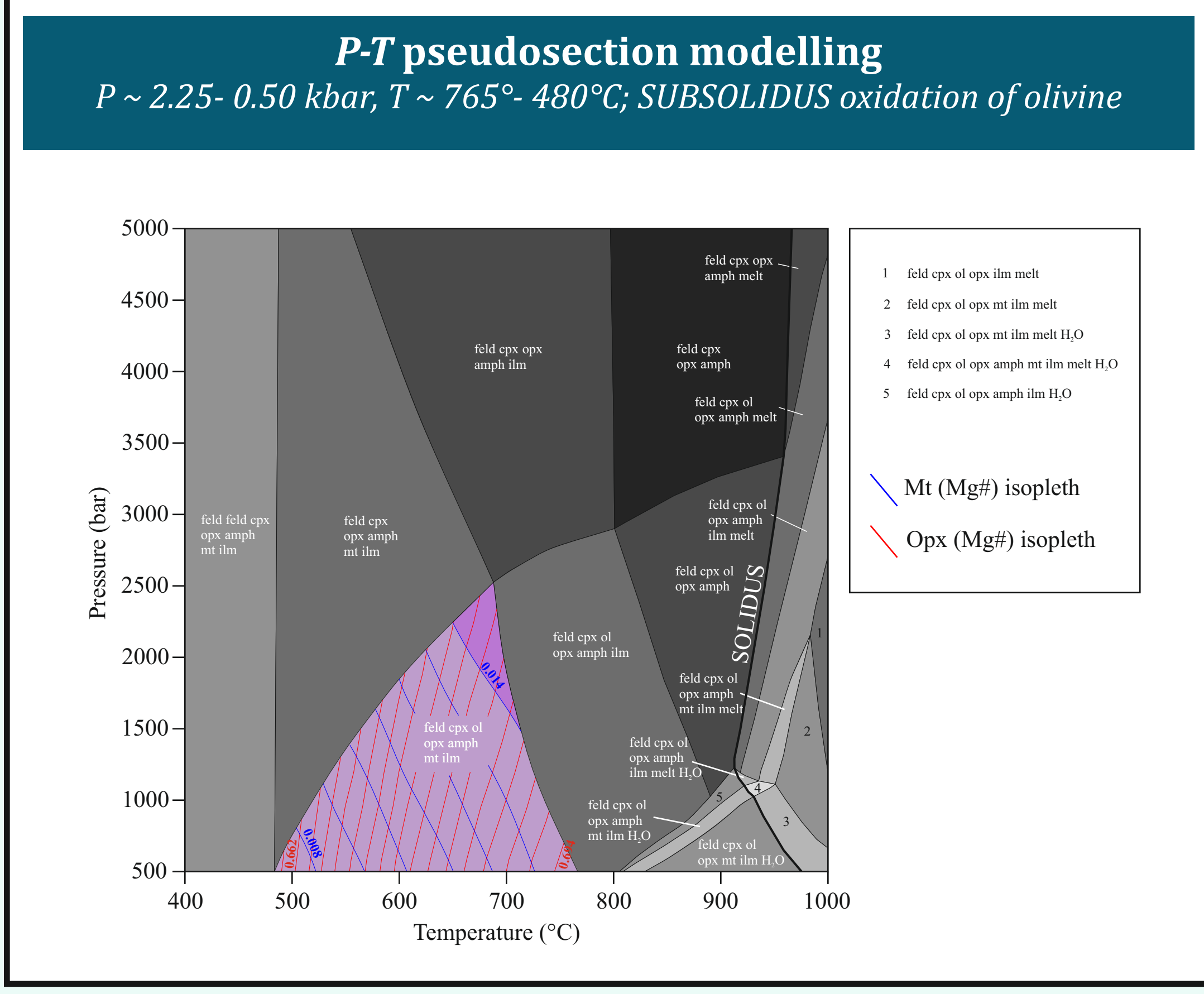
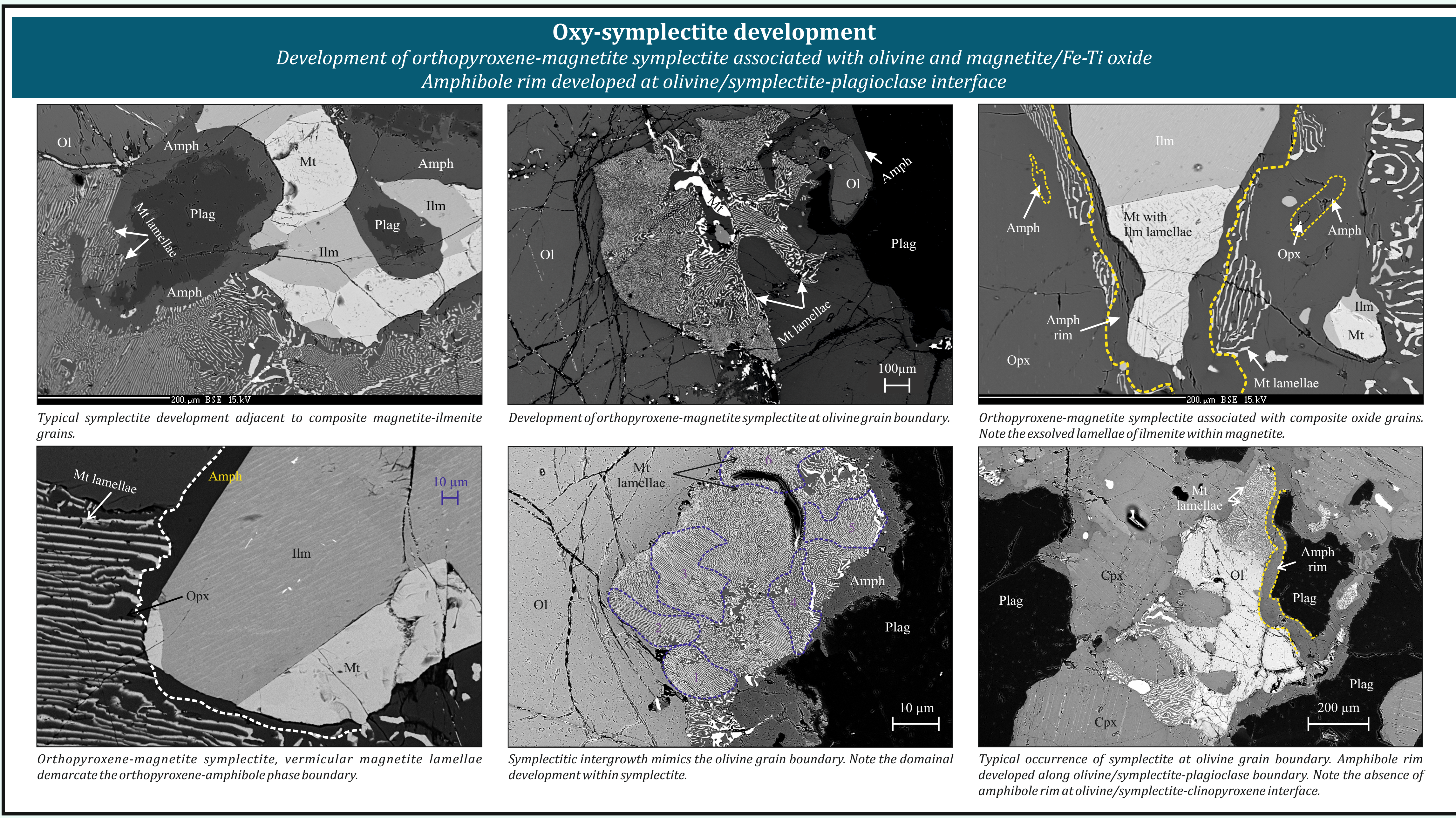
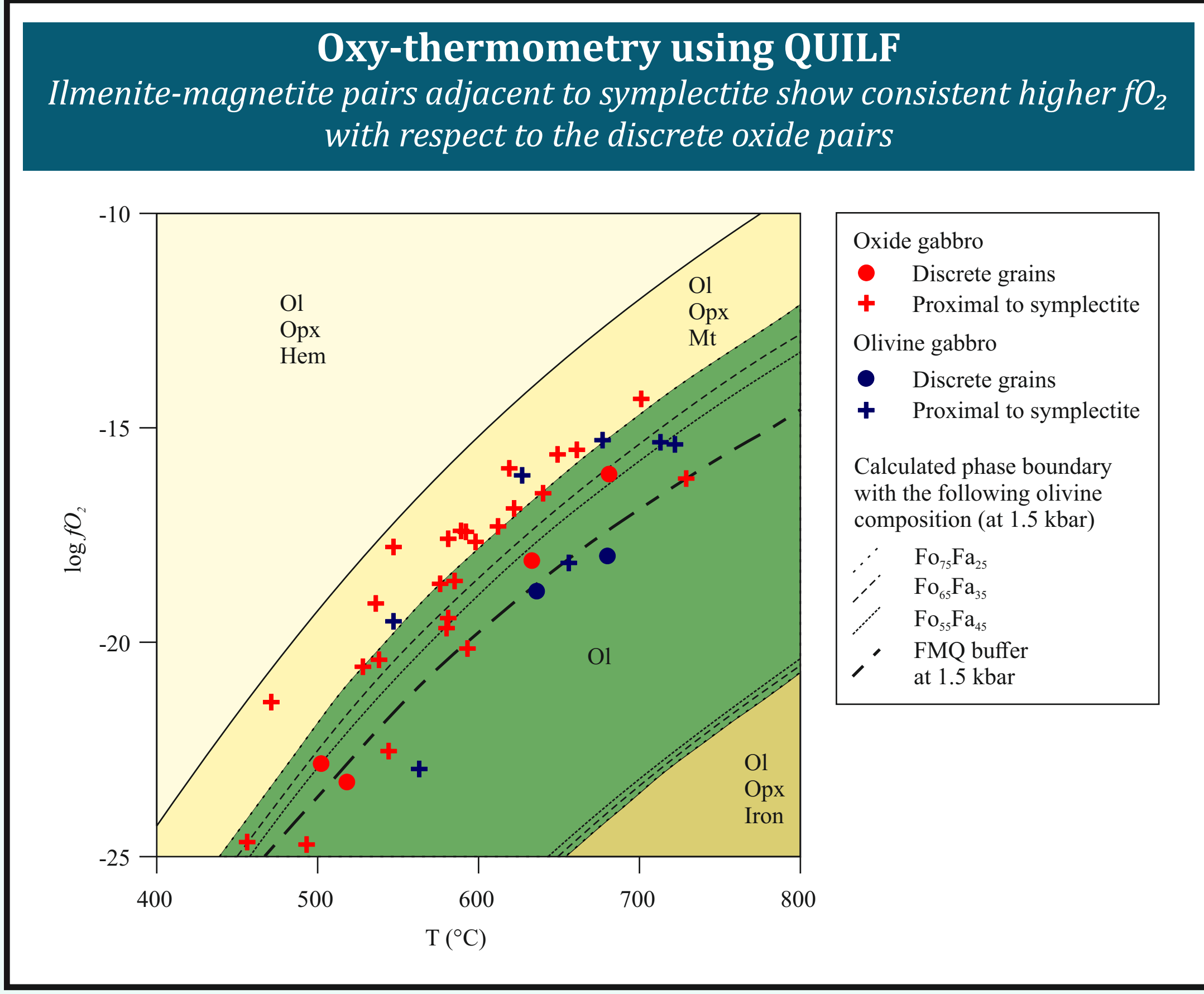
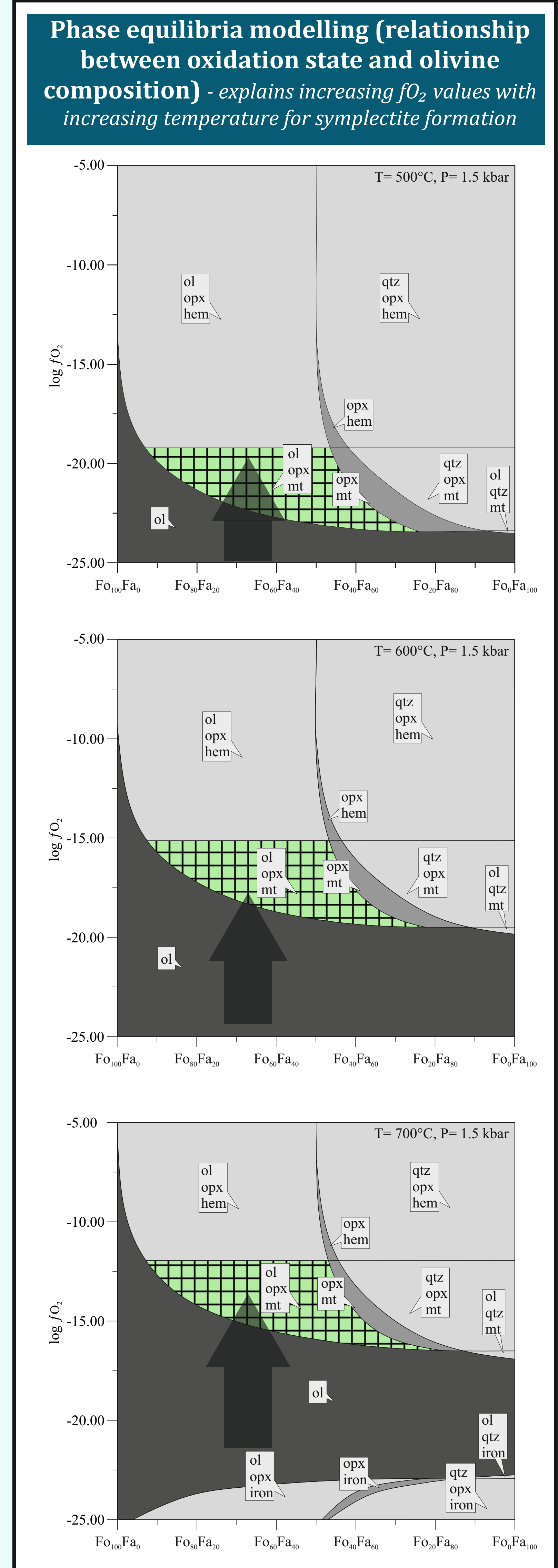
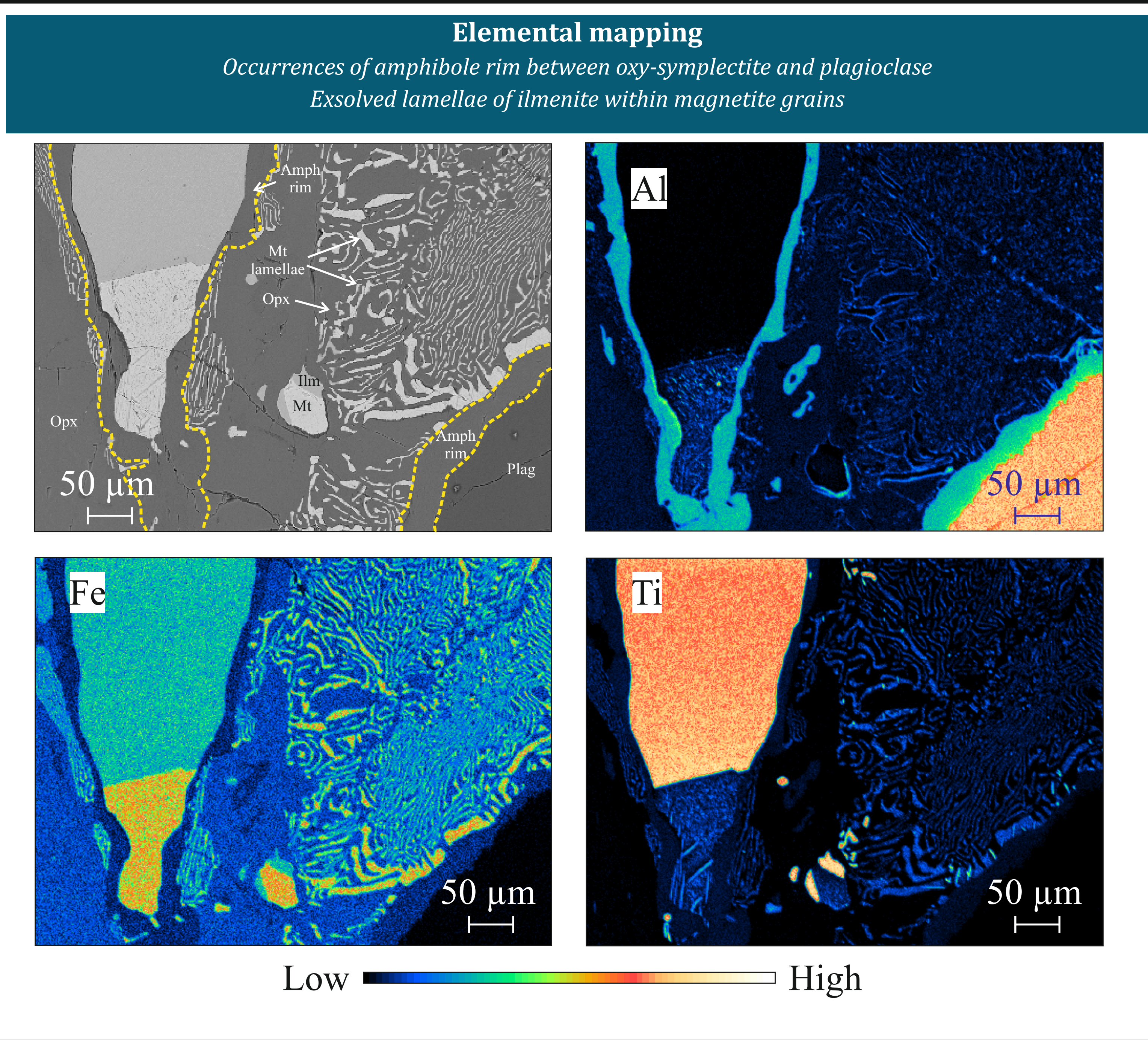
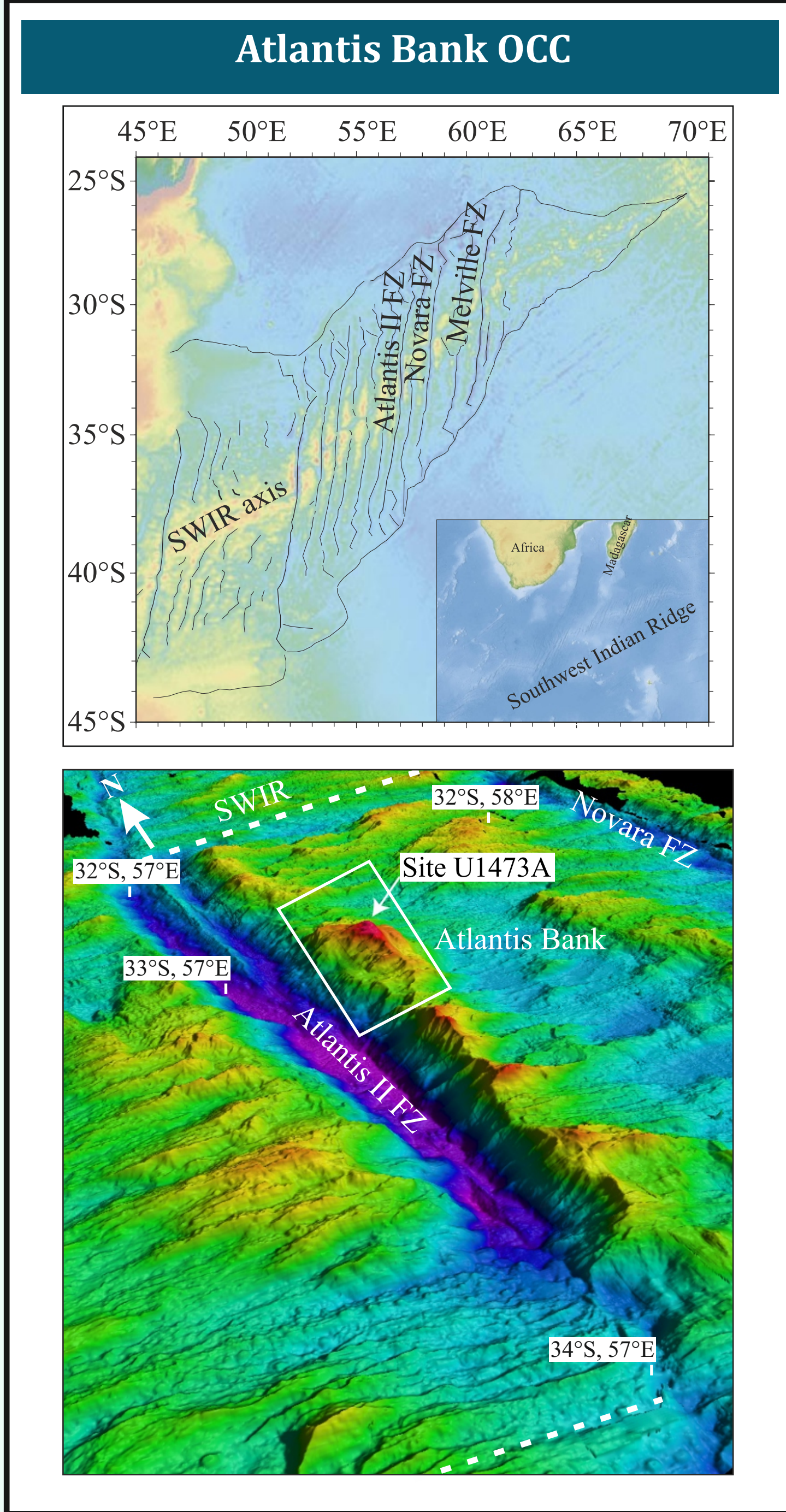




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### Conclusion

Orthopyroxene-magnetite symplectite is usually developed in the oxide-rich lithologies from the lower oceanic crust at Atlantis Bank OCC along SWIR.

Symplectitic intergrowth typically occurs as a pseudomorph after olivine, adjacent to magmatic magnetite and/or Fe-Ti oxide.

T and  $fO_2$  range (using QUILF, from adjacent ilmenite-magnetite pairs)

- Proximal to symplectite  
~ 730° to 450°C, -0.86 to +3.83 (FMQ buffer).
- Discrete oxide pairs  
~ 720° to 550°C, -1.91 to +2.77 (FMQ buffer).

Higher oxygen fugacity of the former group confirms the role of oxidation in the development of the texture.

**Abbreviations used**  
Ol= olivine, Fo= forsterite, Fa= fayalite, Opx= orthopyroxene, Mt= magnetite, Ilm= ilmenite, Amph= amphibole, Plag= plagioclase feldspar, Cpx= clinopyroxene, Qtz= quartz, Hem= hematite.

We sincerely acknowledge

Abstract

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Sharing is encouraged