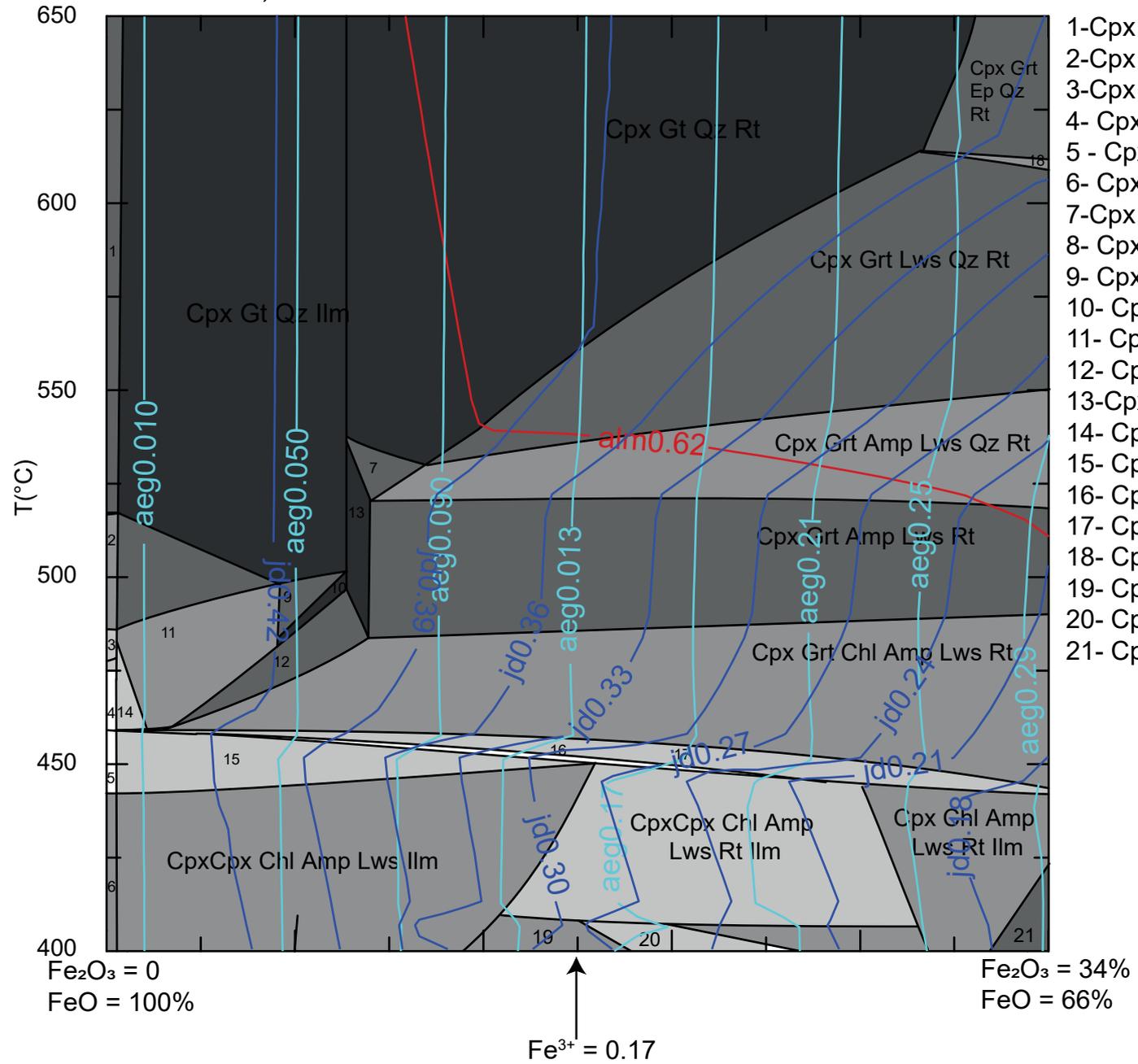


P=2.6 GPa, H₂O sat.



- 1-Cpx Gt Qz Ilm iron
- 2-Cpx Gt Amp Rt Ilm
- 3-Cpx Gt Amp Chl R
- 4- Cpx Cpx Gt Amp
- 5 - Cpx Cpx Grt Amp
- 6- CpxCpx Chl Amp
- 7-Cpx Gt Amp Qz R
- 8- Cpx Gt Amp Rt Ilm
- 9- Cpx Gt Chl Rt Ilm
- 10- Cpx Gt Chl Rt
- 11- Cpx Gt Amp Chl
- 12- Cpx Gt Amp Chl
- 13-Cpx Gt Amp Rt
- 14- Cpx Cpx Gt Amp
- 15- Cpx Cpx Grt Amp
- 16- Cpx Cpx Grt Am
- 17- Cpx Grt Amp Ch
- 18- Cpx Grt Lws Ep
- 19- Cpx Amp Chl Lw
- 20- Cpx Amp Chl Lw
- 21- Cpx Chl Amp Lw

Figure S1: T-X compositions calculated at 2.6 GPa under water-saturated conditions and in the NCFMASHTi system. The X axis is the variation of the bulk composition ranging from FeO = 100%, Fe₂O₃ = 0 to FeO = 66% and Fe₂O₃ = 34%.