

Figure 3.1 Geological setting of the Thompson Nickel Belt (TNB) at the margin of the Superior craton, adjoining the internal (Reindeer) zone of the Trans-Hudson Orogen. The TNB is the most highly deformed and metamorphosed, and probably the oldest of the four known Paleoproterozoic supracrustal belts. The ages are approximate and discussed in the text. Under the Paleozoic cover, the belts are drawn from aeromagnetic patterns and exploration drilling information where available, but the northern and southern ends of the TNB are not constrained. A possible flat-lying basin is drawn with a speculative boundary that follows an area of low gravity. The age and origin of the sedimentary rocks in the Muddy Bay area are also unknown.

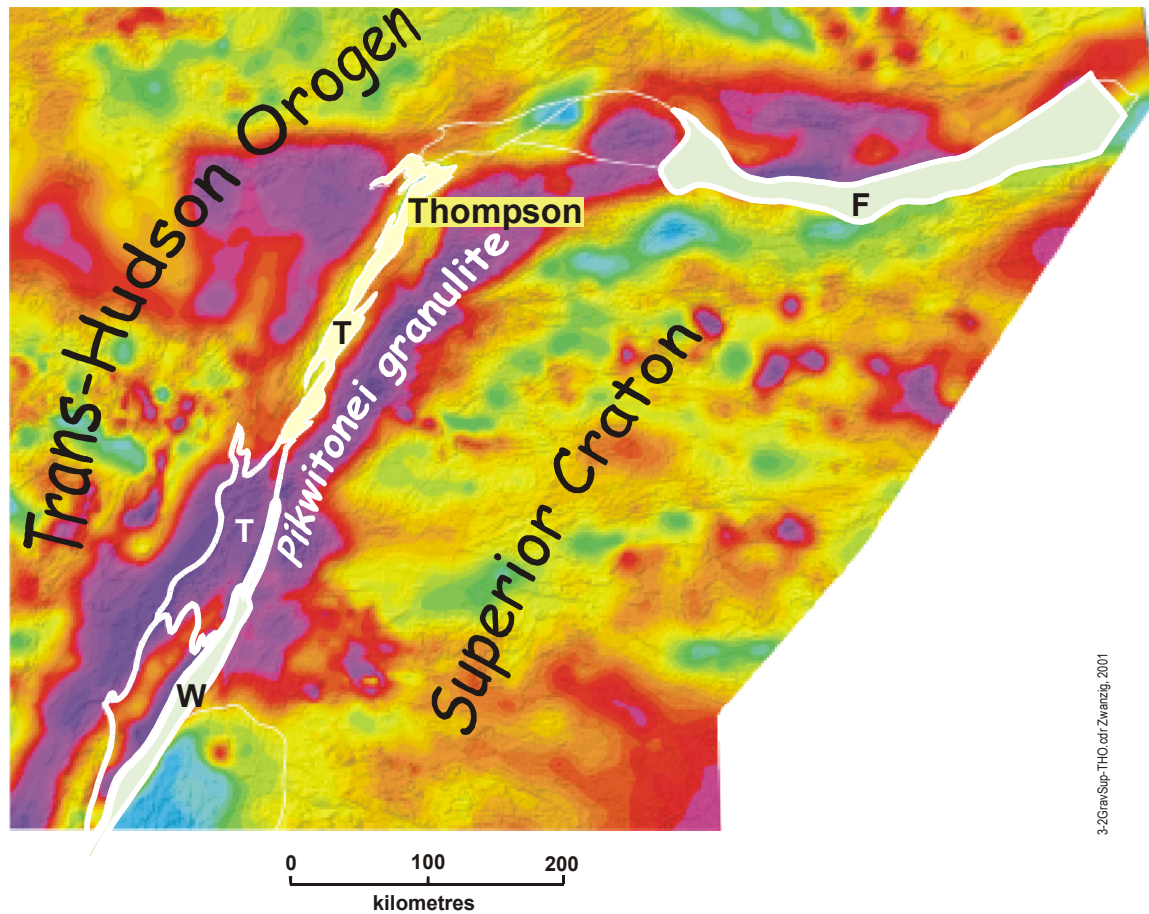


Figure 3.2 Bouguer gravity anomaly map (with shaded magnetic relief) of central Manitoba, showing the positive anomaly of the Pikwitonei granulite domain southeast of the exposed TNB (T, pale yellow) but extending below the Fox River Belt (F) and probably below the buried TNB, and the Winnipegosis Belt (W). The pattern suggests that only the exposed TNB lies directly at the Superior Craton margin but the other belts lie farther inboard, either as thrust belts or in situ. This relationship is consistent with the high-grade metamorphism and strong deformation of the exposed TNB.