

**Development of the West Siberian  
Basin  
during the Mesozoic and Tertiary:  
Early and Middle Jurassic**



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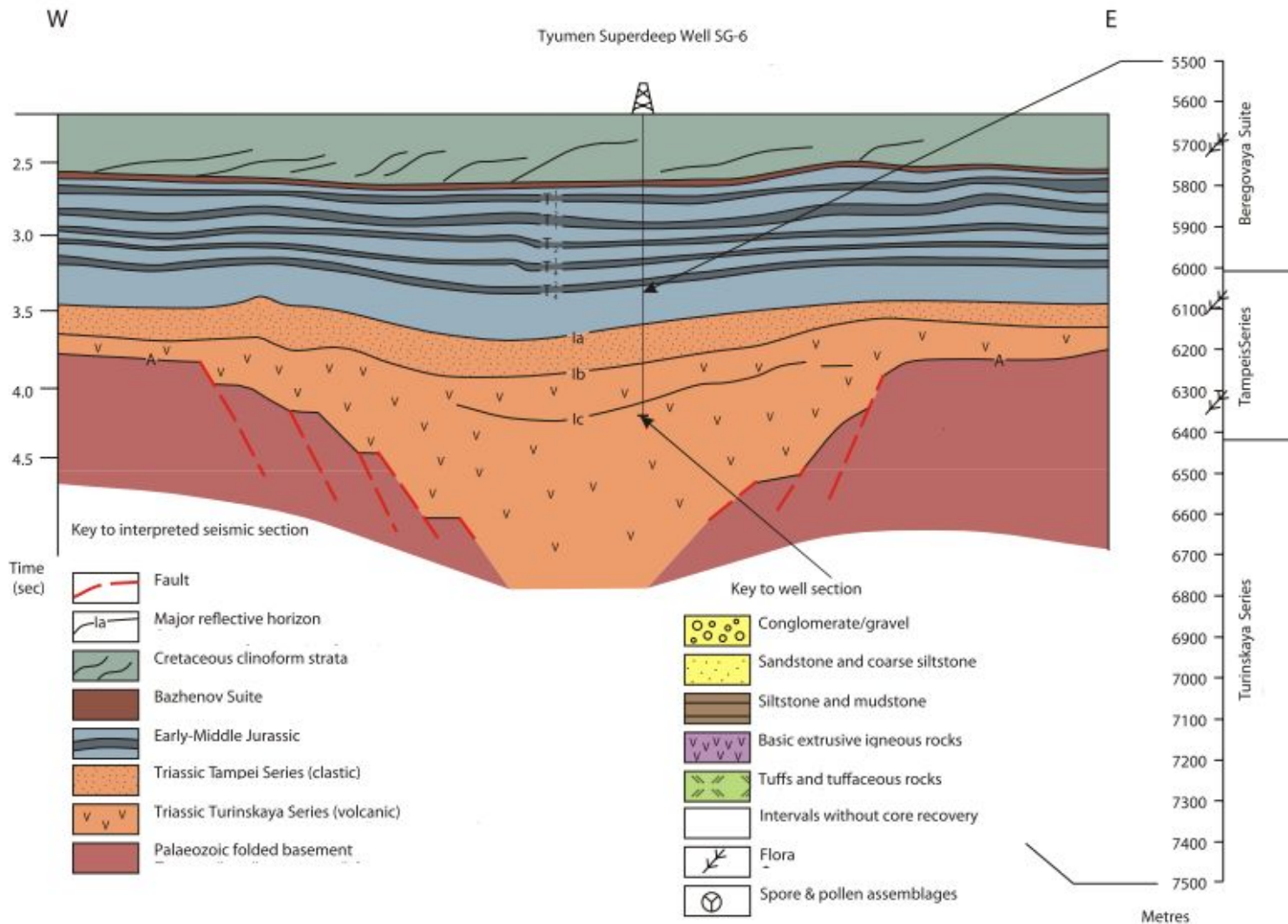
# Content



- Jurassic
- Subside of the WSB
- Riftzones



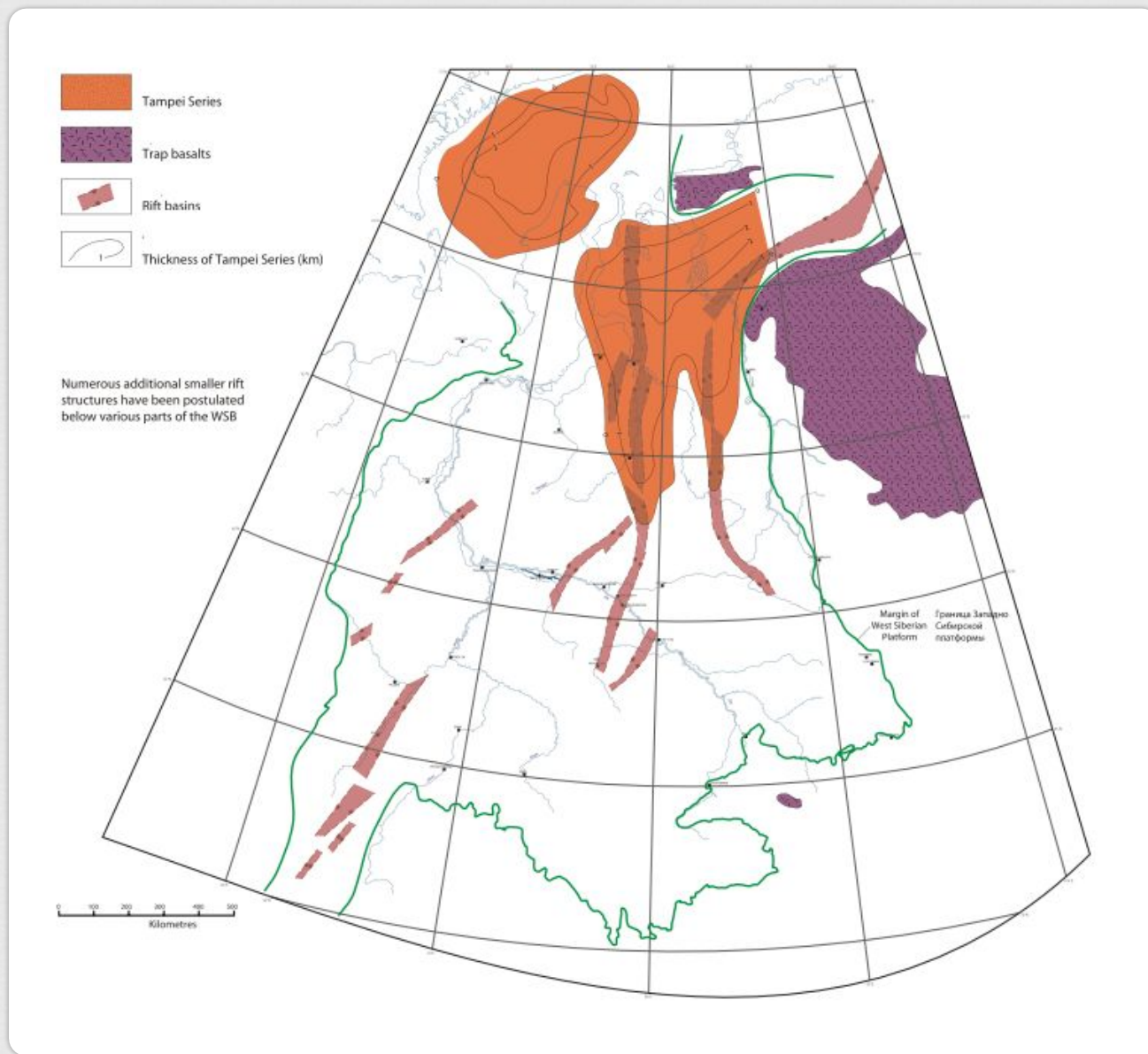
The Lower Jurassic rests on Palaeozoic or Precambrian rocks over most of the West Siberian Platform area, except where Triassic graben-fill deposits are present. In the northern basin region, however, Early Jurassic sediments of mainly continental (including lacustrine) origin overlie widespread Late Triassic deposits (Tampei Series).



*Pic.1. Cross section through the Urengoirift, and the Triassic to Early Jurassic stratigraphy of the Tyumen SG-6 well.*



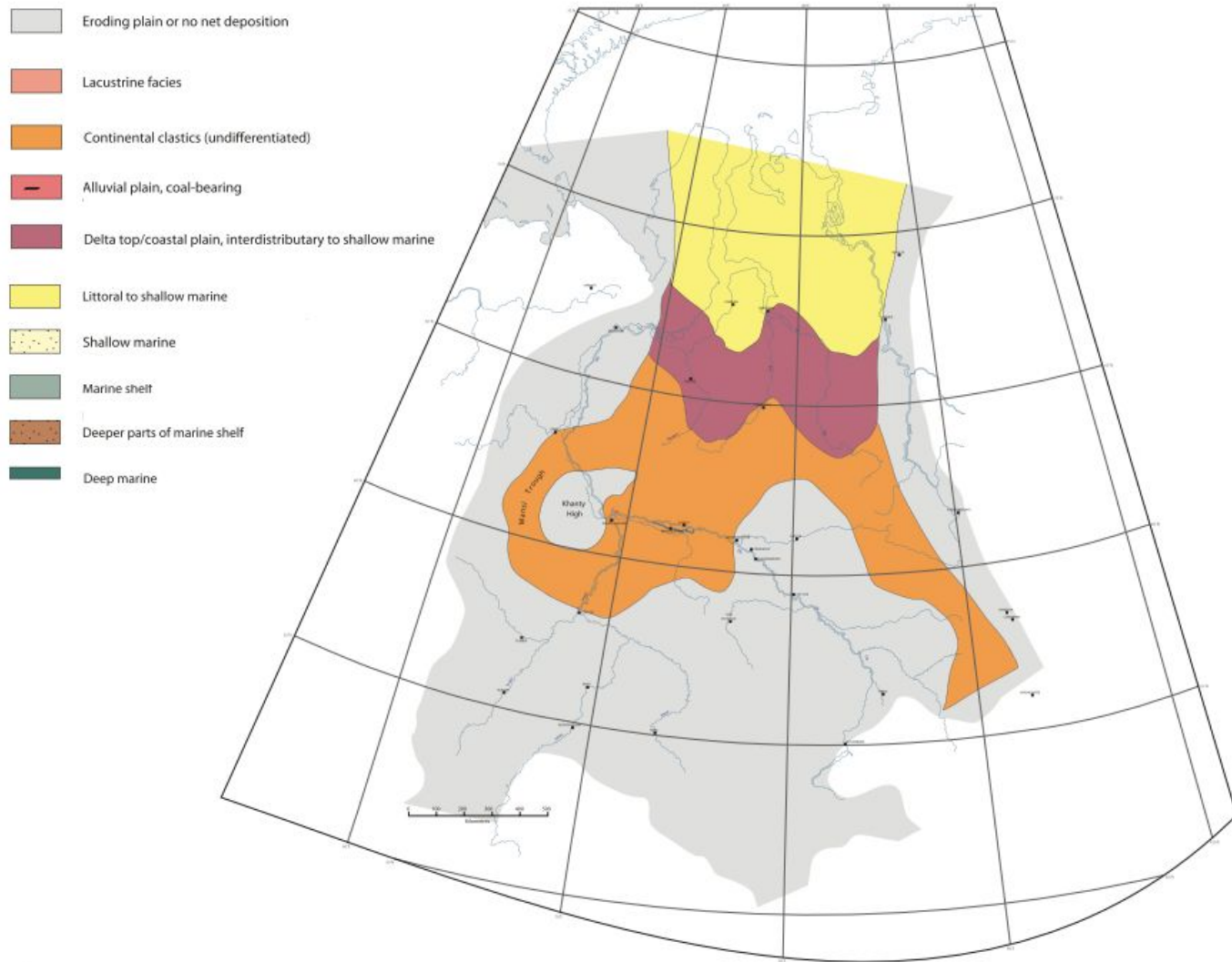
During the Early Jurassic, and most notably during the Pliensbachian, the WSB as a whole began to subside, although a tendency remained for a while for the greatest subsidence to occur in areas underlain by Triassic rifts. Early and Middle Jurassic marine transgressions proceeded from the north along the lines of the grabens, and spread outward from them to cover most of the basin floor, progressively burying the earlier structural and erosional topography.



**Pic.2.** *Approximate distribution of Late Triassic deposition, in relation to rifting and trap volcanism (Tampei Series).*

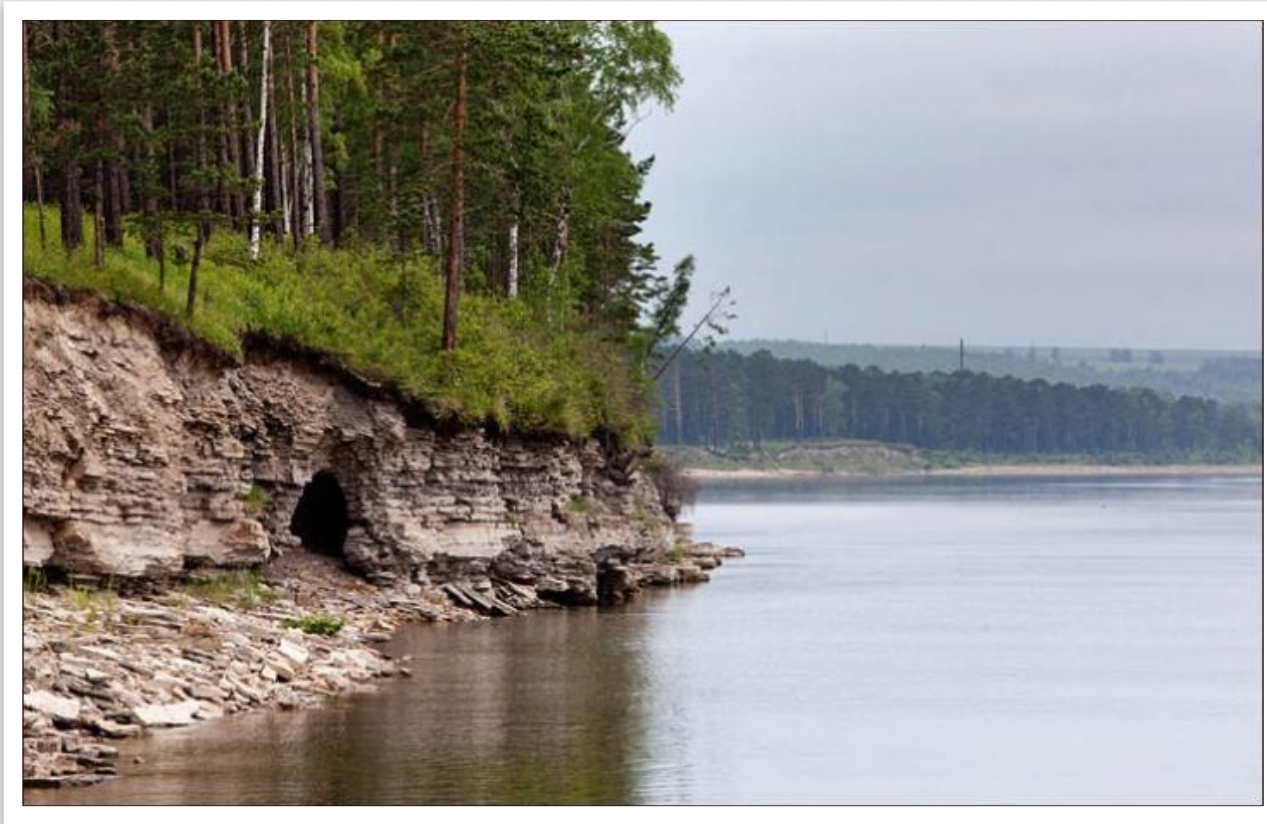


During this period the Mansi Trough, which had been an area of late Palaeozoic uplift, became a major area of subsidence. It formed a semi-starved basin to the west of the Khanty regional high . Later in the Jurassic, the Khanty High also began to subside, and from the Late Jurassic the combined Khanty-Mansi Trough had become the deepest-water zone within the WSB.

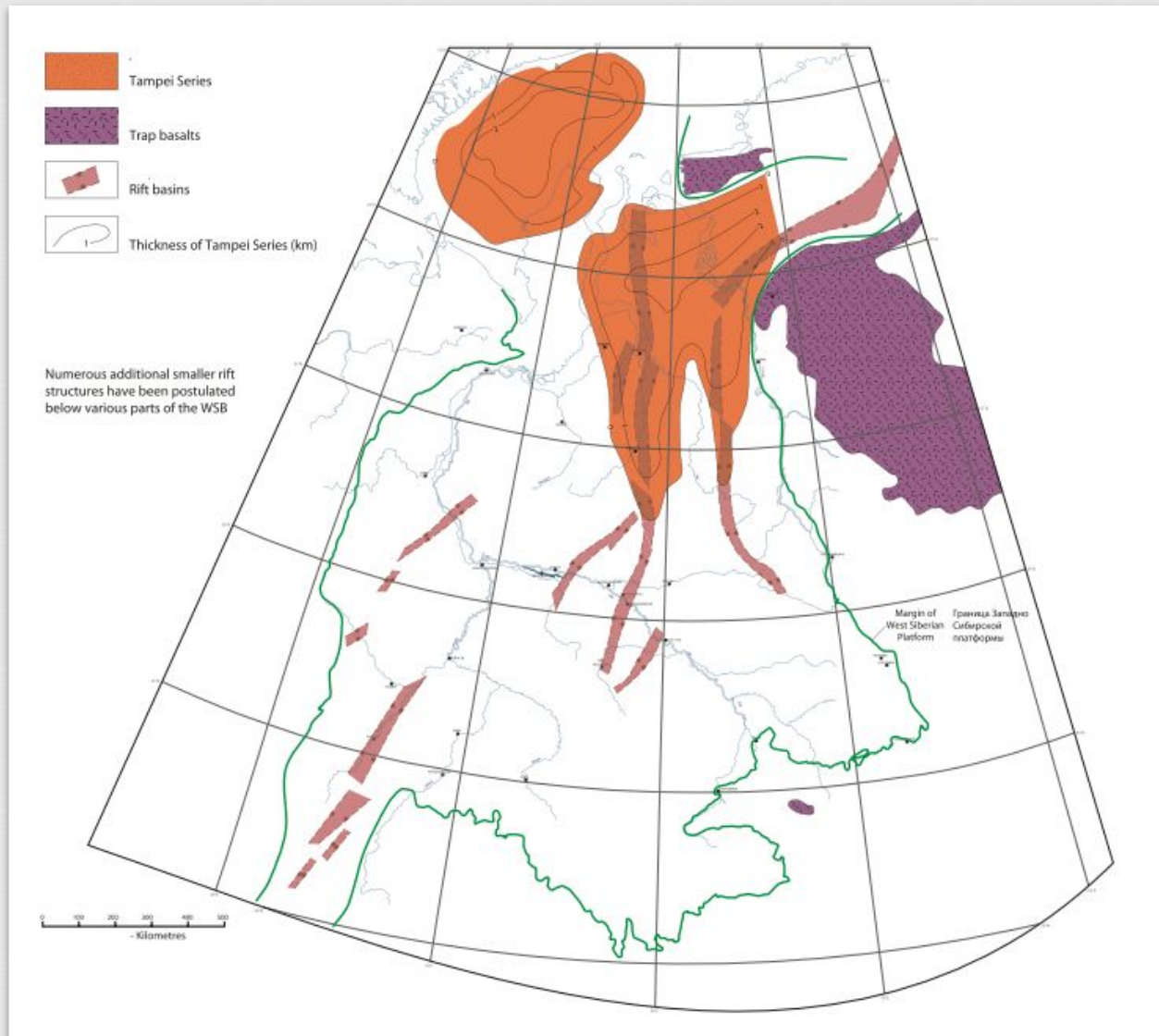


***Pic.3. West Siberian Basin - Palaeogeography Pliensbachian***

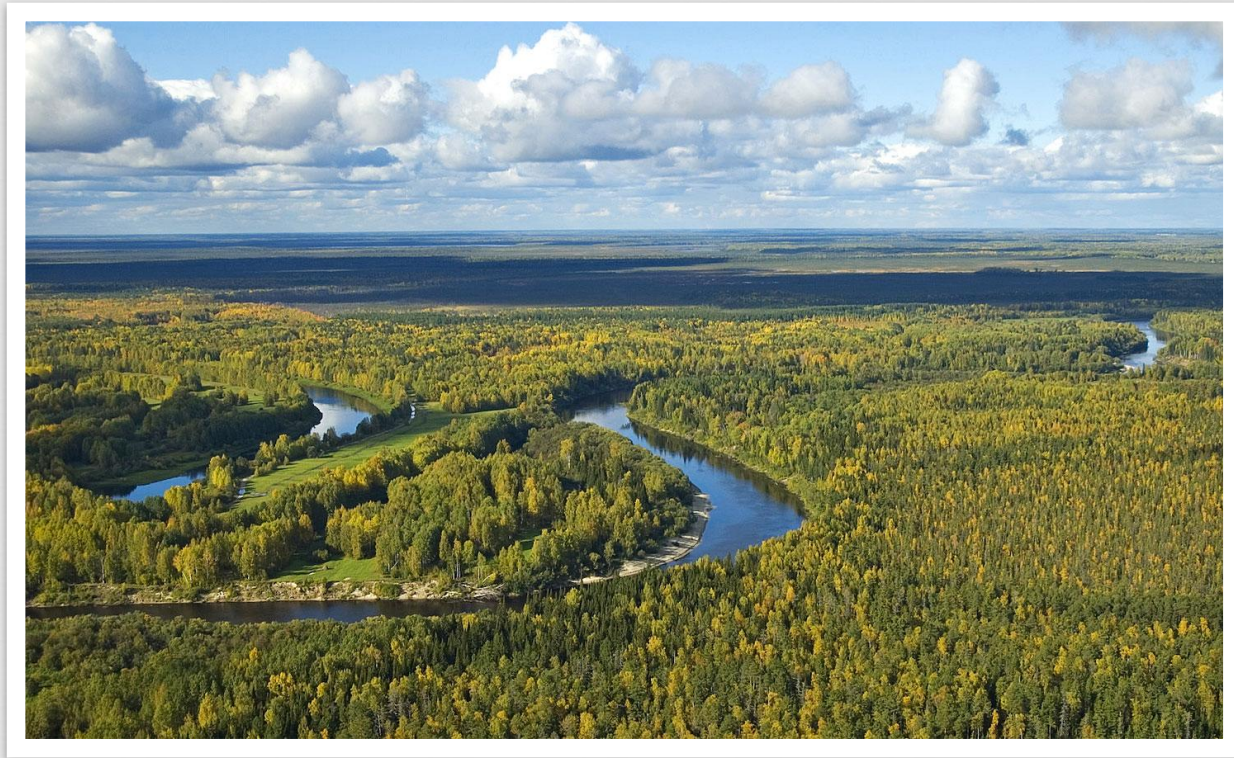




These structures appear to have been partly responsible, especially during the Late Jurassic and Cretaceous, for determining the position of marine – non-marine facies transitions, and the position of the slope lying between areas of shallow and deeper-marine shelf deposits.



***Pic.4. Approximate distribution of Late Triassic deposition, in relation to rifting and trap volcanism (Tampei Series)***



During periods of low sea level and continental sedimentation, the more rapidly subsiding areas above the sites of Triassic grabens commonly accommodated stream systems, which deposited fluvial and deltaic facies, whereas erosion sometimes occurred on the less rapidly subsiding areas.

In the present-day basin the late Palaeozoic basement blocks, in addition to the former rift zones, are characterized by higher heat flow.

# Conclusion



Thank you for your  
attention!

