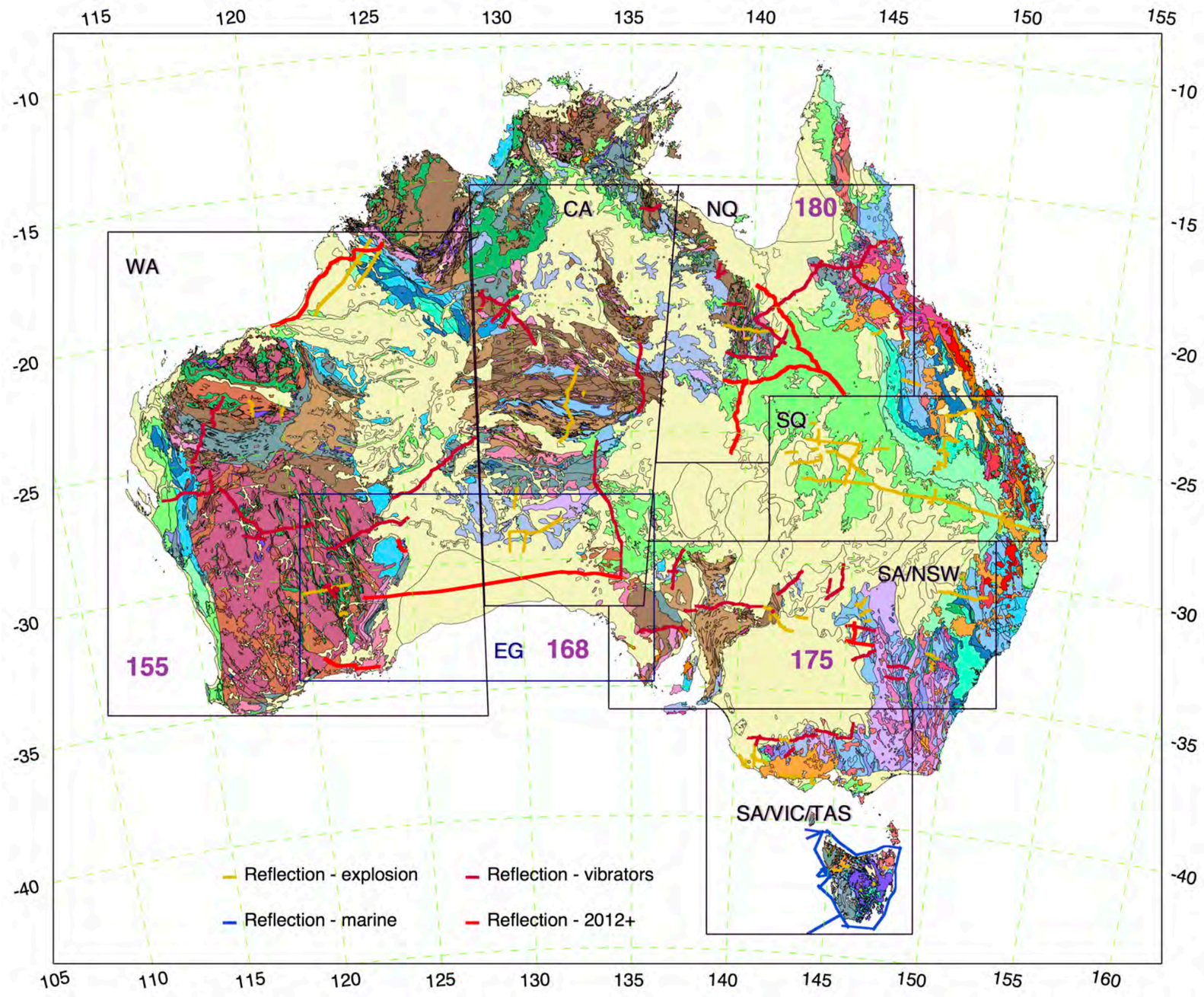
## Geographic Groups for Full-crustal Reflection Profiles 1978-2015

For the period from 2012-2015 we introduce a new region to encompass the Eucla-Gawler Profile, which runs from Western Australia into South Australia. The set of regional groups are outlined with reference to the page for the key diagram for the profiles conducted in 2012-2015.



## Legend for 1:1 000 000 and 1:2 500 000 Surface Geology

### CENOZOIC UNITS (mainly unconsolidated deposits)

**Quaternary**

- Q *Quaternary sediments, undivided*
- Qa *Channel and flood plain alluvium; gravel, sand, silt, clay*
- Qb *Volcanic rocks, predominantly mafic*
- Qd *Dunes, sand plain with dunes*
- Qdc *Coastal dunes, beach ridge, barrier beach, foredune and shoreface sands*
- Qe *Estuarine, tidal delta deposits; coastal mud flats*
- Qi *Carbonate sediments*
- Qk *Calcrete*
- Qrc *Colluvium and/or residual deposits; boulder, gravel, sand*
- Qrlb *Black soil plains*
- Qsg *Glacial sediments, moraine*
- Qsm *Anthropogenic deposits; mining waste, salt pans*
- Qt *Lake and swamp deposits; mud, silt, evaporites, limestone, minor sand*
- Qv *Volcanics, undivided*

**Cenozoic**

- Czu *Cenozoic sediments, undivided*
- Cza *Alluvial deposits; typically incised by current drainage*
- Czb *Volcanic rocks, predominantly mafic*
- Czc *Consolidated siliclastic rocks*
- Cze *Estuarine and delta deposits*
- Czf *Felsic to intermediate volcanic rocks*
- Czg *Felsic intrusive rocks*
- Czi *Carbonate sediments*
- Czk *Calcrete*
- Czl *Laterite, ferruginous duricrust*
- Czq *Spring deposits*
- Czs *Sand plain*
- Czt *Lake and swamp deposits*
- Czu *Ultramafic intrusive rocks*
- Czz *Silcrete*

### SEDIMENTARY ROCKS AND LOW-GRADE METAMORPHIC ROCKS

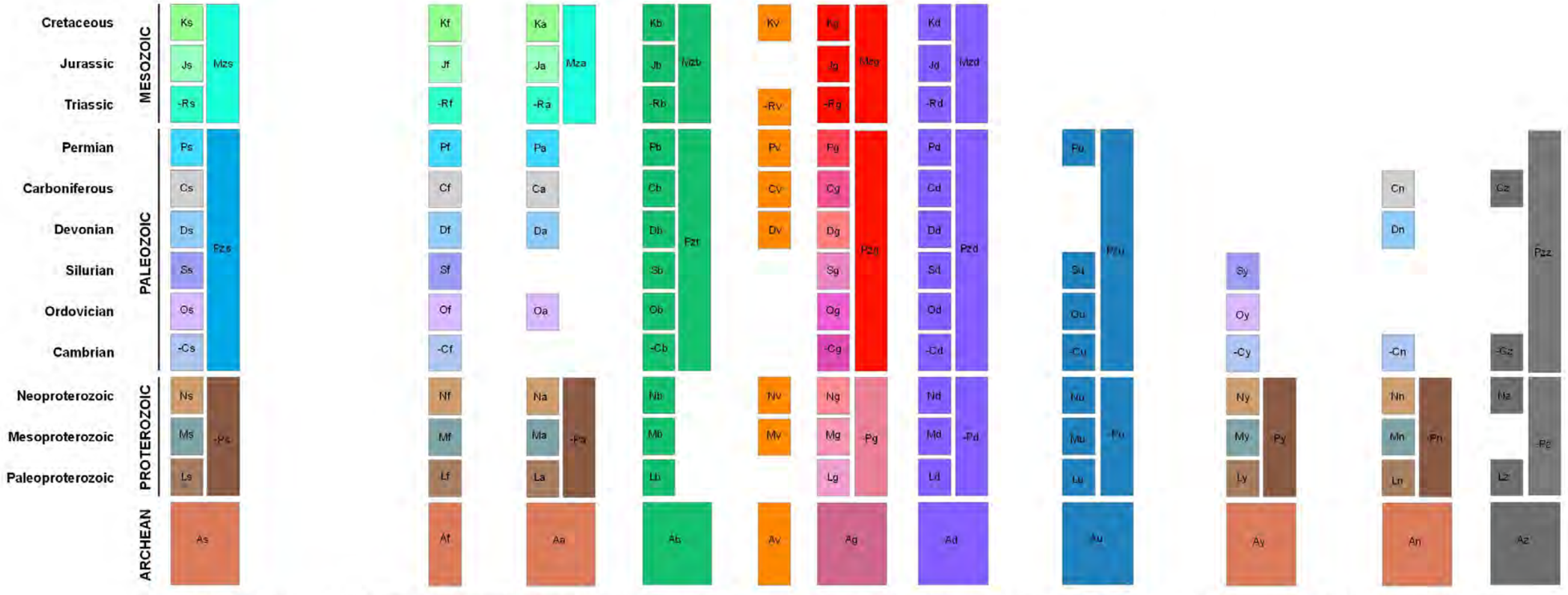
mudstone, siltstone, sandstone, conglomerate (s), limestone (l), coal measures (o), volcanogenic sediments (j), mixed sediments and volcanic rocks (w), chemical sediments (c)

### IGNEOUS ROCKS

| Volcanic rocks | | | | Intrusive rocks | | |
|---|---|---|---|---|---|---|
| **Felsic** | **Intermediate** | **Mafic to ultramafic** | **Felsic to mafic** | **Felsic** | **Mafic** | **Mafic to ultramafic** |
| (f), metamorphosed (r) | (a) | metamorphosed (t), mixed intrusives (i) | (v) | (g), quartz vein (q) | (d), metamorphosed (t) | (u), metamorphosed (e), alkaline ultrabasic (k) |

### METAMORPHIC ROCKS

| **Low-medium grade** | **High-grade** | **Fault/shear rocks** |
|---|---|---|
| metacarbonate (m), siliciclastic (y), hornfels (h) | metamorphics (n), complexes (x) | (z) |




Note: Geological units which span multiple time periods have symbols showing the oldest and youngest time periods. e.g. Cambrian to Ordovician sedimentary rocks = -COs; Paleoproterozoic to Mesoproterozoic high grade metamorphics = LMn

This text is taken from *Deep Crustal Seismic Reflection Profiling: Australia 1978–2015*, edited by B.L.N. Kennett, E. Saygin, T. Fomin and R. Blewett, published 2016 by ANU Press and Commonwealth of Australia (Geoscience Australia), Canberra, Australia.