

Figure 12. Sketch map showing areal distribution of Permian--Triassic rift configuration.

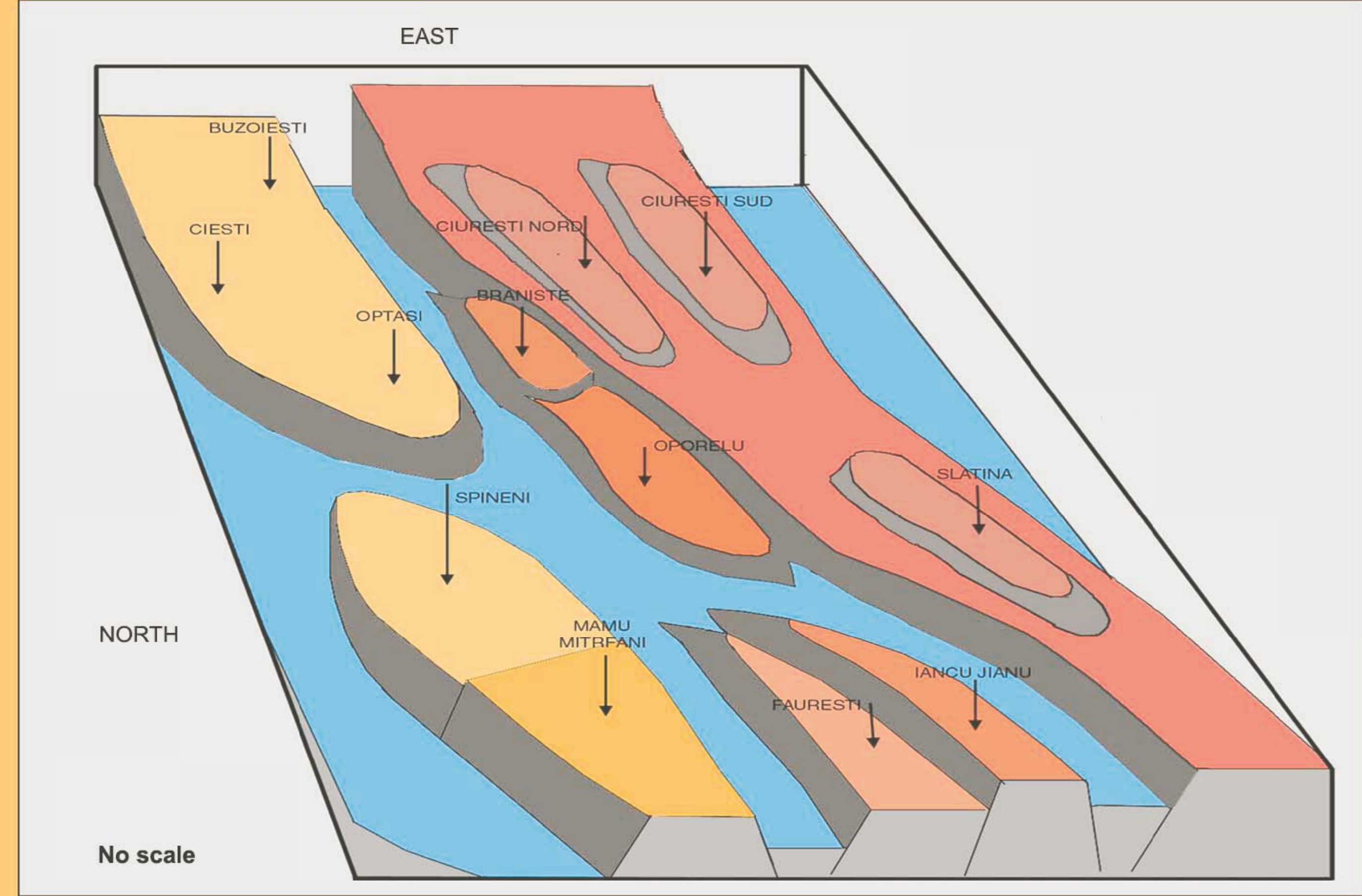


Figure 13. Tectonogram with Permian-Triassic configuration.

A few representative N-S and W-E trending seismic profiles were selected in order to recognize the main fault systems (Figures 4, 5, 6, 7, 8, 9, 10, and 11).

The Permian-Triassic basement faults present N-S and E-W trends. The latter faults are responsible for igneous intrusions and extrusions associated with pyroclastic rocks along Craiova-Optasi Uplift, due to Hercynian and Cimmerian Orogenesis.

In the north of the Moesian Platform, the Permian-Triassic magmatism is associated with an extensional rift area, along W-E trending fault system, generating horst-graben structures. The components of the structures are: Mamu-Mitrofani-Spineni northern horst; Fauresti-Iancu Jianu and Optasi-Ciesti-Buzoiesti median horst; Strejesti-Oporelu-Mogosesti and Braniste southern horst, structurally attached to Slatina-Ciuresti highest horst (Figures 12, 13, and 14).

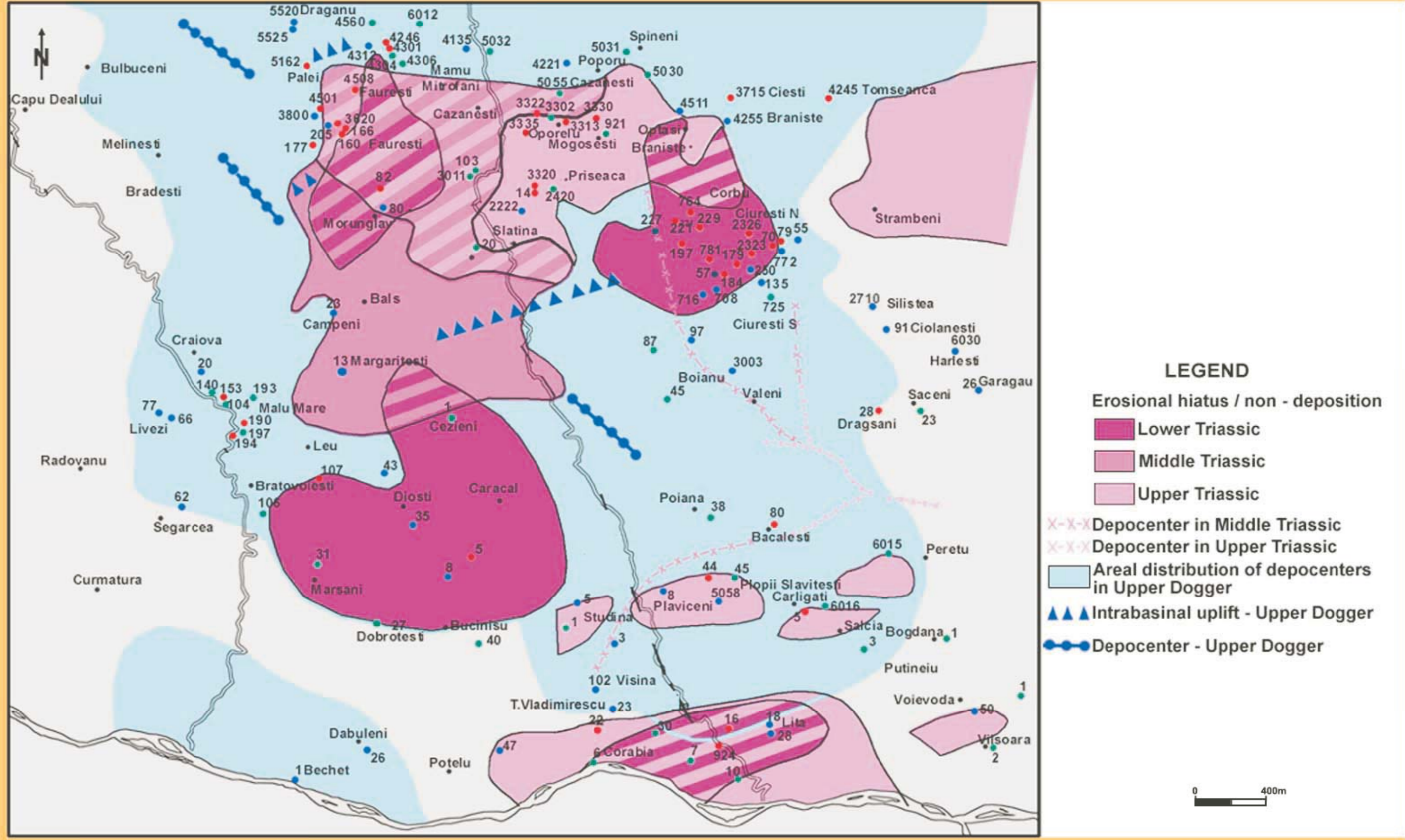
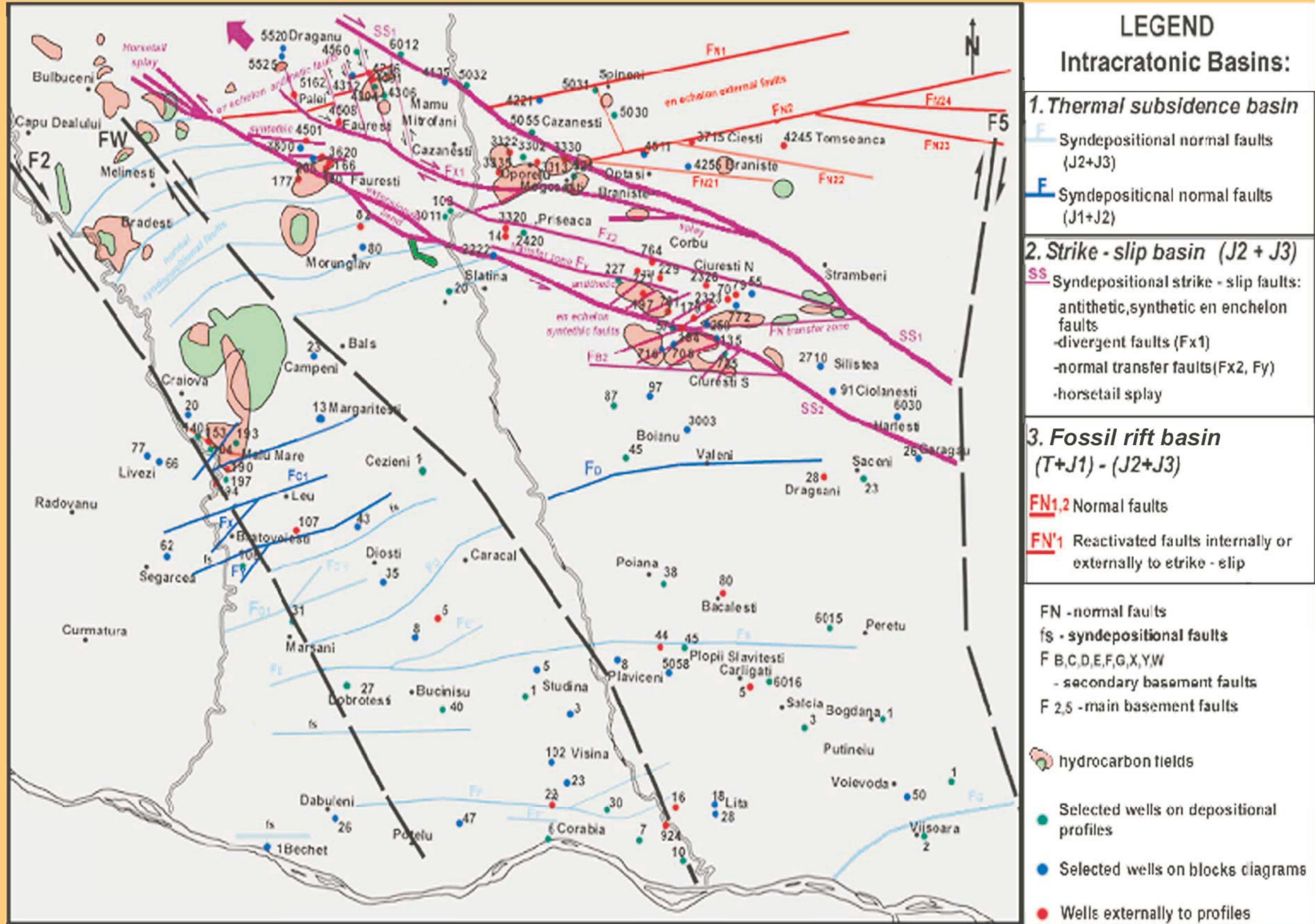


Figure 14. Areal distribution of erosion/non-deposition during the Triassic and of depocenters during late Dogger.

Three types of the Jurassic intracratonic basins were recognized (Figure 15). The first (1) is the southern-central basin characterized by normal syndepositional faults and thermal subsidence (Corabia, Studina, Plopii-Slavitesti, Diosti, Boianu, and Malu Mare structures). The second (2) basin is strike-slip type and is located between SS1 and SS2 strike-slip faults (Ciuresti, Priseaca, Oporelu, Strejesti, Fauresti, Mamu, and Draganu structures). The third (3) type is a fossil rift basin, with external en echelon, normal faults (Tatulesti, Braniste, and Tomsanca structures).

Figure 15. Sketch map of Jurassic elements, Central Moesian Platform.



1. Jurassic deposition in the southern-central basin took place as a result of subsidence and eustacy interaction. The source areas were the former Triassic uplift (Leu, Corabia, and Harlesti structures), and the main transport trend was SE-NW, and locally NE-SW.

2. In the second basin, the strike-slip fault system presents 2 km displacement. It consists of:

- Two main faults, a sinistral one (SS1) and a dextral one (SS2).
- Normal splay faults (Fx1, Fx2, Fx3, Fy).
- Antithetic and synthetic en echelon faults (Mamu, Fauresti, and Ciuresti areas)
- A normal transfer fault and a horsetail splay fault (Varteju and Golumbu areas).

The direction of sedimentary influx was the same as the direction of the uplifted block movement. The source area for this basin was located laterally on Iancu Jianu, Fauresti and Mamu uplifted horst, the latter one being cannibalized to the north (escarpment fault with conglomerates facies in Mitrofani-Dumitresti area), and to the south towards the deeper Draganu basin.

3. In the third, fossil rift basin - Spineni, the direction of the Jurassic sedimentary influx was opposed to the block movement, externally generating active bi-directional erosion along the normal fault escarpment of the fossil rift shoulder, and internally an active depocenter shifted to the source area.