

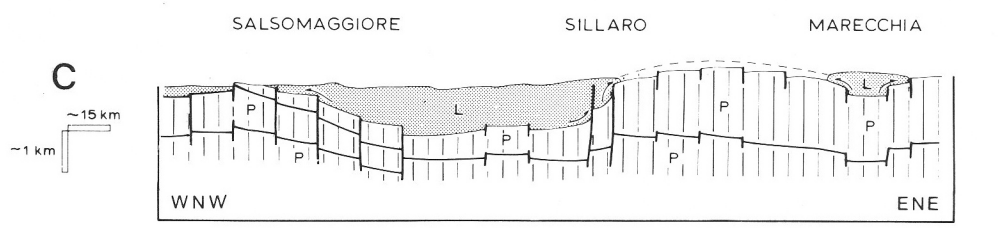
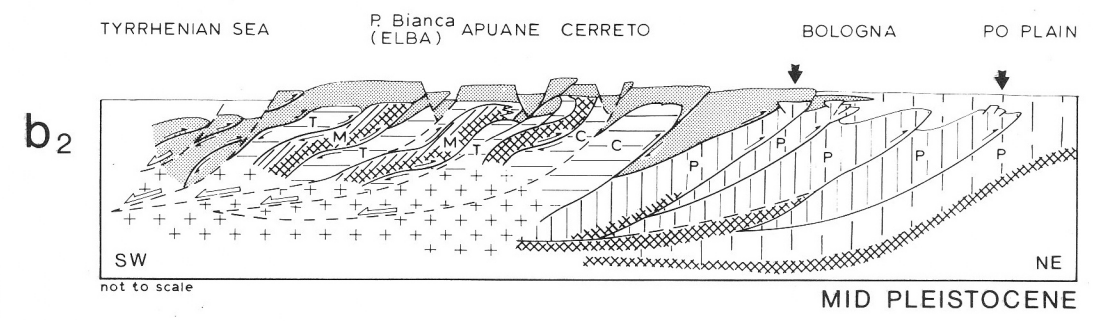
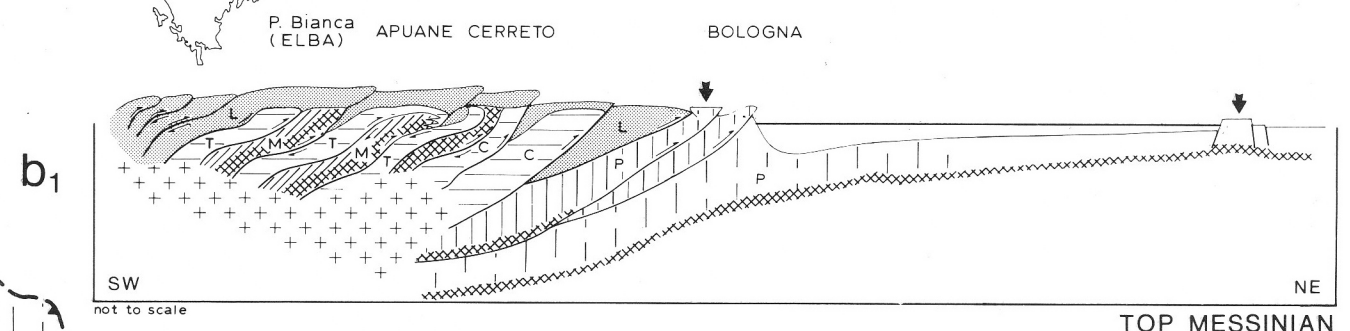
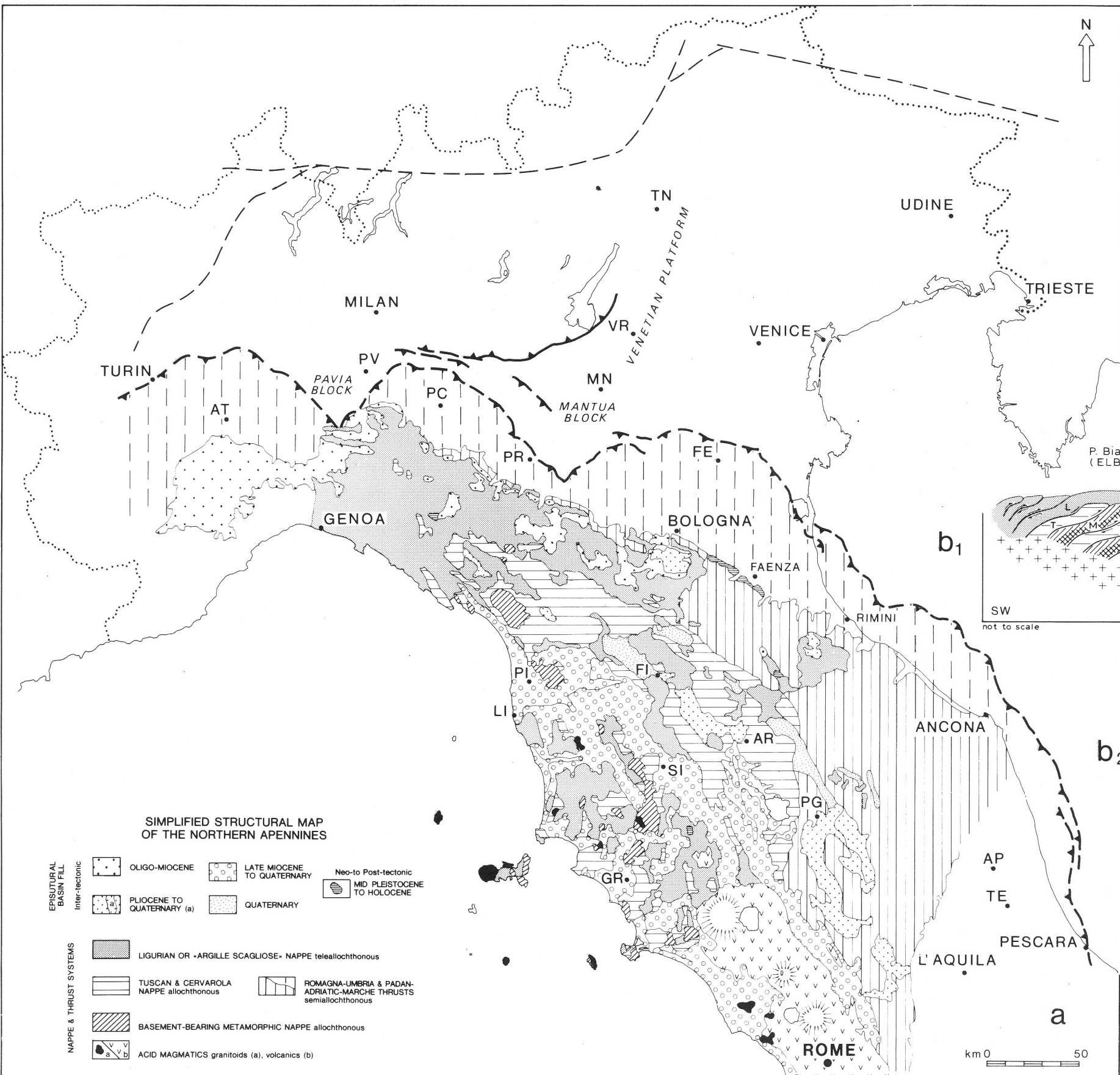
NORTHERN APENNINES

SIMPLIFIED STRUCTURAL MAP AND CONCEPTUAL SECTIONS

CONCEPTUAL SECTIONS ALONG DIP (b) AND ALONG STRIKE (c)

L = LIGURIAN or "ARGILLE SCAGLIOSE" NAPPE
 T & C = TUSCAN & CERVAROLA NAPPE
 P = ROMAGNA - UMBRIA & PADAN - MARCHE THRUSTS
 M = BASEMENT-BEARING METAMORPHIC NAPPE (cross hatching: pre-Alpine basement)
 + = GRANITOIDS

Section b1 : palinspastic restoration at the end of Messinian
 Section b2 : Mid Pleistocene to Present setting
 (Quaternary erosion and strong Apuane uplift not shown)



SIMPLIFIED STRUCTURAL MAP OF THE NORTHERN APENNINES

EPISUTURAL BASIN FILL
 Inter-tectonic: OLIGO-MIOCENE, LATE MIOCENE TO QUATERNARY, Pliocene to Quaternary (a), QUATERNARY, Neo- to Post-tectonic: MID PLEISTOCENE TO HOLOCENE

NAPPE & THRUST SYSTEMS
 LIGURIAN OR "ARGILLE SCAGLIOSE" NAPPE teleallochthonous
 TUSCAN & CERVAROLA NAPPE allochthonous
 ROMAGNA-UMBRIA & PADAN-ADRIATIC-MARCHE THRUSTS semiallochthonous
 BASEMENT-BEARING METAMORPHIC NAPPE allochthonous
 ACID MAGMATICS granitoids (a), volcanics (b)

Simplified structural map of the Northern Apennines (a) with top Messinian (b1) and mid Pleistocene (b2) transversal and longitudinal (c) conceptual sections. Base contacts of the episutural basin fills only are stratigraphic (or partly tectonized). Other contacts are tectonic. The outer front of the Northern Apennines is marked by saw teeth. Subsurface units and limits shown by dashed lines. Post-tectonic episutural basin fill drapes the whole subsurface Apennine. The term 'inter-tectonic' is used for basin fills deposited after a major tectonic structuration, mainly between tectonic events (compressional and/or extensional), and deformed accordingly.