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**Article:**

Hoerlle, GS, Remus, MVD, Müller, T et al. (3 more authors) (2023) Metasomatic reactions triggered by localized and dynamically evolving fluid flux record multistage intrusion history: An example from the syntectonic Caçapava do Sul Granitic Complex, Southern Brazil. *Lithos*, 442-443. 107103. ISSN 0024-4937

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## GEOLOGICAL UNITS

### Cenozoic cover

Paraná Basin

### Neoproterozoic cover

Camaquã Basin

### Caçapava do Sul Granitic Complex

Granodiorites, monzogranites, syenogranites, diorites

Mylonitic granites

### Passo Feio Metamorphic Complex

Carbonatite lenses

Metapelites, amphibolites, quartzites, Mgschists

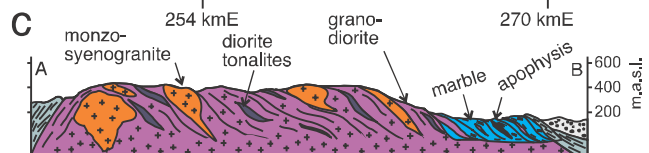
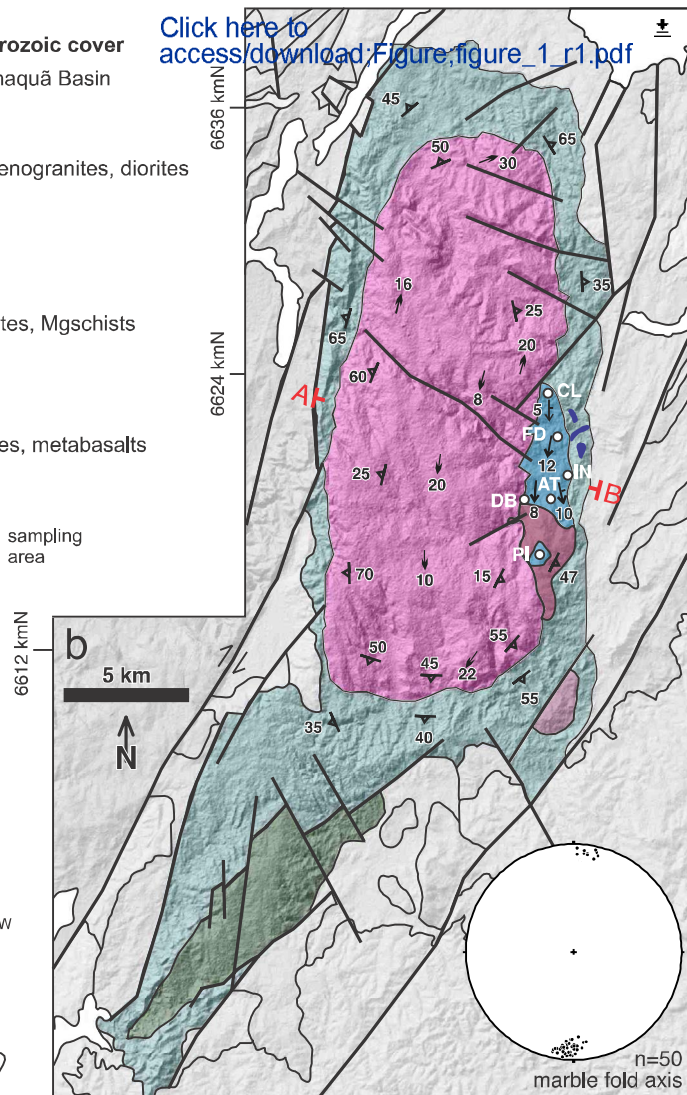
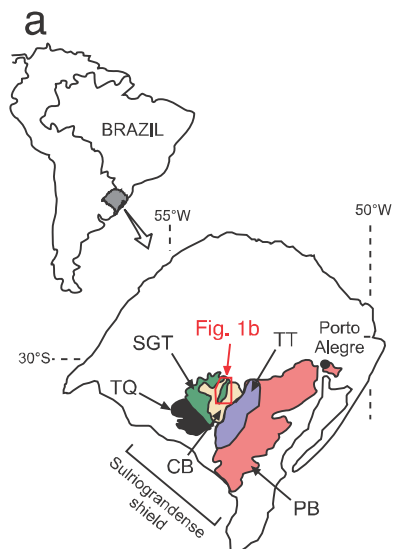
Dolomitic marbles, Mgschists

### Palma Group

Mudador Formation, metaandesites, metabasalts

### MAP CONVENTIONS

- fault
- foliation / igneous banding
- sampling area
- stretching lineation
- fold axis
- recumbent fold axis





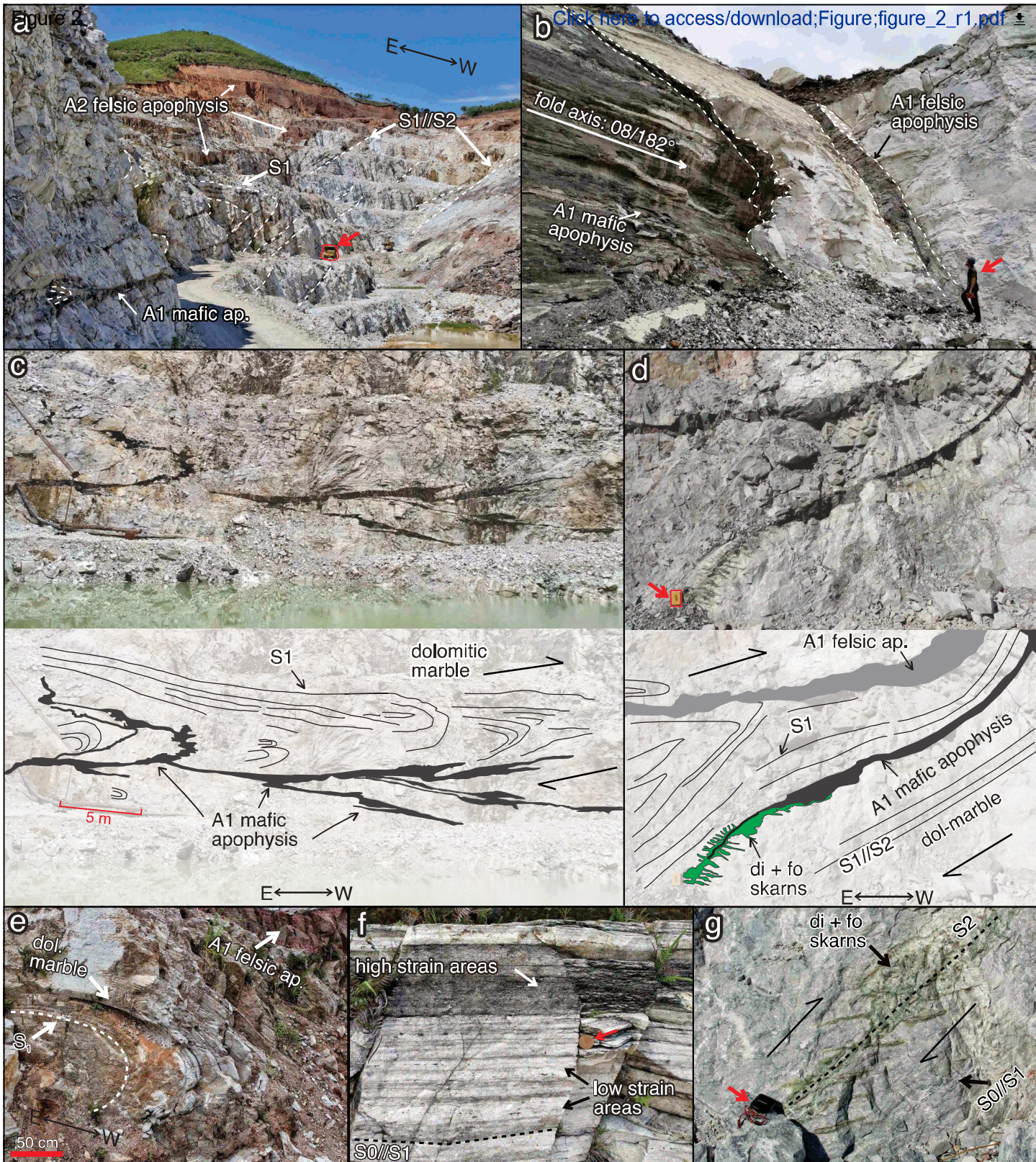
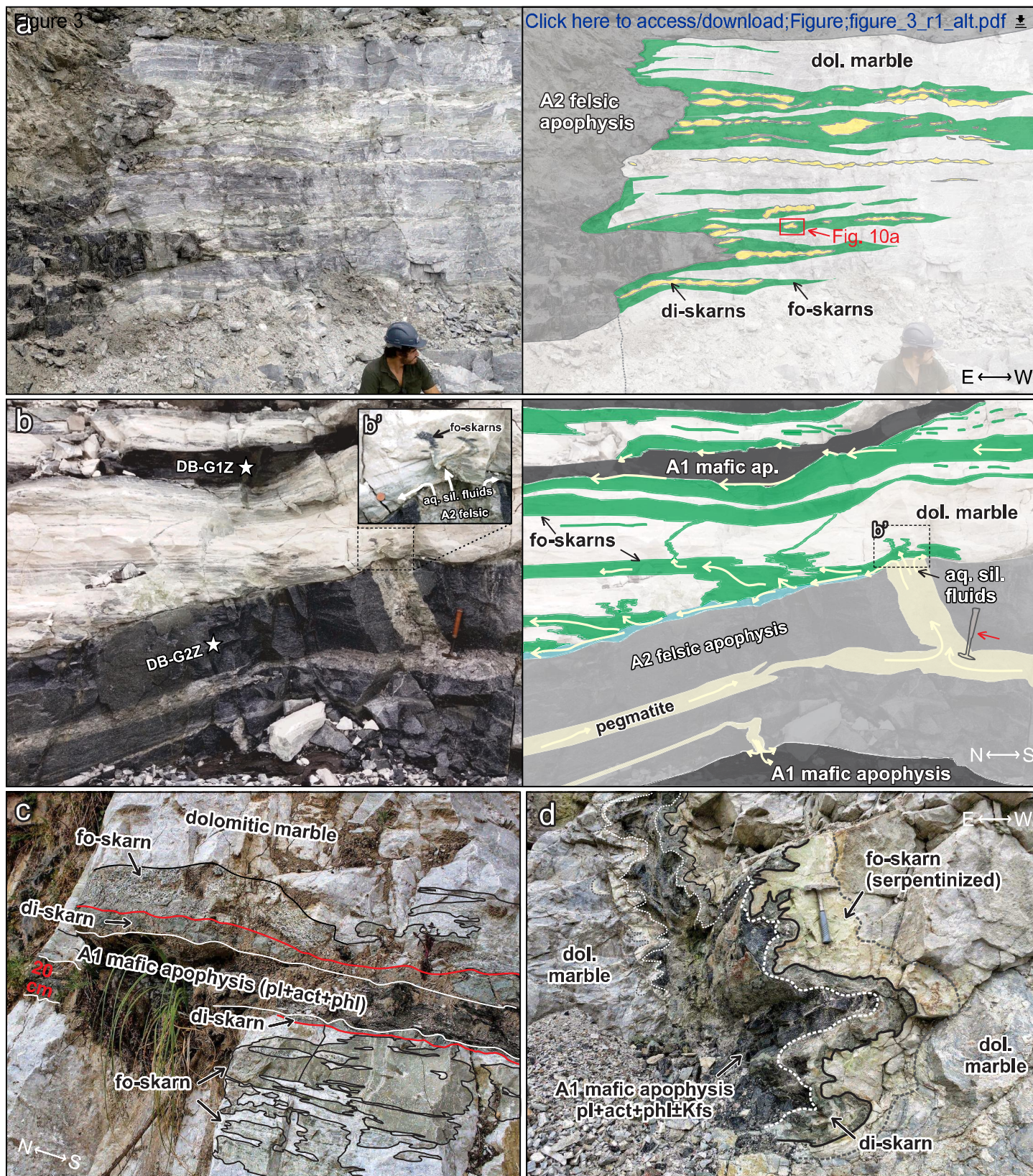


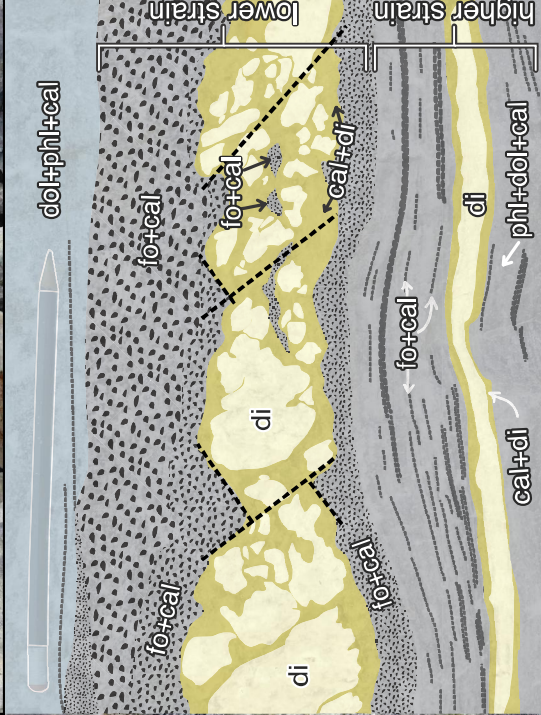
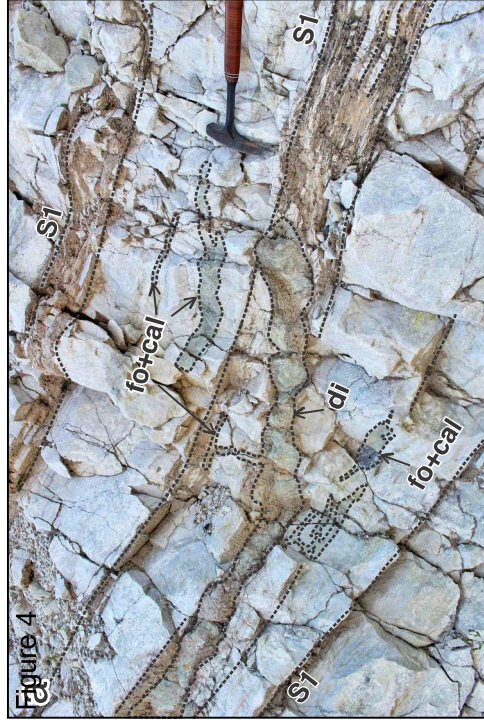


Figure 3

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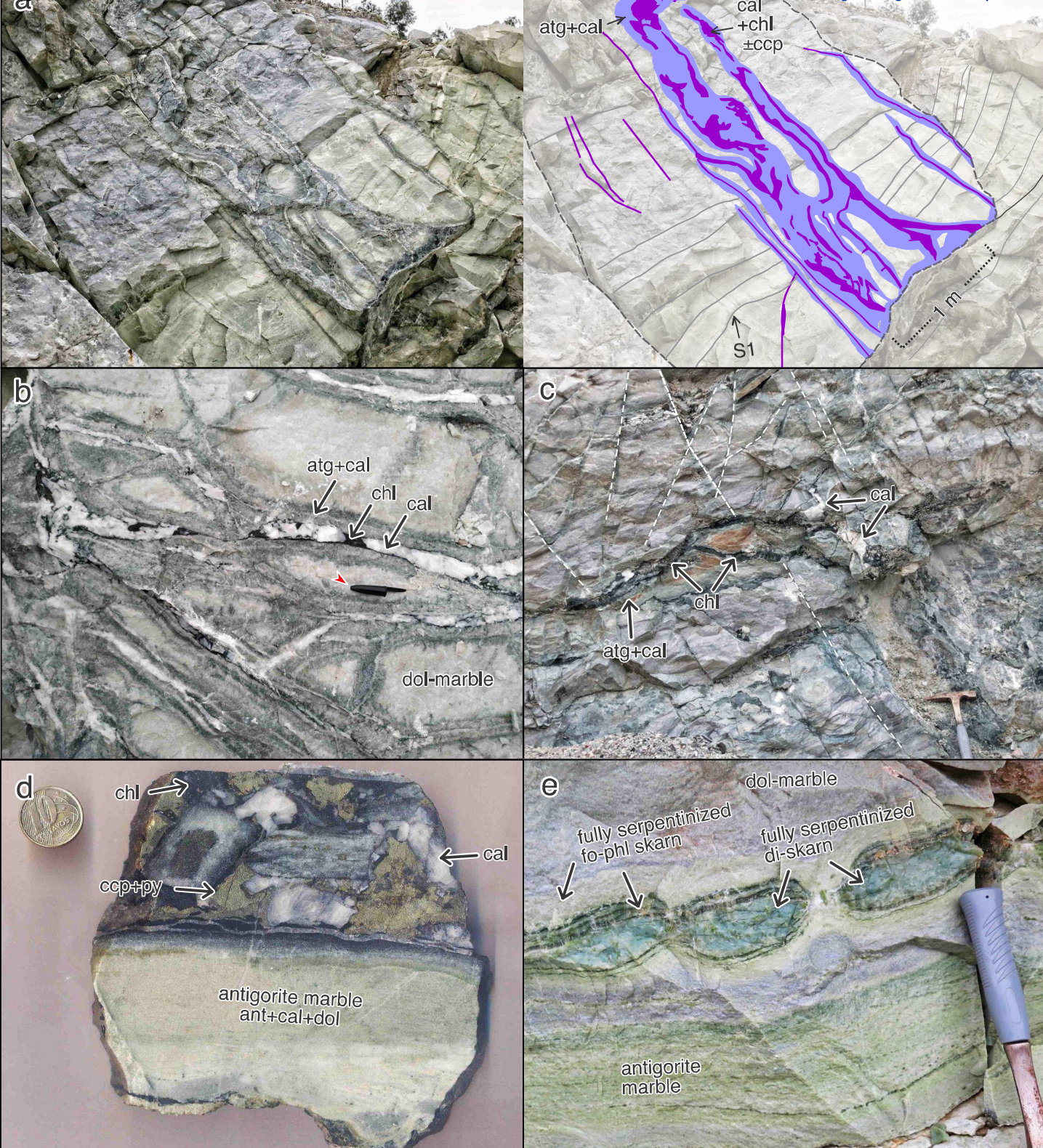




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Figure 5





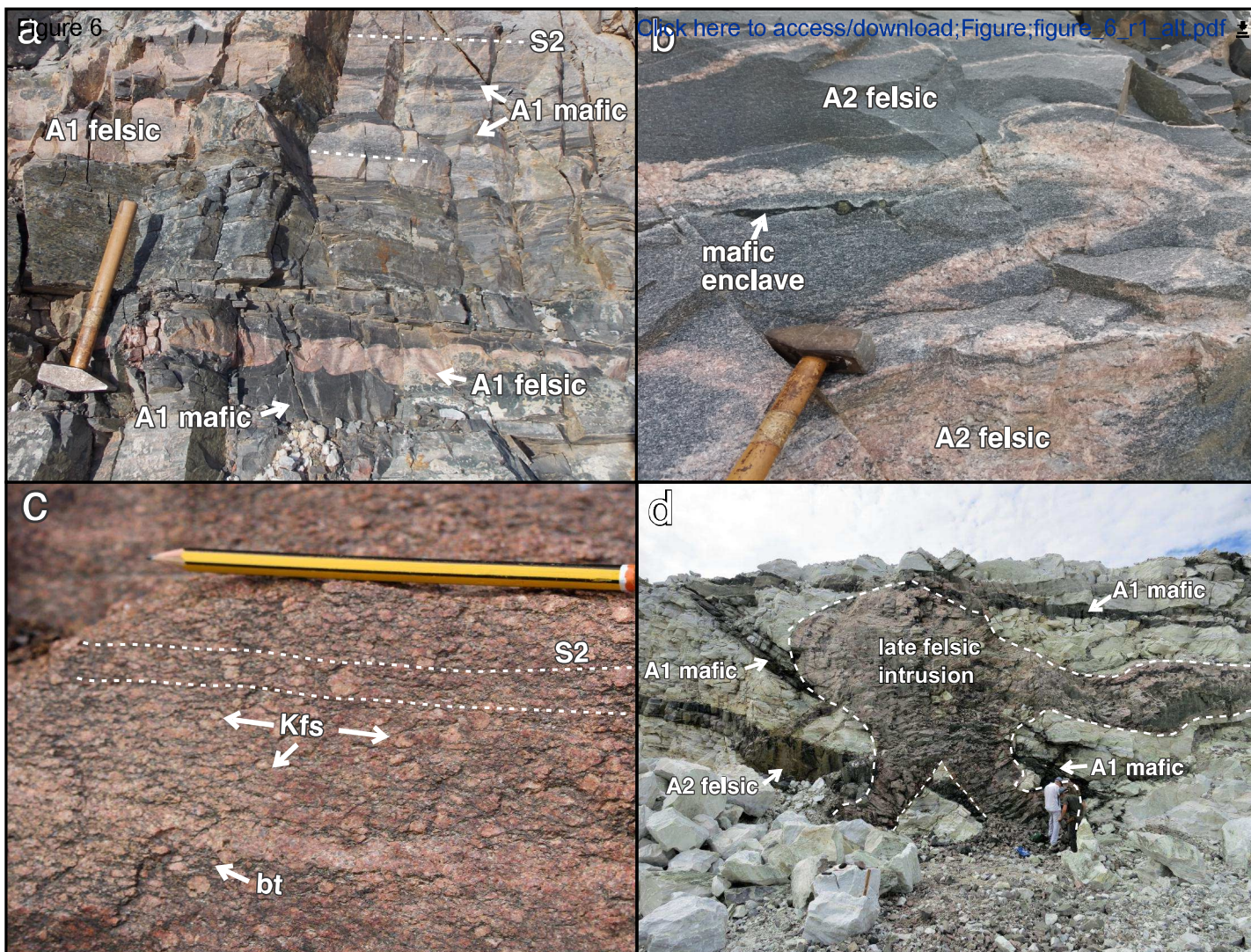
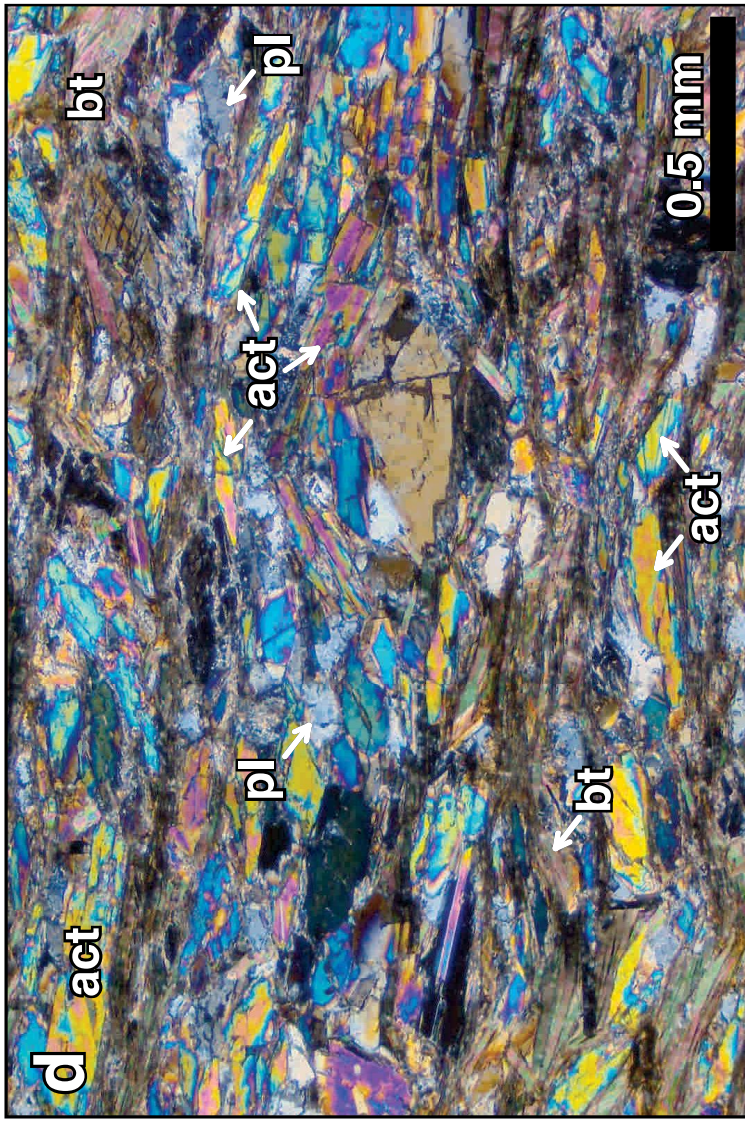
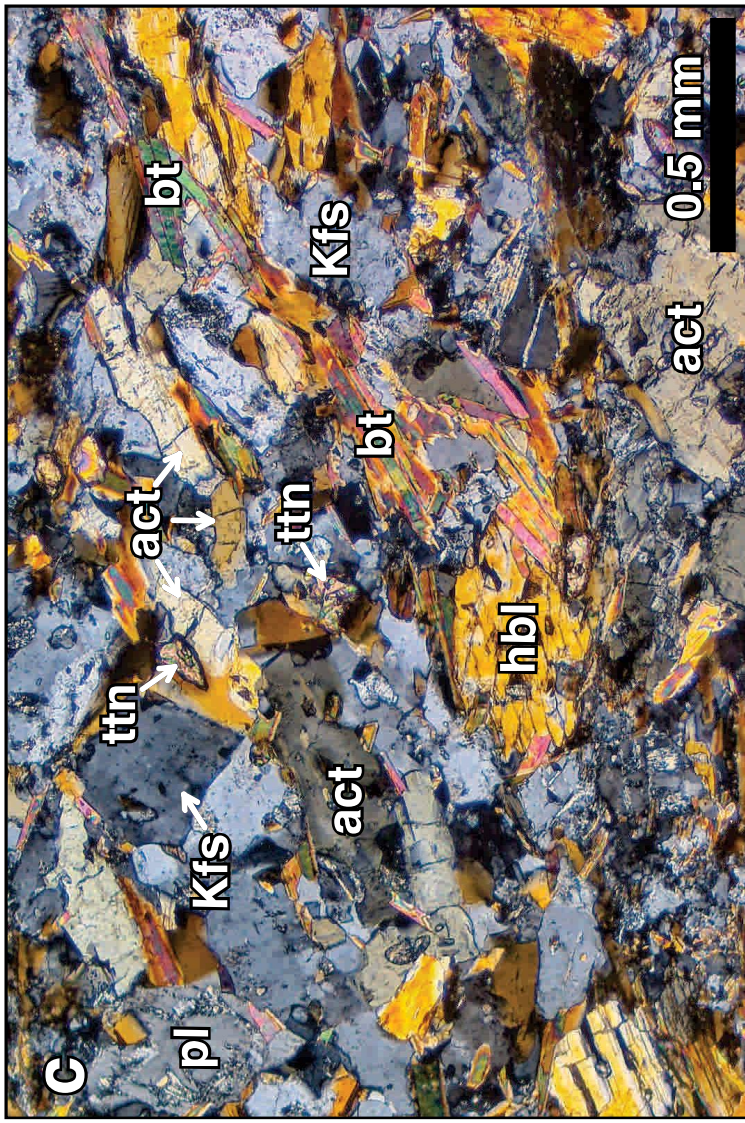
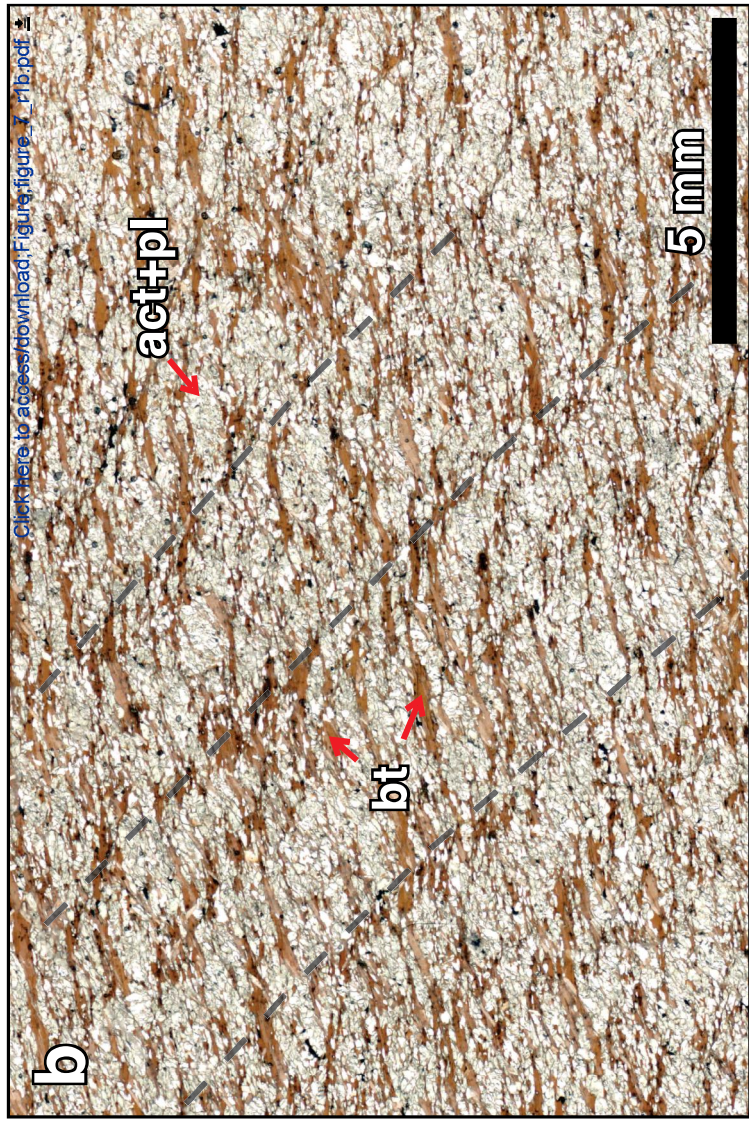
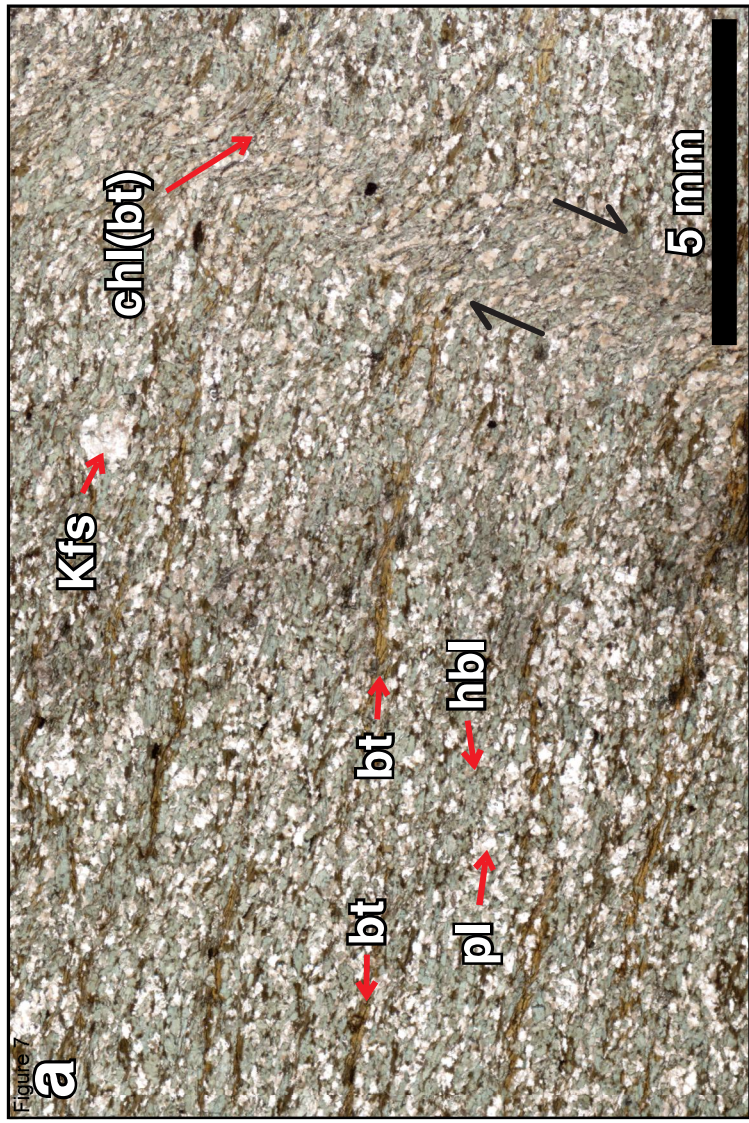
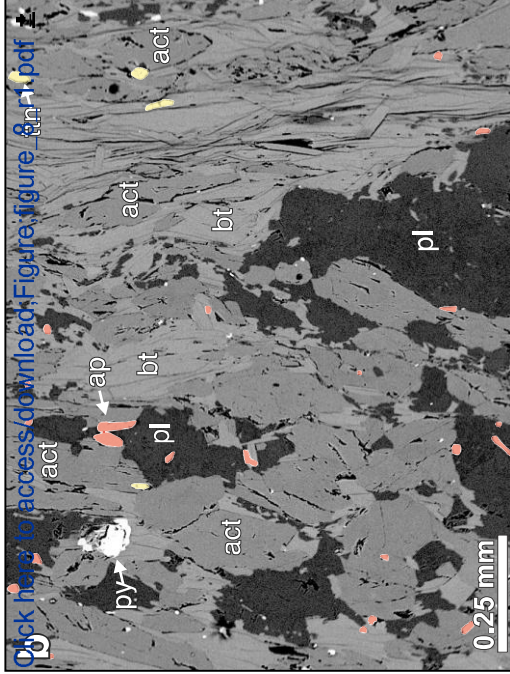
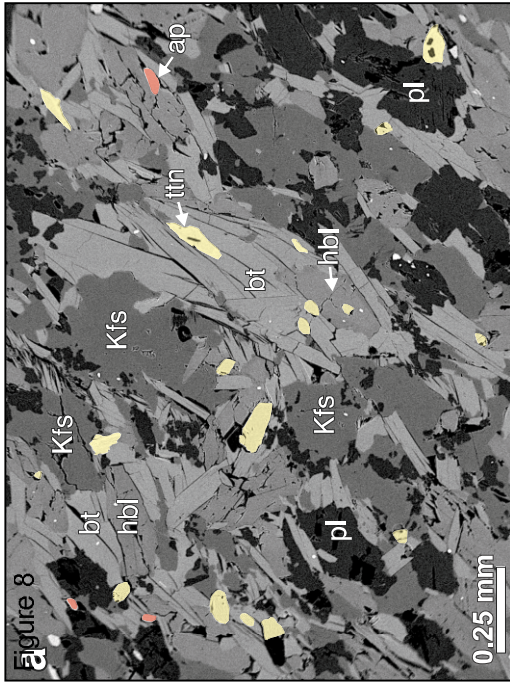




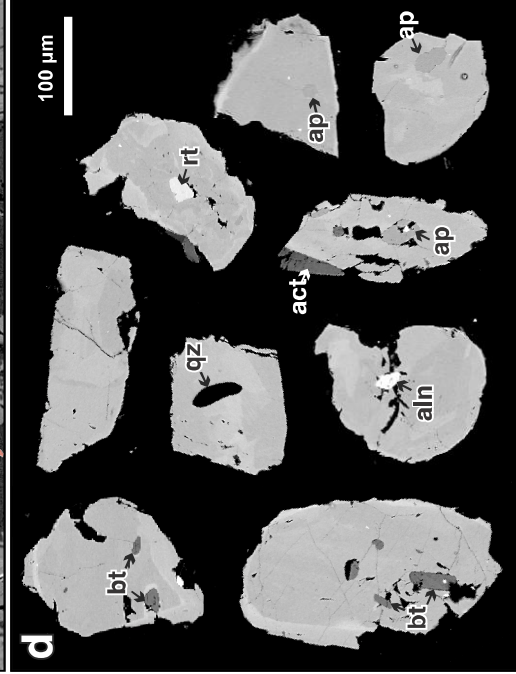
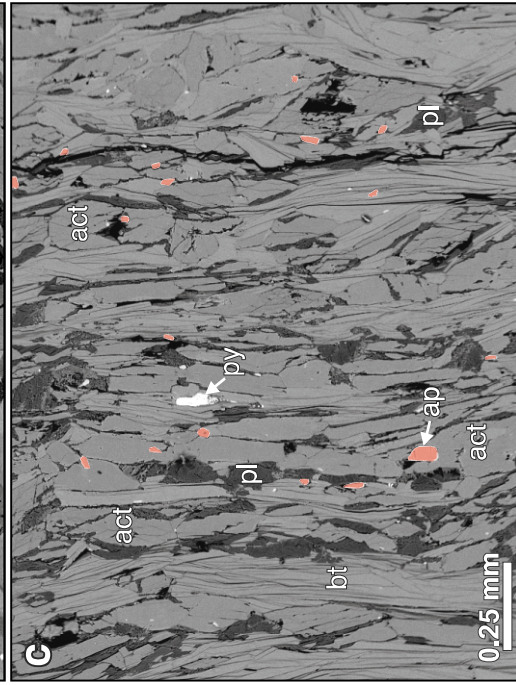
Figure 7



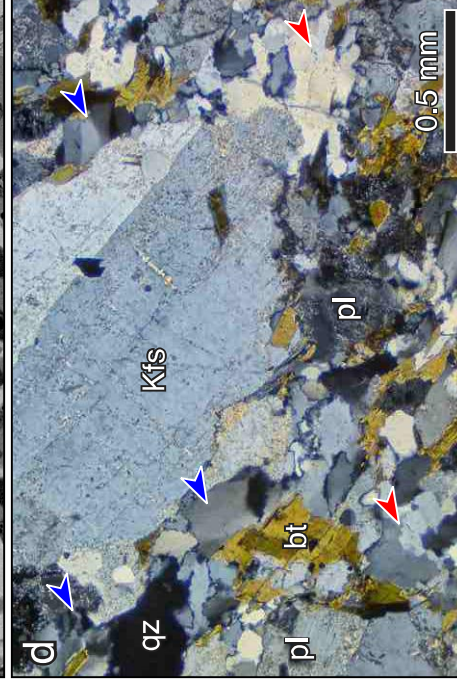
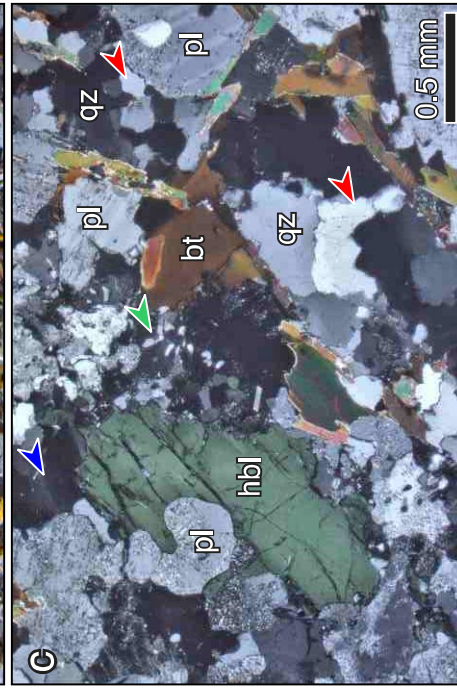
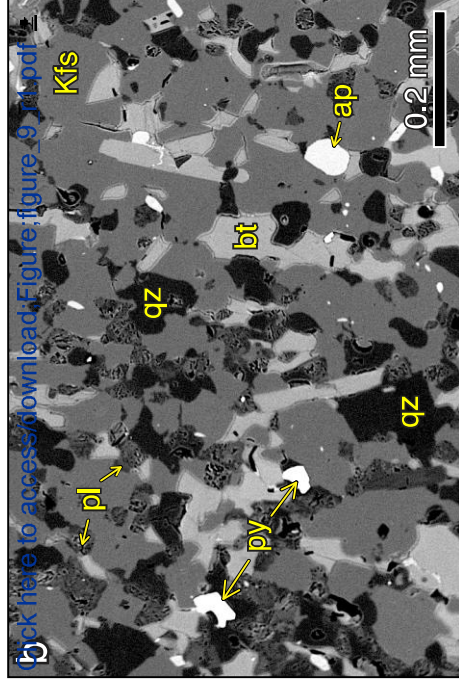
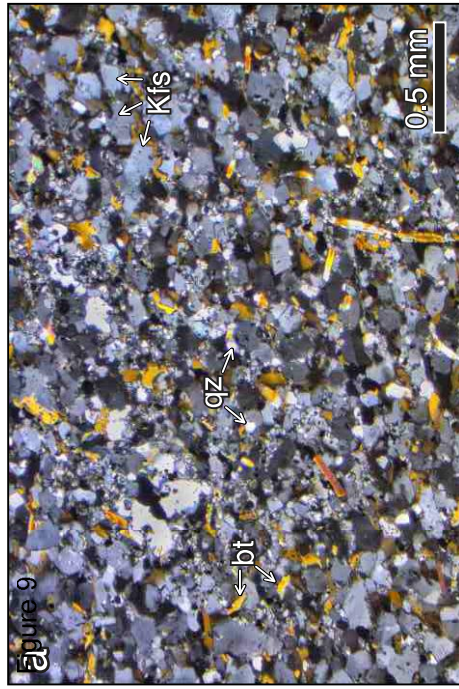




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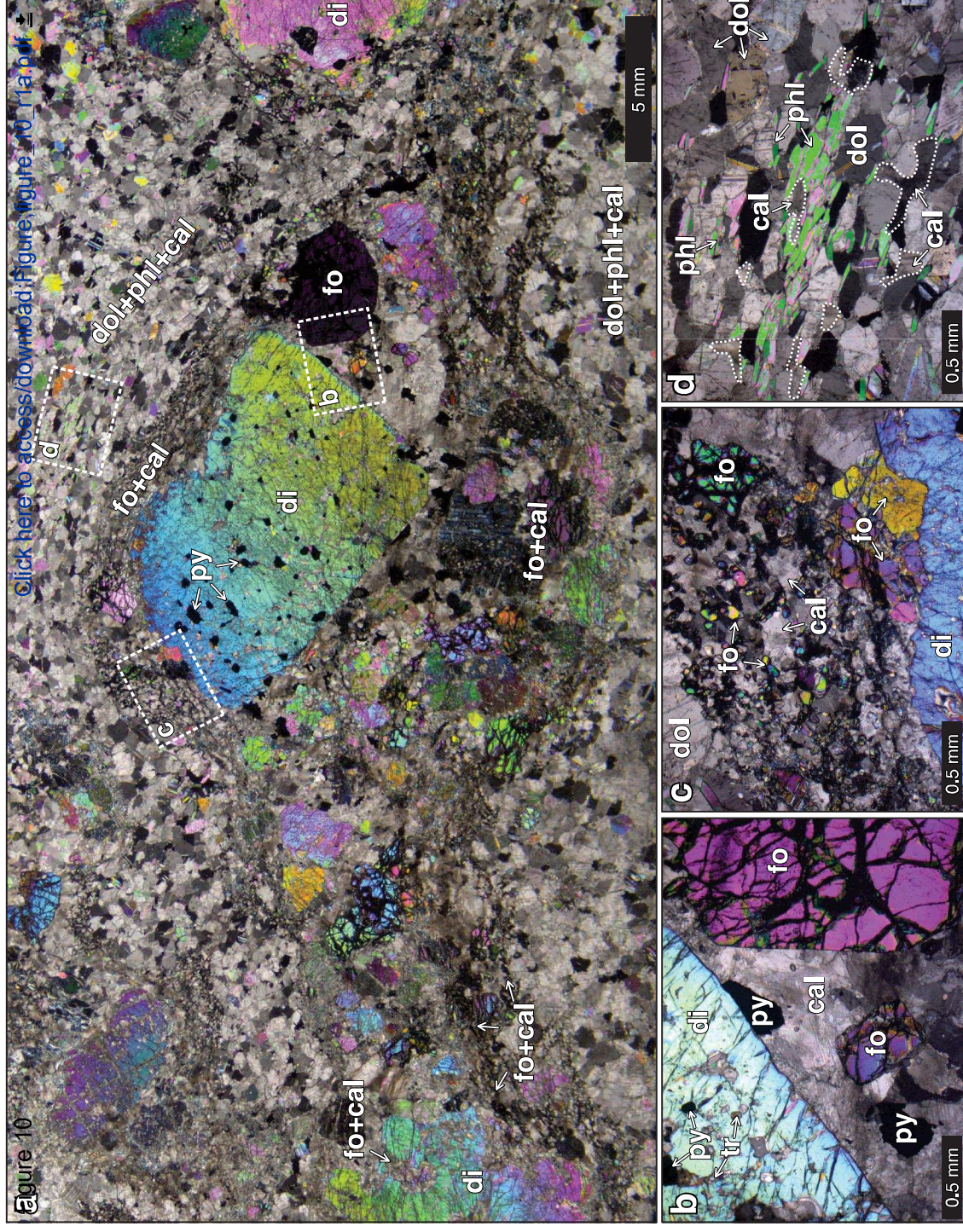




Figure 11

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100  $\mu\text{m}$

**c** igneous zircons

inherited zircons

18 29 19 09 31 14 35 36 13 10 32

530 550 570 590 610 630

0.086 0.090 0.094 0.098 0.102

$^{206}\text{Pb}/^{238}\text{U}$

0.68 0.72 0.76 0.80 0.84

$^{207}\text{Pb}/^{235}\text{U}$

Concordia age

578.0 $\pm$ 4.7 Ma

MSWD = 4.5

M2 Felsic apophysis  
DB-G2Z  
igneous zircon

610

590

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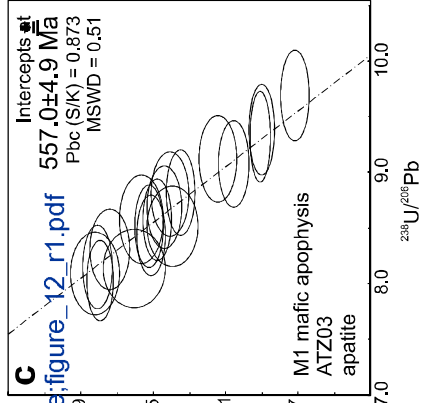
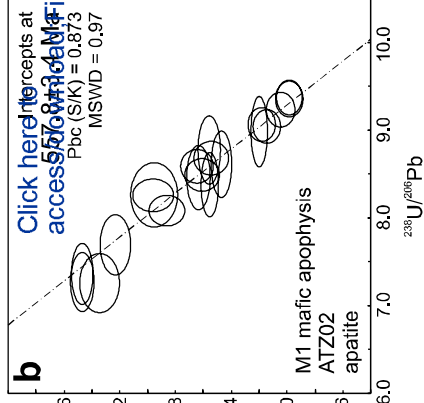
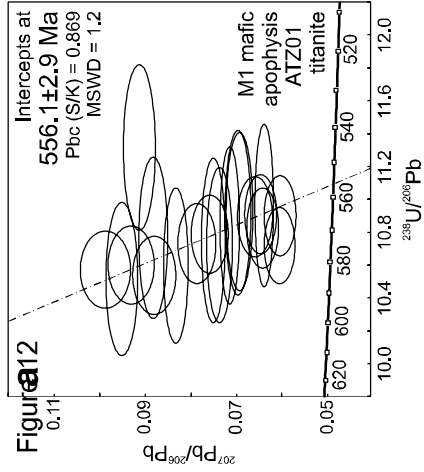
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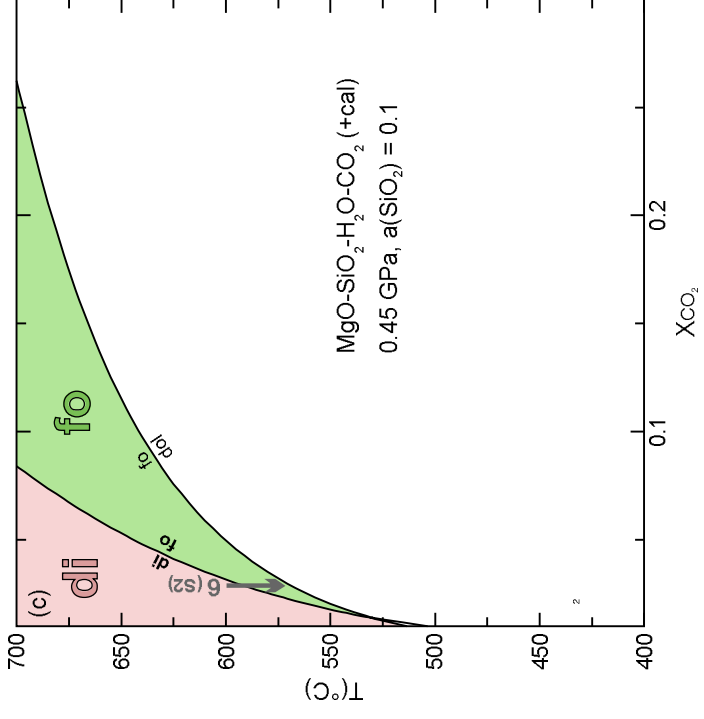
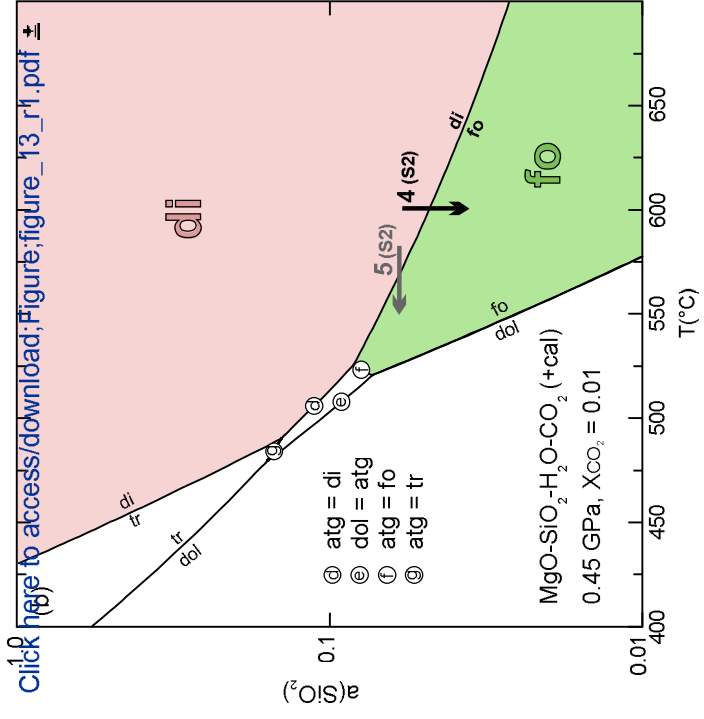
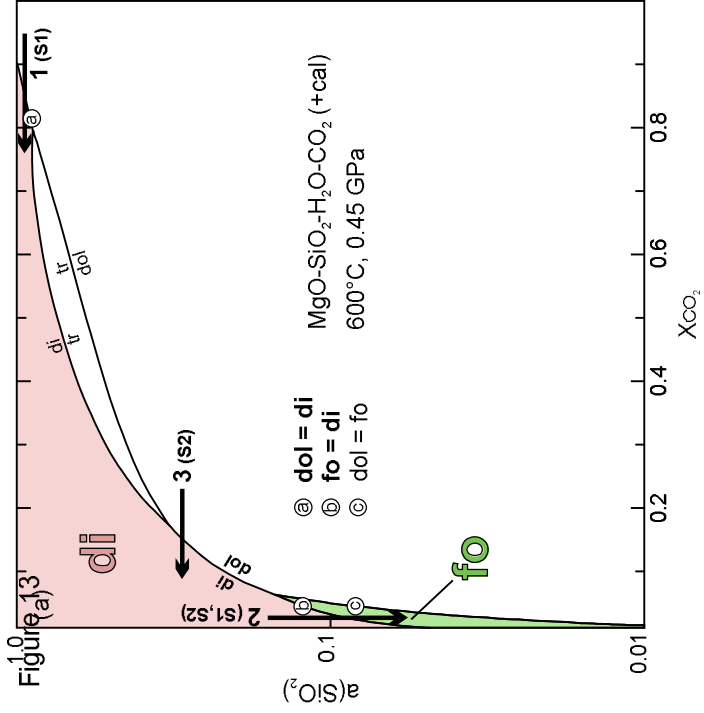
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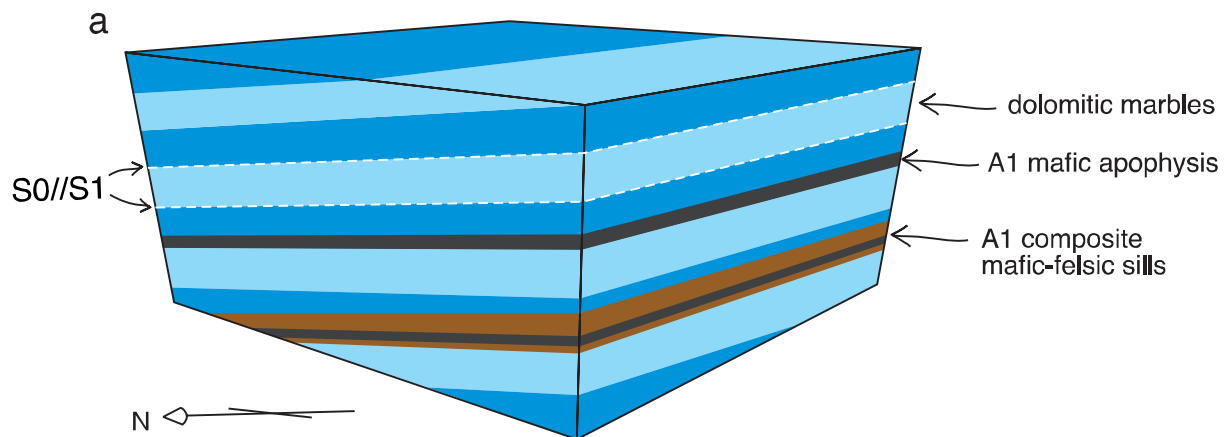




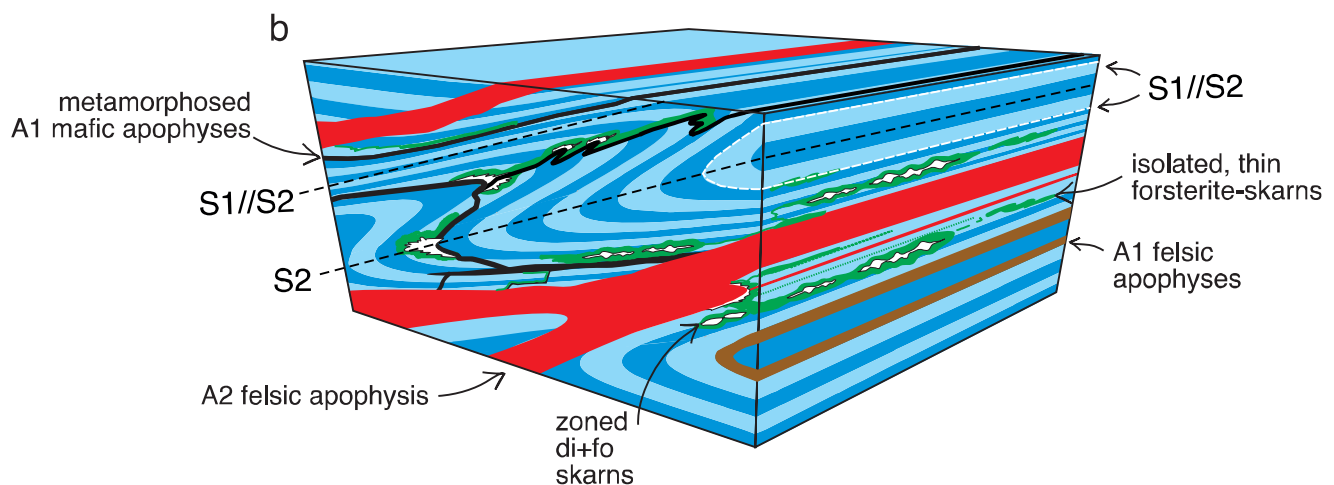
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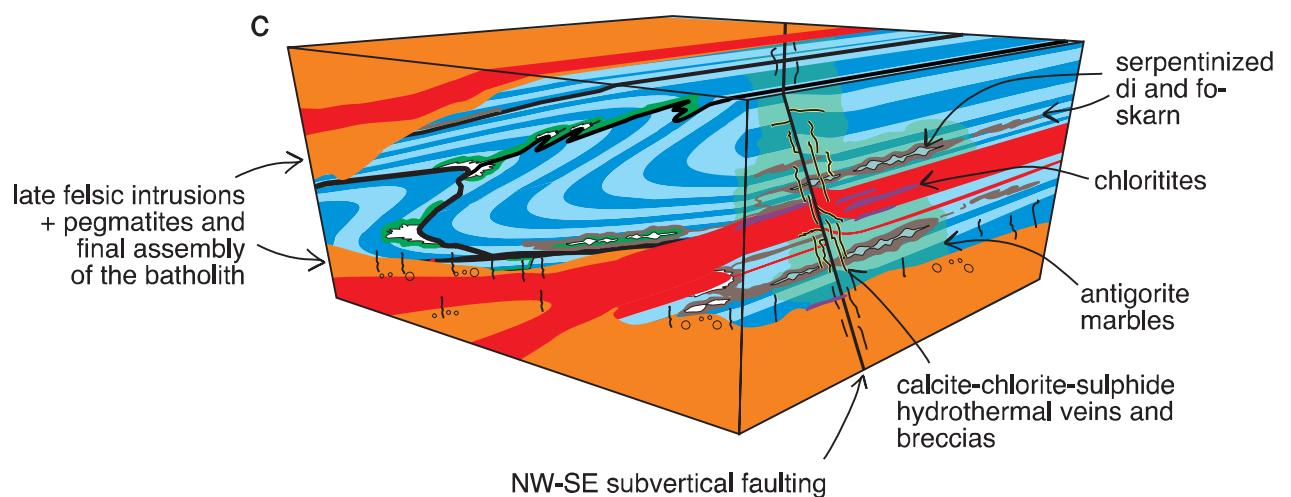
**600-580 Ma - A1 mafic-felsic intrusions** [Click here to access/download;Figure;figure\\_14\\_r1.pdf](#)



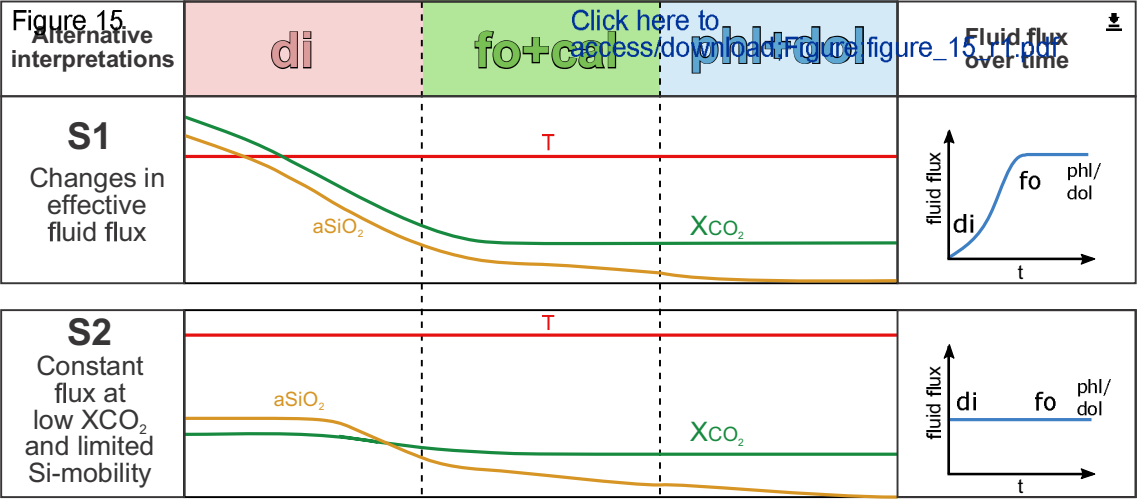
**578 Ma - A2 synkinematic felsic intrusions - di-fo-skarns (~600°C)**



**557 Ma - late felsic intrusions - hydrothermalism (~300°C)**









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**Supplementary material/Appendix (Files for online publication only)**

Table S1 - U-Pb zircon - DB-G1Z - mafic apophysis (M1).xls