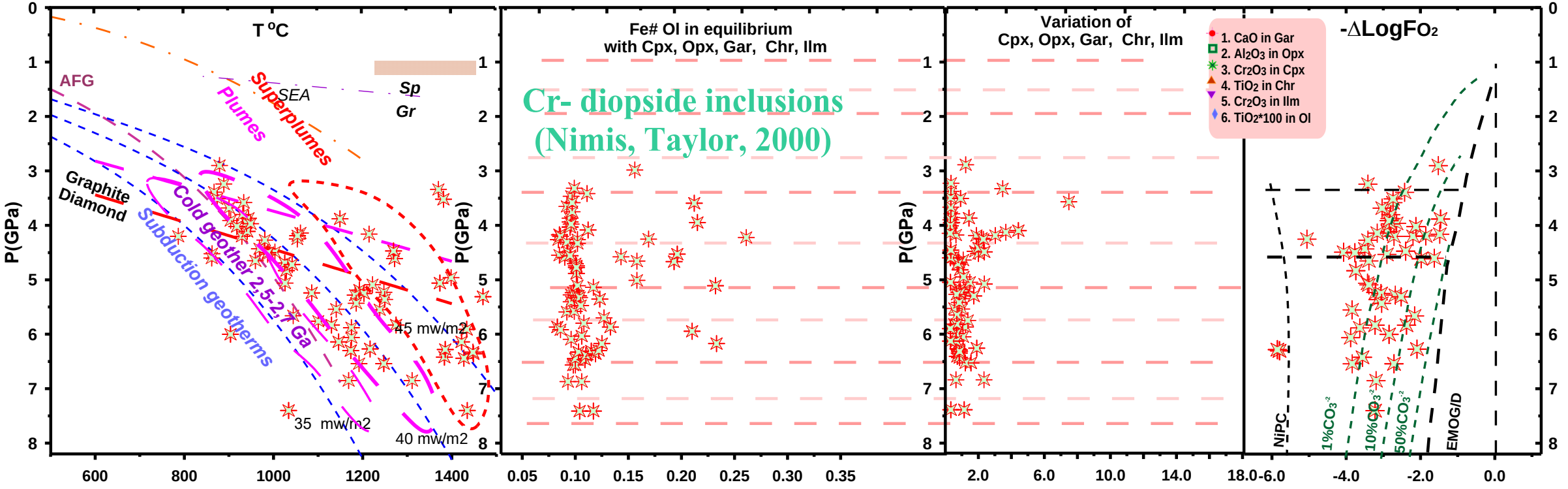

Figure 1. *PTXFO2 diagram for diamond inclusions of Cr diopsides of the whole data base. Pressure estimates (Nimis, Taylor, 2000)*

Fig.3

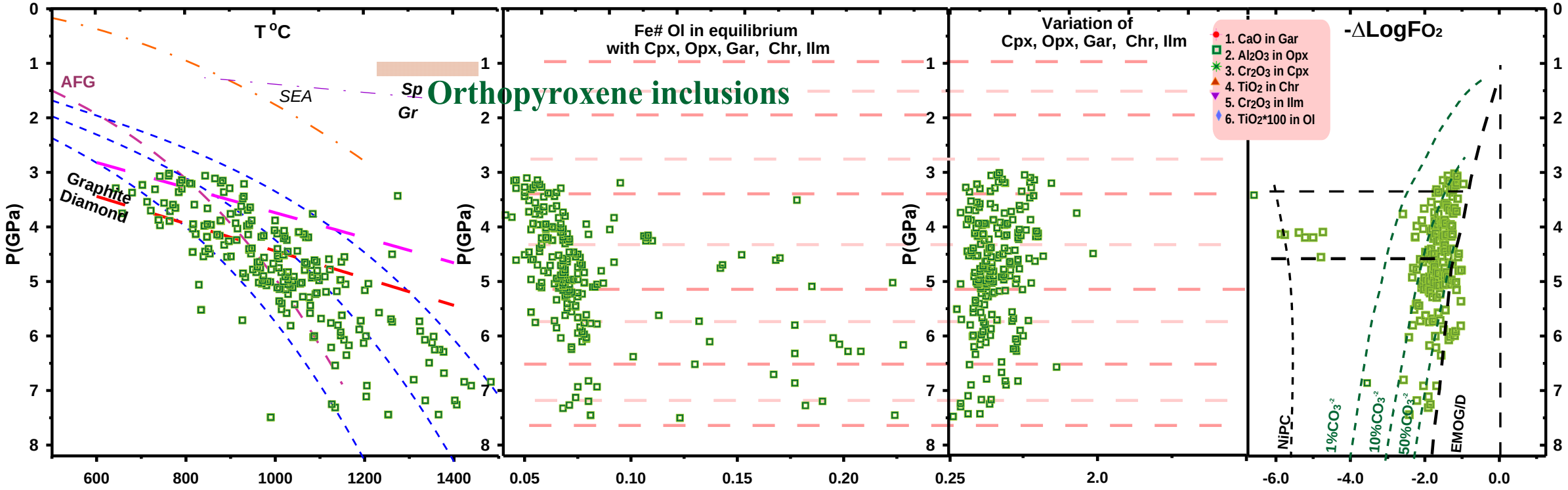

Figure 2. *PTXFO2 diagram for diamond inclusions of orthopyroxenes of the whole data base. Pressure estimates (McGregor, 1980)*

Fig.1

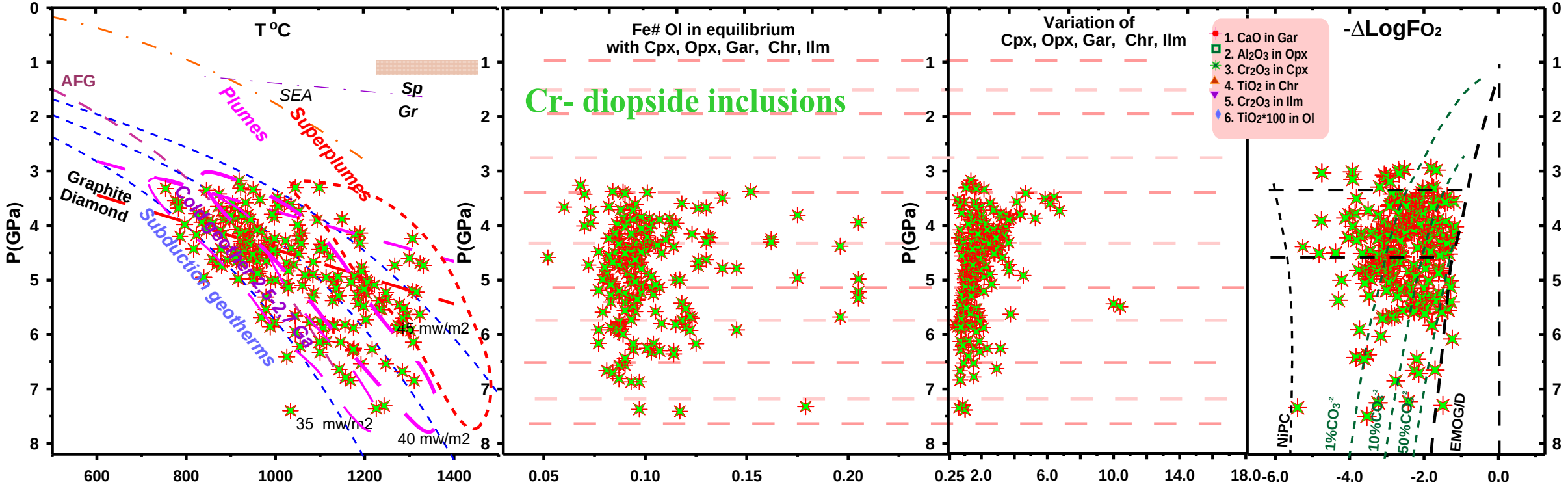

Figure 3. *PTXFO2 diagram for diamond inclusions of Cr diopsides of the whole data base. Pressure estimates (Ashchepkov et al., 2017 for peridotite)*

Fig.5

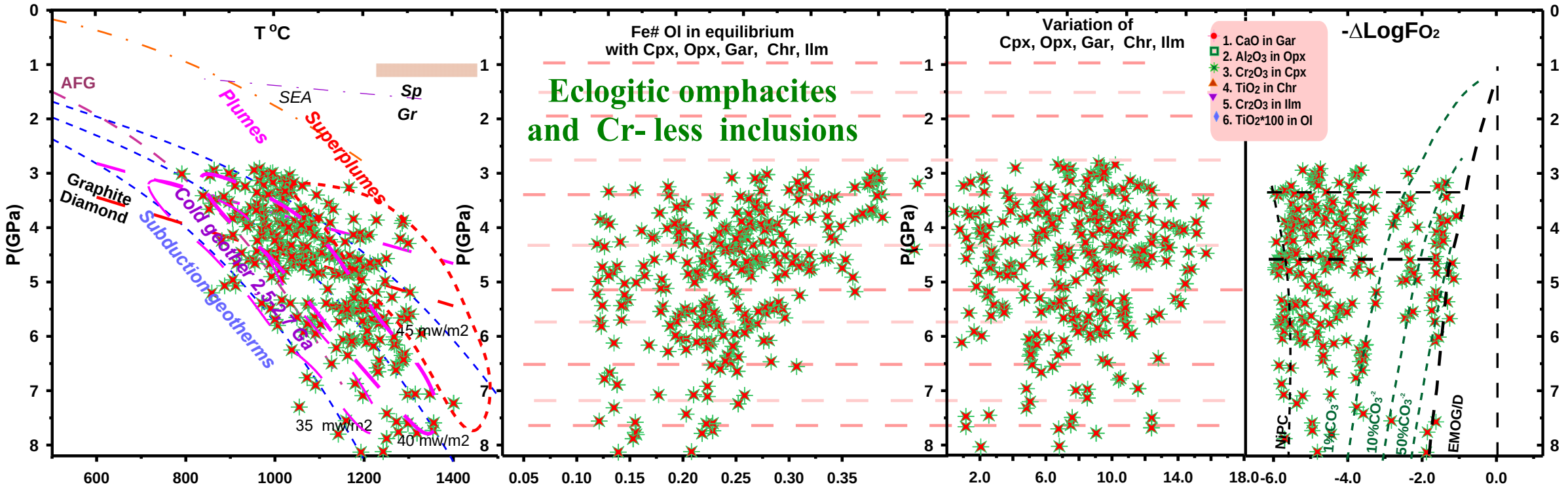

Figure 4. *PTXFO2 diagram for diamond inclusions of Cr less clinopyroxenes of the whole data base. Pressure estimates (Ashchepkov et al., 2017 universal for eclogites)*

Fig.2

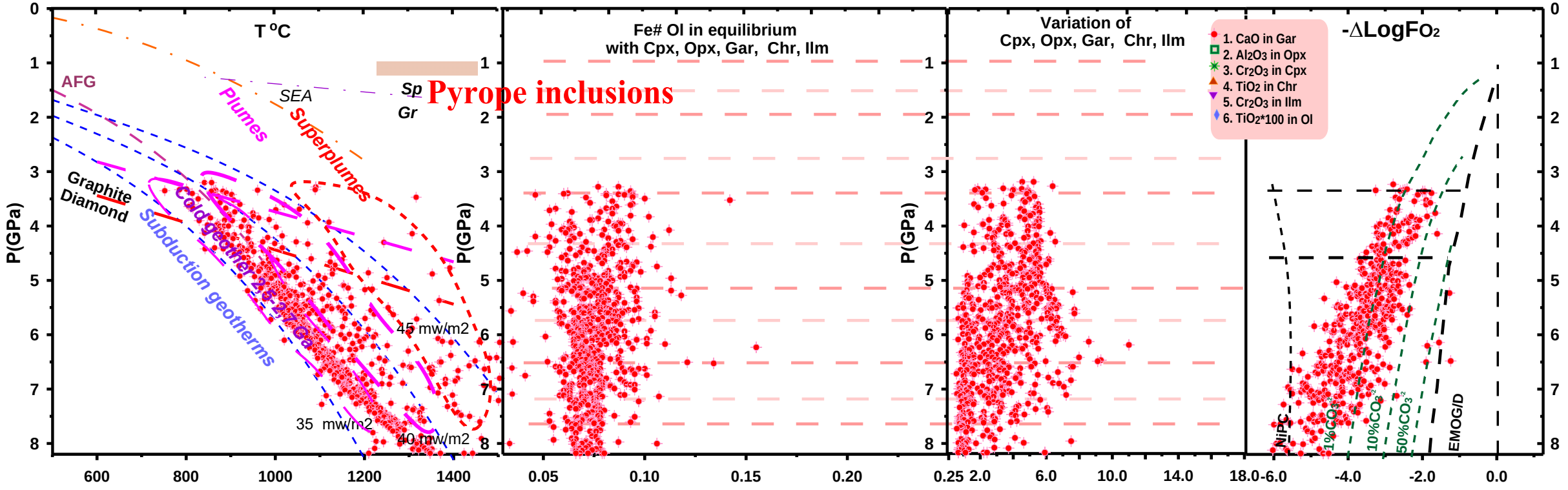

Figure 5. *PTXFO2 diagram for diamond inclusions of Cr pyropes of the whole data base. Pressure estimates (Ashchepkov et al., 2017 for peridotite)*

Fig.6

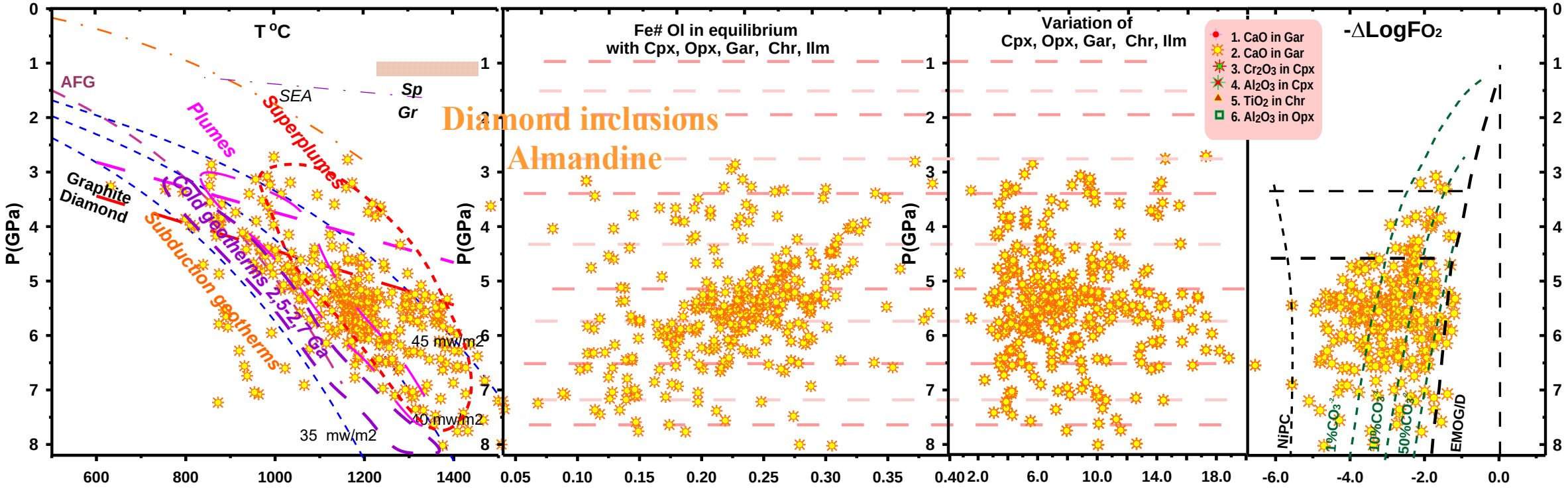

Figure 6. *PTXFO2 diagram for diamond inclusions of Cr less garnets of the whole data base. Pressure estimates (Ashchepkov et al., 2017 for eclogites)*

Fig.4

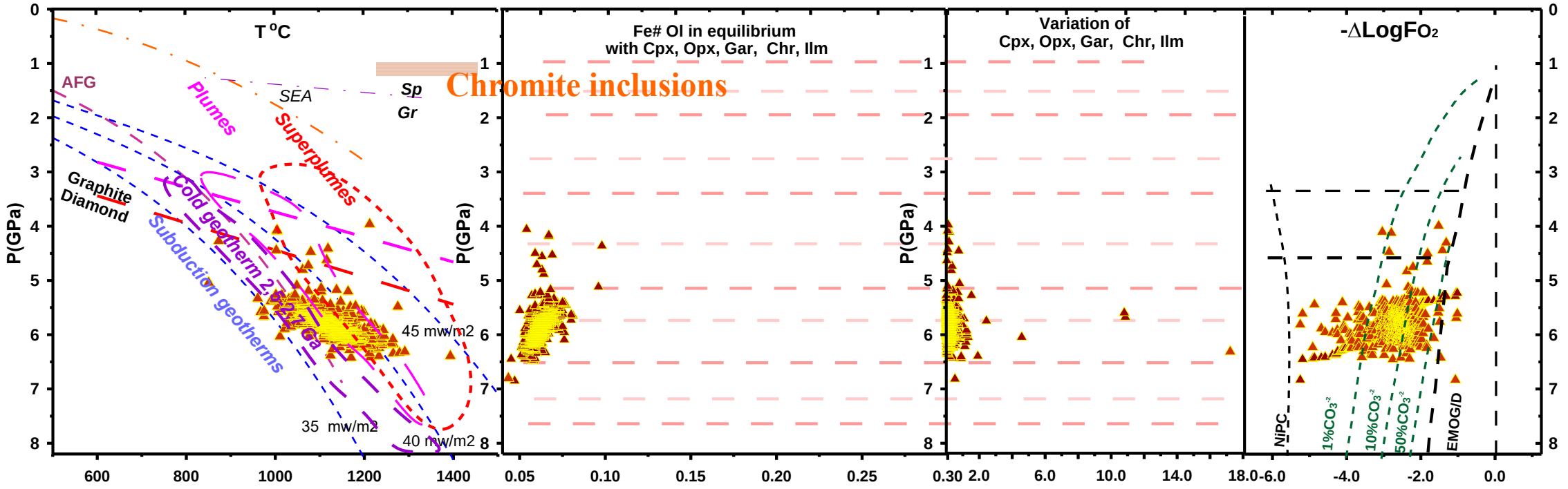

Figure 7. *PTXFO2 diagram for diamond inclusions of Chromites of the whole data base. Pressure estimates (Ashchepkov et al., 2010)*

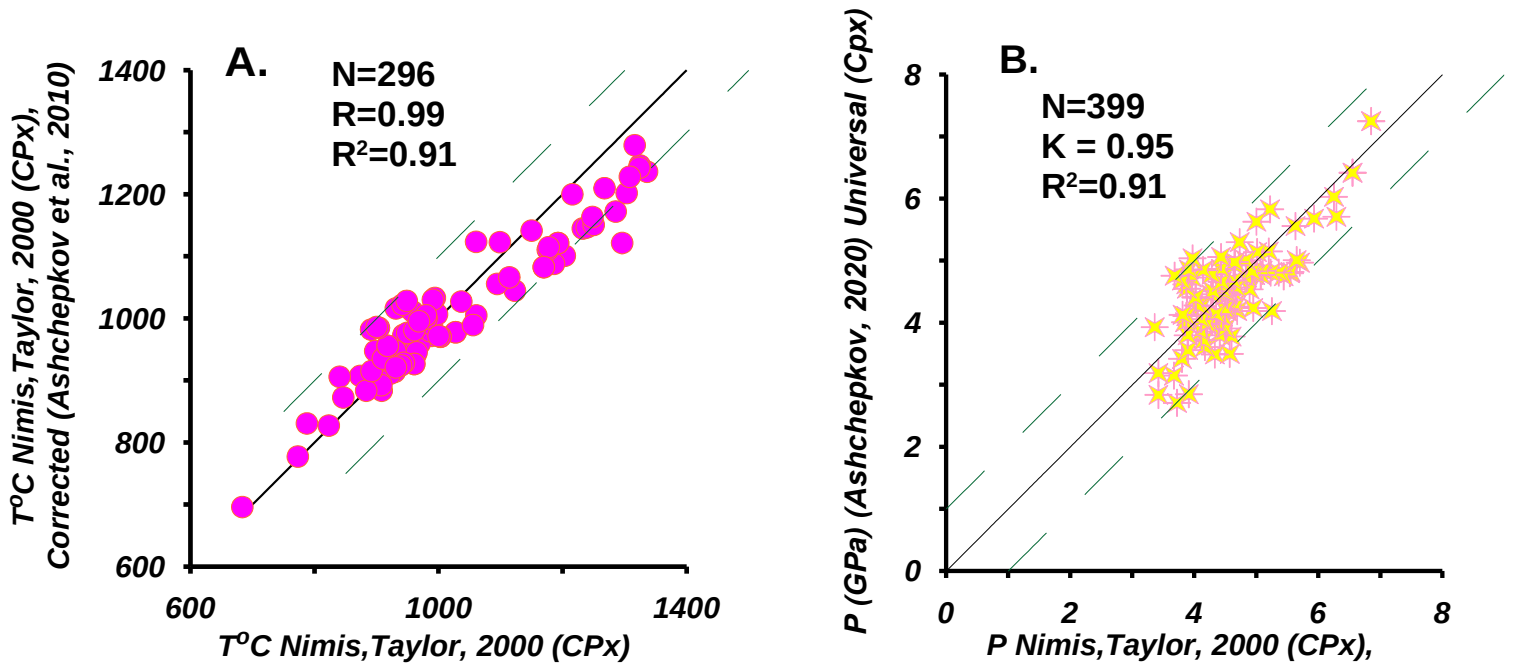

Figure 8. *Correlations A. T estimates (Nimis Taylor, 2000) and corrected version and B. P (GPa) estimates (Nimis Taylor, 2000) and (Ashchepkov et al., 2017)*

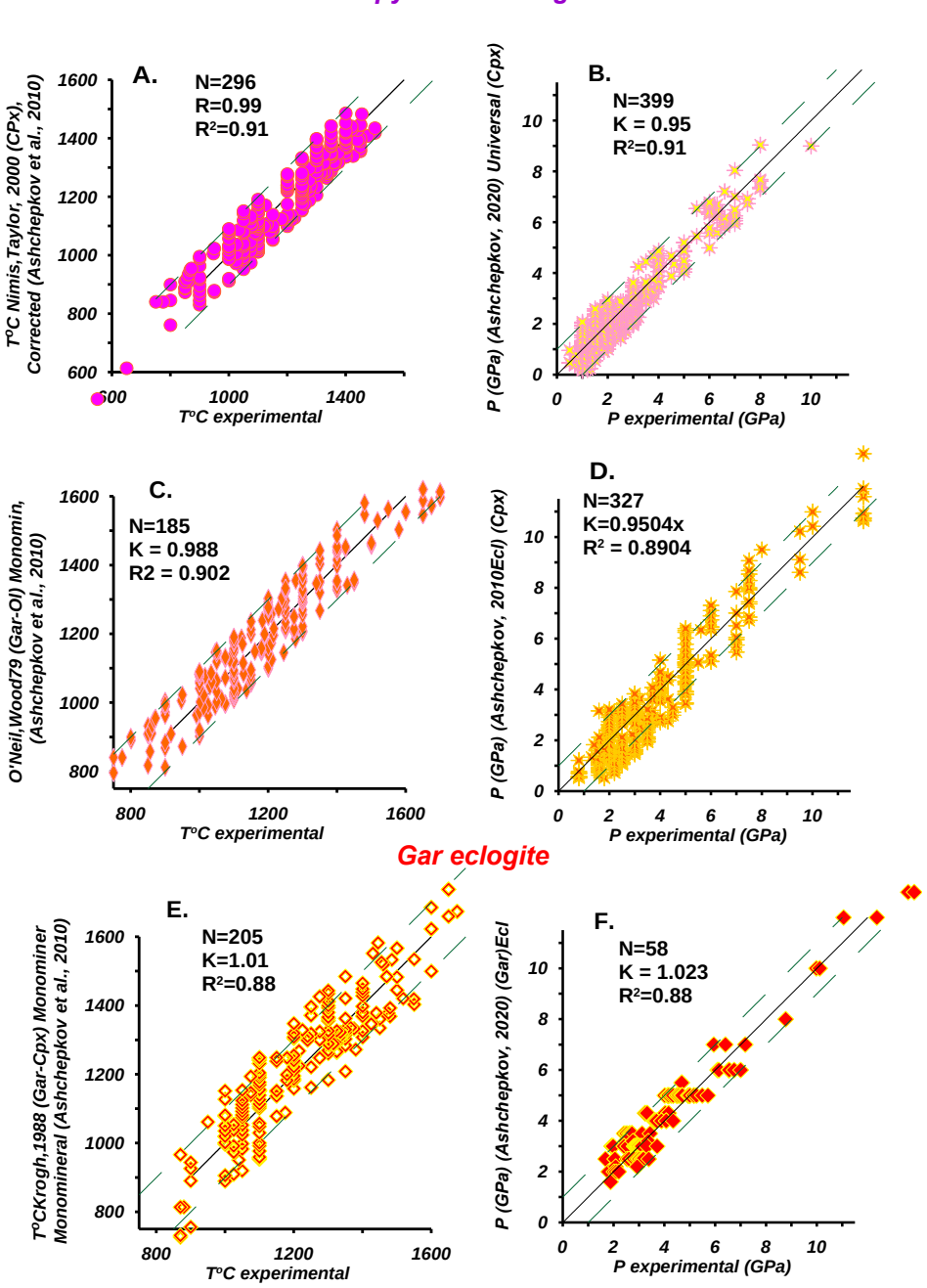

Figure 9. *Correlations A. ToC estimates (Nimis Taylor, 2000, cor and B. P (GPa) (Ashchepkov et al Universal) and experimental data*

C. ToC estimates (O'Neill,Wood, 1979 mono) P(GPa)(Ashchepkov et al., 2010) Cpx

D. ToC estimates (O'Krogh, 1988 mono) P(GPa)(Ashchepkov et al., 2017) for garnets

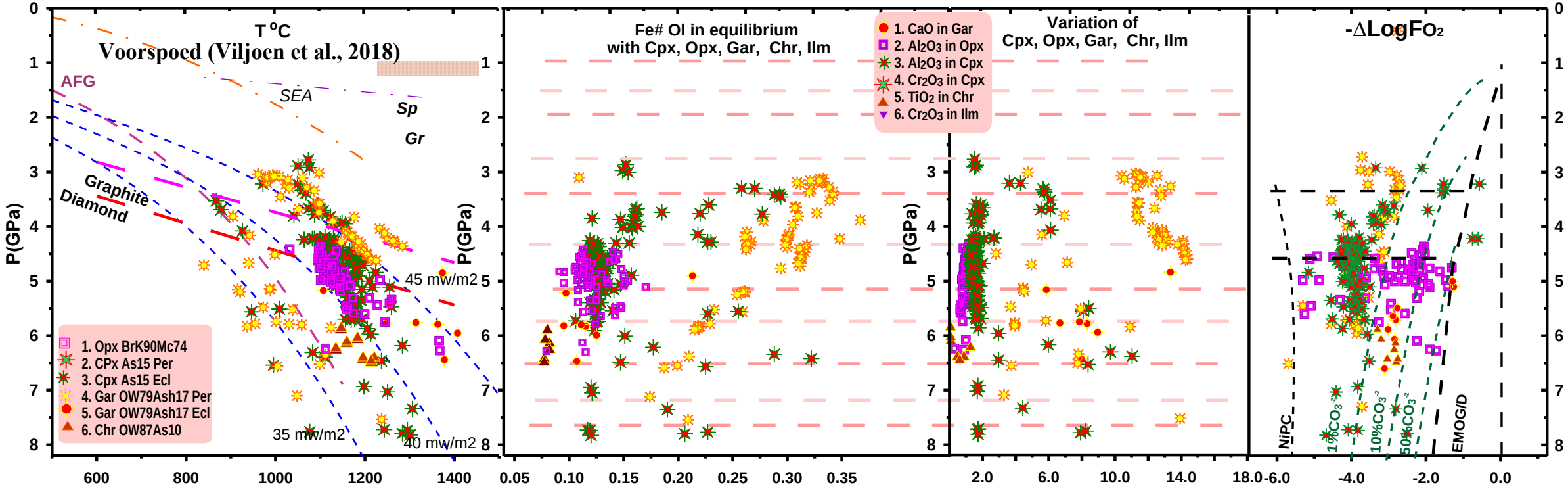

Figure 10. *PTXFO2 diagram for diamond inclusions from Voorspoed pipe. Signs see Fig.3 from main text.*

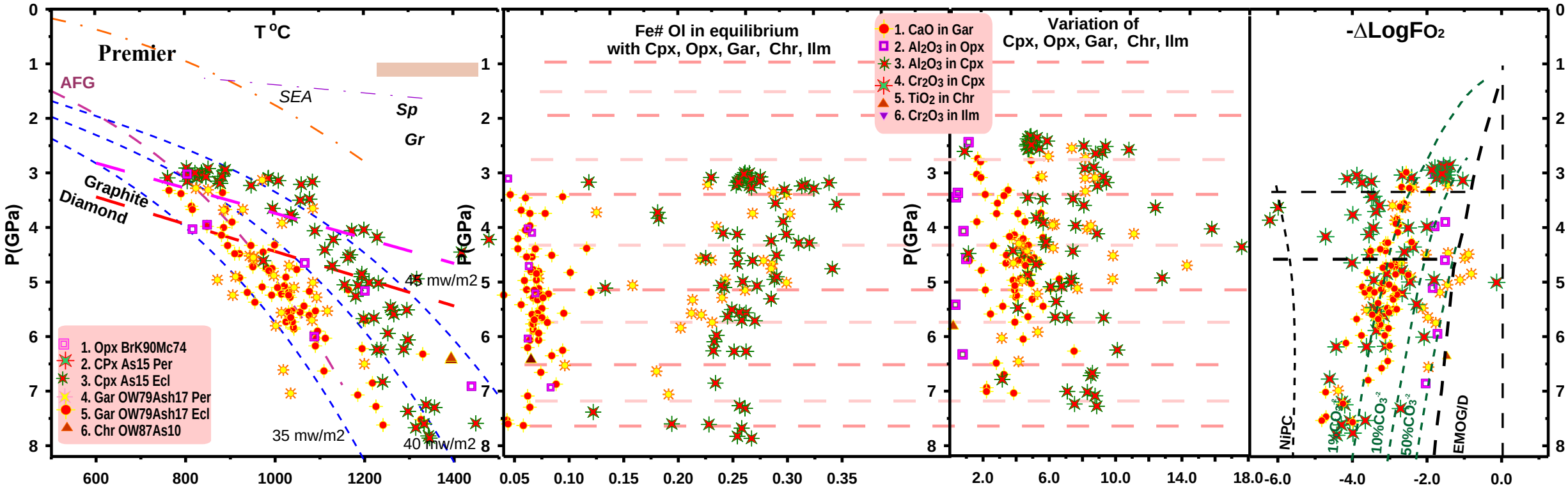

Figure 11. *PTXFO2 diagram for diamond inclusions from Premier pipe. Signs see Fig.3 from main text.*

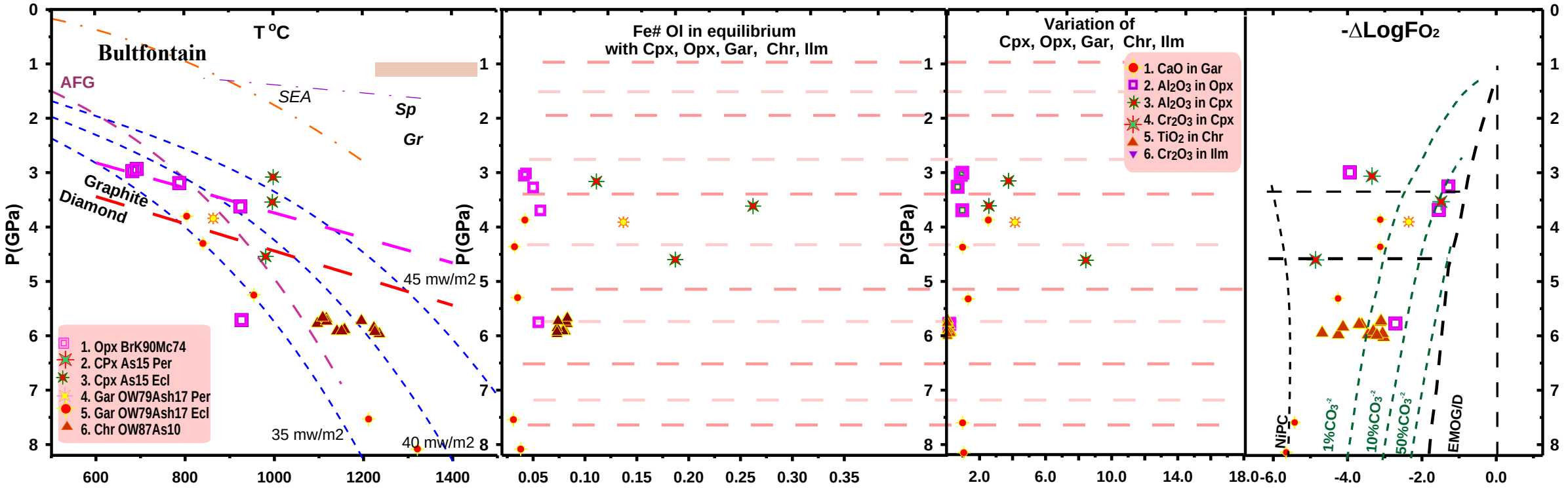

Figure 12. *PTXFO2 diagram for diamond inclusions from Bultfontain pipe. Signs see Fig.3 from main text.*

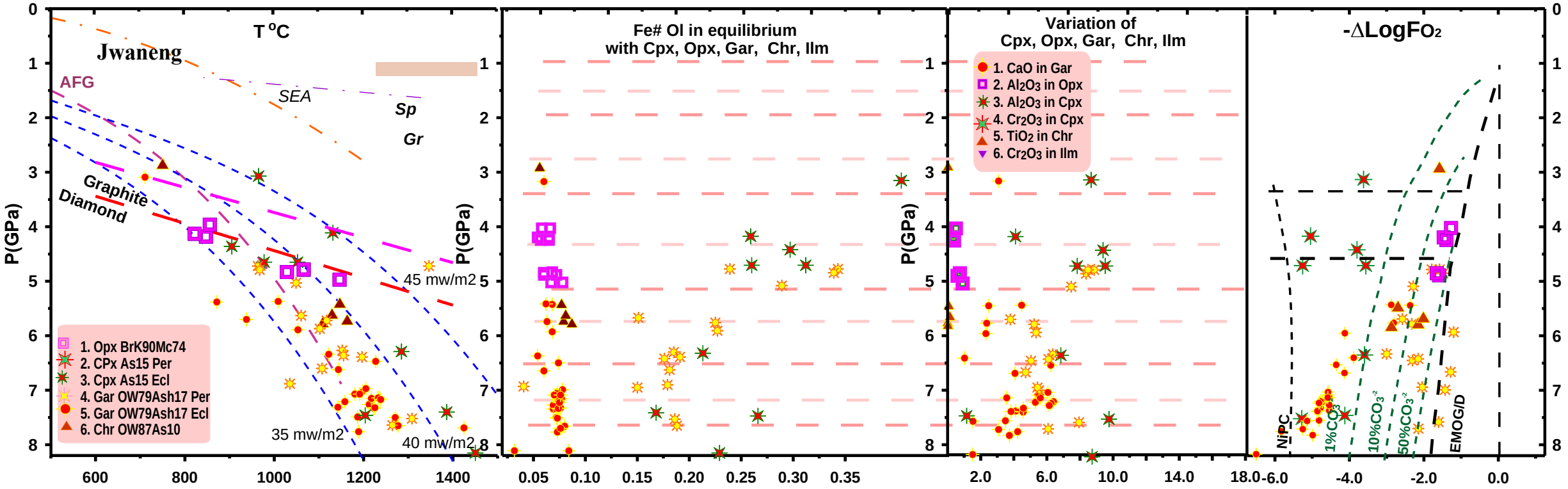

Figure 13. *PTXFO2 diagram for diamond inclusions from Jwaneng pipe. Signs see Fig.3 from main text.*

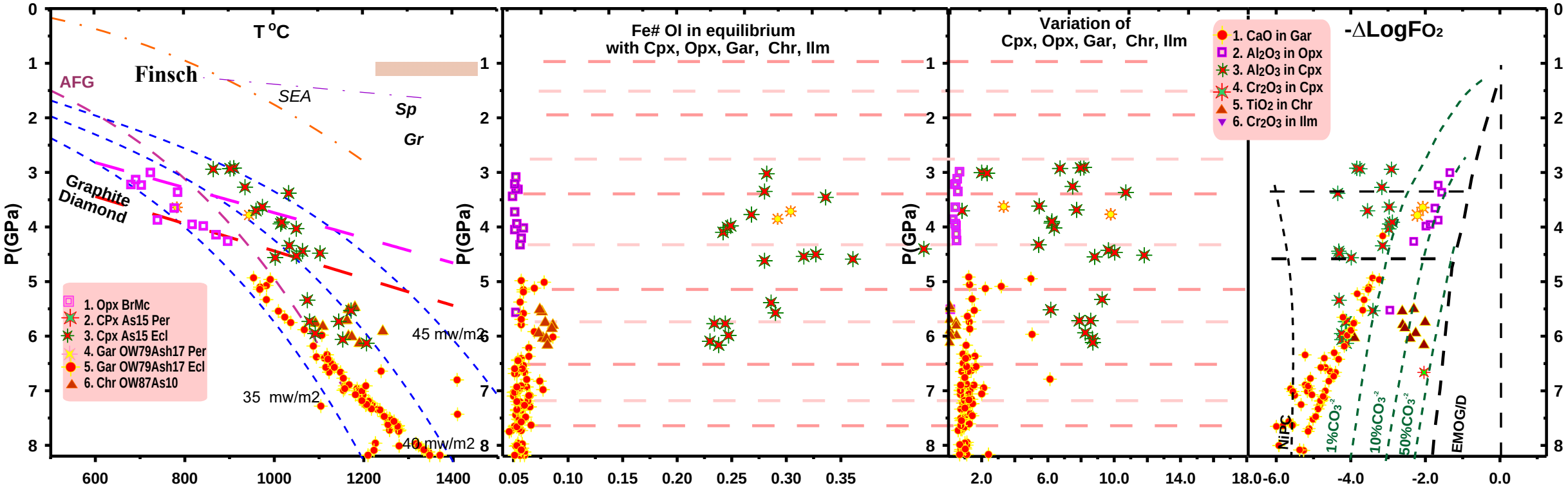

Figure 14. *PTXFO2 diagram for diamond inclusions from Finch pipe. Signs see Fig.3 from main text.*

Fig.13

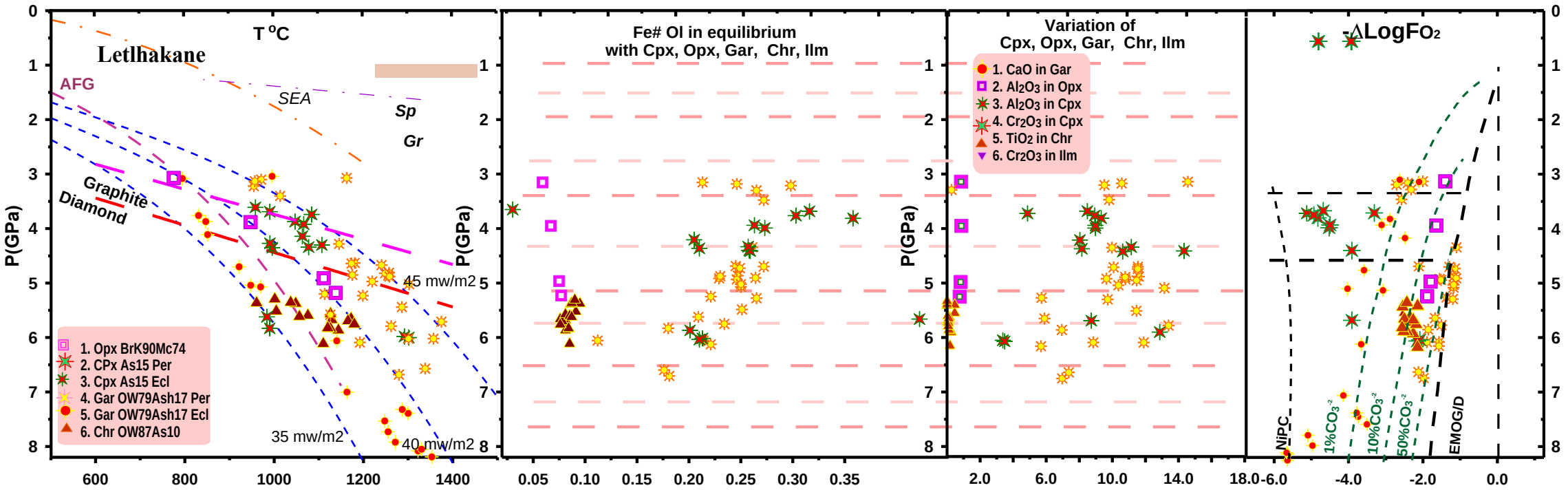

Figure 15. *PTXFO2 diagram for diamond inclusions from Letlhakane pipe. Signs see Fig.3 from main text.*

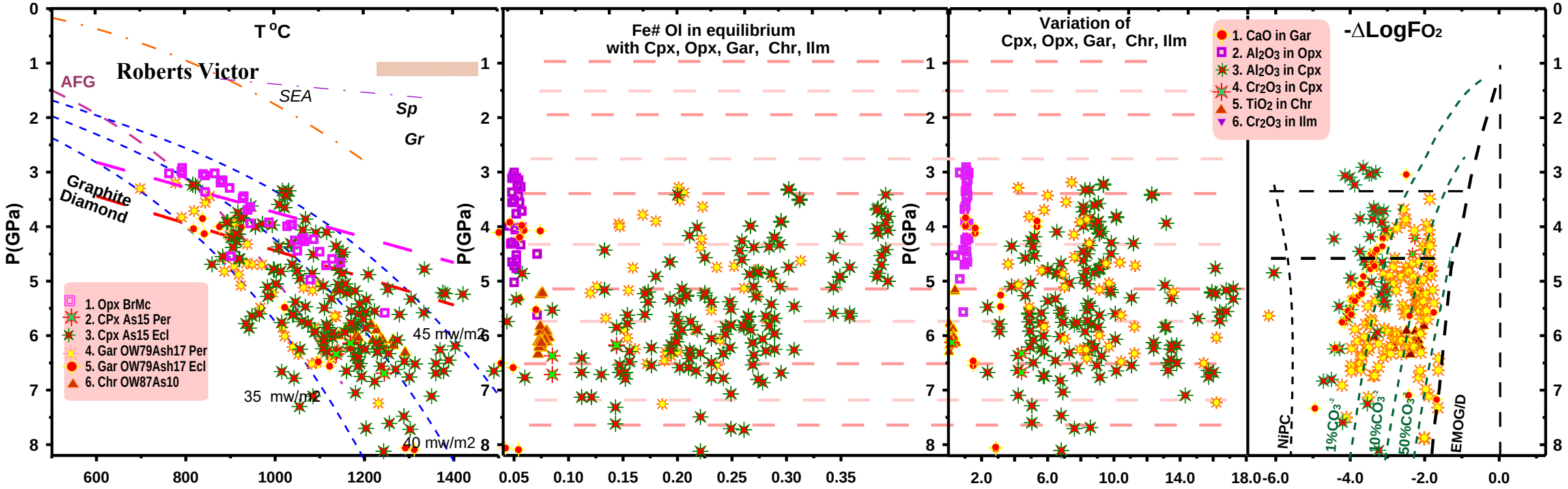

Figure 16. *PTXFO2 diagram for diamond inclusions from Roberts Victor pipe. Signs see Fig.3 from main text.*

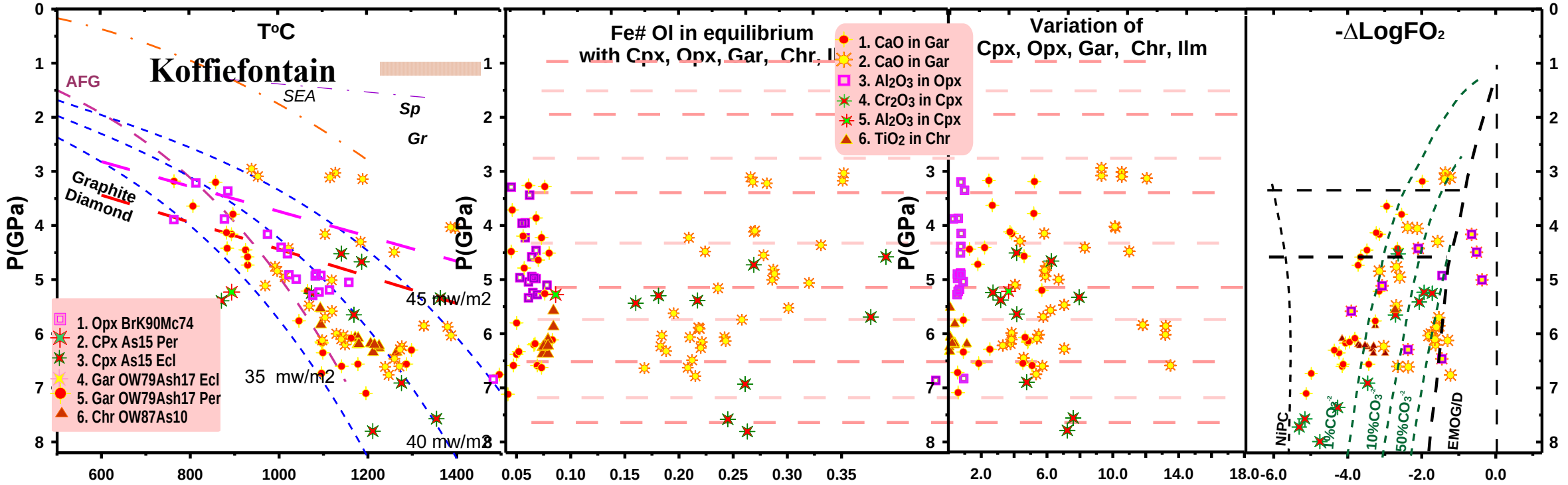

Figure 17. *PTXFO2 diagram for diamond inclusions from Koffiefontain pipe. Signs see Fig.3 from main text.*

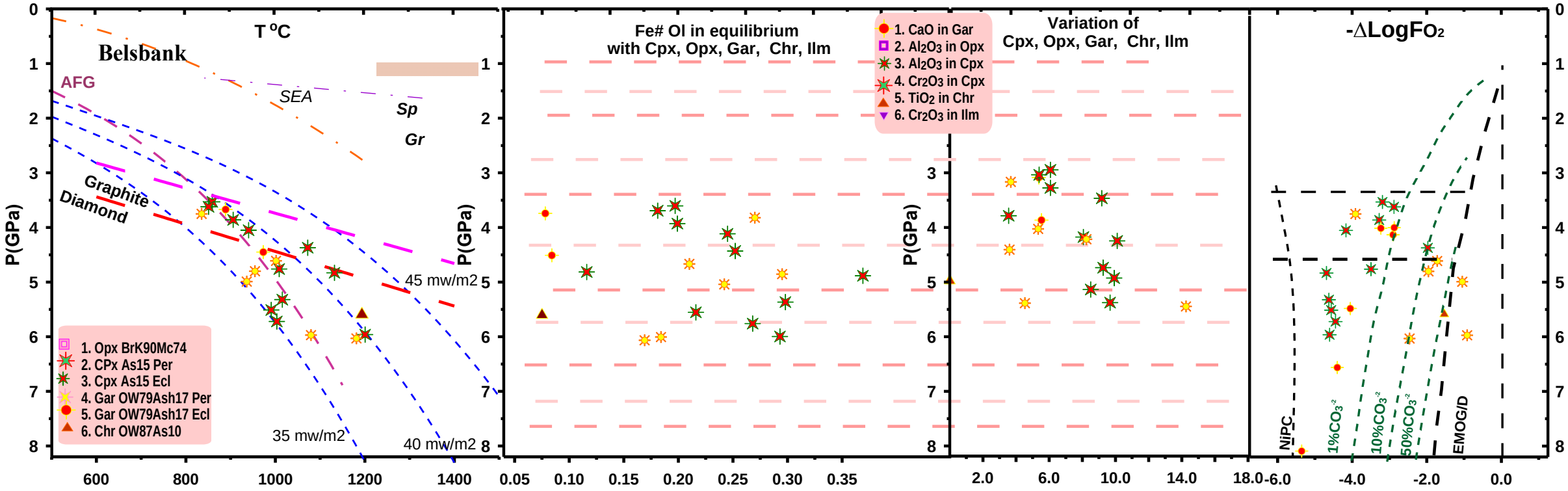

Figure 18. *PTXFO2 diagram for diamond inclusions from Belsbank pipe. Signs see Fig.3 from main text.*

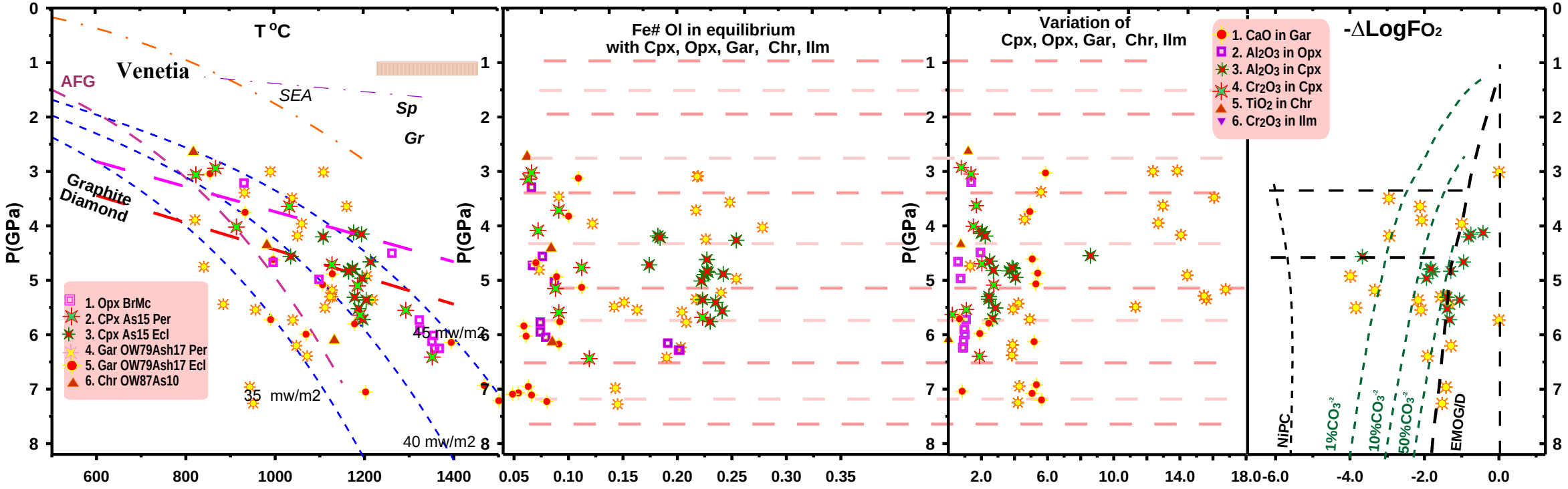

Figure 19. *PTXFO2 diagram for diamond inclusions from Venetia pipe. Signs see Fig.3 from main text.*

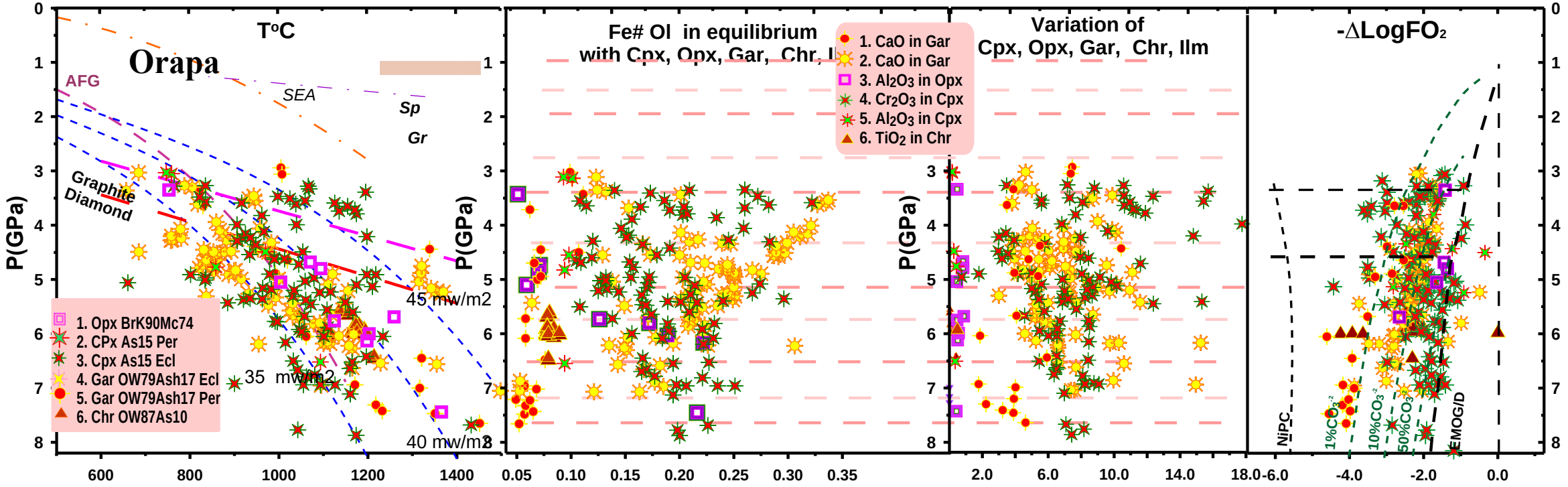

Figure 20. *PTXFO2 diagram for diamond inclusions from Venetia pipe. Signs see Fig.3 from main text.*

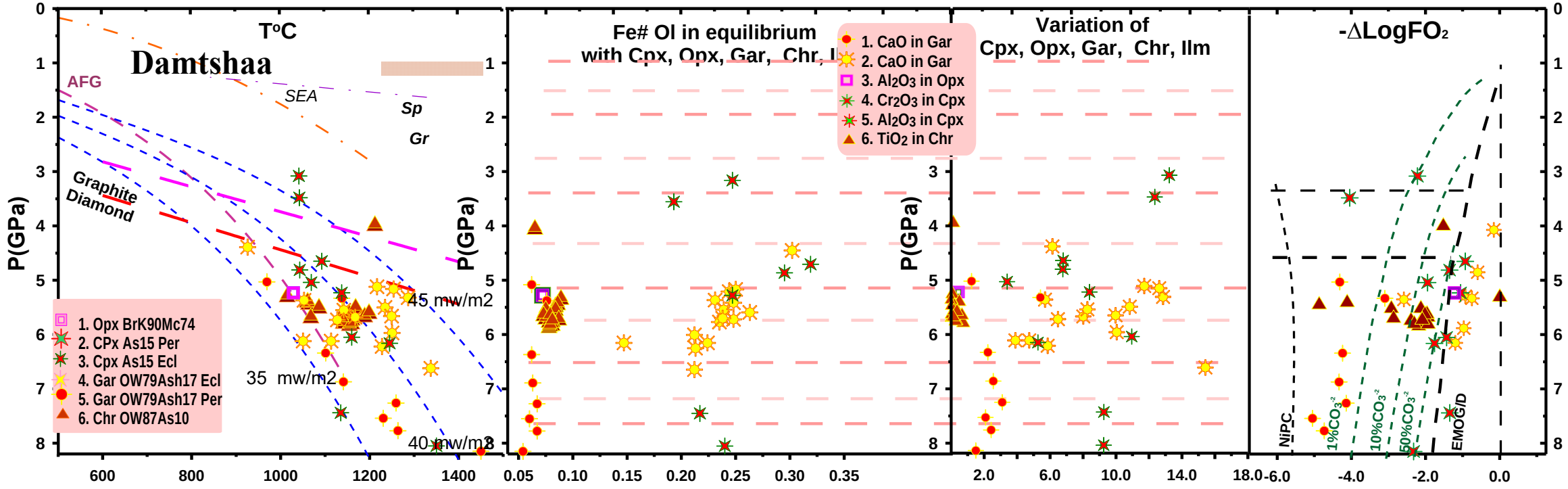

Figure 21. *PTXFO2 diagram for diamond inclusions from Damtshaa pipe. Signs see Fig.3 from main text.*

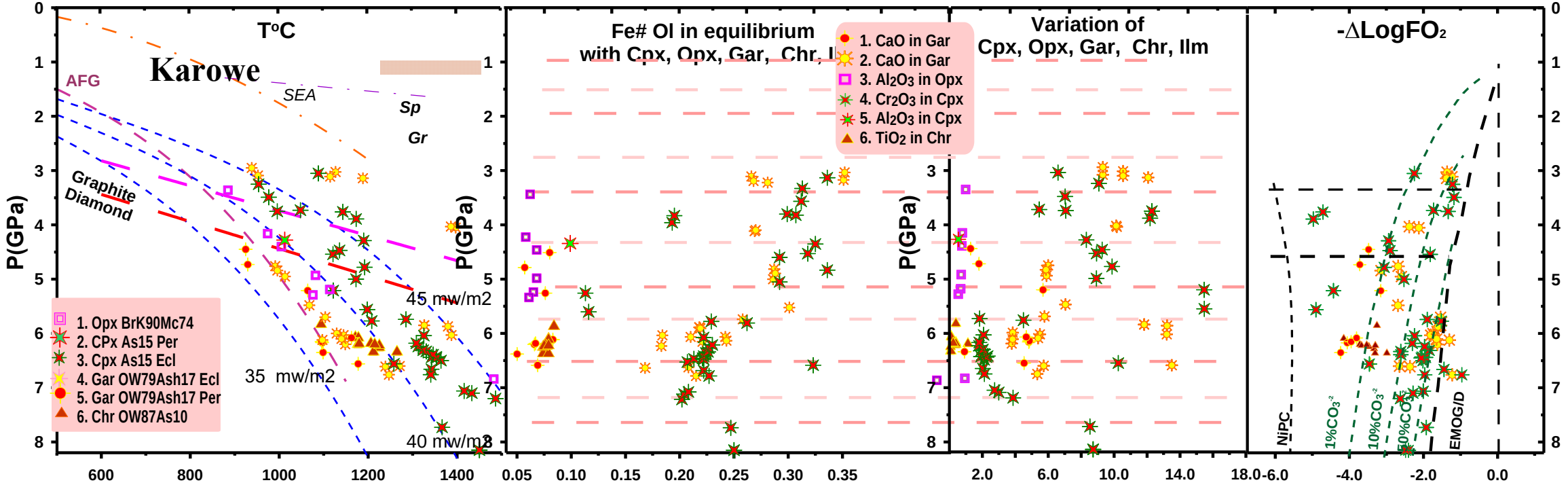

Figure 21. *PTXFO2 diagram for diamond inclusions from Karowe pipe. Signs see Fig.3 from main text.*

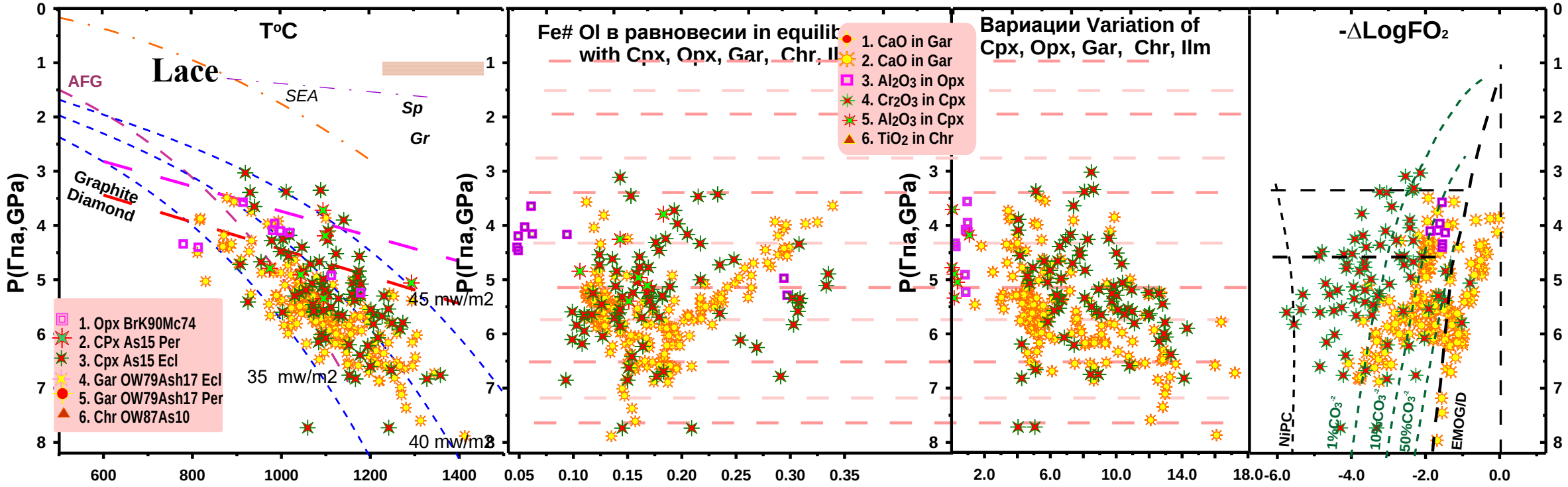

Figure 23. *PTXFO2 diagram for diamond inclusions from Lace pipe. Signs see Fig.3 from main text.*

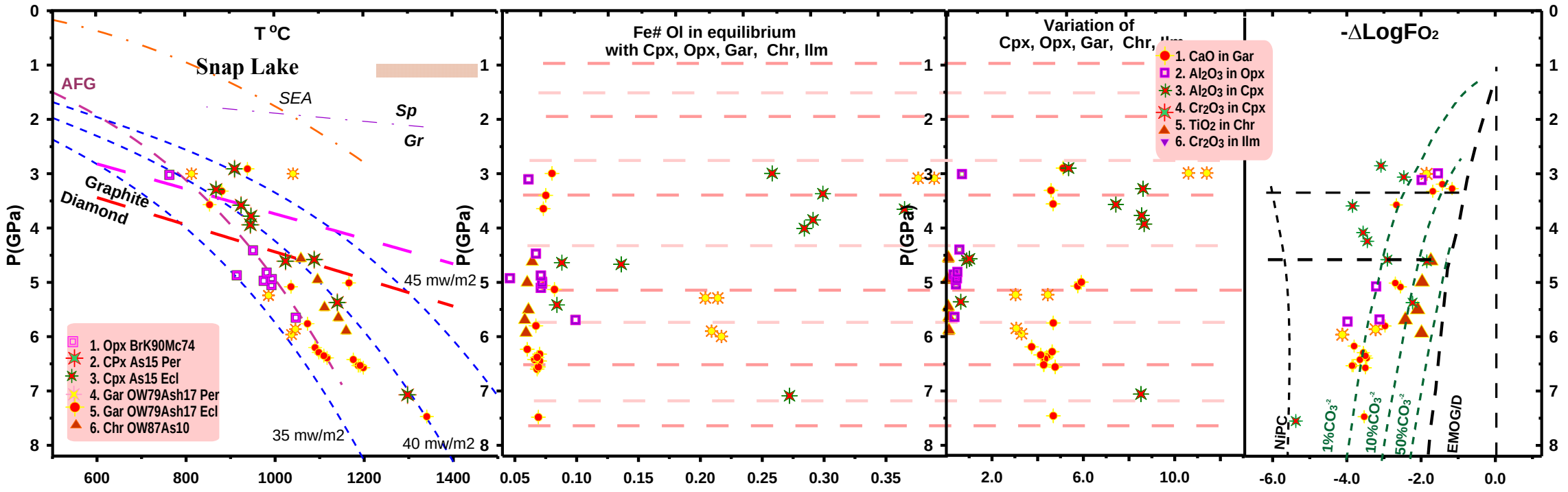

Figure 24. *PTXFO2 diagram for diamond inclusions from Snap Lake pipe. Signs see Fig.3, from main text.*

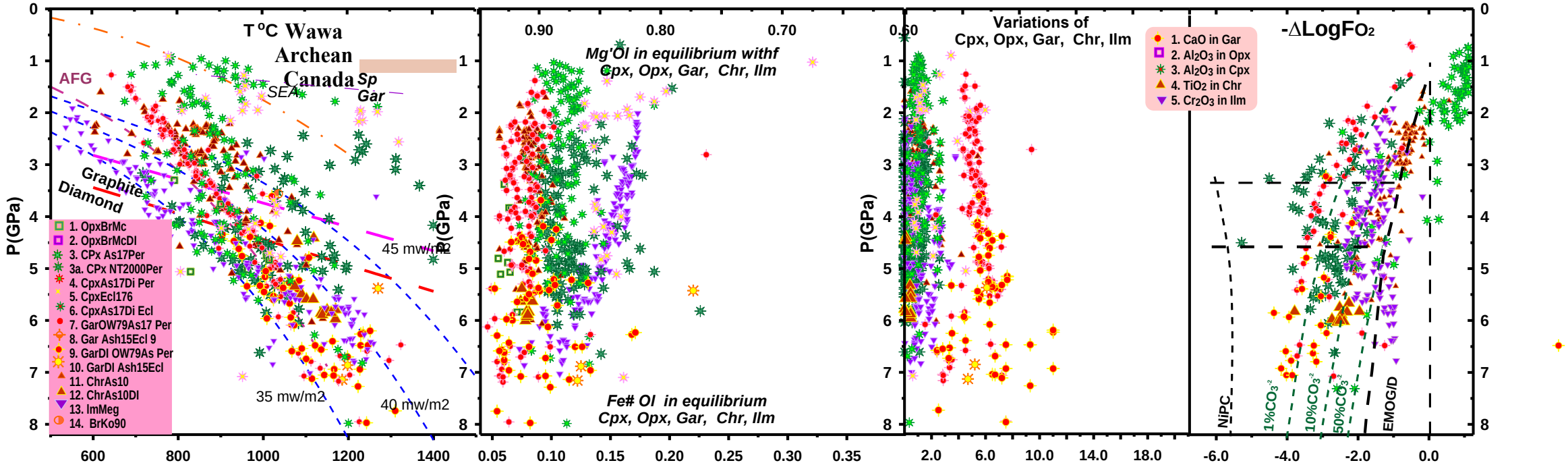

Figure 25. *PTXFO2 diagram for diamond inclusions from Wawa lamprophyres and kimberlitic minerals from surrounding placers [53–56]: Symbols: 1. Opx: 1.: T °C [165]–P (GPa)[151]; Cpx: 2. The same for diamond inclusions: 3. Cpx: T °C [162] – P (GPa) [24] for peridotite; 4. The same for eclogites; 5. The same for pyroxenites. 6. The same for diamond inclusions; 7 Garnet (monomineral): T °C [167]–P (GPa)[24] for peridotite. 8. T °C [168]–P (GPa)[24] for eclogites. 9. The same for peridotitic diamond inclusions. 10. The same for eclogitic diamond inclusions. 11. Chromite: T °C [170]–P (GPa) [21]; 12. The same for peridotitic diamond inclusions; Ilmenite: 13. T °C [170]–P (GPa)[27]; 14. Opx- Gar: T °C–P (GPa)[165].*