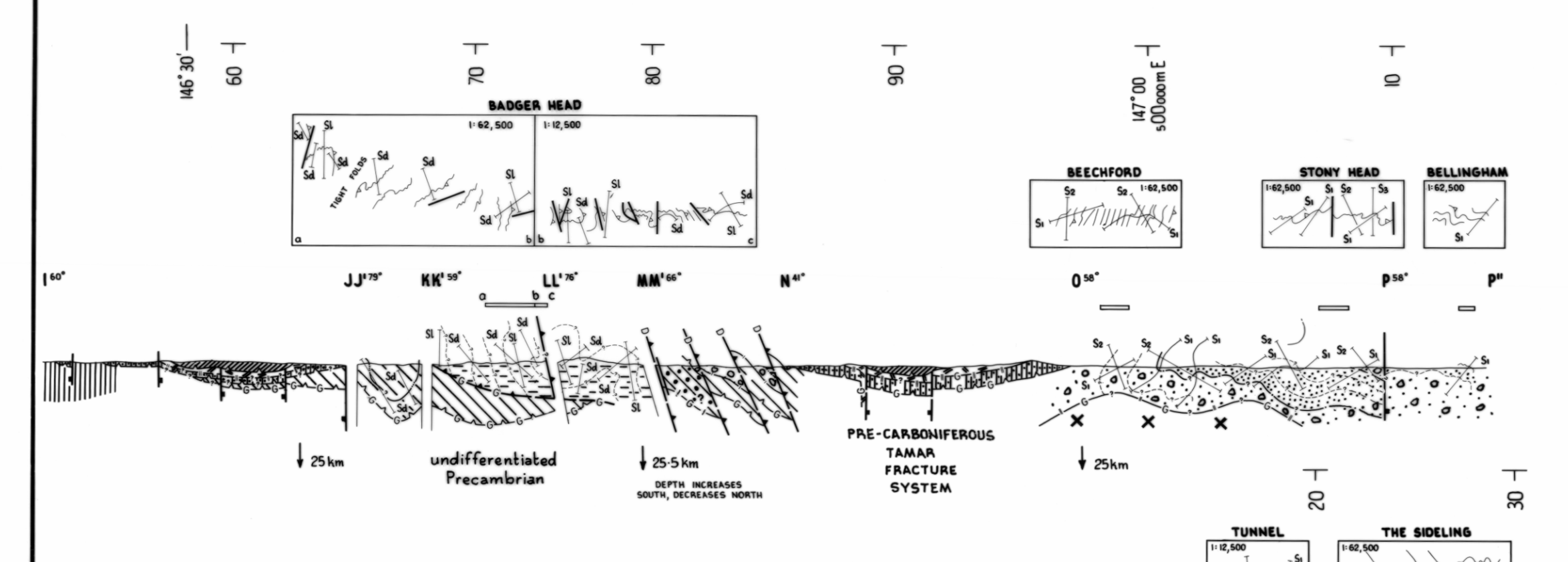
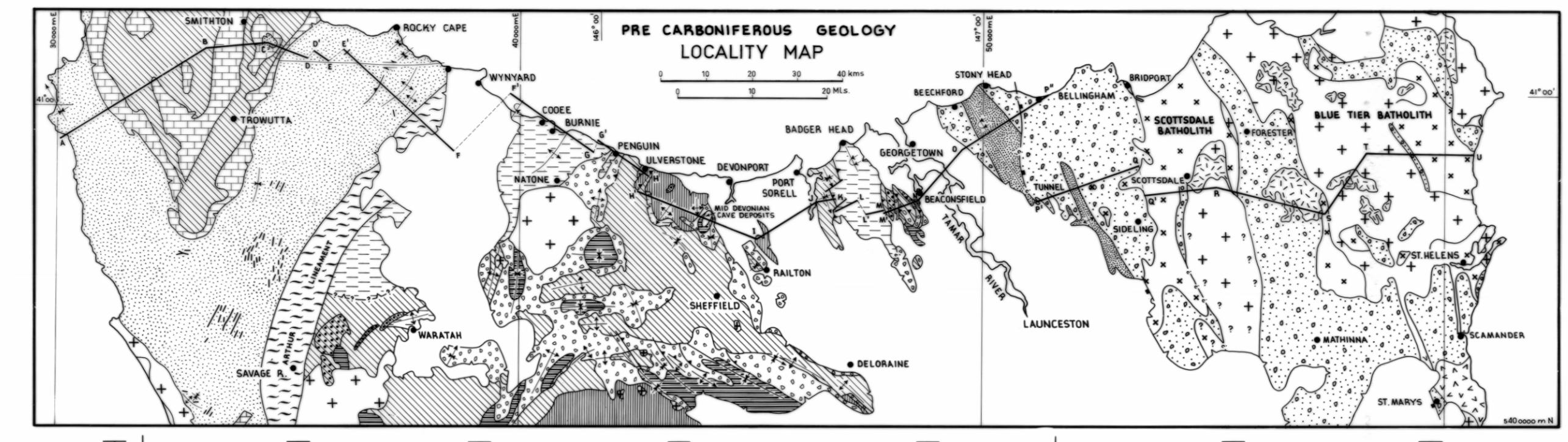
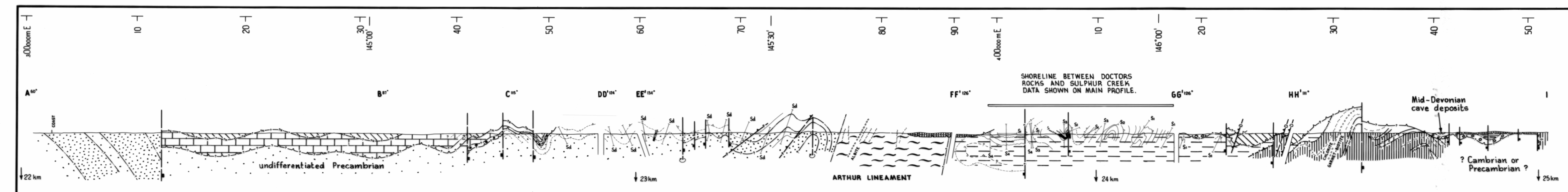


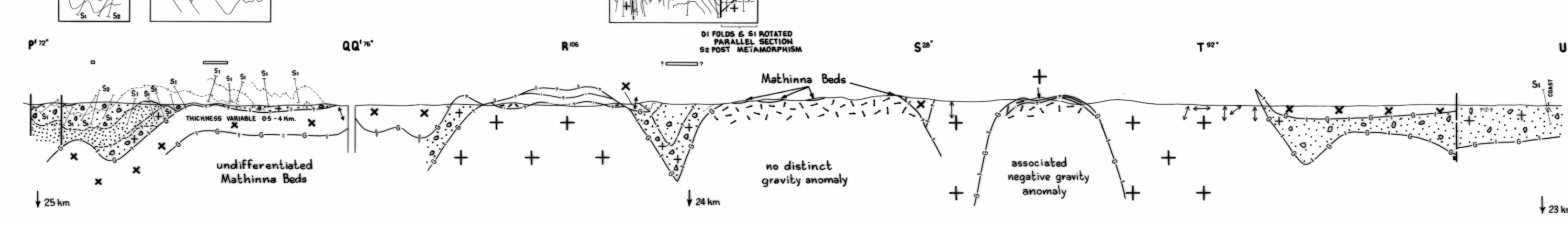
COMPOSITE GEOLOGICAL PROFILE ACROSS TASMANIA

SCALE 1:250,000 V=H

The profile is supplementary to Williams, E., 1976, Structural map of Precarboniferous rocks of Tasmania, Geol. Surv. Tasm., and the reference and locality map are partly after that work. The reference is general for Tasmania. Ornamental boxes are rock units represented on the profile. Text in box brackets refers specifically to the profile.



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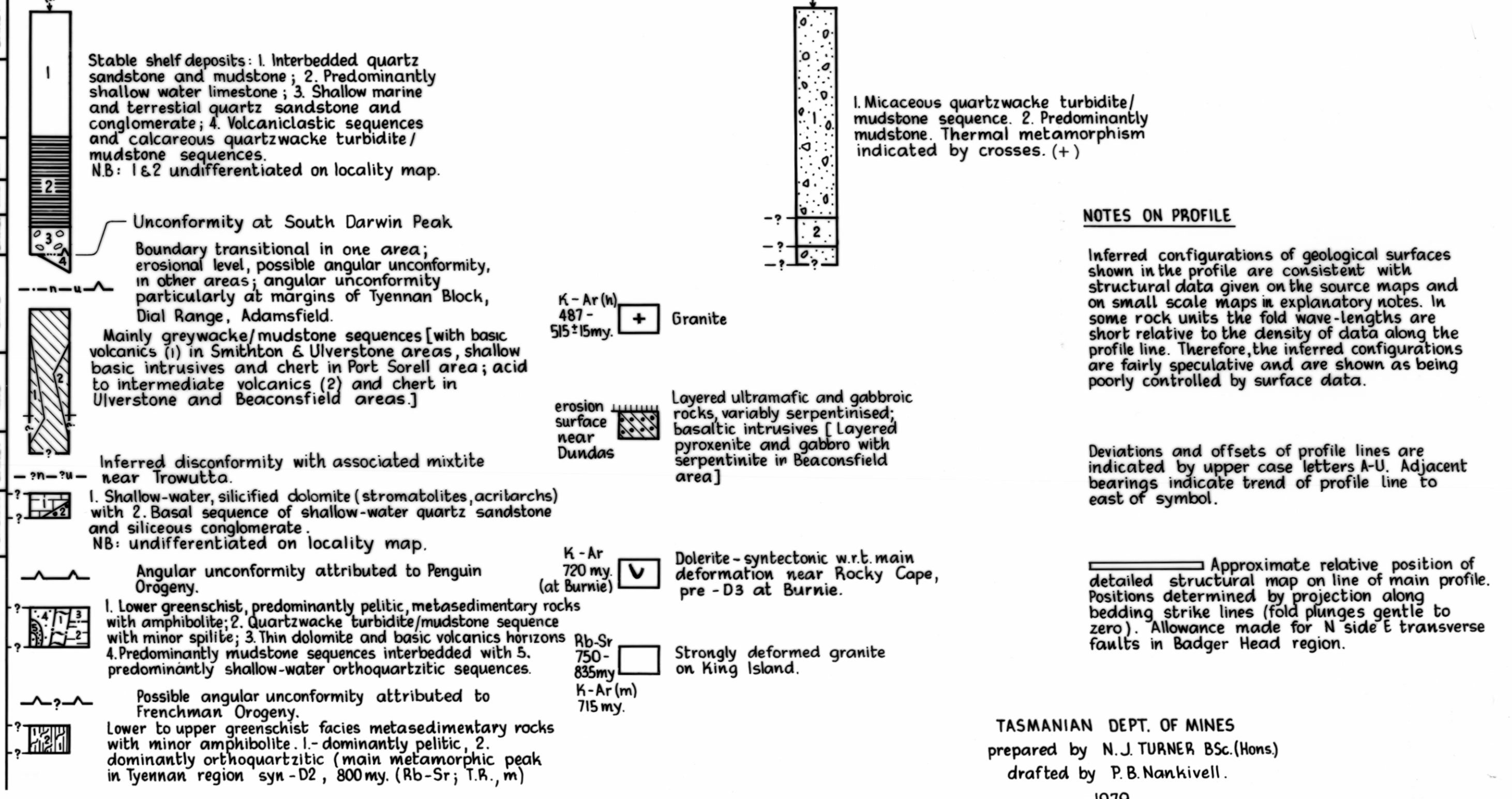


- LEGEND**
- Conformable lithostratigraphic boundary.
 - Inferred unconformity.
 - Angular unconformity.
 - Bedding trace - configuration inferred from structural maps.
 - Bedding trace - configuration inferred from good surface information.
 - Transitional boundary.
 - Structurally transposed boundary.
 - Metamorphic isograd.
 - Intrusive boundary - long strokes show intruded rock, short show intrusion.
 - Unspecified geological boundary.
 - Boundary derived from gravimetric data.
 - All boundary types for which the configuration is poorly controlled by surface data.
- FAULTS**
- Fault, thrust, dip approximate, arrow on upthrown side.
 - Fault, possible thrust, dip poorly established.
 - Thrust associated with Precambrian (P) Devonian (D) deformation.
 - Fault, normal, dip approximate, block on downthrown side.
 - Fault, dip unknown.
 - Fault, inferred, dip unknown.
 - Fault, dip unknown, dextral transverse component, trend strongly oblique to fold trend.
- CLEAVAGE**
- Hierarchy applies to unit containing symbol Sd-dominant, Sl-late, S1, 2, 3, 4 - first, second, third, fourth, S1(m)-modified by post thermal metamorphism flattening.
 - Schistosity in metamorphic rocks.
 - Dominant foliation in granodiorite due to planar preferred orientation of major minerals.
 - Dominant foliation in porphyritic adamellite due to planar preferred orientation of potash feldspar phenocrysts.
 - Note: There are several foliations of each type and the dominant foliation in different localities within a single rock unit may not be the same foliation.
- FOLDS**
- Easterly vergence of folds.
 - Asymmetry of fold.
 - Depth of Moho in locality of symbol - determined by gravity/seismic methods.

- SEDIMENTARY/VOLCANIC ROCKS**
- QUATERNARY TO PLEISTOCENE: Alluvium, etc. (Holocene). Glacial and associated deposits, talus, aeolian sands, marginal marine deposits (Pleistocene) marine deposits (Pliocene). Erosion surface.
 - MIOCENE TO LATE CRETACEOUS: 1. Non-marine clastic sequences with intercalated basalts, pyroclastics. 2. Marine clastic sequences.
 - MID-CRETACEOUS: Andesite. (small occurrence at Cape Portland N.E. Tas.)
 - JURASSIC: Low angle unconformity related to warping (of older rocks) associated with Jurassic to Early Tertiary normal faulting.
 - TRIASSIC TO LATE CARBONIFEROUS: Fluvio-lacustrine sequence (mostly Triassic); glacio-marine sequence (Permian); thin non-marine sequence (Permian); glacio-marine sequence with basal tillite. (Late Carboniferous, to Early Permian).
- INTRUSIVE IGNEOUS ROCKS**
- Appinite, syenite.
 - Dolerite and related rock types.

- WEST OF TAMAR RIVER**
- SEDIMENTARY/VOLCANIC ROCKS
 - INTRUSIVE IGNEOUS ROCKS: Rb-Sr (T.R. b.m. 353±7-375±7my) Mainly adamellite.
- EAST OF TAMAR RIVER**
- SEDIMENTARY ROCKS
 - GRANITIC ROCKS (N.E. TAS): Regional deformation (mild)
 - 364 - 374my: Alkali granite.
 - 368 - 382my: Adamellite. Regional deformation (mild, locally more intense).
 - 377 - 398my: Granodiorite.
 - Hypersthene adamellite porphyry. Main deformation.

DEVONIAN
EARLY AND LATE
SILURIAN
EARLY AND LATE
ORDOVICIAN
EARLY AND LATE
CAMBRIAN
EARLY AND LATE
VEVENDIAN
EARLY AND LATE
PRECAMBRIAN



NOTES ON PROFILE

Inferred configurations of geological surfaces shown in the profile are consistent with structural data given on the source maps and on small scale maps in explanatory notes. In some rock units the fold wave-lengths are short relative to the density of data along the profile line. Therefore, the inferred configurations are fairly speculative and are shown as being poorly controlled by surface data.

Deviations and offsets of profile lines are indicated by upper case letters A-U. Adjacent bearings indicate trend of profile line to east of symbol.

Approximate relative position of detailed structural map on line of main profile. Positions determined by projection along bedding strike lines (fold plunges gentle to zero). Allowance made for N side E transverse faults in Badger Head region.

TASMANIAN DEPT. OF MINES
prepared by N.J. TURNER BSc.(Hons)
drafted by P.B. Nankivell.
1979

4591

230

5 cm