

Massaciuccoli Lake Basin



Atlas of agri-environmental spatial data



Autorità di Bacino Appennino Settentrionale

Water Balance of the Lake Massaciuccoli Basin

Regione Toscana

Regional Technical Cartography (CTR) and orthophotos

Regional pedological dataset and Morphology

Protected natural areas and Natura 2000 sites

Habitat (HaSCITu project) and Tuscan naturalistic repertoire (RENATO)

Land use and cover

Consorzio Lamma

Climatology

ART€A

Graphic crop plans

Copernicus

Land Monitoring Service (CLMS)

Climate Change Service (CCCS)

Institute of Information Science and Technologies - National Research Council

Climate change effects on animal presence in the Massaciuccoli Lake hydrographic basin



Autorità di Bacino Appennino Settentrionale

Water Balance of the Lake Massaciuccoli Basin

Autelit di Bassino del Fiume Serchio
 (Pianura del Fiume Serchio - 100000:100000)

Progetto di
**Piano di Bacino Stralcio
 "Bilancio idrico del bacino del
 lago di Massaciuccoli"**

Bilancio idrico
 L. 10 maggio 1984 n. 161 - L. 4 gennaio 1985 n. 40
 L. 1 gennaio 1984 n. 30 - D. 17 maggio 1984 n. 102



DELIMITAZIONE DEL BACINO
 DEL LAGO DI MASSACIUCCOLI

Tavola n.
1

Scala 1:25.000

Legenda

- Sorgenti captate
- Sorgenti non captate
- Argini del lago di Massaciuccoli
- Bacino idrogeologico
- Bacino idrografico
- Limite amministrativo dell'AdB del Serchio
- Area collinare (Dominio Montano, DM)
- Depositi alluvionali
- Depositi lacustri
- Duna costiera (Fascia della Duna Costiera, FDC)
- Aree urbane

Demio Cestereo (DC)

Legenda

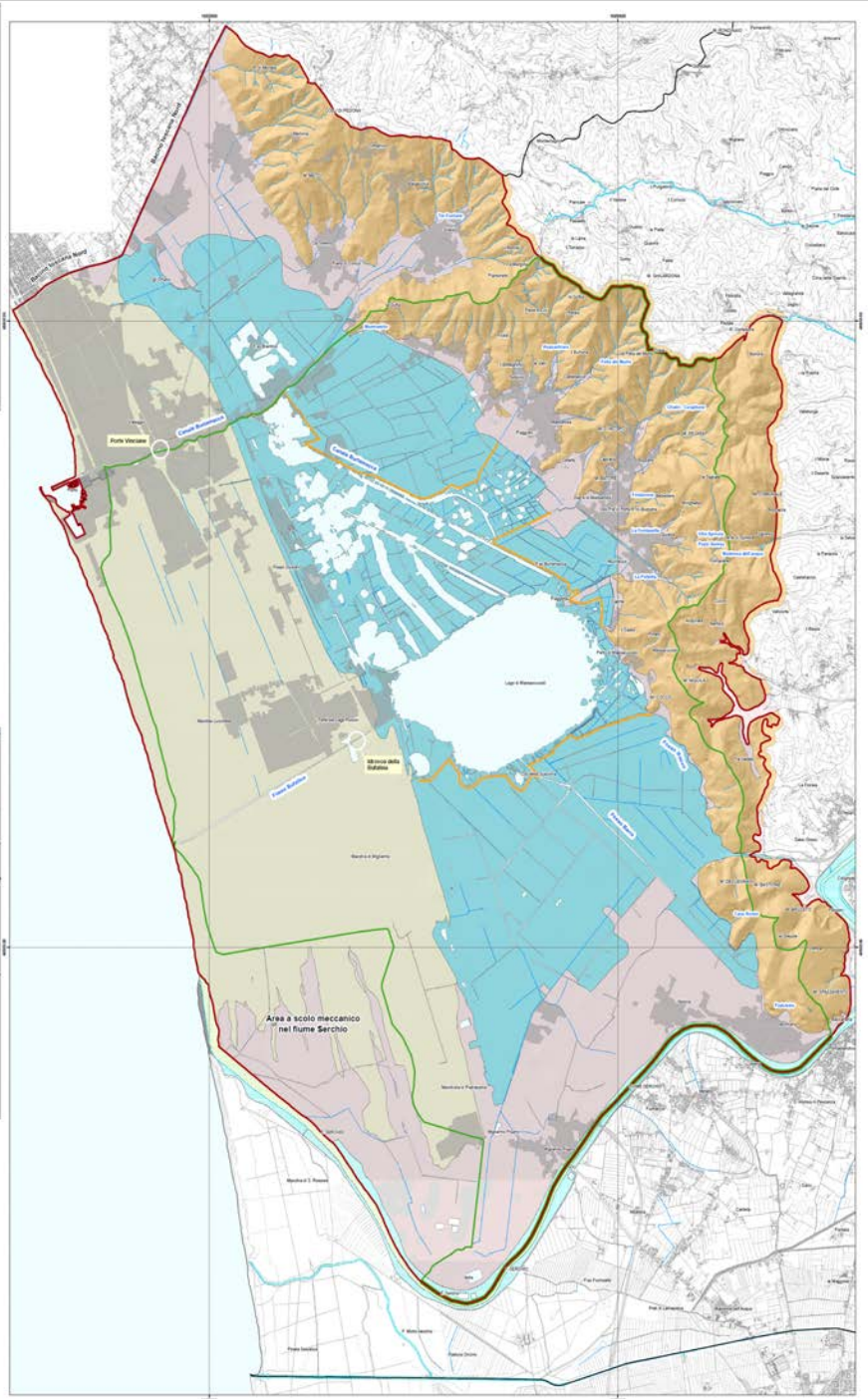
Utilizzazione delle stazioni pluviometriche e termometriche utilizzate

- Stazioni pluviometriche
- Stazioni termometriche

Quadro di unione



Carta Tecnica della Regione Toscana



Autelit di Bassino del Fiume Serchio
 (Pianura del Fiume Serchio - 100000:100000)

Progetto di
**Piano di Bacino Stralcio
 "Bilancio idrico del bacino del
 lago di Massaciuccoli"**

Bilancio idrico
 L. 10 maggio 1984 n. 161 - L. 4 gennaio 1985 n. 40
 L. 1 gennaio 1984 n. 30 - D. 17 maggio 1984 n. 102



CARTA GEOLOGICA

Tavola n.
2

Scala 1:25.000

Legenda

QUATERNARIO

- Sabbie di spiaggia attuale
- Fiume
- Terroni di riporto
- Depositi di versante
- Alluvioni recenti e attuali
- Conoidi
- Depositi lacustri
- Sabbie della duna costiera
- Depositi torbosi
- Depositi torbosi - argillosi
- Alluvioni terrazzate

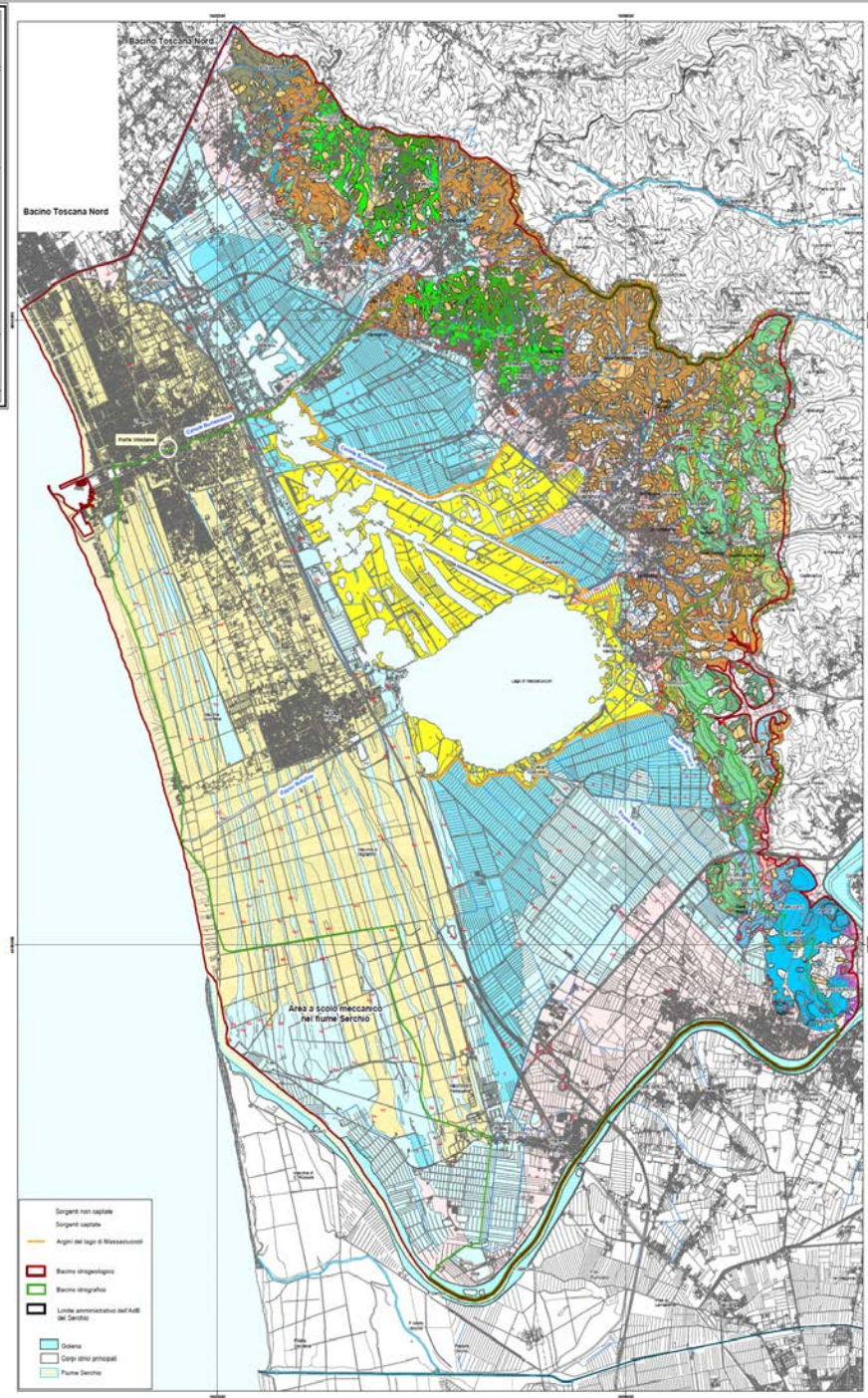
CRETACEO

- Bassoselvati Argini
- Unità del Flysch ad Estorioni
- Complesso di base
- Bassoselvati Subliguri
- Unità di Carrara
- Bassoselvato Toscana
- Margine
- Breccia a Numitoli
- Scaglia rossa
- Mastice
- Daghi
- Calcari grigi scuri a sabbie rosse
- Marna a Pistoia/Carpi
- Calcari grigi chiari a sabbie chiare
- Rosse arenarie
- Calcari massivi
- Purpuree
- Calcari a marna a Pistoia/Carpi sabbia
- Calcari calcareo
- Successione toscana metamorfica della Apuane
- Massaciuccoli, con sabbie e noduli di sabbia
- Vulcanici s.l.

Quadro di unione



Carta Tecnica della Regione Toscana



Legenda

- Sorgenti non captate
- Sorgenti captate
- Argini del lago di Massaciuccoli
- Bacino idrogeologico
- Bacino idrografico
- Limite amministrativo dell'AdB del Serchio
- Odore
- Capri sivi principali
- Fiume Serchio

Progetto di
**Piano di Bacino Stralcio
"Bilancio idrico del bacino del
lago di Massaciucoli"**

Riformato con la L. 18 maggio 1998, n. 193 - L. 4 dicembre 1992, n. 493
L. 2 gennaio 1994, n. 10 - D.Lgs. 11 maggio 1999, n. 152



**CARTA DELLA PERMEABILITÀ,
DEI TIPI DI SUOLO E
DELLA INFILTRAZIONE POTENZIALE**

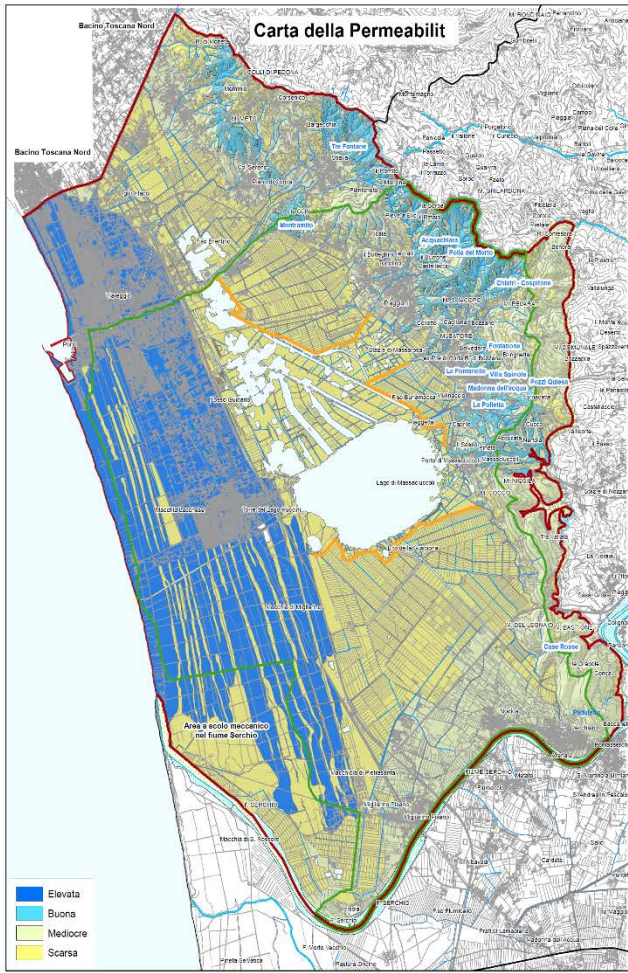
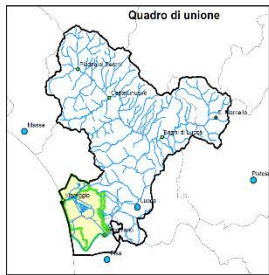
Tavola n.
2.1

Scala 1:50.000

2006

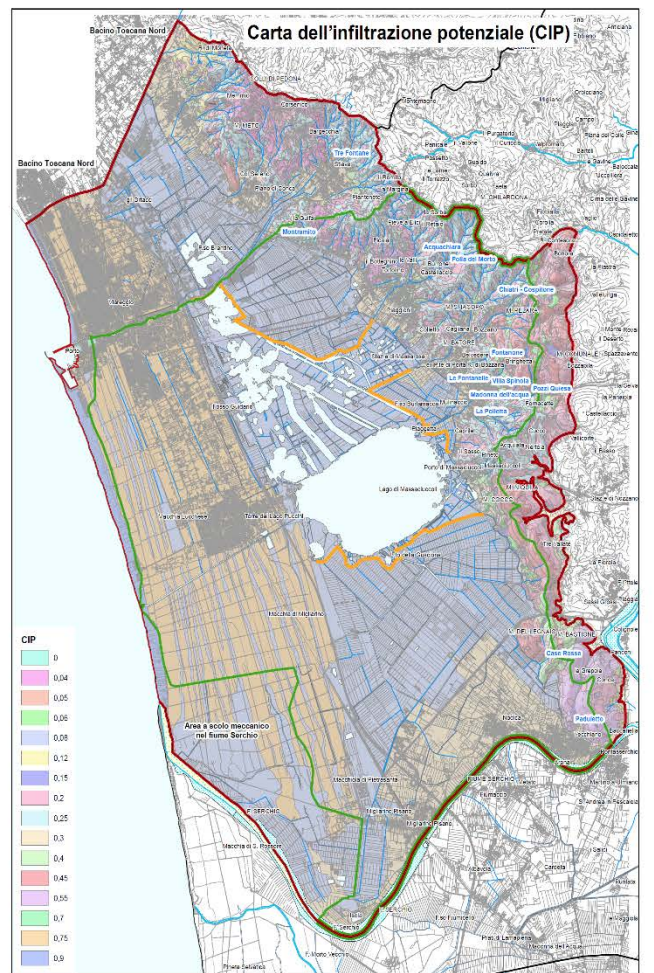
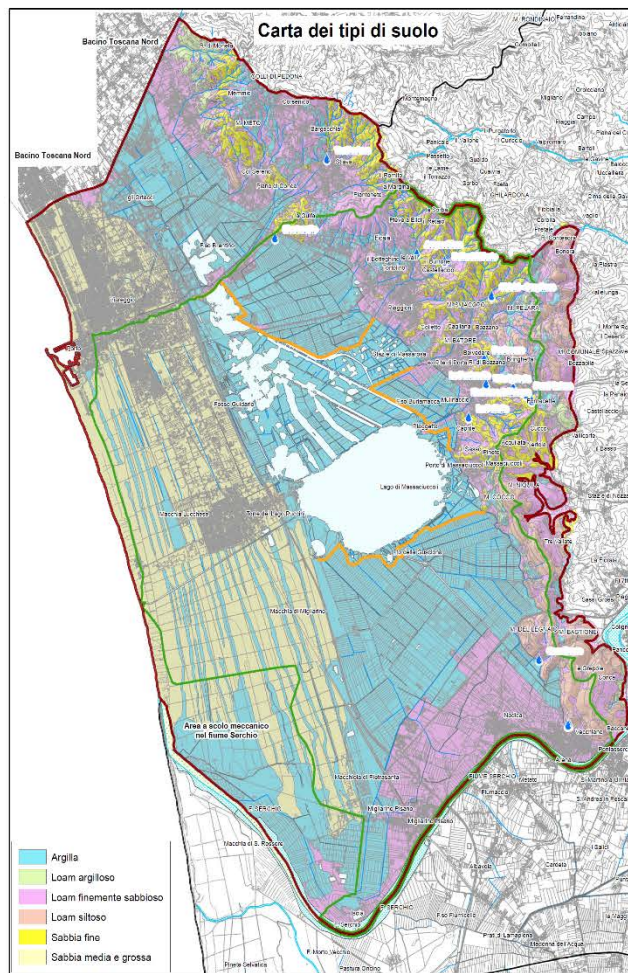
Legenda

- Sorgenti principali
- Argini del lago di Massaciucoli
- Bacino idrogeologico
- Bacino idrografico
- Limite amministrativo dell'ASB del Serchio



Carta Tecnica della Regione Toscana

Elaborato con i dati riferiti al sistema nazionale "CAUSI BOGAS"



Progetto di
**Piano di Bacino Stralcio
"Bilancio idrico del bacino del
lago di Massaciuccoli"**

Riferimenti normativi
L. 18 maggio 1989, n. 183 - L. 4 dicembre 1993 n. 493
L. 5 gennaio 1994 n. 36 - D.Lgs. 11 maggio 1999 n. 152



**CARTA DELLE PRECIPITAZIONI CUMULATE
E DELLE TEMPERATURE MEDIE ANNUE
(Periodo di osservazione 1980-1999)**

Tavola n.

3

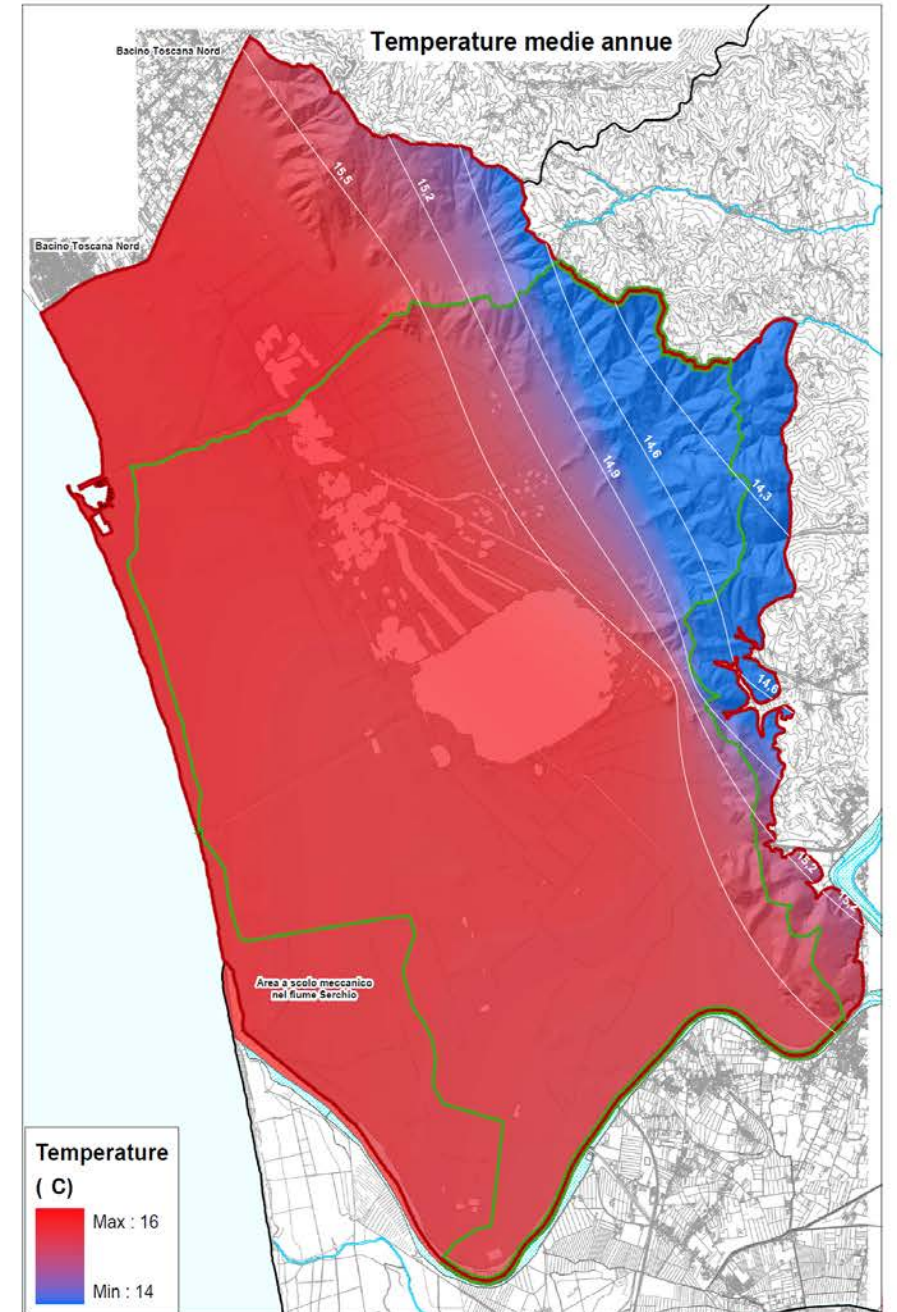
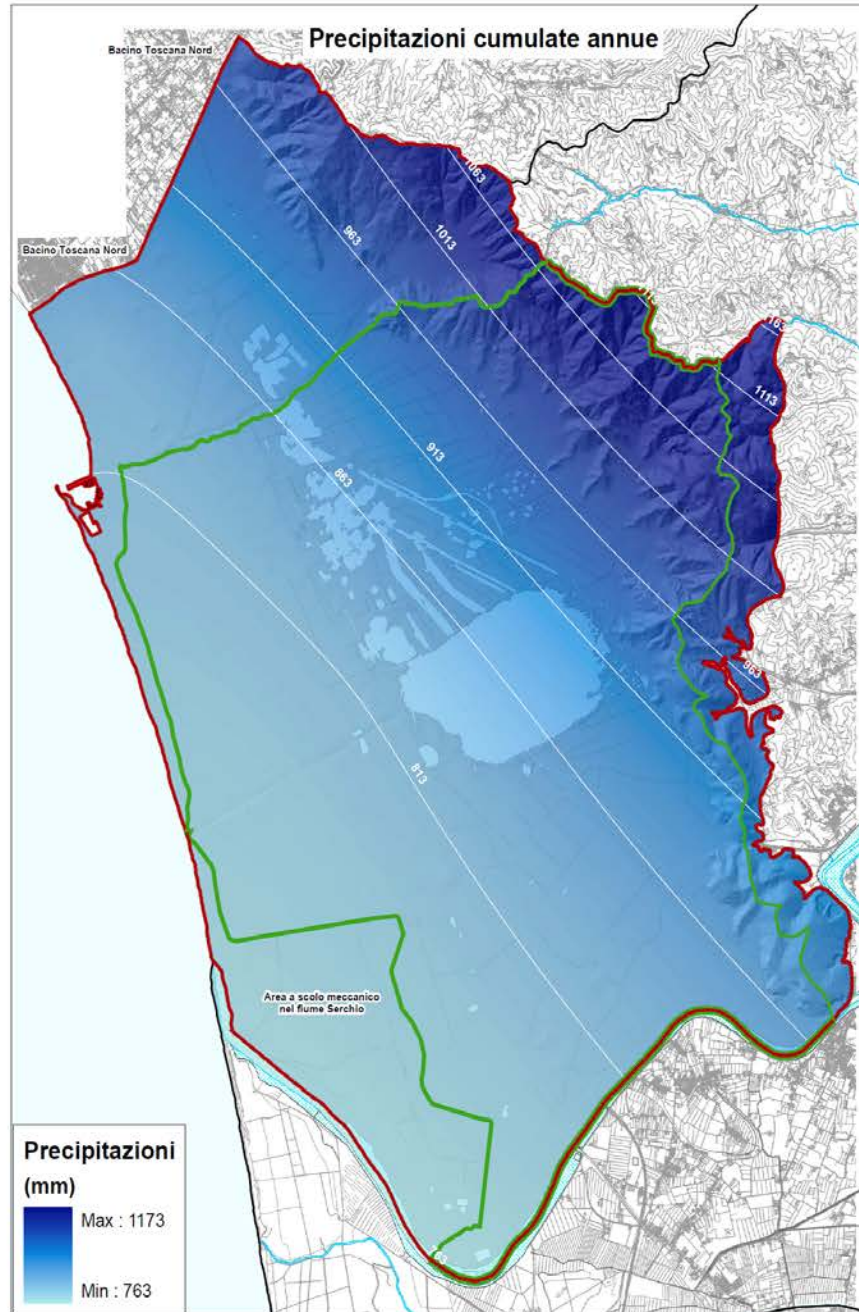
Scala 1:50.000

2006

Legenda

- Bacino idrogeologico
- Bacino idrografico
- Limite amministrativo dell'AdB del Serchio

Quadro di unione



Autorità di Bacino del Fiume Serchio
Piano di Bacino Stralcio "Bilancio idrico del bacino del lago di Massaciuccoli"

Progetto di

Bilancio idrico del bacino del lago di Massaciuccoli

Stato di attuazione: L. 19 maggio 1994, n. 151, 4 dicembre 1994, n. 482, 1 gennaio 1995, n. 21, 21 giugno 1994, n. 192



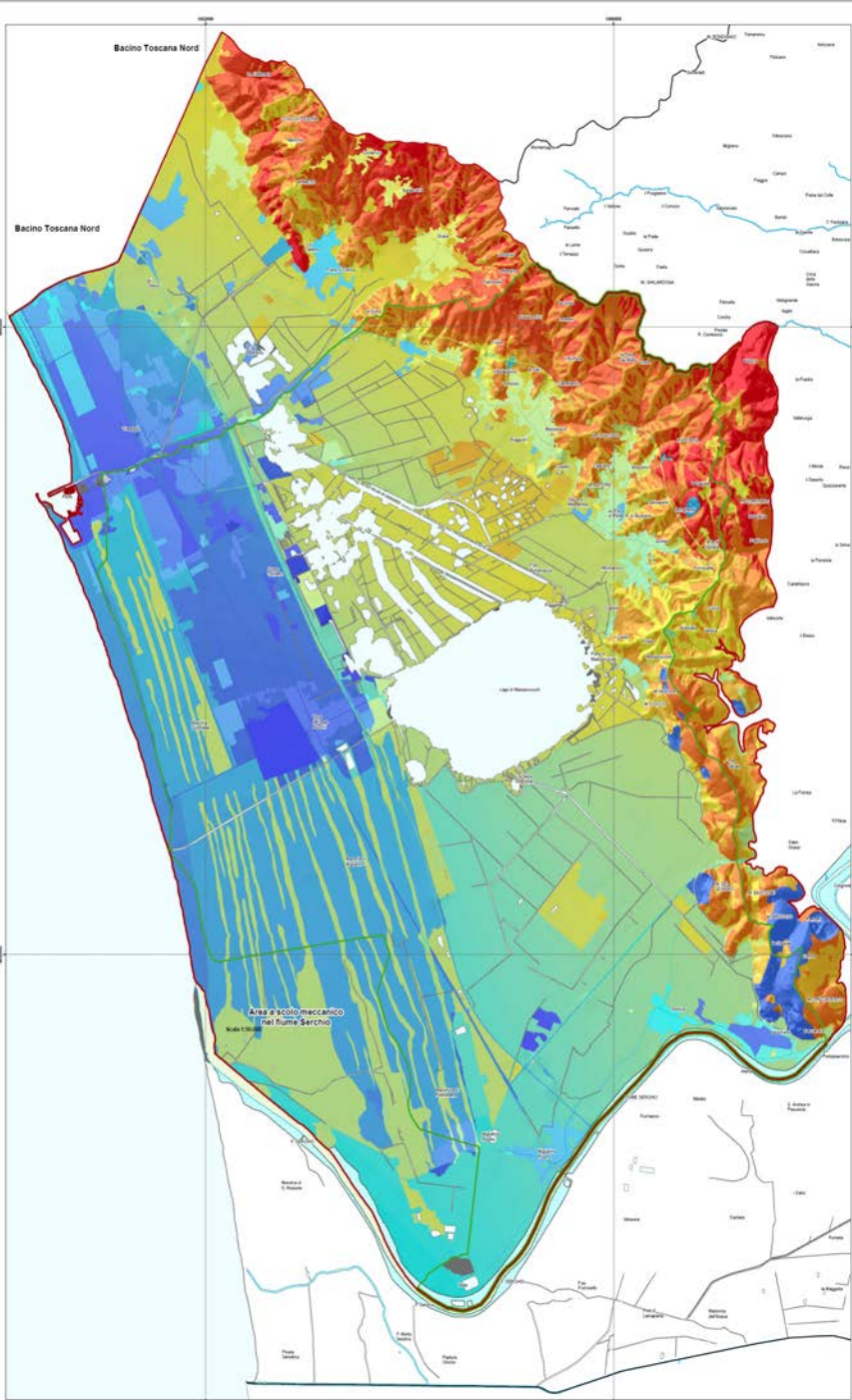
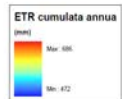
EVAPOTRASPIRAZIONE REALE (ETR)

Tavola n. **4**

Scala 1:25,000

Legenda

- Bacino idrogeologico
- Bacino idrografico
- Limite amministrativo dell'ABE del Serchio



Autorità di Bacino del Fiume Serchio
Piano di Bacino Stralcio "Bilancio idrico del bacino del lago di Massaciuccoli"

Progetto di

Bilancio idrico del bacino del lago di Massaciuccoli

Stato di attuazione: L. 19 maggio 1994, n. 151, 4 dicembre 1994, n. 482, 1 gennaio 1995, n. 21, 21 giugno 1994, n. 192



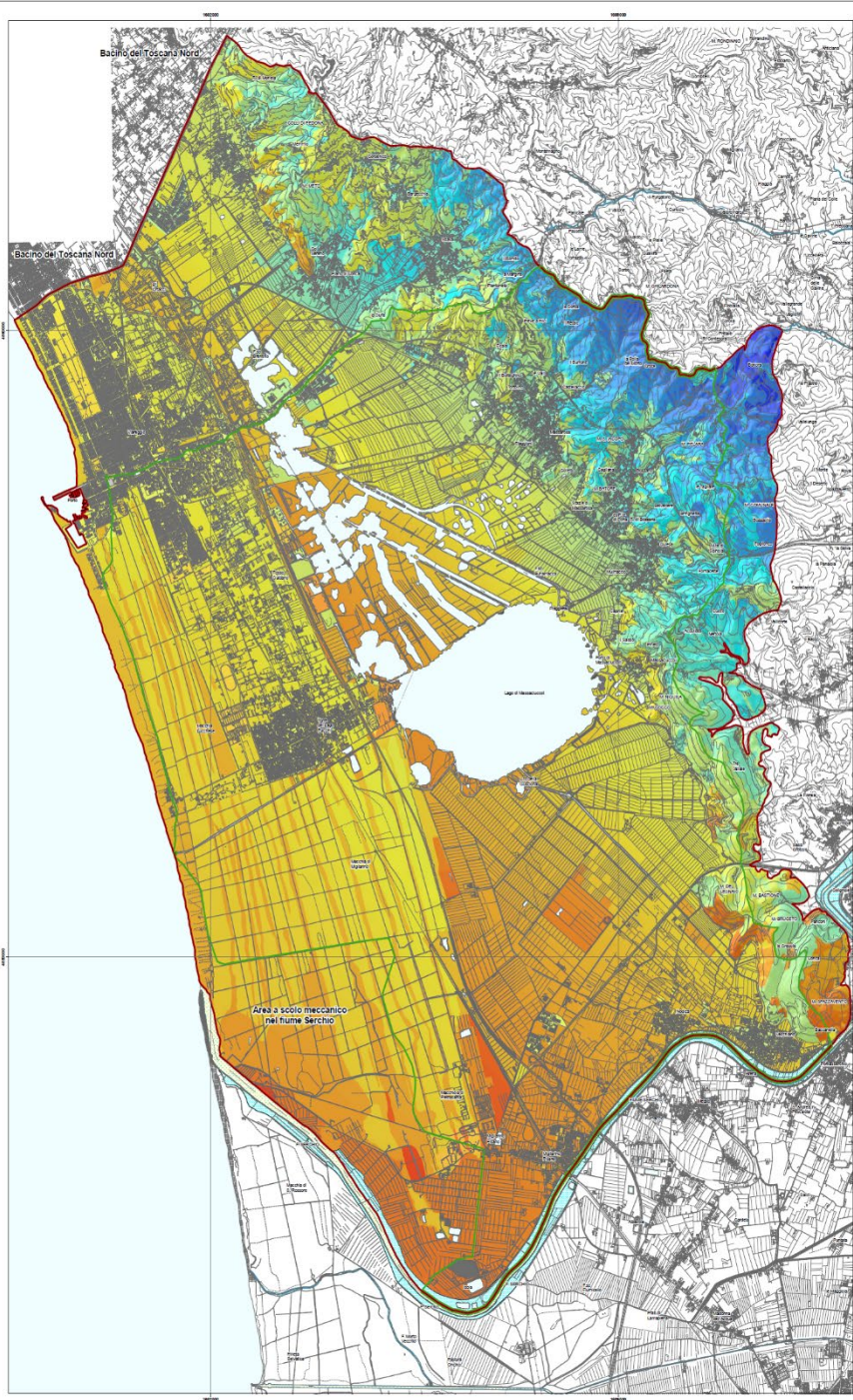
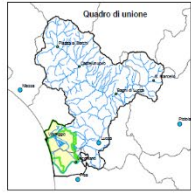
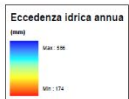
ECCEDEZZA IDRICA (WS) (PRECIPITAZIONE EFFICACE)

Tavola n. **5**

Scala 1:25,000

Legenda

- Bacino idrogeologico
- Bacino idrografico
- Limite amministrativo dell'ABE del Serchio



*Autorità di Bacino
del Fiume Serchio*
(Decreto prefettuale n. 132/1989, art. 2)

Progetto di
Piano di Bacino Stralcio
**"Bilancio idrico del bacino del
lago di Massaciuccoli"**

Riferimenti normativi
L. 18 maggio 1989, n. 182 - L. 4 dicembre 1992, n. 492
L. 9 gennaio 1994, n. 28 - D.Lgs. 11 maggio 1998, n. 152

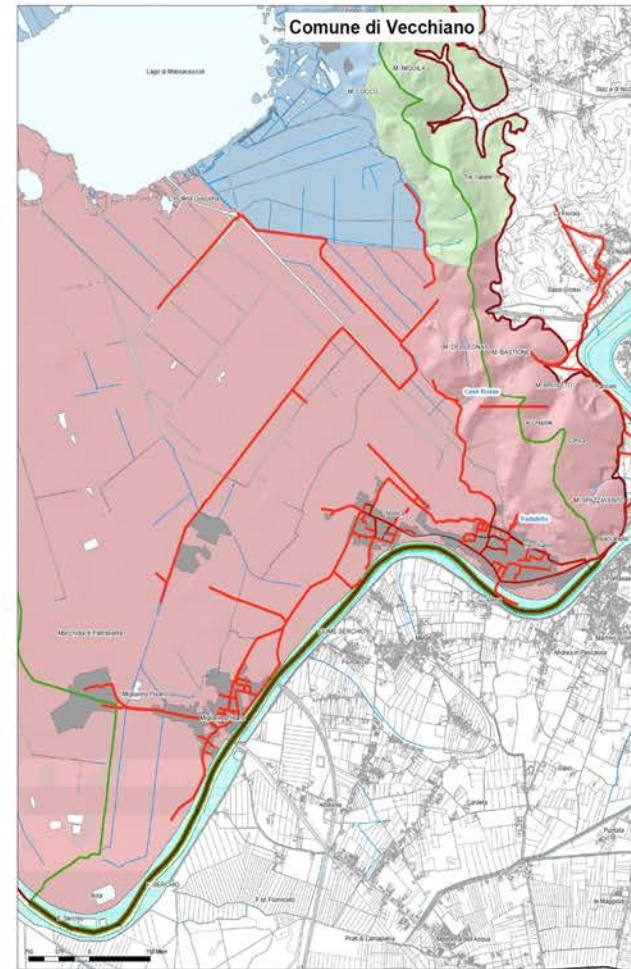
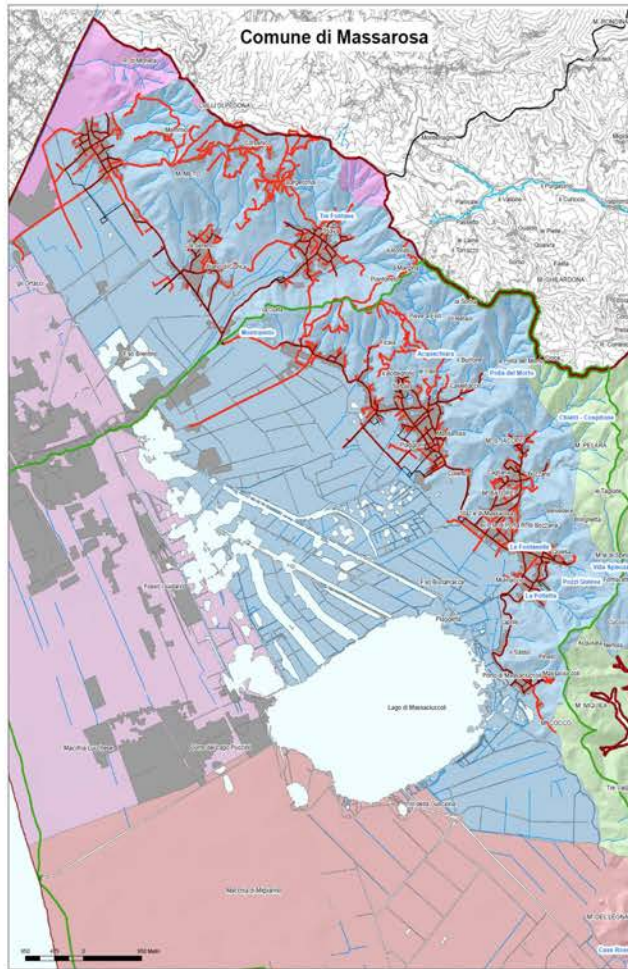


**SCHEMA GENERALE DELLA RETE IDRICA
E DEI CONDOTTI PRINCIPALI DI FOGNATURA**

Tavola n.
7

2006

- Legenda**
-  Sorgenti non captate
 -  Sorgenti captate
 -  Rete fognaria
 -  Rete idrica
 -  Bacino idrogeologico
 -  Bacino idrografico
 -  Limite amministrativo dell'AAB del Serchio



Autelit di Bacino del Fiume Serchio
 (Autelit del Fiume Serchio - 2006 - 1:25.000)

Progetto di
**Piano di Bacino Stralcio
 "Bilancio idrico del bacino del
 lago di Massaciuccoli"**

Autelit (Autelit) - 11 maggio 1994 n. 1011 - L. 4 dicembre 1984 n. 481
 L. 1 gennaio 1984 n. 21 - L. 8 giugno 1984 n. 102



RETE DEI PRINCIPALI CORSI D'ACQUA
 NATURALI E CANALI DI BONIFICA

Tavola n.
6

Scale 1:25.000

Legenda

- ▲ Idrosvoro
 - Corsi d'acqua naturali
 - Canali di acque alte
 - Canali di acque basse
 - Argini del lago di Massaciuccoli
- Sottobacini**
- Area a scolo naturale
 - Sottobacino di Massaciuccoli
 - Sottobacino di Massarosa
 - Sottobacino di Portovechio
 - Sottobacino di Quiesca
 - Sottobacino di Vecchiano
- Bacino idrogeologico
 - Bacino idrografico
 - Limite amministrativo dell'ABS del Serchio



Autelit di Bacino del Fiume Serchio
 (Autelit del Fiume Serchio - 2002 - 1:25.000)

Progetto di
**Piano di Bacino Stralcio
 "Bilancio idrico del bacino del
 lago di Massaciuccoli"**

Autelit (Autelit) - 11 maggio 1994 n. 1011 - L. 4 dicembre 1984 n. 481
 L. 1 gennaio 1984 n. 21 - L. 8 giugno 1984 n. 102



CARTA DELLA CONDUCEVITÀ ELETTRICA
 DELLE ACQUE DI FALDA

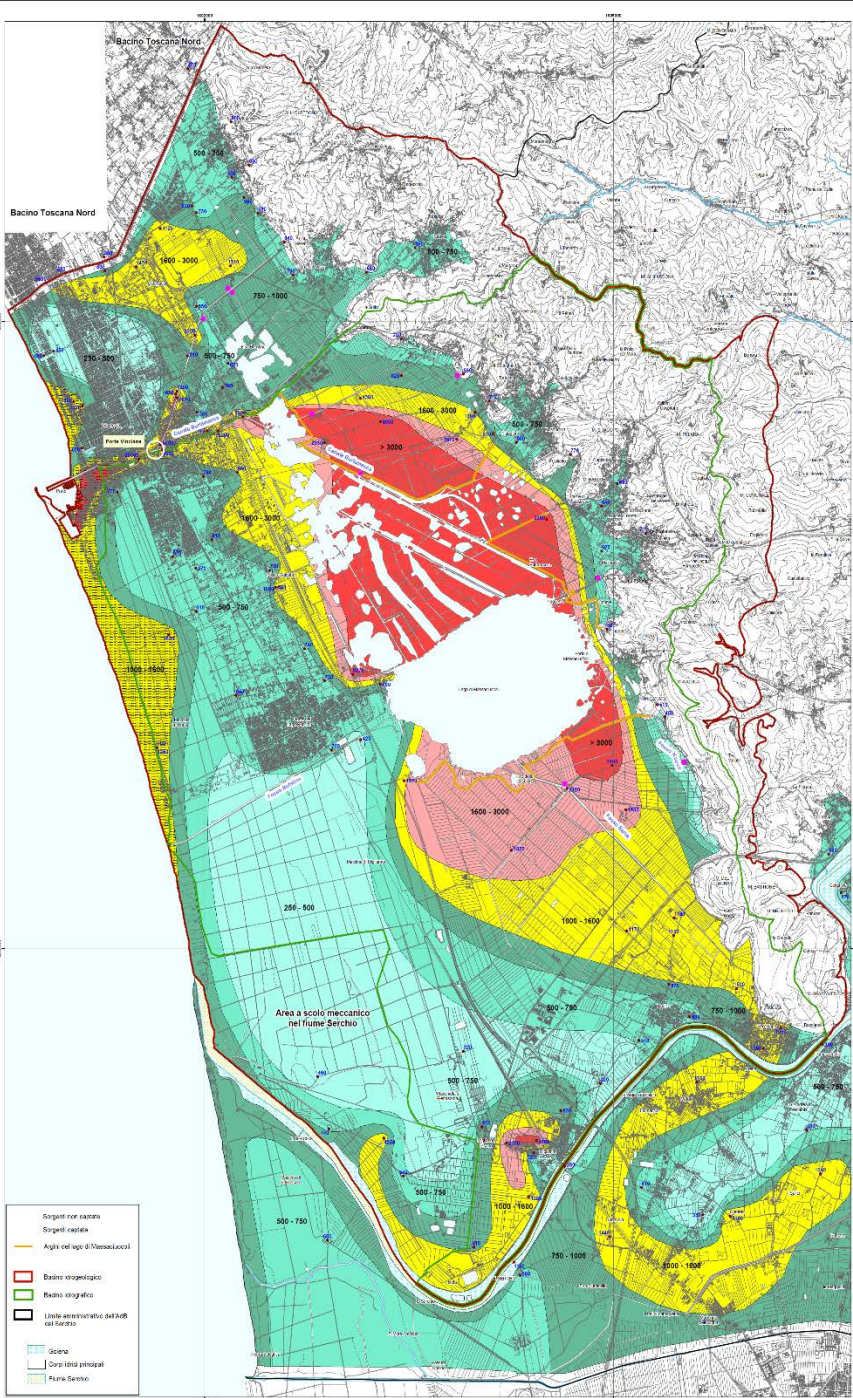
Rilievo novembre 2002

Tavola n.
8

Scale 1:25.000

Legenda

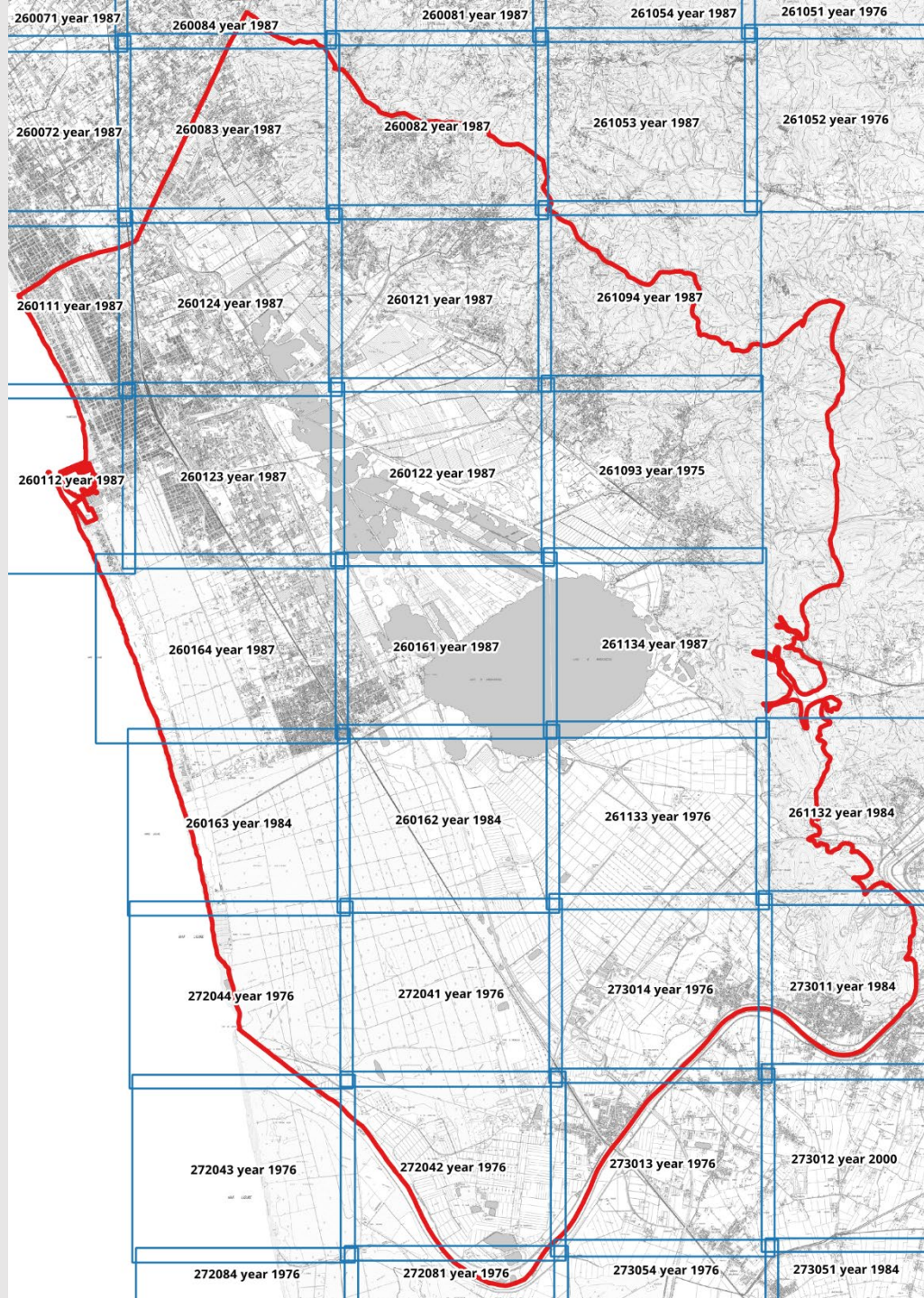
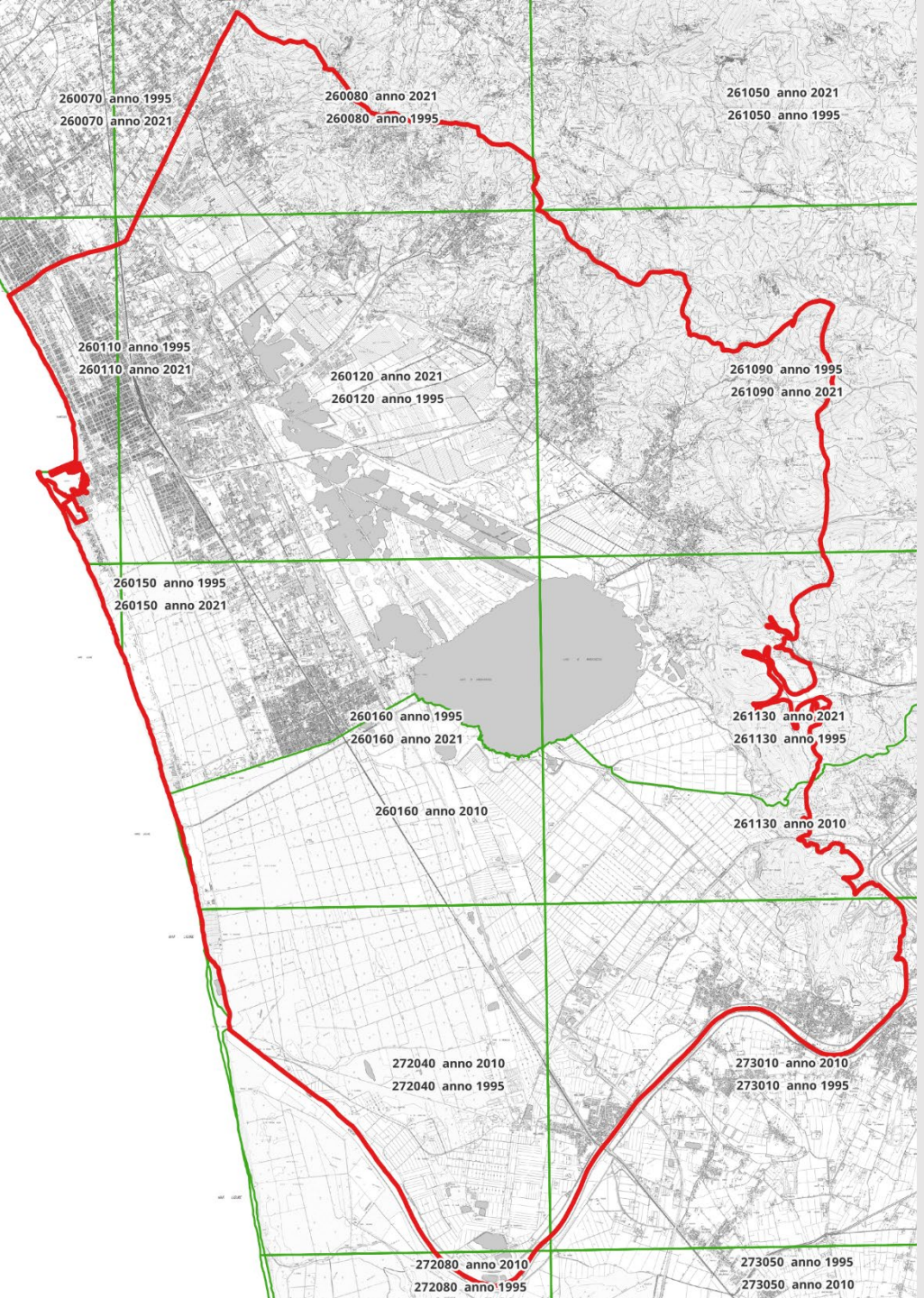
- Idrosvoro
 - Punti di controllo (novembre 2002)
 - Area oggetto di ingressione marina
- Conducibilità S/cm**
- <250
 - 250-500
 - 500-750
 - 750-1000
 - 1000-1600
 - 1600-3000
 - >3000





Regione Toscana

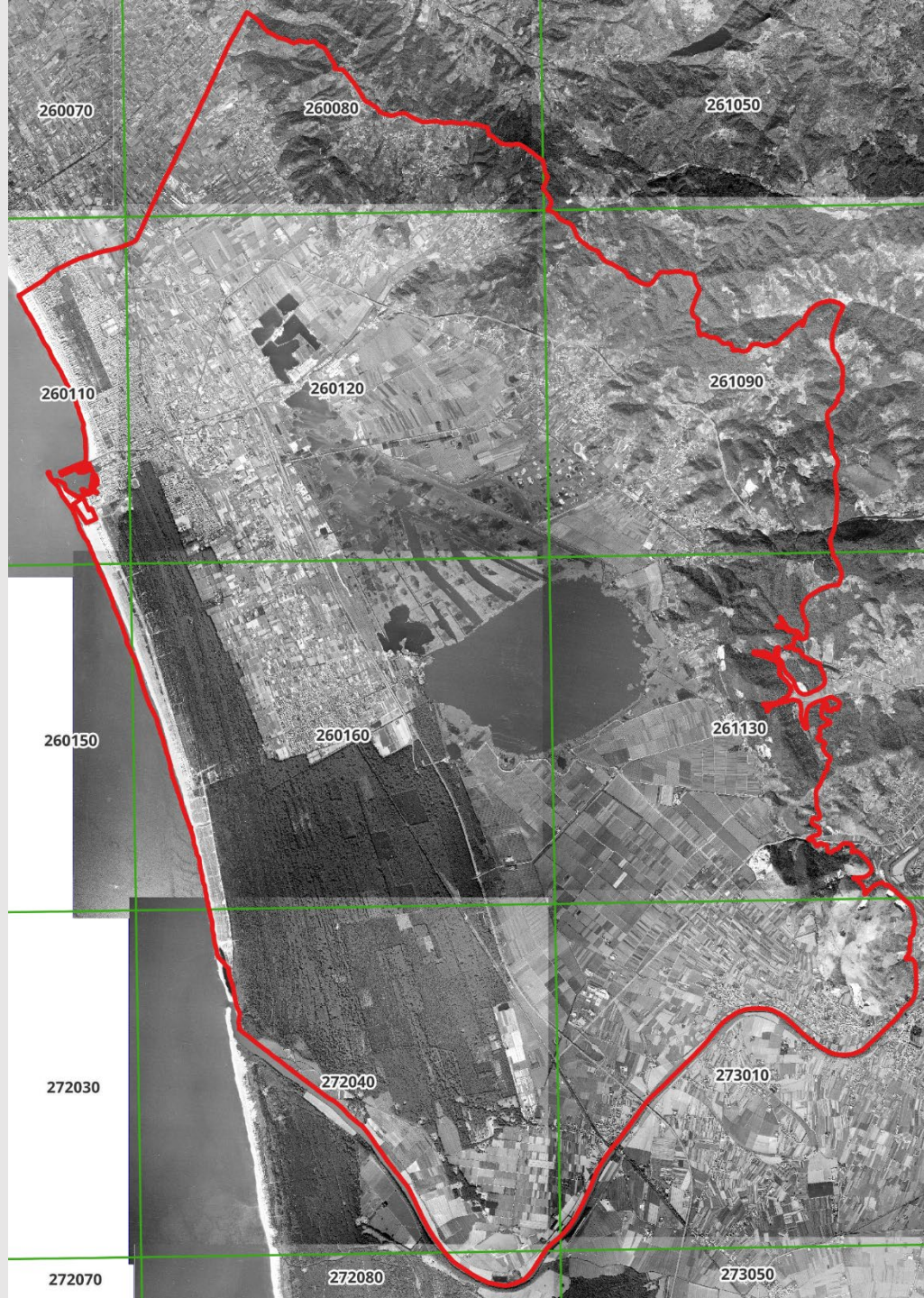
Regional technical map (CTR) and orthophotos





Orthophoto 1954 gray levels (raster 1m), flight G.A.I., detail 1:10,000

Orthophoto 1975 gray levels (wms only), flight E.I.R.A., detail 1:13,000



Orthophoto 1978 gray (raster 1m), flight Rossi Brescia, detail 1:10,000

Orthophoto 1988 gray levels (wms only), flight C.G.R. Parma, detail 1:10,000



Orthophoto 1996 gray levels (wms only), flight C.G.R. Parma, detail 1:10,000

Orthophoto 1999 gray levels (wms only), flight C.G.R. Parma, detail 1:10,000, partial coverage



Orthophoto 2000 gray levels (wms only), flight C.G.R. Parma, detail 1:10,000, partial coverage

Orthophoto 2003 gray levels (wms only), flight C.G.R. Parma, detail 1:10,000, partial coverage



Orthophoto 2005 gray levels (wms only), flight Rossi Brescia, detail 1:10,000, partial coverage

Orthophoto 2007 RGB (wms only), flight BLOM-C.G.R. Parma, detail 1:10,000



Orthophoto 2009 RGB (wms only), detail 1:10,000, partial coverage

Orthophoto 2010 RGB Nir (wms only), flight Rossi Brescia, detail 1:10,000

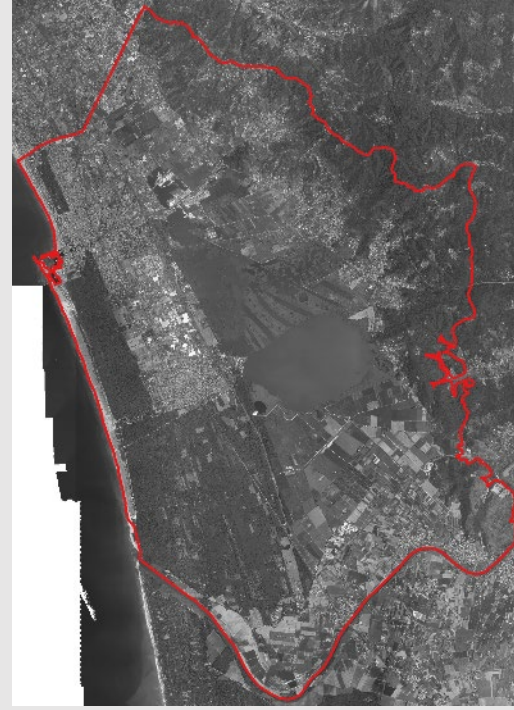


RGB



4R 2G 3B NirGB

Modified False Color (Conifers dark-red)



Enhanced grey



1R 4G 2B RNirG RNirG False Color



4R 1G 2B NirRG

Standard False Color for vegetation studies

Orthophoto 2013 RGB Nir (wms only), flight Rossi Brescia, detail 1:10,000



RGB



4R 2G 3B NirGB
Modified False Color (Conifers dark-red)



Enhanced grey



1R 4G 2B RNirG RNirG False Color



4R 1G 2B NirRG
Standard False Color for vegetation studies

Orthophoto 2010 RGB, 2012/2013 RGB Nir (raster 0,20 m), flight Rossi Brescia, detail 1:2,000, partial coverages



Quadrant



4R 2G 3B NirGB

Modified False Color (Conifers dark-red)



RGB



1R 4G 2B RNirG RNirG False Color



4R 1G 2B NirRG

Standard False Color for vegetation studies

Orthophoto 2016 RGB Nir (wms only), flight BLOM-C.G.R., detail 1:5,000

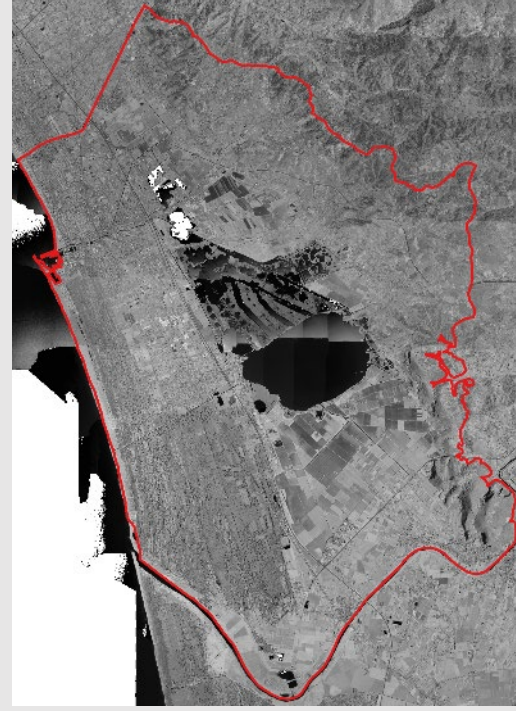


RGB



4R 2G 3B NirGB

Modified False Color (Conifers dark-red)



Nir



1R 4G 2B RNirG RNirG False Color



4R 1G 2B NirRG

Standard False Color for vegetation studies

Orthophoto 2019 RGB Nir (wms only), detail 1:5,000



RGB



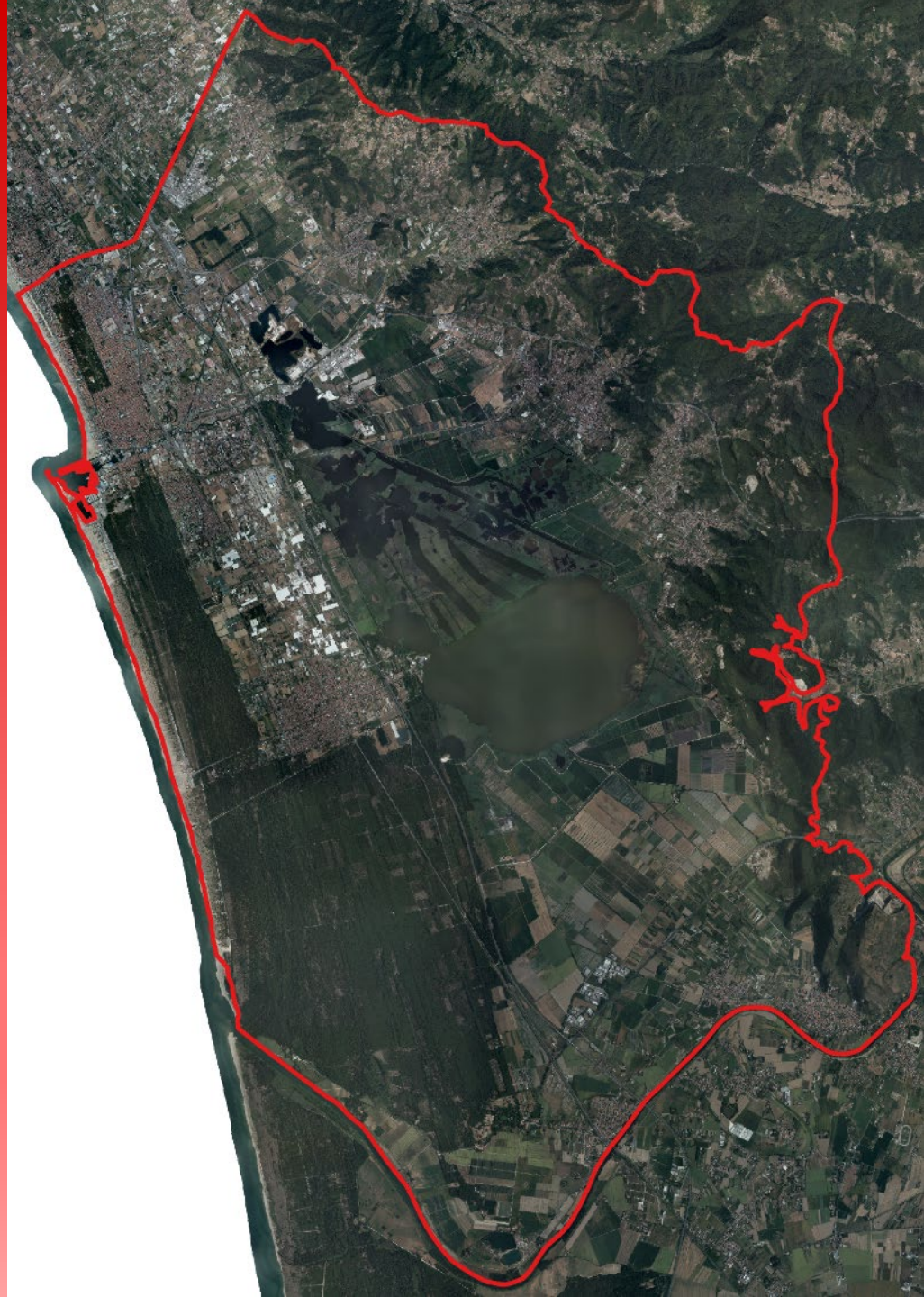
4R 2G 3B NirGB
Modified False Color (Conifers dark-red)



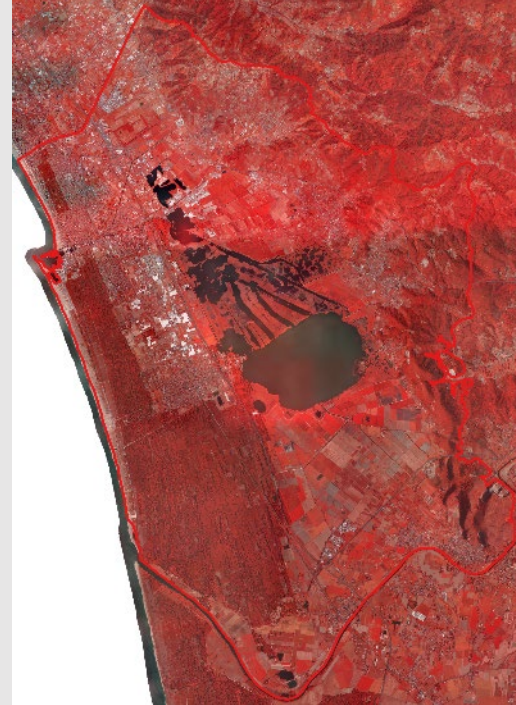
Nir



1R 4G 2B RNirG RNirG False Color



RGB



4R 2G 3B NirGB

Modified False Color (Conifers dark-red)



Nir

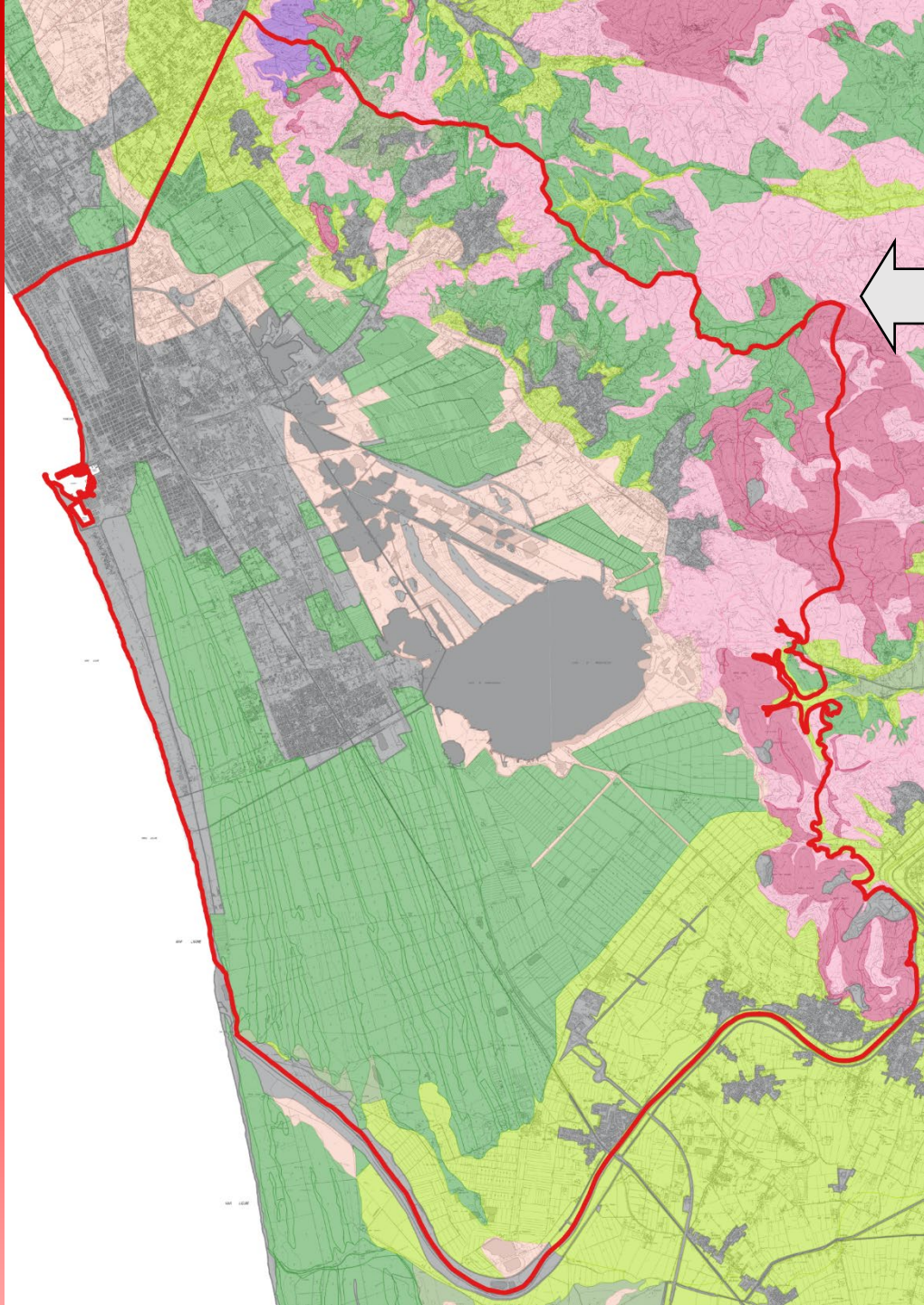


1R 4G 2B RNirG RNirG False Color



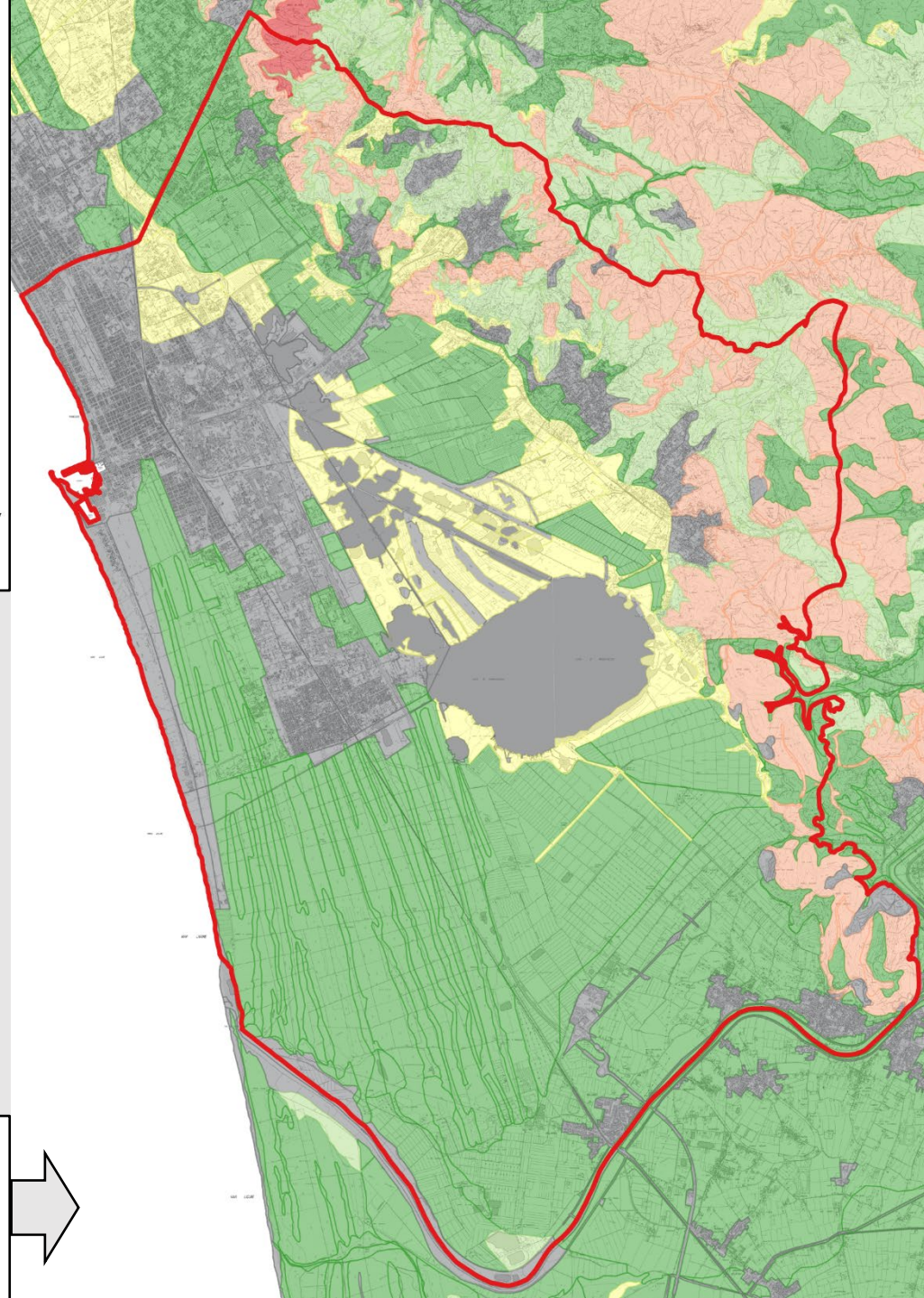
Regione Toscana

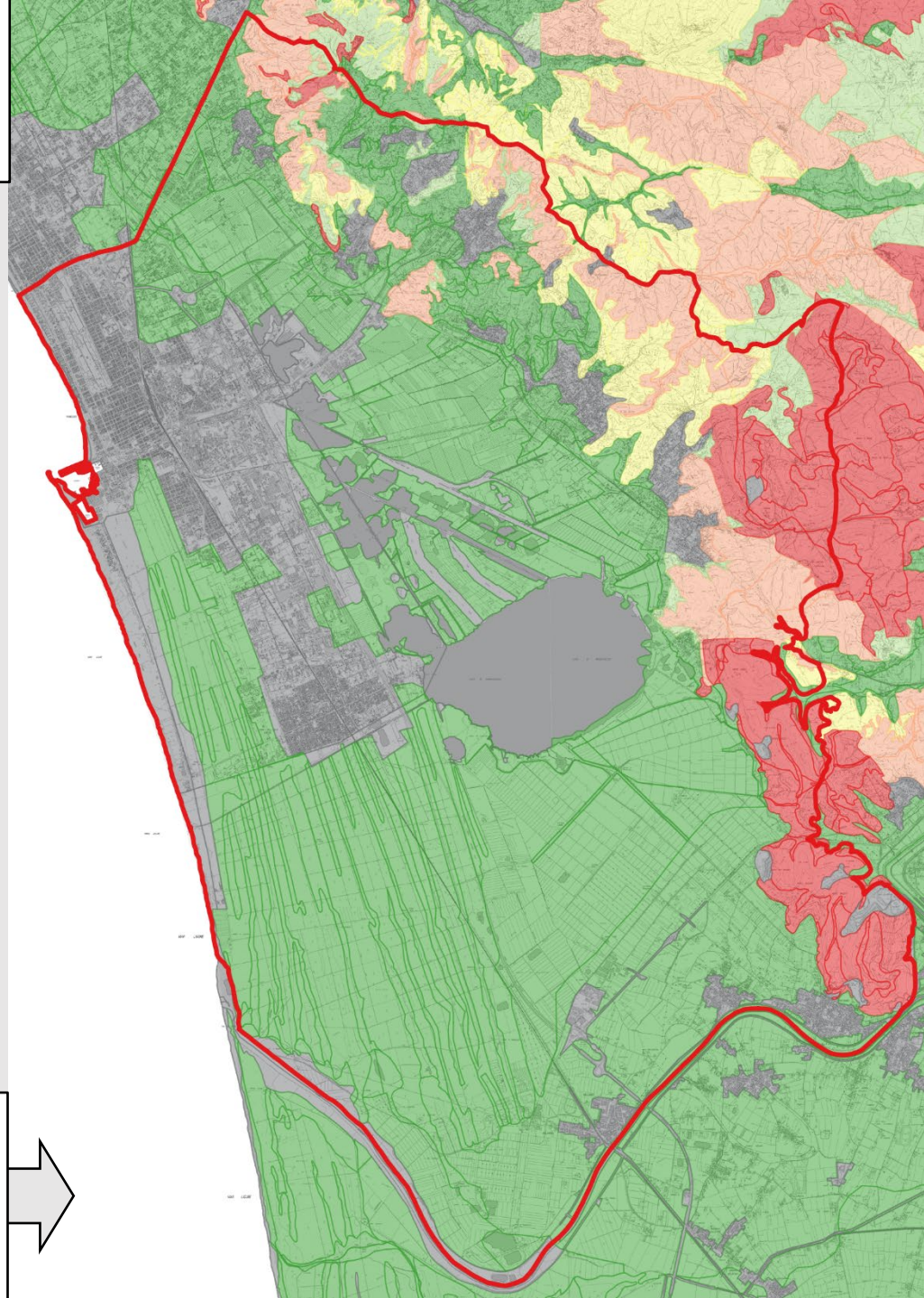
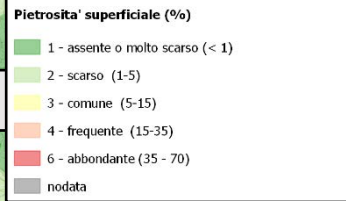
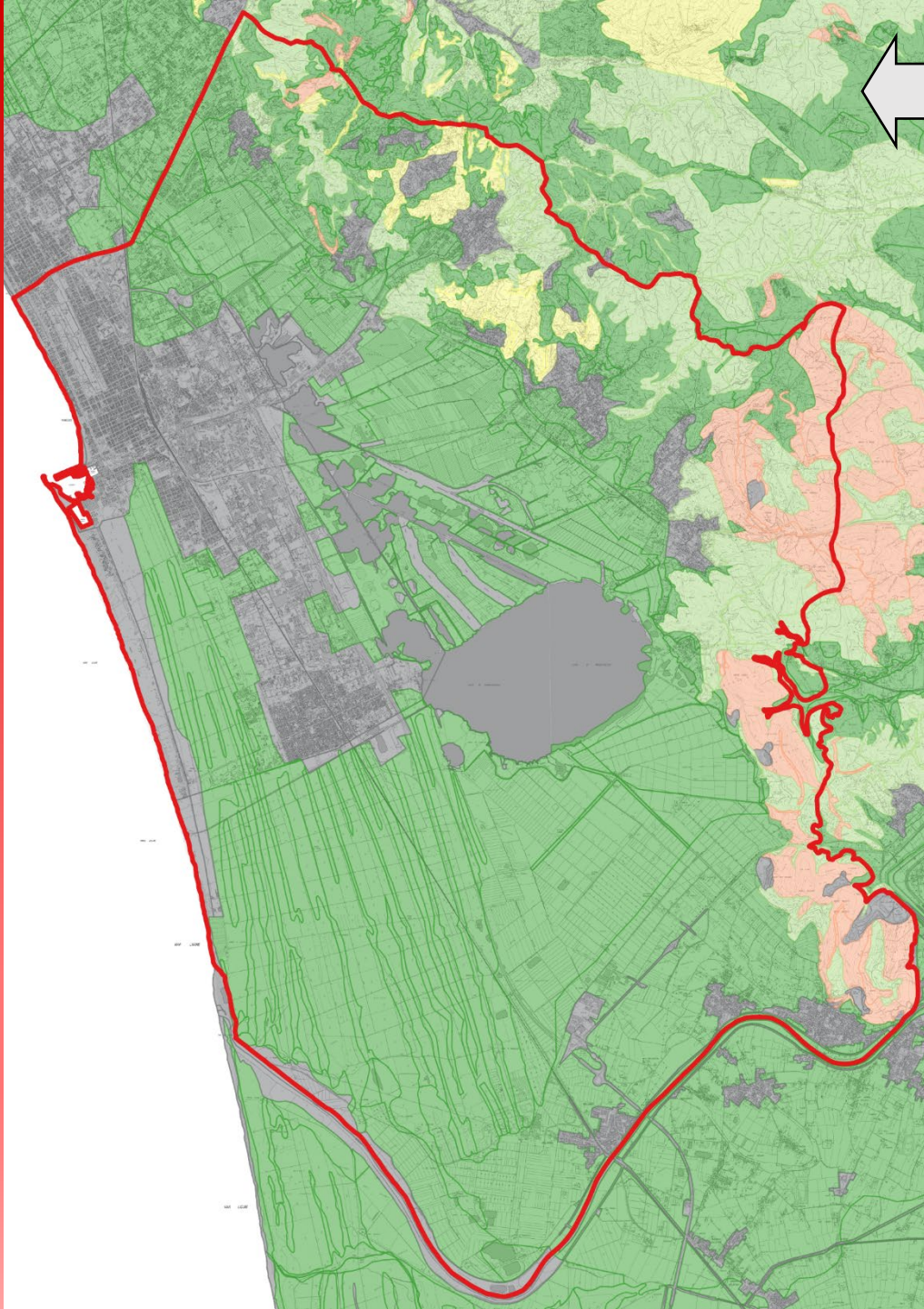
Regional pedological dataset and morphology

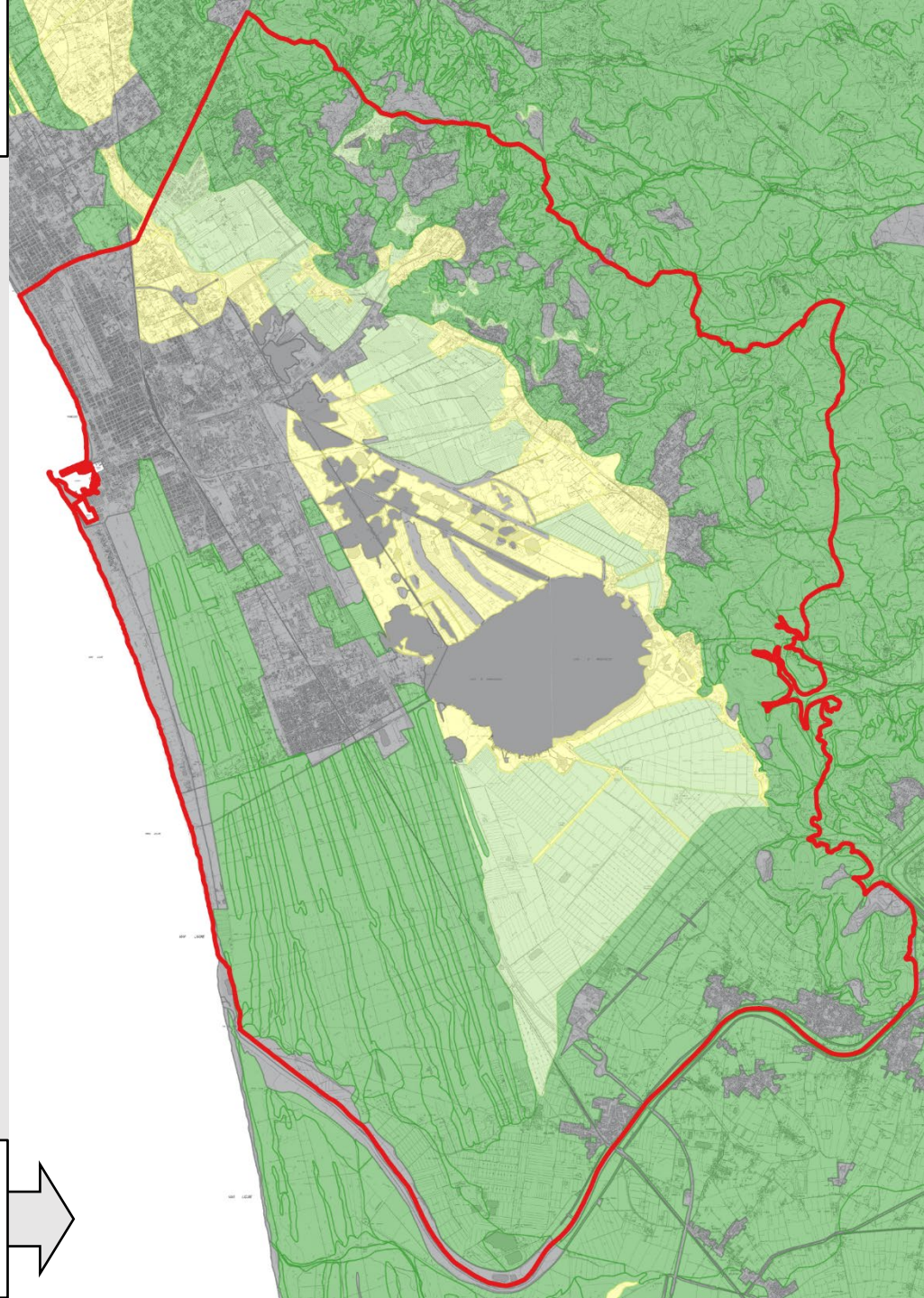
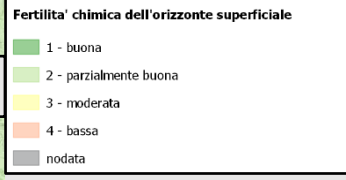
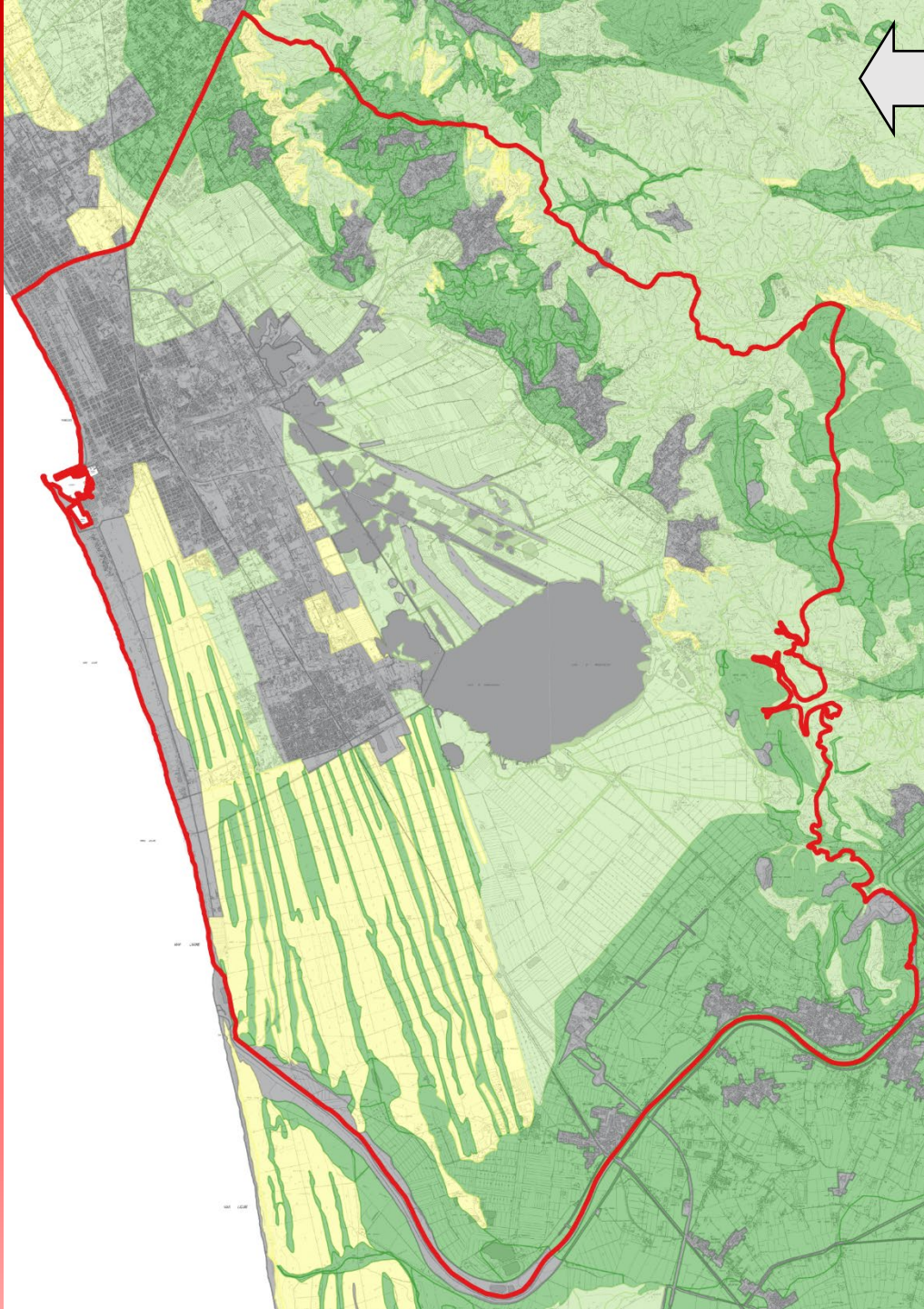


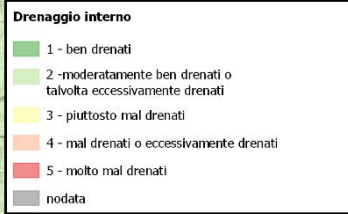
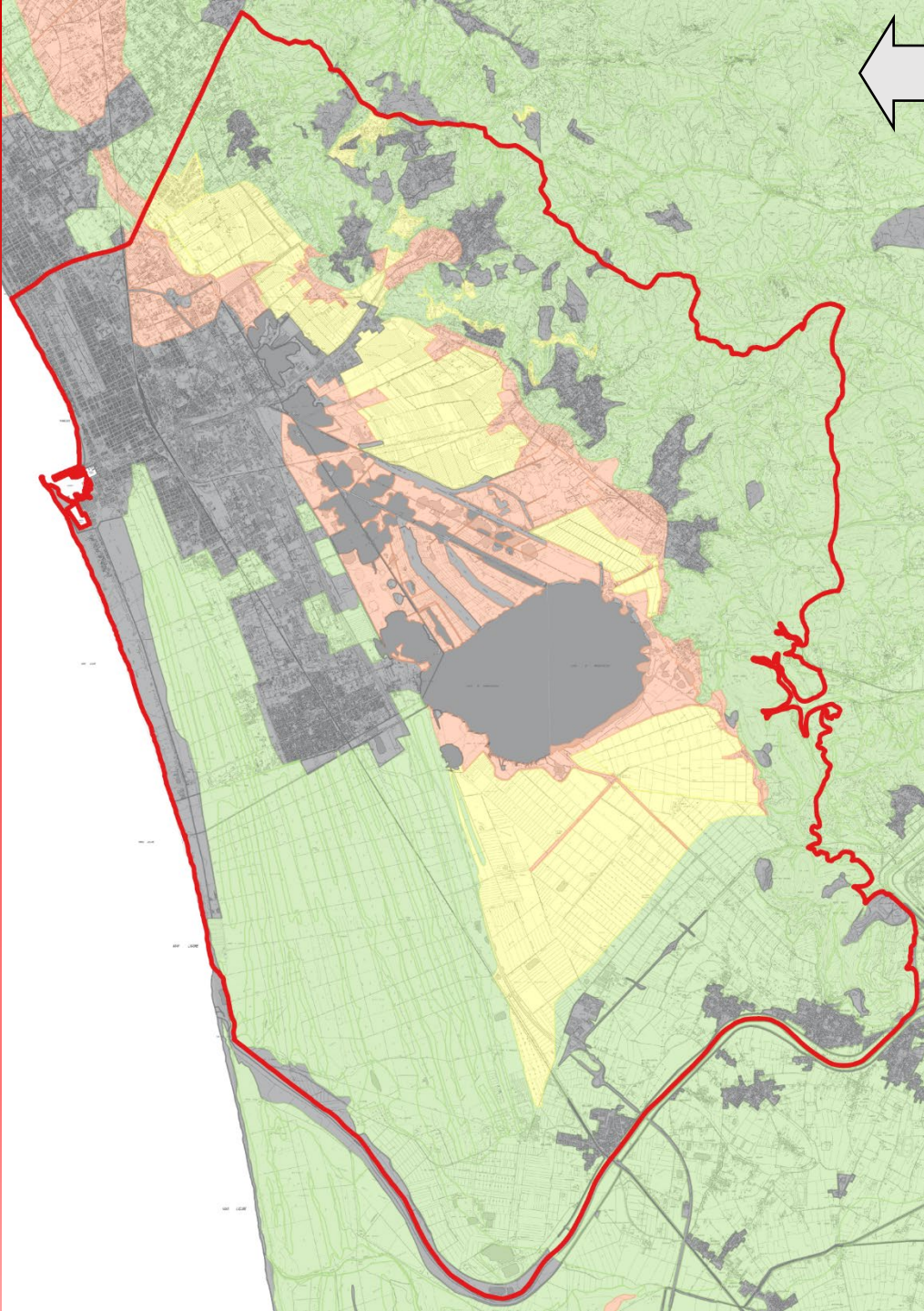
- Capacita' d'uso e fertilita' dei suoli**
- Classe I - Suoli che presentano pochissimi fattori limitanti il loro uso e che sono quindi utilizzabili per tutte le colture
 - Classe II - Suoli che presentano moderate limitazioni che richiedono una opportuna scelta delle colture e/o moderate pratiche conservative
 - Classe III - Suoli che presentano severe limitazioni, tali da ridurre drasticamente la scelta delle colture e da richiedere speciali pratiche conservative
 - Classe IV - Suoli che presentano limitazioni molto severe, tali da ridurre drasticamente la scelta delle colture e da richiedere accurate pratiche di coltivazione
 - Classe V - Suoli che pur non mostrando fenomeni di erosione, presentano tuttavia altre limitazioni difficilmente eliminabili tali da restringere l'uso al pascolo o alla forestazione o come habitat naturale
 - Classe VI - Suoli che presentano limitazioni severe, tali da renderli inadatti alla coltivazione e da restringere l'uso, seppur con qualche ostacolo, al pascolo, alla forestazione e come habitat naturale
 - Classe VII - Suoli che presentano limitazioni severissime, tali da mostrare difficolt  anche per l'uso silvo pastorale
 - Classe VIII - Suoli che presentano limitazioni tali da precludere qualsiasi uso agro-silvo-pastorale e che, pertanto, possono venire adibiti a fini creativi, estetici, naturalistici, o come zona di raccolta delle acque. In questa classe rientrano anche zone calanchive e gli affioramenti di roccia
 - nodata

- Profondita' utile per le radici (cm)**
- 1 - molto elevata (>100)
 - 2 - elevata (75-100)
 - 3 - moderatamente elevata (50-75)
 - 4 - scarsa (25-50)
 - 7 - molto scarsa (10-25)
 - nodata

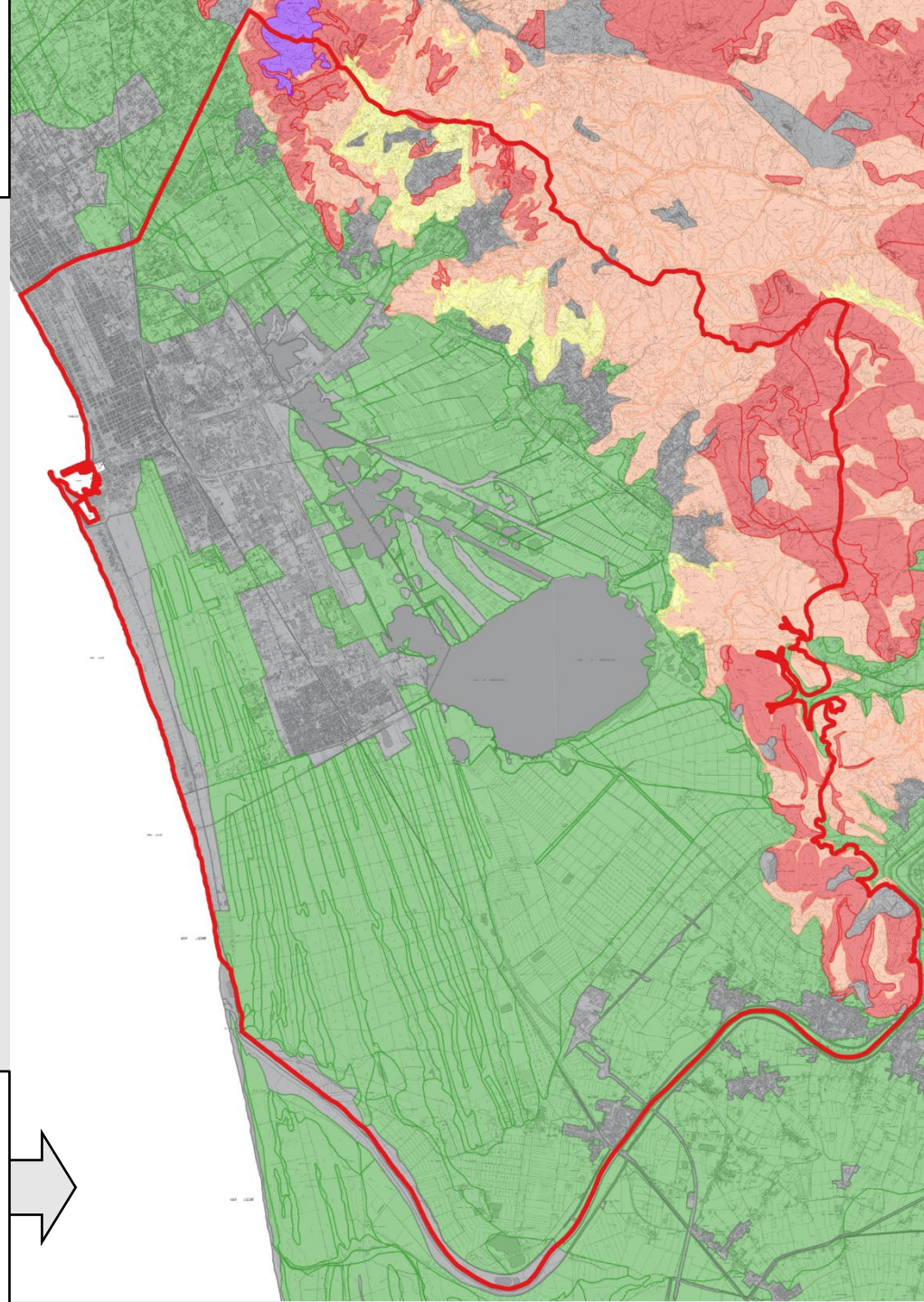
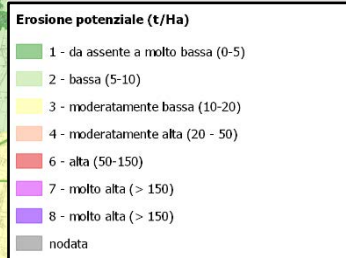
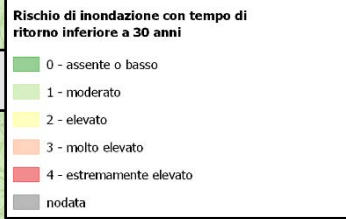
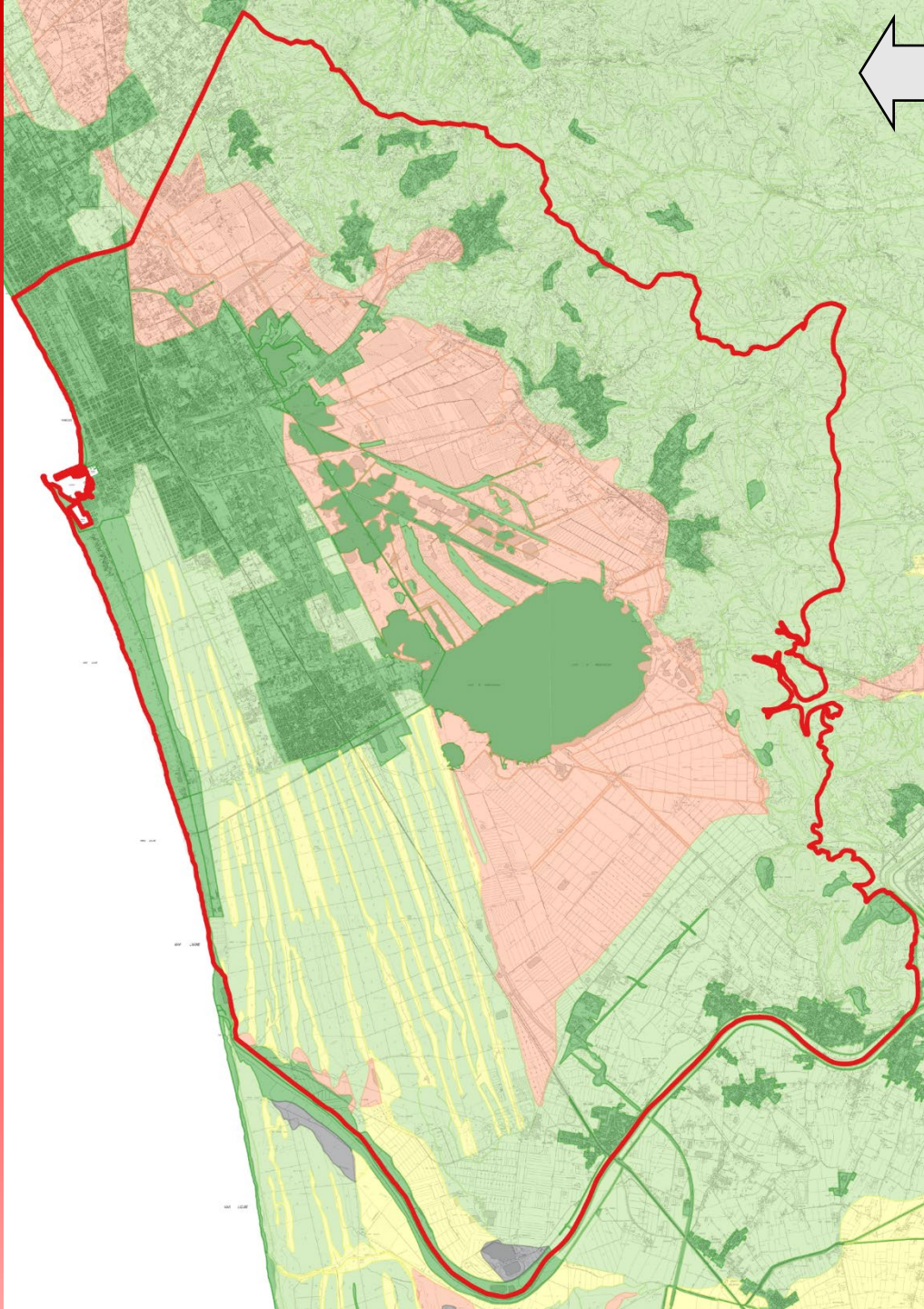






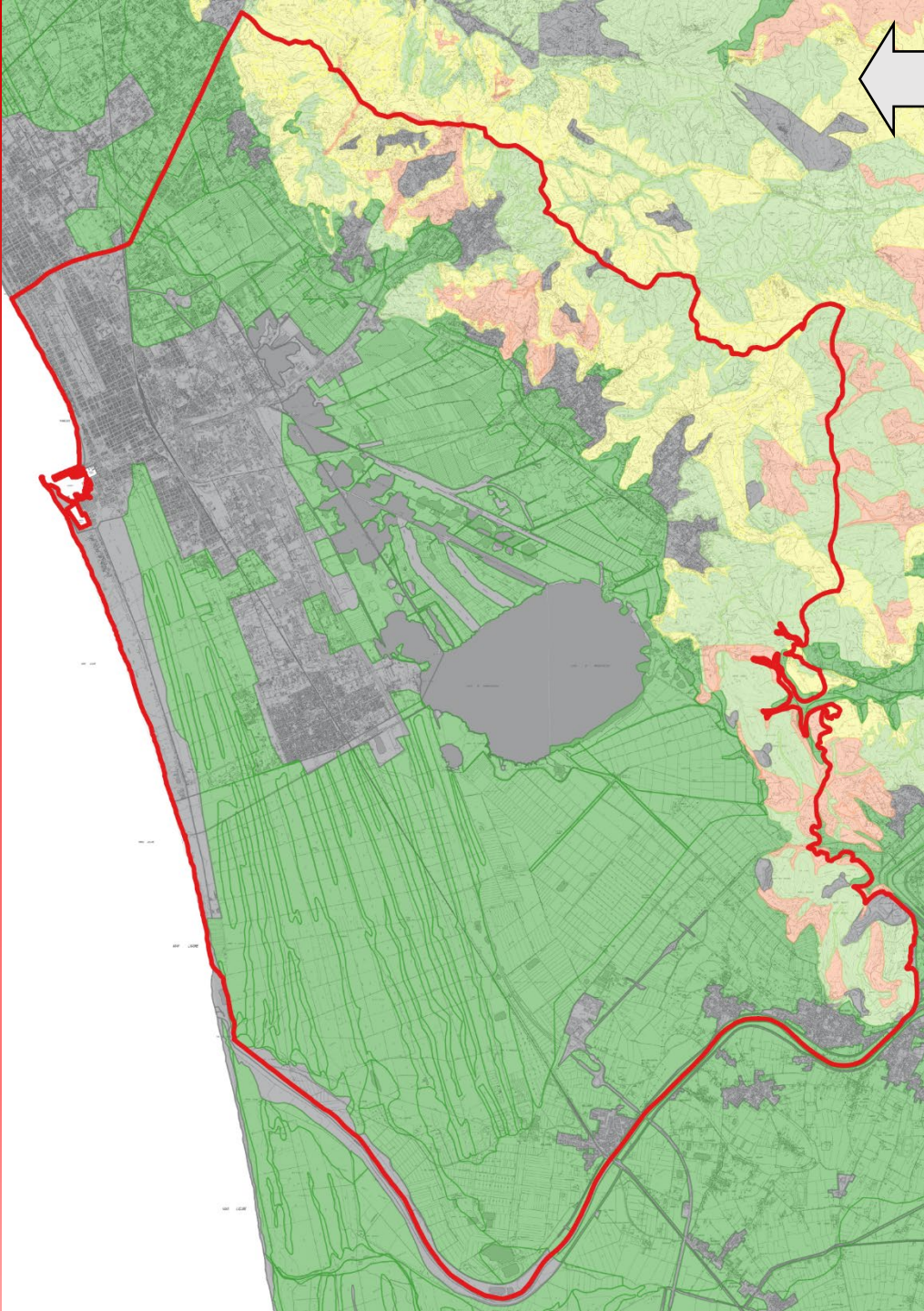


Limitations due to excess water (w)
Flood risk with return time of less than 30 years (vector), 2017, detail 1:10,000



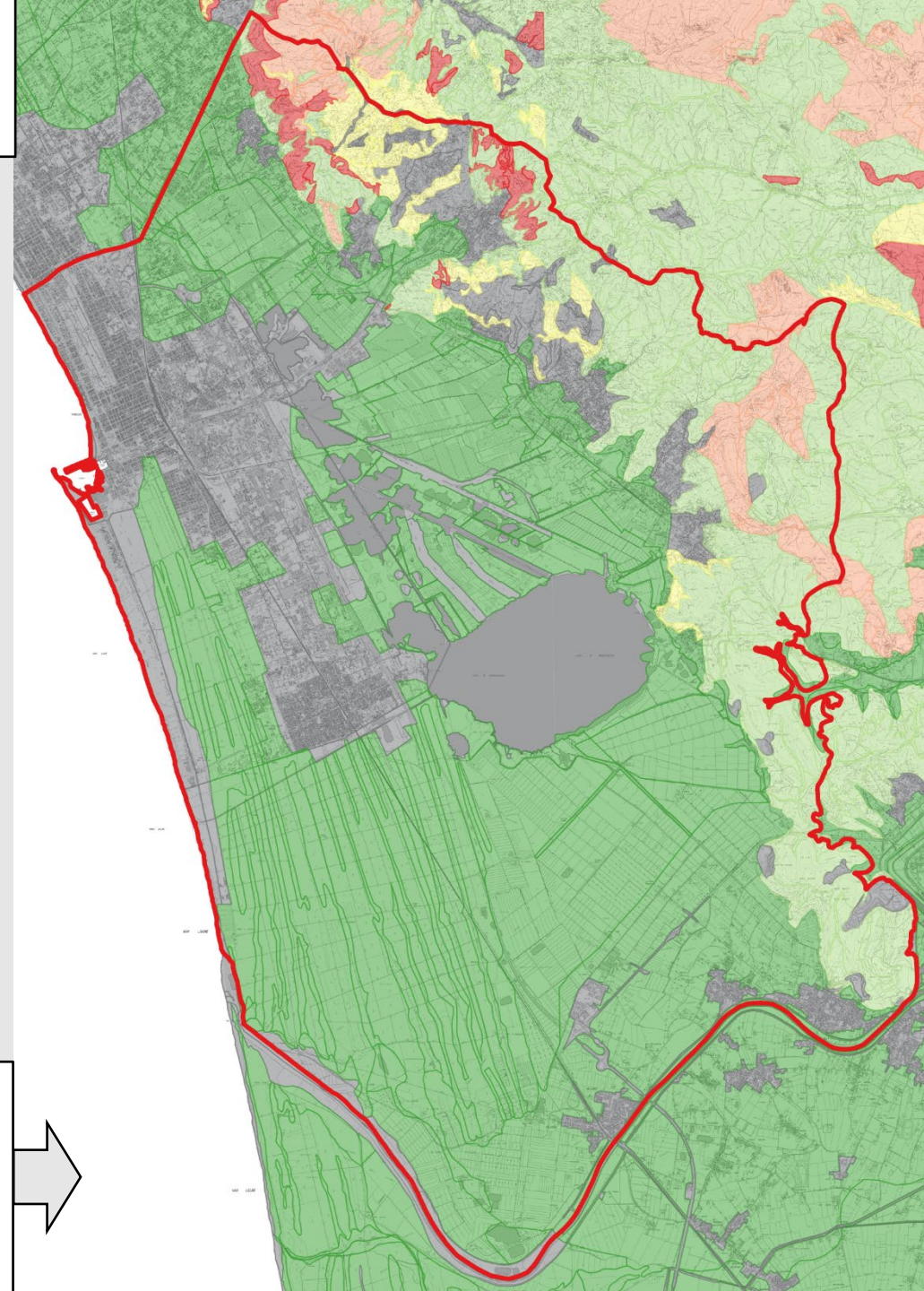
Limitations due to erosion and rollover hazard of agricultural machinery (e)
Potential erosion (t/Ha) (vector), 2017, detail 1:10,000

Limitations due to erosion and rollover hazard of agricultural machinery (e)
Landslides (% of area affected by landslides) (vector), 2017, detail 1:10,000

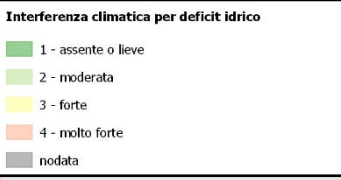
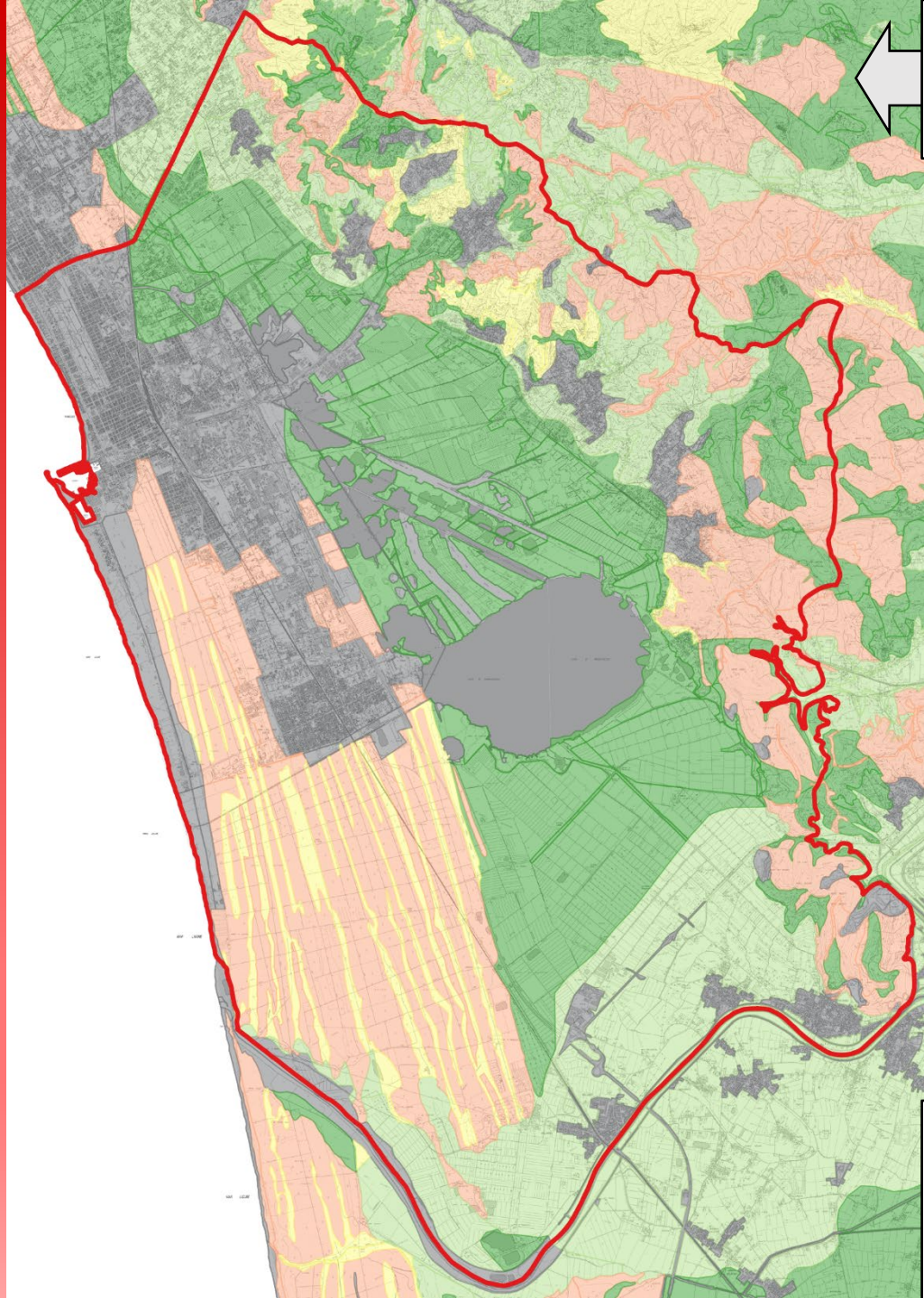


Interferenza climatica per quota

- 1 - assente
- 2 - molto lieve
- 3 - lieve
- 4 - moderata
- 6 - forte
- 7 - molto forte
- 8 - estrema
- nodata



Limitations due to climate (c) - Climate interference by altitude (vector), 2017, detail 1:10,000

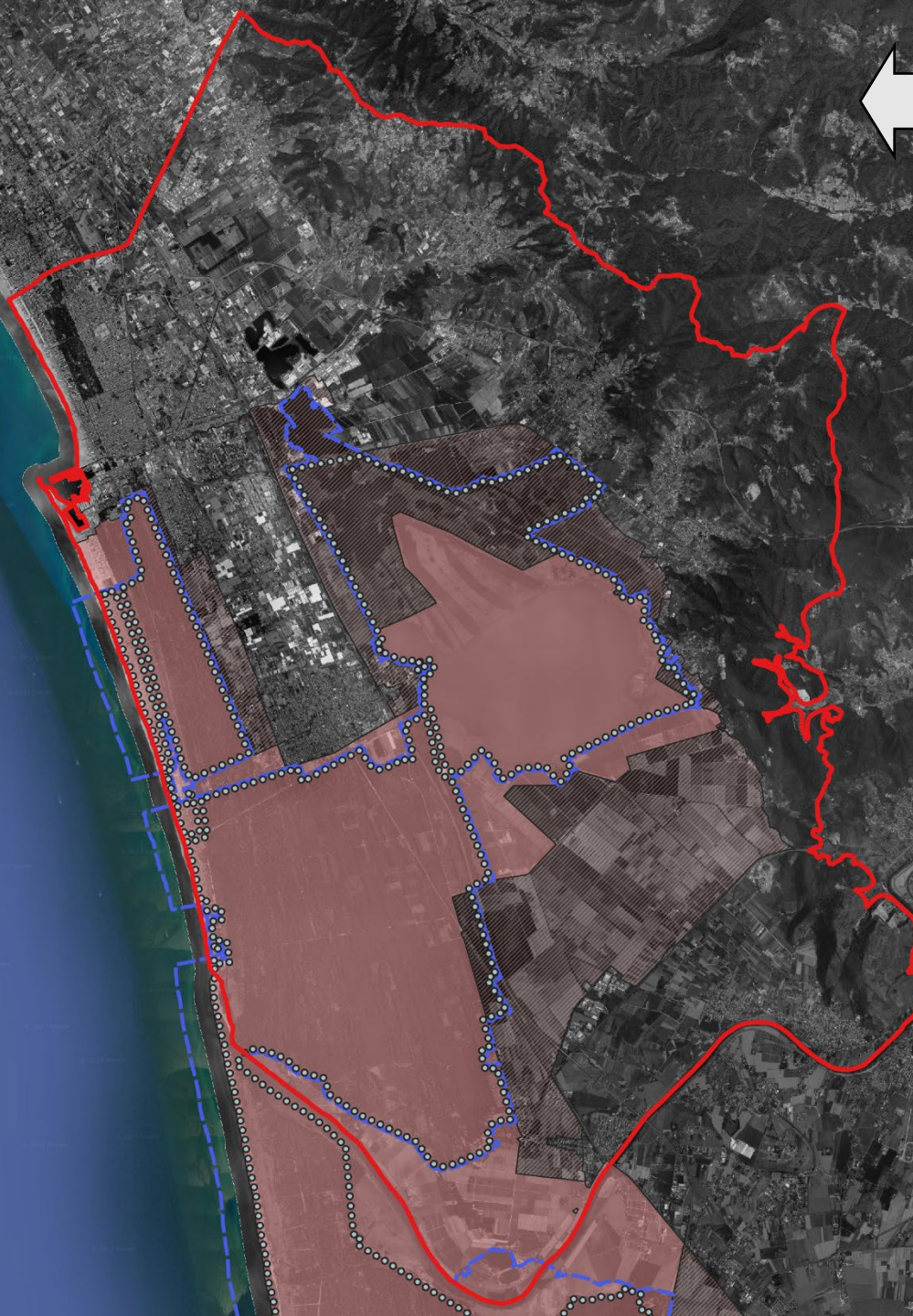




Regione Toscana



Protected natural areas and Natura 2000 sites
Habitat (HaSCITu project) and Tuscan naturalistic repertoire (RENATO)



Aree naturali protette e siti Natura 2000

Parchi e riserve regionali

- Parco
- Area contigua

Siti Natura 2000

- Zone Speciali di Conservazione ZSC e Zone di Protezione Speciale ZPS coincidenti (ZSC-ZPS)
- Zone umide di importanza internazionale (RAMSAR)

Habitat (fonte Progetteto HaASCITu)

Habitat - HaSCITu

- habitat 1
- habitat 2
- habitat 3
- habitat 4
- habitat 5
- habitat 6
- habitat 7
- habitat 8

Repertorio Naturalistico Toscano (RENATO)

Renato Biomart - Habitat

- habitat

Renato Biomart - Fitocenosi

- fitocenosi

Renato Biomart - Vegetali

- vegetali

Renato Biomart - Uccelli

- uccelli

Renato Biomart - Rettili

- rettili

Renato Biomart - Pesci

- pesci

Renato Biomart - Molluschi

- molluschi

Renato Biomart - Mammiferi

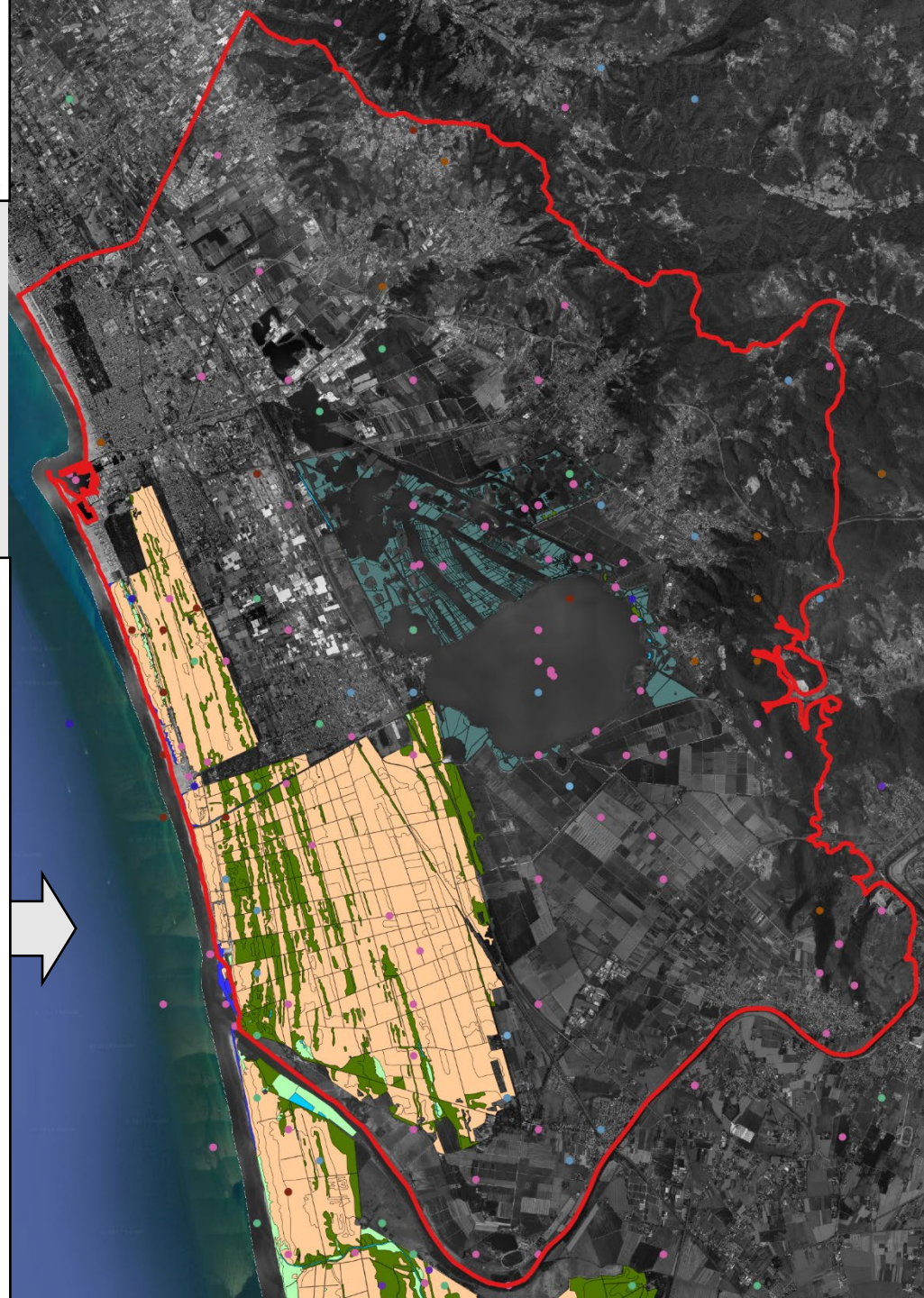
- mammiferi

Renato Biomart - Insetti

- insetti

Renato Biomart - Anfibi

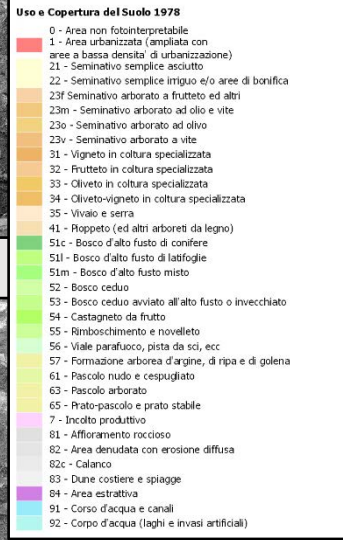
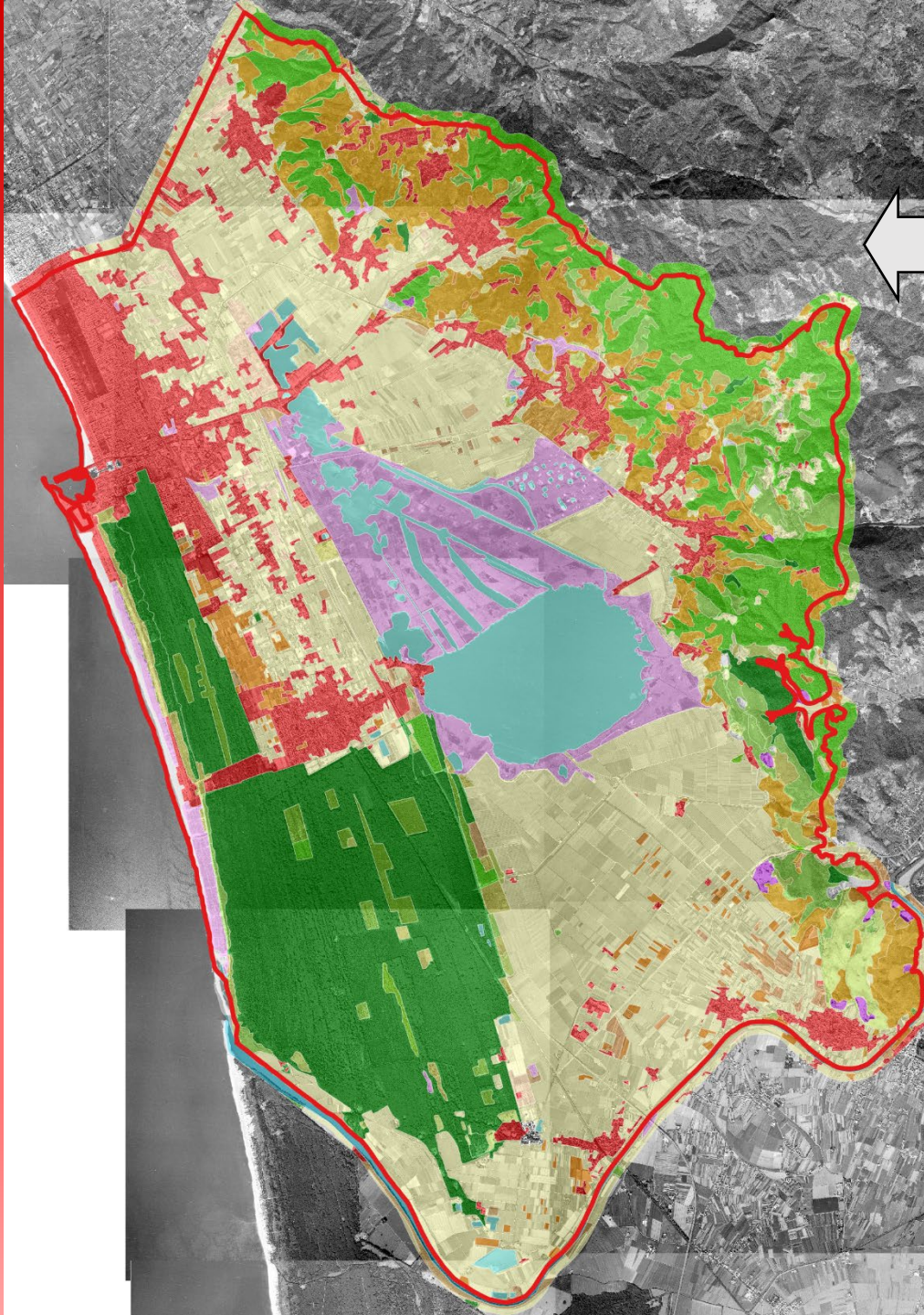
- anfibi





Regione Toscana

Land use and cover





Uso e Copertura del Suolo

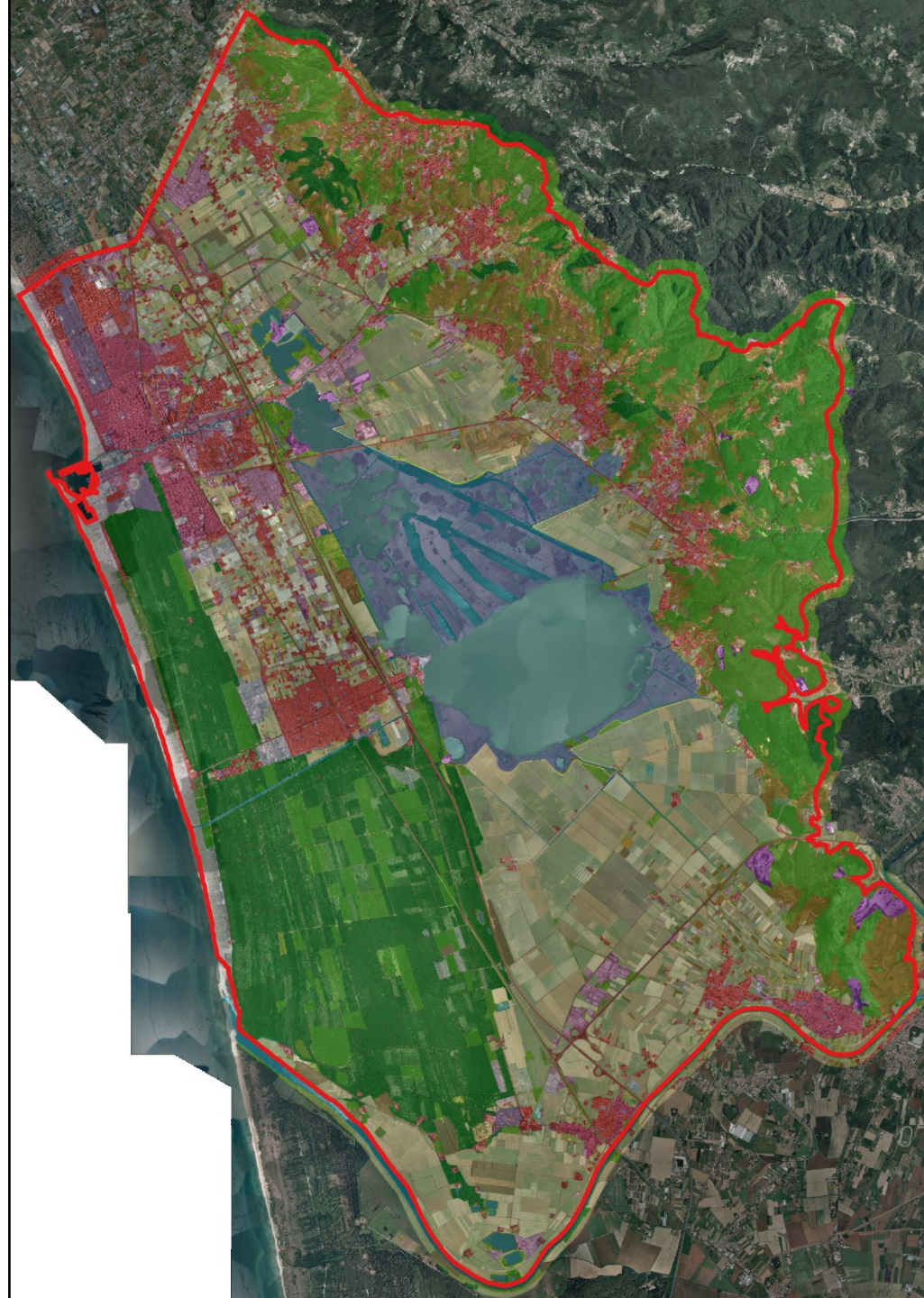
- 111: Zone residenziali a tessuto continuo
- 112: Zone residenziali a tessuto discontinuo
- 1121: Pertinenza abitativa, edificato sparso
- 121: Aree industriali e commerciali
- 1211: Depuratori
- 1212: Impianti fotovoltaici
- 122: Reti stradali, ferroviarie e infrastrutture tecniche
- 1221: Strade in aree boscate
- 123: Aree portuali
- 124: Aeroporti
- 131: Aree estrattive
- 132: Discariche, depositi di rottami
- 133: Cantieri, edifici in costruzione
- 141: Aree verdi urbane
- 1411: Cimiteri
- 142: Aree ricreative e sportive
- 210: Seminativi irrigui e non irrigui
- 2101: Serre stabili
- 2102: Vivali
- 213: Risaie
- 221: Vigneti
- 222: Frutteti e frutti minori
- 2221: Arboricoltura
- 223: Oliveti
- 231: Prati stabili
- 241: Colture temporanee associate a colture permanenti
- 242: Sistemi culturali e particellari complessi
- 243: Colture agrarie con presenza di spazi naturali importanti
- 244: Aree agroforestali
- 311: Boschi di latifoglie
- 312: Boschi di conifere
- 313: Boschi misti di conifere e latifoglie
- 321: Aree a pascolo naturale e praterie
- 322: Brughiere e cespuglieti
- 323: Aree a vegetazione sclerofilla
- 324: Aree a vegetazione boschiva ed arbustiva in evoluzione
- 331: Spiagge, dune e sabbie
- 332: Rocce nude, falesie, rupi e affioramenti
- 333: Aree con vegetazione rada
- 3331: Cesse parafuoco
- 334: Aree percorse da incendio
- 411: Paludi interne
- 421: Paludi salmastre
- 423: Zone intertidali
- 511: Corsi d'acqua, canali e idrovie
- 512: Specchi d'acqua
- 521: Lagune
- 523: Mare





Uso e Copertura del Suolo

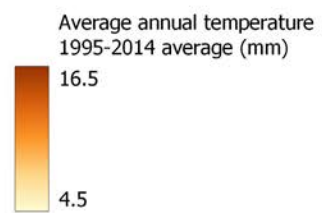
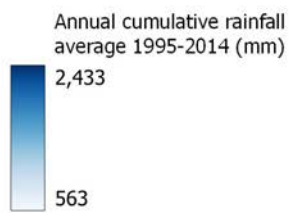
- 111: Zone residenziali a tessuto continuo
- 112: Zone residenziali a tessuto discontinuo
- 1121: Pertinenza abitativa, edificato sparso
- 121: Aree industriali e commerciali
- 1211: Depuratori
- 1212: Impianti fotovoltaici
- 122: Reti stradali, ferroviarie e infrastrutture tecniche
- 1221: Strade in aree boscate
- 123: Aree portuali
- 124: Aeroporti
- 131: Aree estrattive
- 132: Discariche, depositi di rottami
- 133: Cantieri, edifici in costruzione
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- 242: Sistemi colturali e particellari complessi
- 243: Colture agrarie con presenza di spazi naturali importanti
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- 311: Boschi di latifoglie
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- 511: Corsi d'acqua, canali e idrovie
- 512: Specchi d'acqua
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Consorzio Lamma

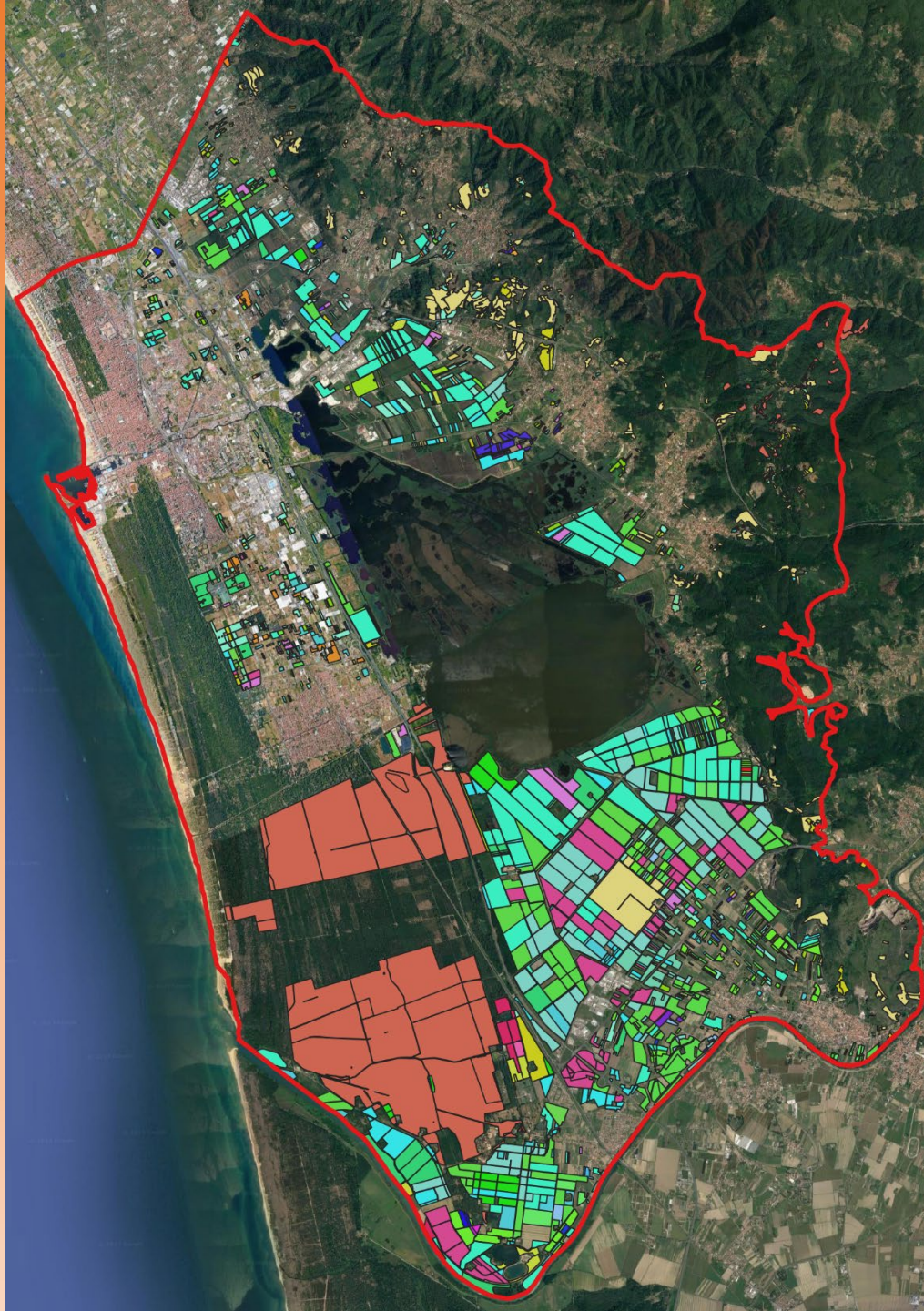
Climatology





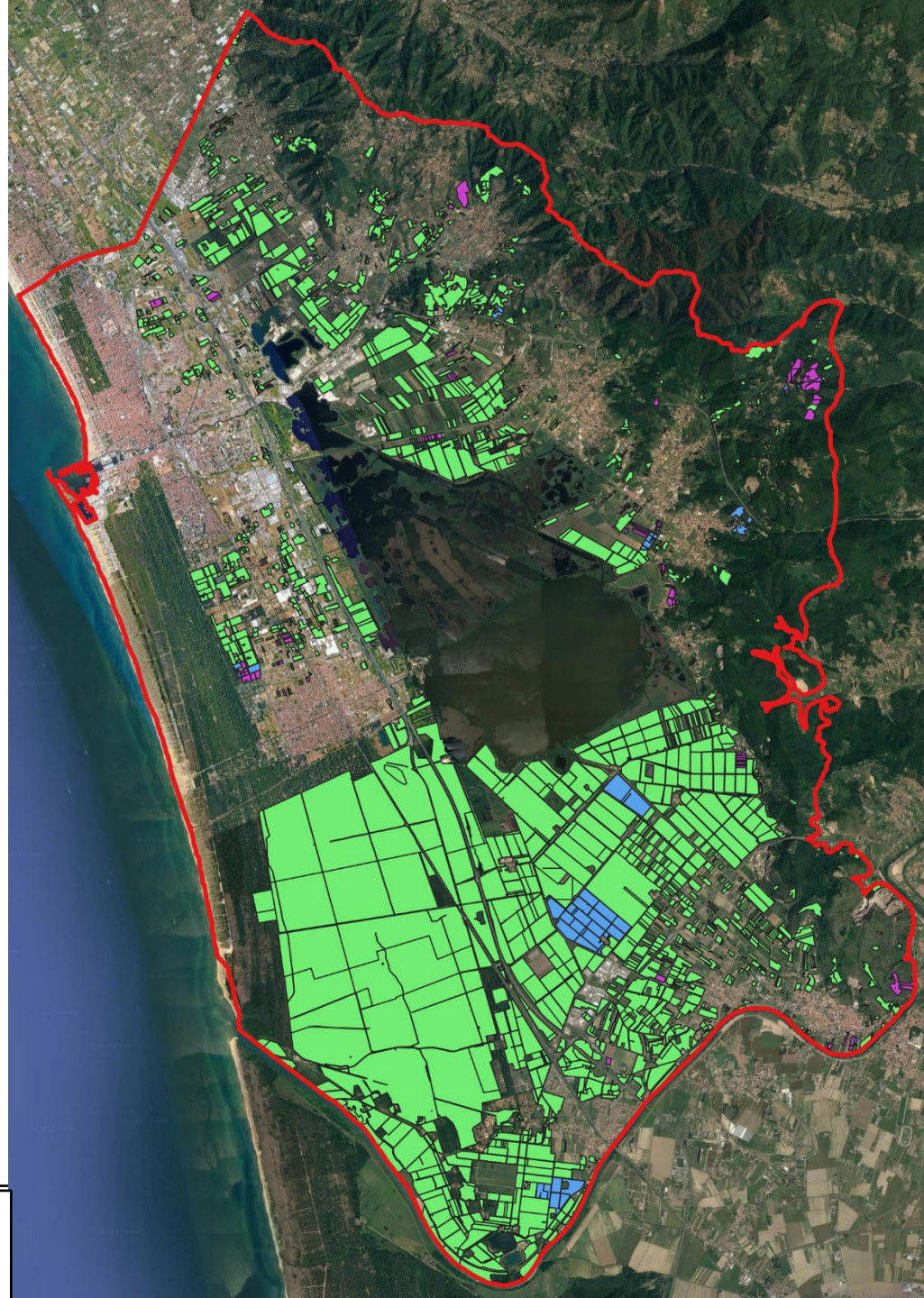
ART€A

Graphic crop plans



- Piano culturale grafico**
- albicocco
 - alloro
 - arachide
 - arancio
 - arboreto consociabile (con coltivazioni erbacee)
 - arboricoltura
 - asparago
 - avena
 - barbabietola - rapa rossa/bietola da costa
 - basilico
 - bietola (compresa la cheltenham beet, barbabietola rossa/bietola da costa)
 - bosco
 - canapa
 - carciofo
 - carota
 - cavolfiore
 - cavolo
 - cavolo rapa
 - cece
 - cetriolo
 - ciliegio
 - cipolla anche di tipo lungo (echallon)
 - cocoonero
 - coltivazioni arboree promiscue (piu' specie arboree)
 - coltivazioni arboree specializzate
 - colza
 - coriandolo
 - erba medica
 - erbaio
 - escaipito
 - fabbricati
 - fagiolino
 - fagiolo
 - fava
 - fico
 - fiori eduli
 - fragola
 - frumento duro
 - frumento tenero
 - frutteti familiari
 - girasole
 - lampone
 - lattuga lattughino
 - lavanda
 - lillium
 - limone
 - loietto loglio
 - lupino
 - luppolo
 - lycium barbarum (goji)
 - mais
 - manufatti
 - medicago sativa 1. (erba medica)
 - melanzana
 - melo
 - melograno
 - melone
 - mirilli rossi, mirilli neri ed altri frutti del genere vaccinium
 - more
 - nocciolo
 - oliva da trasformazione
 - orti familiari
 - ortive a pieno campo
 - orzo
 - pascolo polifita
 - patata
 - peperoncino peperetta
 - peperone
 - pero
 - pesco
 - pesco nettarina
 - piante aromatiche e medicinali e spezie
 - piante ornamentali
 - pioppo
 - pioppo bianco
 - pioppo nero
 - pisello
 - pomodoro
 - porro
 - prato pascolo
 - prato polifita
 - prezzemolo
 - rafano
 - ribes rosso
 - rosmarino
 - ruscus
 - salvia
 - segala
 - seminativi
 - serre
 - sola
 - sorgo
 - spinacio
 - susino
 - bare
 - terreni ritirati dalla produzione
 - uso non agricolo - altro
 - uso non agricolo - aree non coltivabili
 - vite
 - vivai - altri
 - vivai floricoli
 - vivai orticoli
 - vivai viticoli
 - vivaio specie ornamentali
 - zucca
 - zucchini

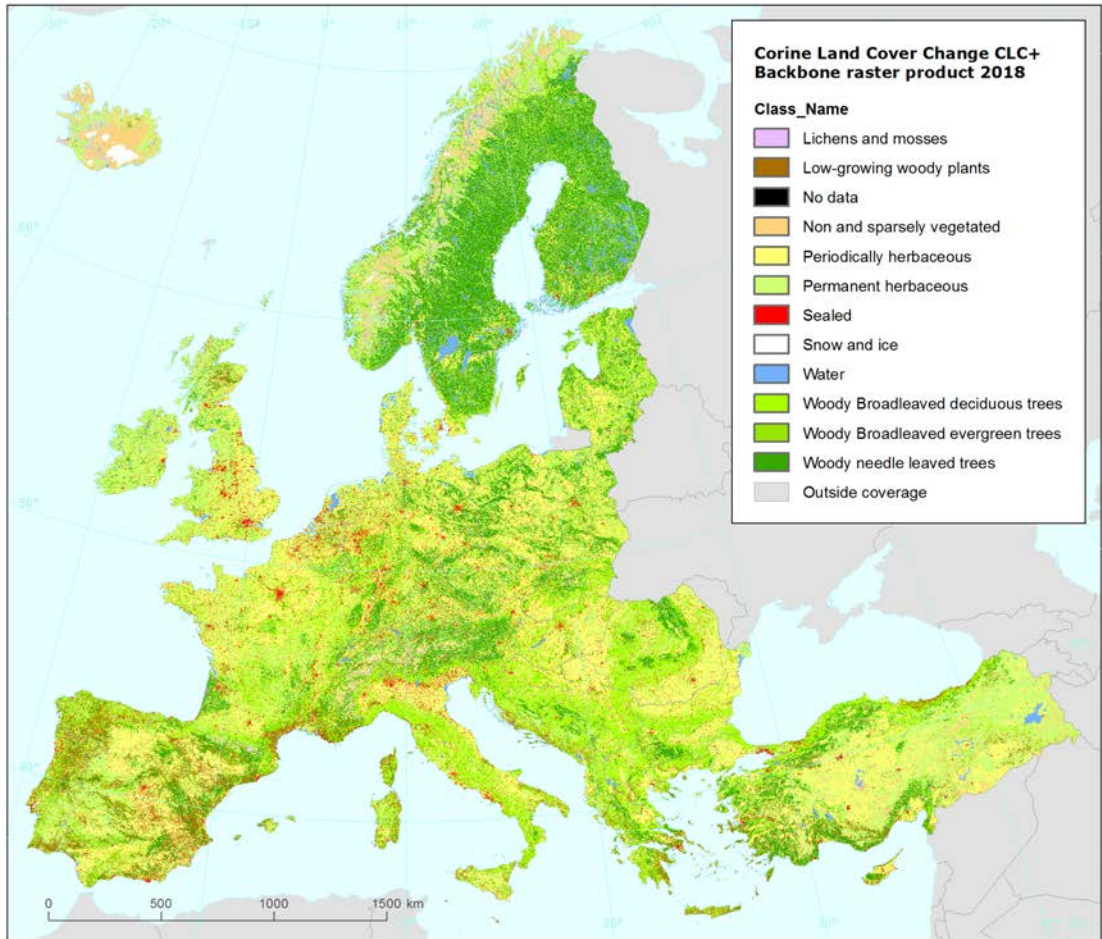
- Tipo di agricoltura**
- Biologico
 - In Conversione
 - Tradizionale (non bio)



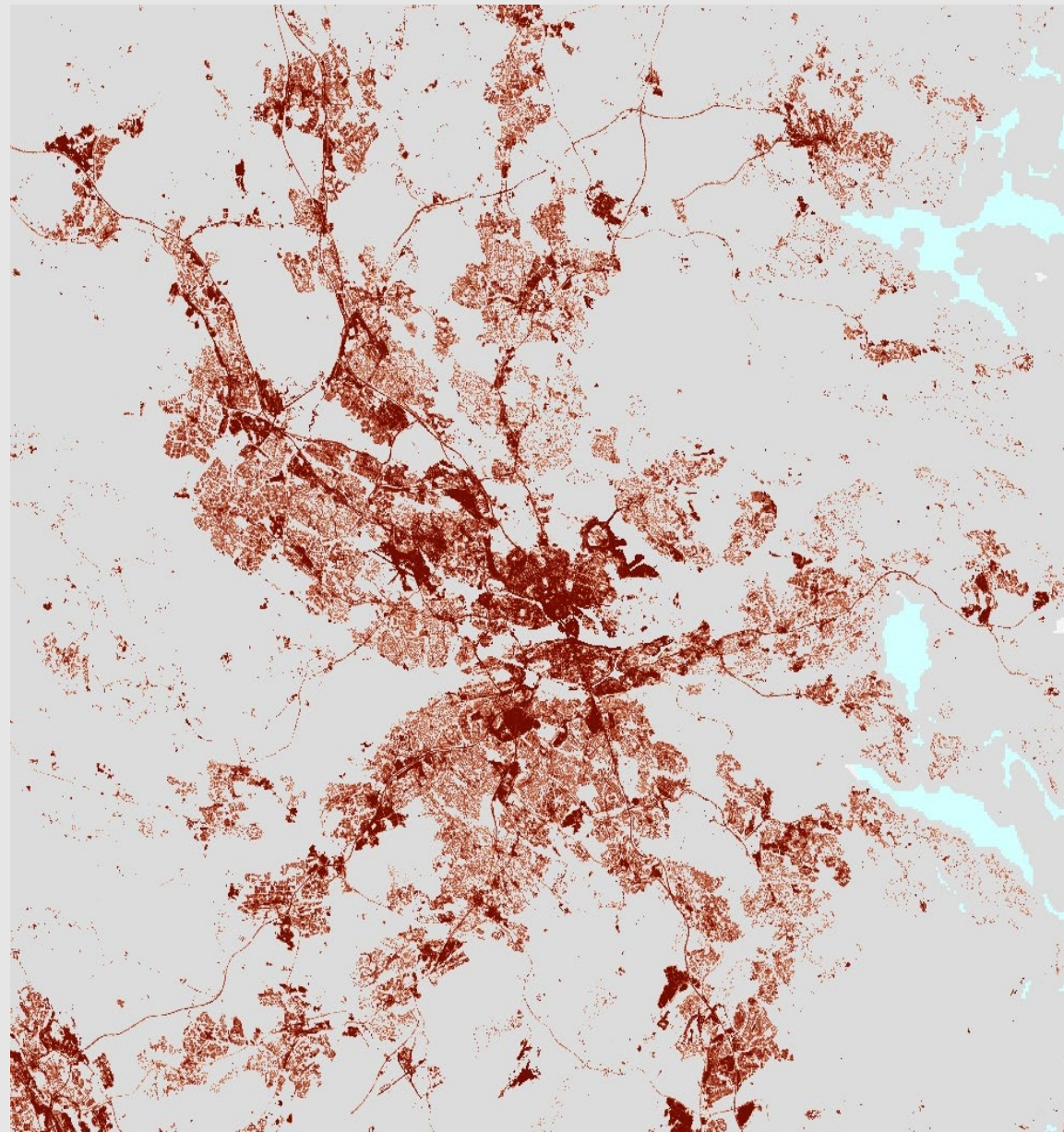
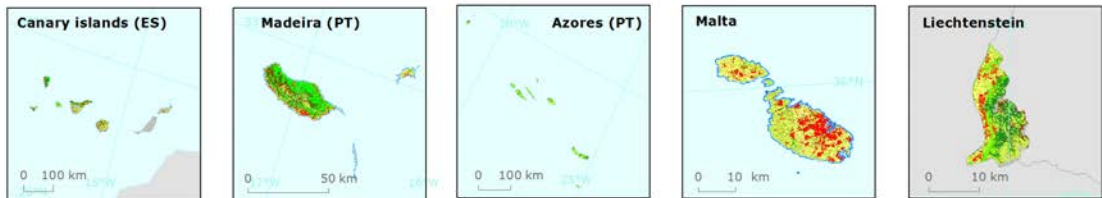


Copernicus

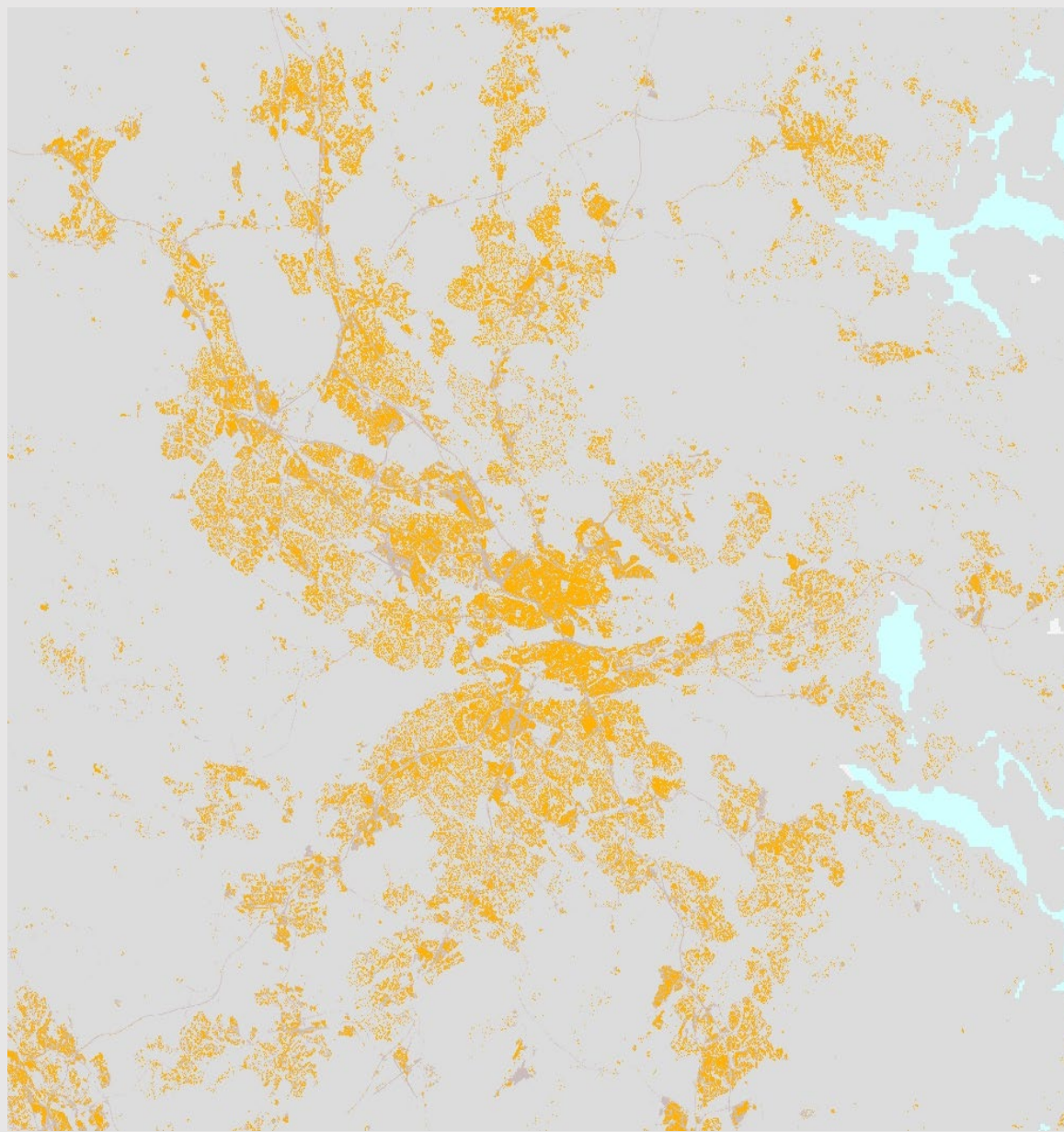
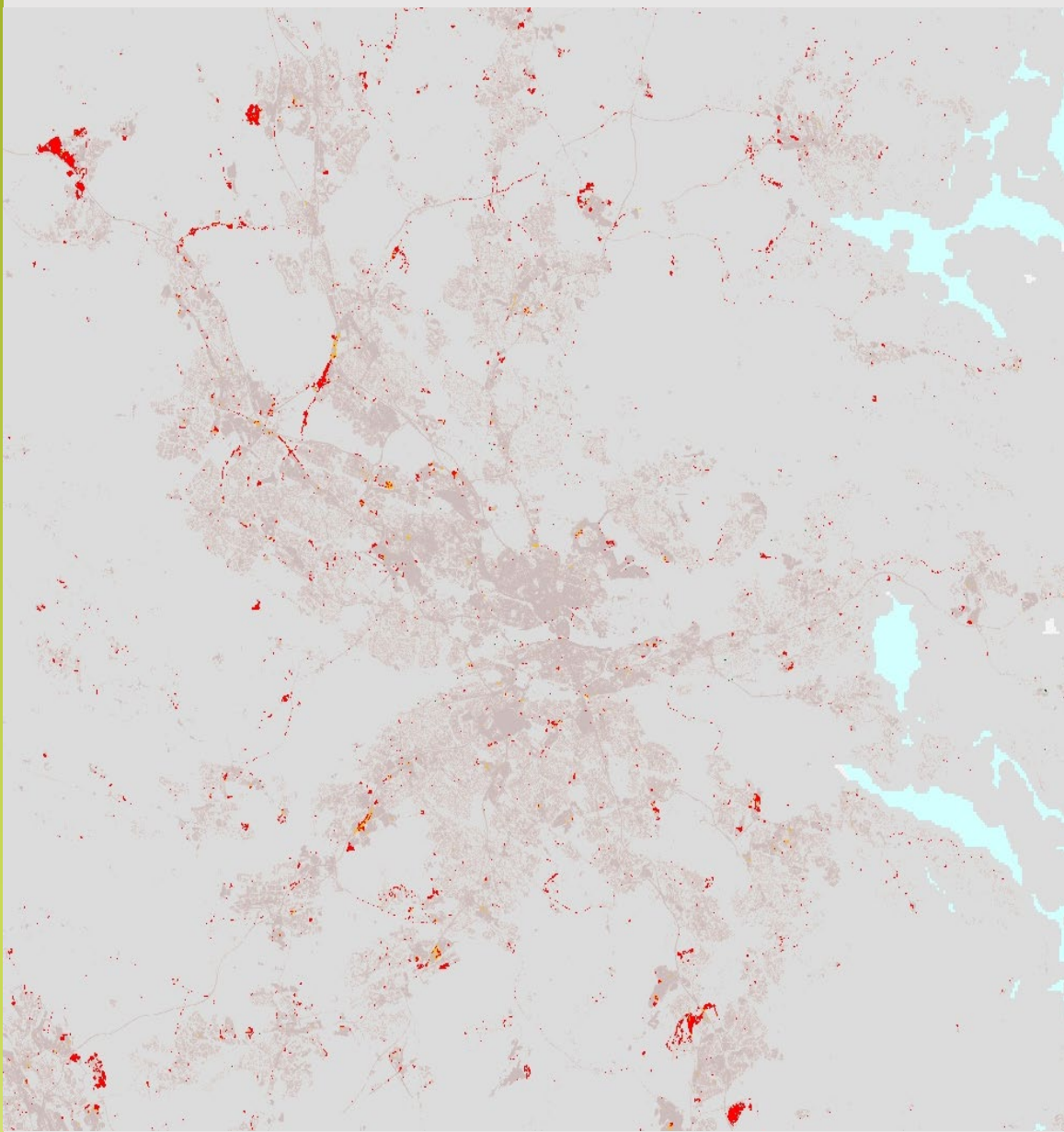
Copernicus Land Monitoring Service (CLMS)



Reference data: Administrative boundaries: ©EuroGeographics, © FAO (UN), © TurkStat Source: European Commission - Eurostat/GISCO

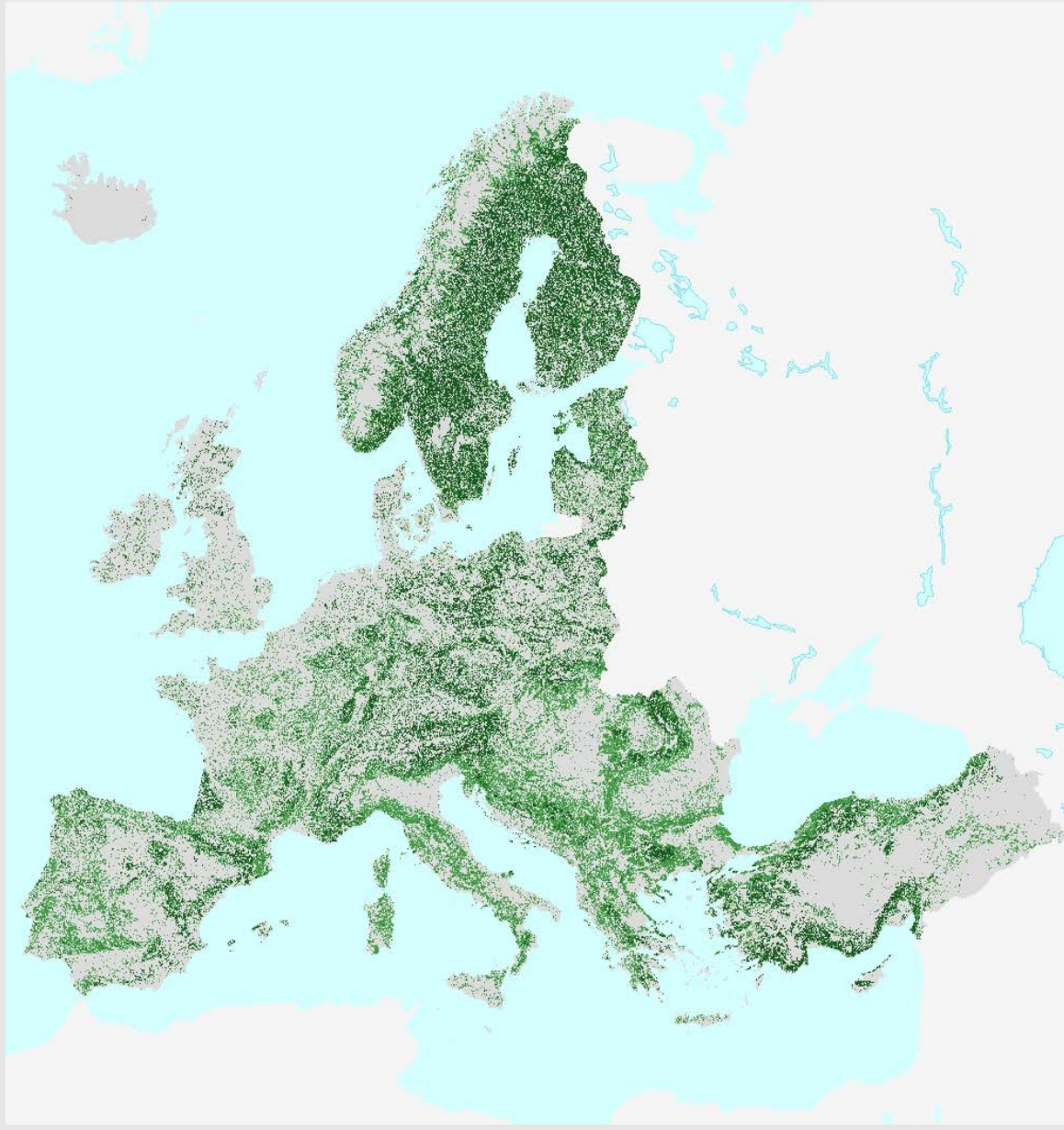
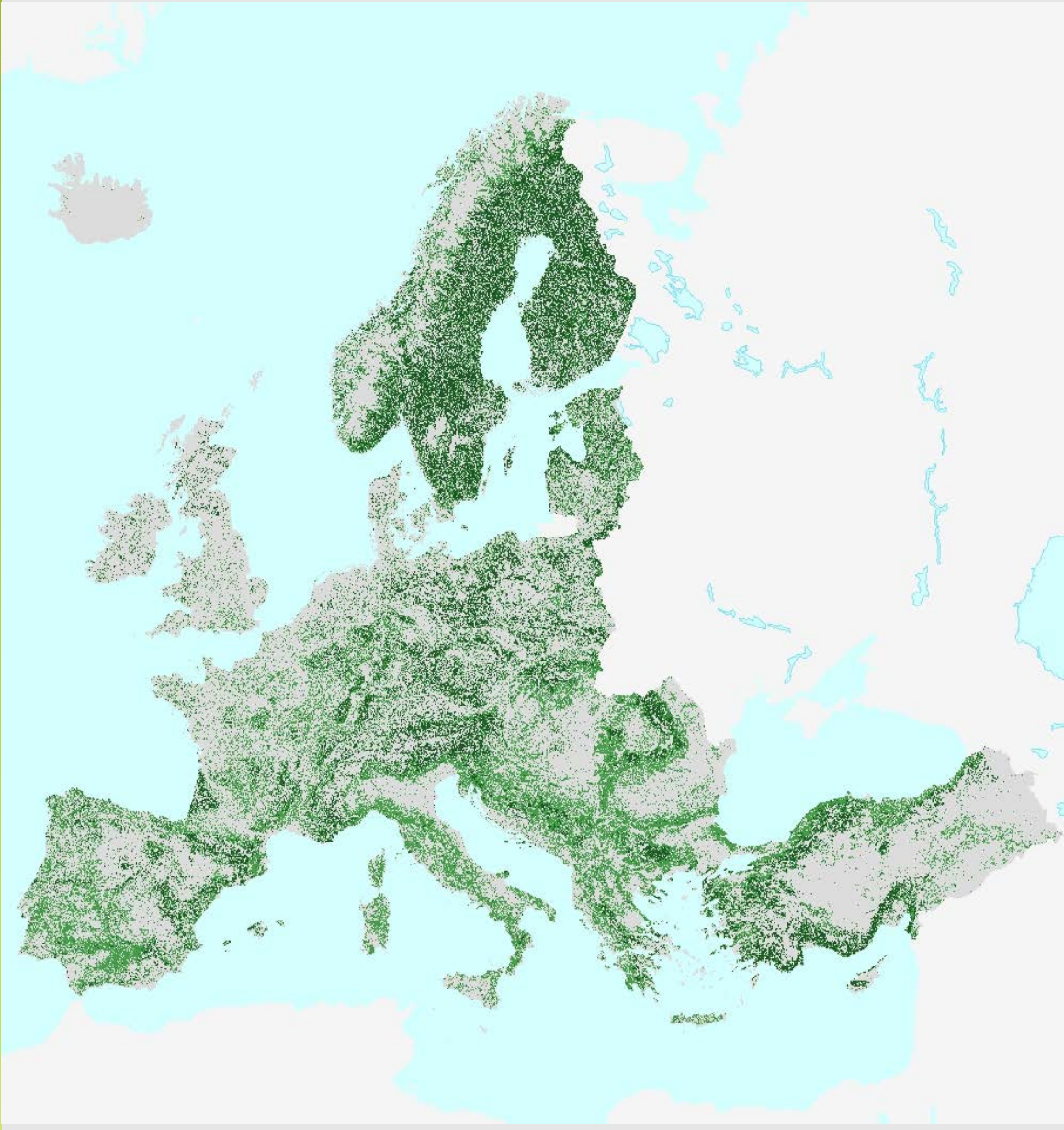


Imperviousness Classified Change 2006-2009-2012-2015-2018 (raster 20 m), Europe, 3-yearly



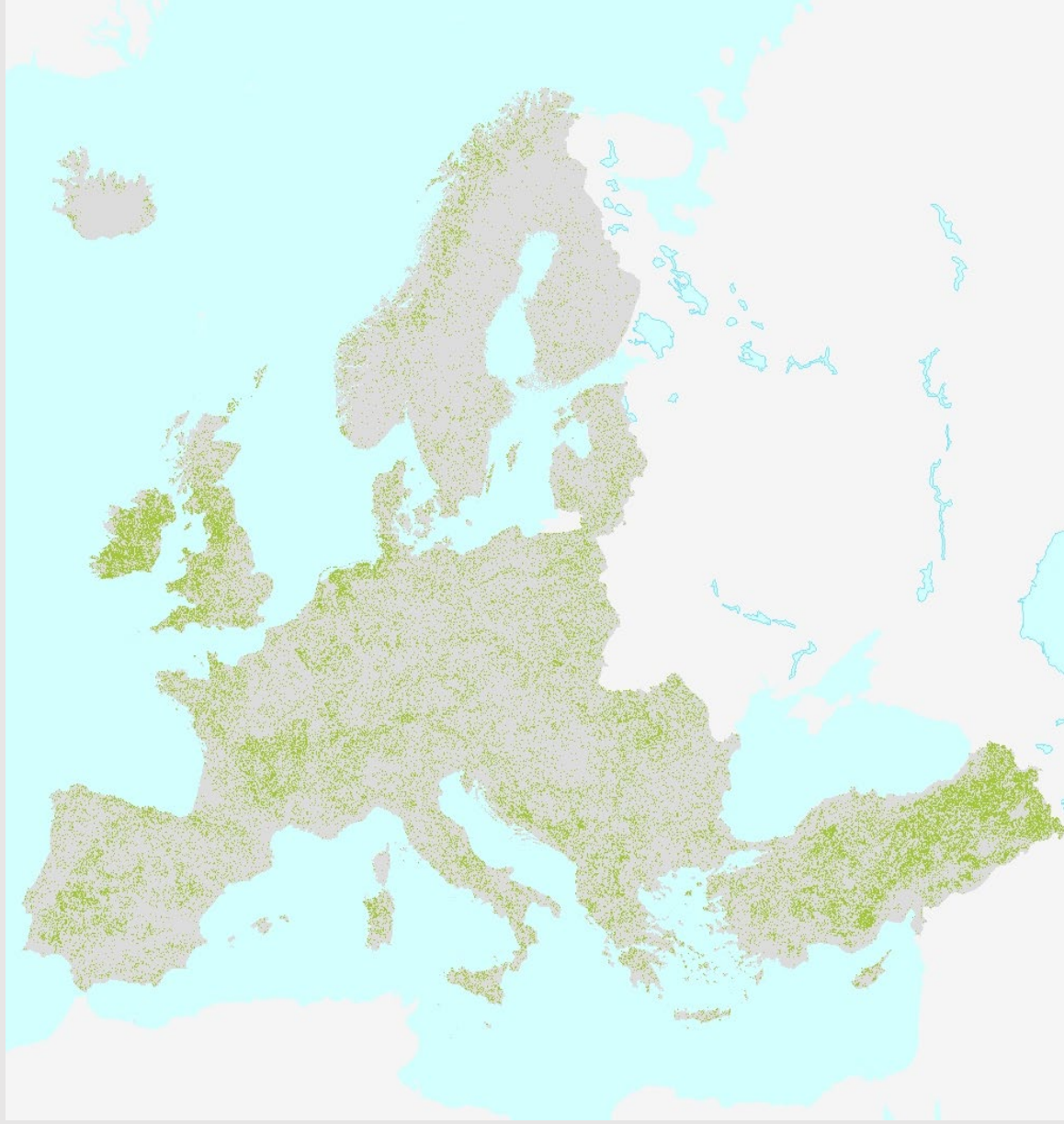
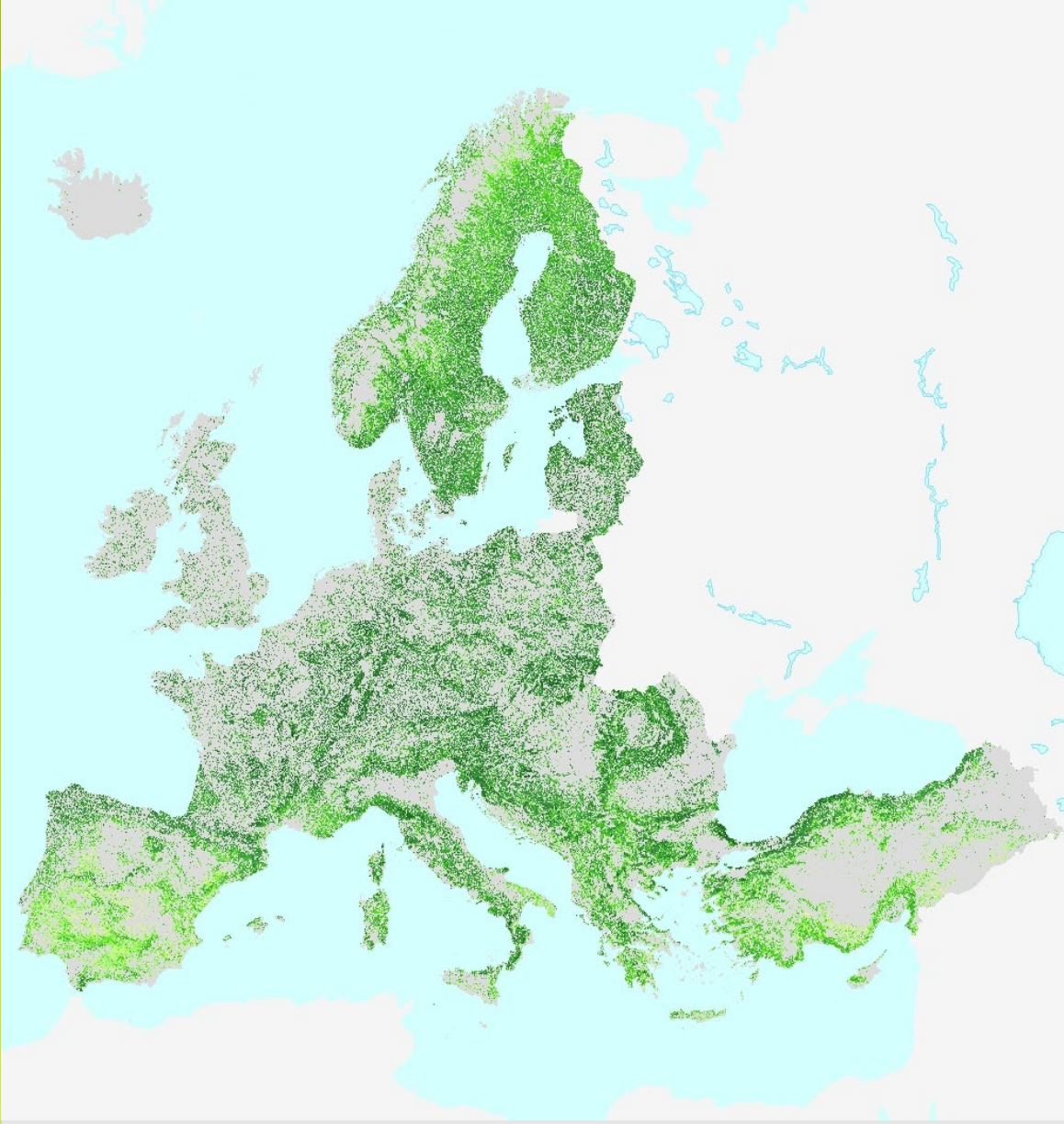
Impervious Built-up 2018 (raster 10 m), Europe, 3-yearly, Aug. 2020

Dominant Leaf Type 2012-2015-2018 (raster 10 m and 20 m), Europe, 3-yearly

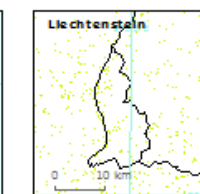
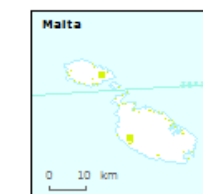
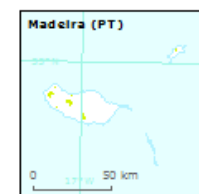
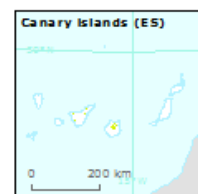
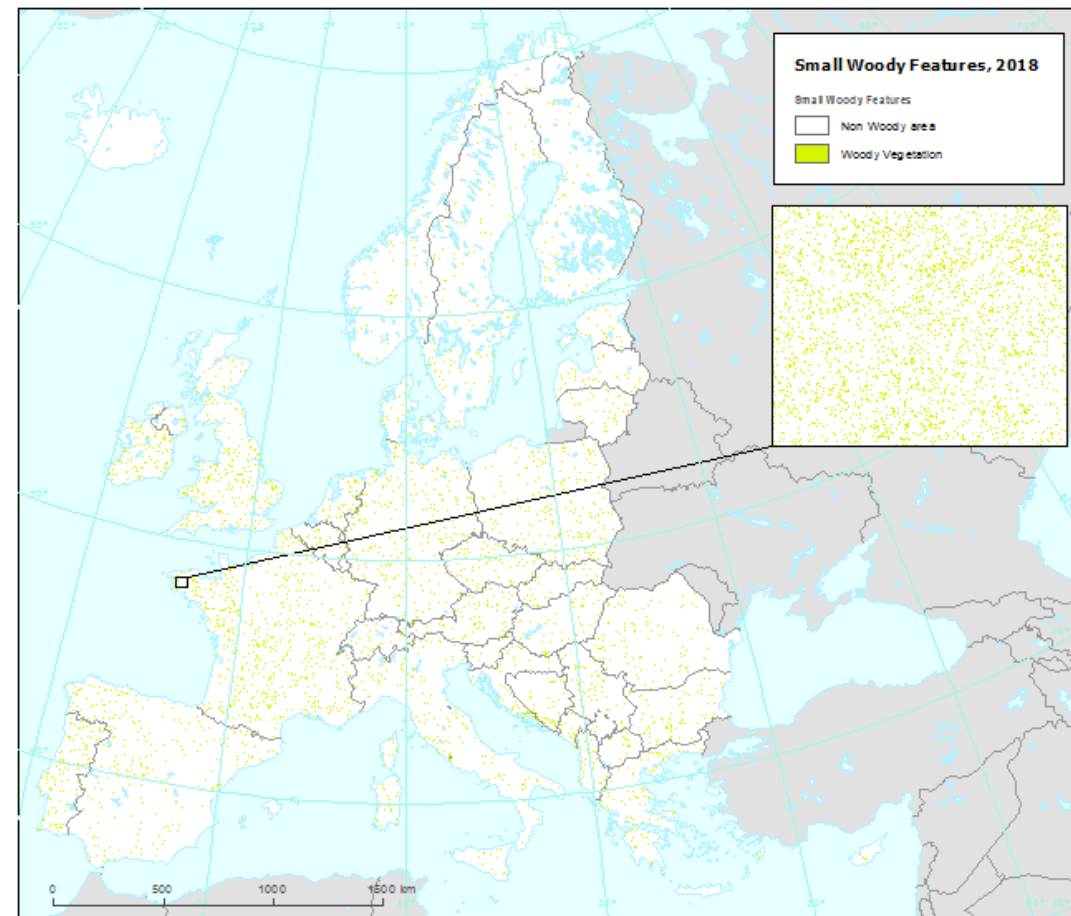
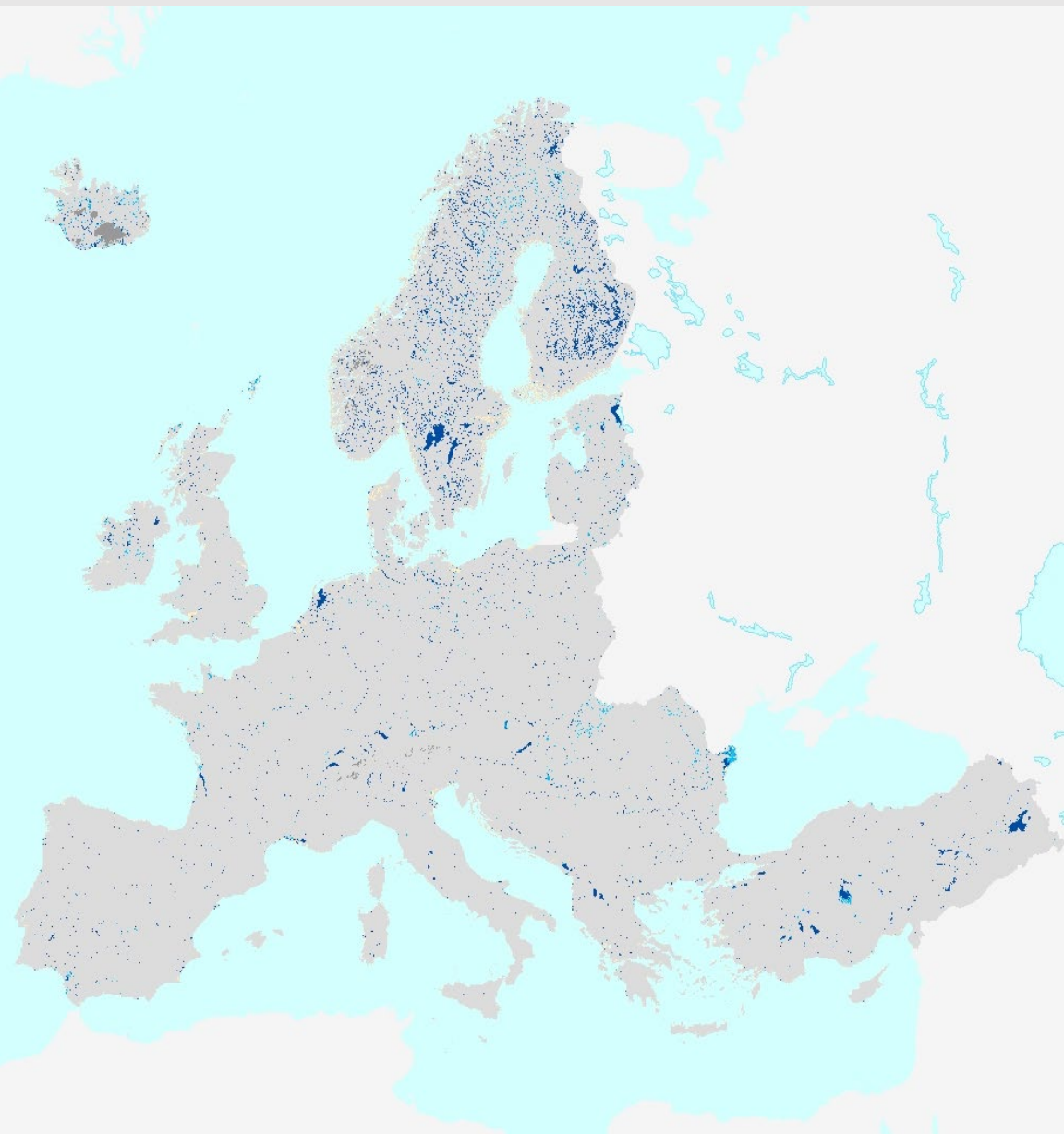


Forest Type 2012-2015-2018 (raster 10 m and 100 m), Europe, 3-yearly

Tree Cover Density 2012-2015-2018 (raster 10 m and 20 m), Europe, 3-yearly



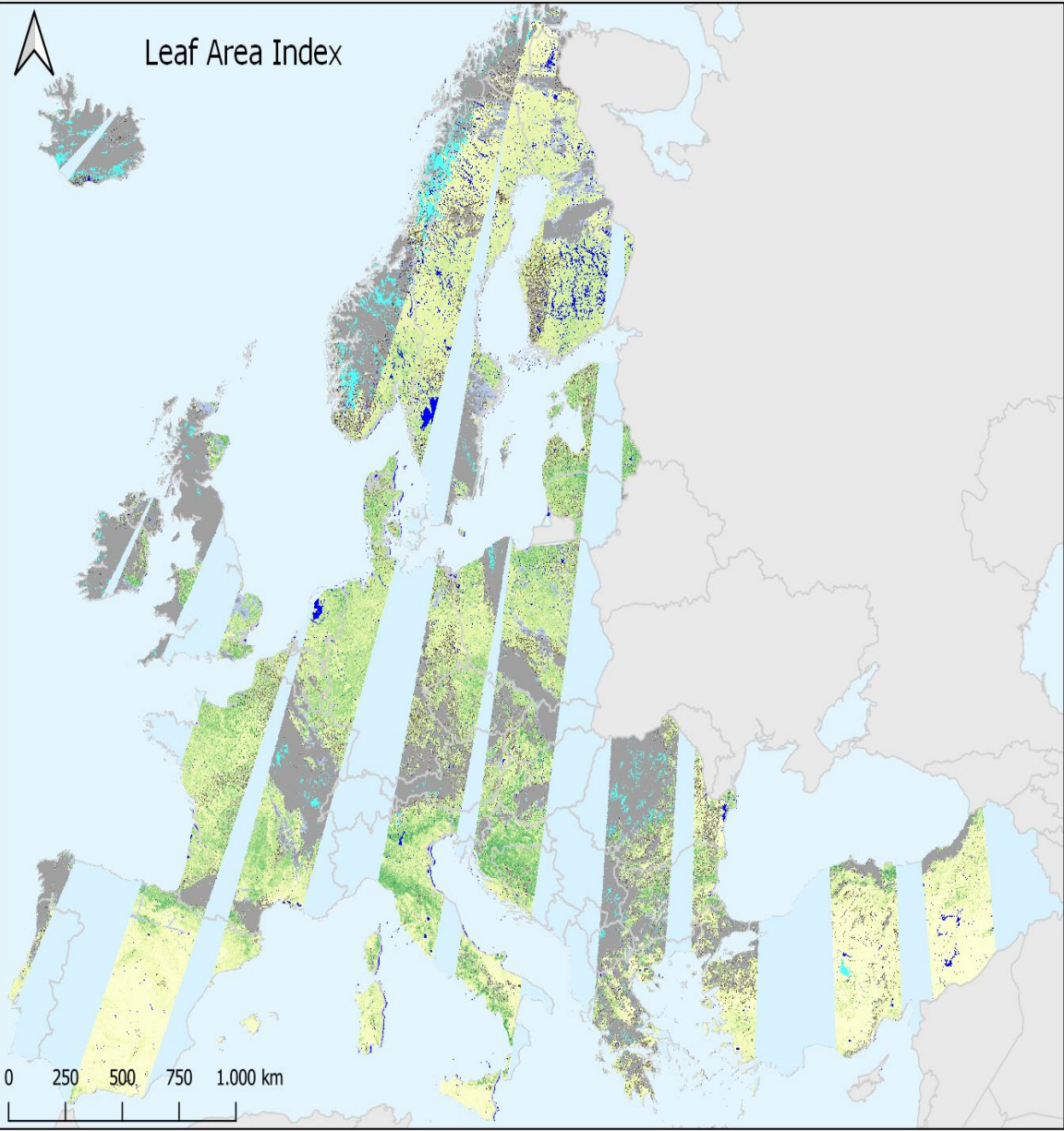
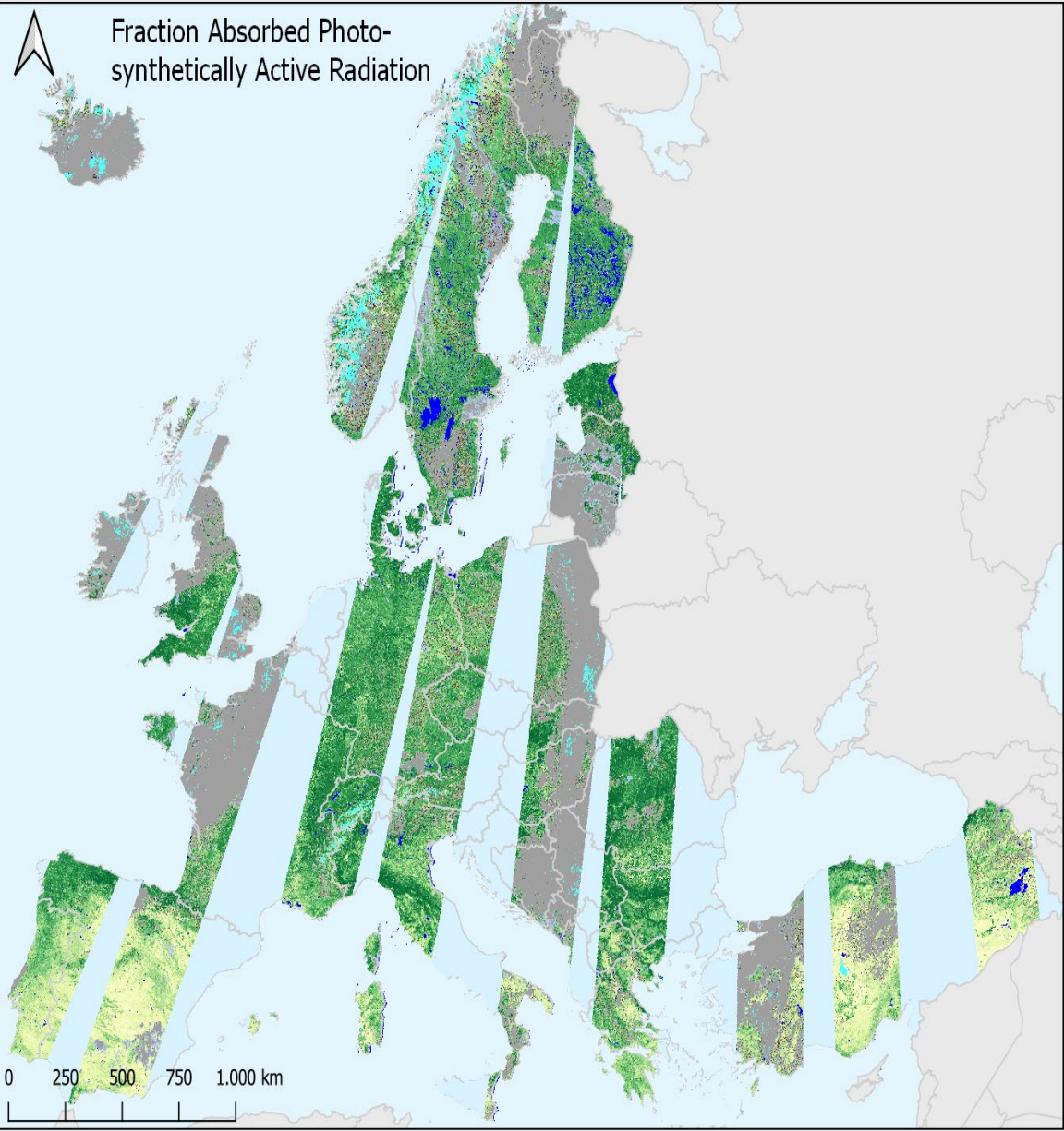
Grassland 2015-2018 (raster 10 m and 20 m), Europe, 3-yearly



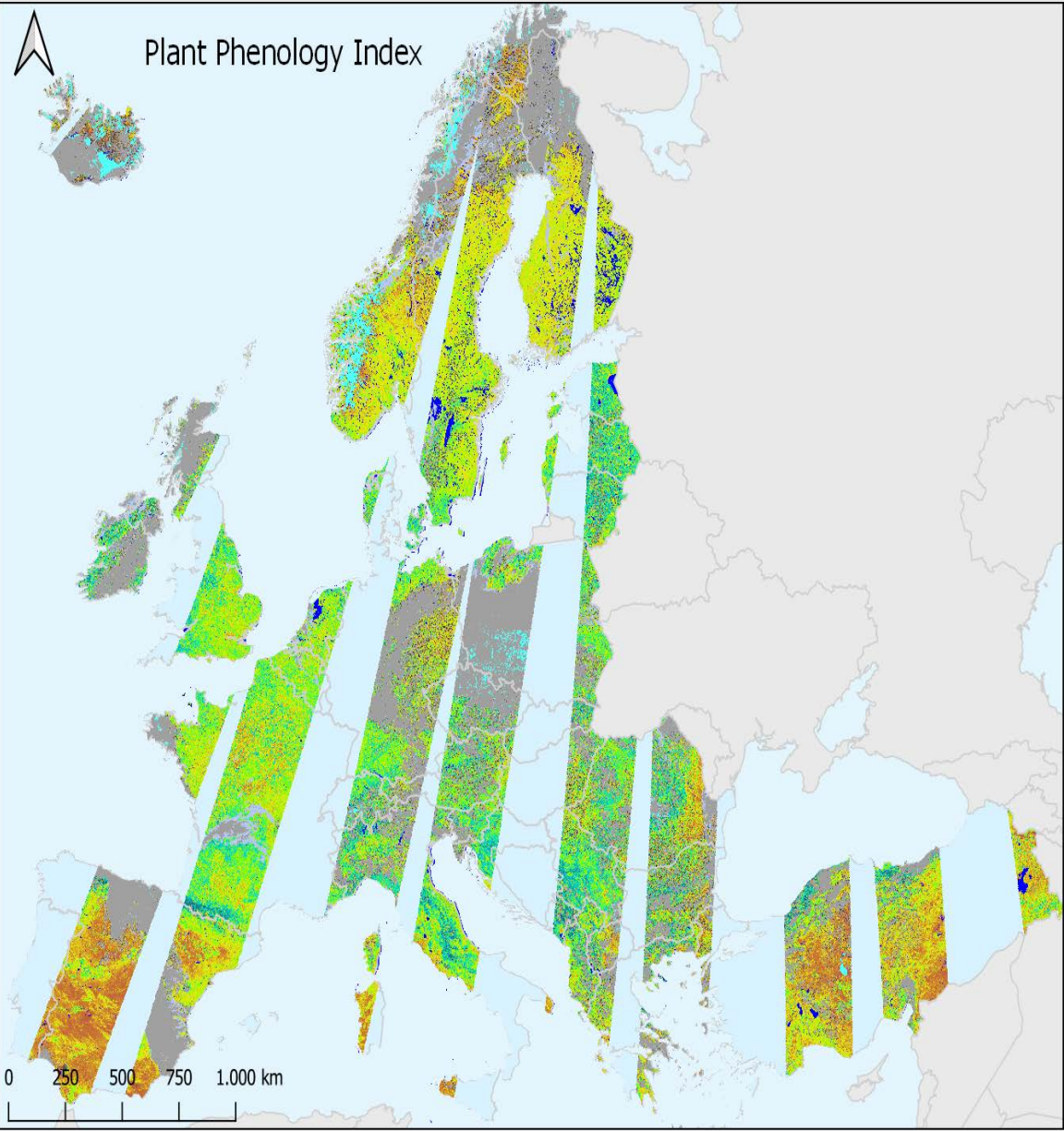
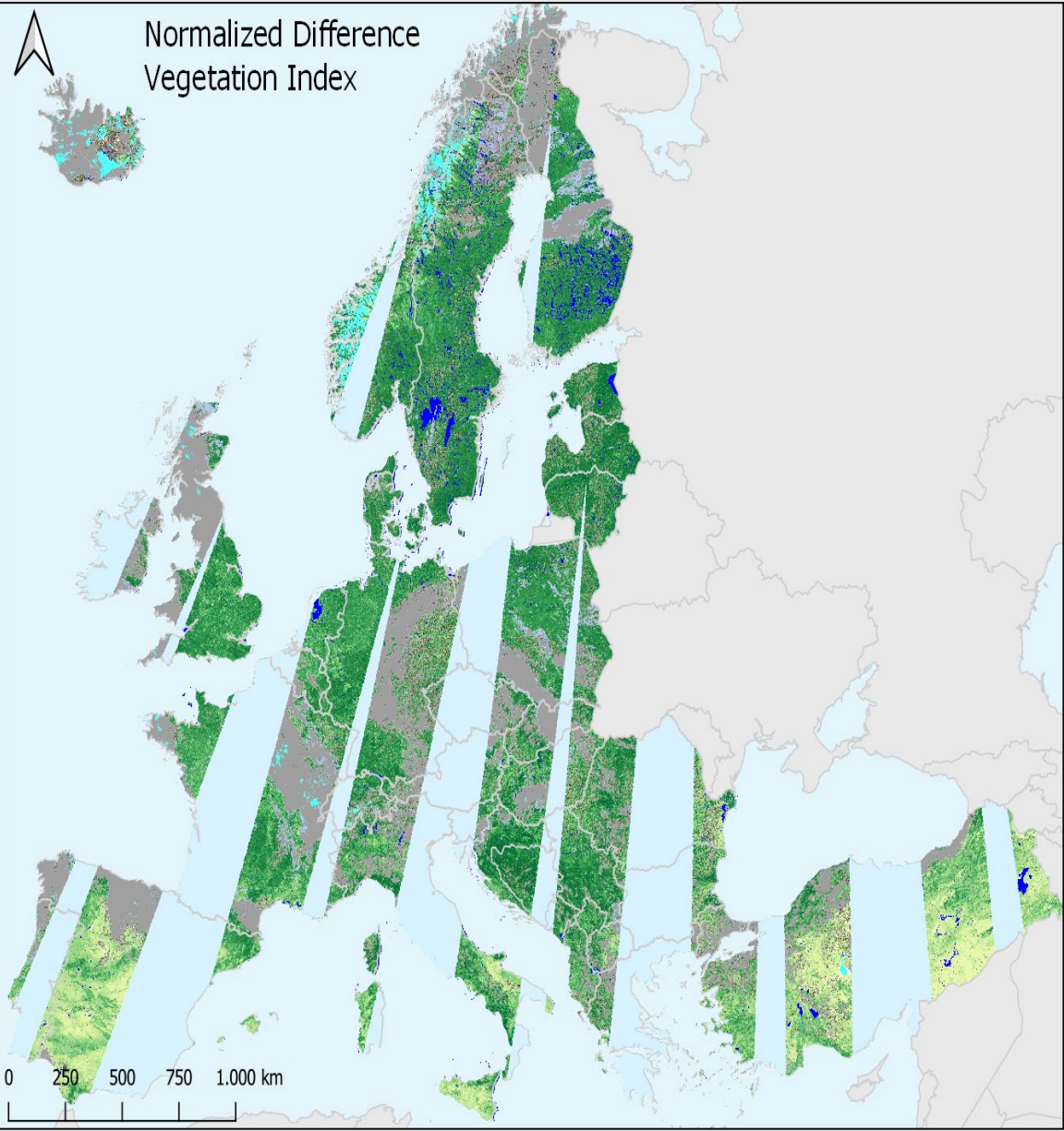
Coastal Zones Land Cover/Land Use 2012 and 2018 (vector), Europe, 6-yearly



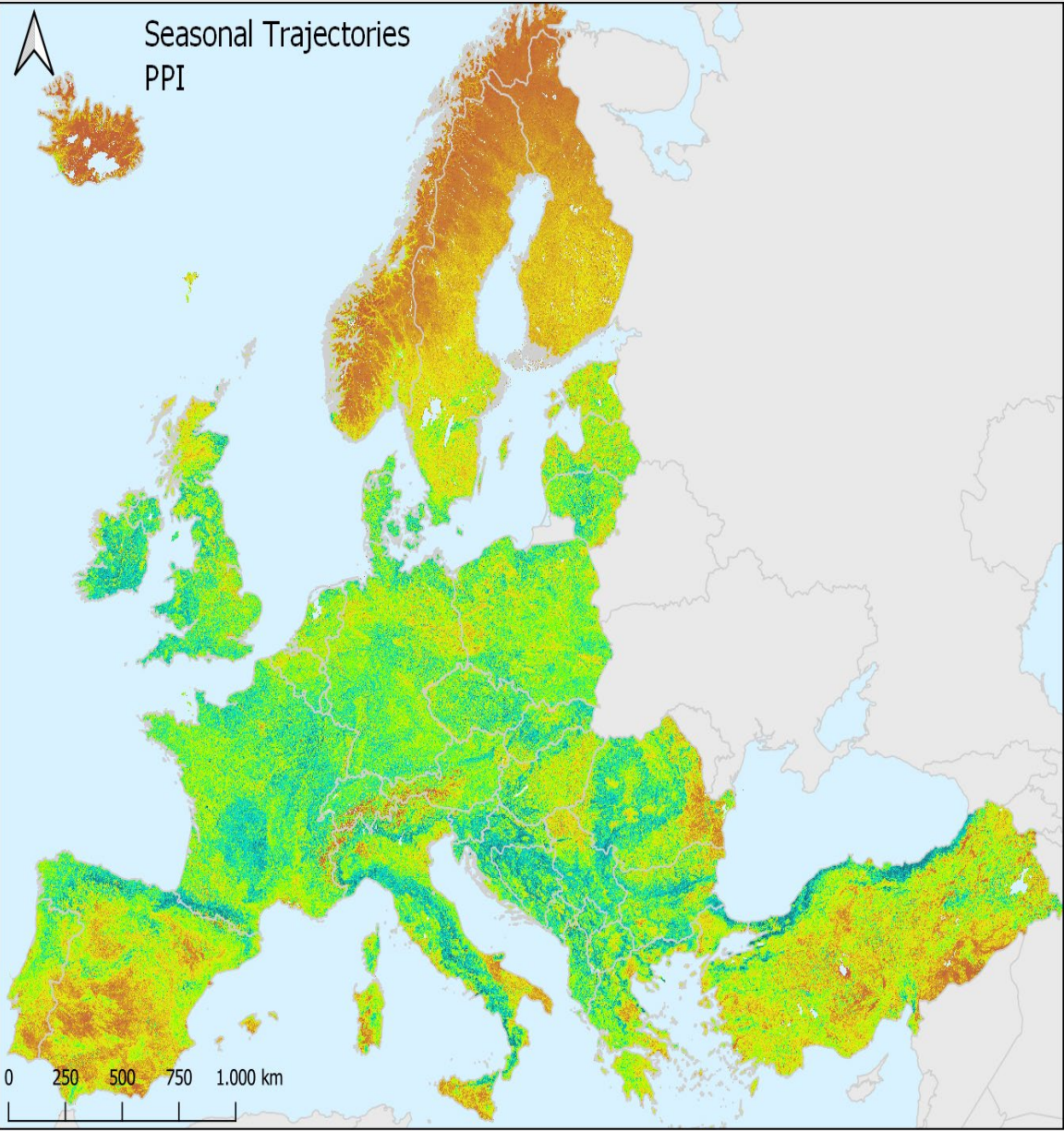
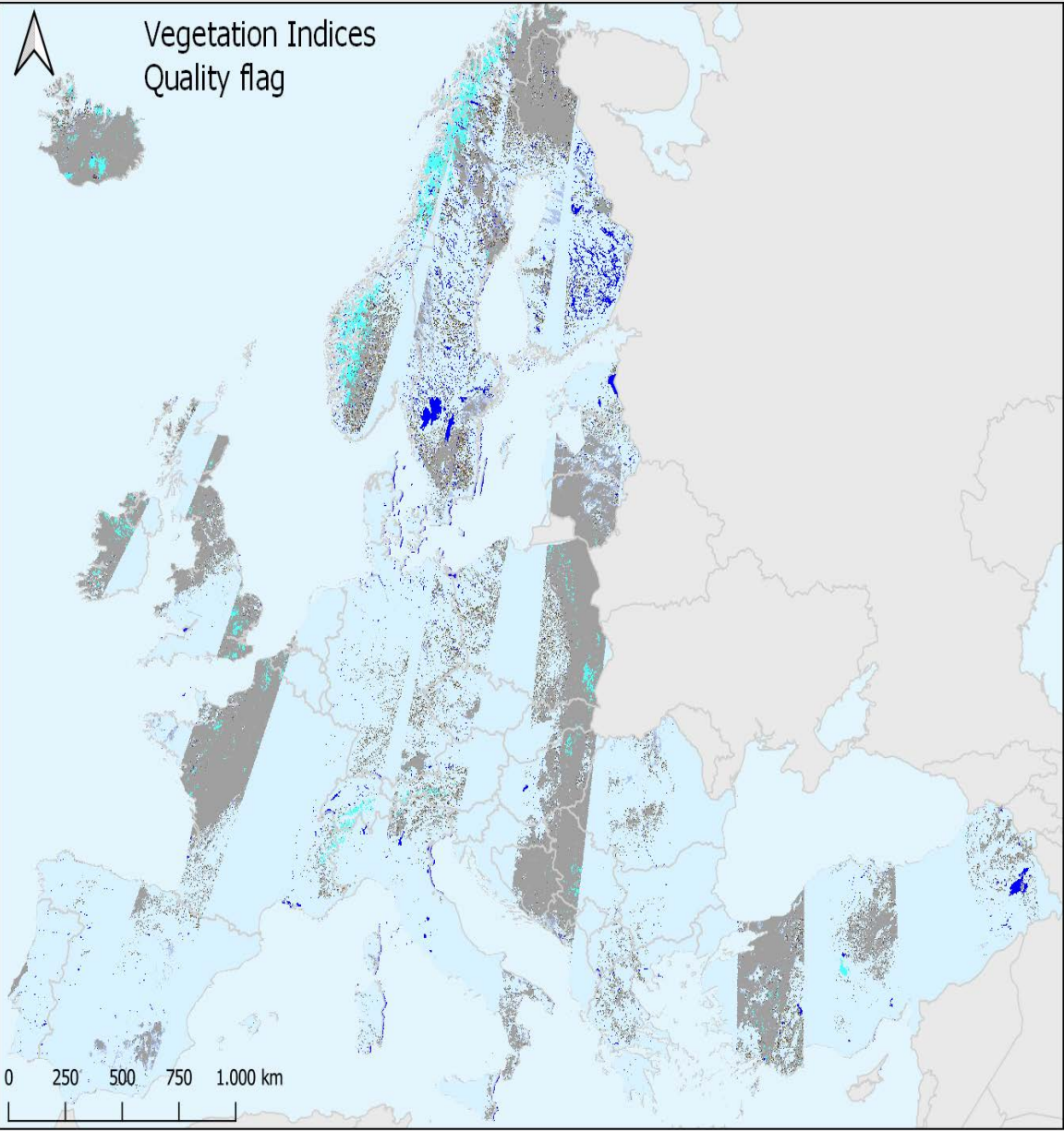
N2K Land Cover/Land Use 2012 and 2018 (vector), Europe, 6-yearly



Normalised Difference Vegetation Index 2016-present (raster 10 m), Europe, daily

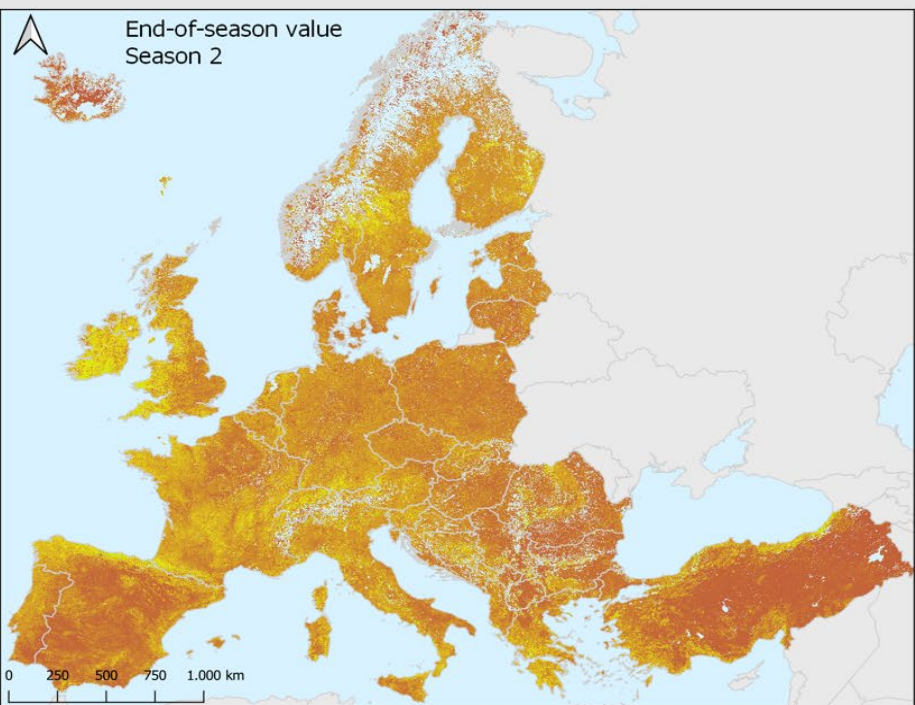
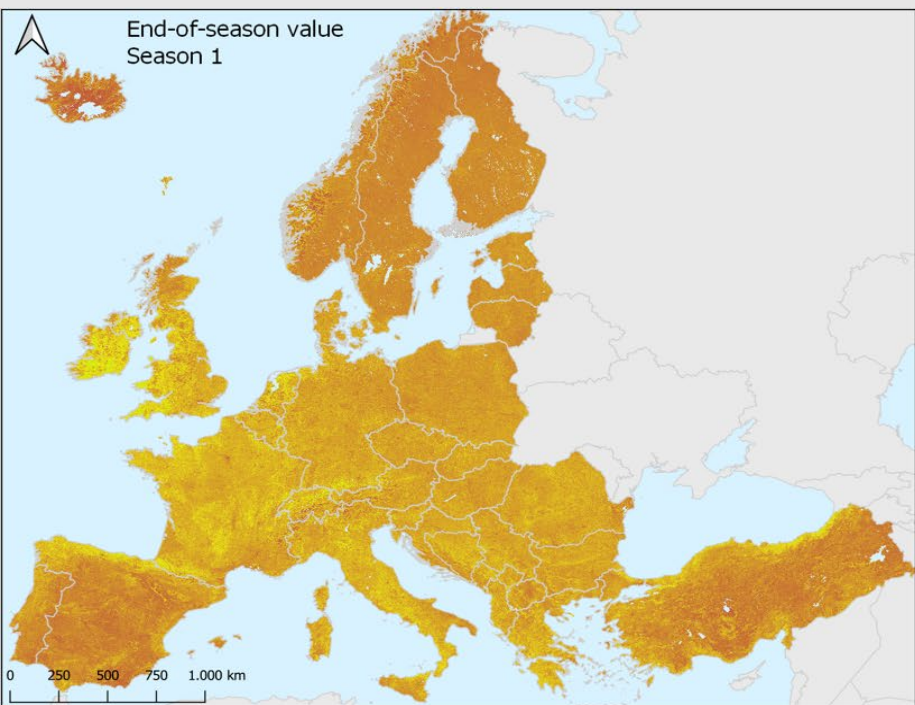
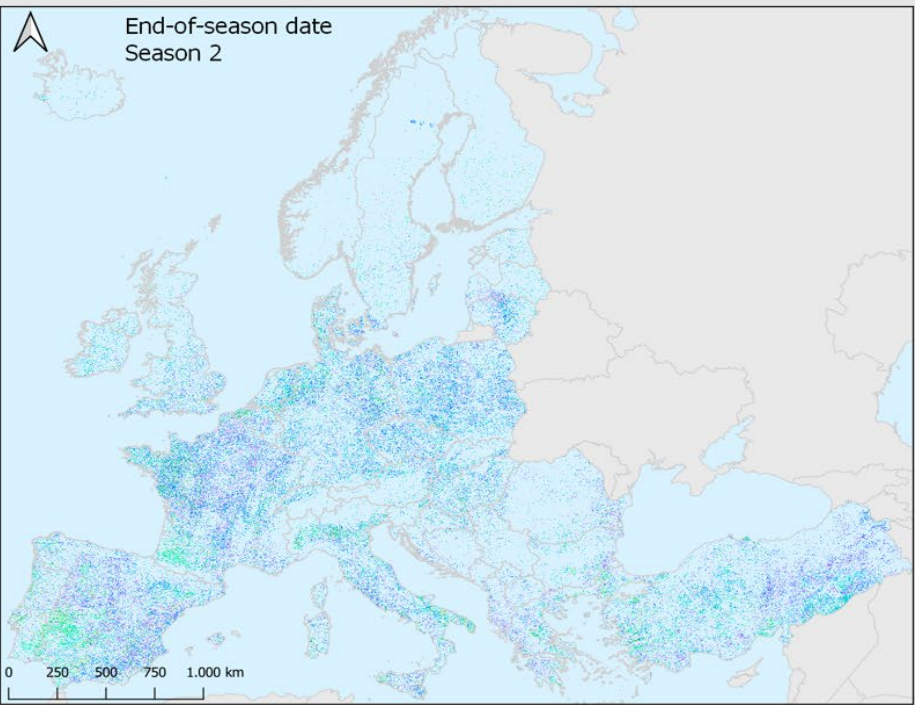
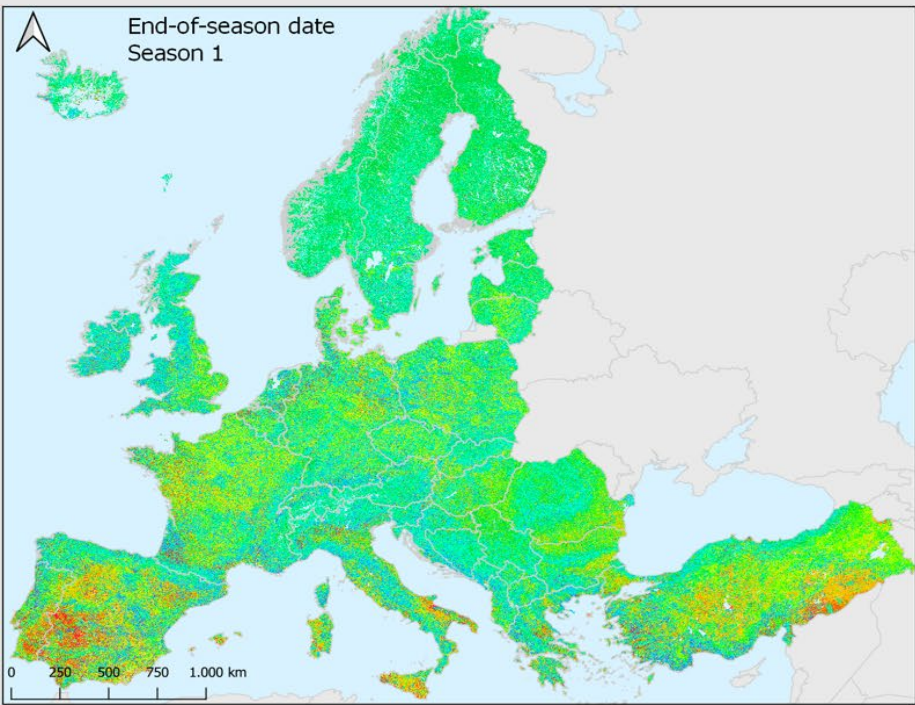


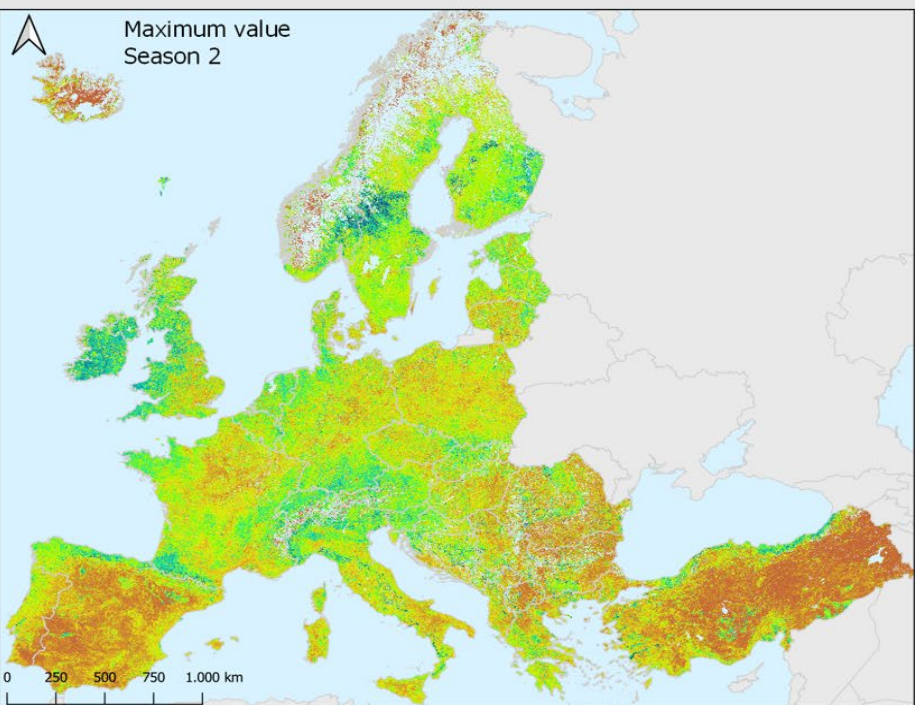
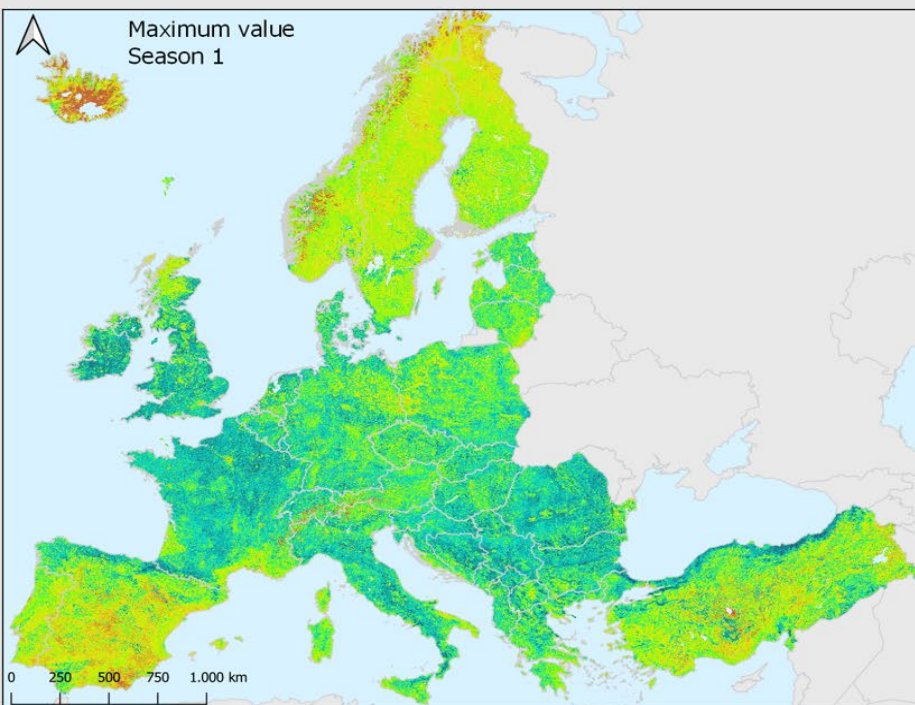
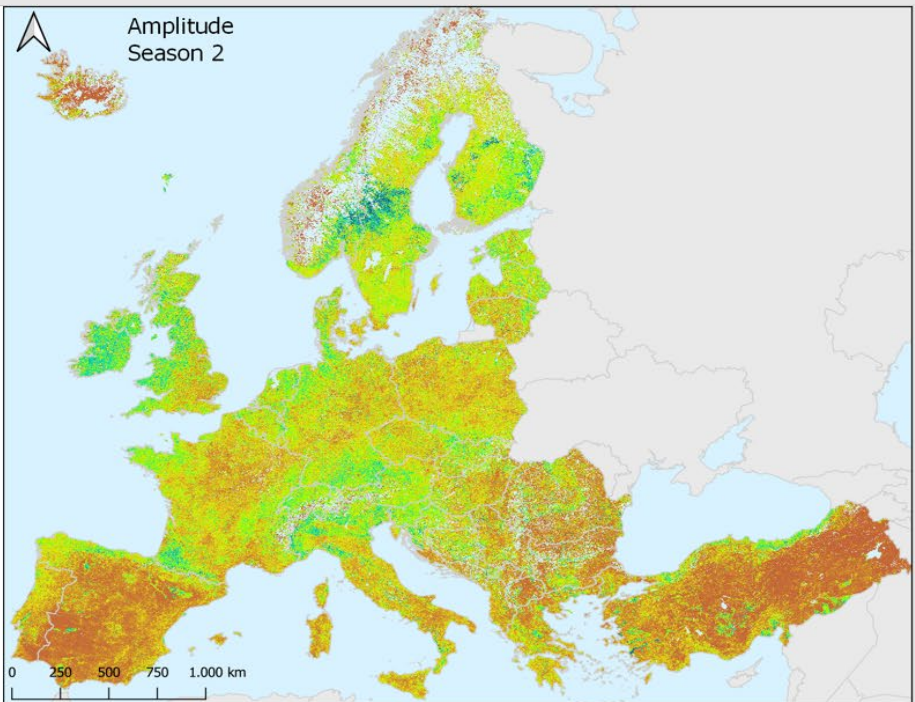
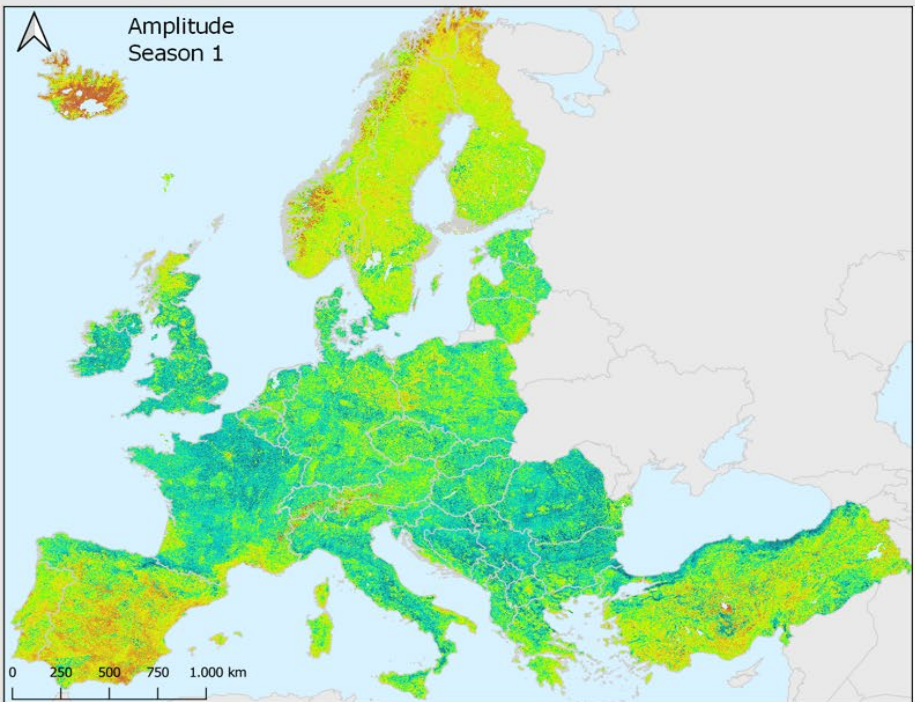
Plant Phenology Index 2016-present (raster 10 m), Europe, daily

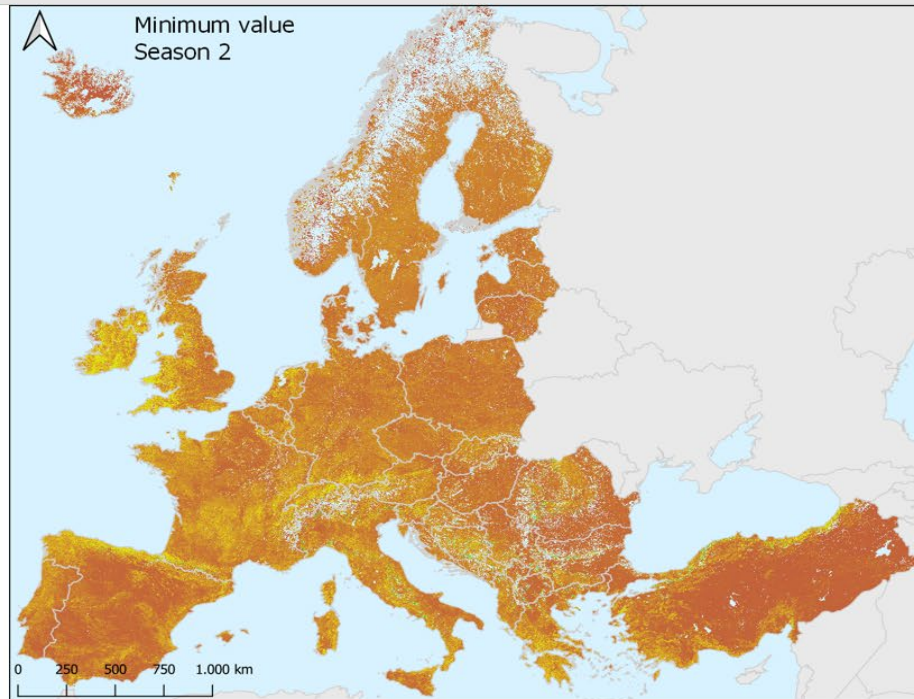
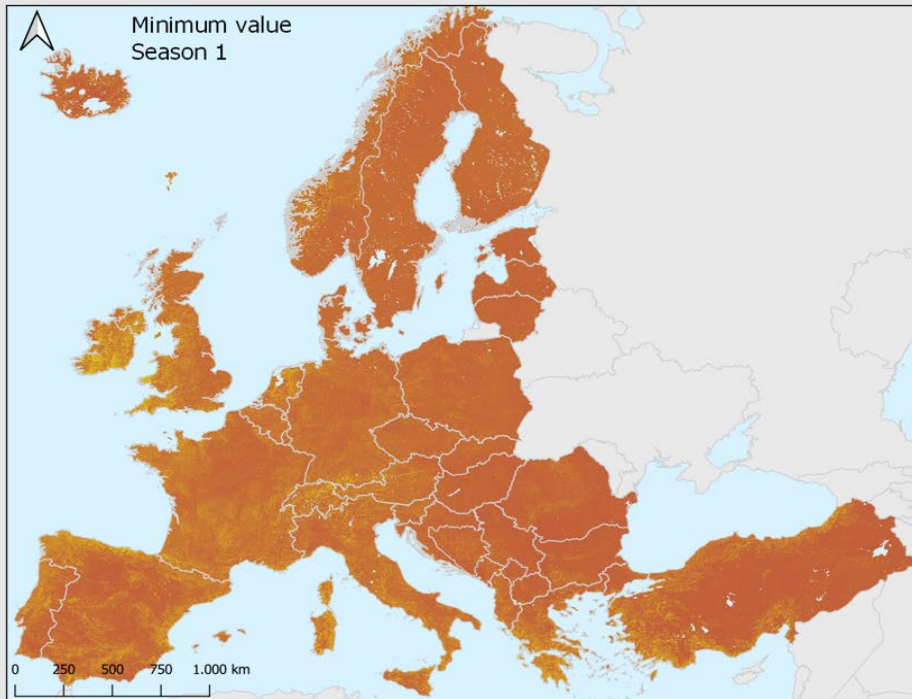
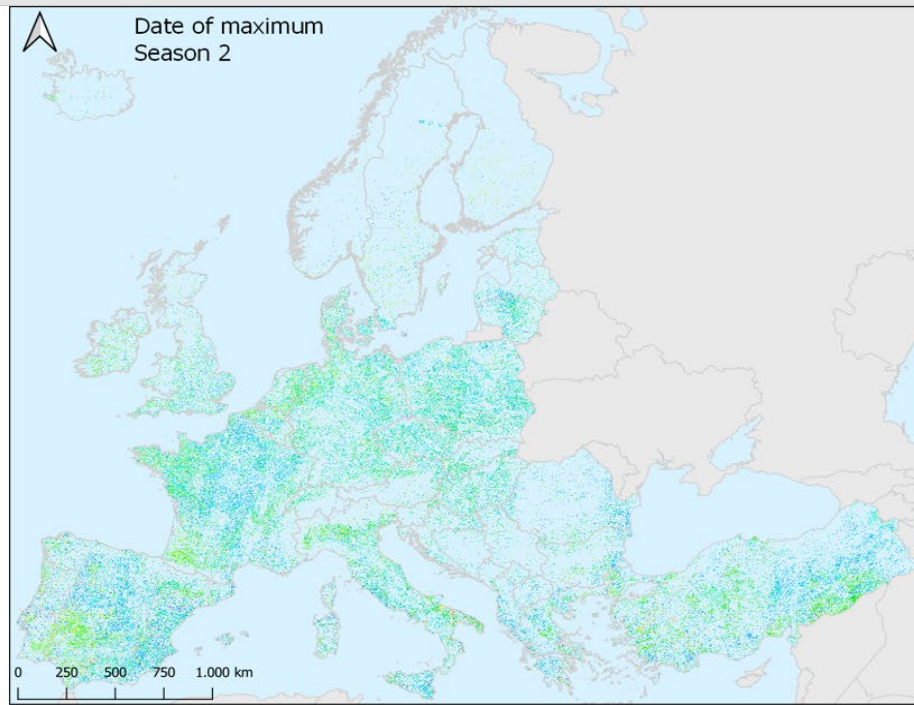
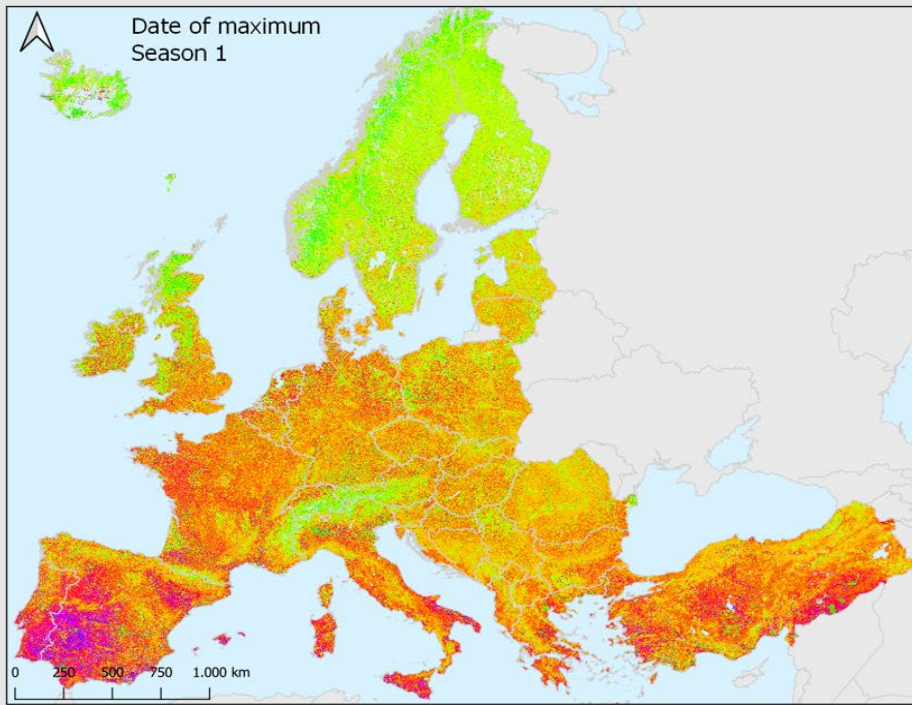


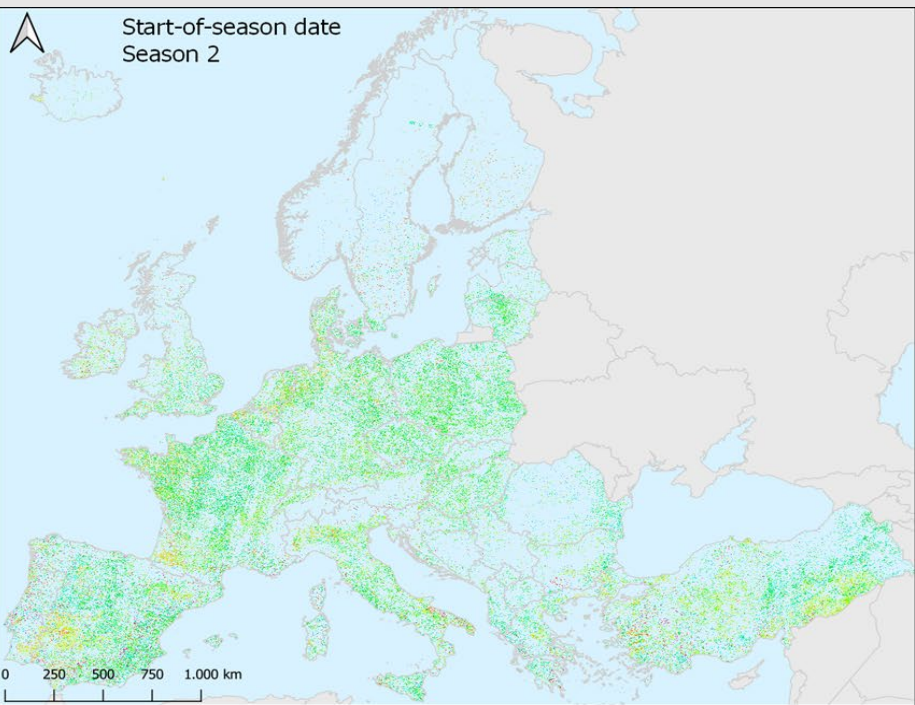
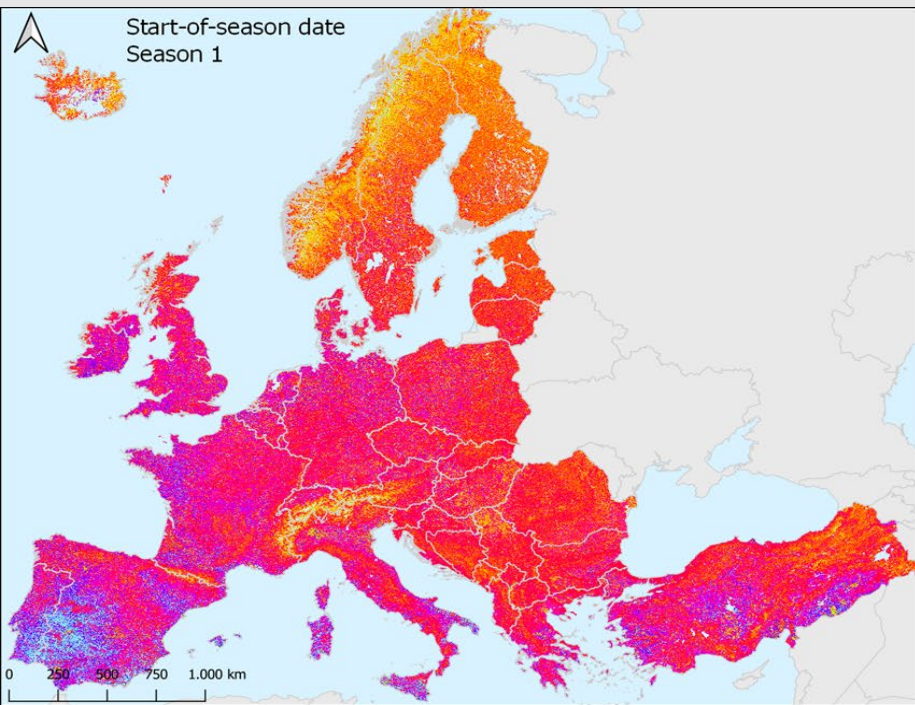
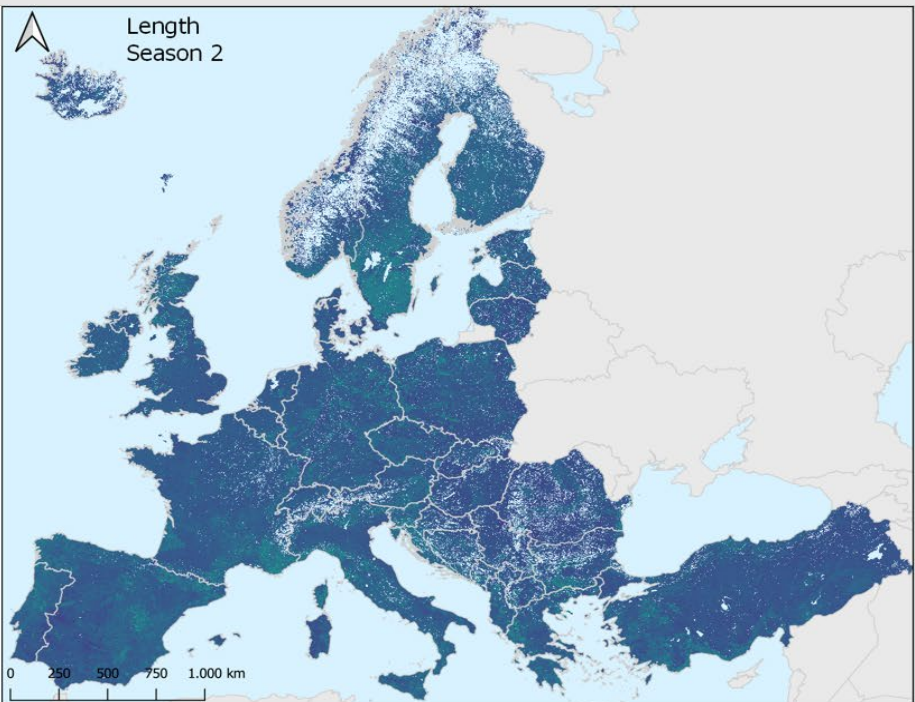
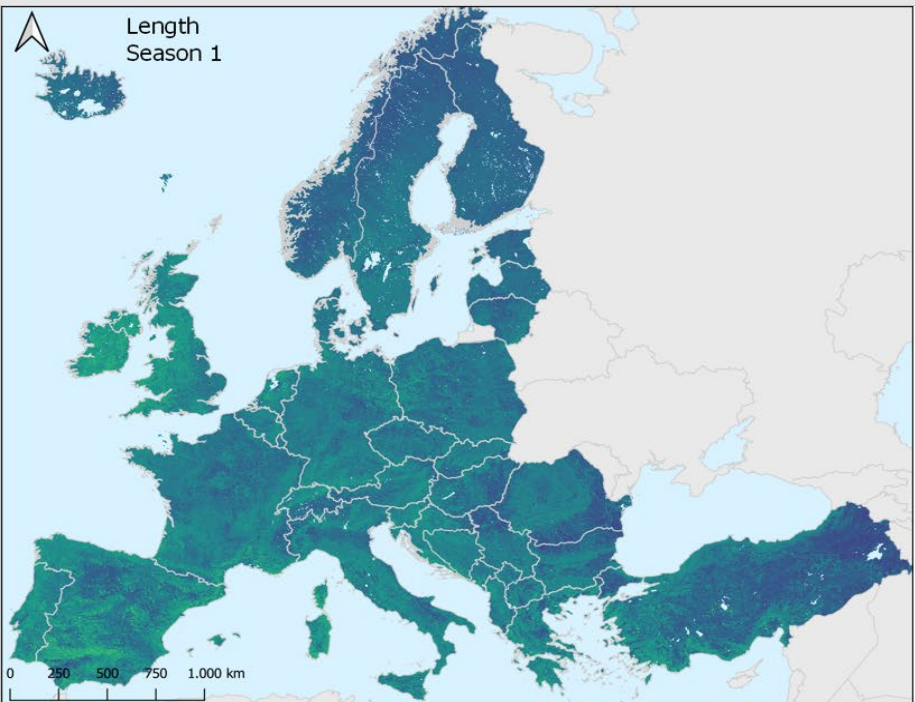
Seasonal Trajectories Quality Flag 2017-present (raster 10 m), Europe, 10-daily

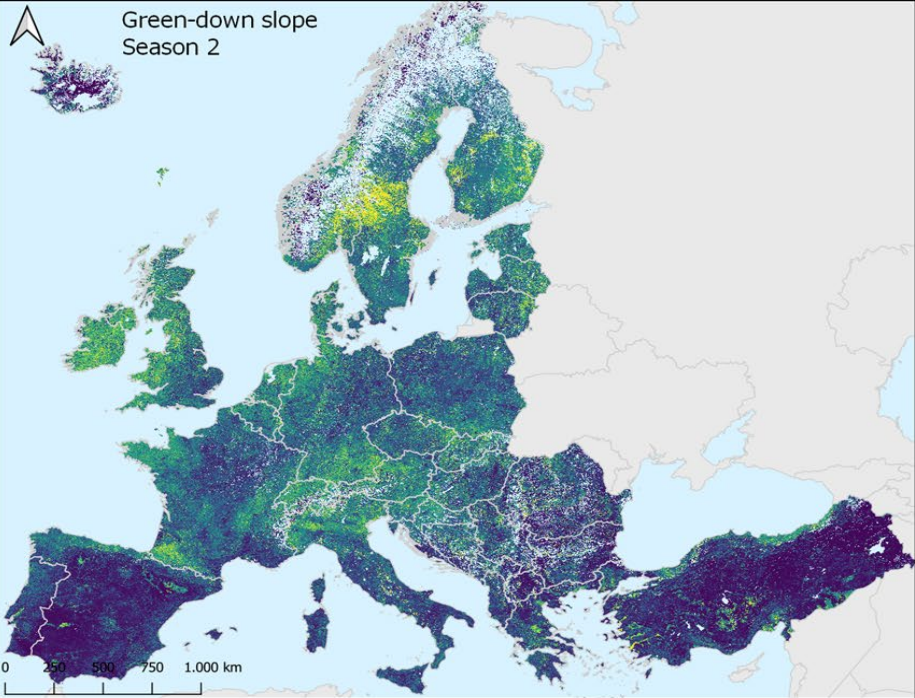
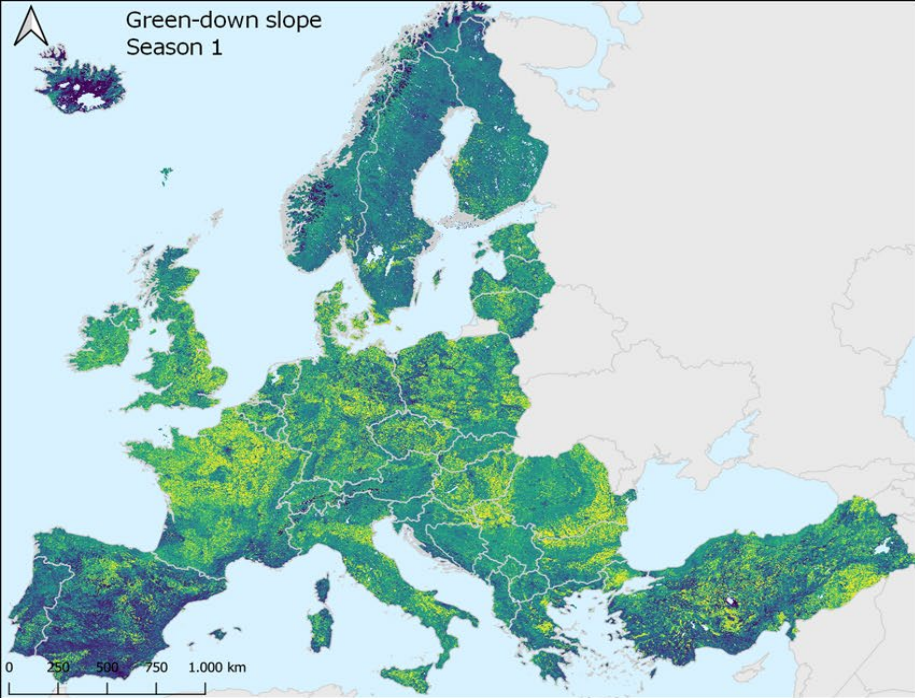
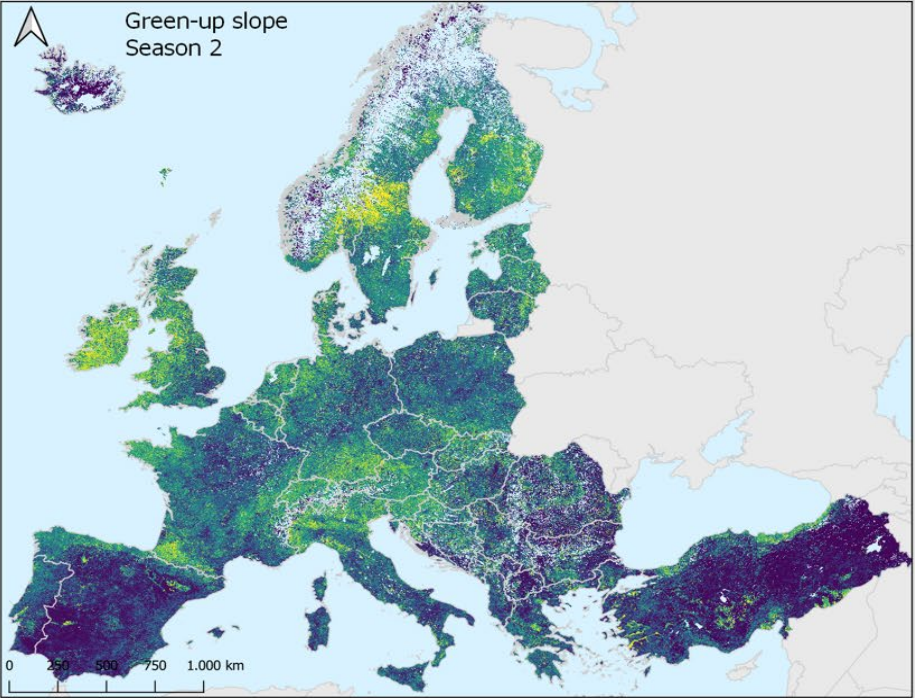
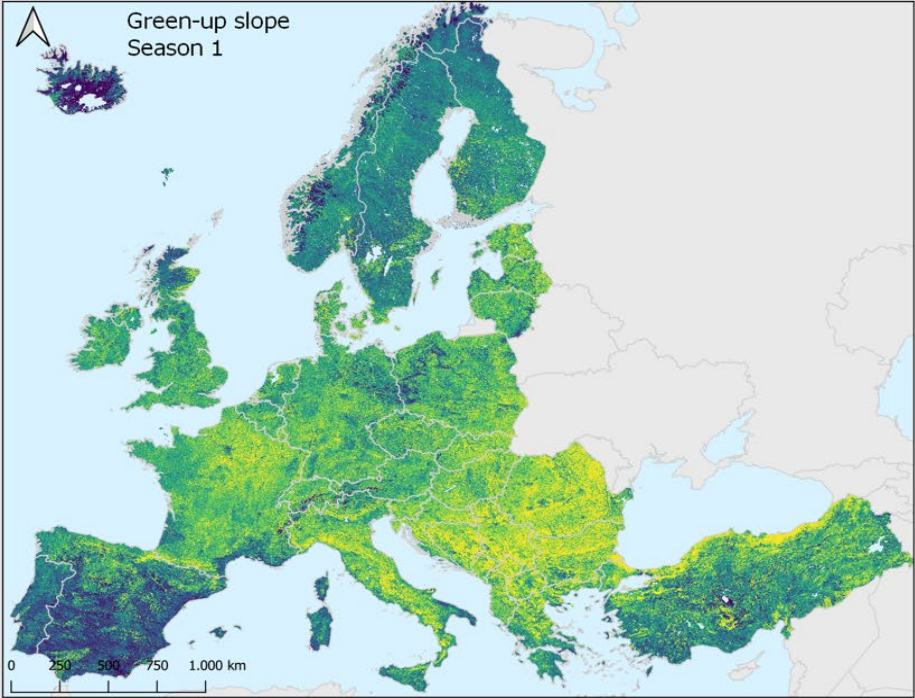


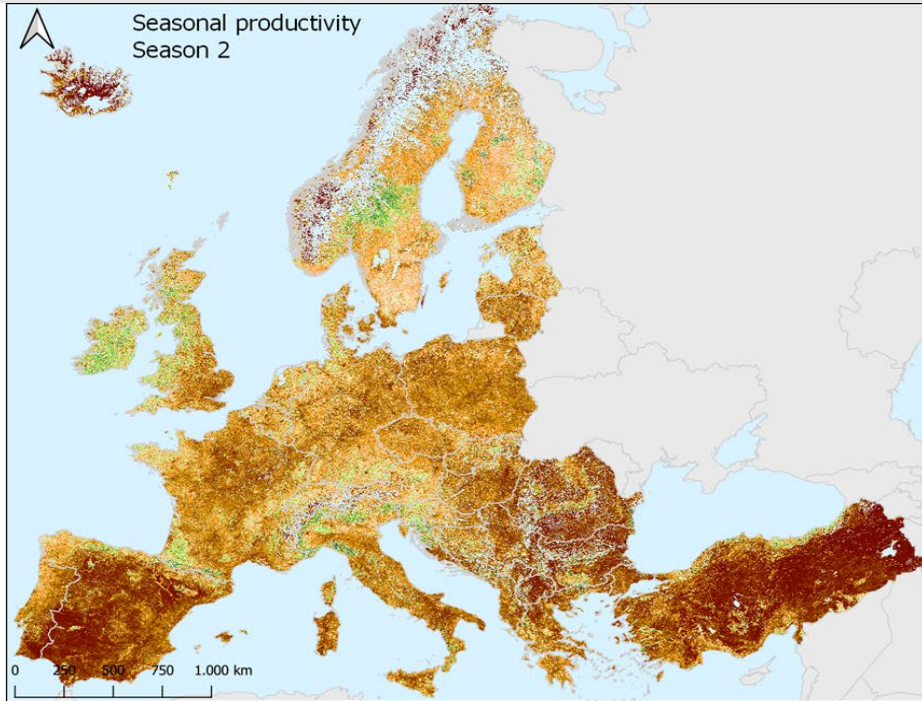
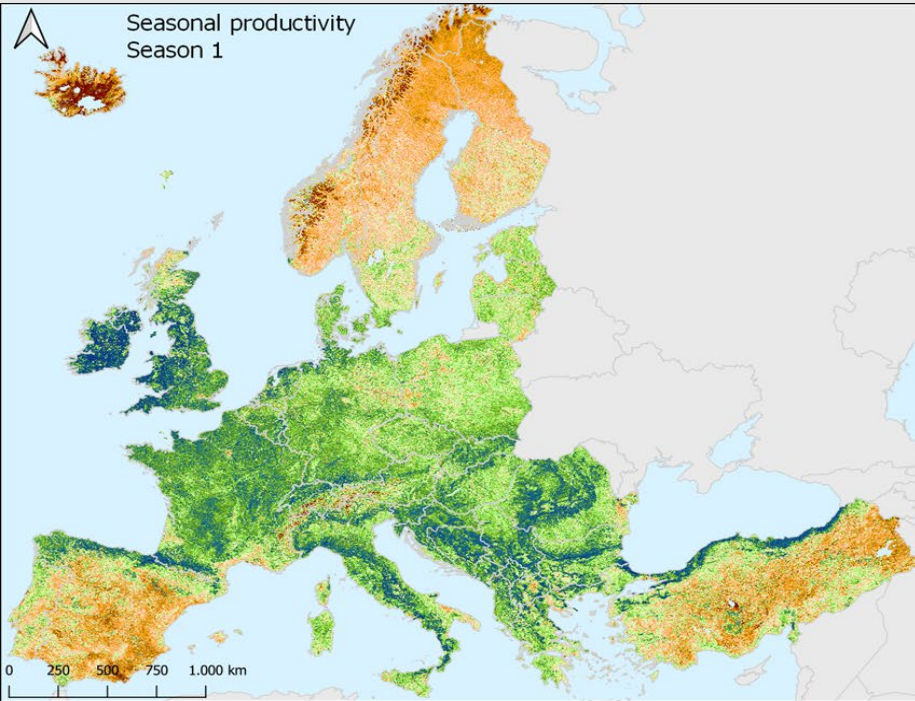
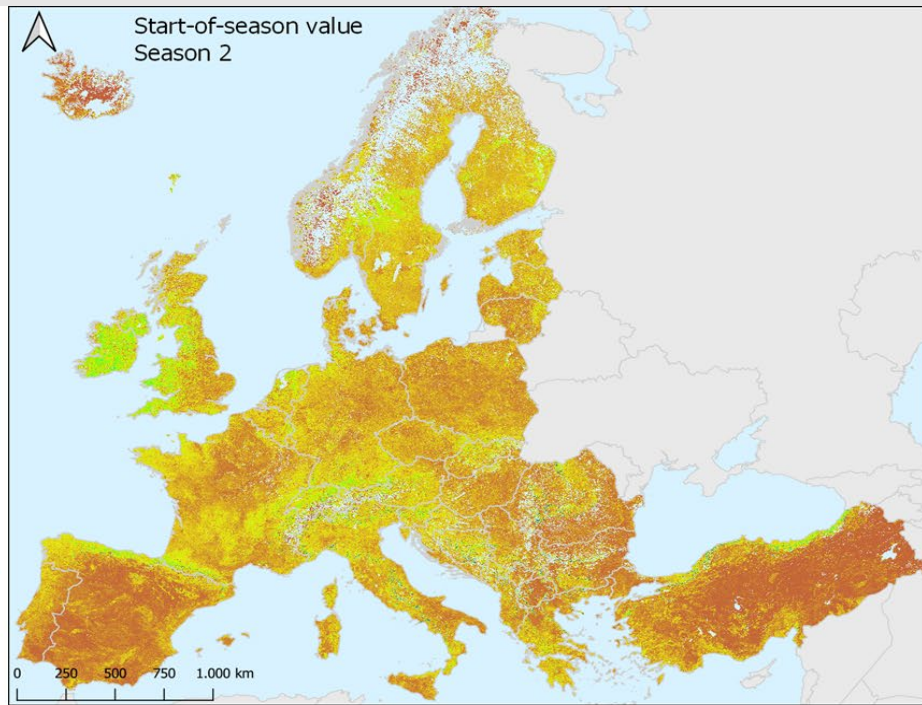
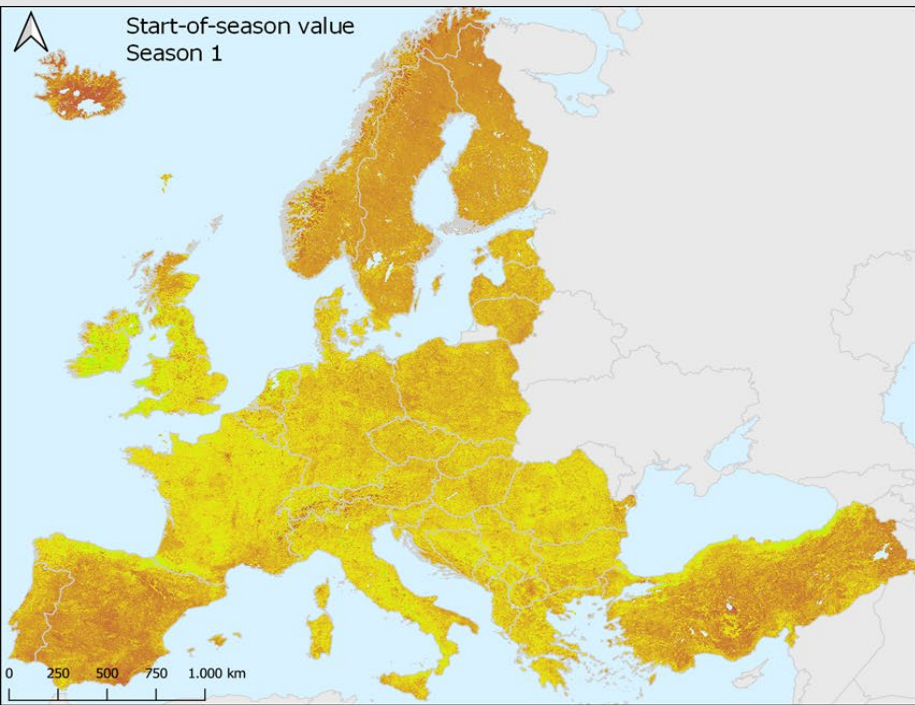


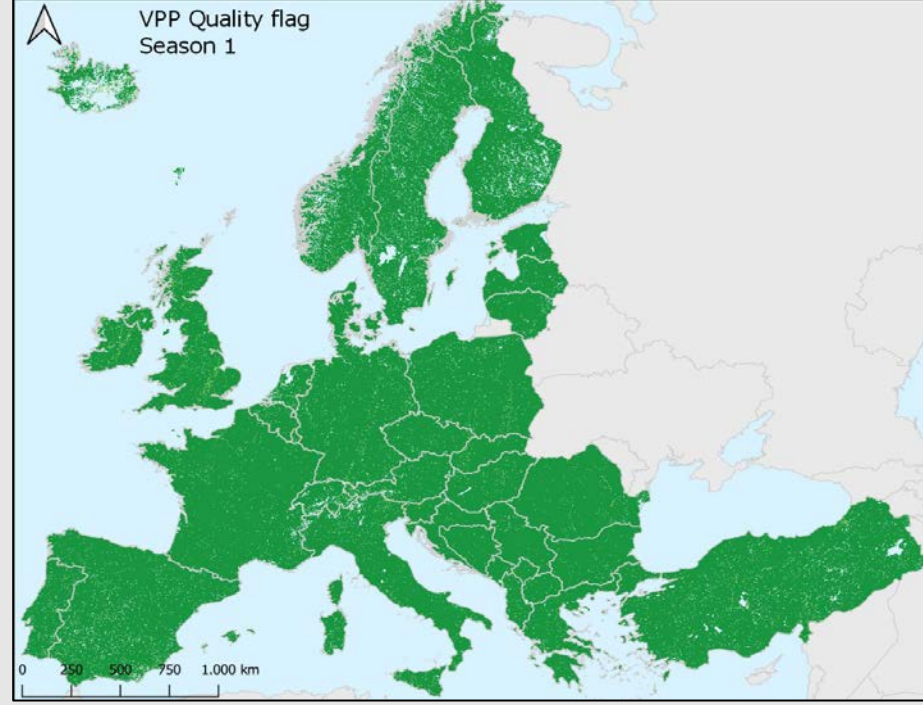
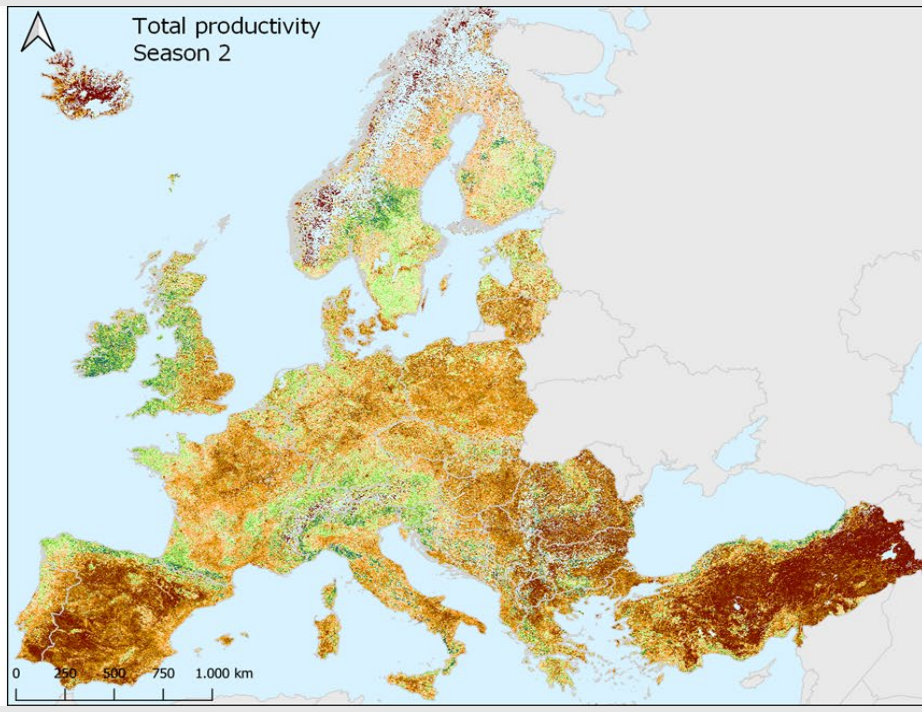
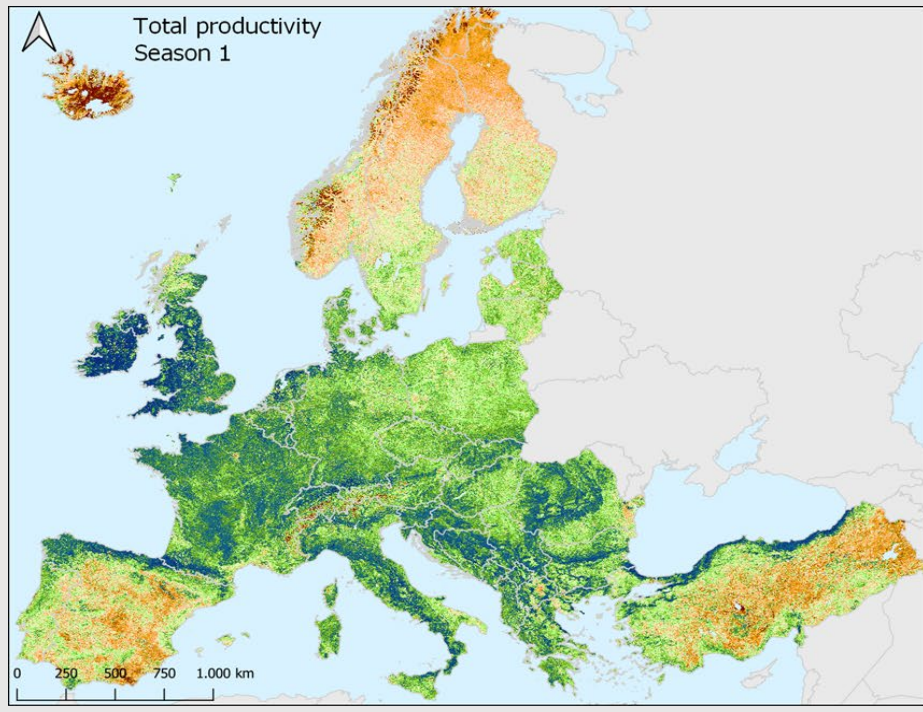




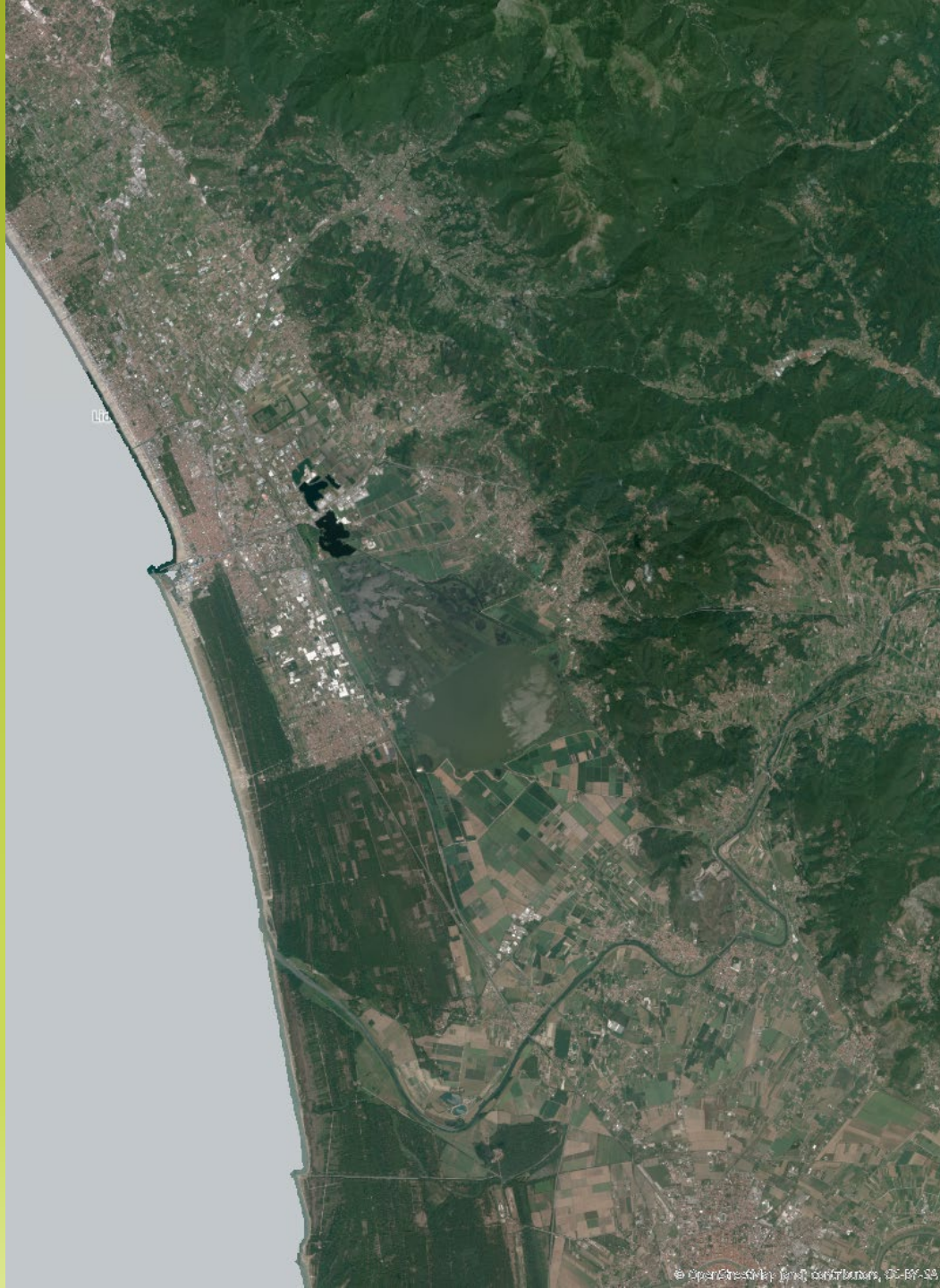








Very High Resolution Image Mosaic 2018 True Color (raster 2 m), Europe



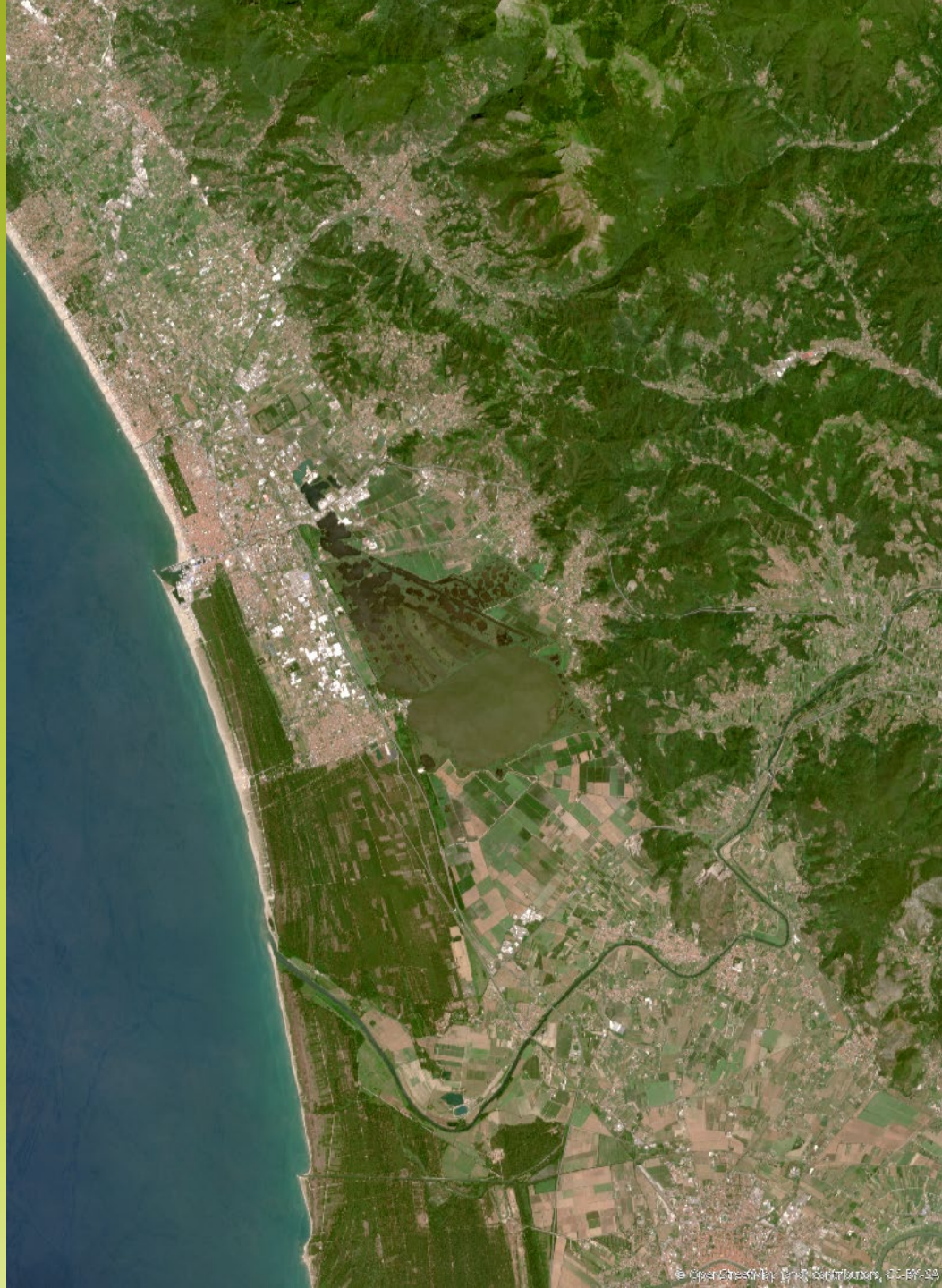
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Very High Resolution Image Mosaic 2012 True Color (raster 2.5 m), Europe

High Resolution Image Mosaic 2018 True Color (raster 10 m), Europe, 3-yearly



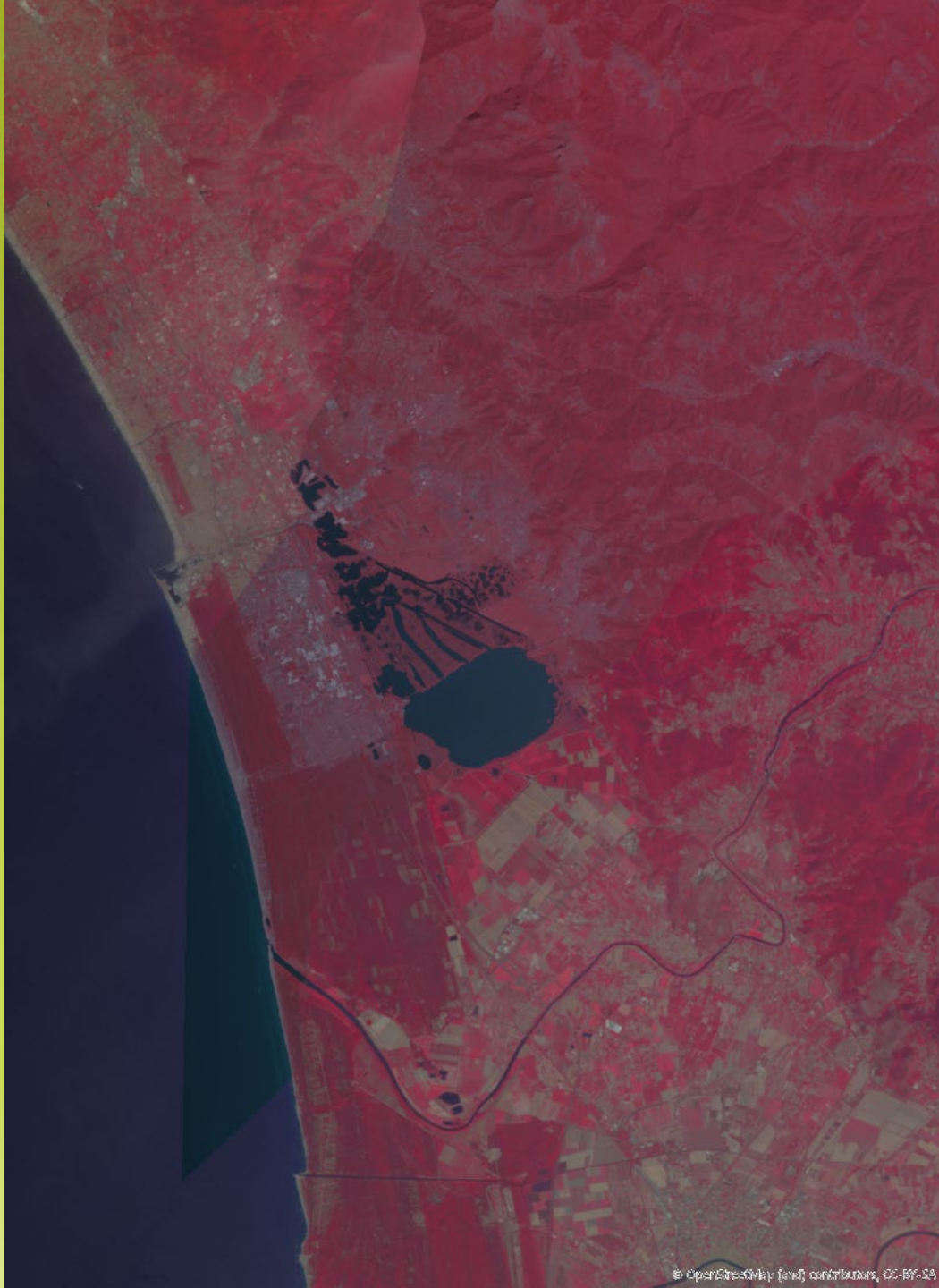
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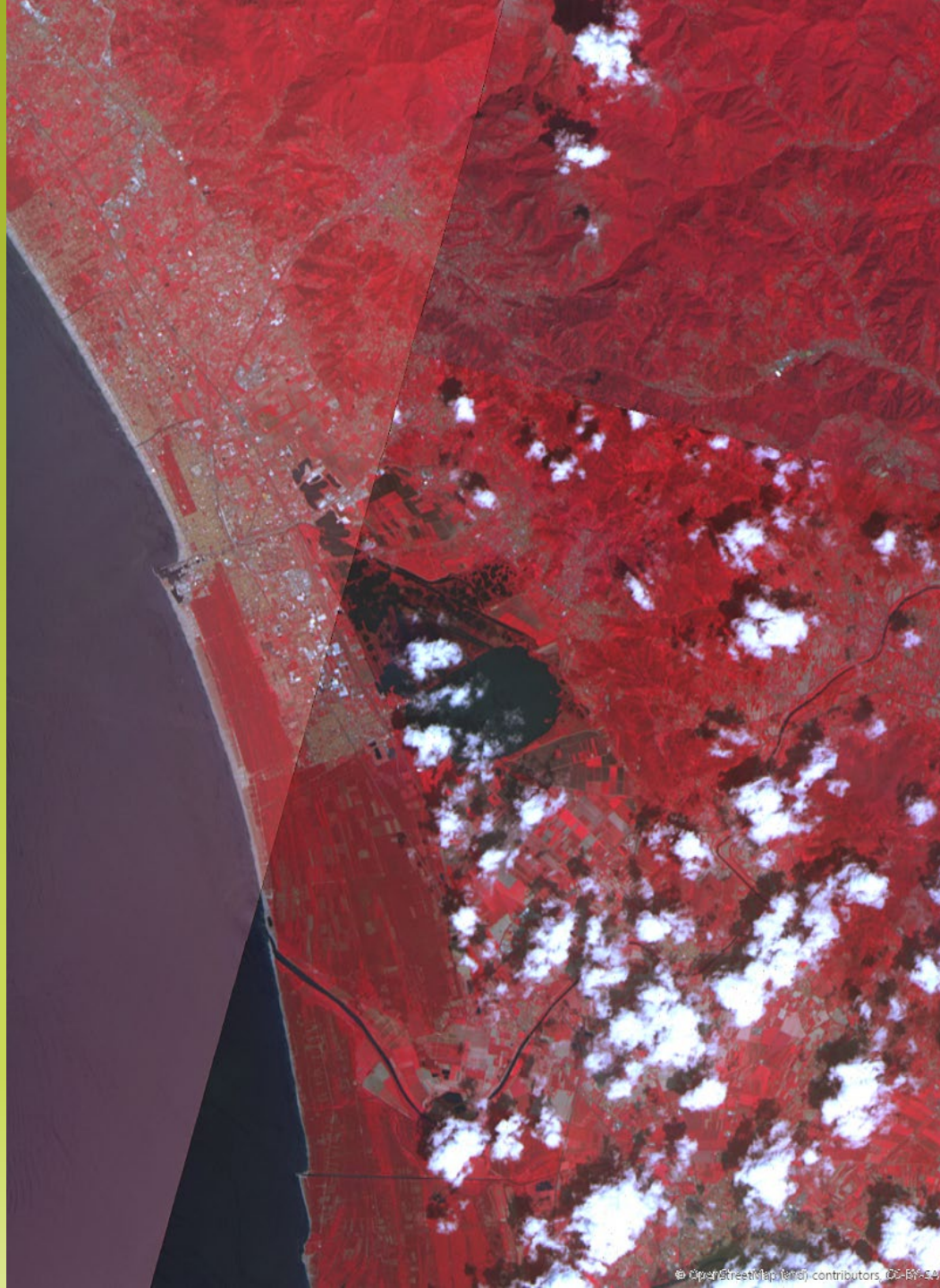
High Resolution Image Mosaic 2018 False Color (raster 10 m), Europe, 3-yearly

High Resolution Image Mosaic 2015-coverage 1 False Color (raster 20 m), Europe, 3-yearly



High Resolution Image Mosaic 2015-coverage 2 False Color (raster 20 m), Europe, 3-yearly

High Resolution Image Mosaic 2012-coverage 1 False Color (raster 20 m), Europe, 3-yearly



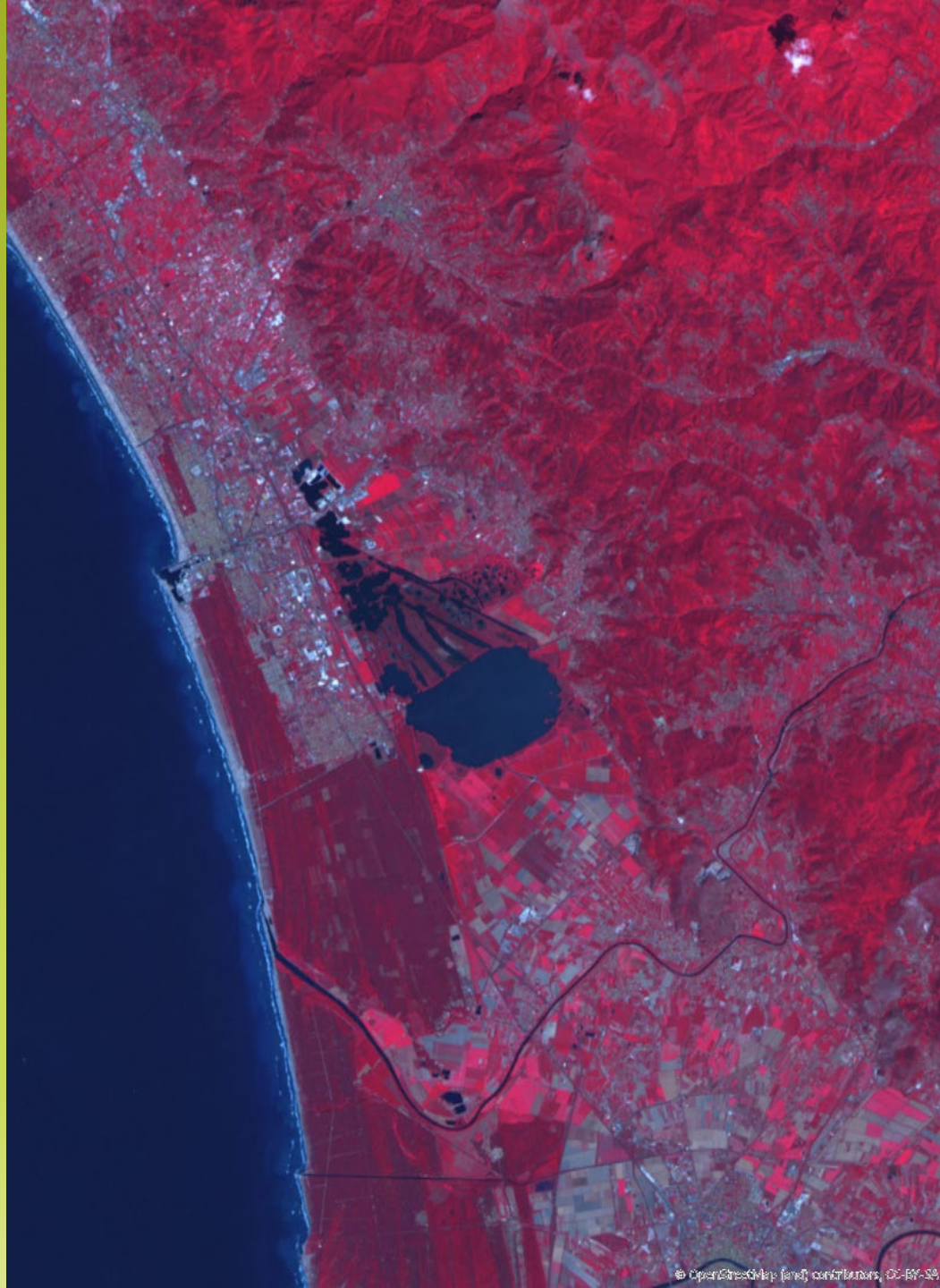
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High Resolution Image Mosaic 2009-coverage 1 False Color (raster 20 m), Europe, 3-yearly

High Resolution Image Mosaic 2006-coverage 1 False Color (raster 20 m), Europe, 3-yearly



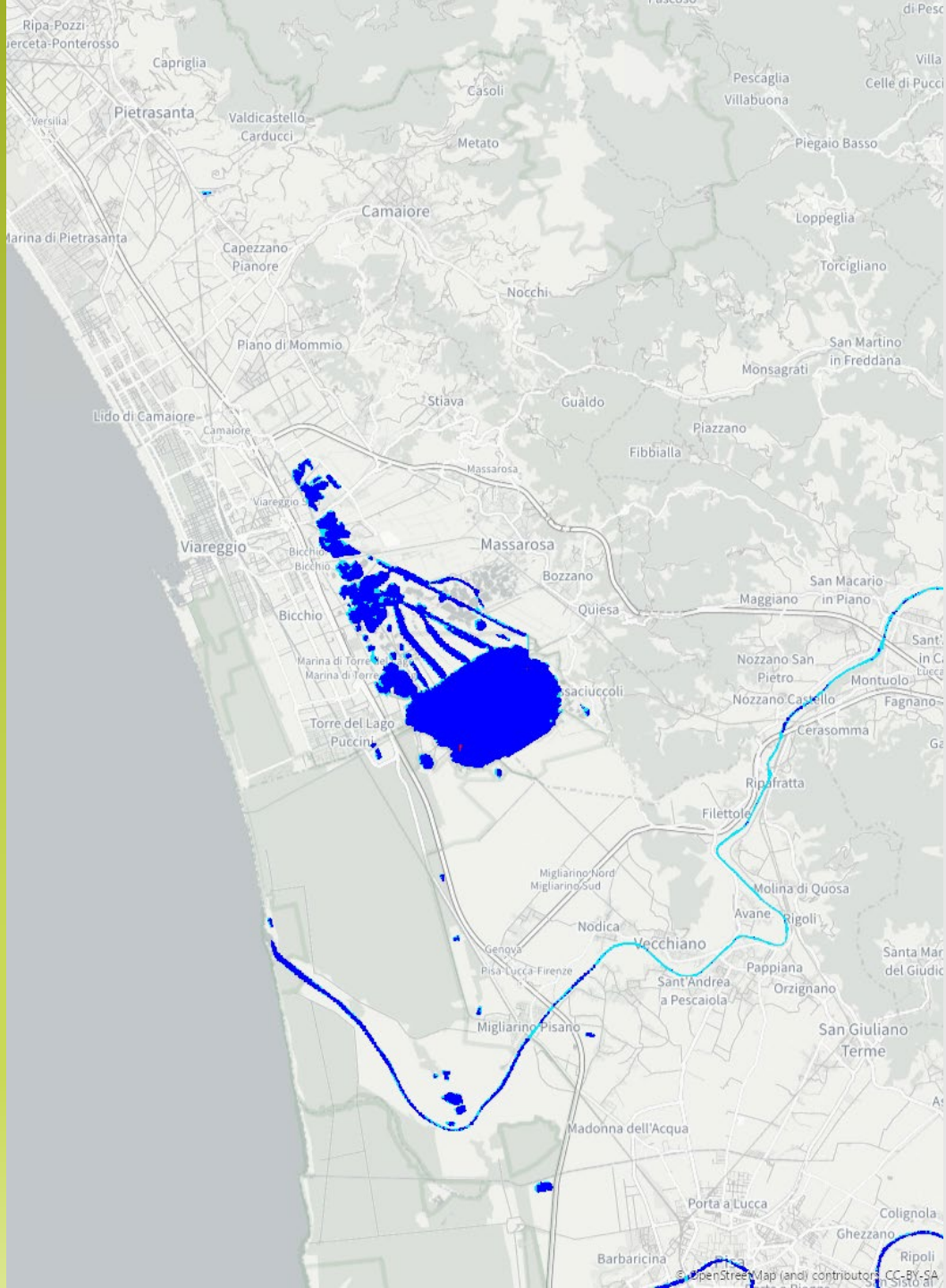
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High Resolution Image Mosaic 2006-coverage 2 False Color (raster 20 m), Europe, 3-yearly

River and Lake Ice Extent 2016-present (raster 20 m), Europe, daily

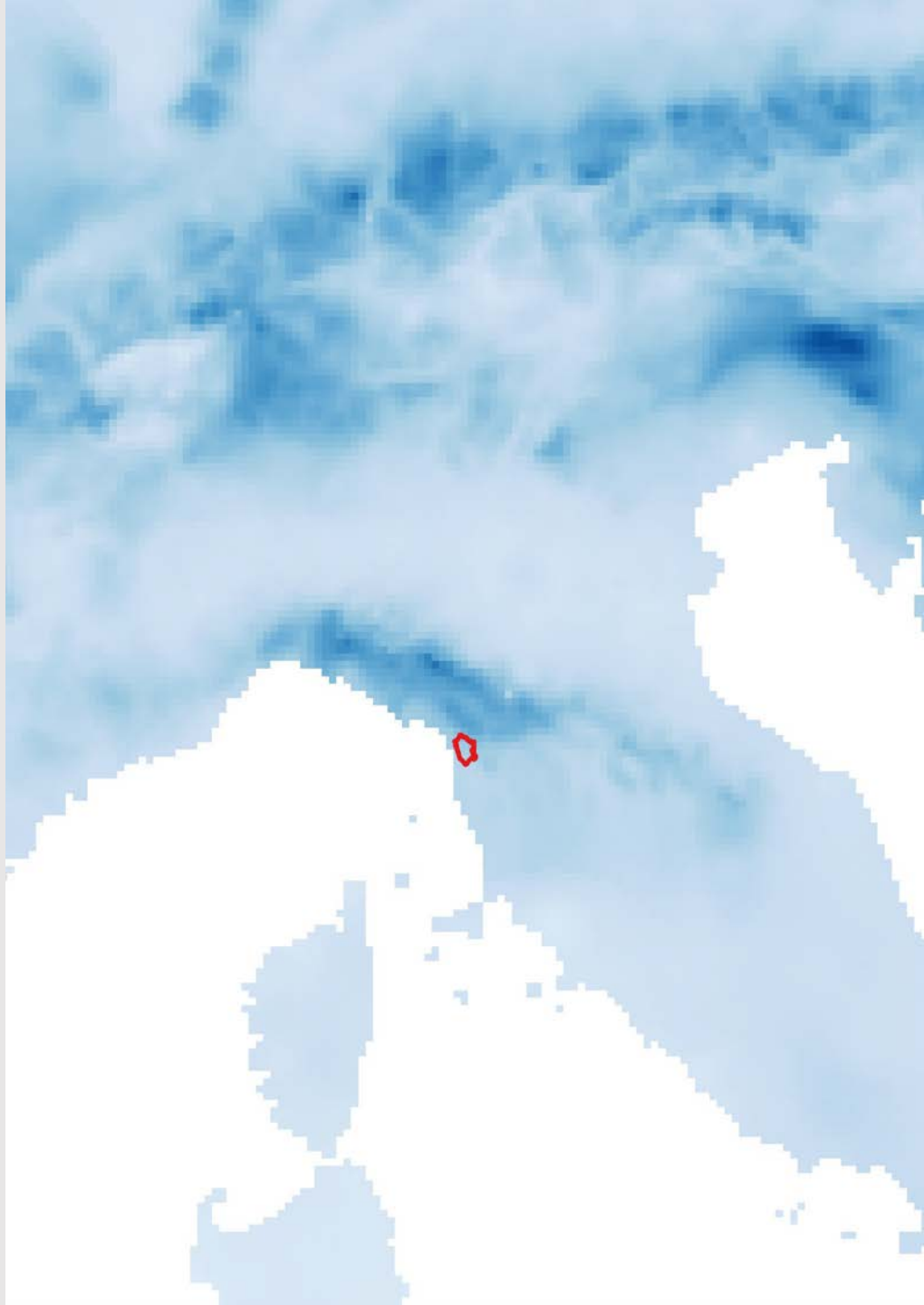
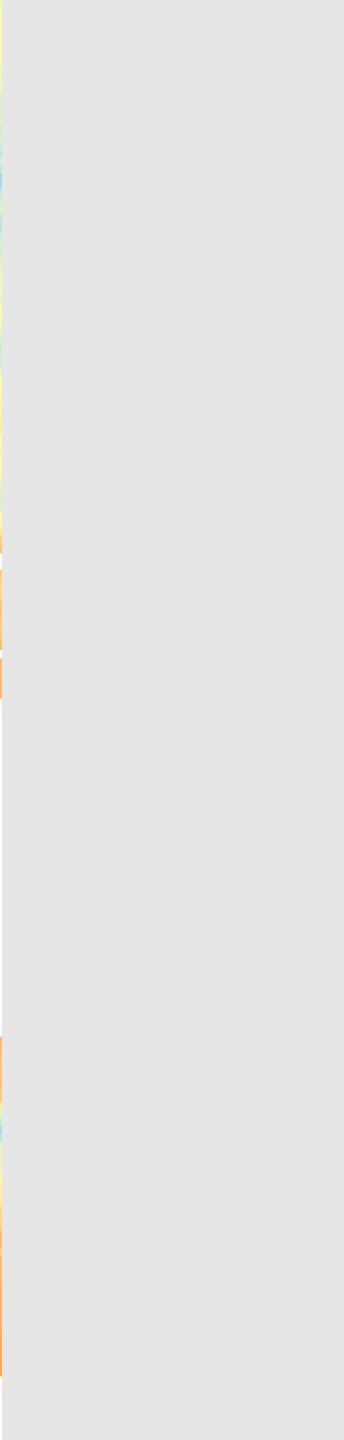
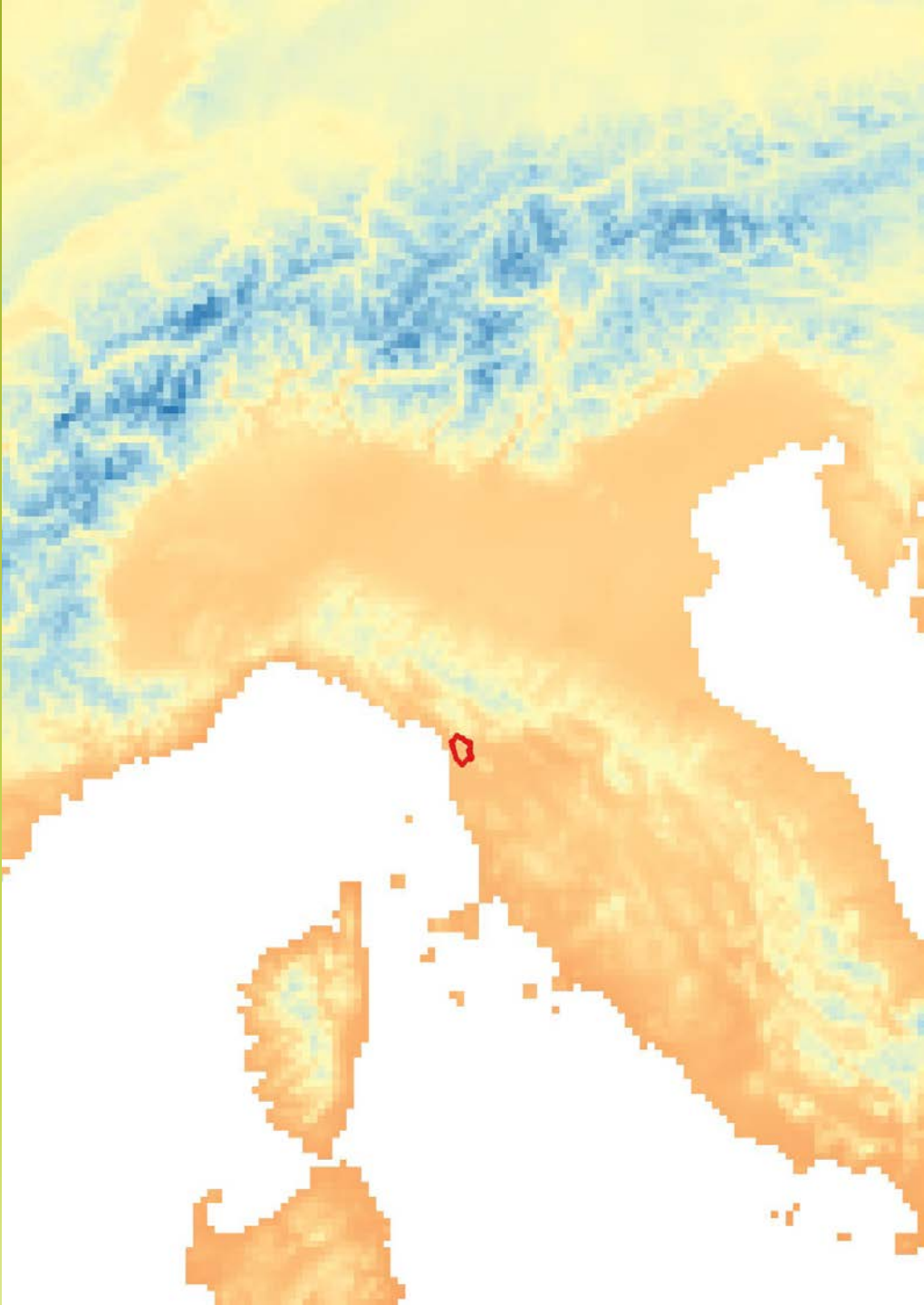




Copernicus

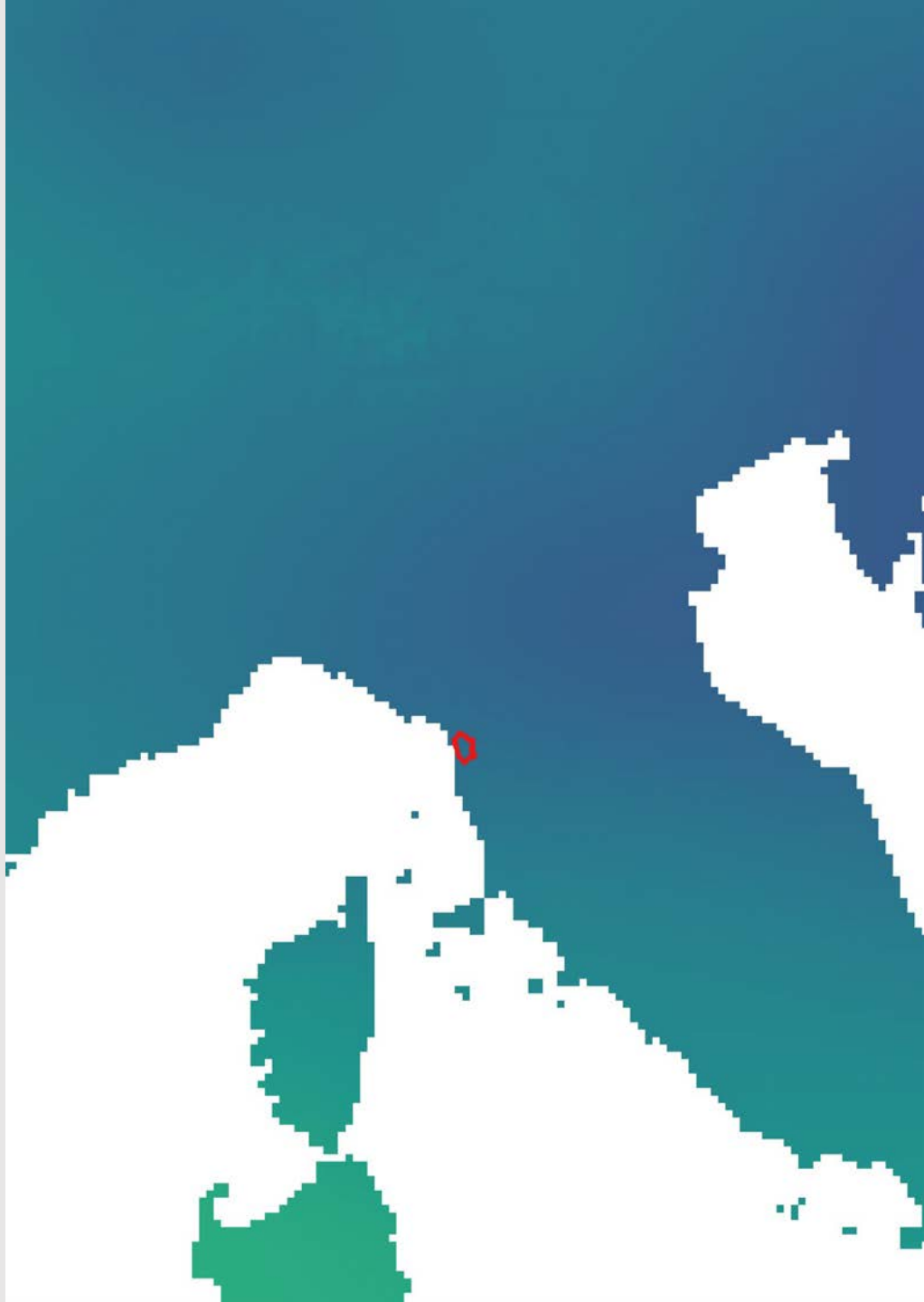
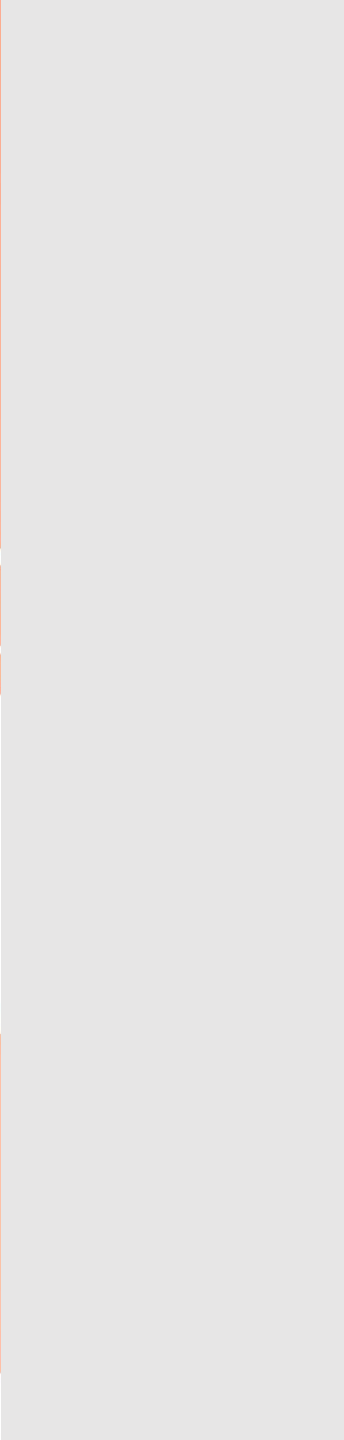
Climate Change Service (CCCS)

Temperature and precipitation climate impact indicators from 1970 to 2100 derived from European climate projections - 2m air temperature (Absolute values, Historical and RCP 4.5 - 8.5)



Temperature and precipitation climate impact indicators from 1970 to 2100 derived from European climate projections - Precipitation (Absolute values, Historical and RCP 4.5 - 8.5)

Water sector indicators of hydrological change across Europe from 2011 to 2095 derived - from climate simulations
Air temperature (absolute change from the reference period, Historical and RCP 4.5 - 8.5)



Water sector indicators of hydrological change across Europe from 2011 to 2095 derived from climate simulations
Potential evapotranspiration (relative change from the reference period, Historical and RCP 4.5 - 8.5)

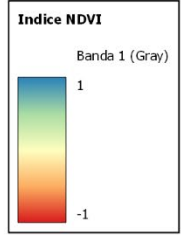
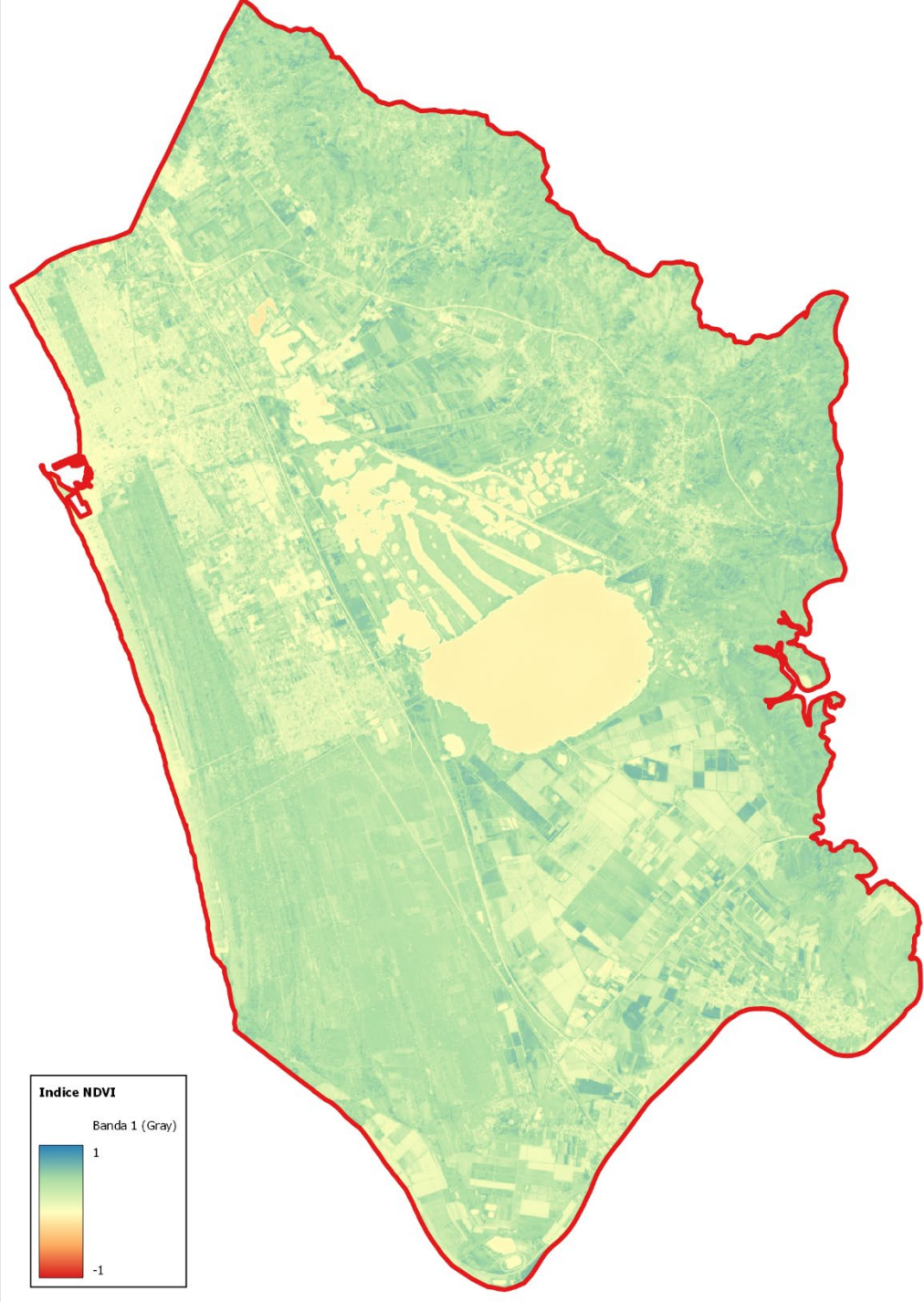
Water sector indicators of hydrological change across Europe from 2011 to 2095 derived from climate simulations
Precipitation men annual (relative change from the reference period, Historical and RCP 4.5 - 8.5)





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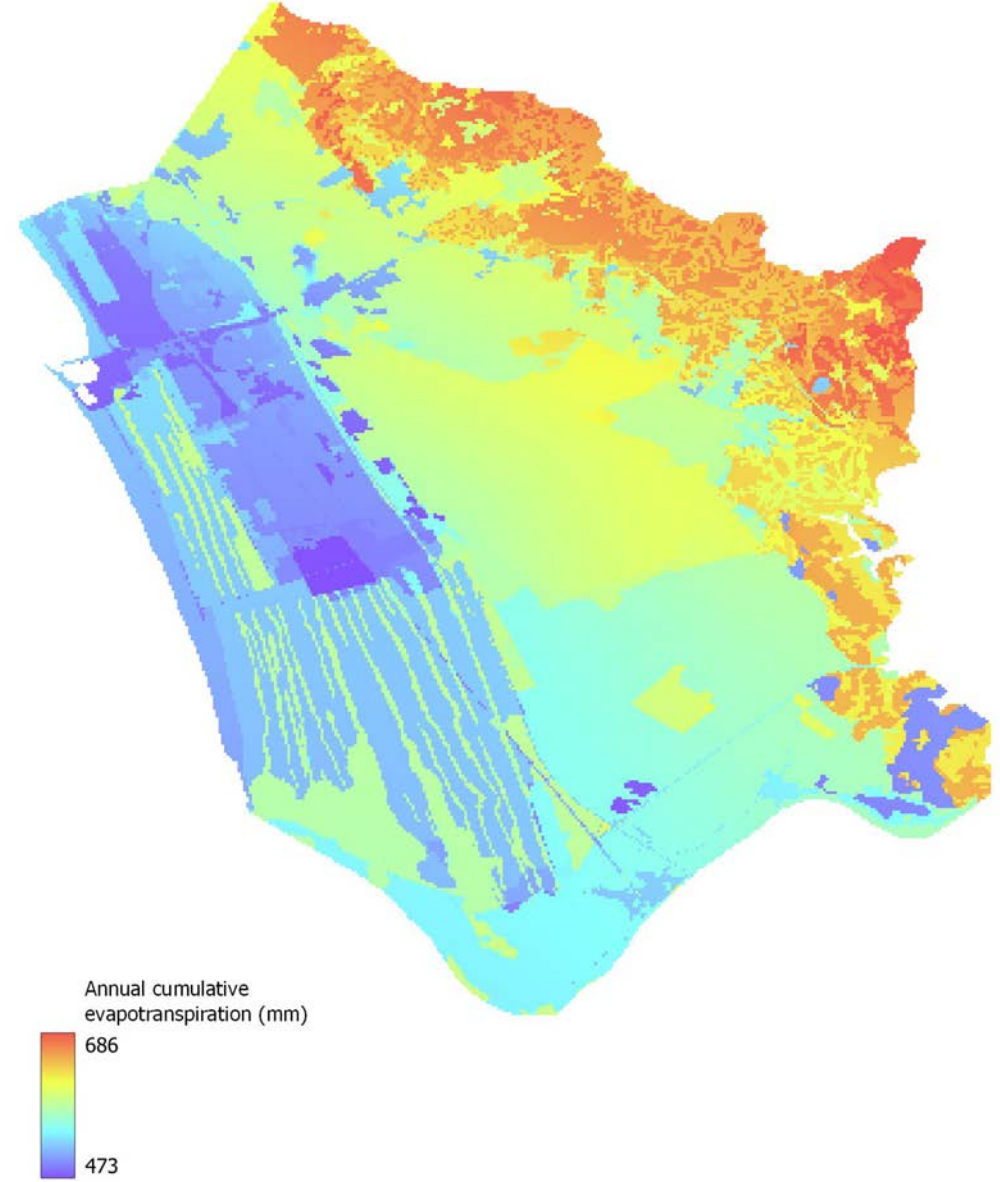
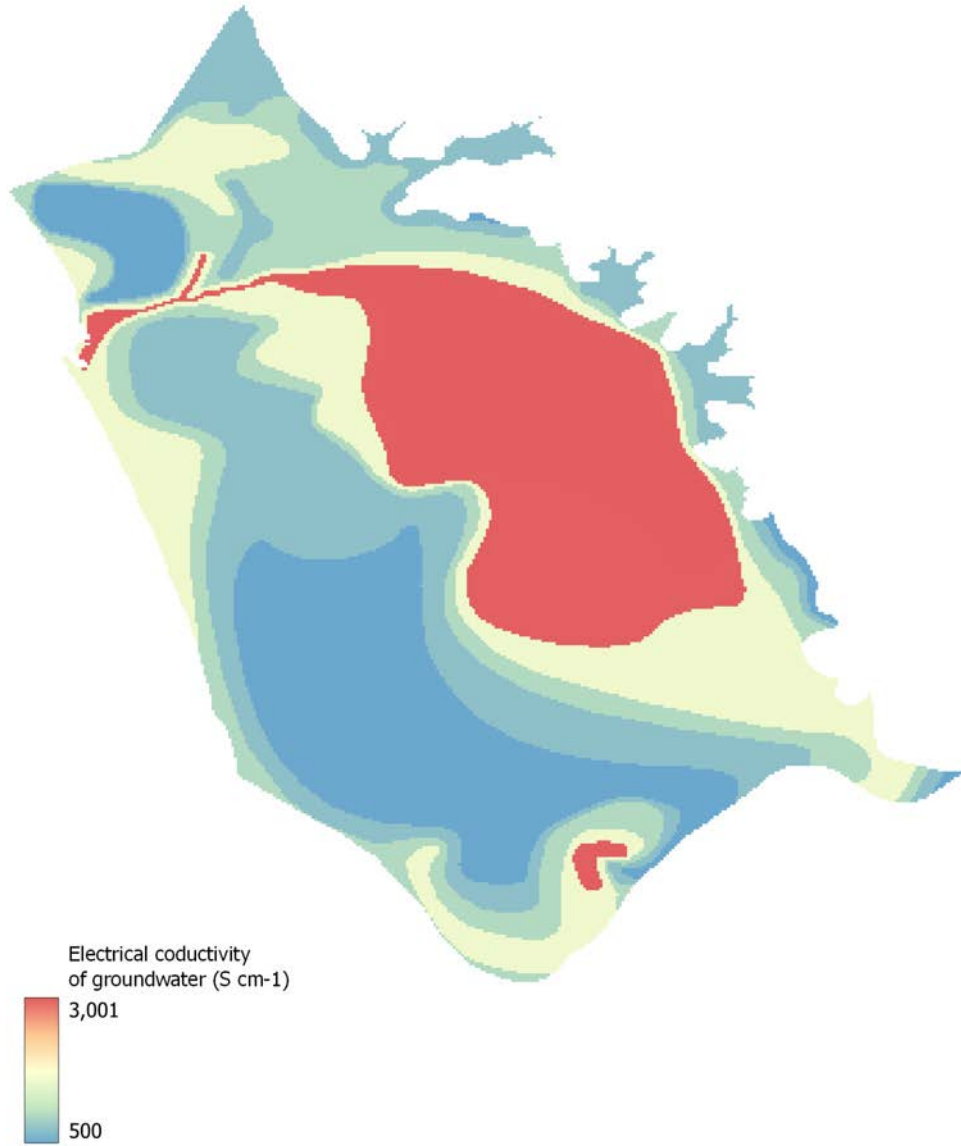
Sentinel 2 products and spectral indexes

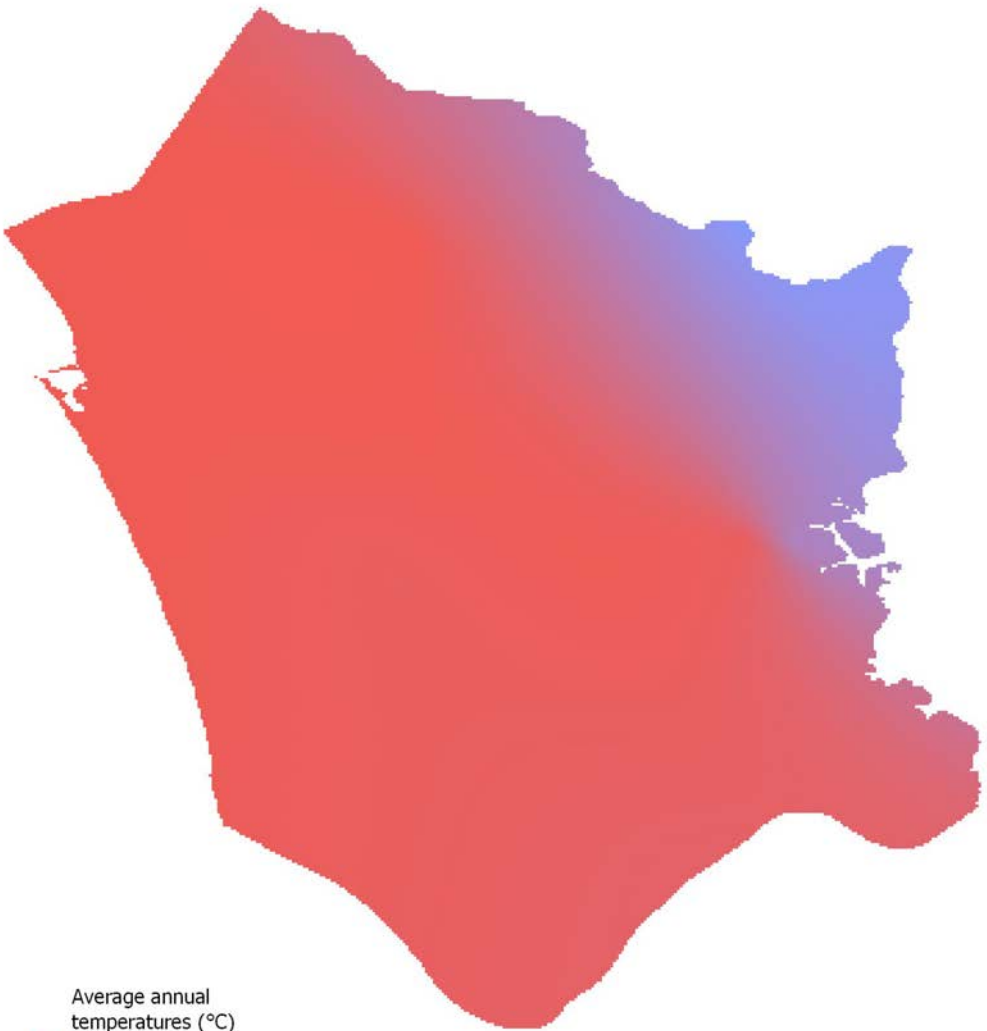
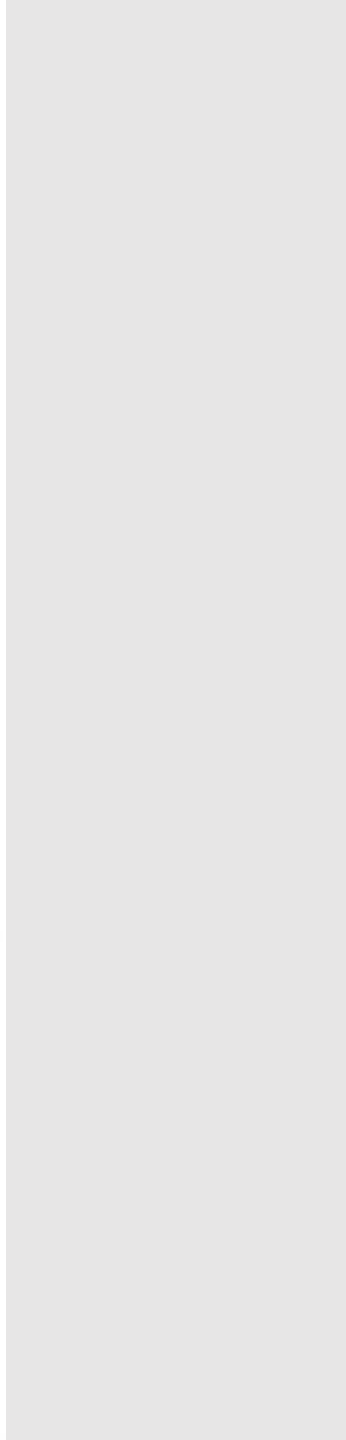
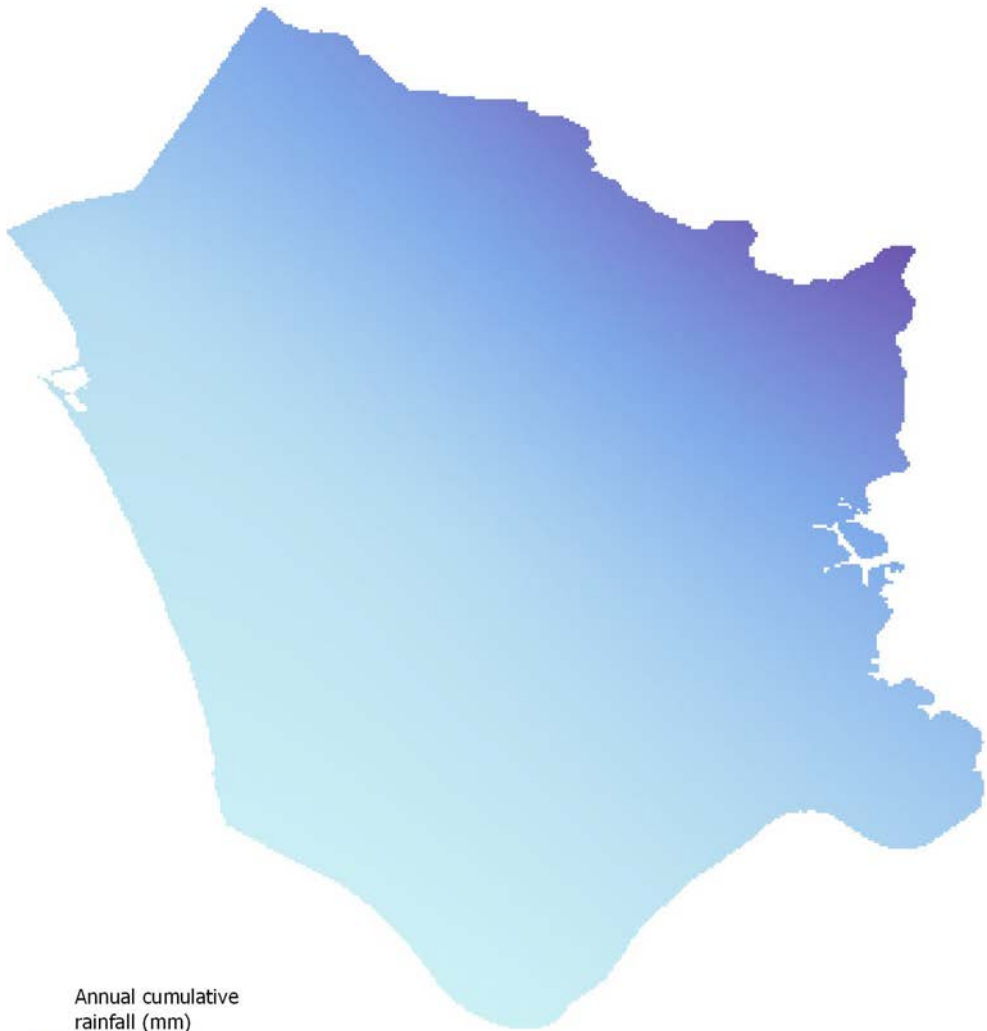


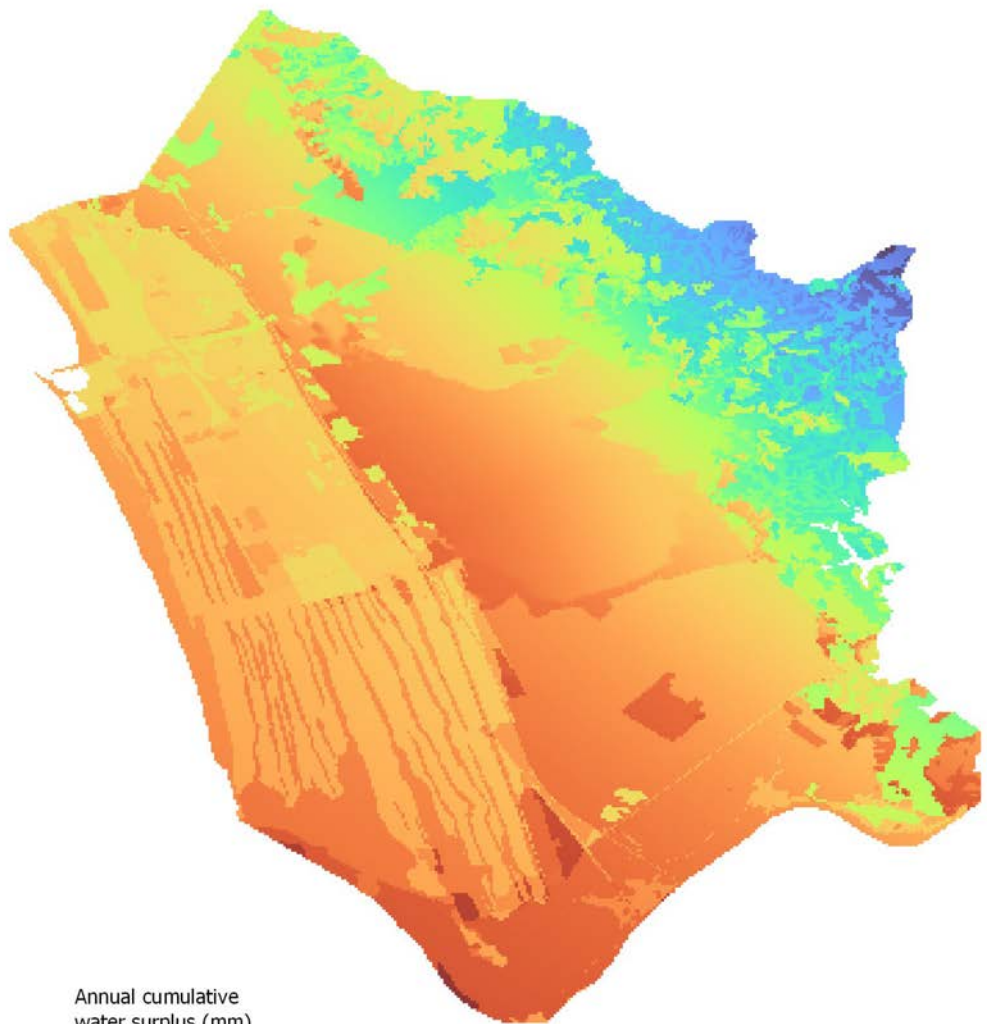
Institute of Information Science and Technologies
National Research Council



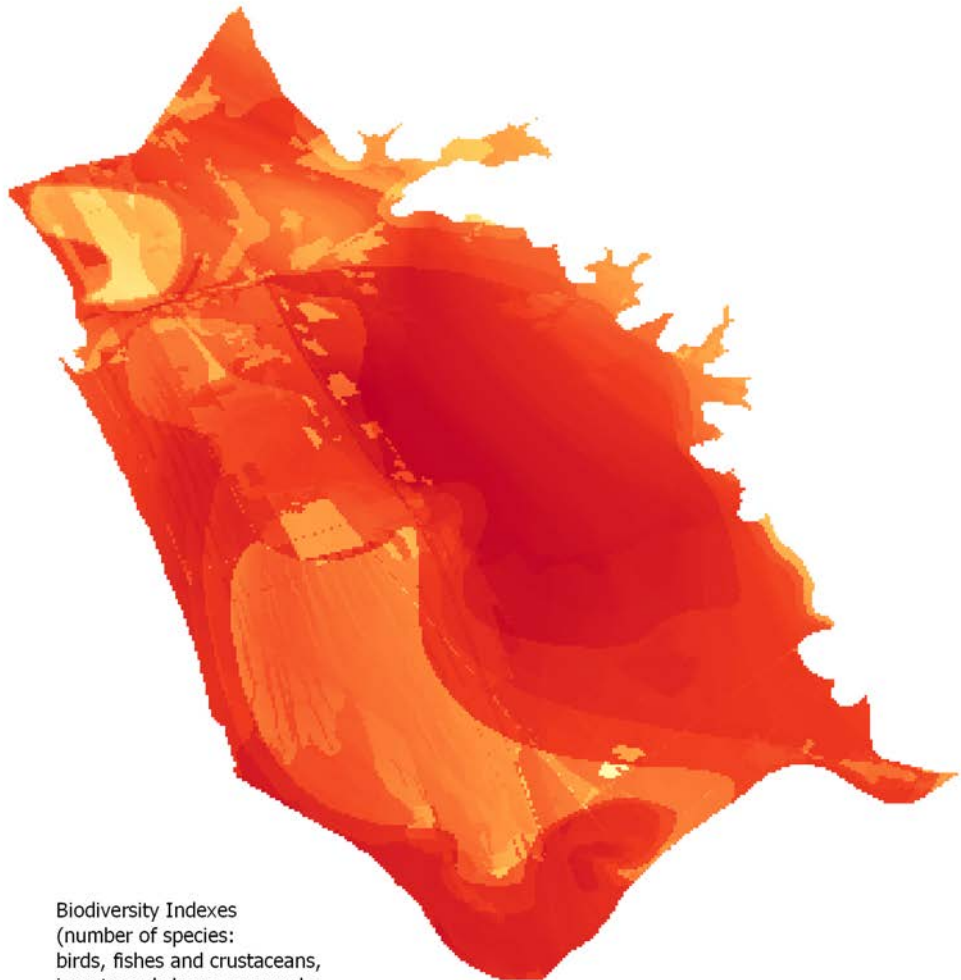
Climate change effects on animal presence in the Massaciuccoli Lake hydrographic basin







Annual cumulative water surplus (mm)
586
174



Biodiversity Indexes
(number of species:
birds, fishes and crustaceans,
insects and clams, mammals,
reptiles and amphibians, others.)
176
56