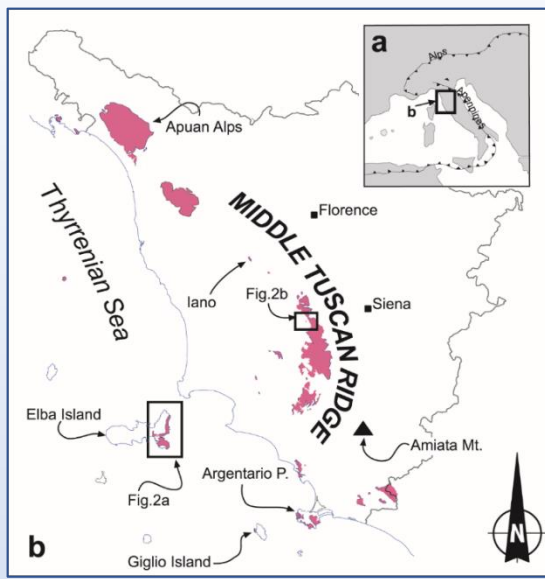


# Permian sporomorphs from upper Palaeozoic successions of Southern Tuscany (Italy): new constraints for the stratigraphy and palaeogeographic setting of the Tuscan Domain

Amalia SPINA, Mauro ALDINUCCI, Andrea BROGI, Enrico CAPEZZUOLI, Simonetta CIRILLI, Domenico LIOTTA

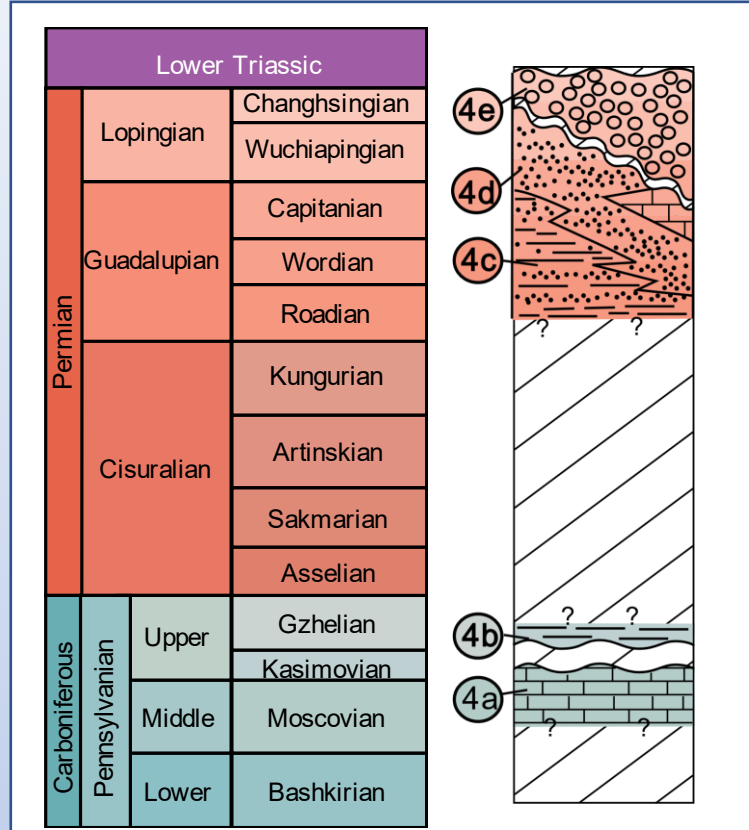


Before palynological analysis...

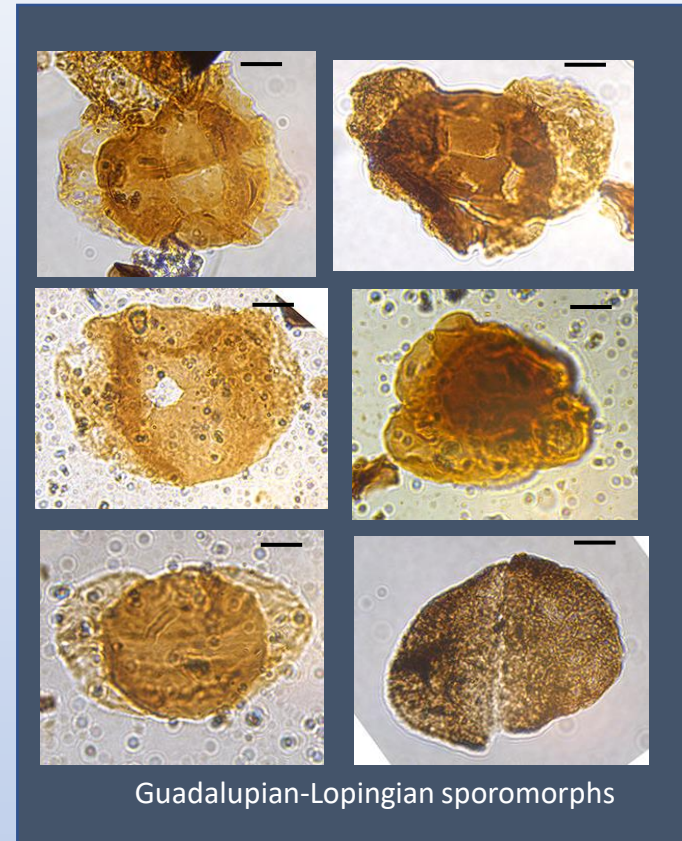
## New stratigraphic data

Triassic	Lower	T. Mersino Fm	Falsacqua Fm	Rio Marina Fm	Calamita Fm	Le Cetine Fm	Borro del Fregione Fm	Farma Fm	Carpineta Fm	Arenarie del M. Argentario Fm	Arenarie di Poggio al Carpino Fm
		Lopingian									
Permian	Guadalupian										
	Cisuralian										
Carboniferous	Upper Pennsylvanian										
	Middle Pennsylvanian										
	Lower Pennsylvanian										
	Upper Mississippian										
	Middle Mississippian										
	Lower Mississippian										
Devonian											
Silurian											
Ordovician											
Cambrian											

After palynological analysis...

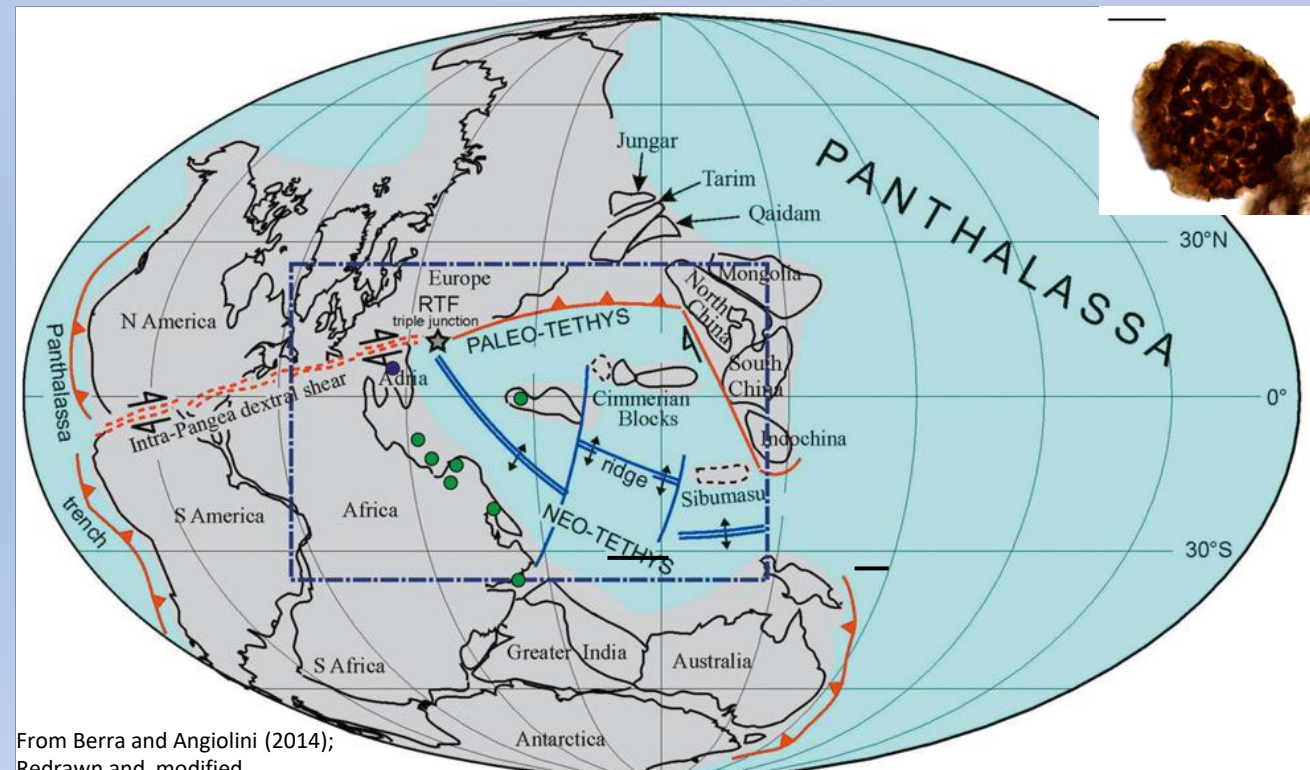


4a: Calcare di Sant'Antonio Fm; 4b: Scisti a Spirifer Fm; 4c: Farma Fm—Falsacqua Fm; 4d: Carpineta Fm; 4e: Arenarie di Poggio al Carpino Fm—Le Cetine Fm. From Mollì et al. (2020)

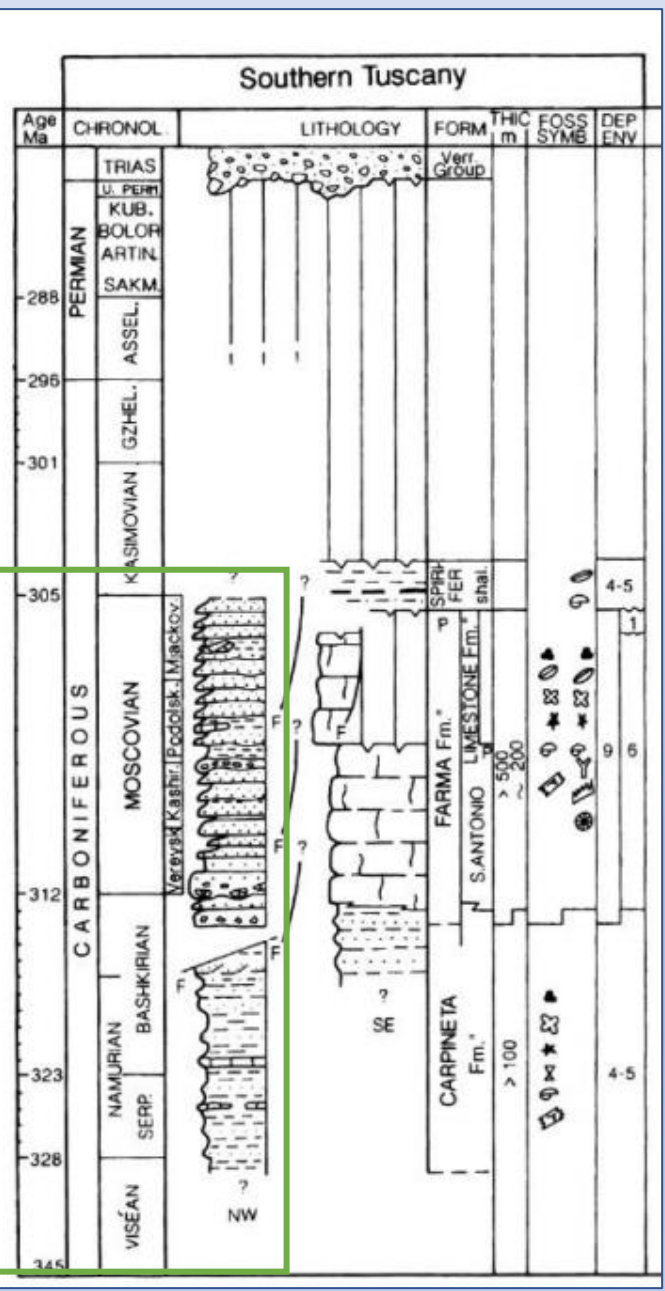


Towards a new palaeogeographic and palaeoclimatic scenario

Before palynological analysis...



From Berra and Angiolini (2014); Redrawn and modified



Redrawn and modified from Pasini and Vai (1997)