

EXPLANATION

- | | | |
|--------------------------------|---|--|
| Rivers | 3913 0101 Assessment unit code and boundary | Minimum petroleum system boundary, proven hydrocarbons |
| Shoreline | Total petroleum system boundary, proven and possible hydrocarbons | Pod of active source rock boundary |
| Browse Basin province boundary | | |
| Field | | |

Figure 1. Index map of USGS Province 3913 Browse Basin, Australia. One petroleum system (391301) containing one assessment unit (39130101) is shown.

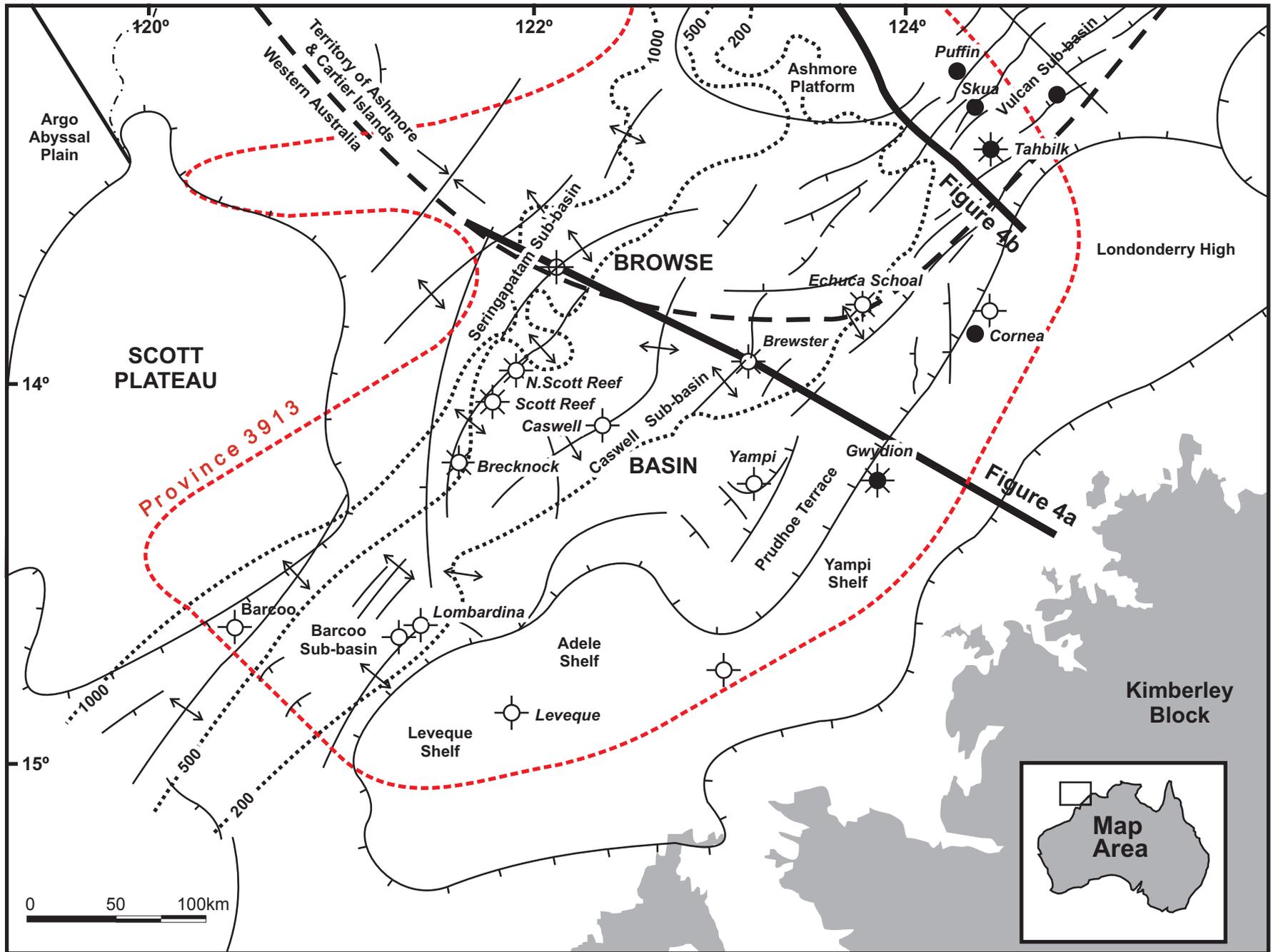


Figure 2. Generalized structural elements and bathymetry, political divisions, cross sections (Figure 4a,b) and selected wells in province 3913 are shown. Compiled from AGSO North West Shelf Study Group (1994); Symonds and others (1994); Spry & Ward(1997).

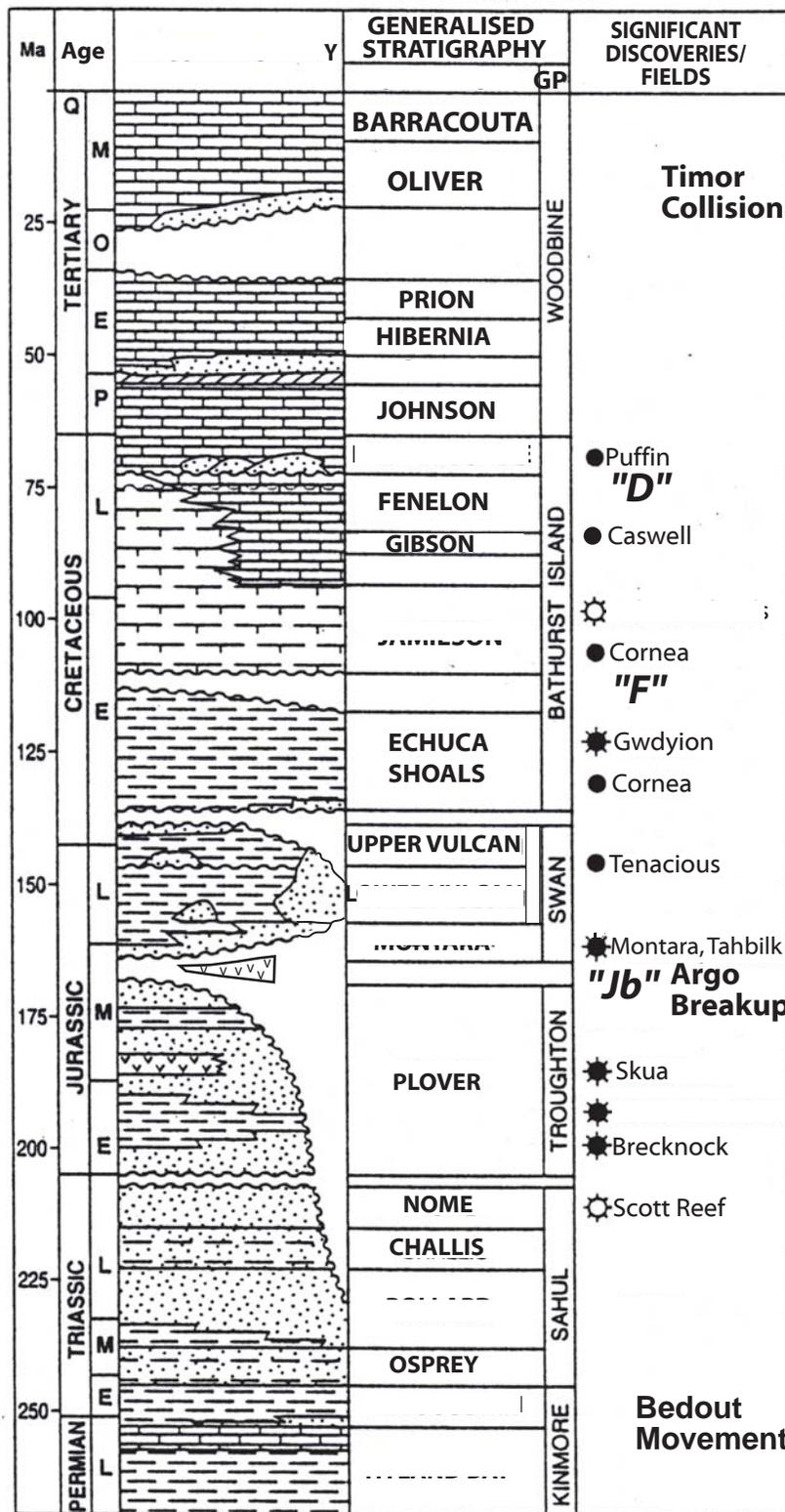


Figure 3. Generalized stratigraphy of the Browse Basin area showing discoveries, fields, and major tectonic events. Nomenclature applied from the Vulcan and Bonaparte basin areas. Modified from AGSO North West Shelf Study Group (1994) and Symonds and others (1994). Oil ●, oil and gas ☼, and gas ☼ discoveries noted. Seismic markers "D", "F", and "Jb" from Willis (1988).

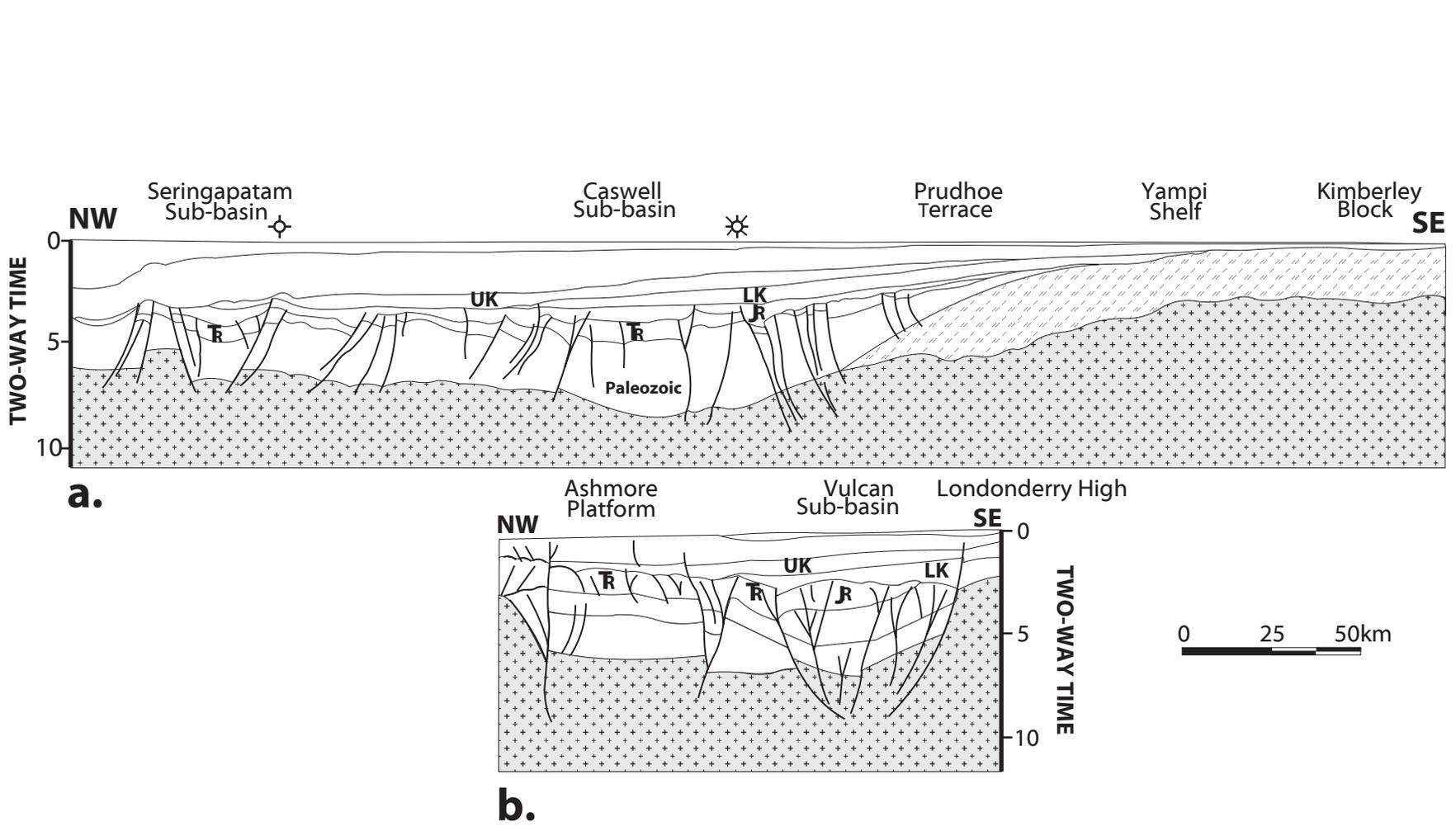


Figure 4. West to East cross sections simplified from seismic showing Browse basin (a) and Vulcan sub-basin (b). Locations on Figure 2. Modified from AGSO Northwest Shelf Study Group (1994), and Symonds and others (1994).

Province Name: BROWSE BASIN

TPS Name: LATE JURASSIC, EARLY CRETACEOUS-MESOZOIC

Author(s): M. G. BISHOP

Date: MAY, 1998

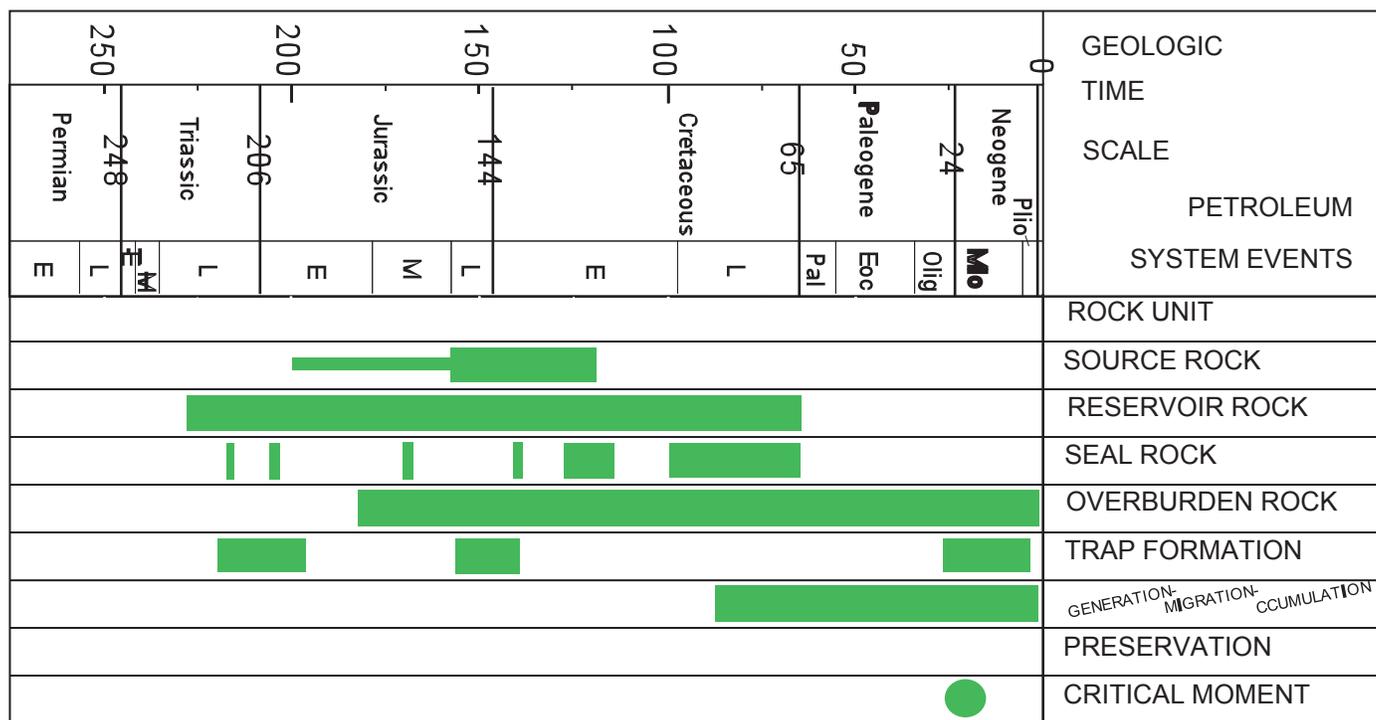


Figure 5. Total Petroleum System events chart showing relative timing of source rock, reservoir rock, seal rock, trap formation, and hydrocarbon maturation. Abbreviations include L, Late; M, Middle; E, Early; Mio., Miocene; Olig, Oligocene; Eoc, Eocene; Pal, Paleocene.

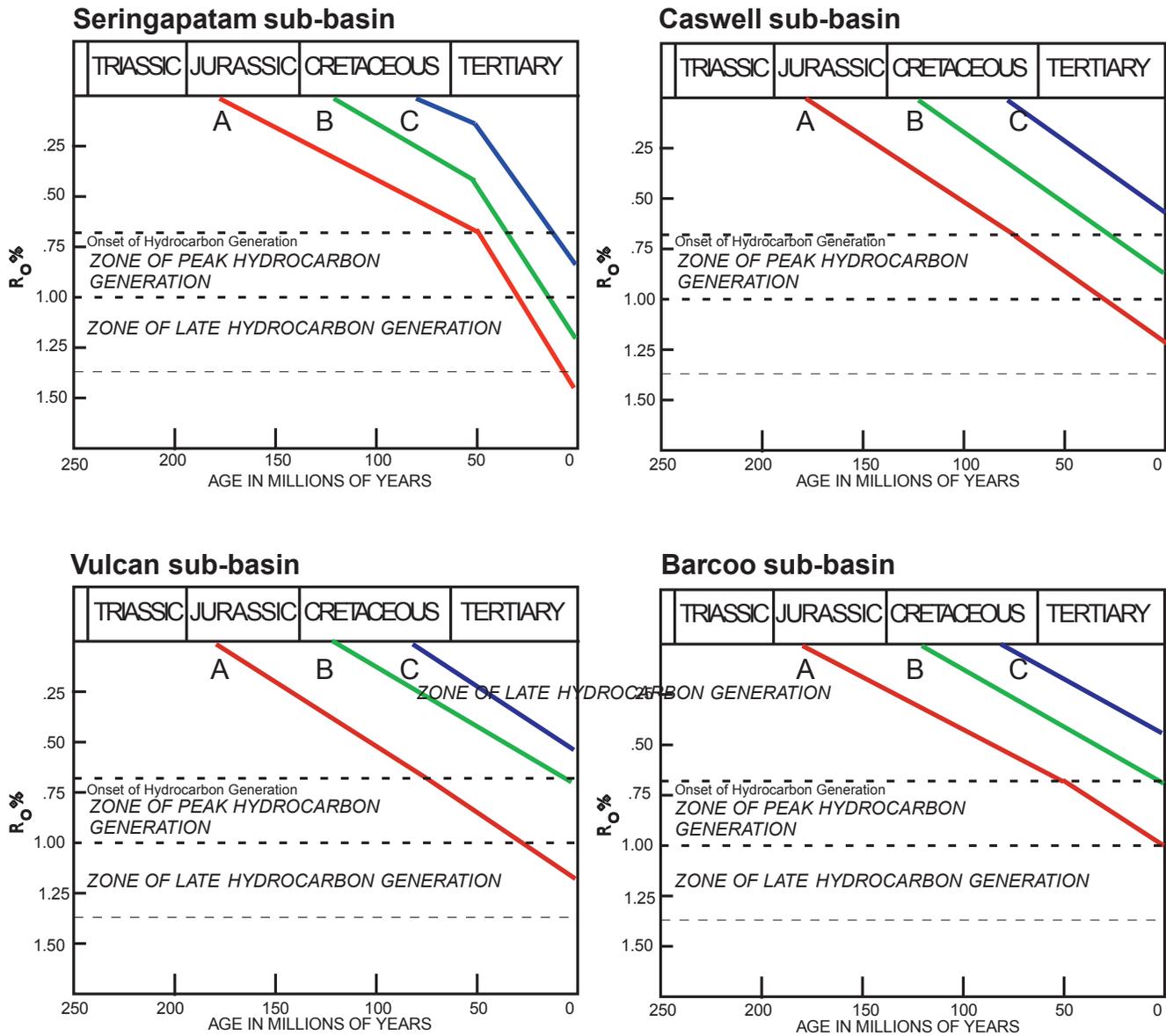


Figure 6. Generalized burial history curves of four sub-basins in the Browse Basin province (see Figure 2). For each sub-basin, the burial trends for three regional seismic markers are illustrated. The A curves represent the Jurassic Breakup unconformity, B, the lower Cretaceous, and C, the upper Cretaceous (see Figure 3). The trends were constructed from maps of the estimated time of onset of hydrocarbon generation at the "Jb" horizon (Jurassic breakup unconformity), and present day estimated level of organic maturity at the lower Cretaceous "F" horizon and at the upper Cretaceous "D" horizon. The maps that these trends are based on were published by Willis (1988).