



**Figure 8.** Upper crust interpretation: (a) Geological cross-section. Black arrows = projected positions of boreholes SA-1/66 and KW-1/67; yellow = Beaufort Group; pale pink = Eccca Group; brown = Dwyka Group. Fold axes mapped on surface appear coincident with folds in the upper 1.5 km of the crust. South dipping listric faults or thrusts in the crust (dashed lines) match faults on surface (red dots). (b) Upper 12 km of seismic data from IyA-200501: integrated interpretation and migrated seismic image superimposed. The décollement within the Eccca Group lies at the top of the Whitehill- and Prince Albert Formations (dark pink layer, base of the Collingham Formation in Table 1). Blue dashed line = a ca. 3° south dipping seismic discontinuity separating the flat based Cape Supergroup from the north dipping mid-crust below (red and black lines).