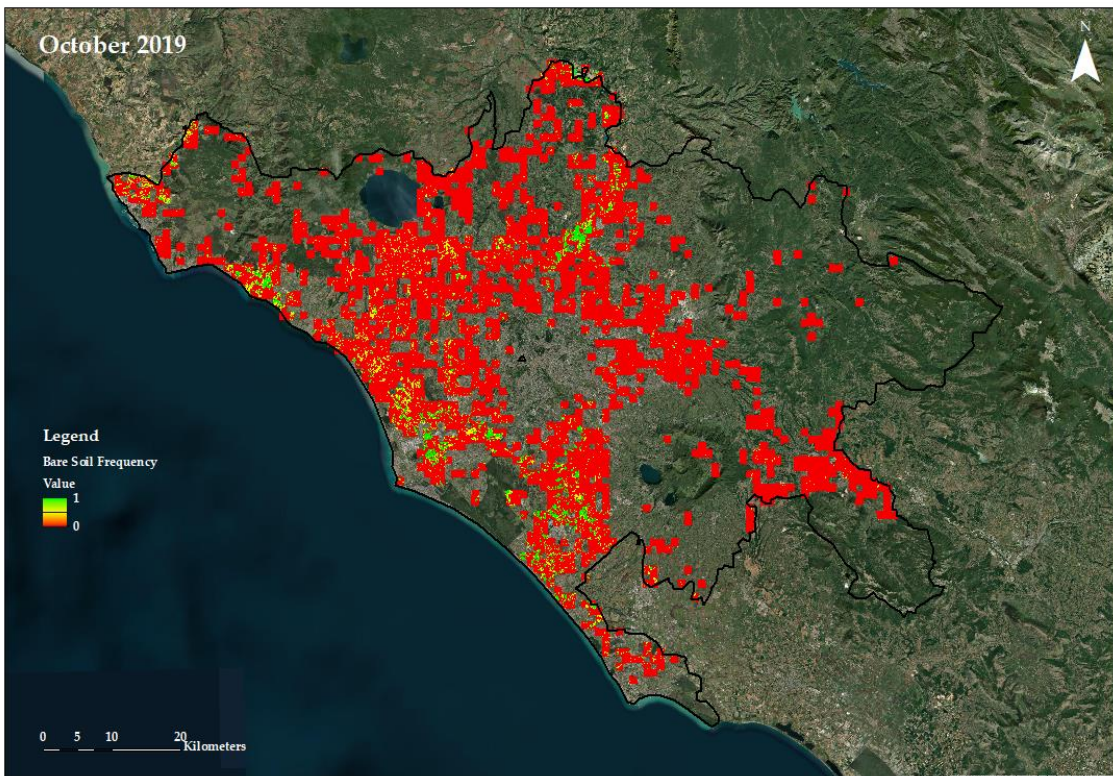




September 2019



October 2019



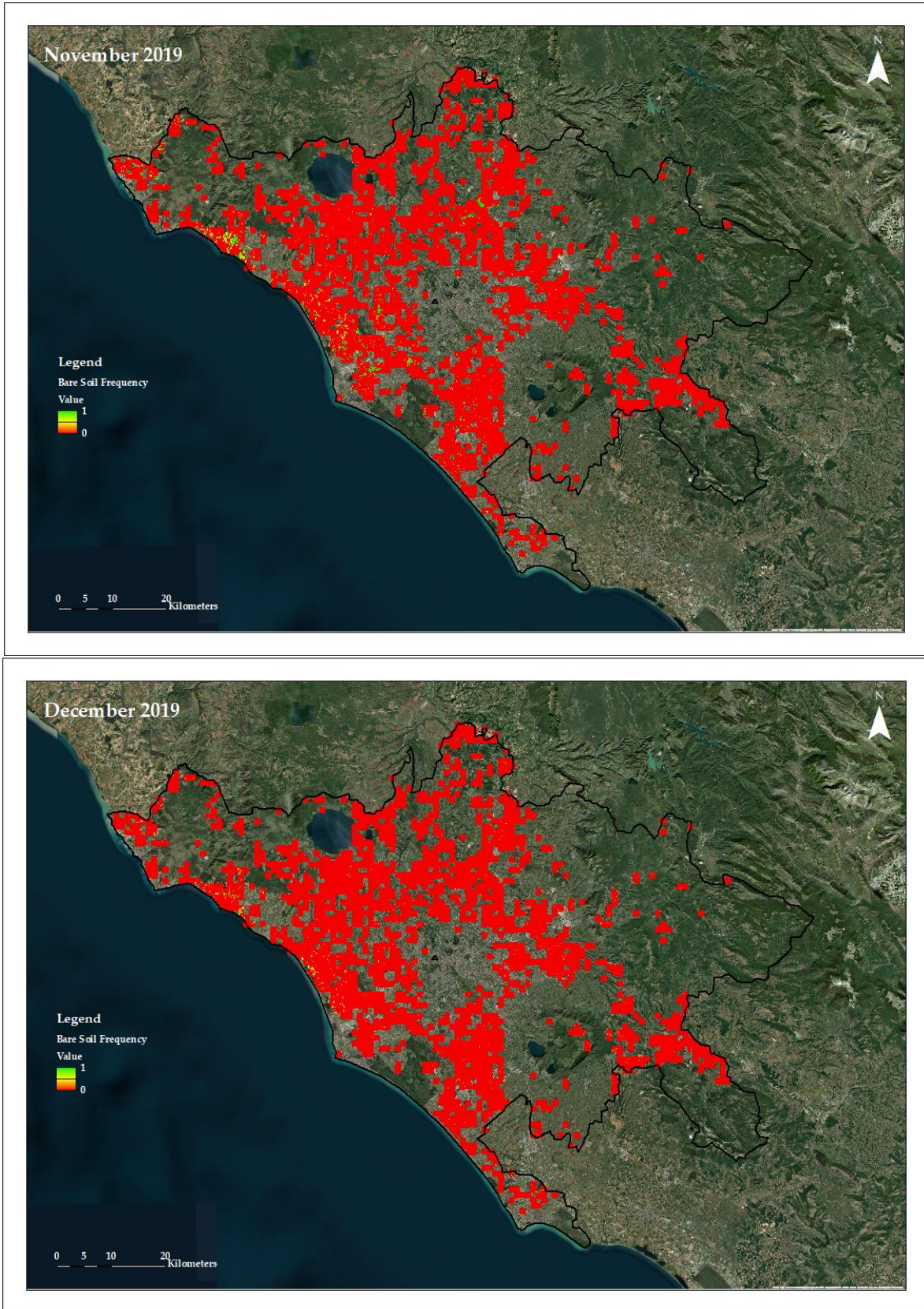
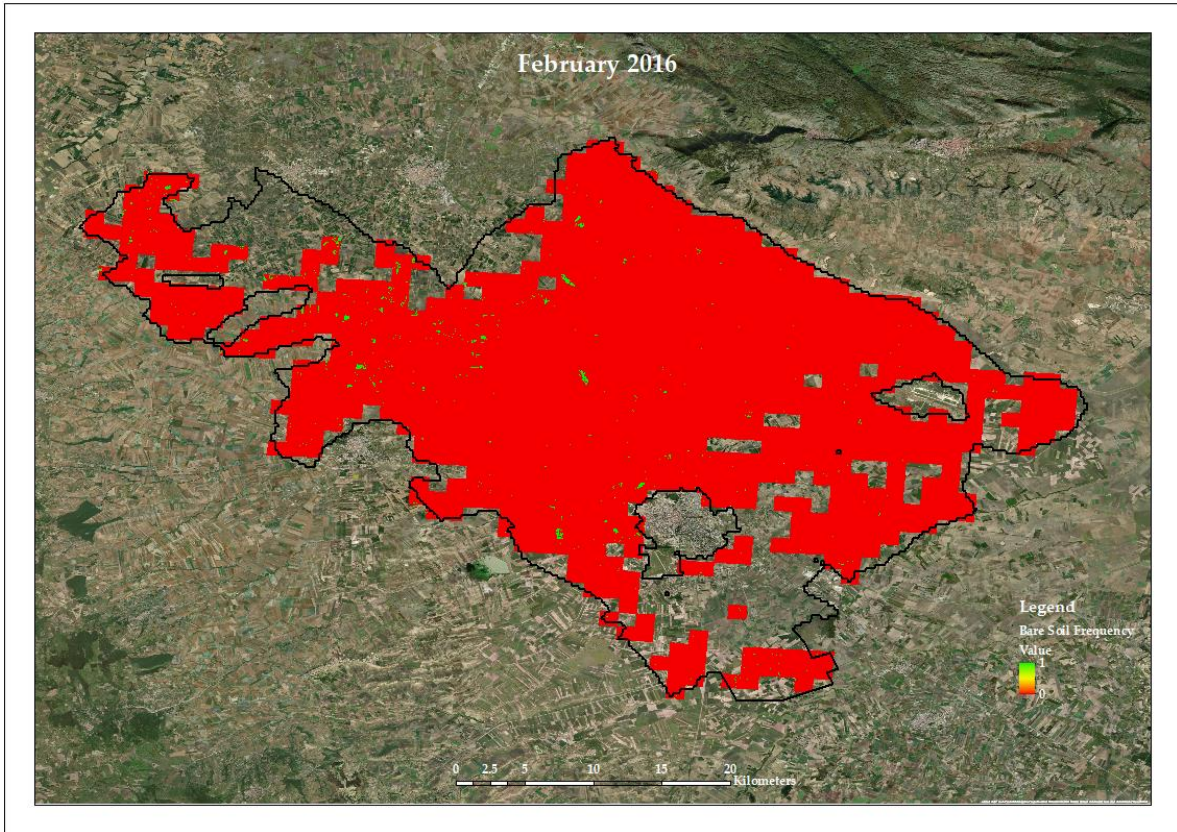
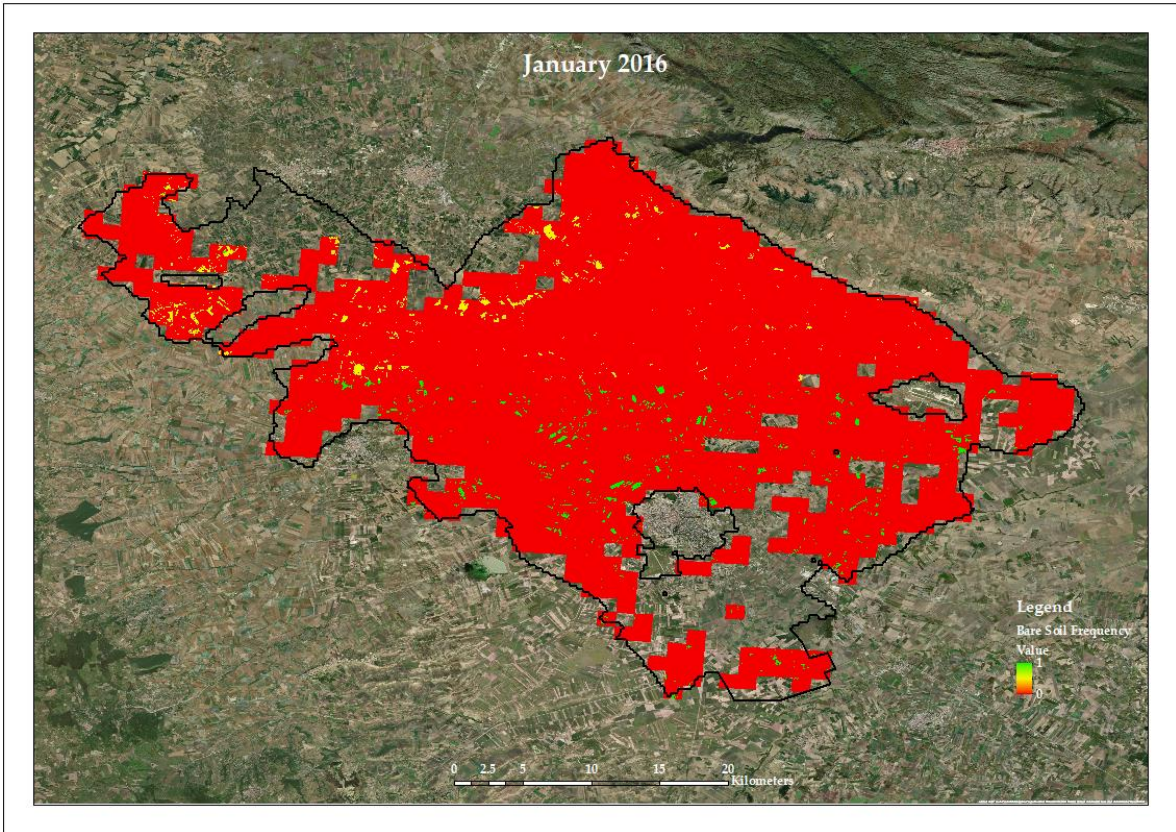
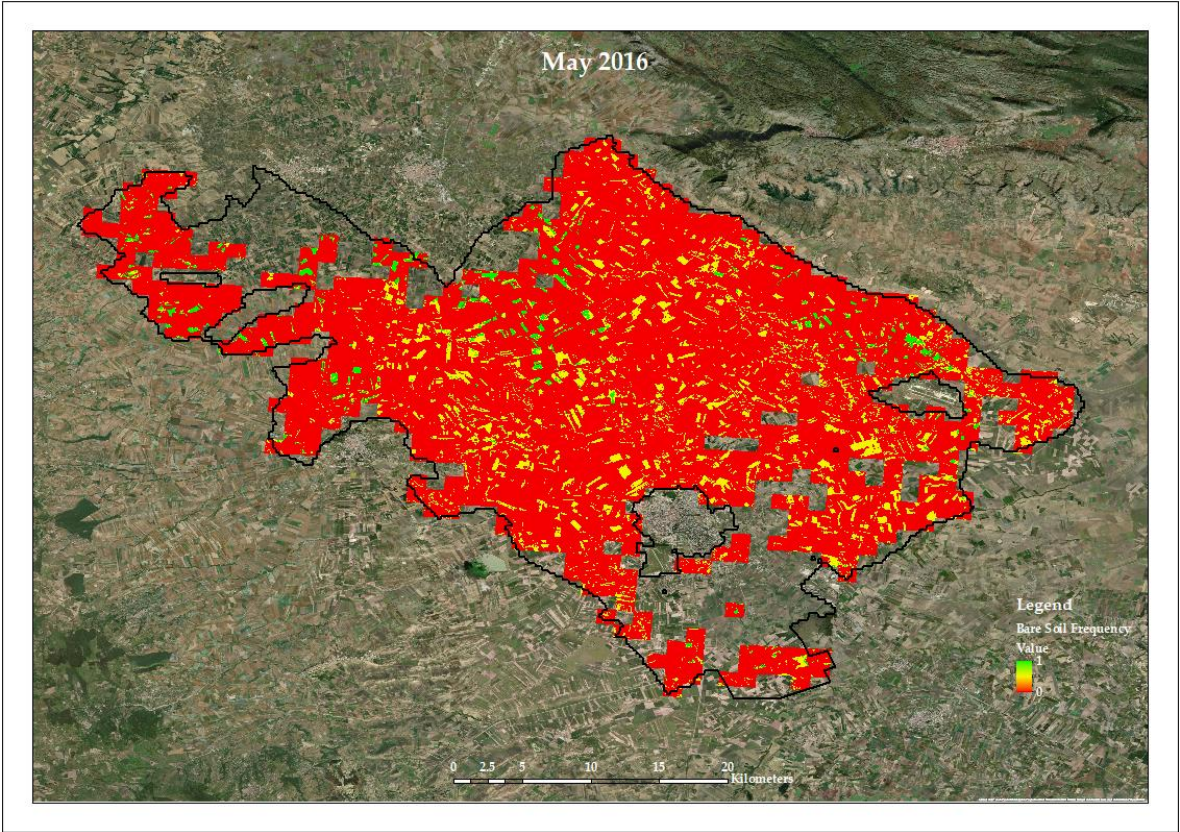
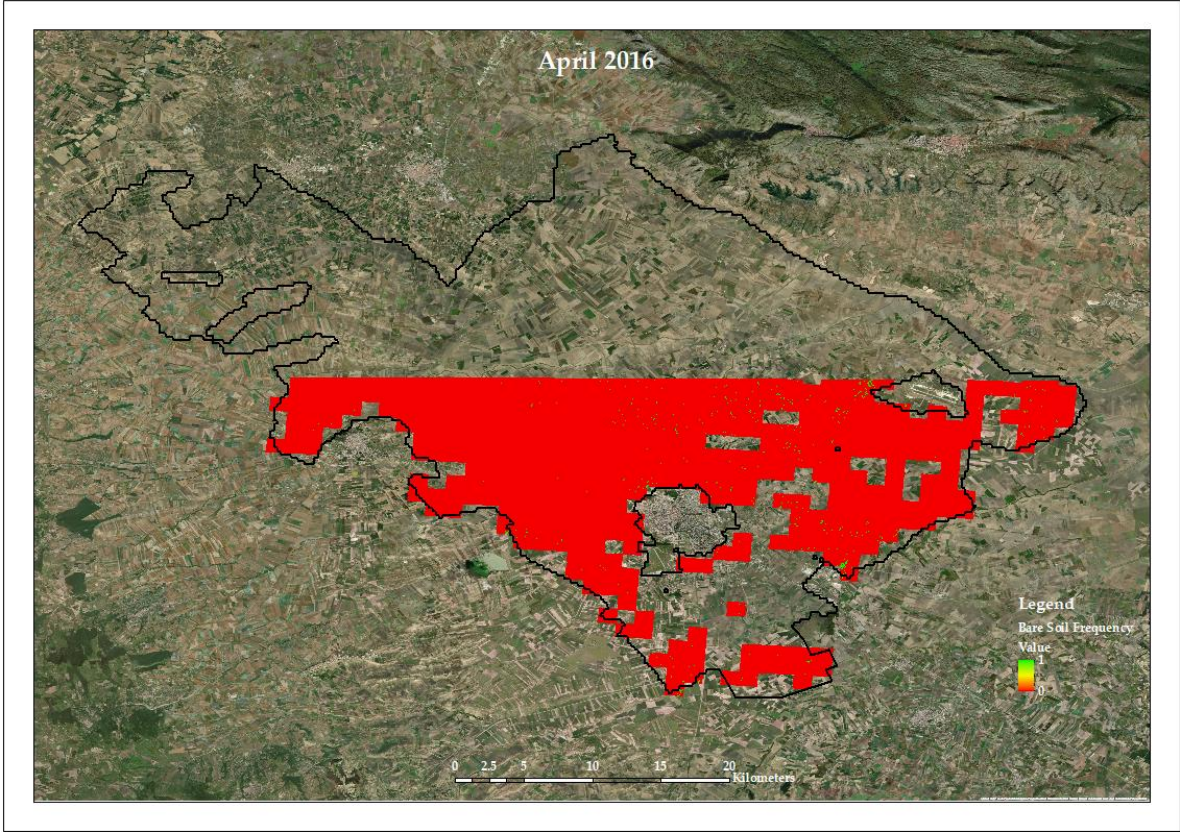
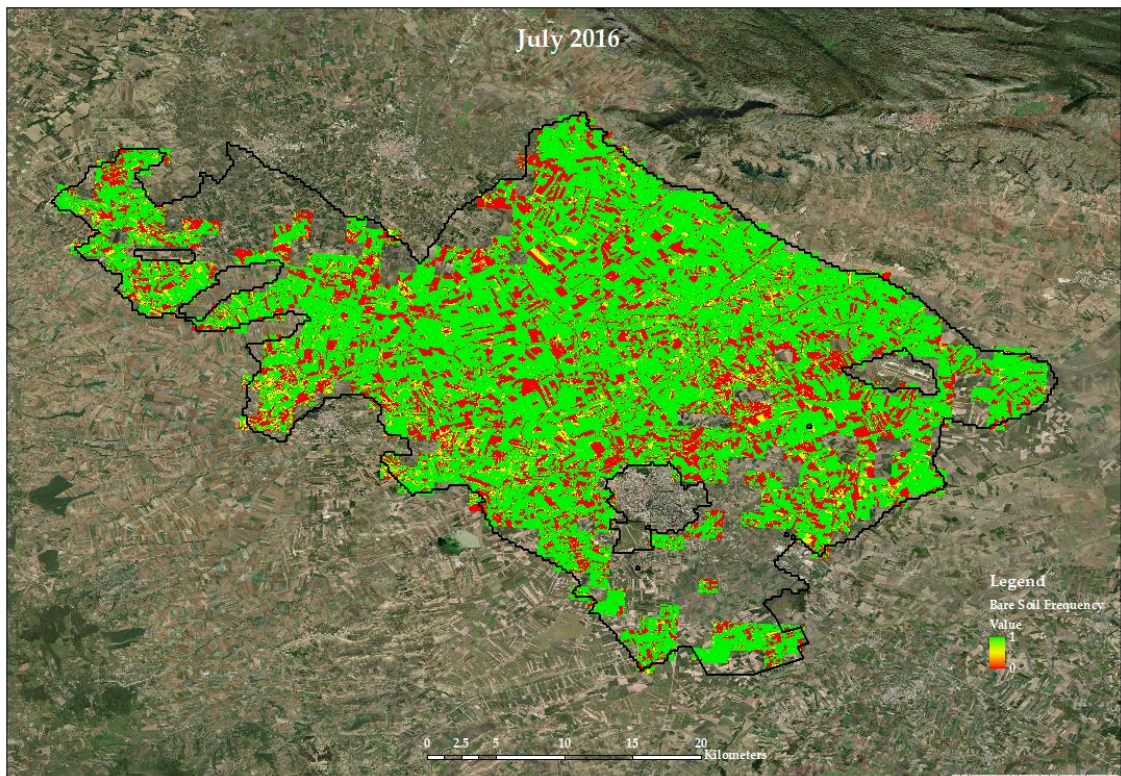
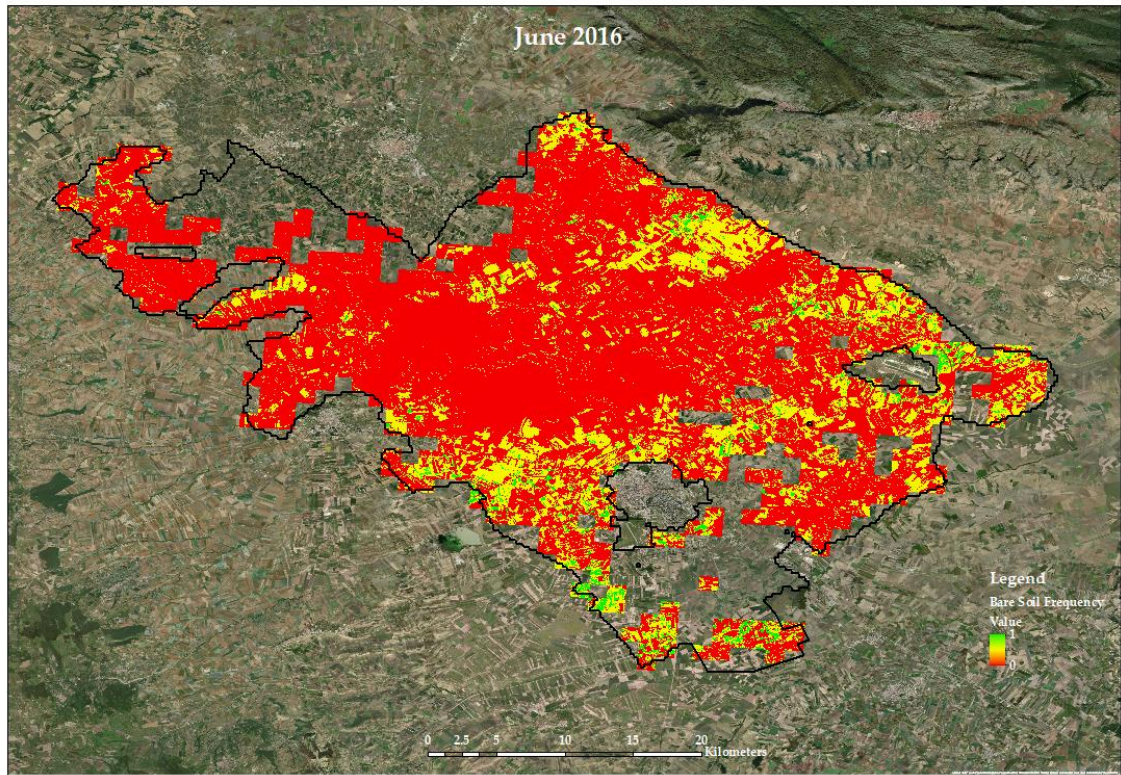
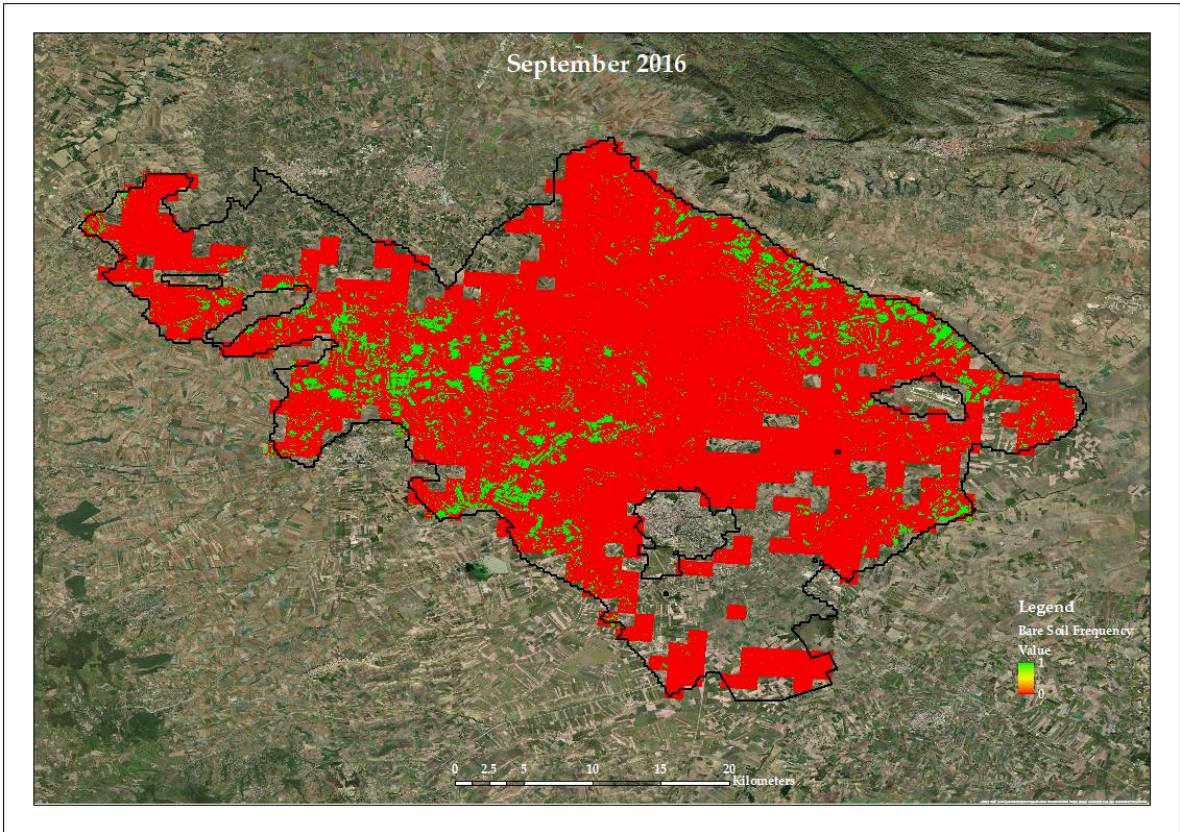
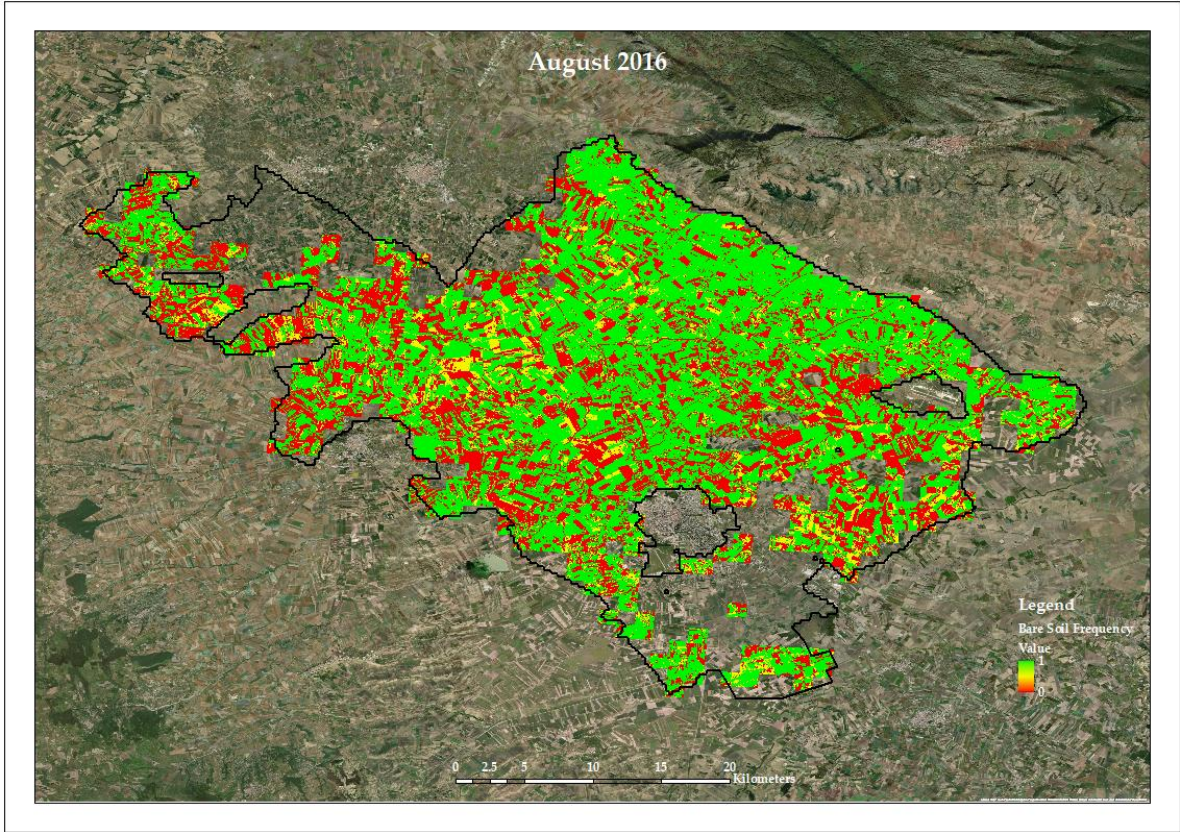


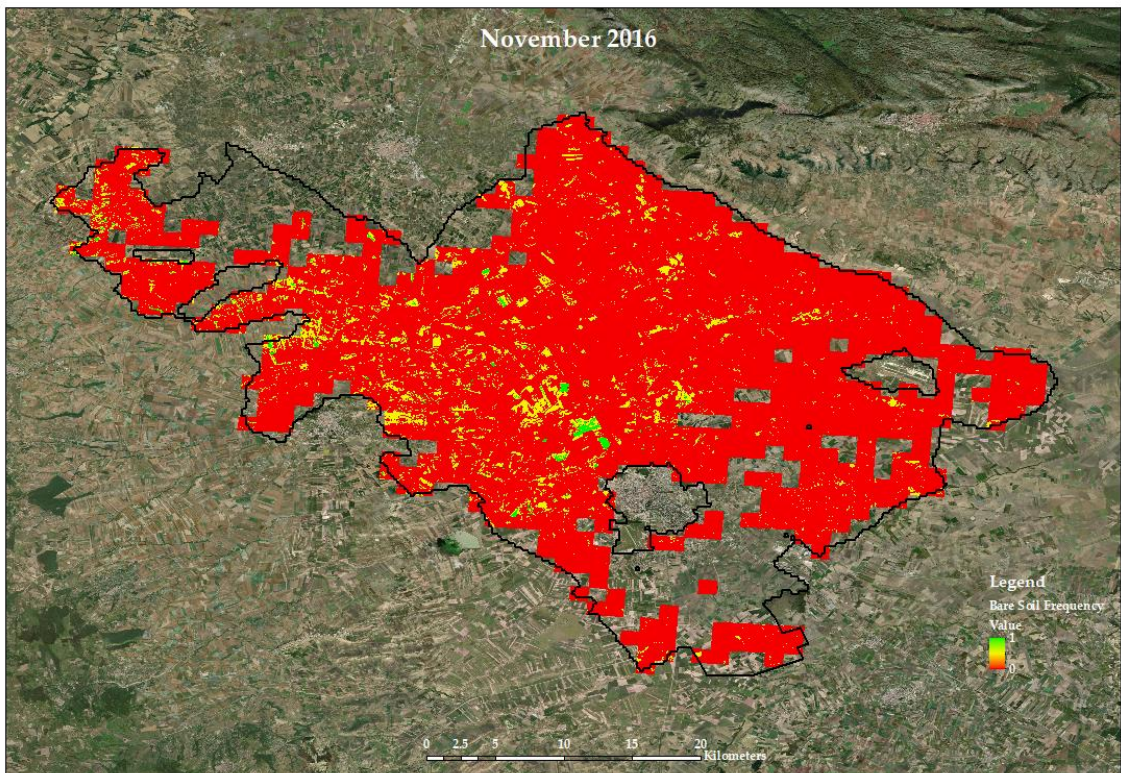
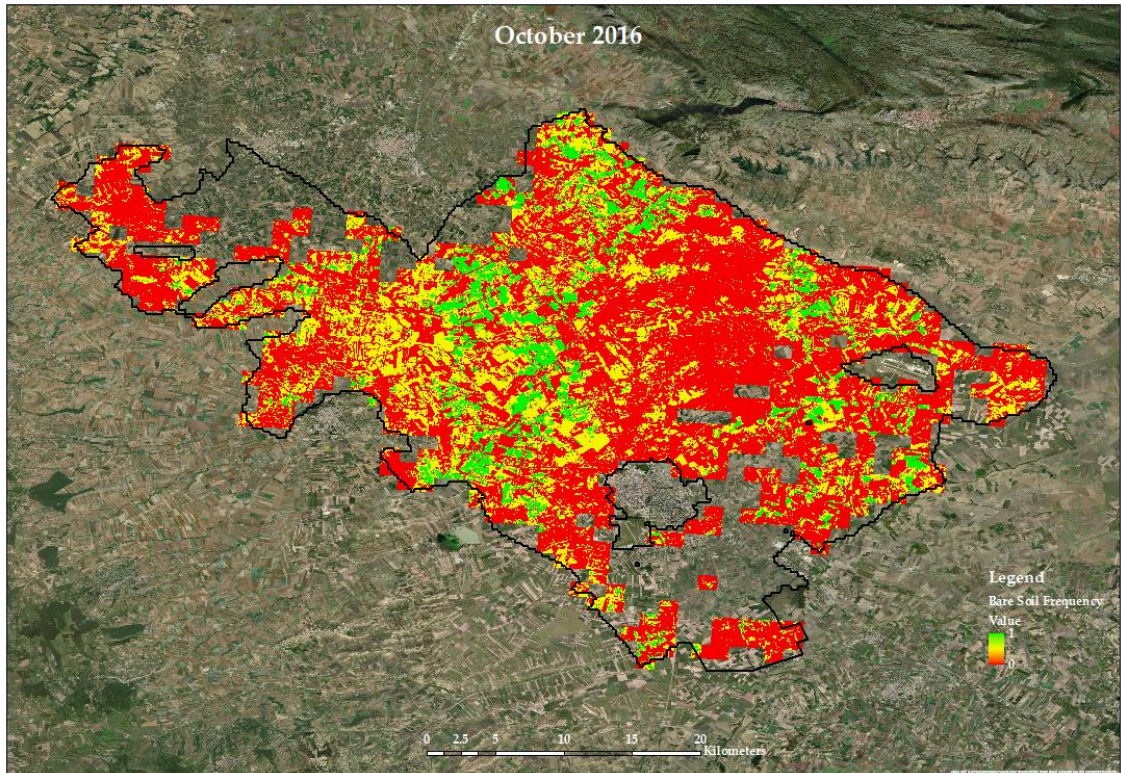
Figure S8. Yearly Bare Soil Frequency of the Roma region for the agricultural year 2019.











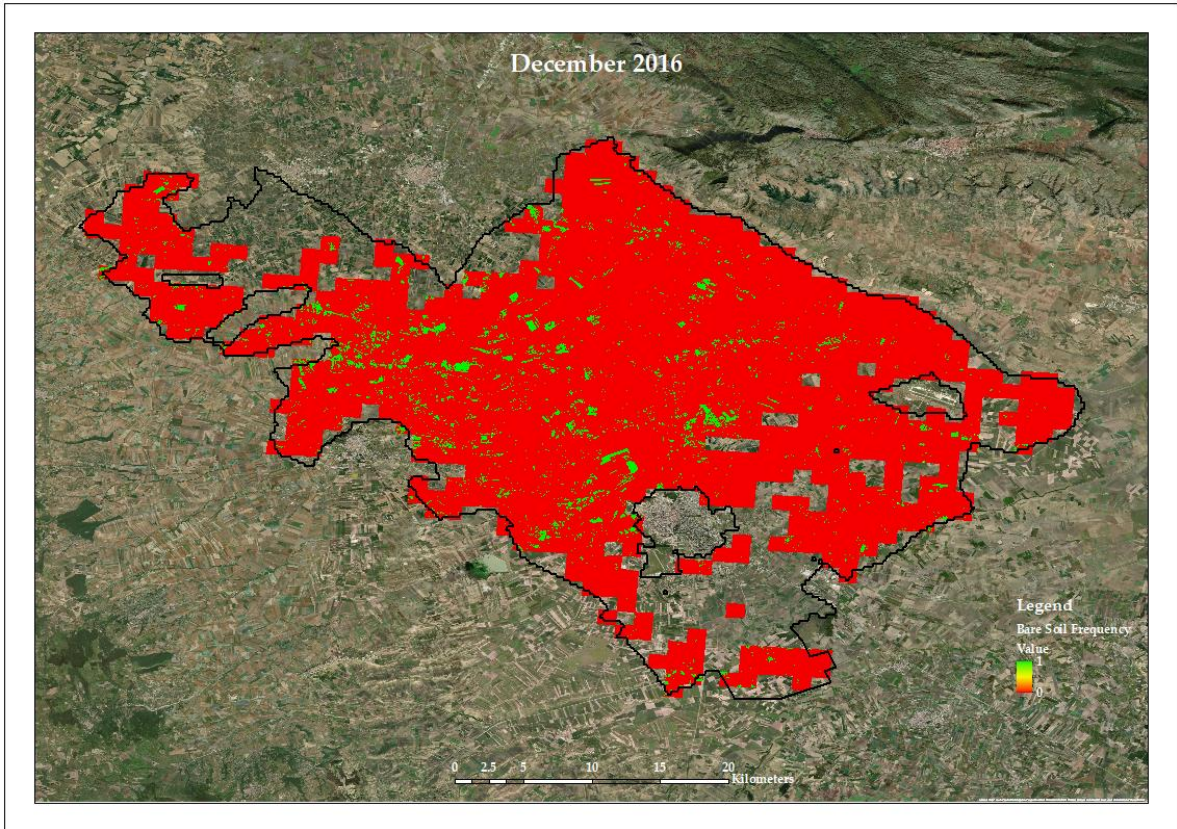
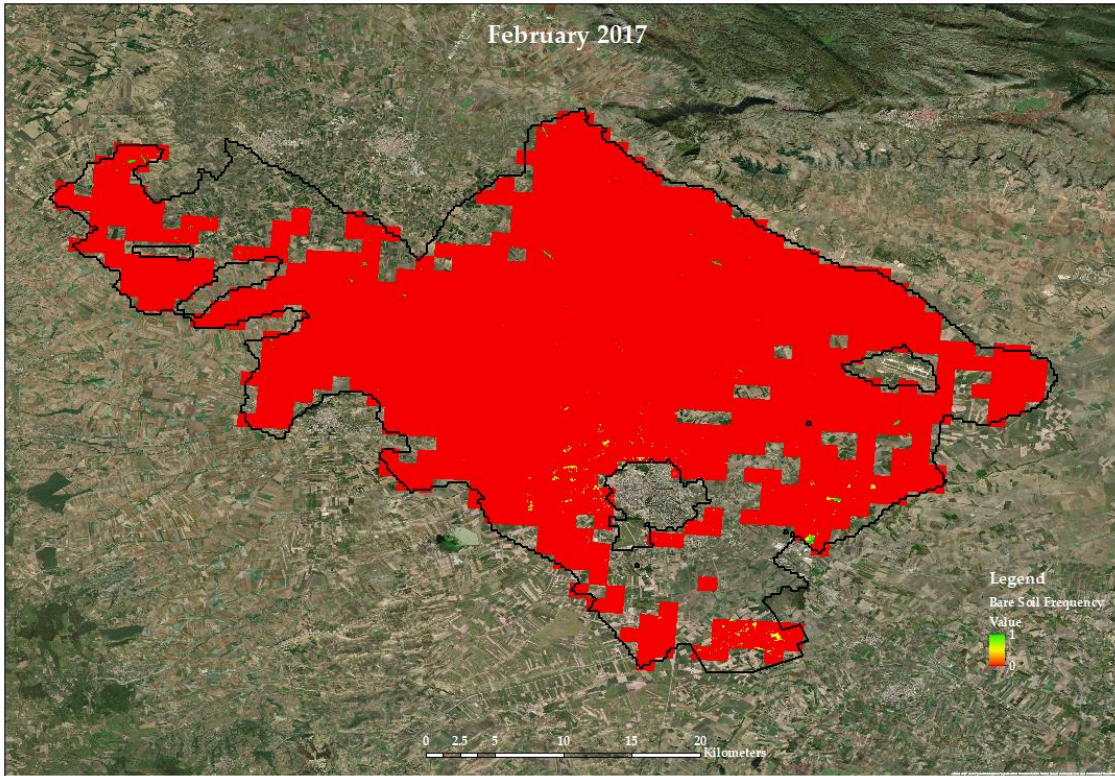
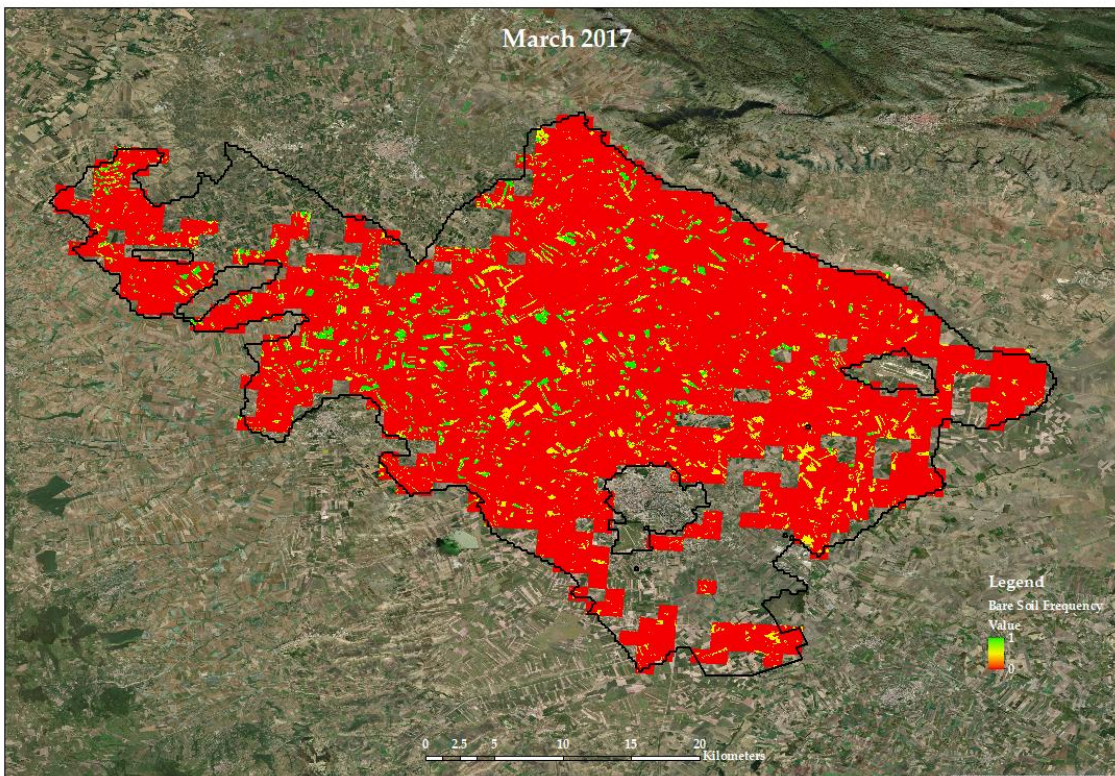


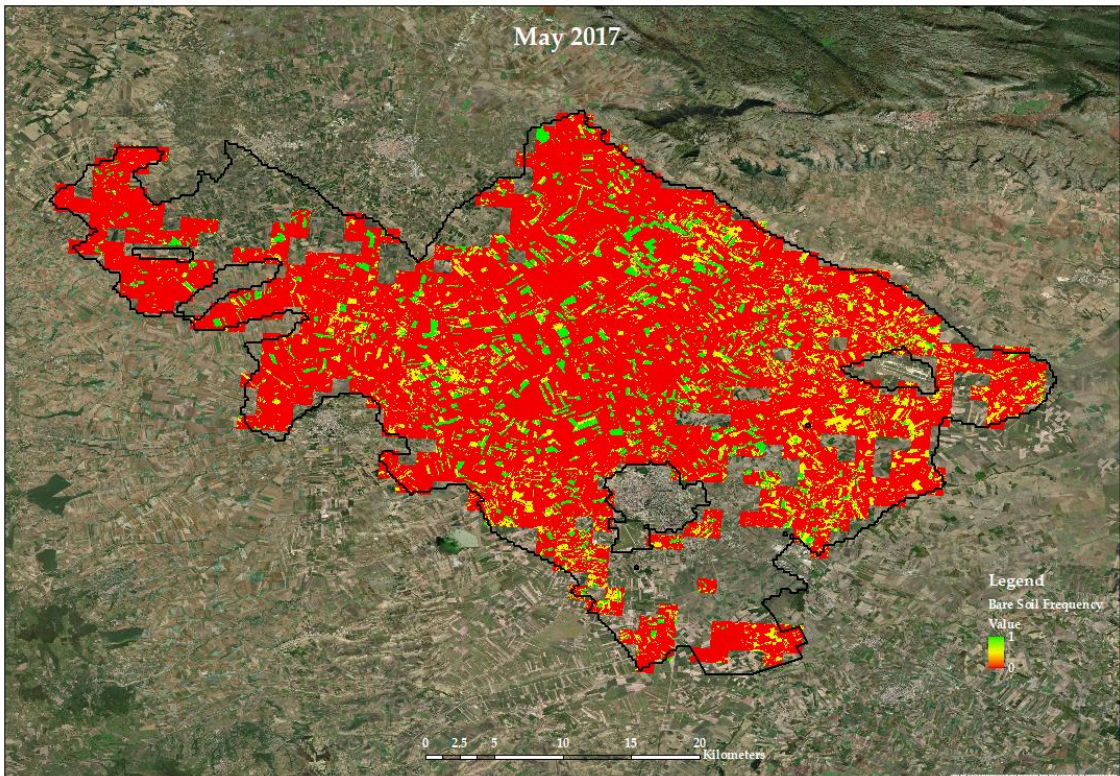
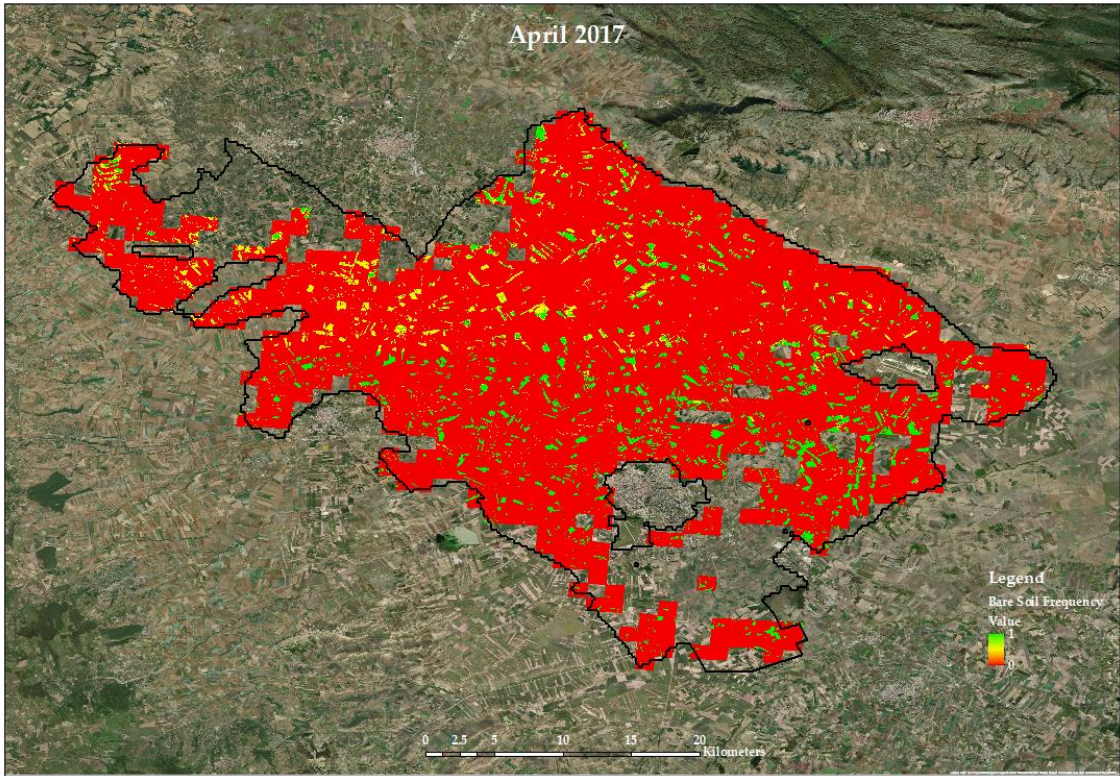
Figure S9. Yearly Bare Soil Frequency of the Capitanata region for the agricultural year 2016.

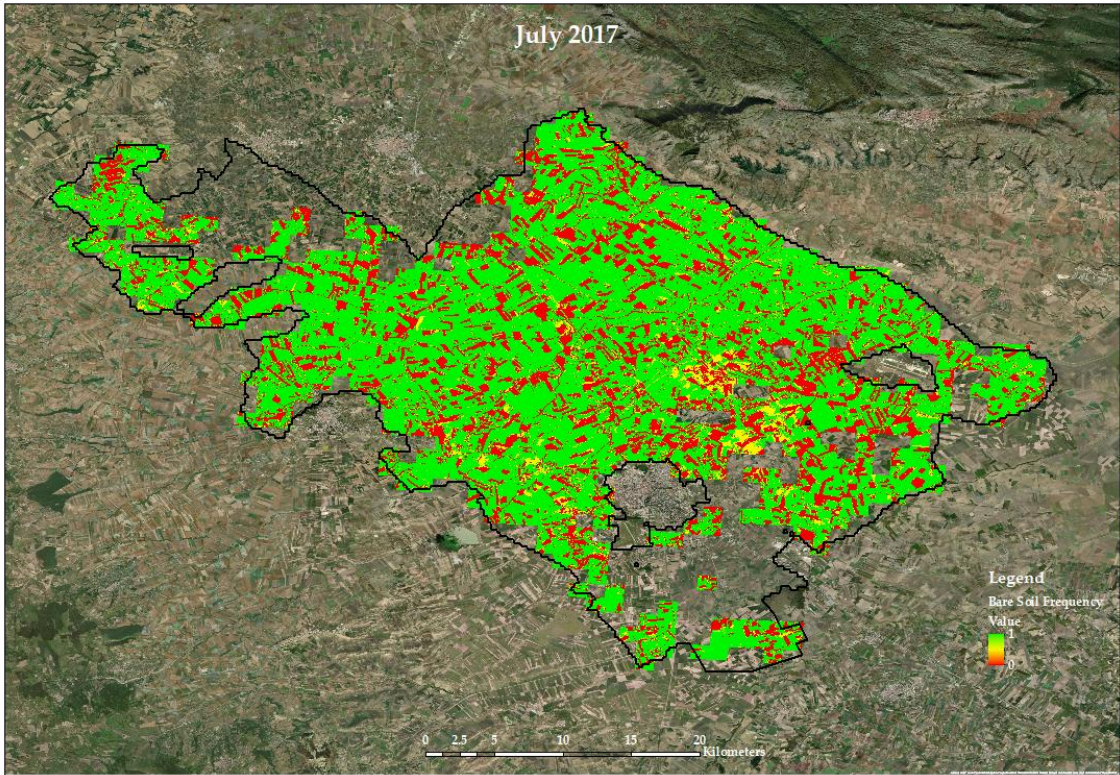
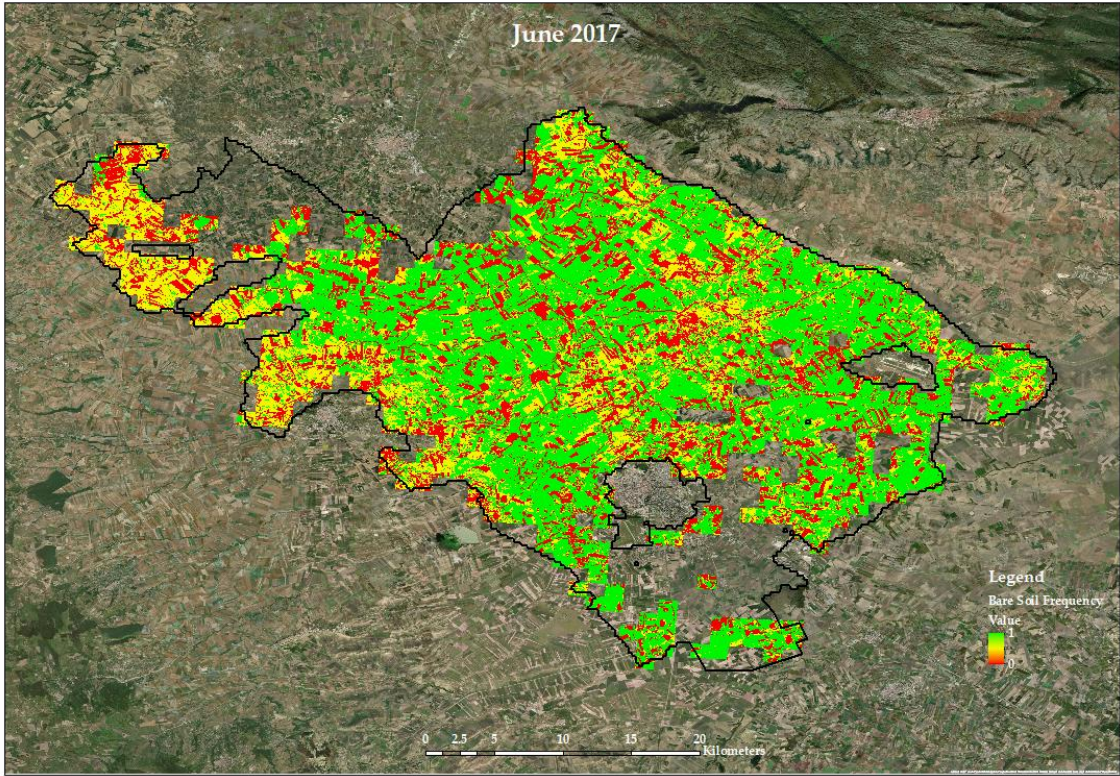
February 2017

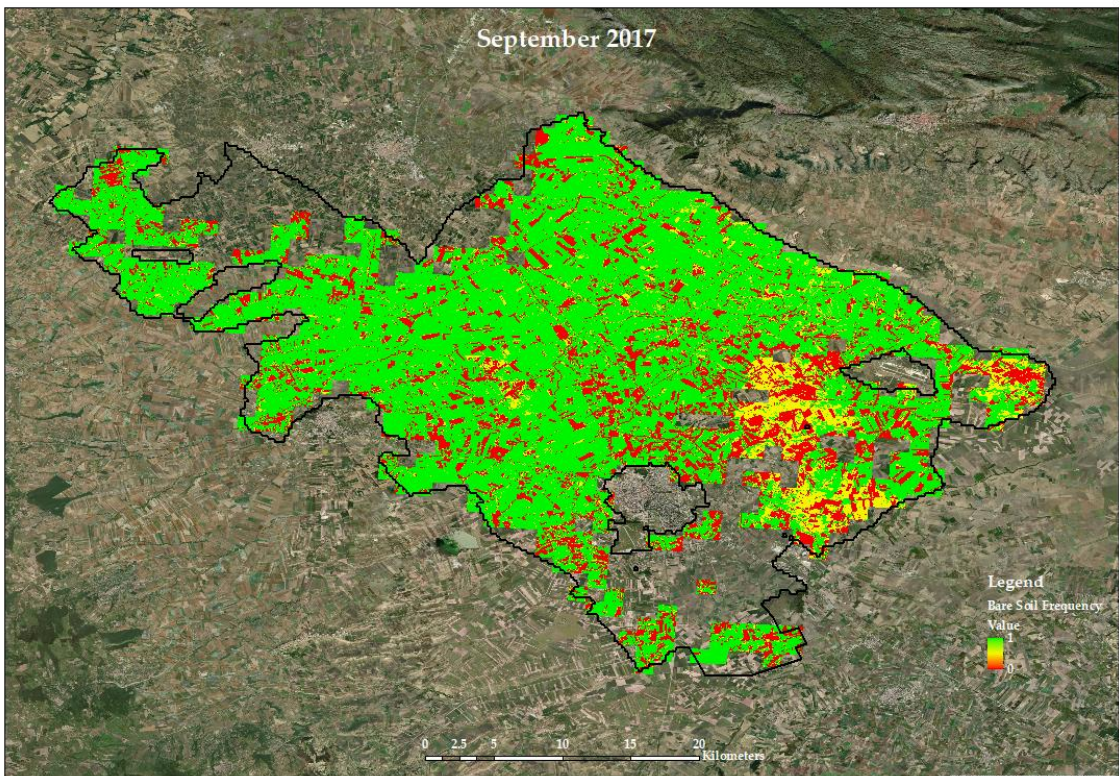
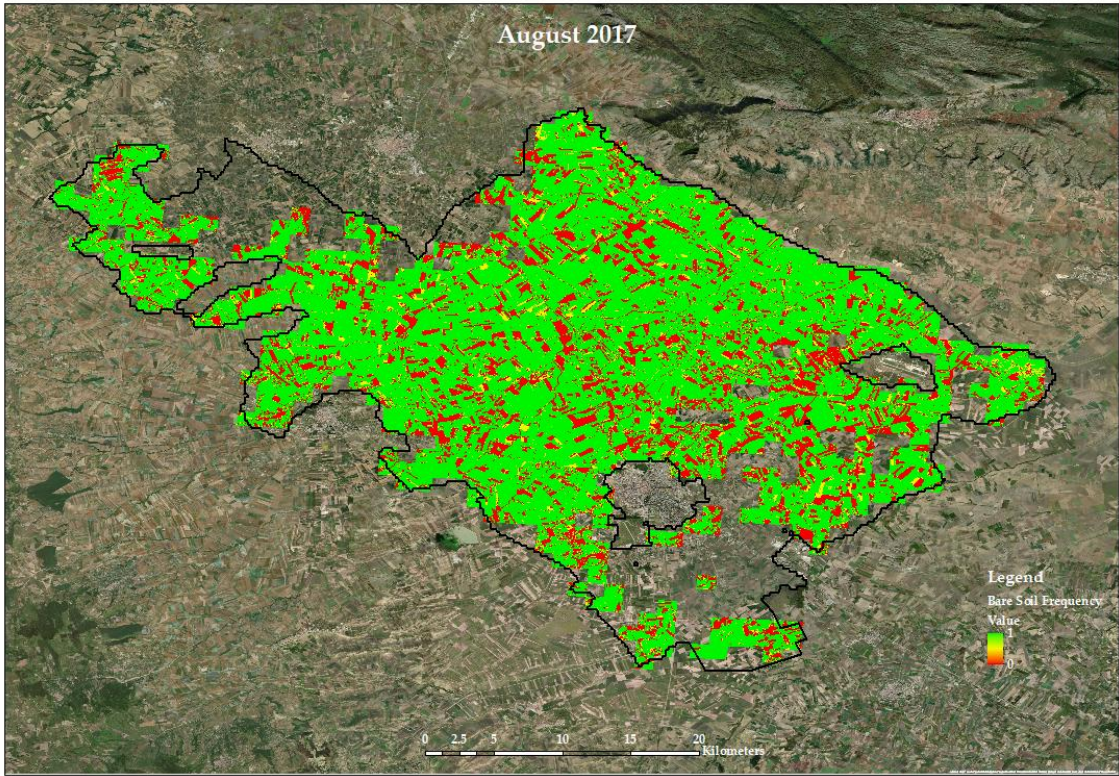


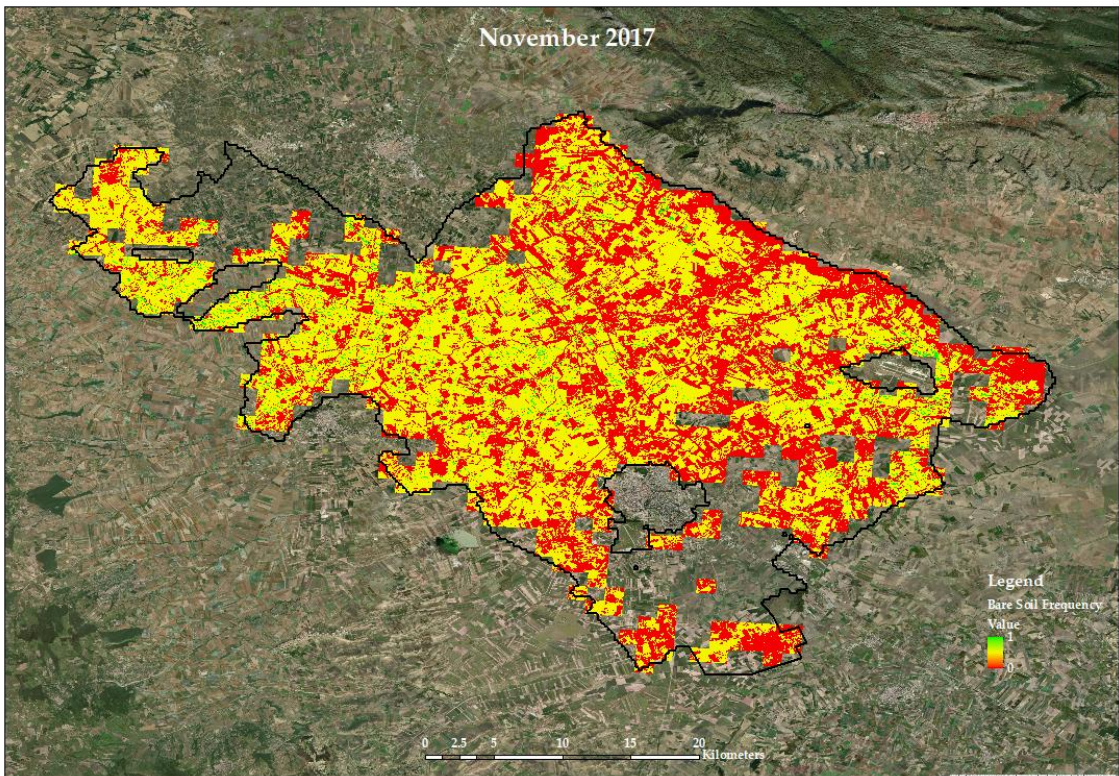
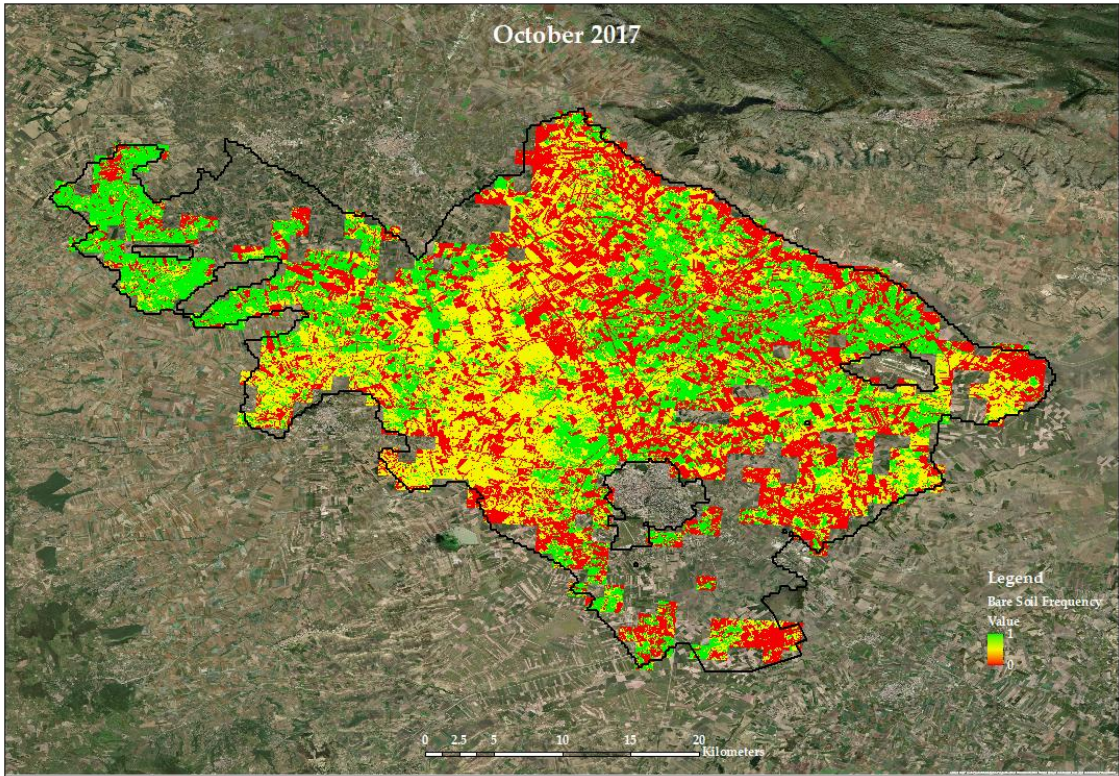
March 2017











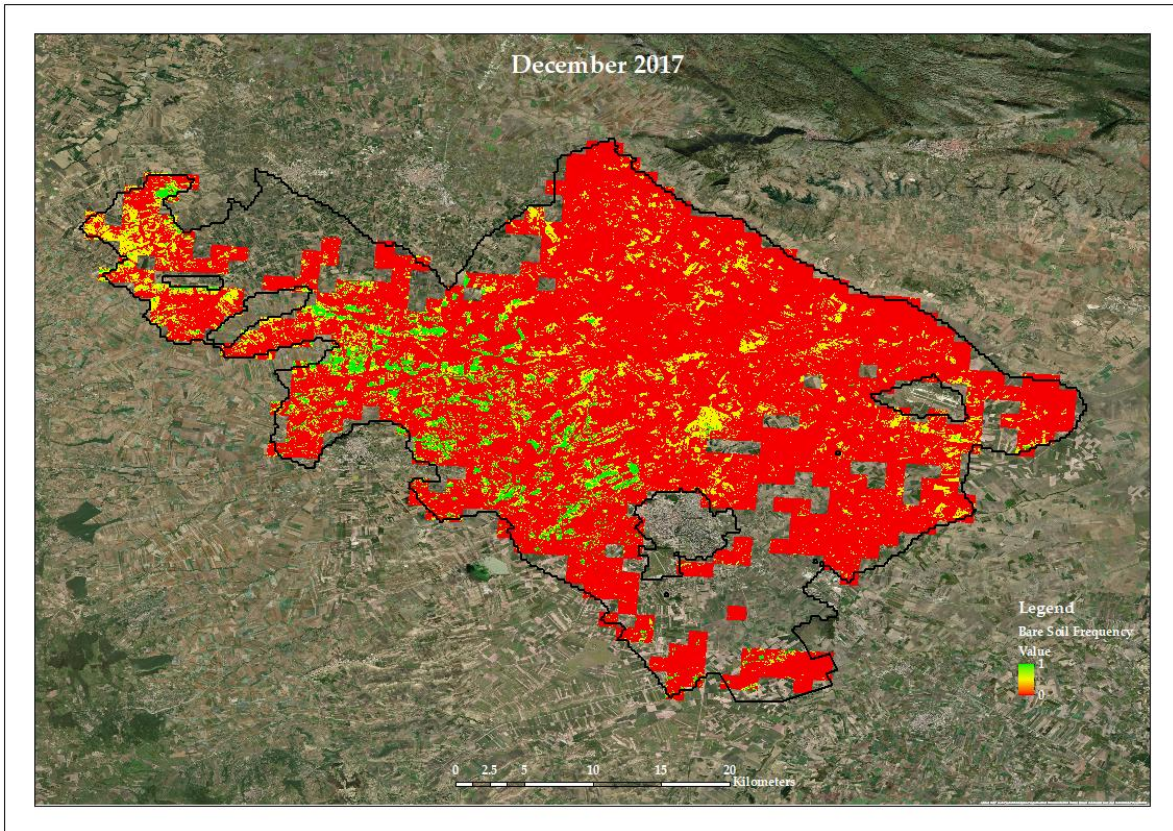
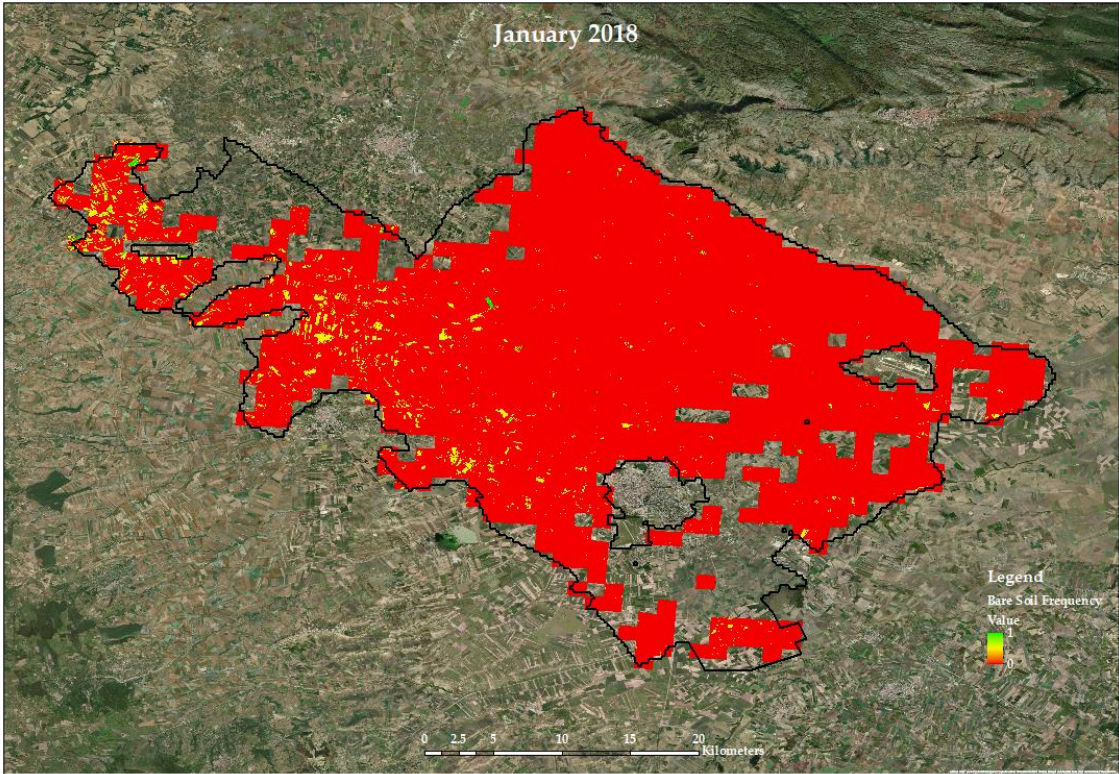
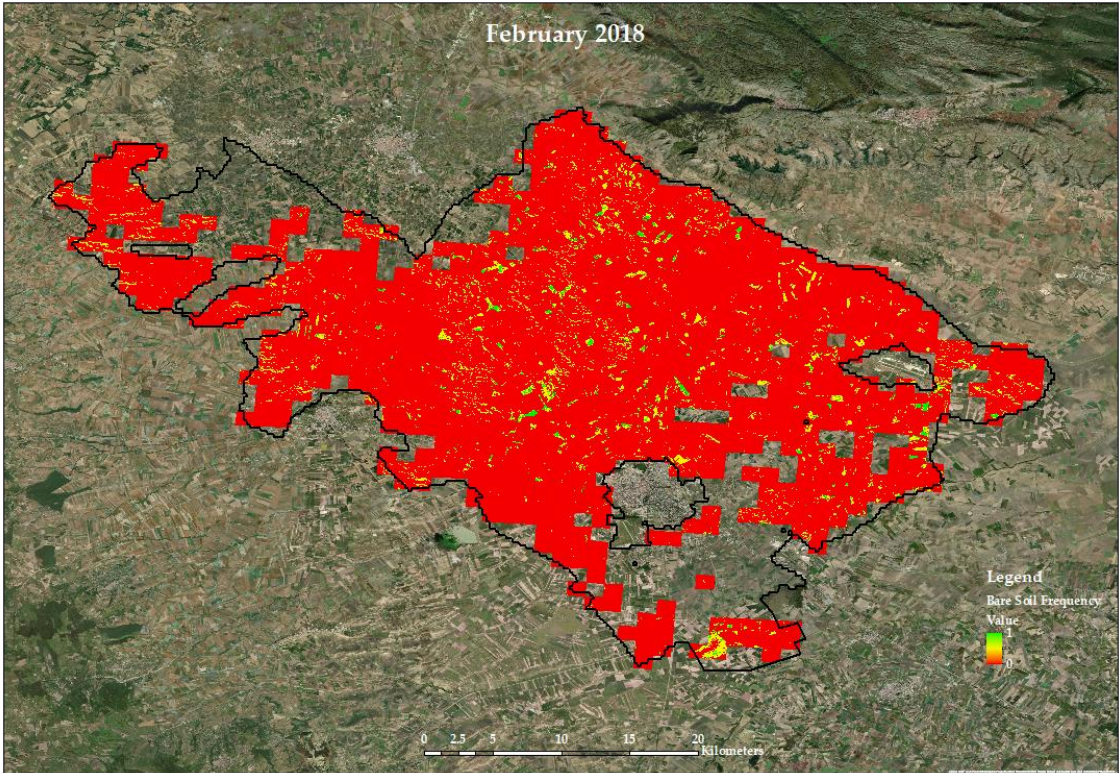


Figure S10. Yearly Bare Soil Frequency of the Capitanata region for the agricultural year 2017.

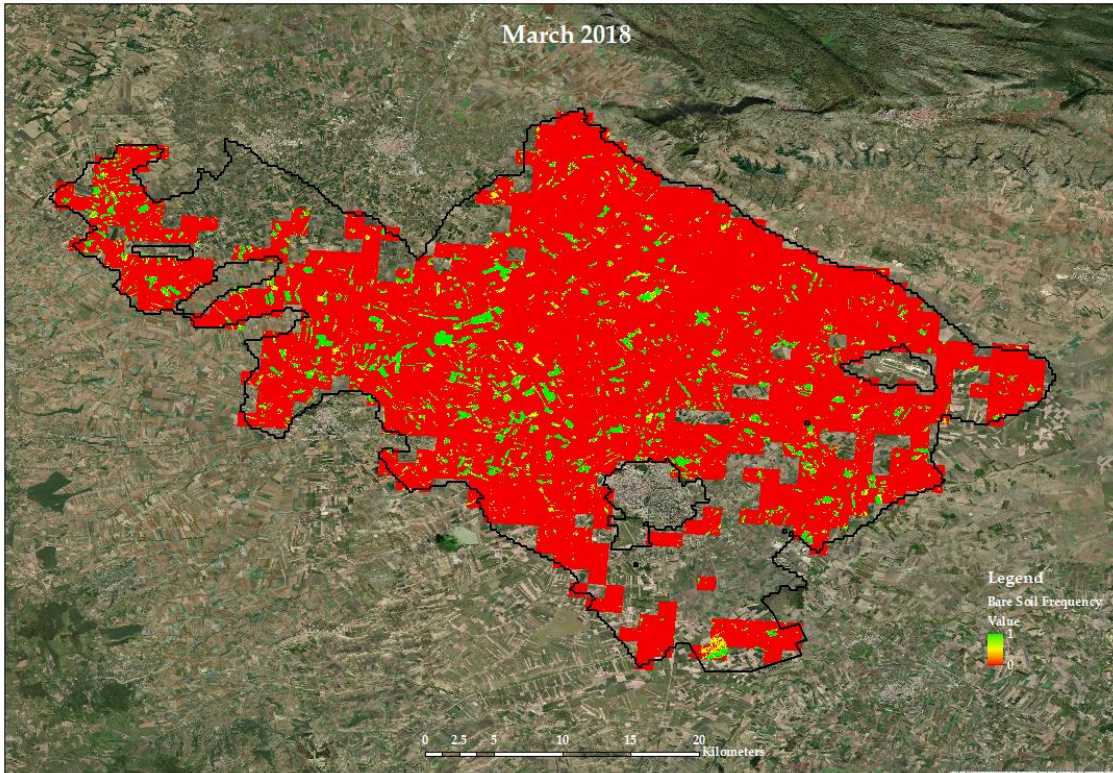
January 2018



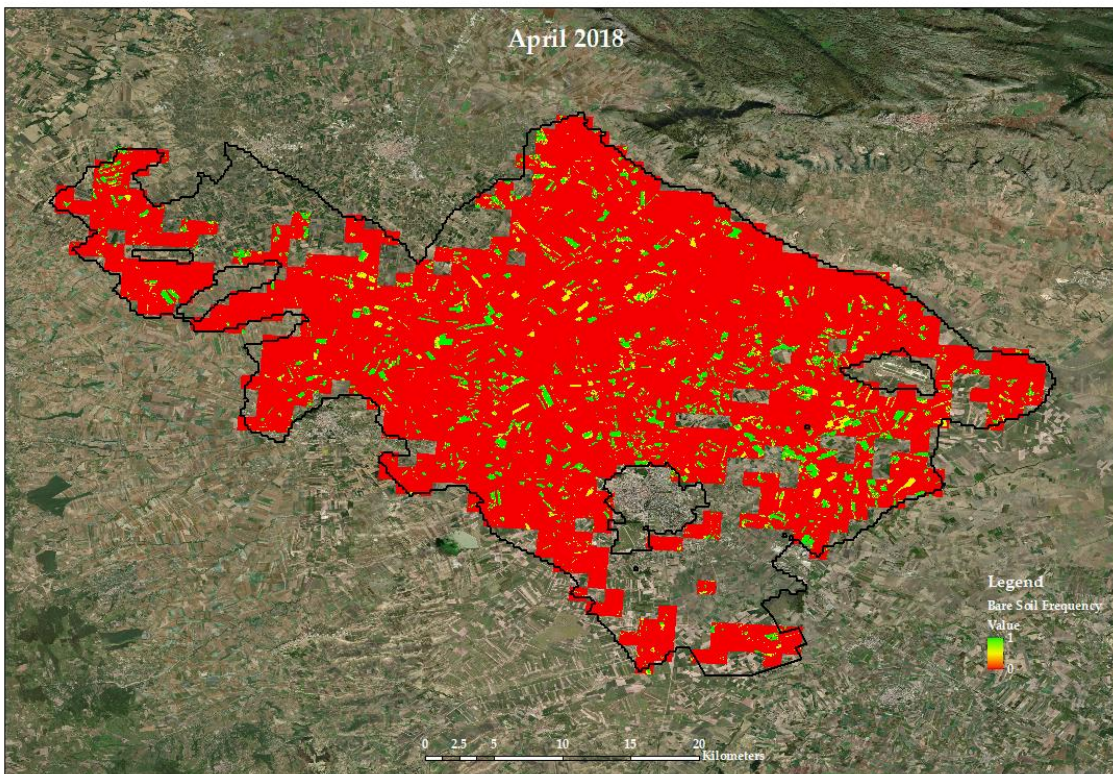
February 2018

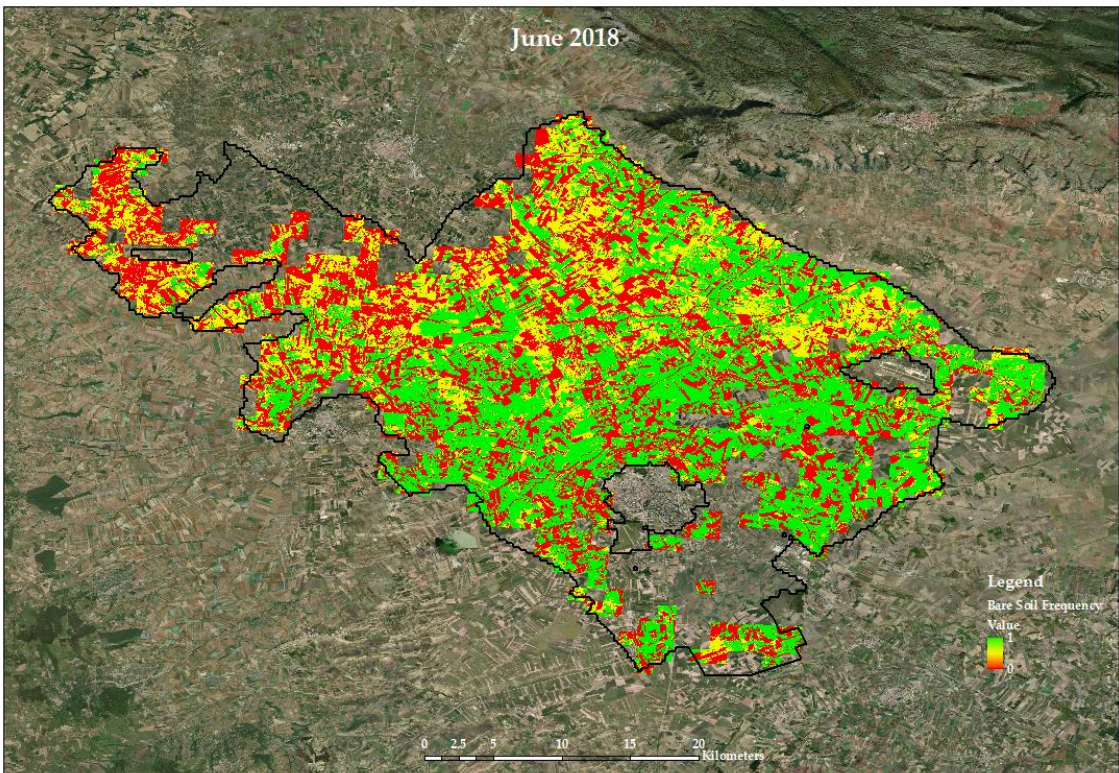
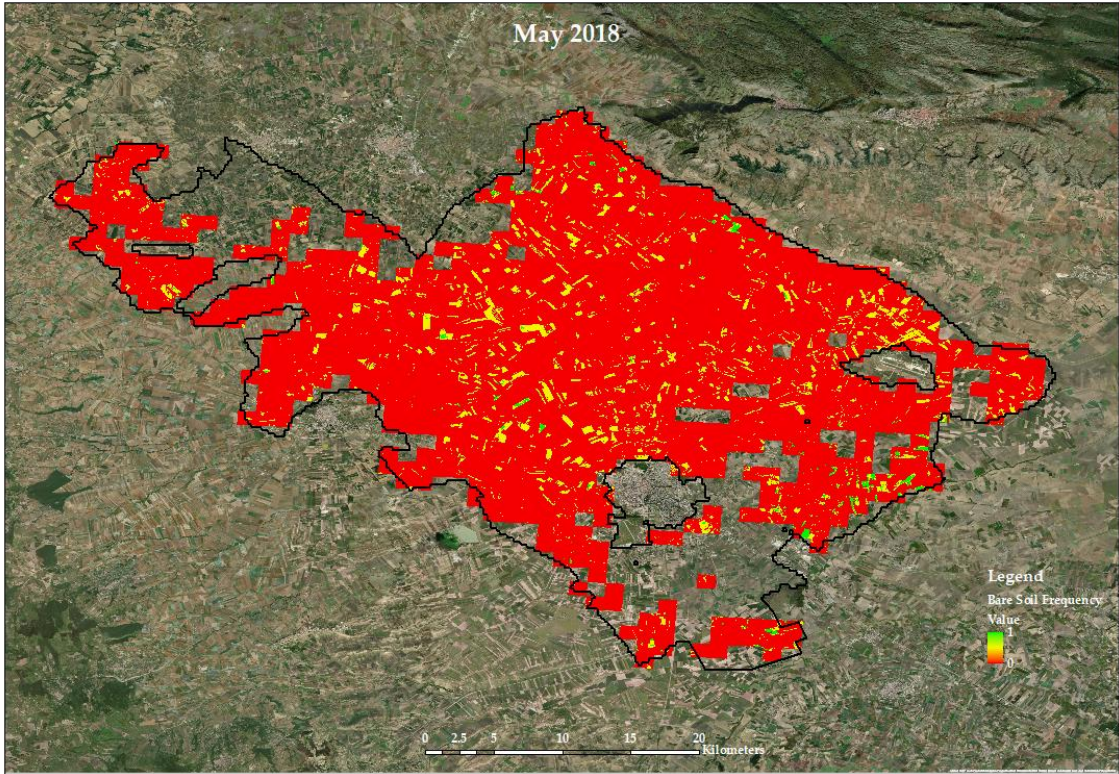


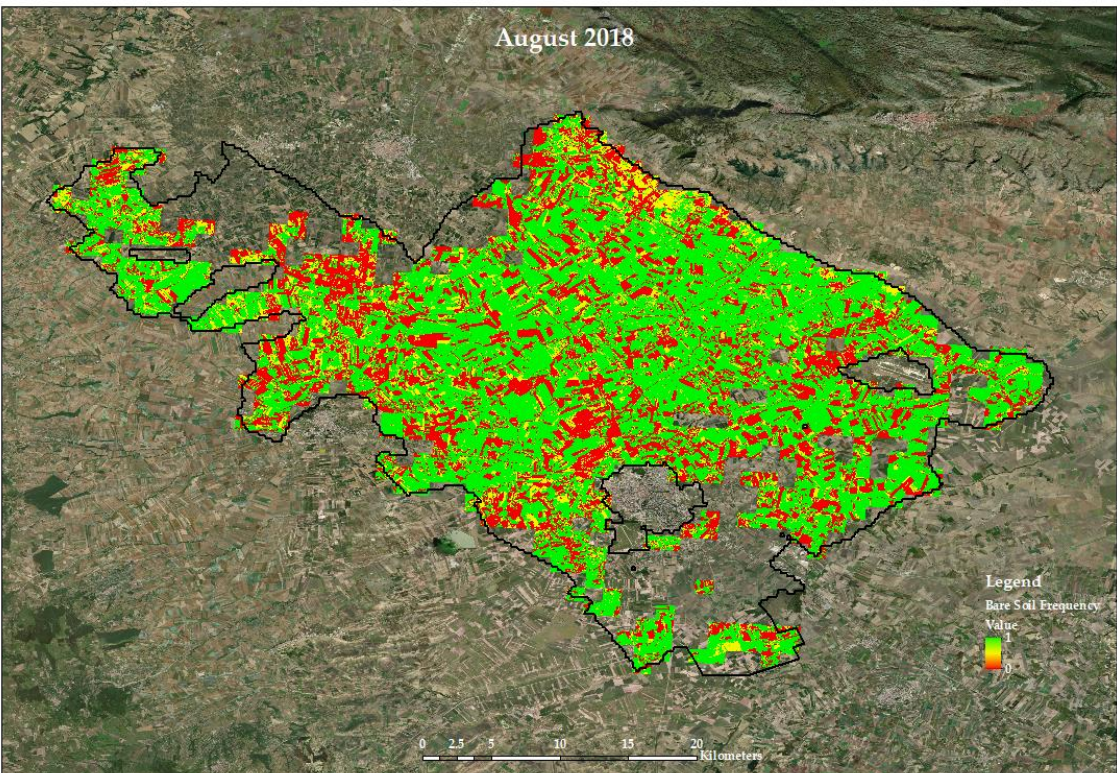
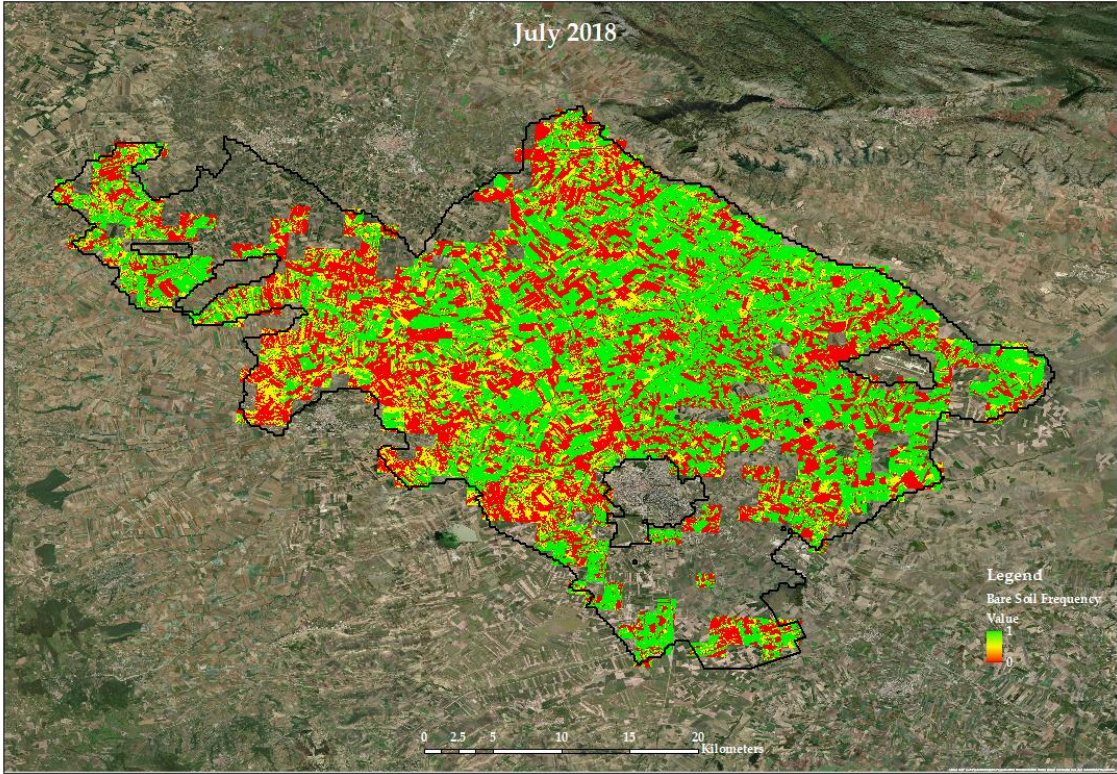
March 2018



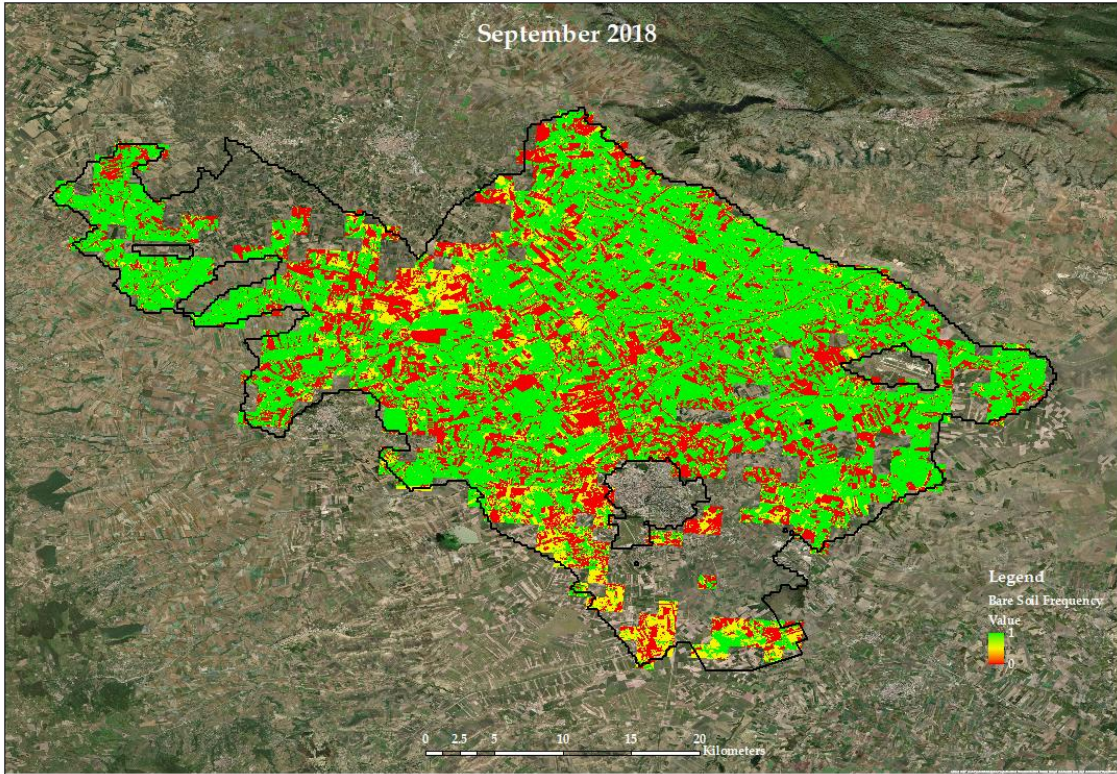
April 2018



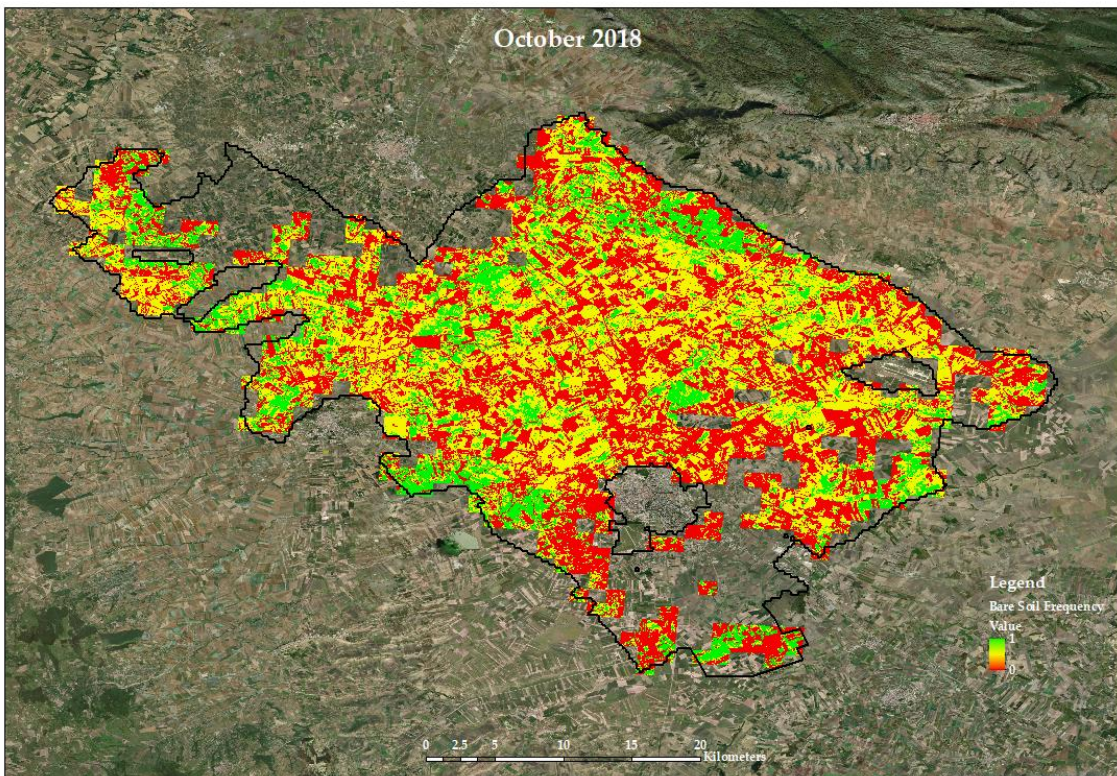




September 2018



October 2018



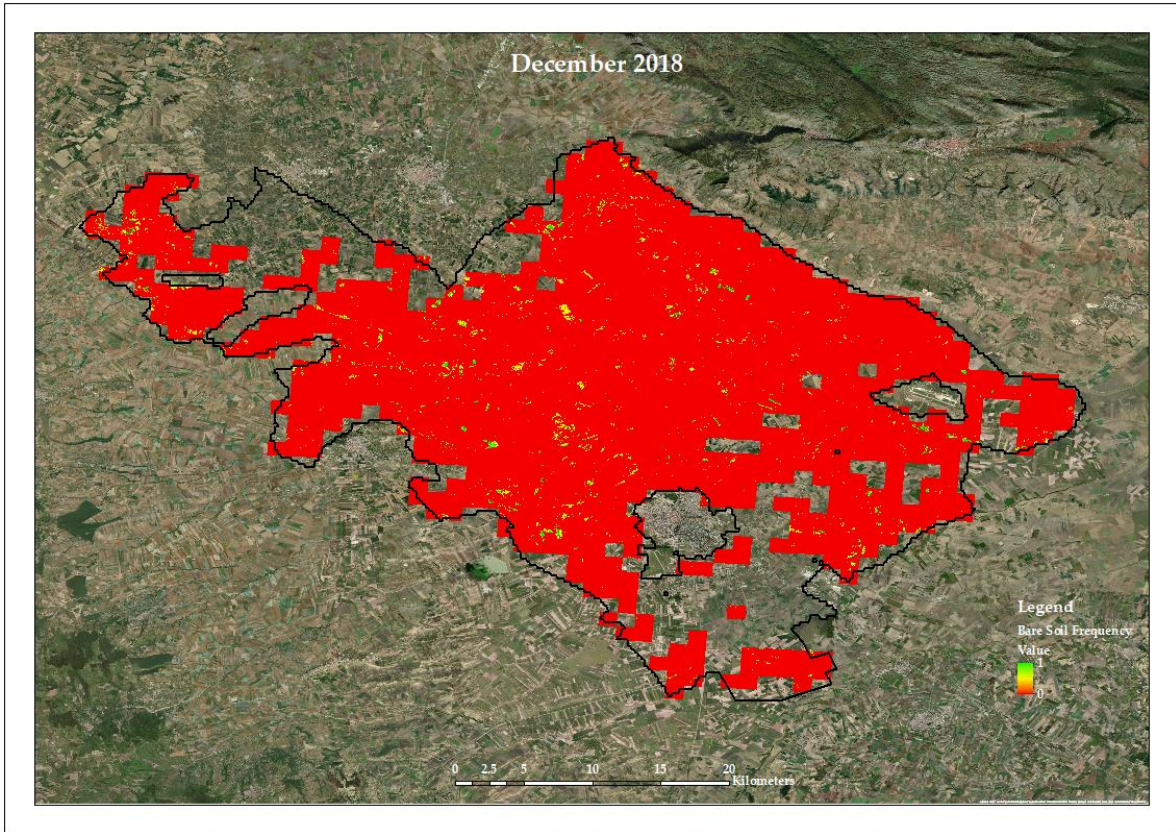
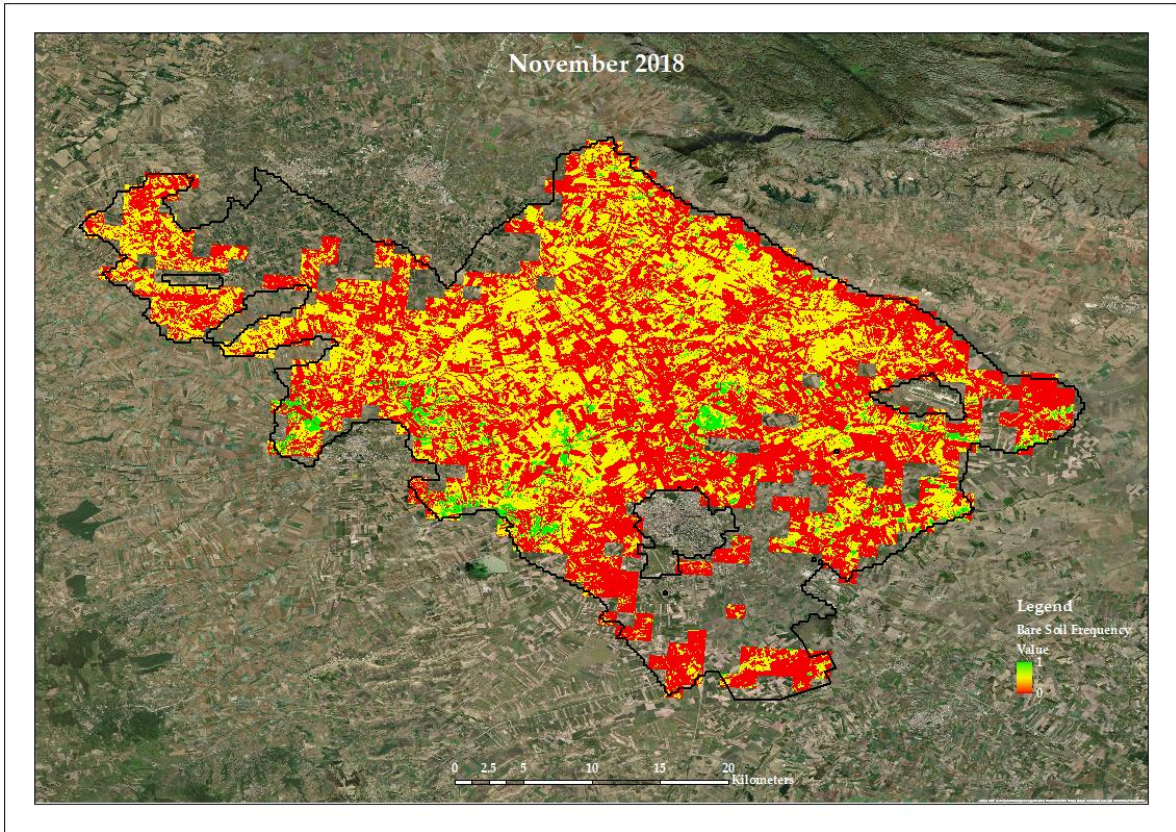
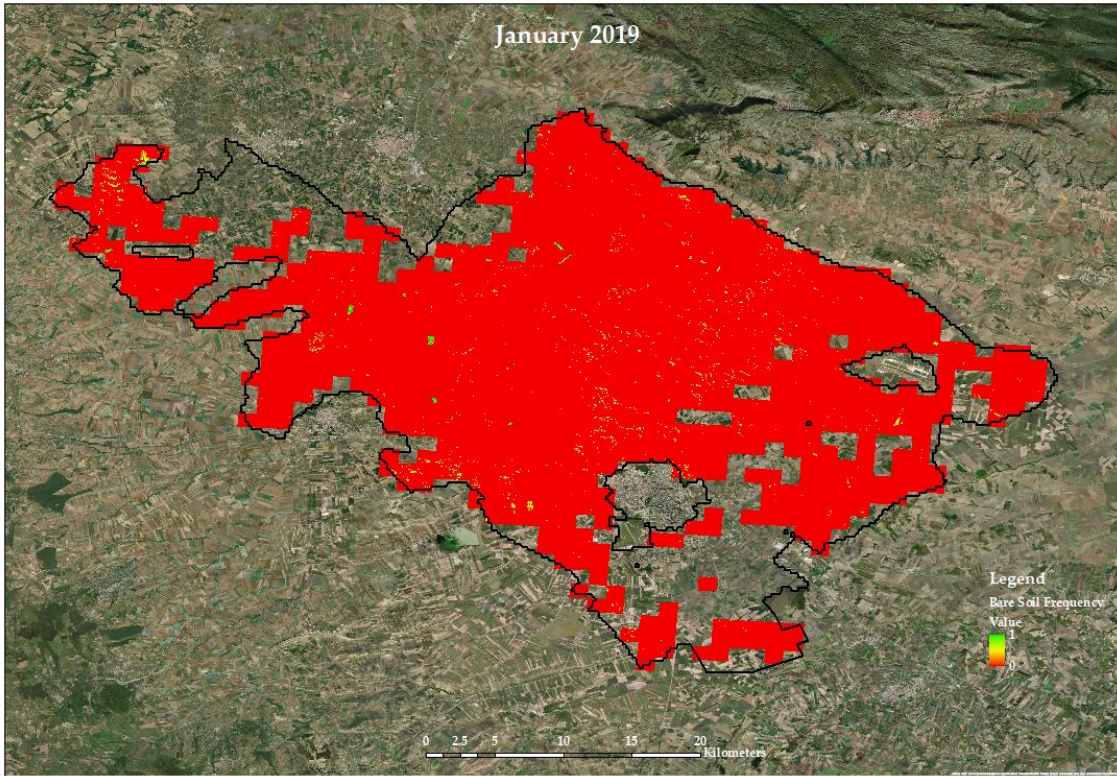
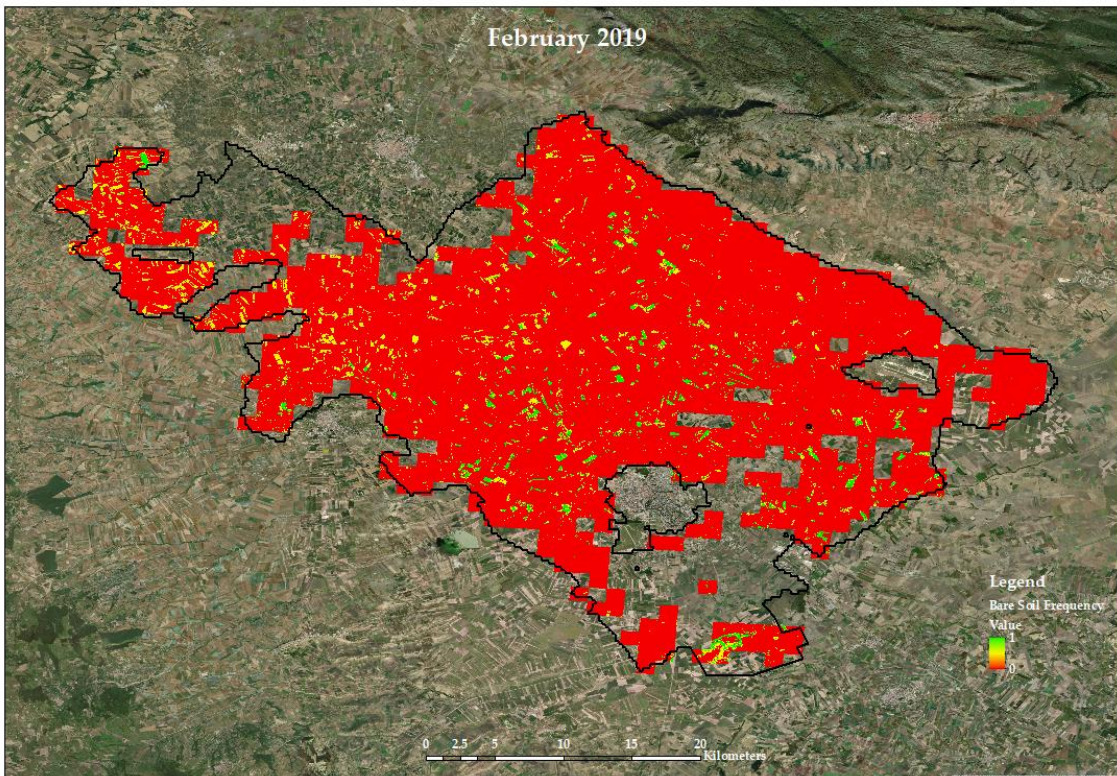


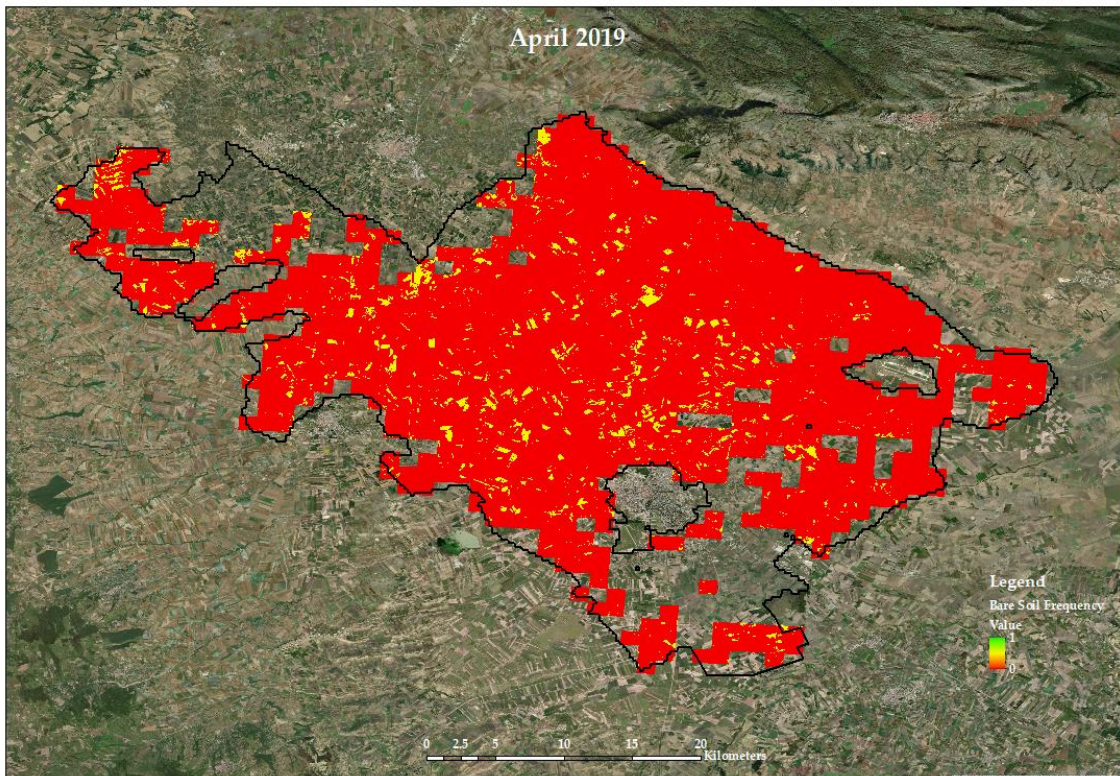
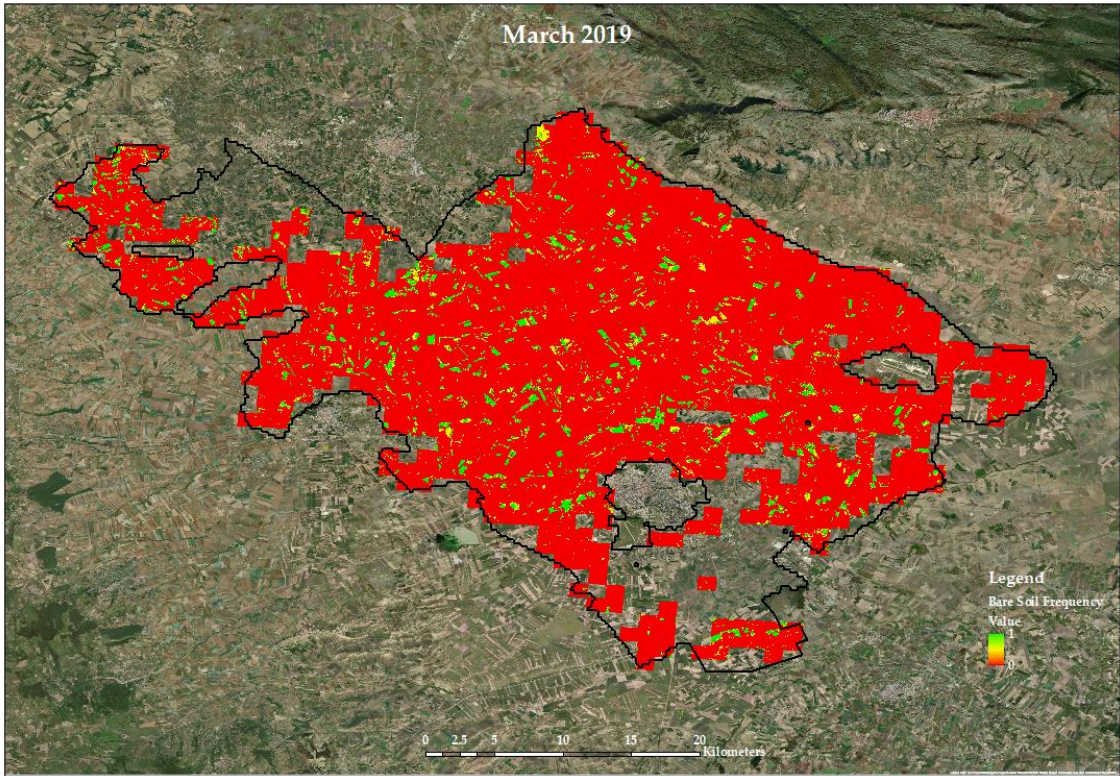
Figure S11. Yearly Bare Soil Frequency of the Capitanata region for the agricultural year 2018.

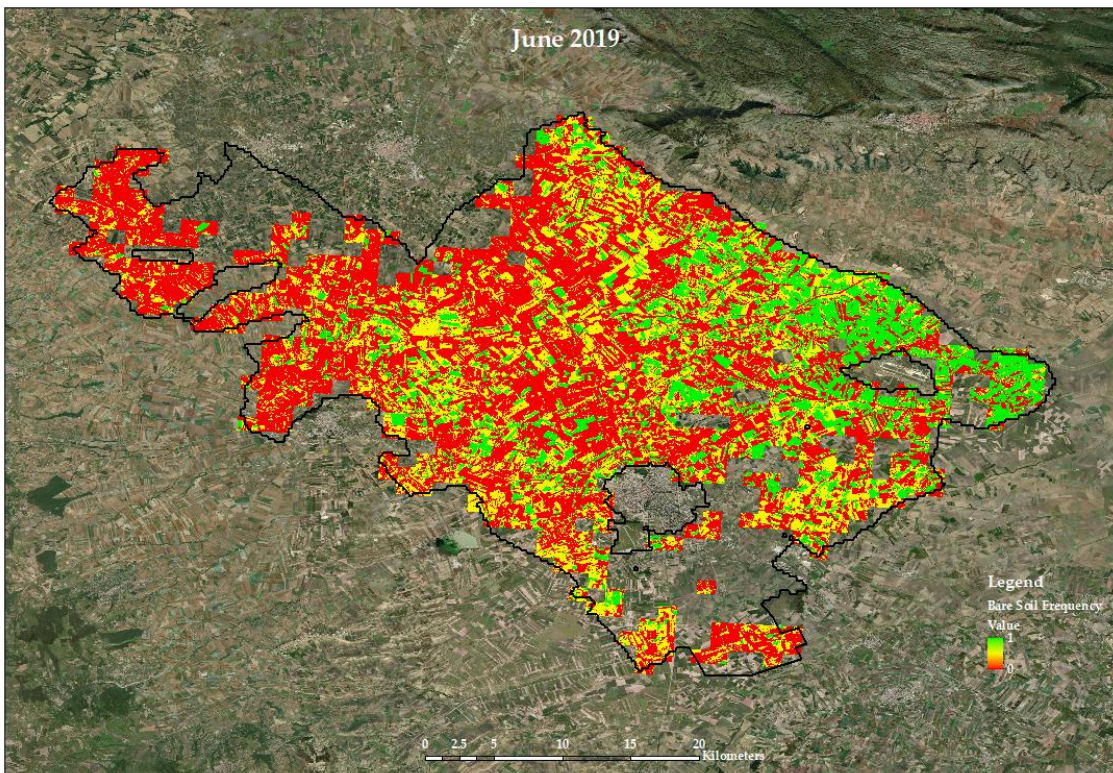
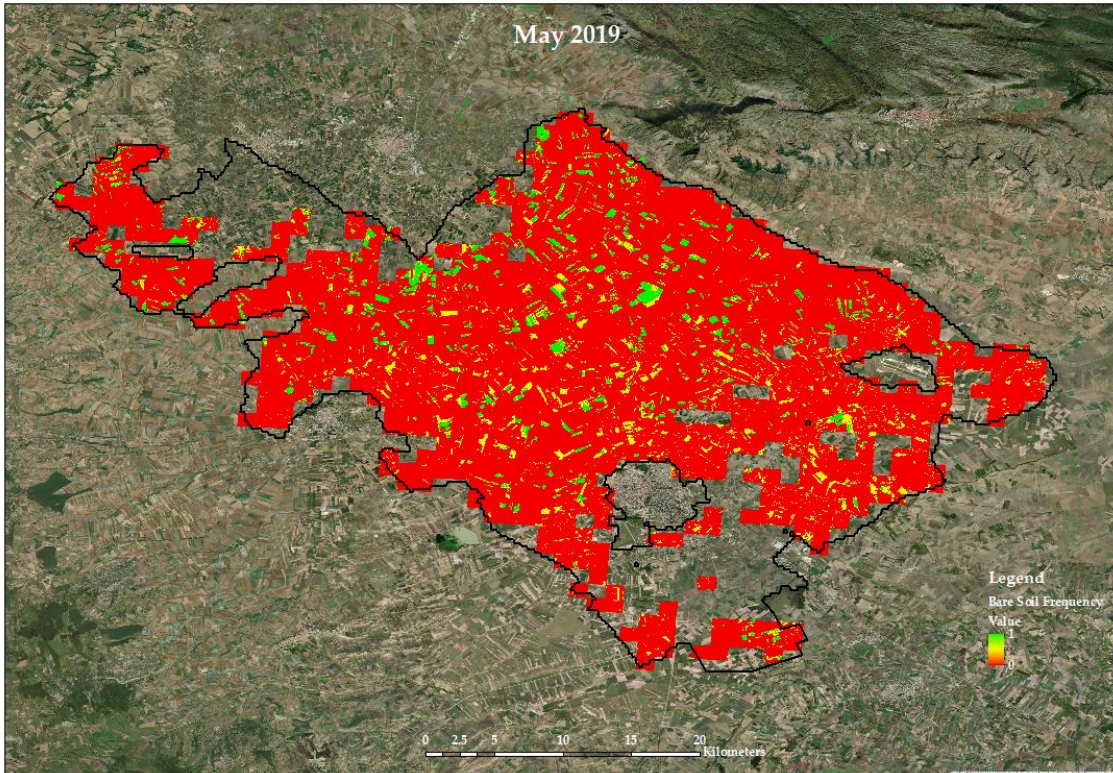
January 2019



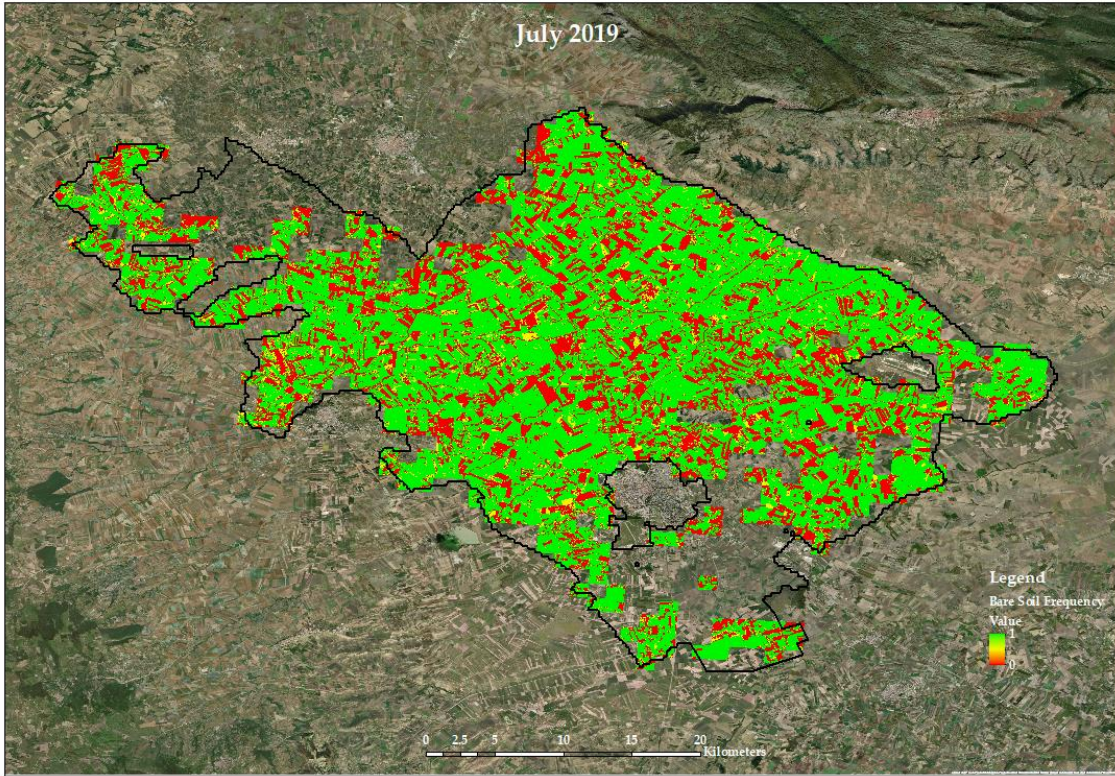
February 2019



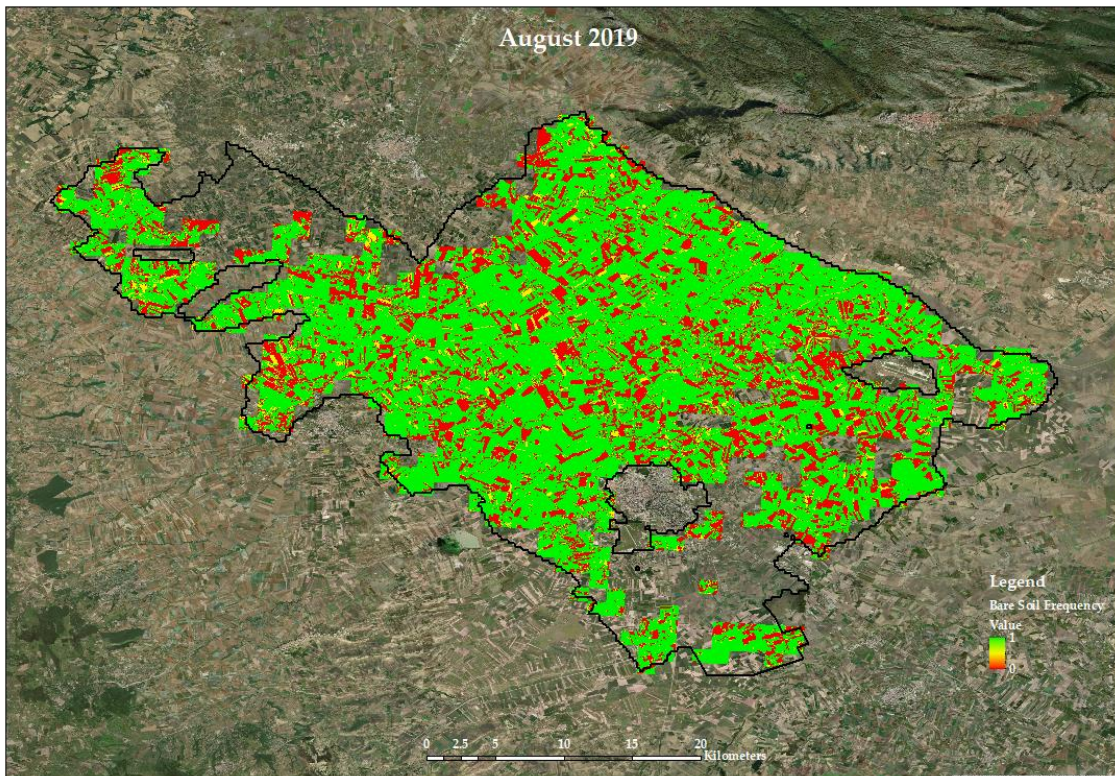




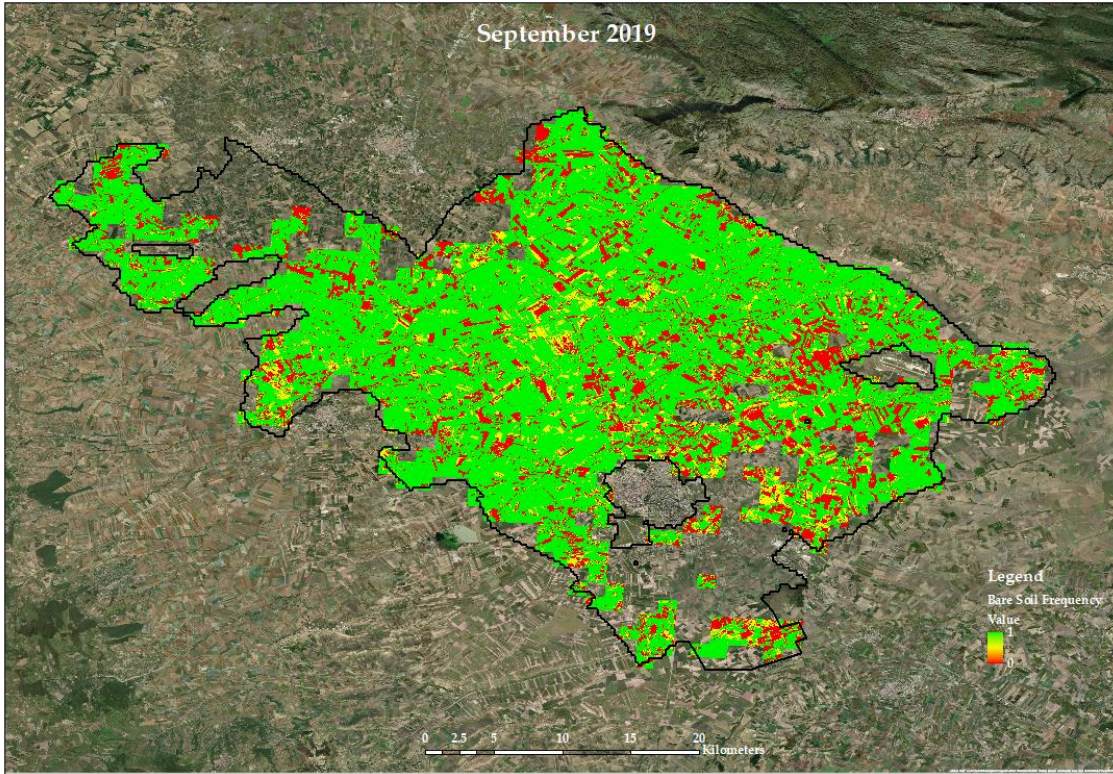
July 2019



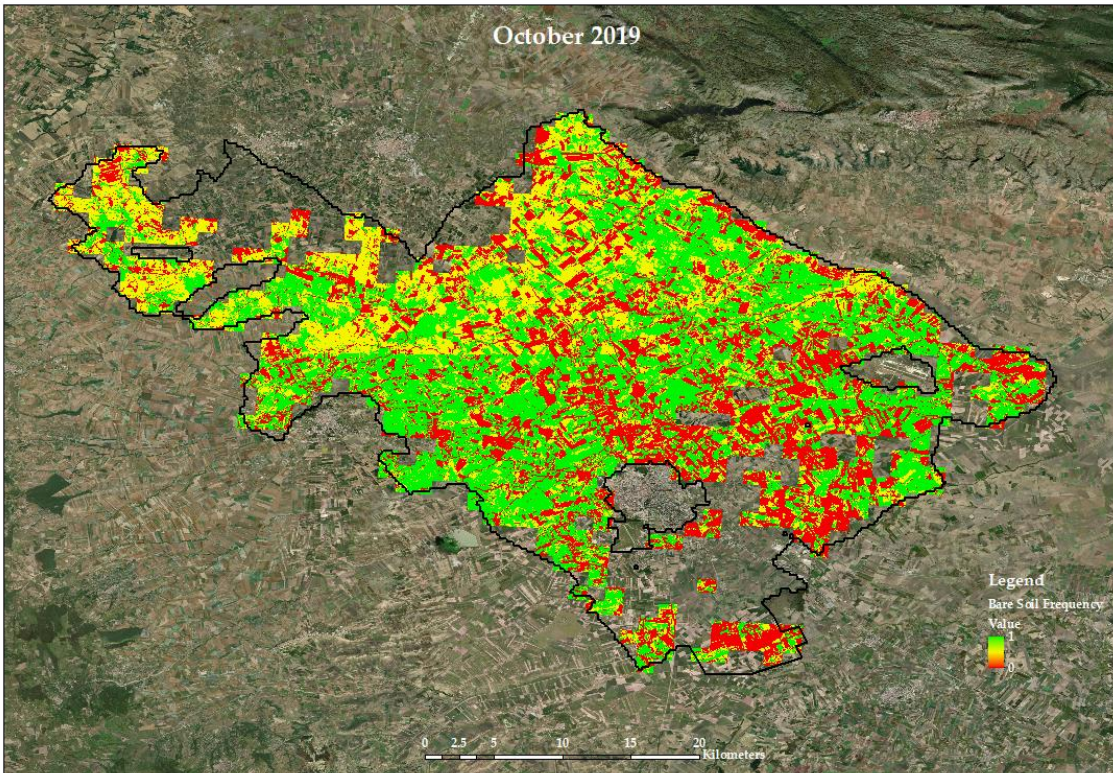
August 2019



September 2019



October 2019



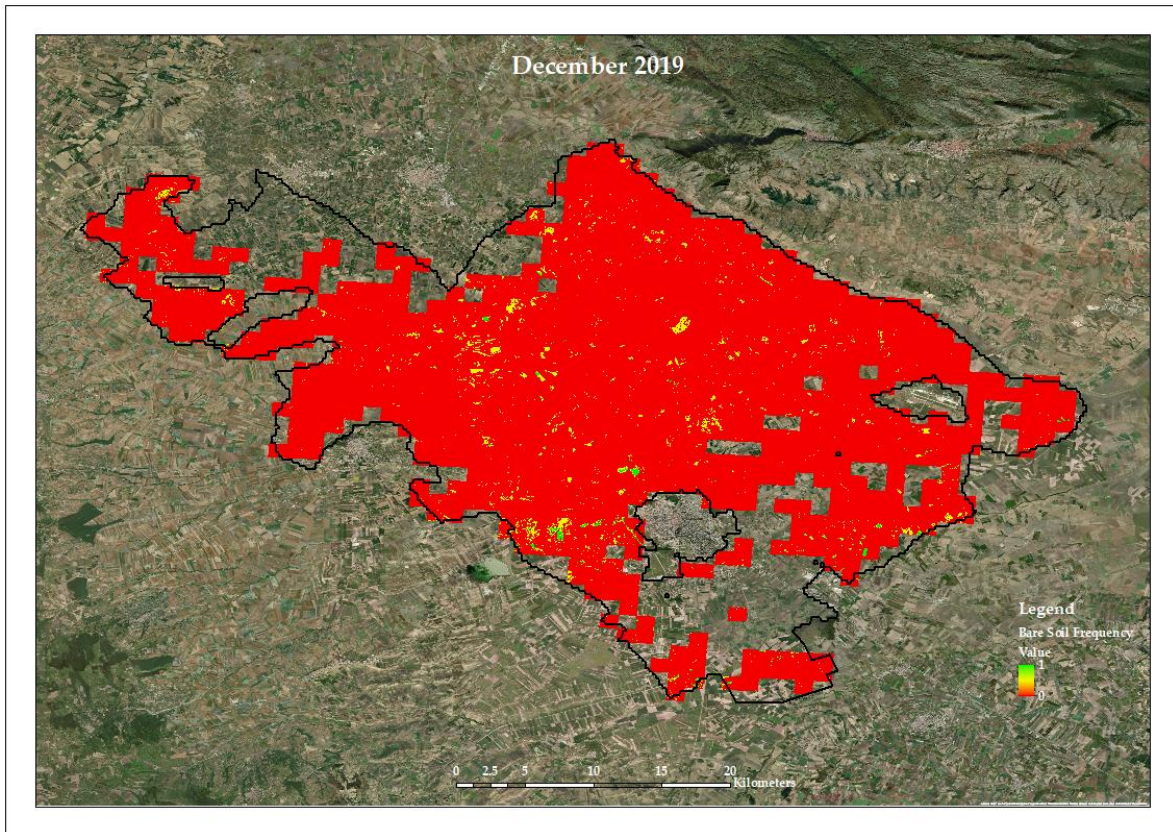
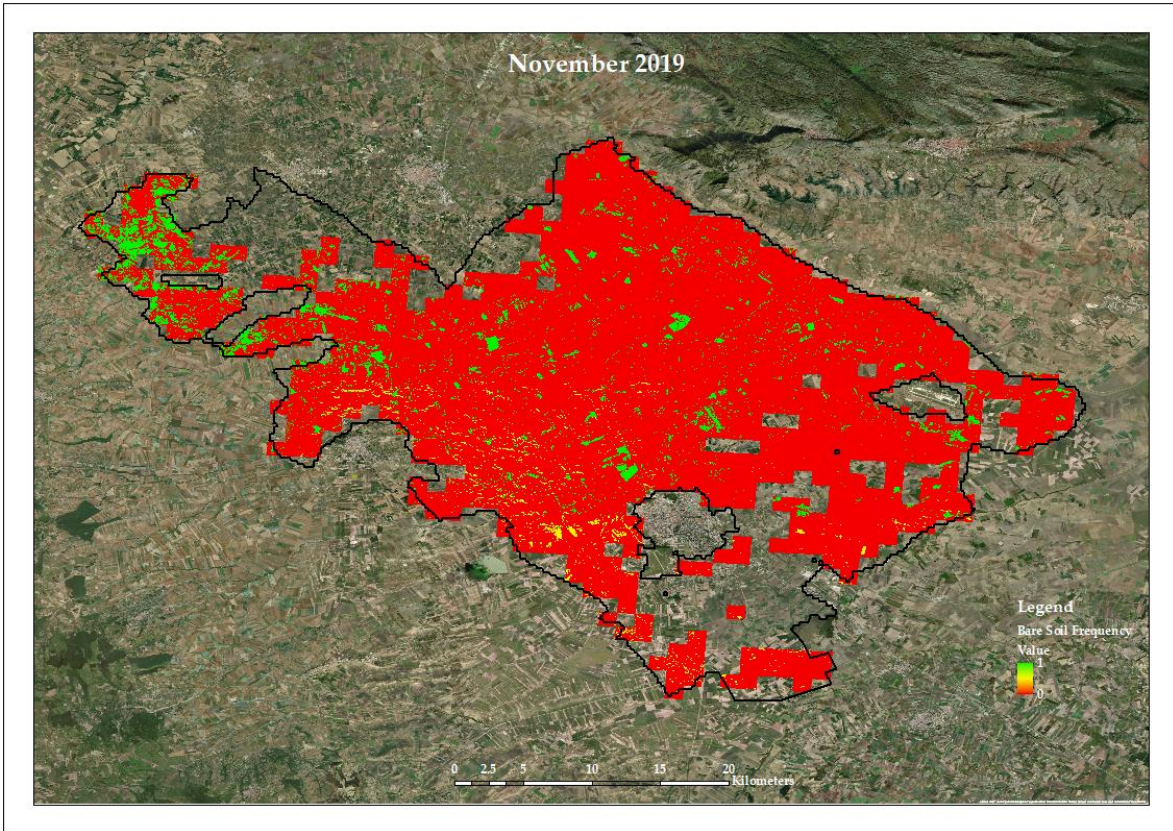


Figure S12. Yearly Bare Soil Frequency of the Capitanata region for the agricultural year 2019.