

# LEAD-ZINC MINERALISATION BY EVENT, STATUS AND TYPE

- Event**
- MinEv10 (~ 660 to 640 Ma) – not recorded for lead-zinc
  - MinEv9 (~ 860 to 840 Ma) – not recorded for lead-zinc
  - MinEv8 (~ 1080 to 1060 Ma) – not recorded for lead-zinc
  - MinEv7 (~ 1540 to 1500 Ma)
  - MinEv6 (~ 1600 to 1550 Ma)
  - MinEv5 (~ 1630 to 1610 Ma)
  - MinEv4 (~ 1700 to 1640 Ma)
  - MinEv3 (~ 1740 to 1720 Ma) – not recorded for lead-zinc
  - MinEv2 (~ 1810 to 1760 Ma)
  - MinEv1 (~ 1860 to 1840 Ma)

- Age**
- | Determined | Inferred | Deposit type   |
|------------|----------|--|
| ●          | ○        | Broken Hill-type lead-zinc-silver                                      |
| ◆          | ◇        | Iron-oxide copper-gold-uranium   |
| ◆          | ◇        | Kuroko-type volcanic-associated massive sulphide zinc-lead-copper-gold |
| ◆          | ◇        | Lead-zinc-copper polymetallic vein                                     |
| ◆          | ◇        | Mt Isa-type zinc-lead-silver-gold-copper                               |
| ◆          | ◇        | Sediment-hosted copper-lead-zinc-uranium                               |
| ◆          | ◇        | Skarn lead-zinc  |
| ◆          | ◇        | Undefined  |
- ◆ Lead-zinc occurrence (only within regions of Proterozoic age)

## GEOLOGICAL REGIONS BY LEAD-ZINC RESOURCES\* (Regions of Proterozoic age lead-zinc only)

- Geological regions with unknown resources
- Geological regions with up to 100 000 tonnes of lead-zinc
- Geological regions with 100 000 to 1 million tonnes of lead-zinc
- Geological regions with 1 to 10 million tonnes of lead-zinc
- Geological regions with 10 to 40 million tonnes of lead-zinc
- Geological regions with 40 to 80 million tonnes of lead-zinc
- Geological regions with > 80 million tonnes of lead-zinc

\* Global resources = production + remaining resources.

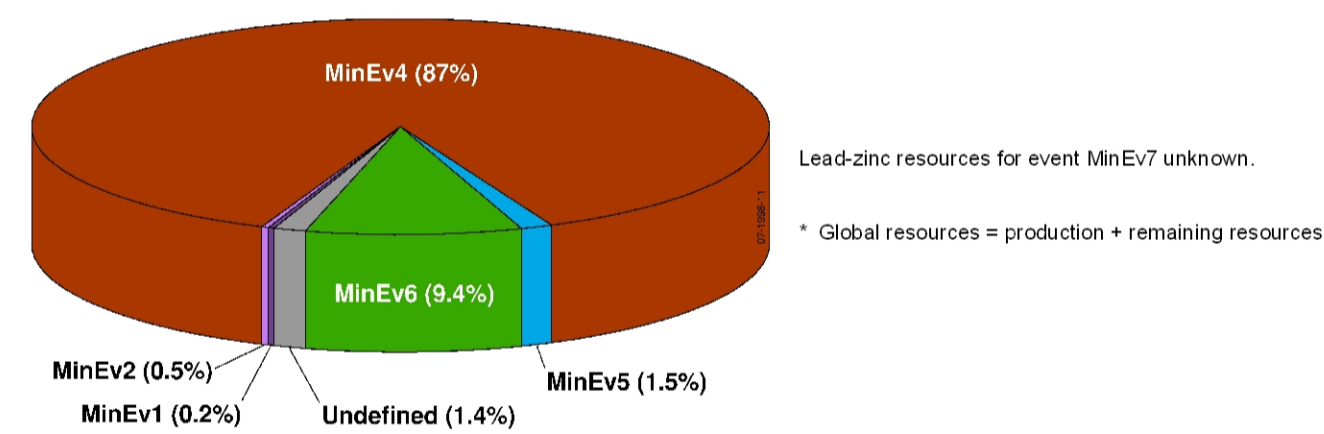
Mineralising events are defined based on the age of a mineral deposit.

**Determined:** deposits/events for which mineralisation, alteration, or host rocks (for syngenetic deposits) have been directly dated (including Pb/Pb model age).

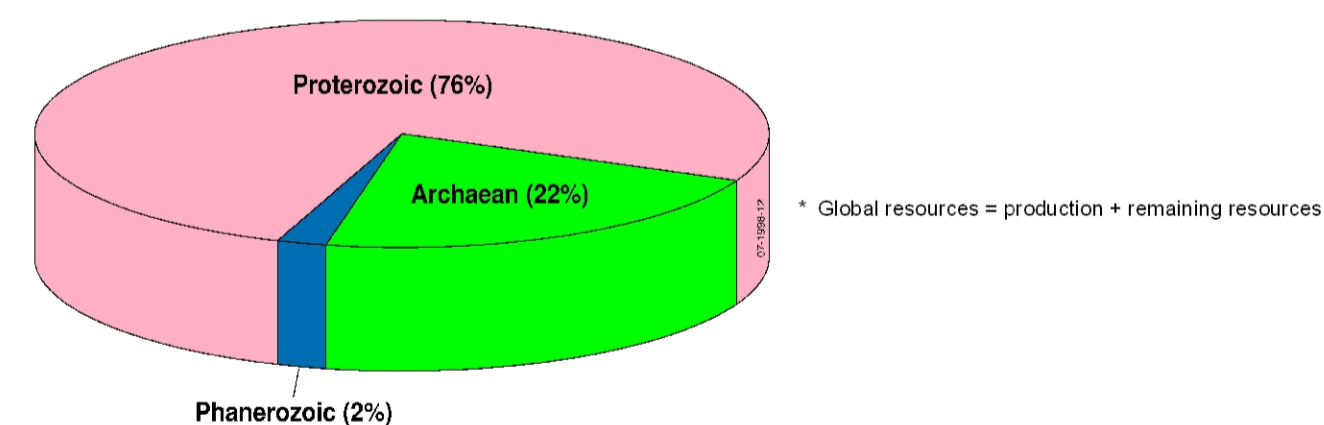
**Inferred:** deposits for which the age is inferred based on the age of similar deposits of the dated category.

**Undefined:** Proterozoic deposits of undetermined age.

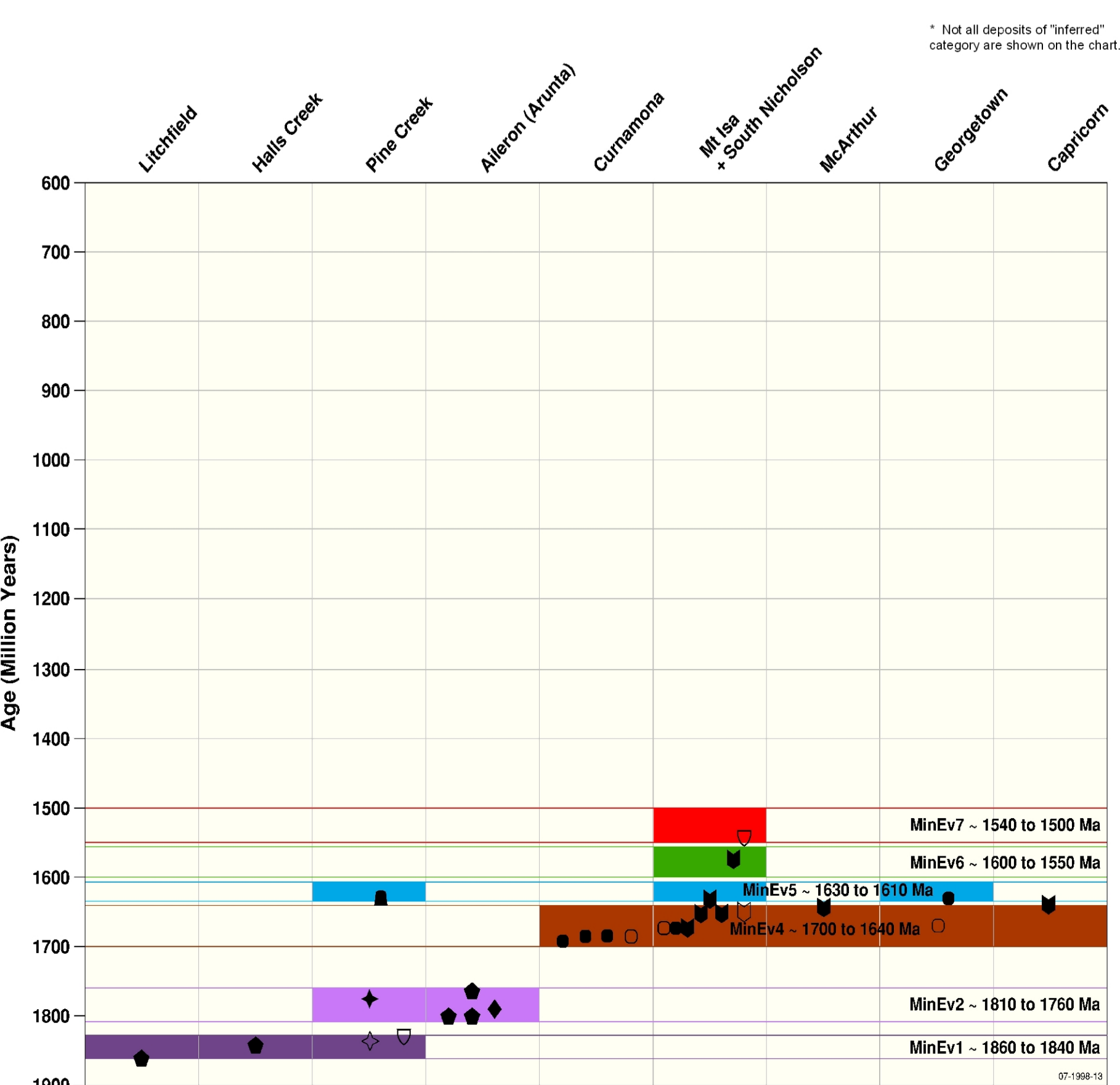
## Australian Lead-Zinc Resources\* by Proterozoic Mineralising Events



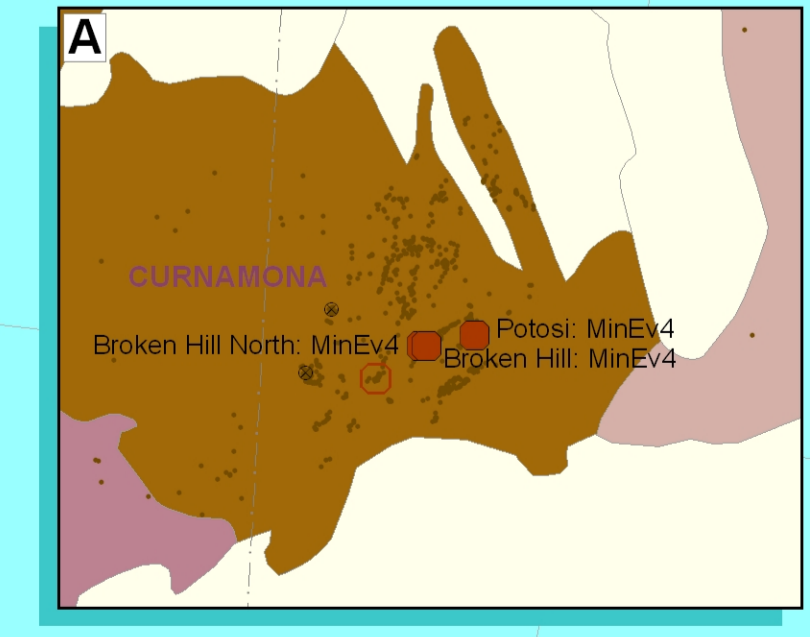
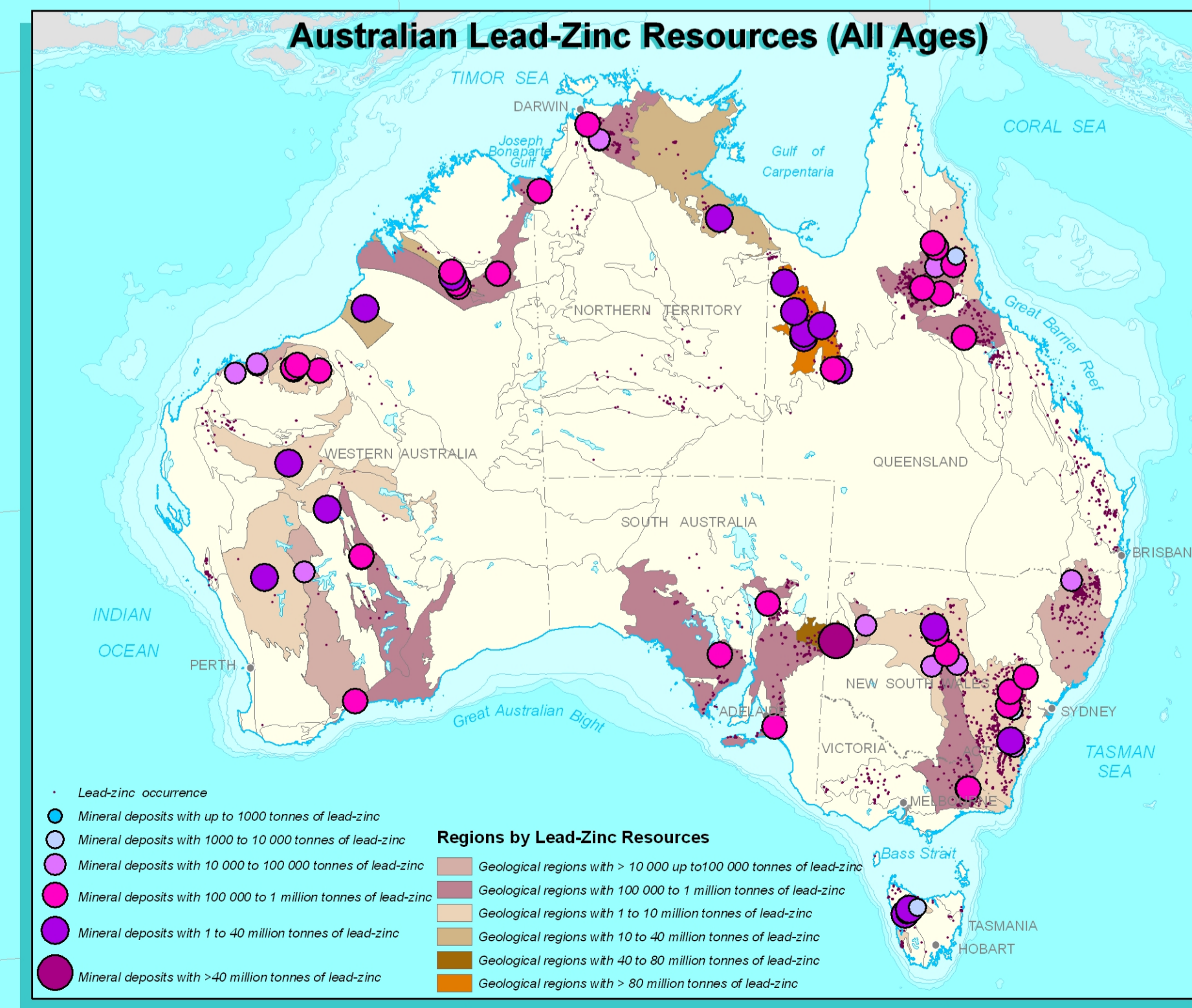
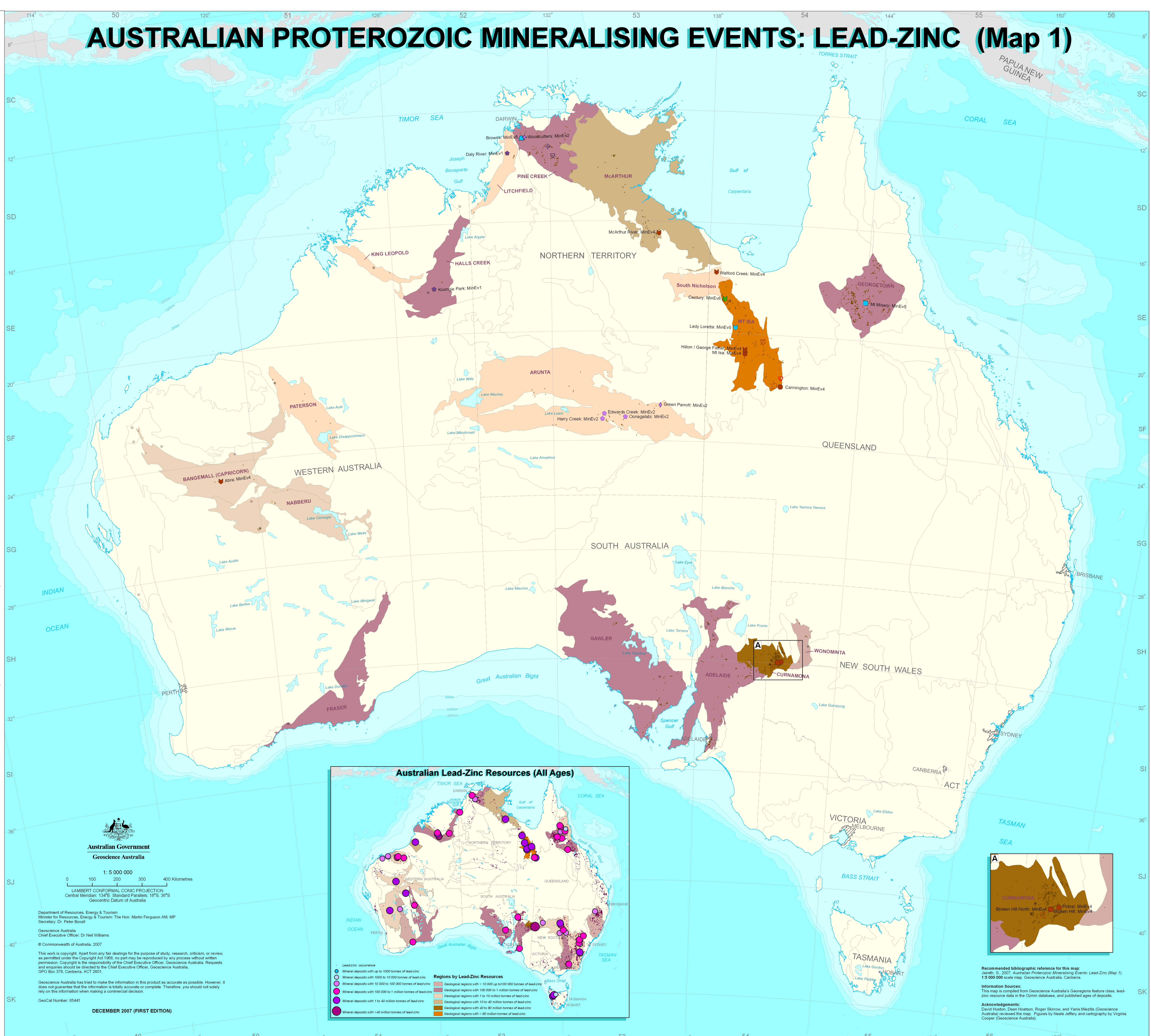
## Australian Lead-Zinc Resources\* by Age



## Time-Space Chart of Lead-Zinc Mineralising Events\*



# AUSTRALIAN PROTEROZOIC MINERALISING EVENTS: LEAD-ZINC (Map 1)



**Australian Government**  
Geoscience Australia

1:5 000 000

0 100 200 300 400 Kilometres

LAMBERT CONFORMAL CONIC PROJECTION  
Central Meridian: 134°E Standard Parallels: 18°S, 36°S  
Geocentric Datum of Australia

Department of Resources, Energy & Tourism  
Minister for Resources, Energy & Tourism: The Hon. Martin Ferguson AM, MP  
Secretary: Dr. Peter Boxall

Geoscience Australia  
Chief Executive Officer: Dr. Neil Williams

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Information Sources:  
This map is compiled from Geoscience Australia's Georegions feature class, lead-zinc resource data in the Ozmin database, and published ages of deposits.

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David Hurton, Dean Houston, Roger Skirrow, and Yannis Mezitis (Geoscience Australia) reviewed the map. Figures by Heale Jeffrey and cartography by Virginia Cooper (Geoscience Australia).