



DIPARTIMENTO DI GEOSCIENZE  
UNIVERSITÀ DEGLI STUDI DI PADOVA

# PAOLO MOZZI

**Dipartimento di Geoscienze**  
**Università di Padova**

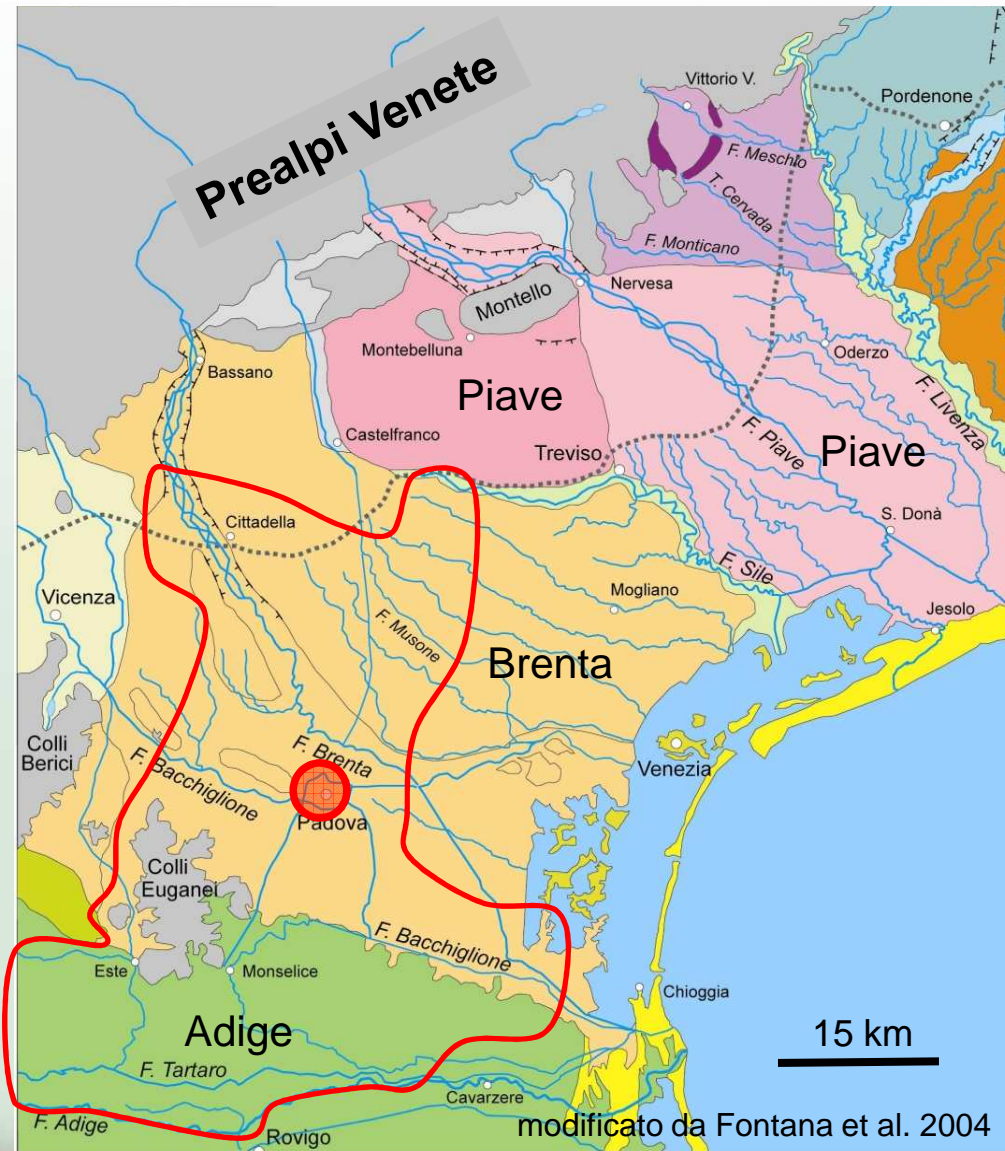
# SUOLI E GEOMORFOLOGIA DEL TERRITORIO PADOVANO



Alta pianura  
ghiaie

Bassa pianura  
Sabbia, limo,  
argilla

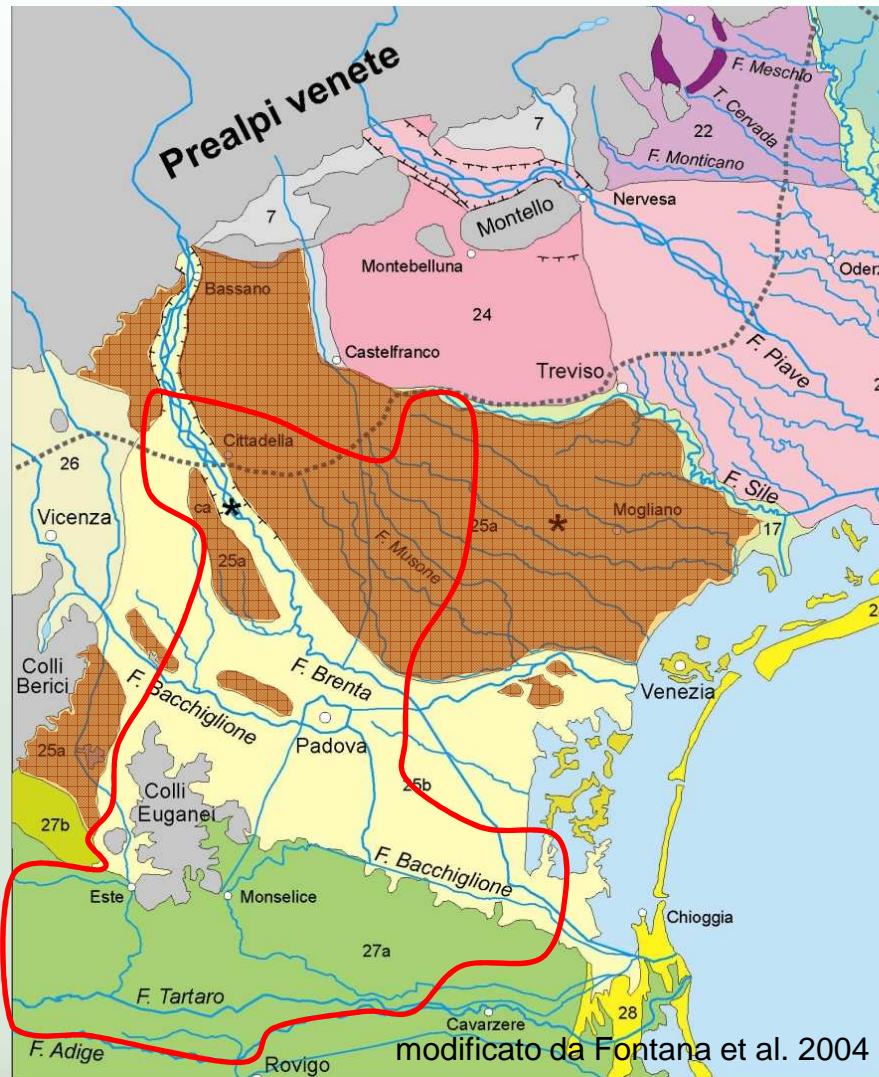




## MEGAFAN del BRENTA

Ultima glaciazione  
- attuale

Superficie: 2700 km<sup>2</sup>

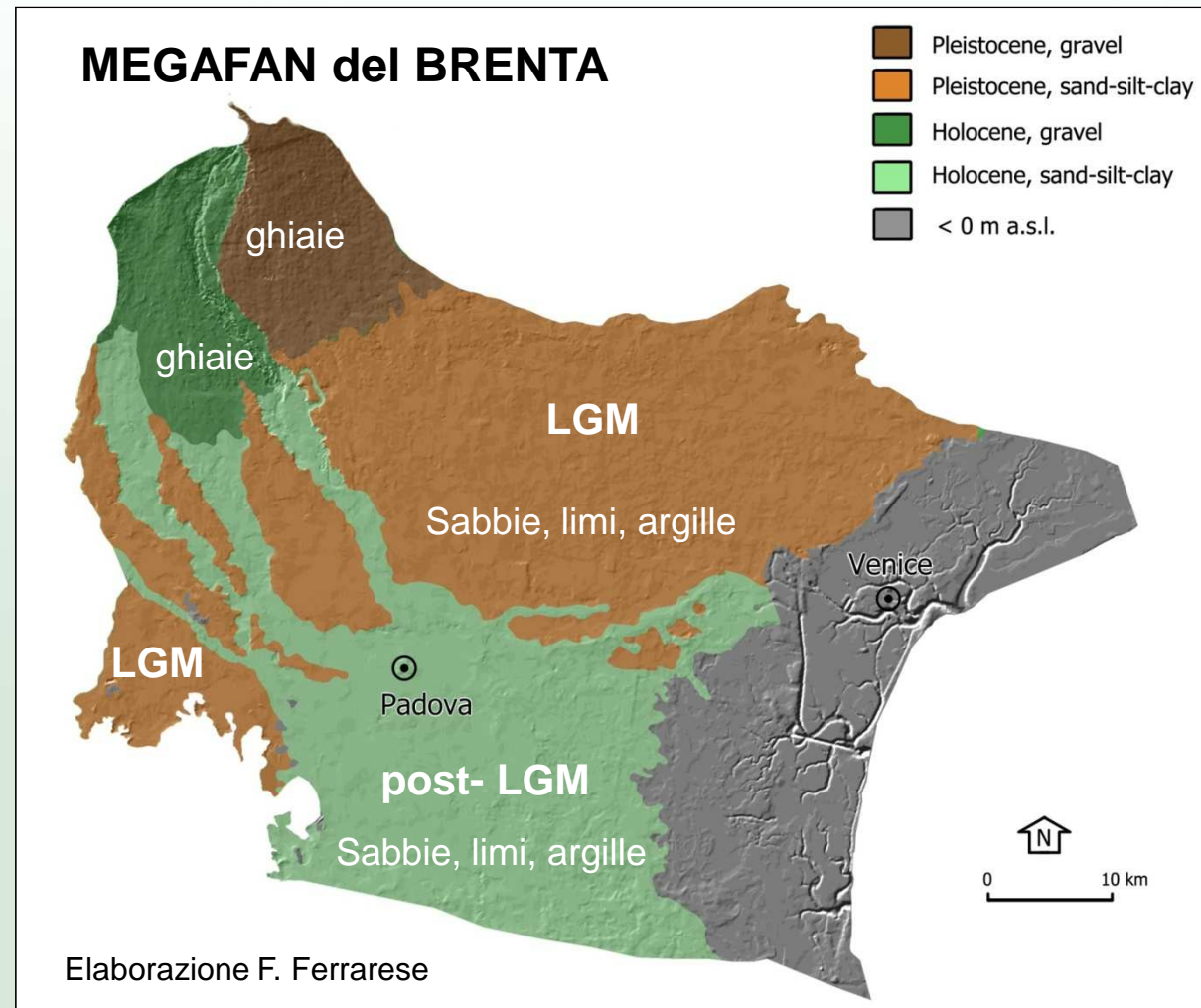


Depositi dell'ultima  
glaciazione

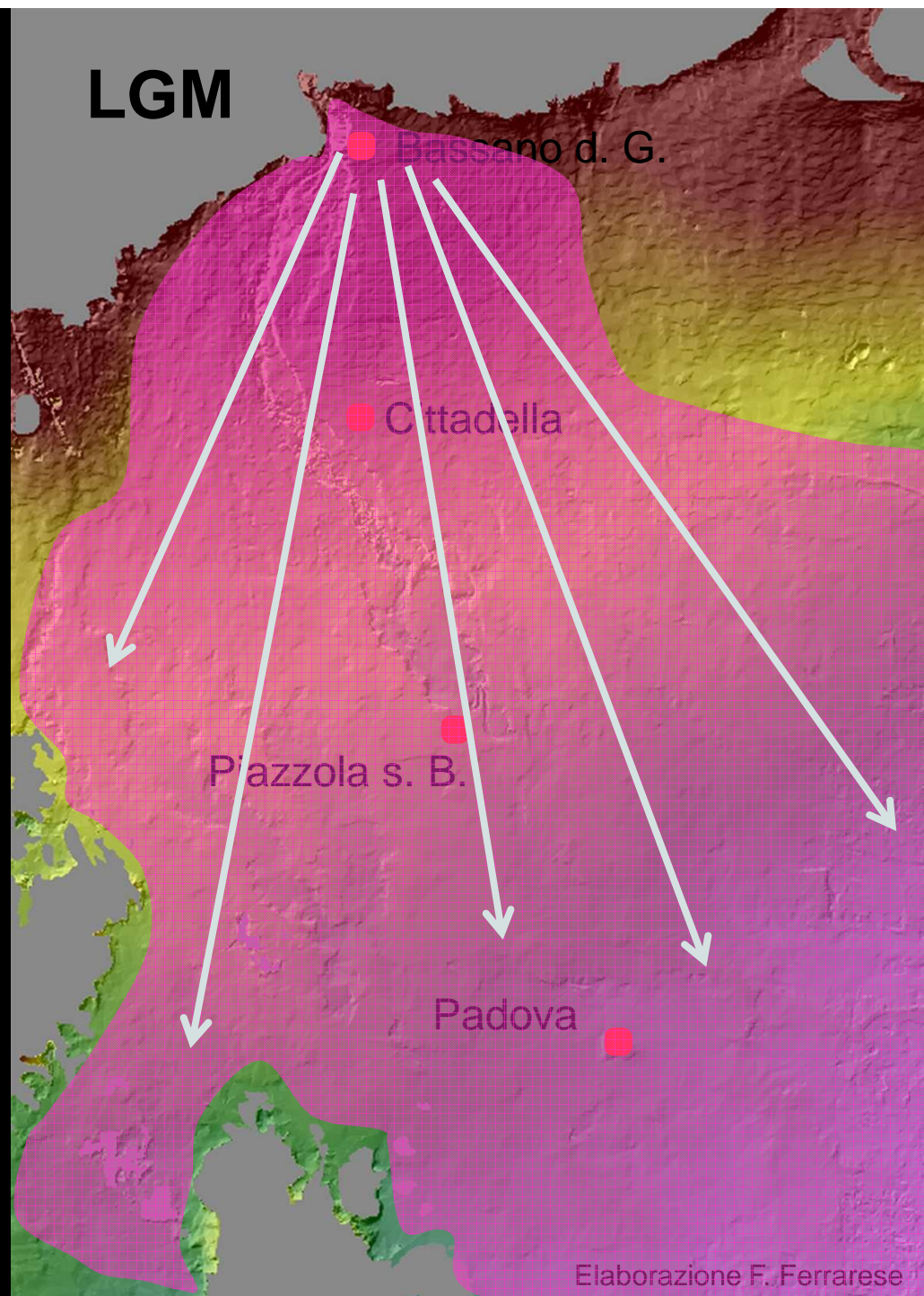
Last Glacial Maximum  
LGM

(ca. 26.000 - 17.500 anni fa)





**LGM**

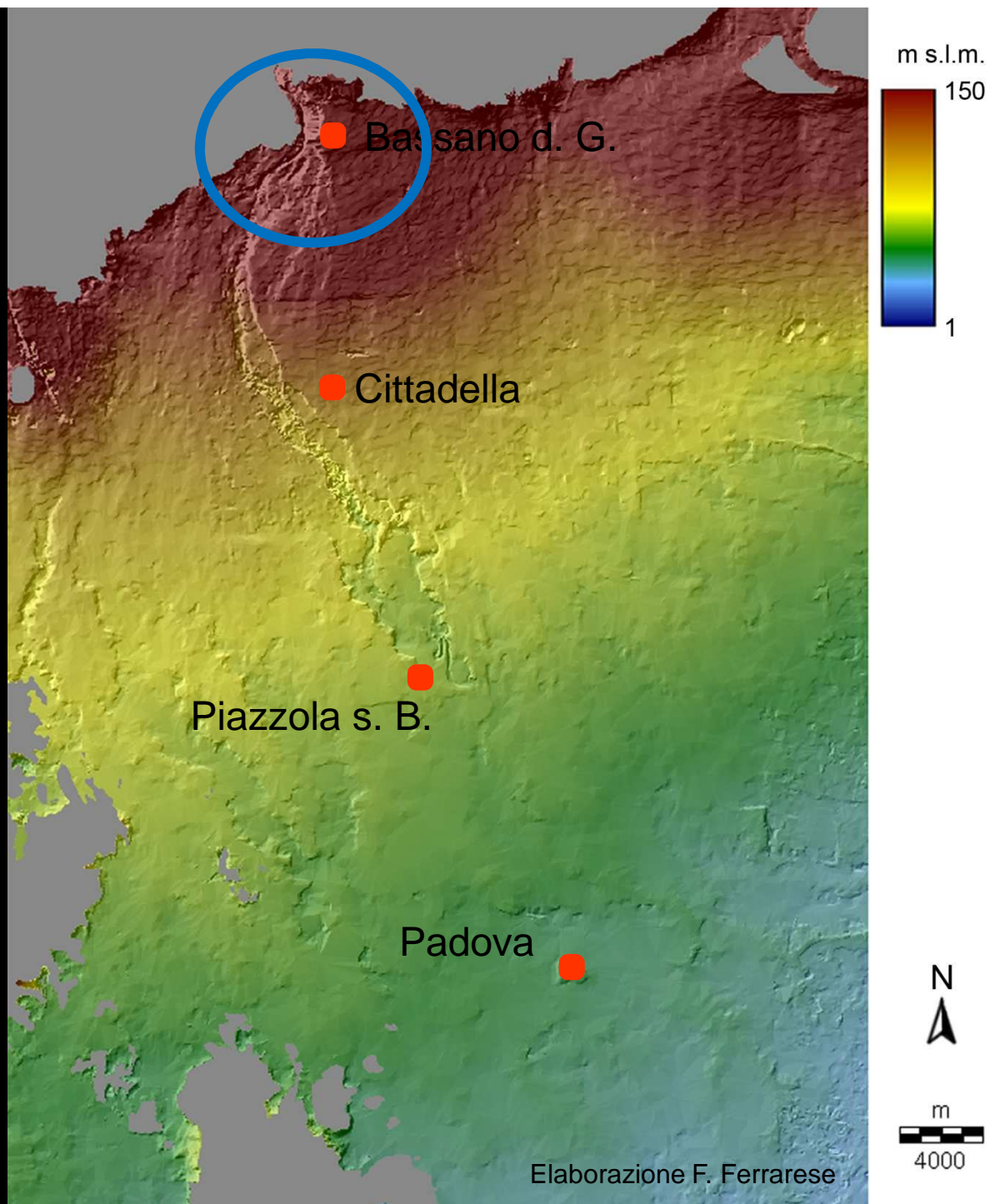


N

m

4000







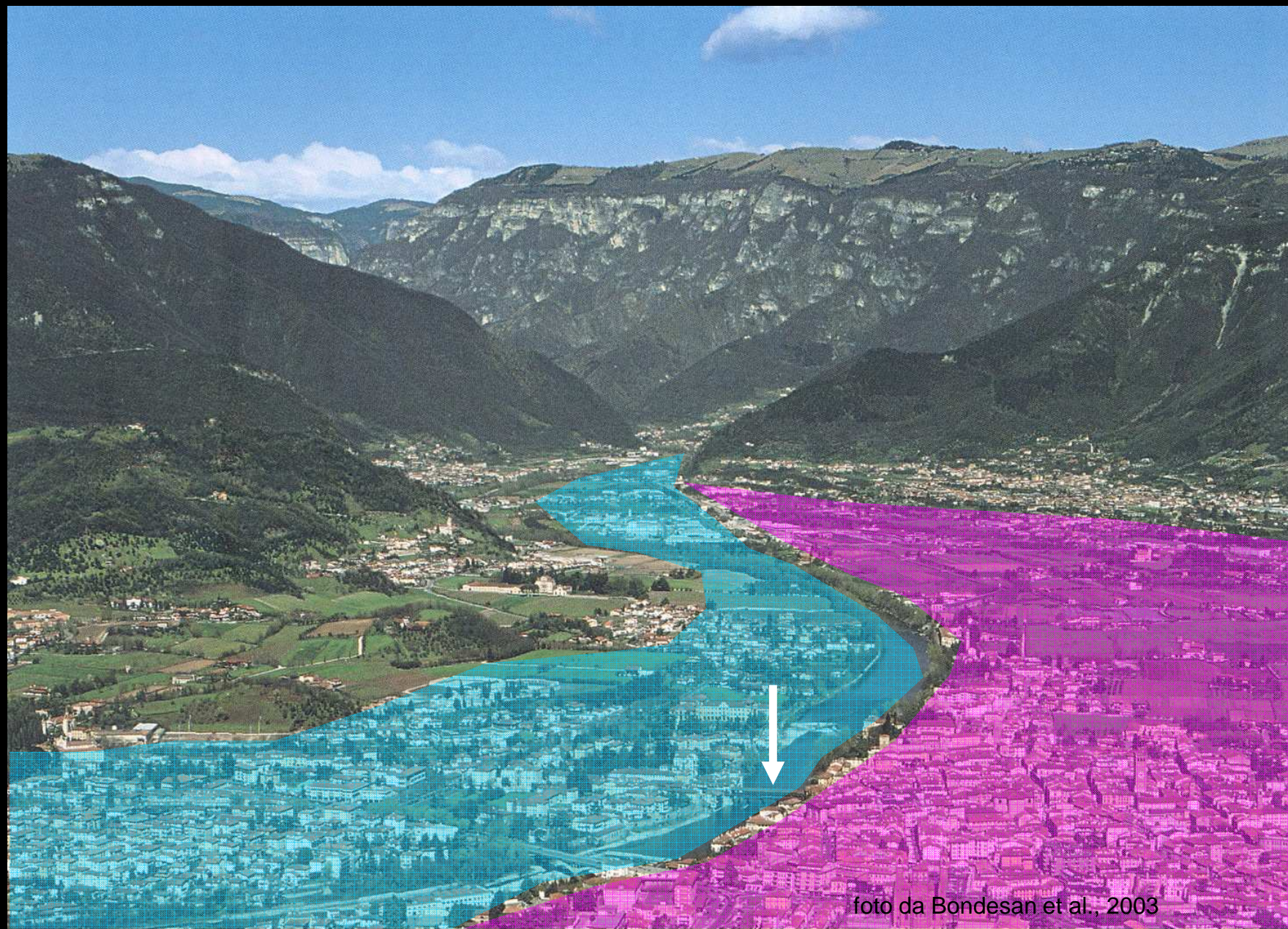


foto da Bondesan et al., 2003



## Bassano del Grappa Palazzo Sturm

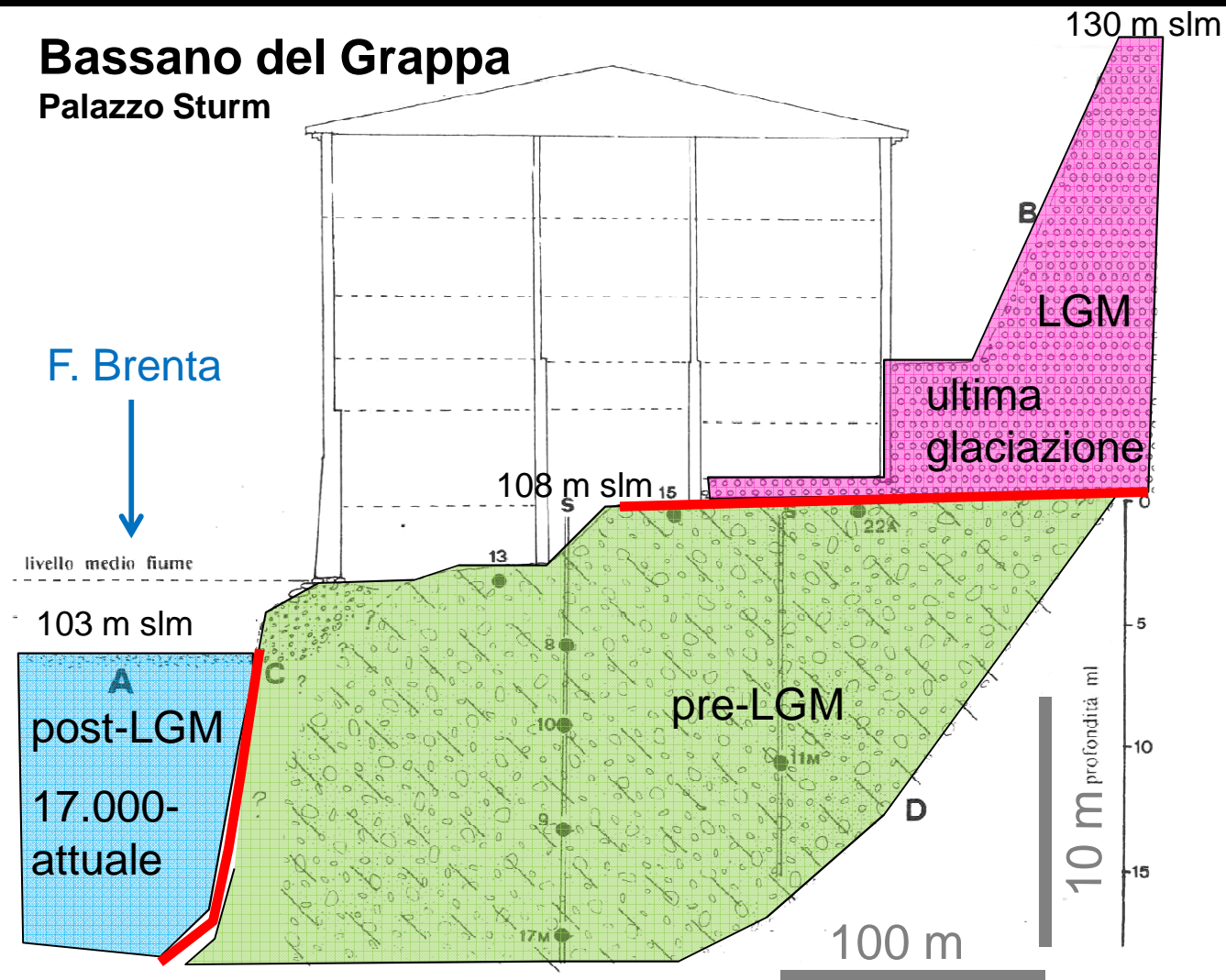
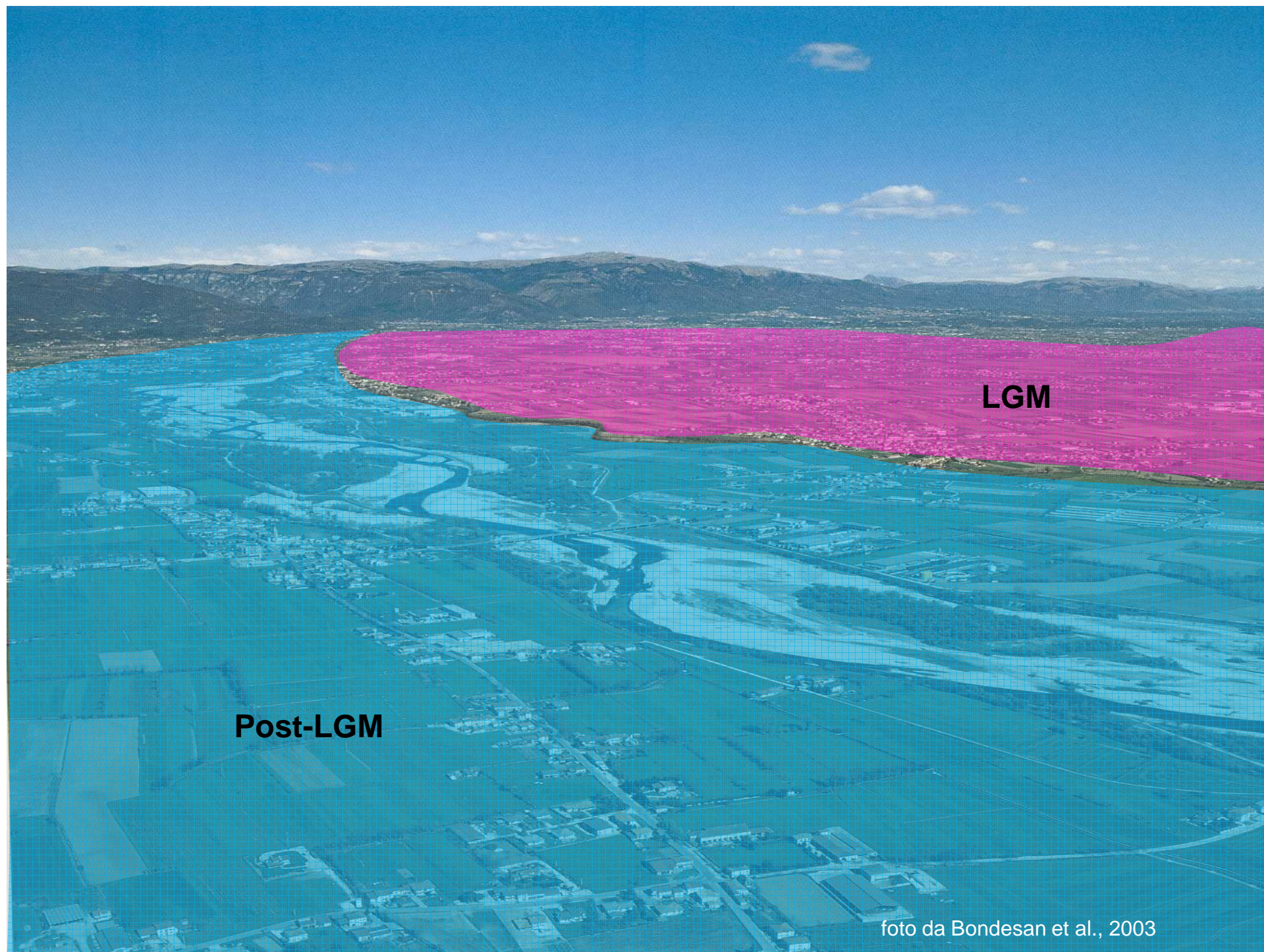


FIG. 3 - Sezione Geologica attraverso il Palazzo Sturm. Legenda: A - sabbie limose attuali, B - ghiaie sabbiose della conoide fluvioglaciale würmiana, C - conglomerato di elementi calcarei poco elaborati, D - morenico antico.

Bartolomei, 1999



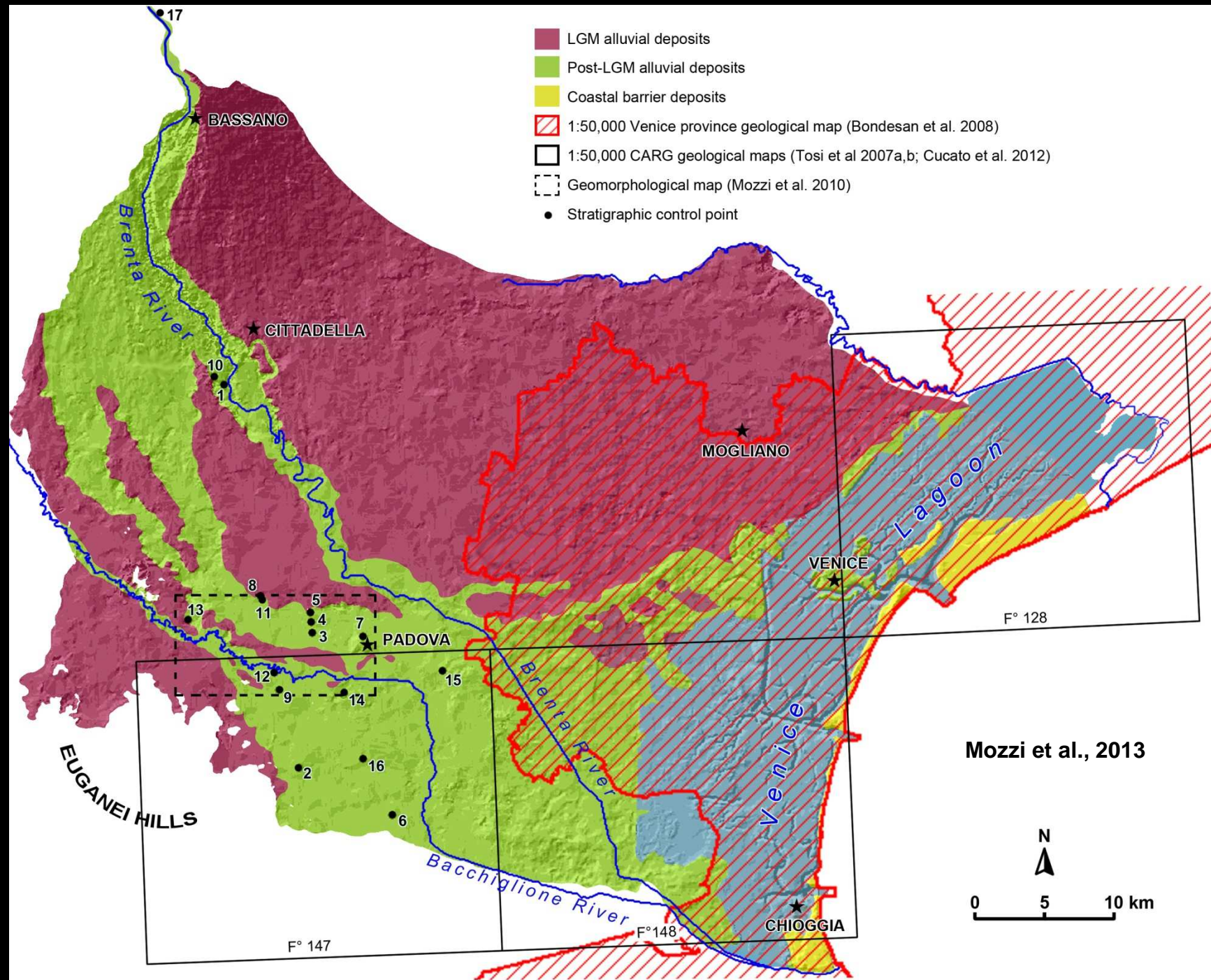


**LGM**

**Post-LGM**

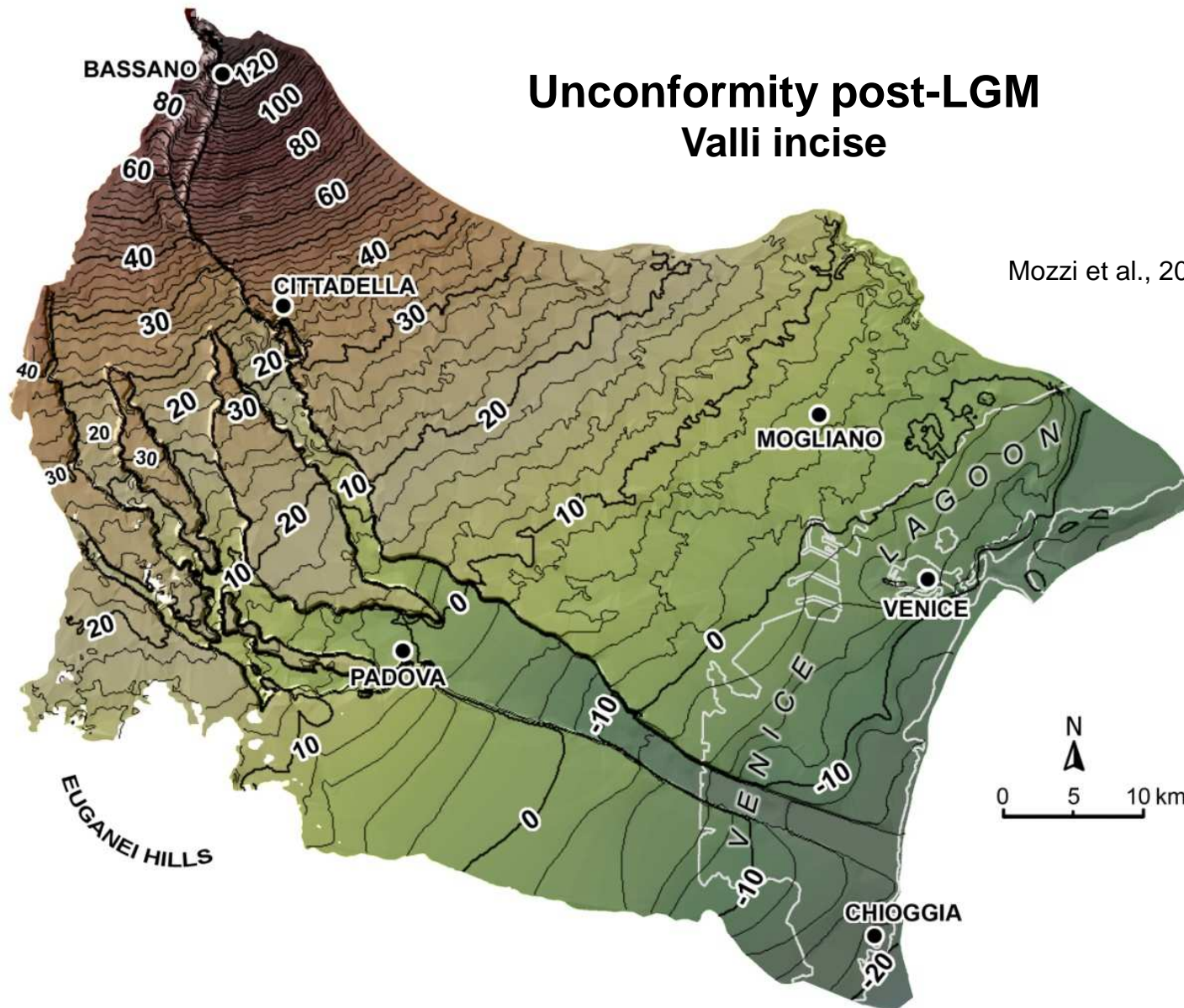
foto da Bondesan et al., 2003



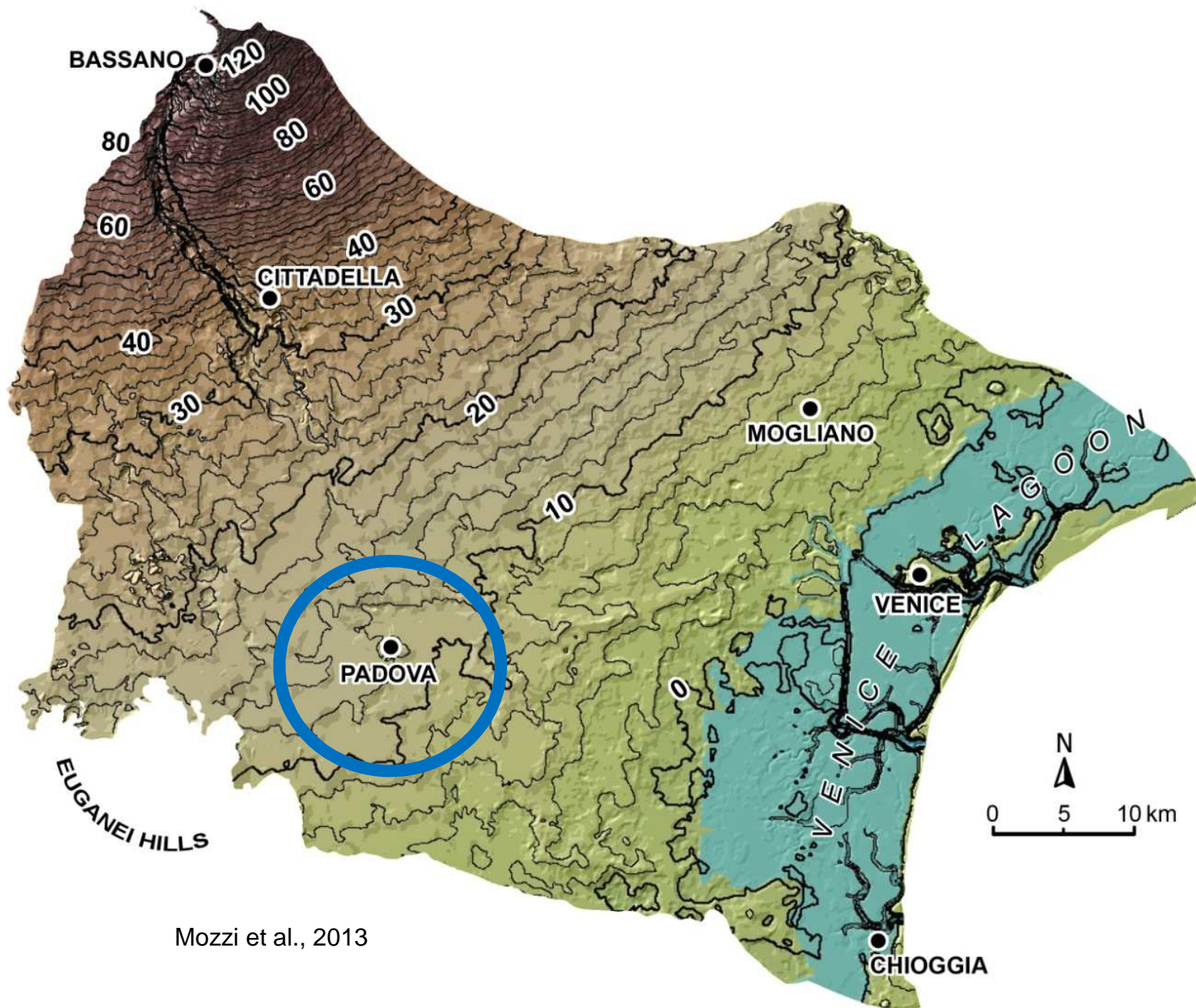


## Unconformity post-LGM Valli incise

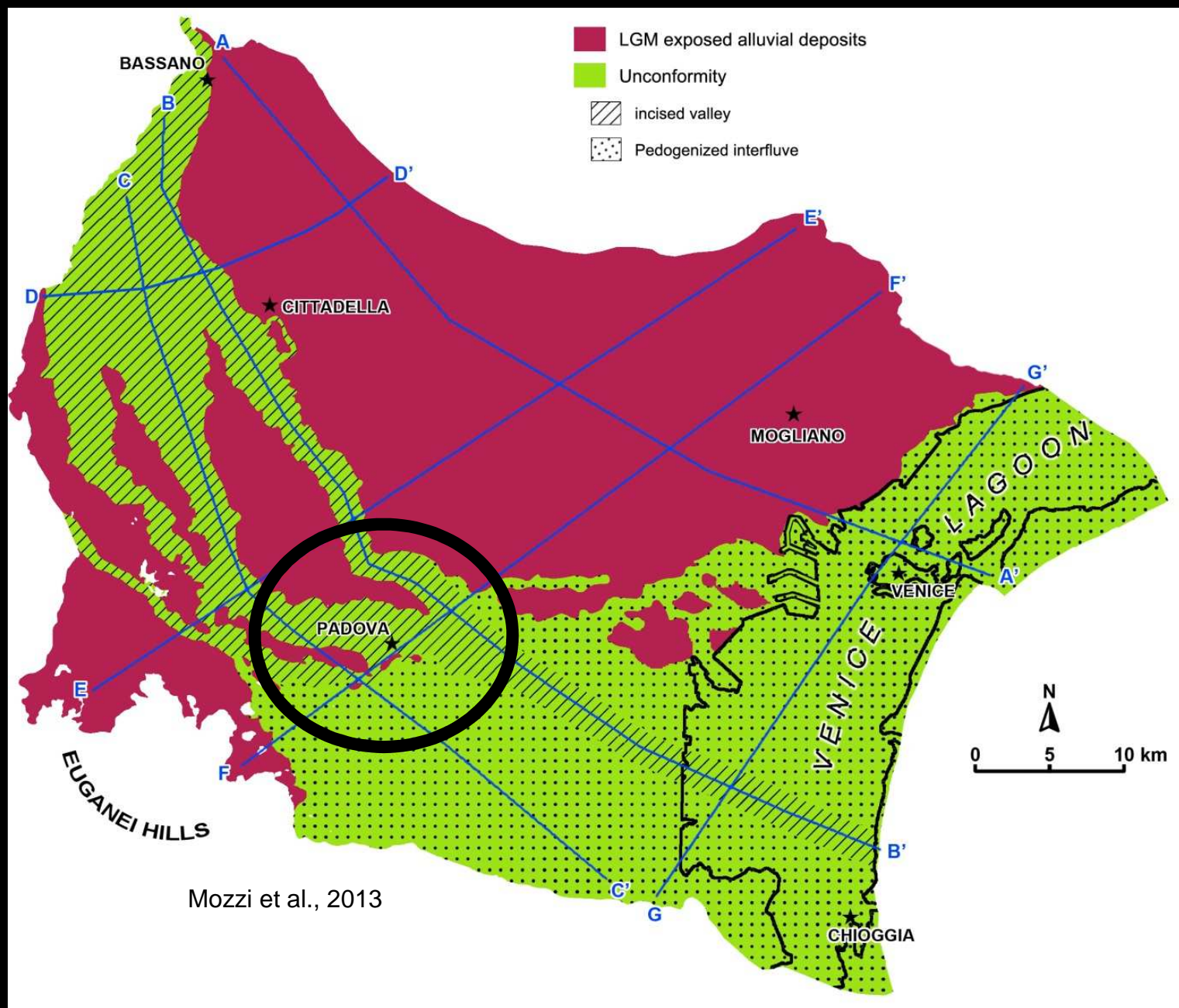
Mozzi et al., 2013



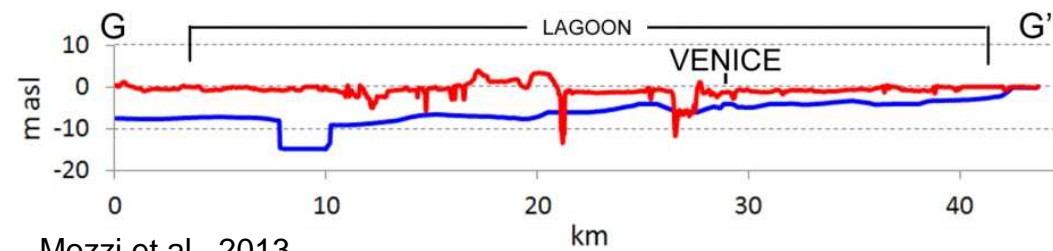
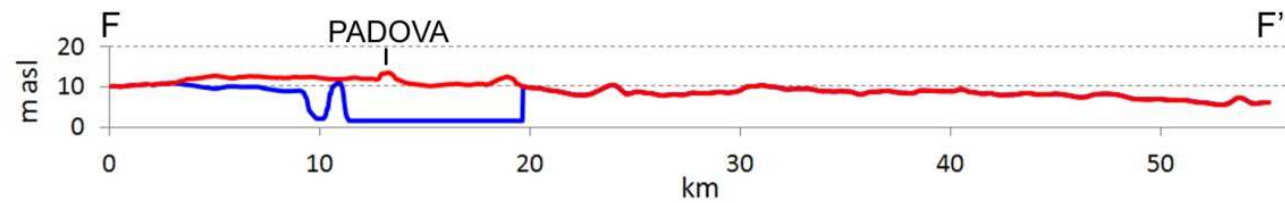
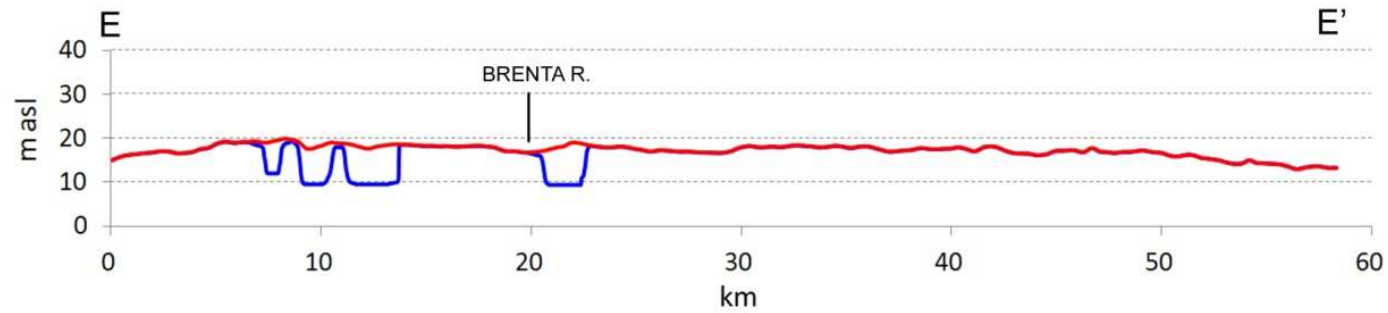
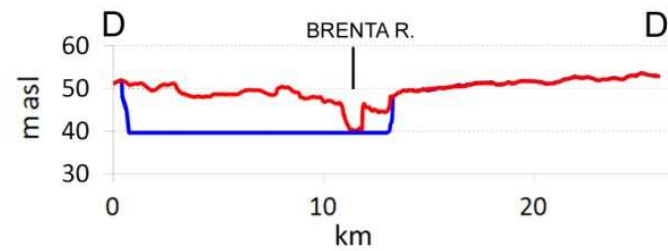




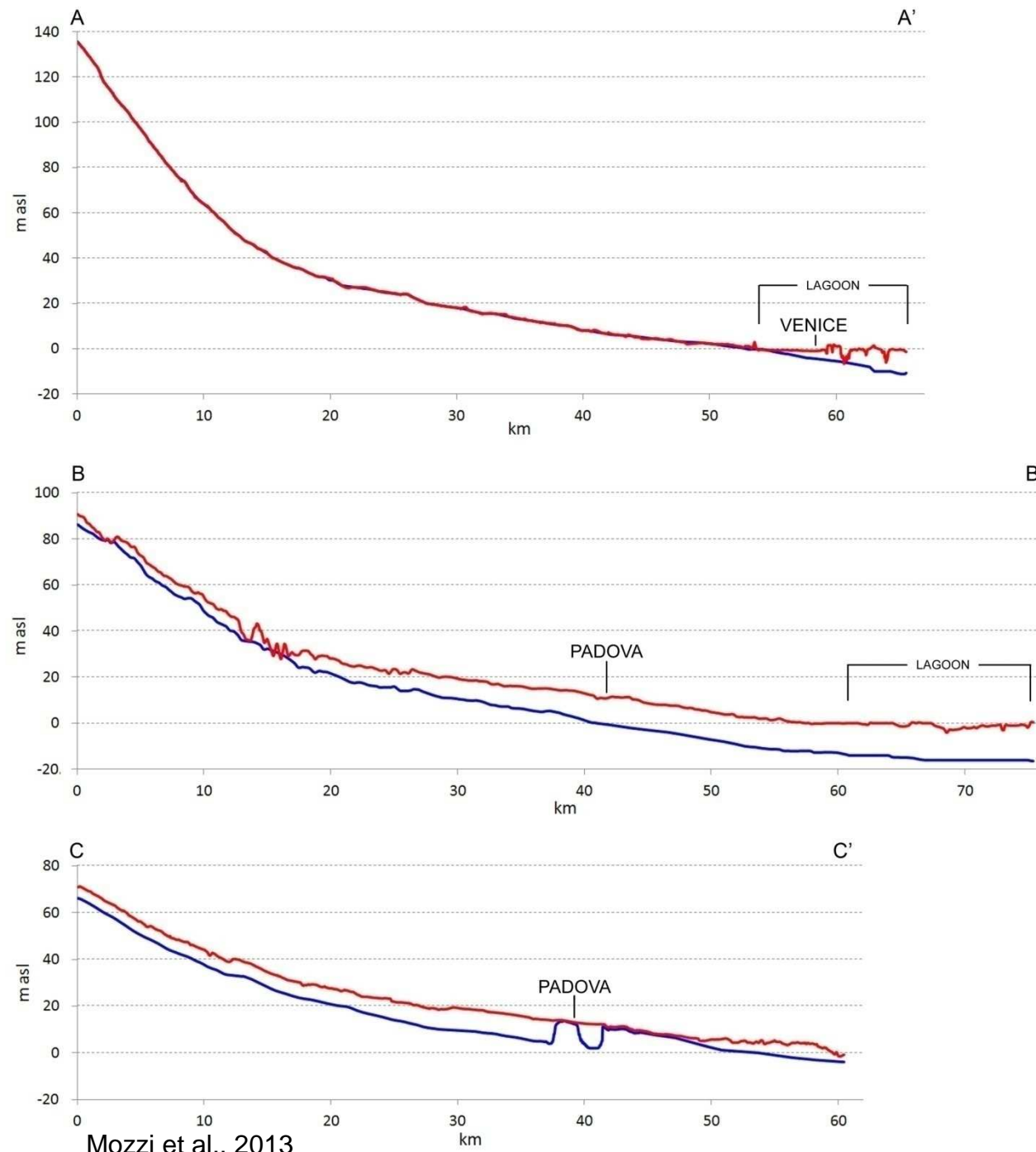
Mozzi et al., 2013







Mozzi et al., 2013



Mozzi et al., 2013



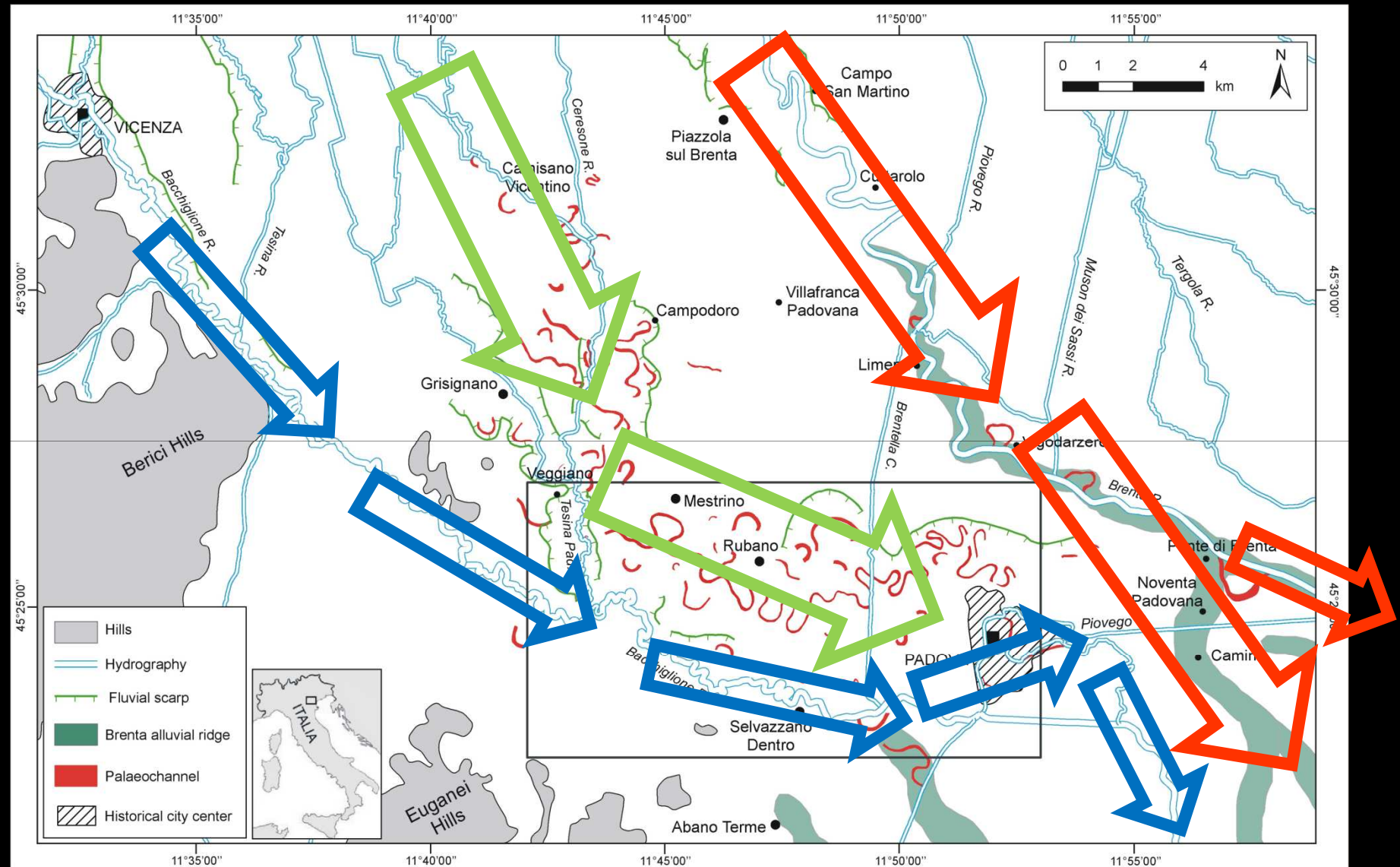
## VOLUM DEI SEDIMENTI POST-LGM NEL MEGAFAN DEL BRENTA

Surface type	Area (km <sup>2</sup> )	Area %	Sediments above unconformity (km <sup>3</sup> )
Exposed LGM alluvial deposits	1427	48,9	-
Unconformity in incised valley	521	17,8	4,3
Unconformity on pedogenized interfluve	970	33,3	6,1
Total	2918	100	10,4

Tab. 2 - Extension of the post-LGM unconformity and volume of overlying sediments in the Brenta megafan.

Mozzi et al., 2013, Alpine and Mediterranean Quaternary

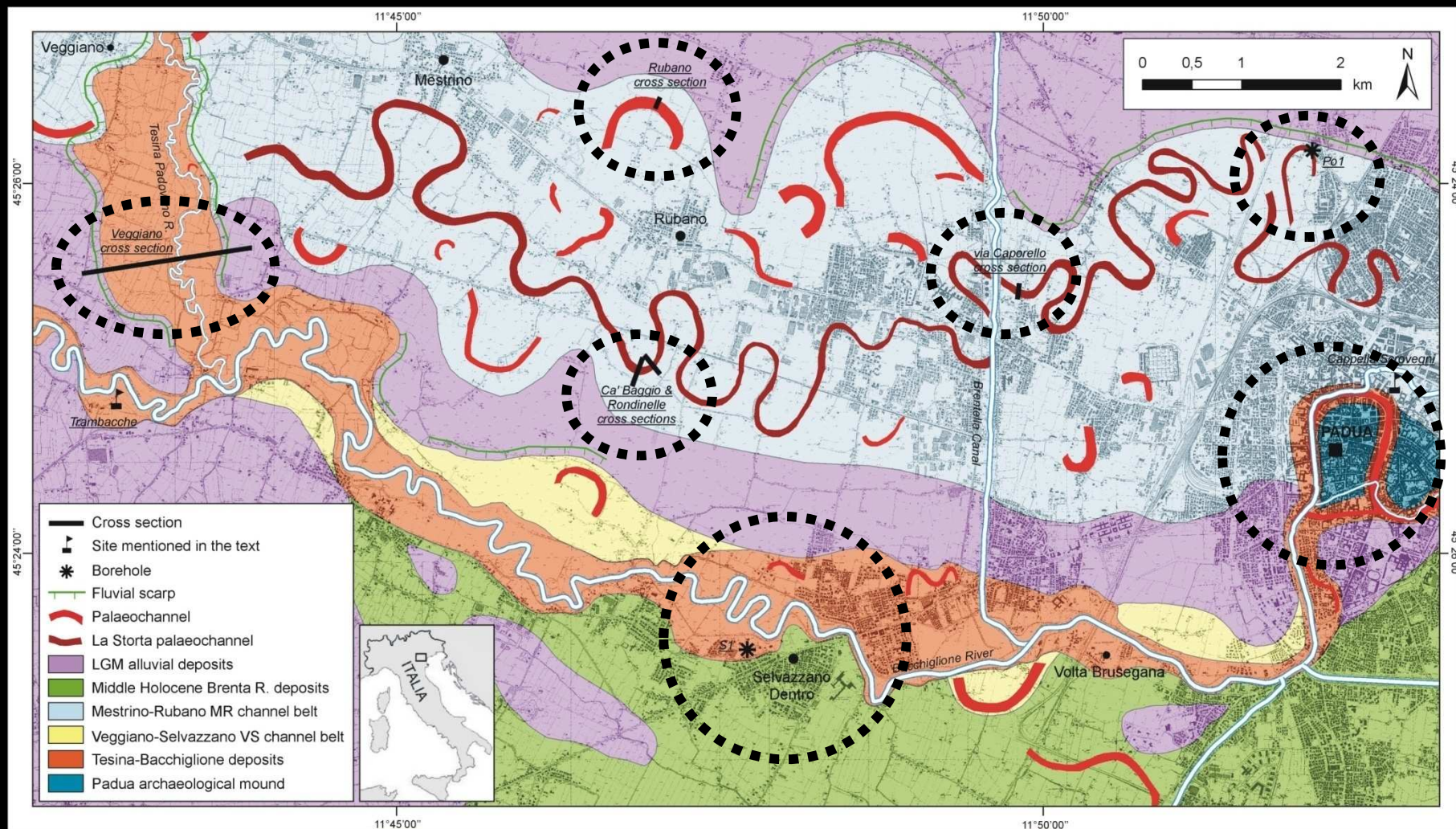
# Paleoidrografia di Padova nell'Olocene



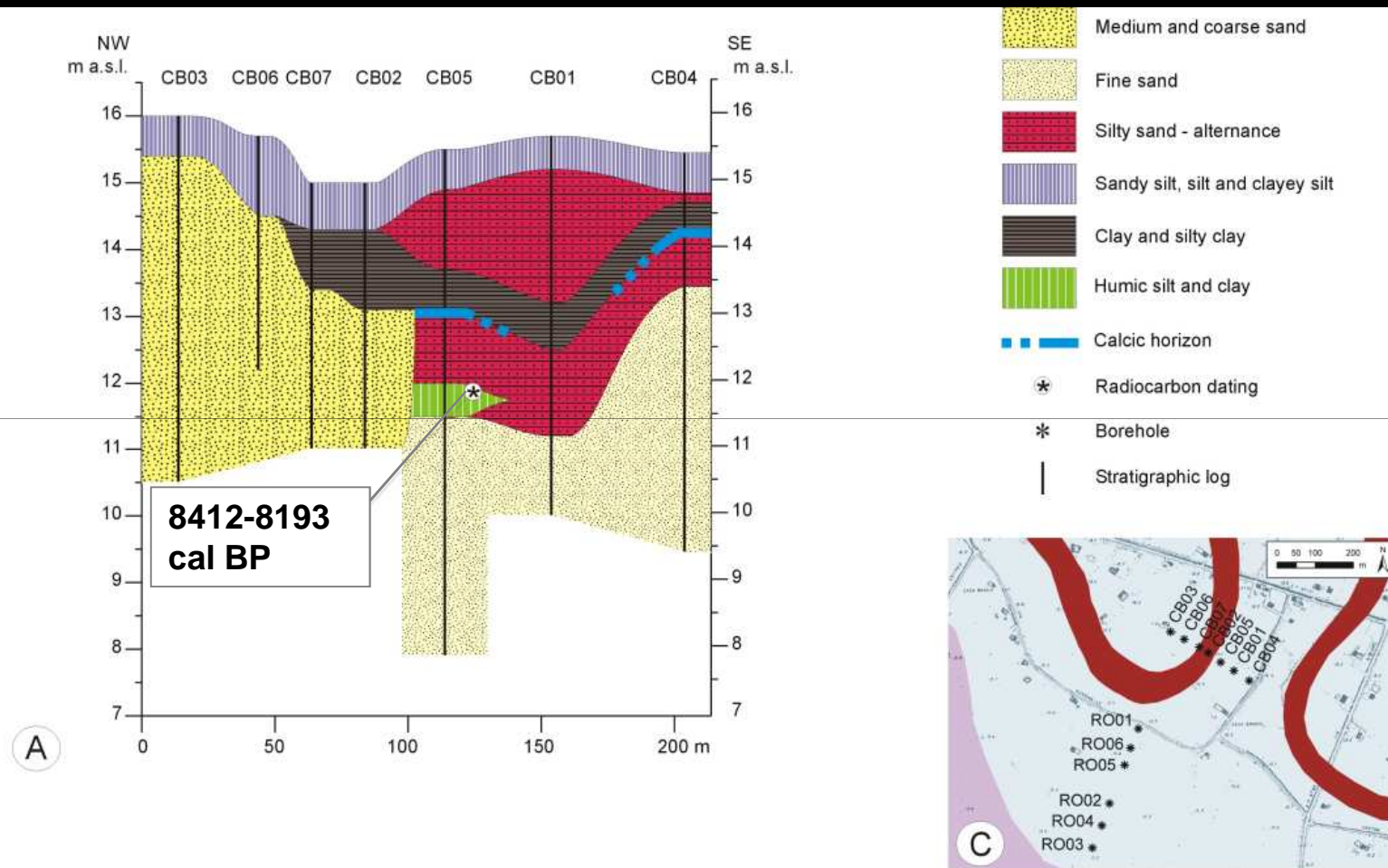
Castiglioni et al., 1987; MURST 1997; Mozzi et al., 2010



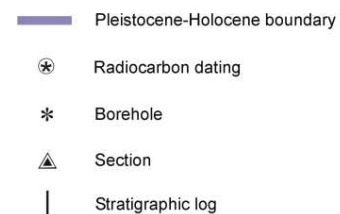
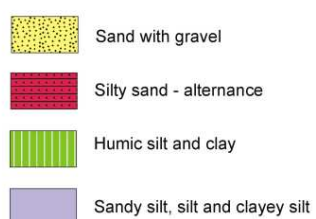
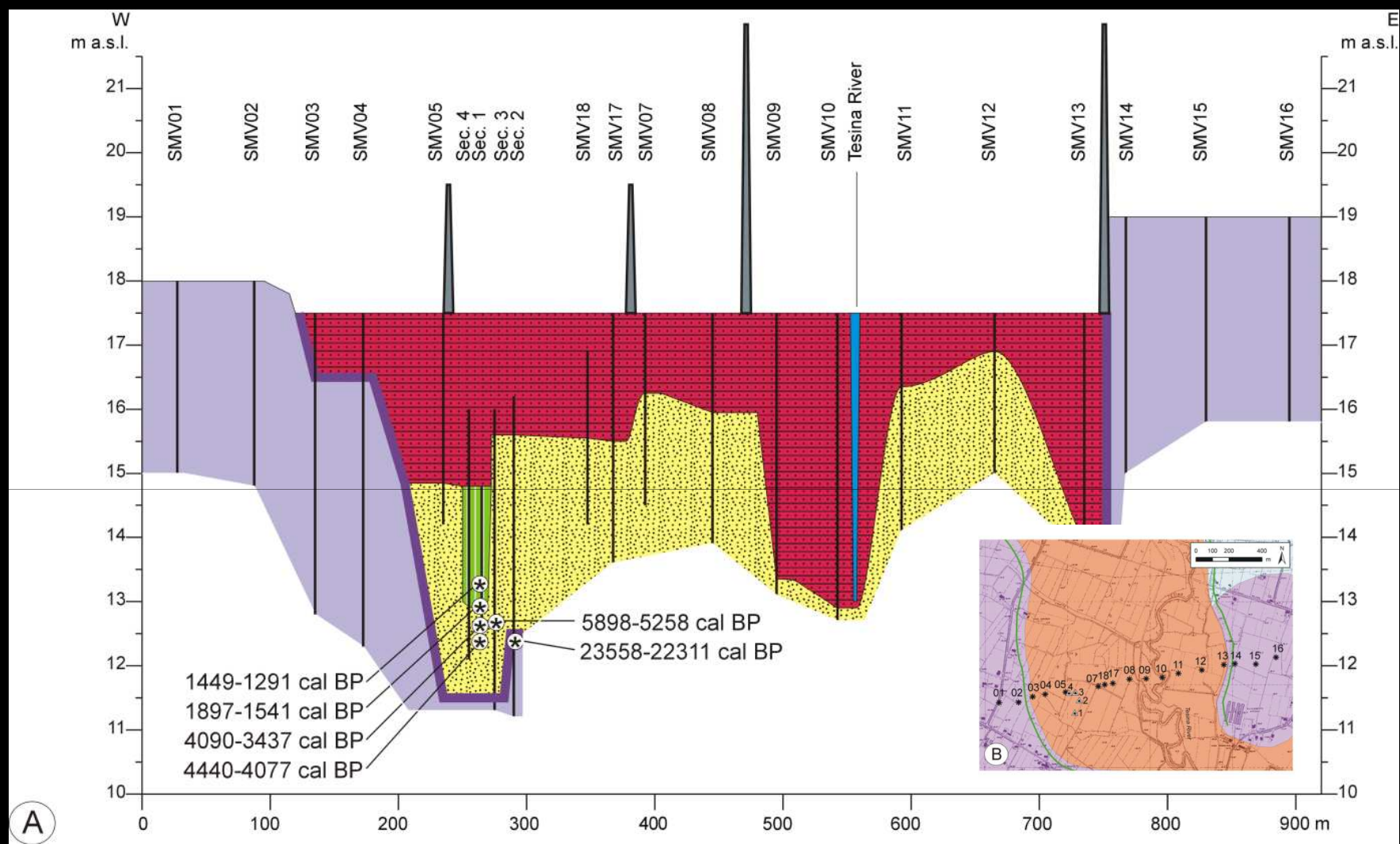
## Carta geomorfologica della pianura alluvionale a NW of Padua



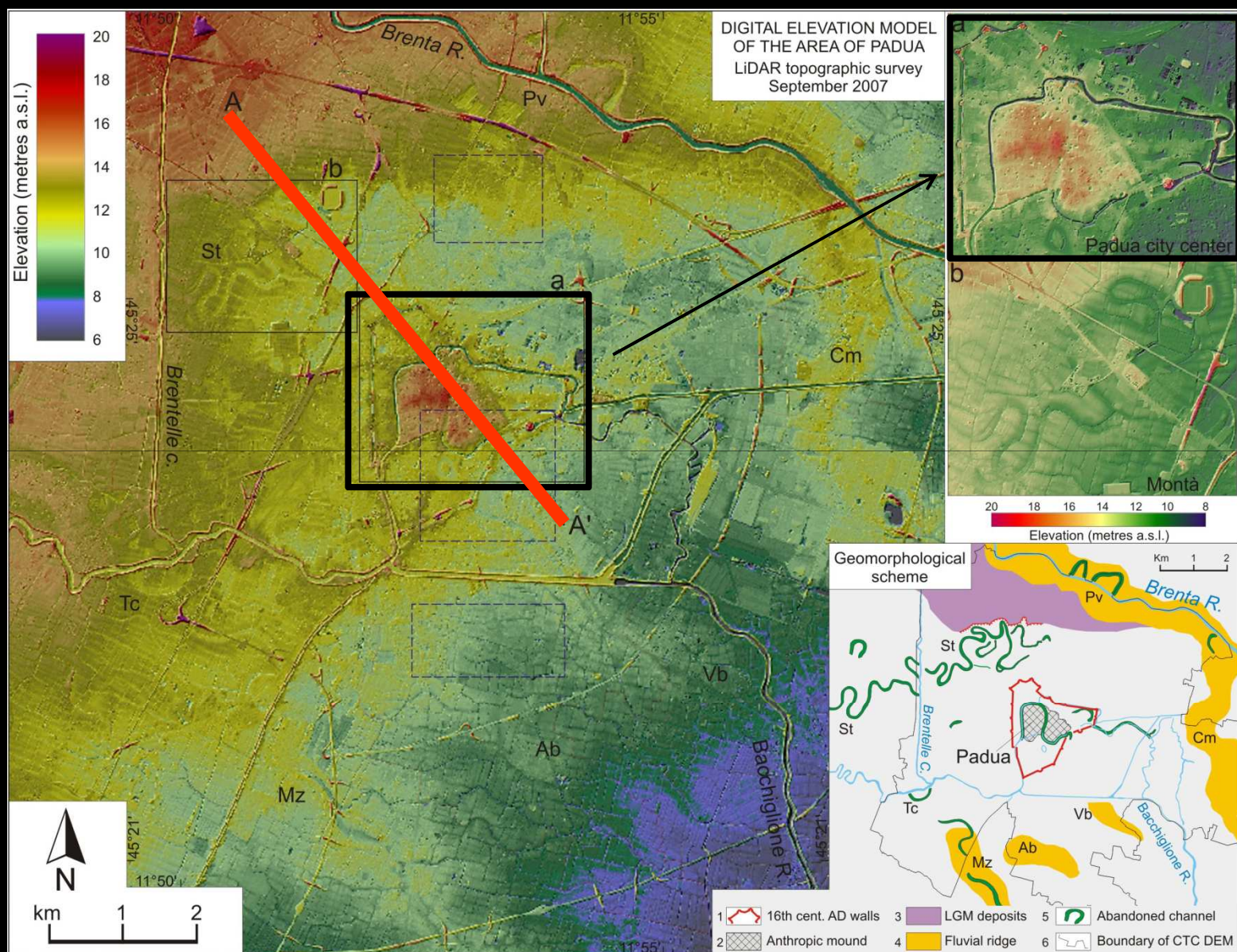
Mozzi et al., 2010, Il Quaternario–It.J.Quat.Sc.



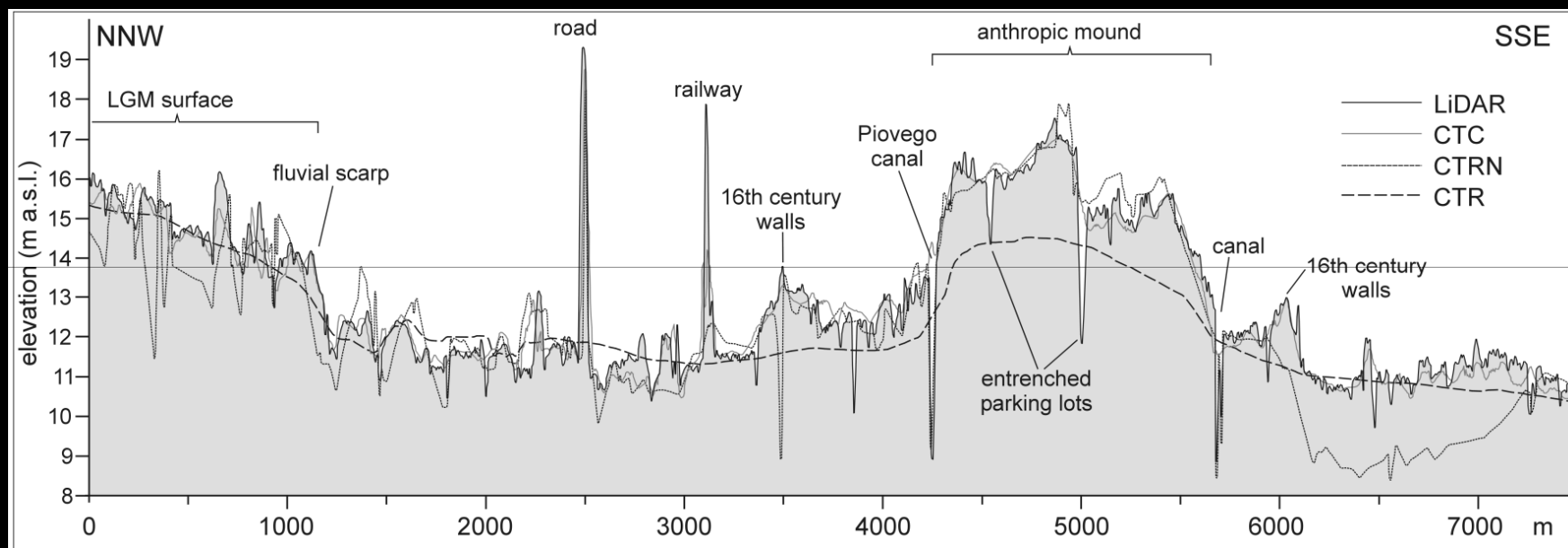




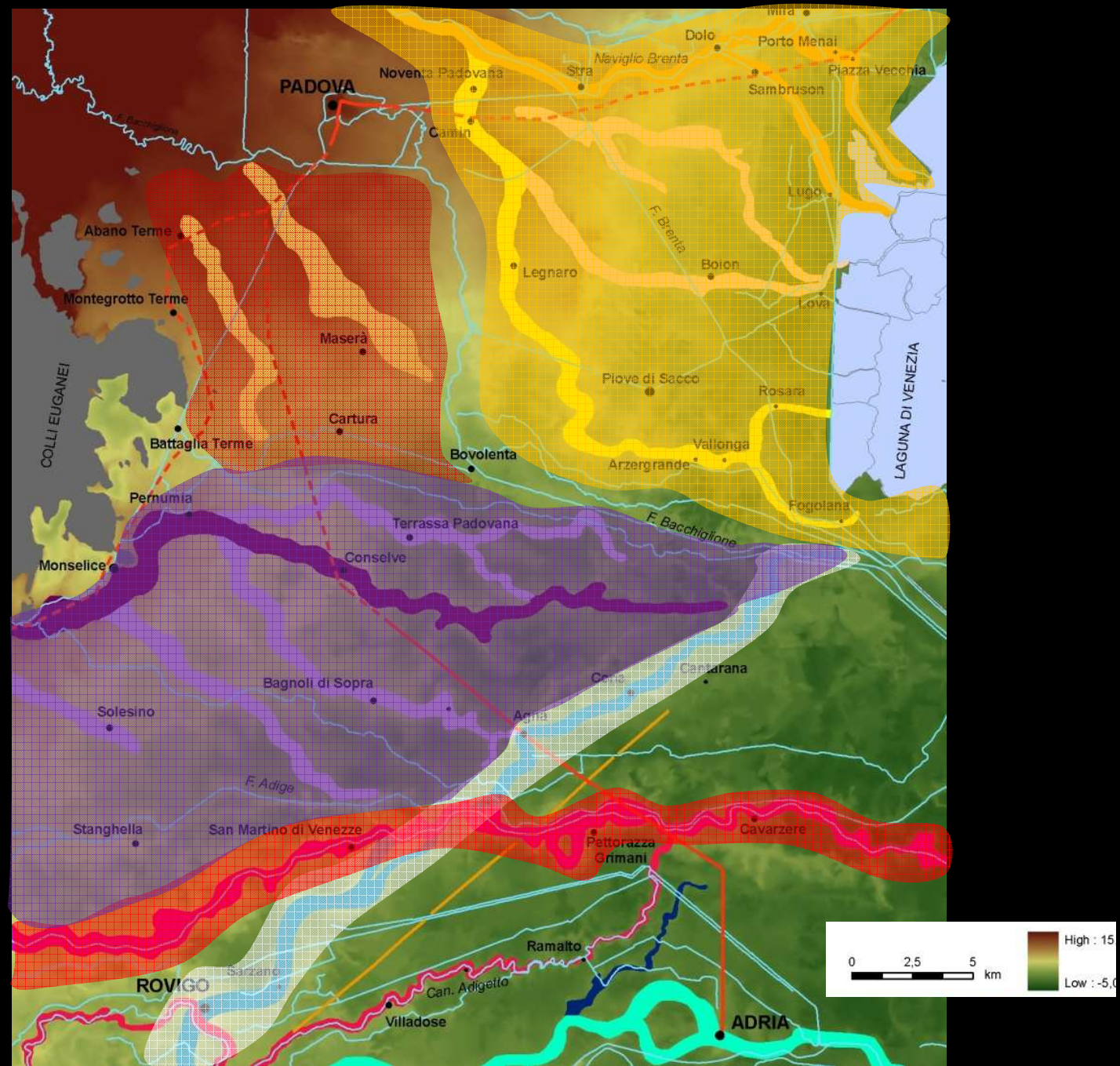
Mozzi et al., 2010





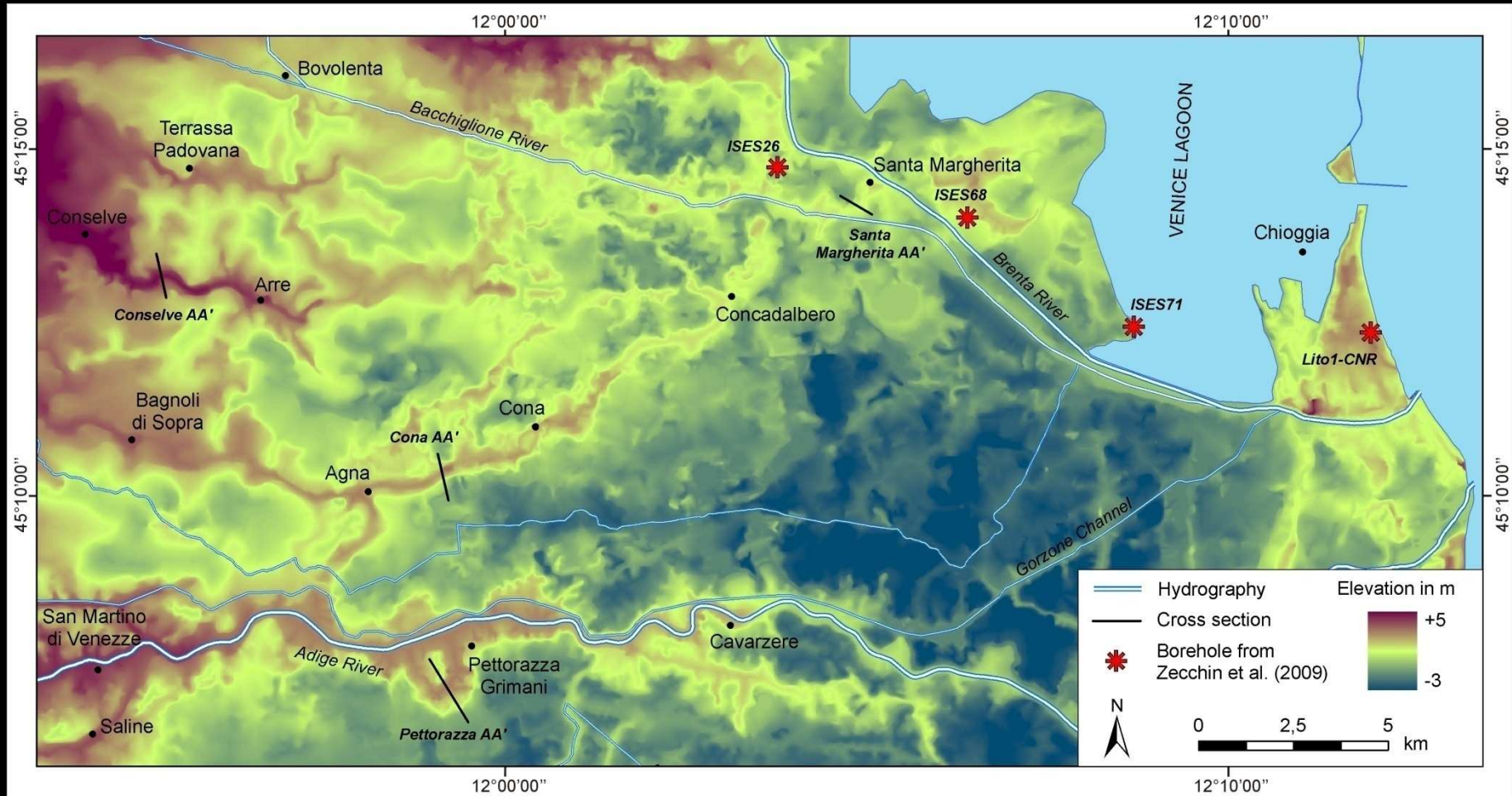


Ninfo et al., 2011

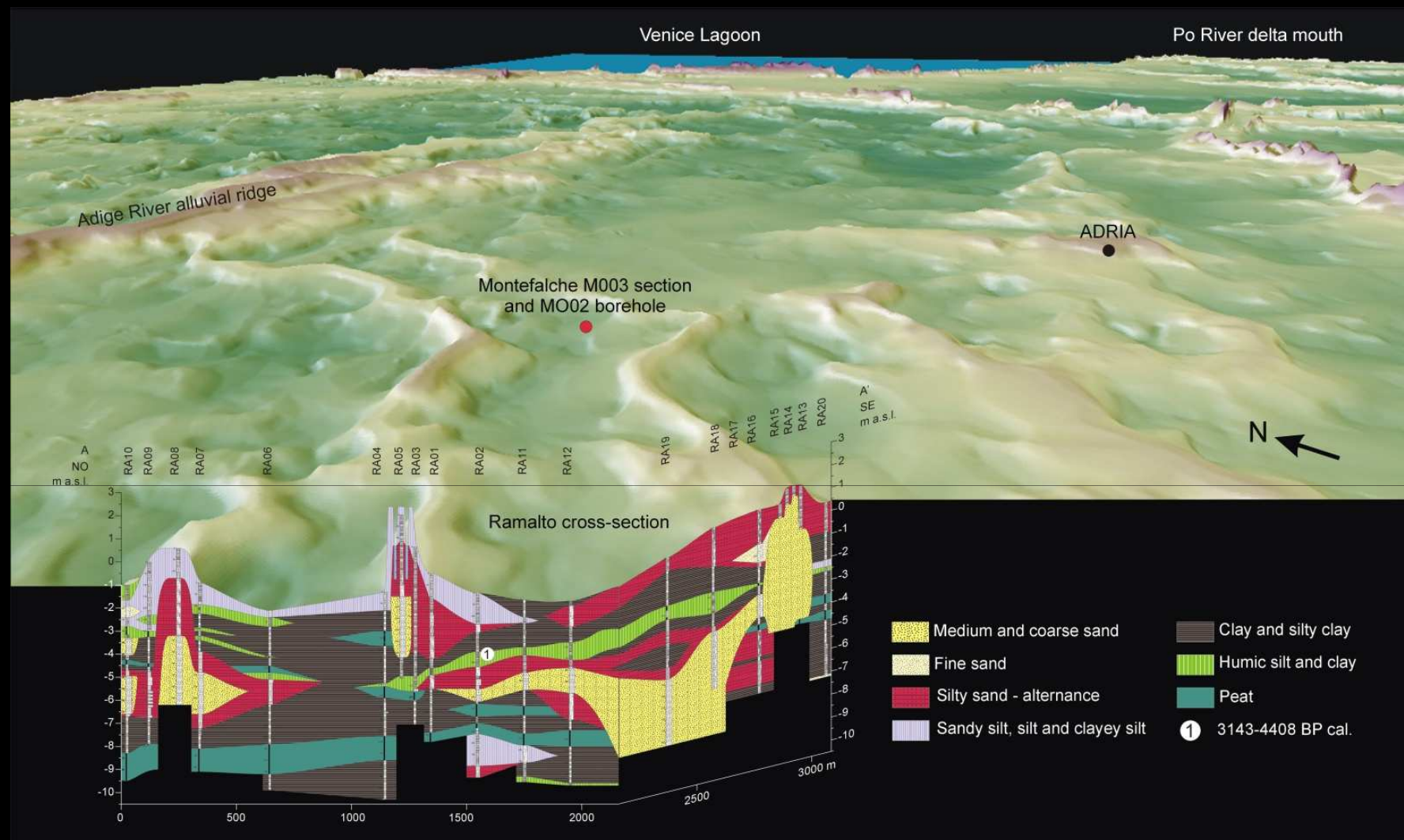


Piovan e Mozzi, 2010



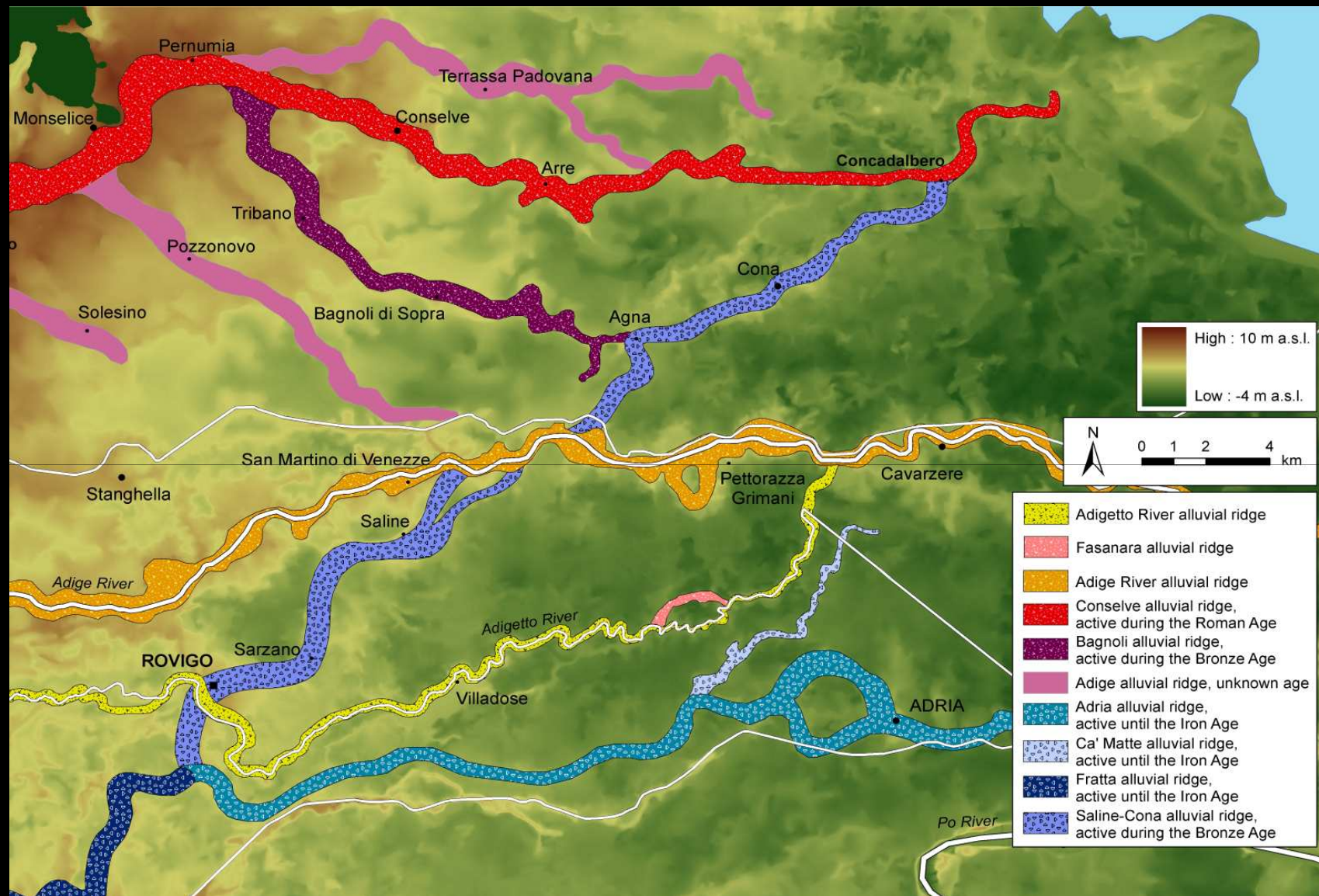


Piovan et al., 2012

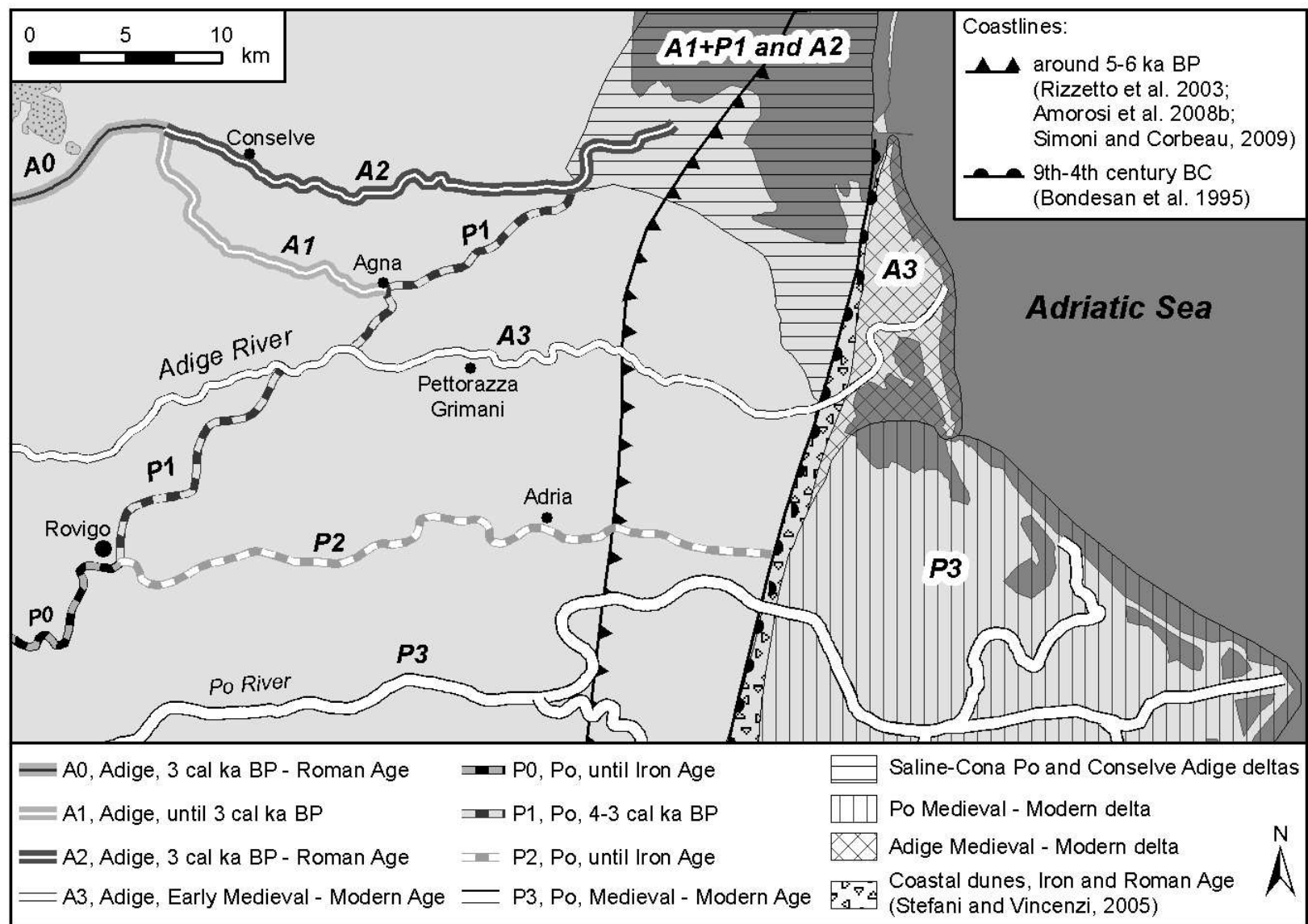


Piovan et al., 2012

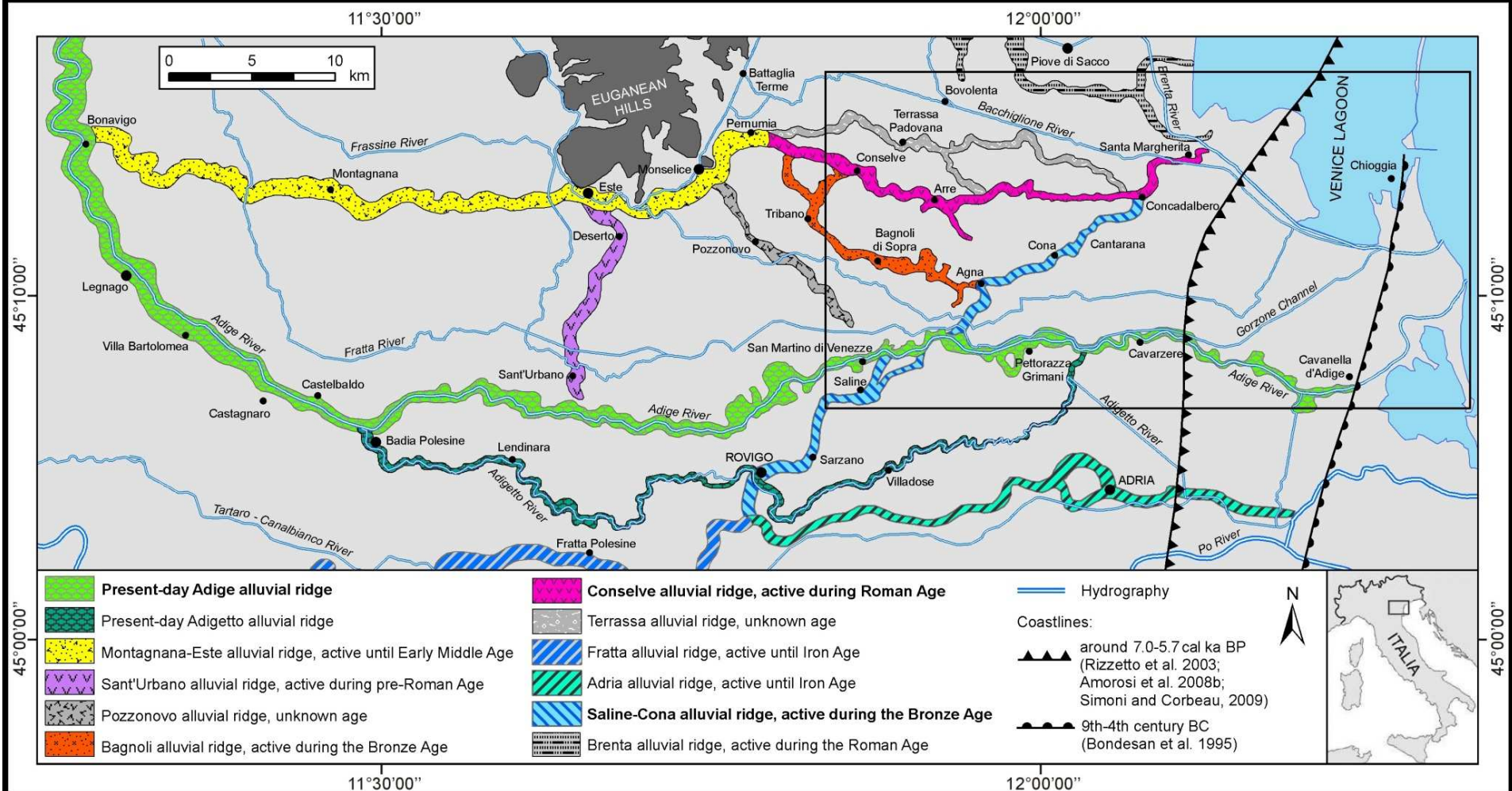




Piovan et al., 2012







# Colli Euganei

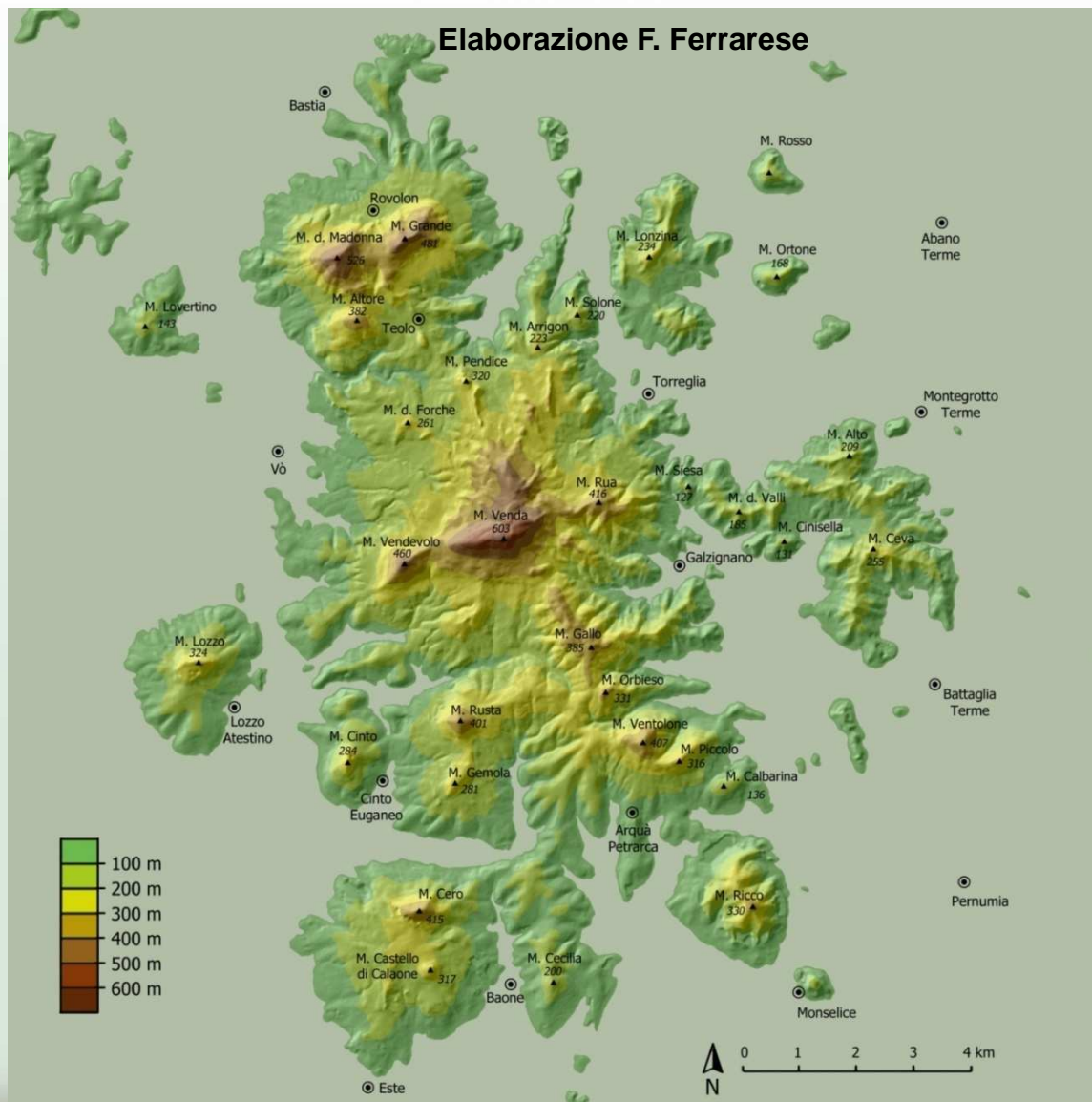


IGM 1:50000 su DTM da CTRn

Elaborazione F. Ferrarese

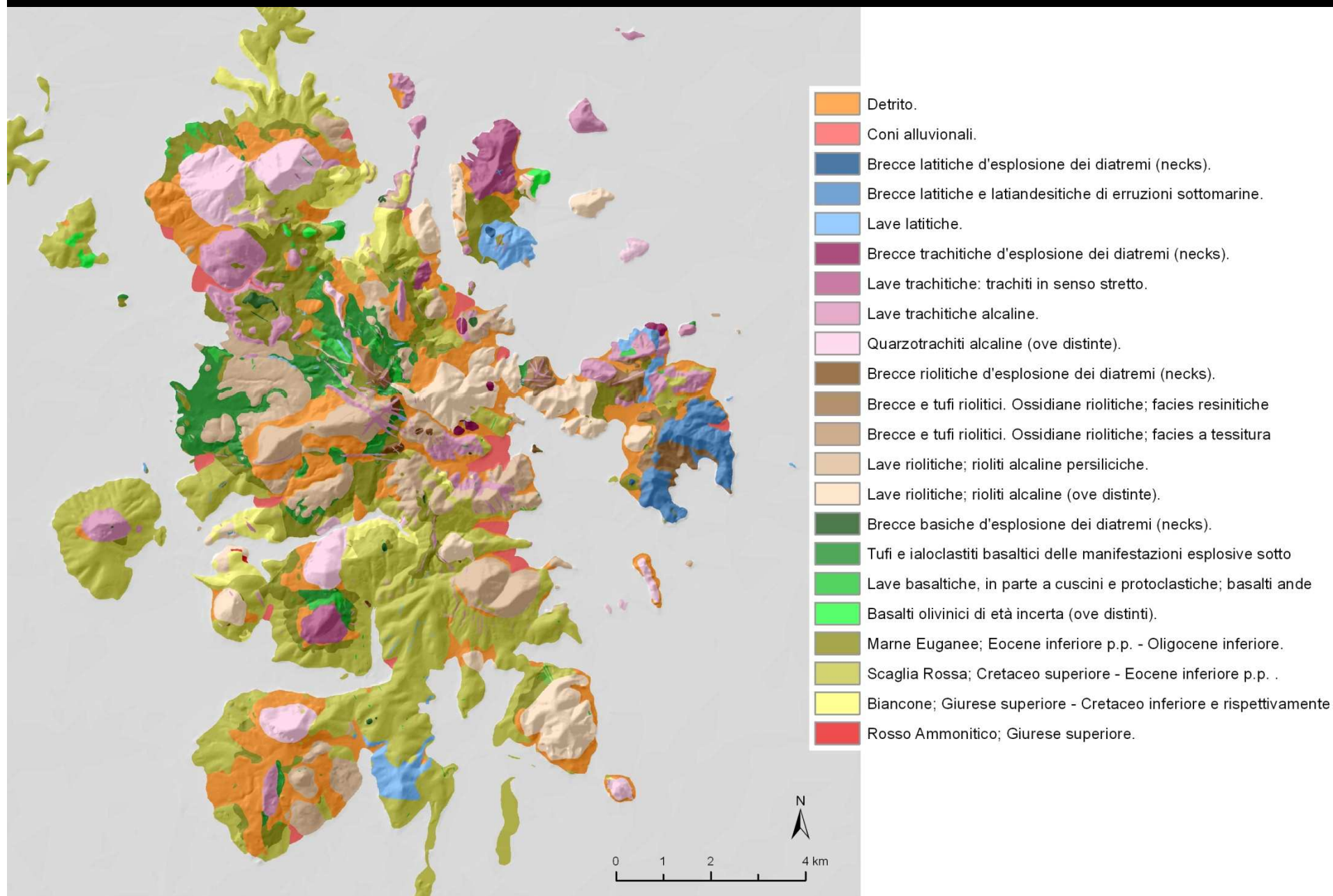


# DTM da CTRn



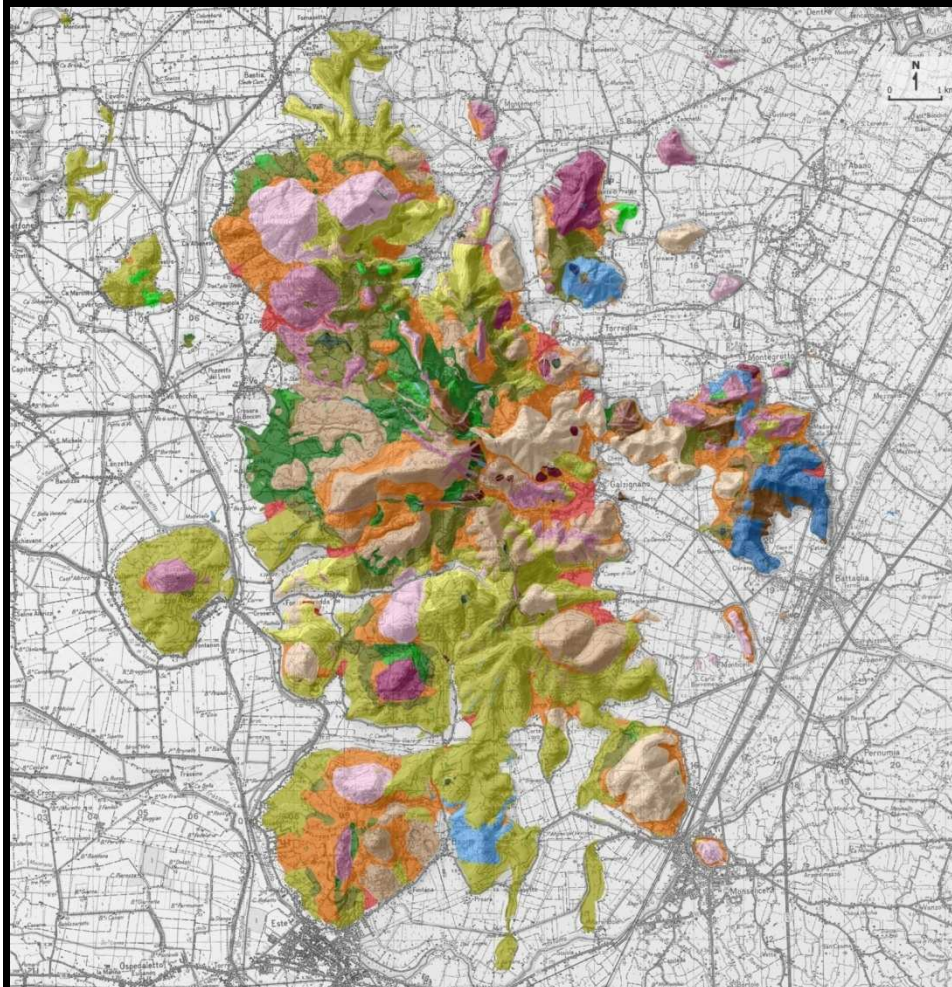
**SUOLI E GEOMORFOLOGIA DEL TERRITORIO PADOVANO**  
Convegno - 23.10.2013

## Carta geologica dei Colli Euganei (Piccoli et al., 1981) su DTM

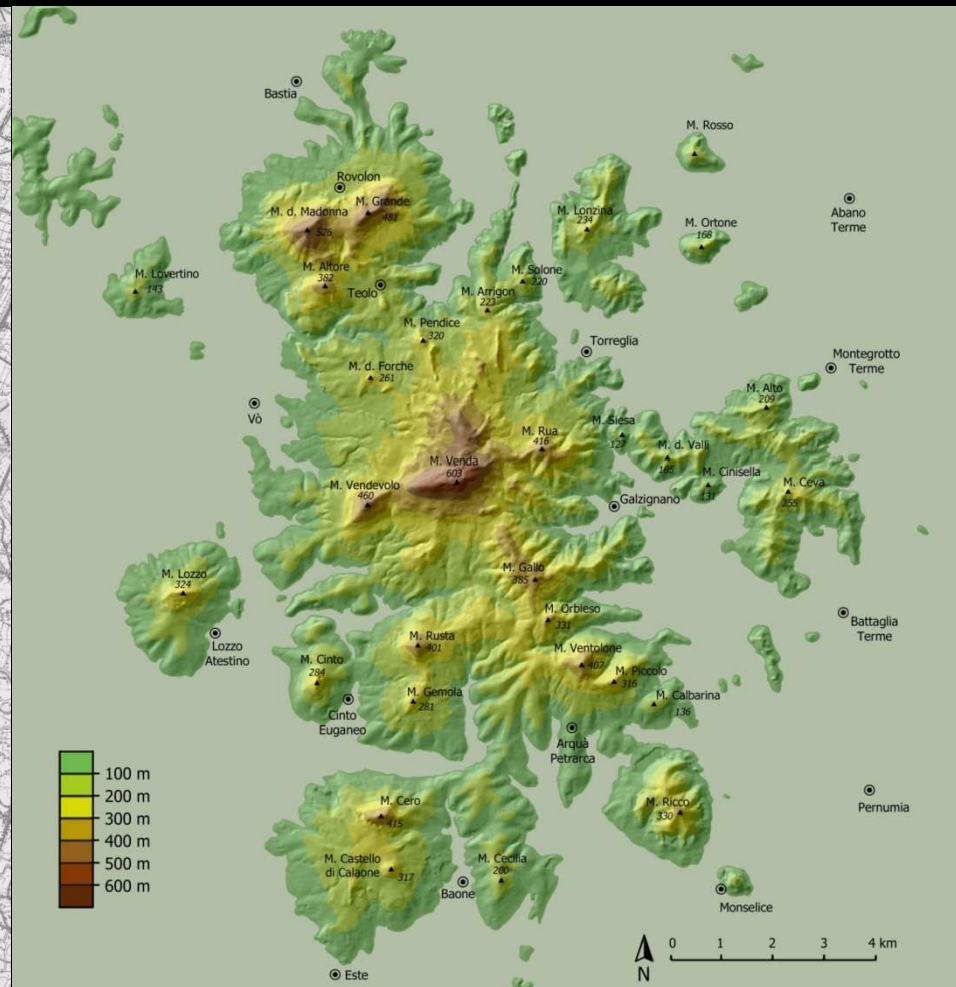




# Carta geologica



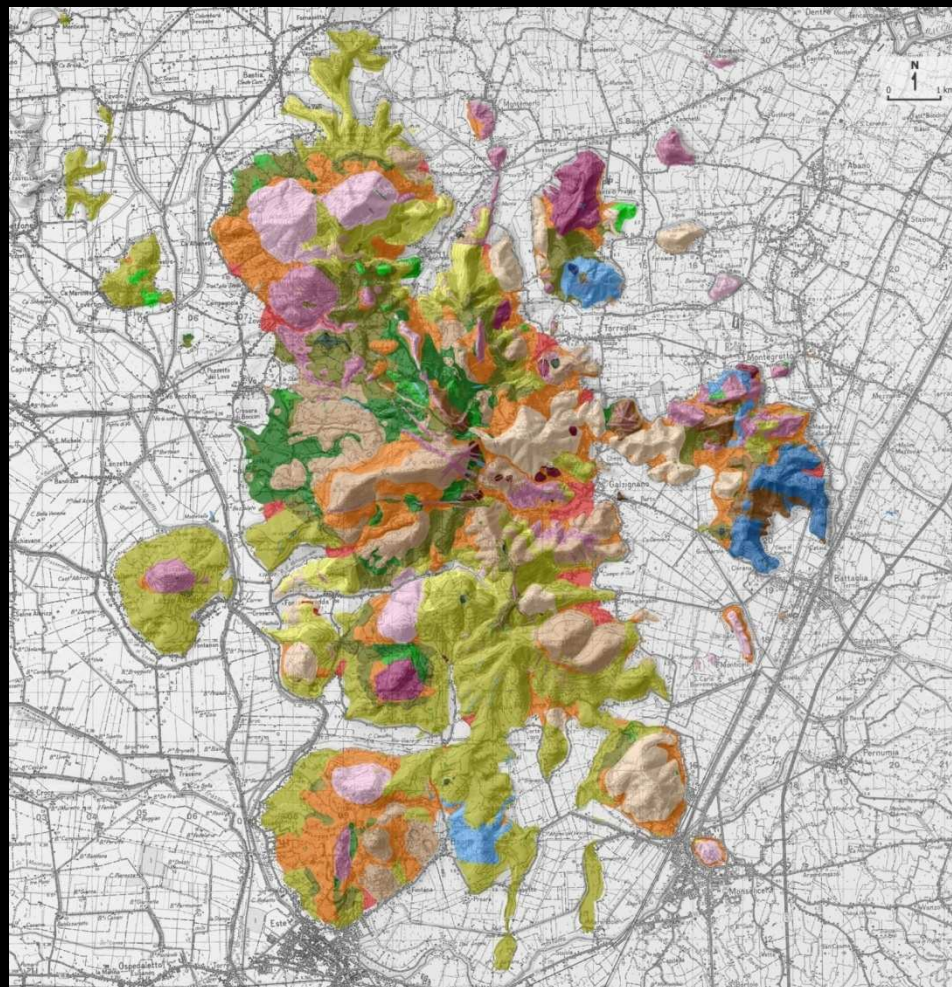
# DTM



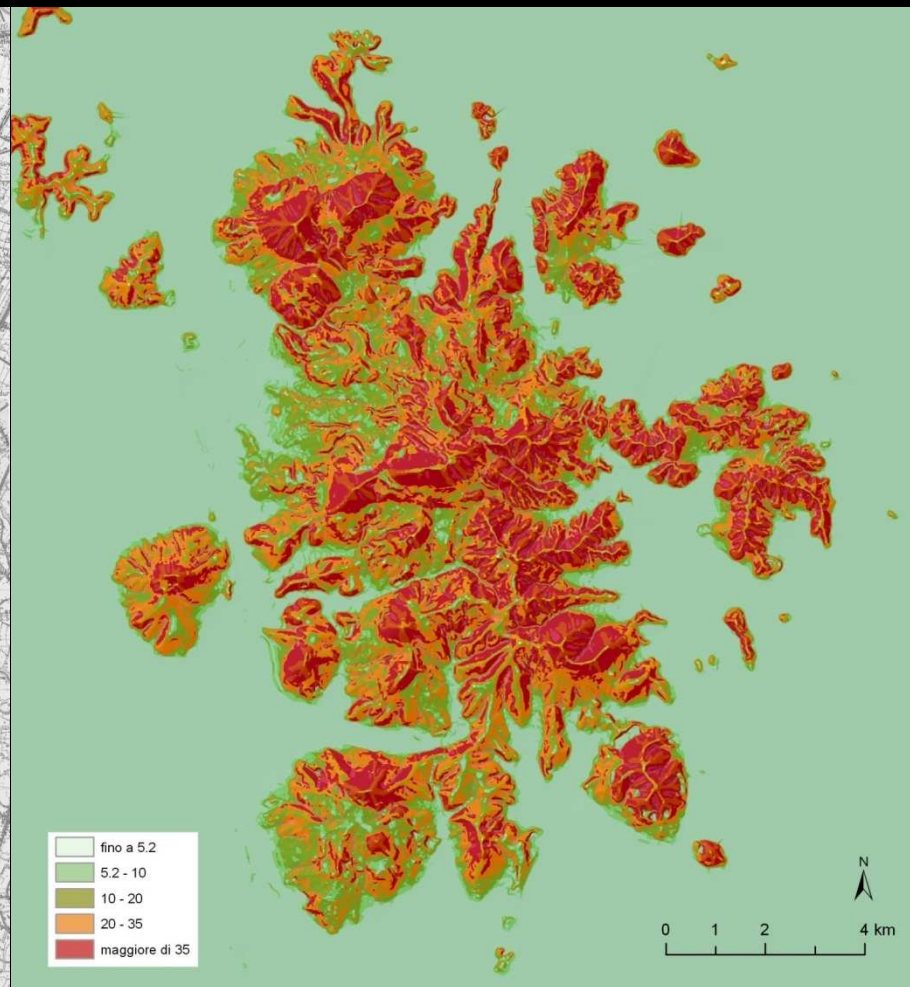
Elaborazione F. Ferrarese



## Carta geologica



## Inclinazione dei versanti



Elaborazione F. Ferrarese





# ISPRA

Istituto Superiore per la Protezione e la Ricerca Ambientale

## SERVIZIO GEOLOGICO D'ITALIA

Organo cartografico dello Stato (legge 68 del 2.2.1960)

### NOTE ILLUSTRATIVE della CARTA GEOLOGICA D'ITALIA alla scala 1:50.000

## foglio 147 PADOVA SUD

a cura di

M. Cucato<sup>(3)</sup>, Gp De Vecchi<sup>(1)</sup>, P. Mozzi<sup>(2)</sup>,  
T. Abbà<sup>(3)</sup>, G. Paiero<sup>(3)</sup>, R. Sedeà<sup>(1)</sup>

con contributi di

A. Asiola<sup>(1)</sup>, P. Fabbri<sup>(1)</sup>, A. Miola<sup>(4)</sup>, B. Monopoli<sup>(5)</sup>, S. Piovan<sup>(2)</sup>, M. Pola<sup>(1)</sup>,  
E. Schiavon<sup>(6)</sup>, C. Stefani<sup>(1)</sup>, F. Toffoletto<sup>(6)</sup>, P.-A. Vorlicek<sup>(3)</sup>, D. Zampieri<sup>(1)</sup>

<sup>(1)</sup> Dipartimento di Geoscienze, Università degli Studi di Padova

<sup>(2)</sup> Dipartimento di Geografia "G. Morandini", Università degli Studi di Padova

<sup>(3)</sup> Libero professionista, collaboratore esterno del Dipartimento di Geoscienze,  
Università degli Studi di Padova

<sup>(4)</sup> Dipartimento di Biologia, Università degli Studi di Padova

<sup>(5)</sup> Land Technology & Services s.r.l.

<sup>(6)</sup> Direzione Geologia e Georisorse - Servizio Geologico Regione del Veneto

Ente realizzatore



REGIONE DEL VENETO

### FOGLIO 147

### PADOVA SUD



125 Piacenza	126 Padova nord	127 Mestre
146 Este	147 PADOVA SUD	148 Chioggia
167 Lendinara	168 Rovigo	169 Adria



ISPRA - Istituto Superiore per la Protezione e la Ricerca Ambientale

### SERVIZIO GEOLOGICO D'ITALIA

Organo Cartografico dello Stato (Legge 68 del 2.2.1960)

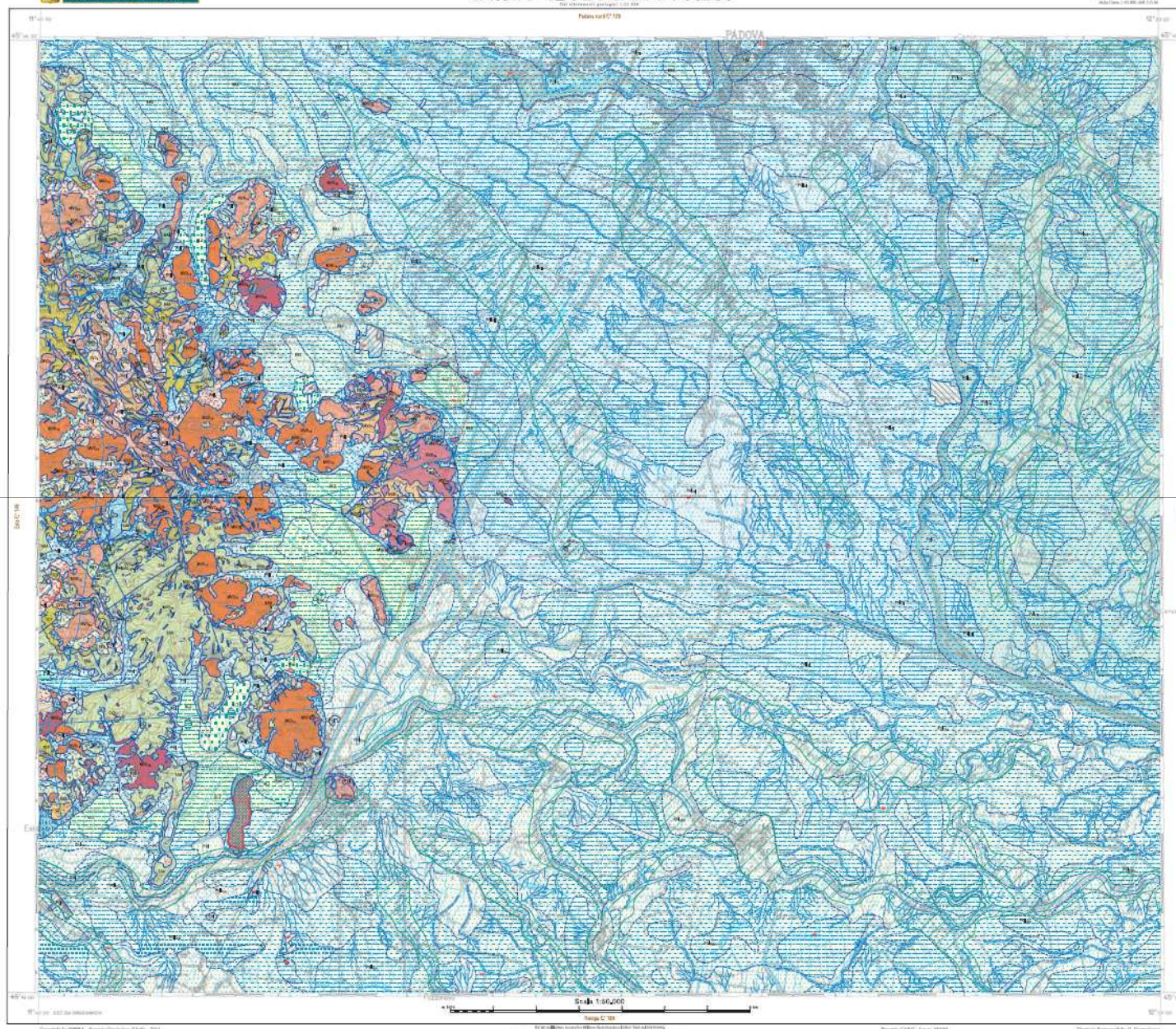
## CARTA GEOLOGICA D'ITALIA

Dai rilievi geologici 1:25.000

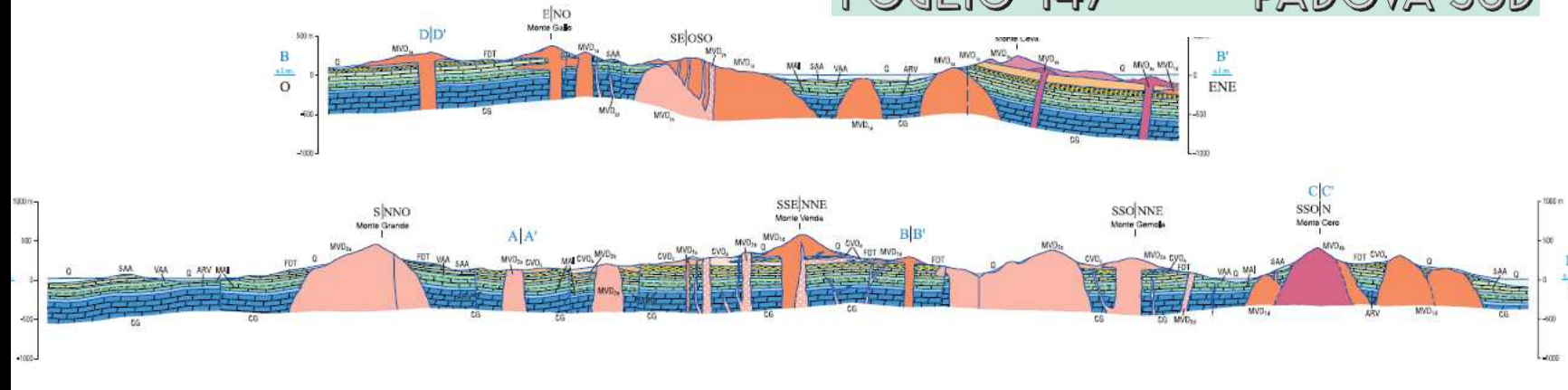


## REGIONE DEL VENETO









REGIONE DEL VENETO

ISPRA - Istituto Superiore per la Protezione e la Ricerca Ambientale  
SERVIZIO GEOLOGICO D'ITALIA

Organo Cartografico dello Stato (Legge 662 del 2.2.1960)

CARTA GEOLOGICA D'ITALIA



BBR

**Formazione di M. Breccale (Colli Euganei)**

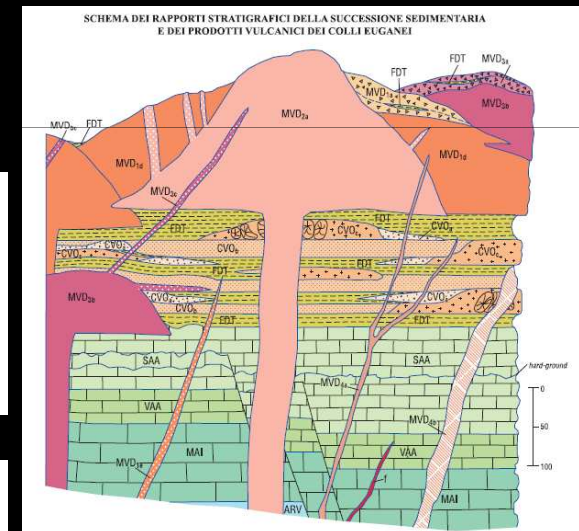
Ghiaie, talora con massi, in matrice limoso-argillosa, diamicton a supporto di matrice, con clasti da angolosi a subarrotondati di origine o provenienza locale, localmente debolmente stratificati (alteriti e colluvi indifferenziati). Limite inferiore graduale con il substrato roccioso o sepolto, limite superiore coincidente con la superficie topografica o inconforme con POI. Spessore da pochi m a circa una ventina di m.

**PLEISTOCENE INFERIORE? - OLOCENE**

CZ

**Supersintema di Comezzara (Colli Euganei)**

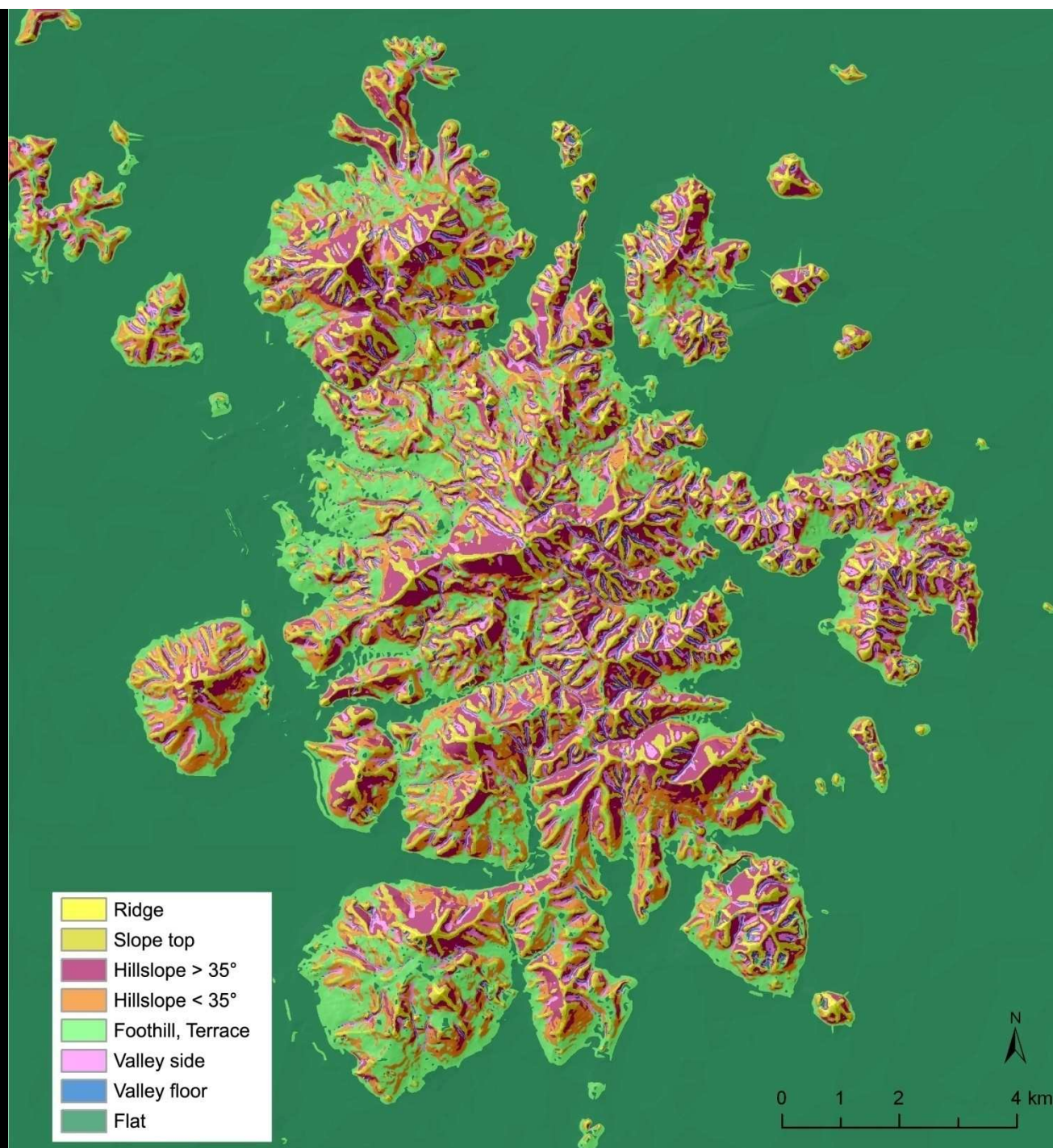
Ghiaie e blocchi a supporto clastico o parzialmente aperto, con clasti angolosi di provenienza locale (depositi di versante); limo sabbioso-argilloso con ghiaia, ghiaia limoso-argillosa, depositi talora debolmente stratificati (depositi colluviali); ghiaia e blocchi eterometrici, diamicton a supporto di matrice o clastici, con clasti di litologie locali (accumuli di frana); ghiaie minute limoso-sabbiose, massive o grossolanamente stratificate (depositi torrentizi). Limite inferiore sepolto o inconforme con il substrato roccioso, limite superiore coincidente con la superficie topografica o inconforme con POI. Spessore variabile da 1 m ad alcune decine di m.

**PLEISTOCENE MEDIO - PLEISTOCENE SUPERIORE**

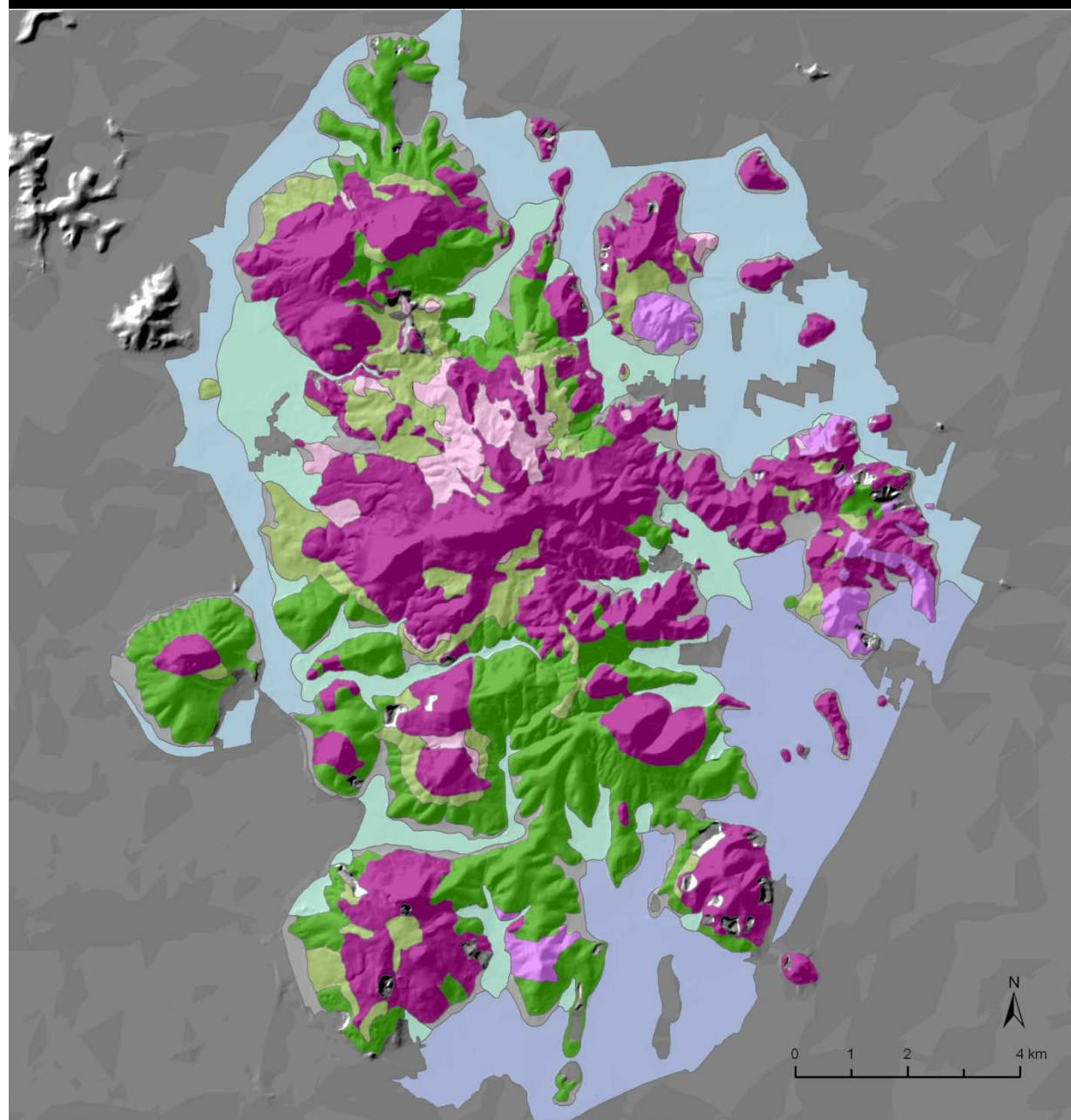
Cucato et al., 2012

# Classificazione delle forme del rilievo da DTM (CTRn)

Elaborazione F. Ferrarese



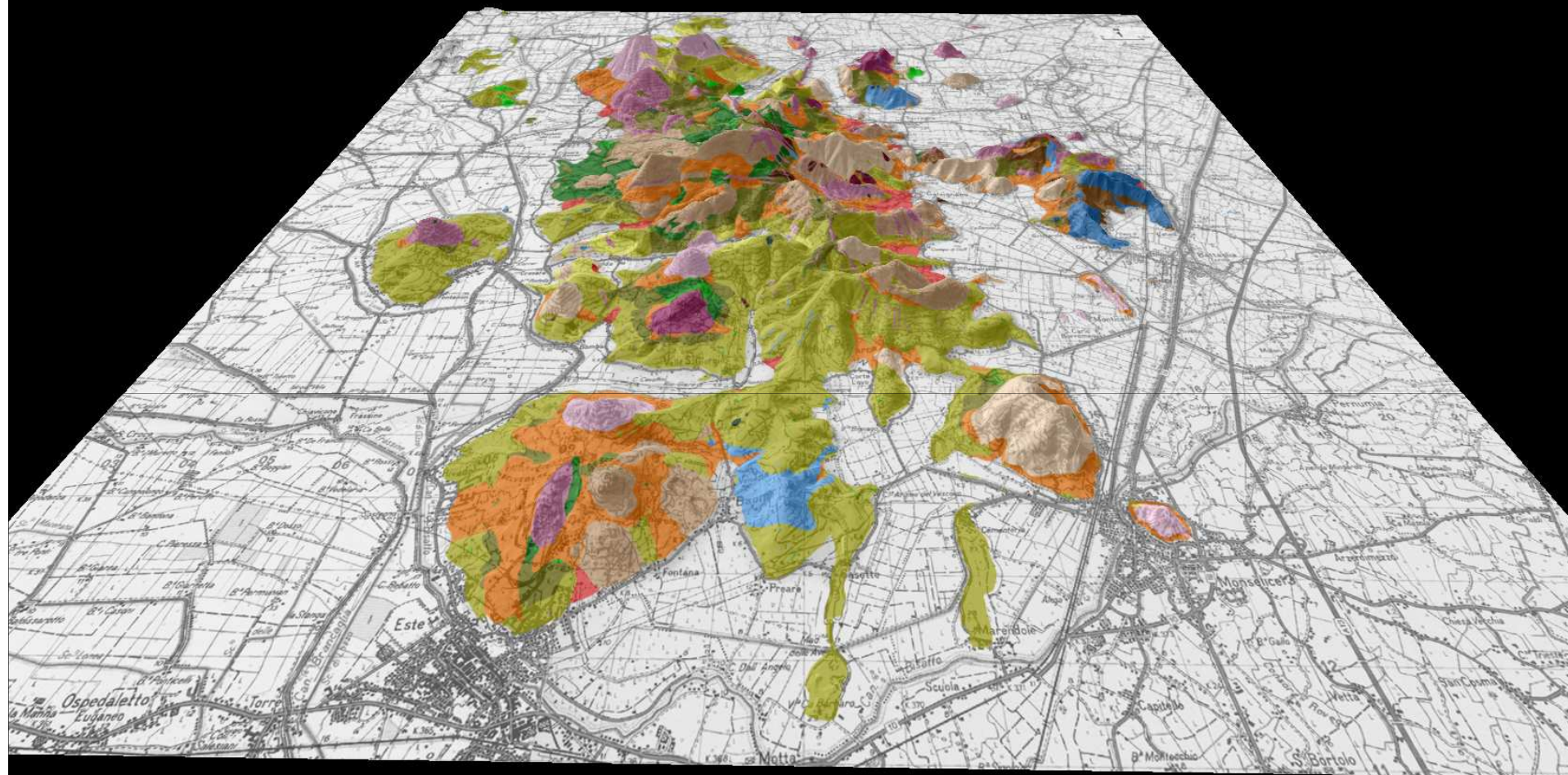




### substrato

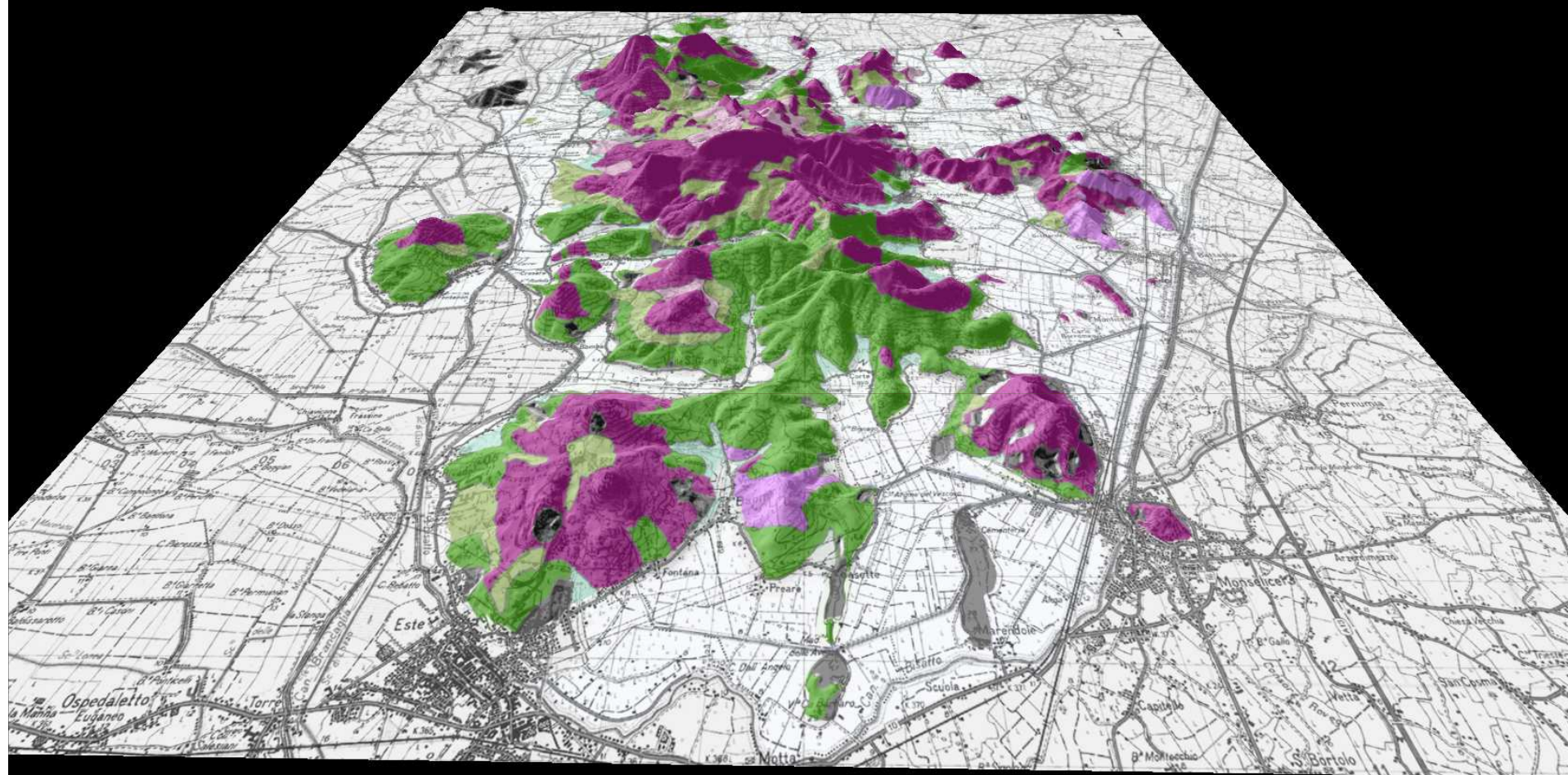
- alluvioni
- alluvioni sistema Adige
- alluvioni sistema Brenta-Bacchiglione
- detriti di versante
- rocce sedimentarie (marna)
- rocce sedimentarie (scaglia e biancone)
- vulcaniti acide (rioliti e trachiti)
- vulcaniti basiche (basalti e tufi basaltici)
- vulcaniti con caratteri intermedi (latite)

Elaborazione F. Ferrarese



Elaborazione F. Ferrarese





Elaborazione F. Ferrarese

***Grazie per l'attenzione***