Supplementary materials

**INTERACTION OF PLATINUM WITH ANTIMONY-BEARING COMPOUNDS IN NaF FLUIDS AT 800 °C AND 200 MPA.** Physics and Chemistry of Minerals. Alexander F. Redkin1, Andrey M. Ionov2, Alexey N. Nekrasov1, Andrey D. Podobrazhnykh3, Rais N. Mozhchil2

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Supplementary materials include phase diagrams in the Pt-Sb system by various authors in the temperature range 500–900 °C, containing from 0 to 50 at% Sb, which demonstrate a wide range of data on the temperature stability of the Pt-Sb phases. The composition of the newly formed Pt5Sb phase at 800 °C is shown in the figures S1-S9.



**Fig. S1.** Phase diagram in the Pt-Sb system according to (Hansen 1936; Hansen and Anderko 1958).



**Fig. S2.** Phase diagram in the Pt-Sb system according to (Bhan et al. 1969).



**Fig. S3.** Phase diagram in the Pt-Sb system according to (Srivastava et al. 1972).



**Fig. S4.** Phase diagram in the Pt-Sb system according to (Massalski et al. 1986)



**Fig. S5.** Phase diagram in the Pt-Sb system according to (Kim 1988). fcc-face-centered cubic structure.



**Fig. S6.** Phase diagram in the Pt-Sb system according to (Kim and Chao 1990; Kim 1993).



**Fig. S7.** Phase diagram in the Pt-Sb system according to (Duruselle and Feschotte 1991, Okamoto 1992; Itkin and Alcock 1996).



**Fig. S8.** Phase diagram in the Pt-Sb system according to (Lyakishev 2000).



**Fig. S9.** Phase diagram in the Pt-Sb system according to (Liu et al. 2013): fcc – face-centered cubic Pt5Sb (*cP*4 or *Fm*$\overbar{3}$*m*) with more homogeneity ranges 0.155 – 0.189 Sb will treated as solid solution compound.

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