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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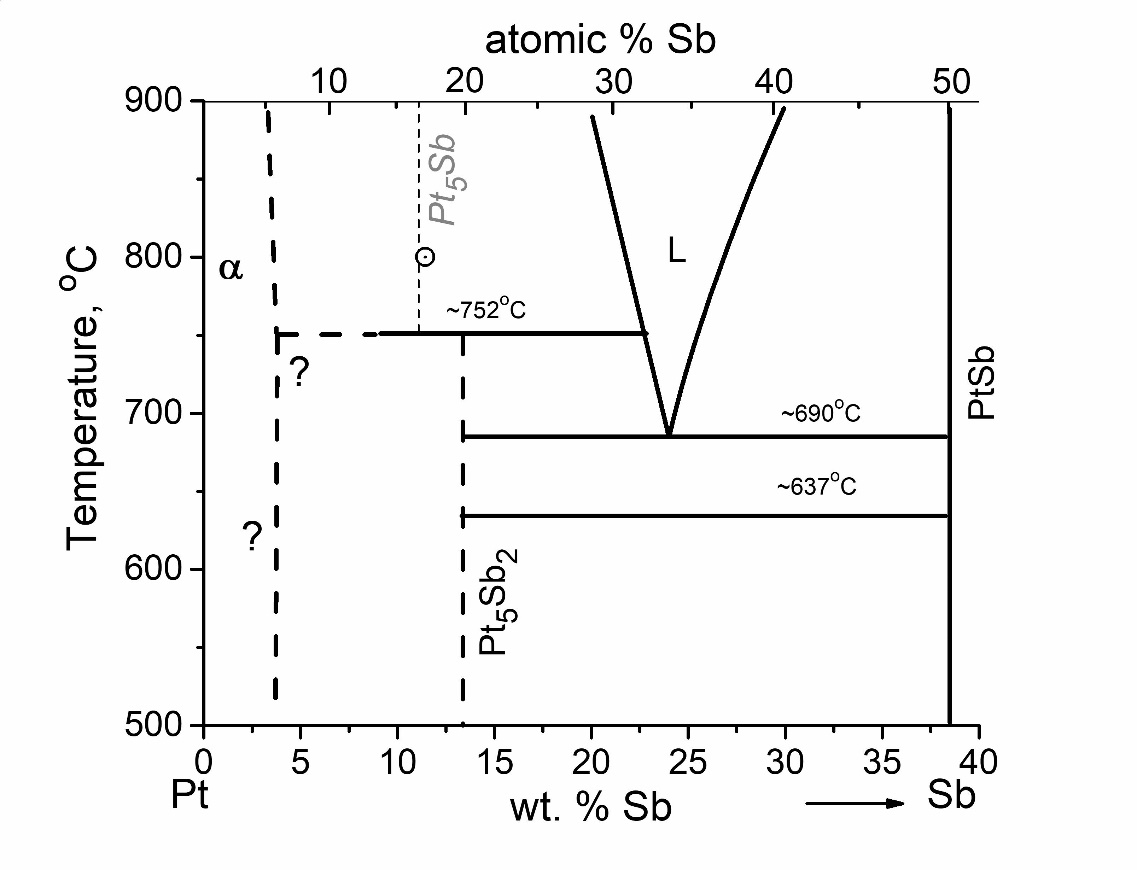
*2* *Phone: 007-49652-25496; Fax: 007-49652-28160; E-mail address:* [ionov@issp.ac.ru](mailto:ionov@issp.ac.ru); *URL:* [www.issp.ac.ru](http://www.issp.ac.ru)

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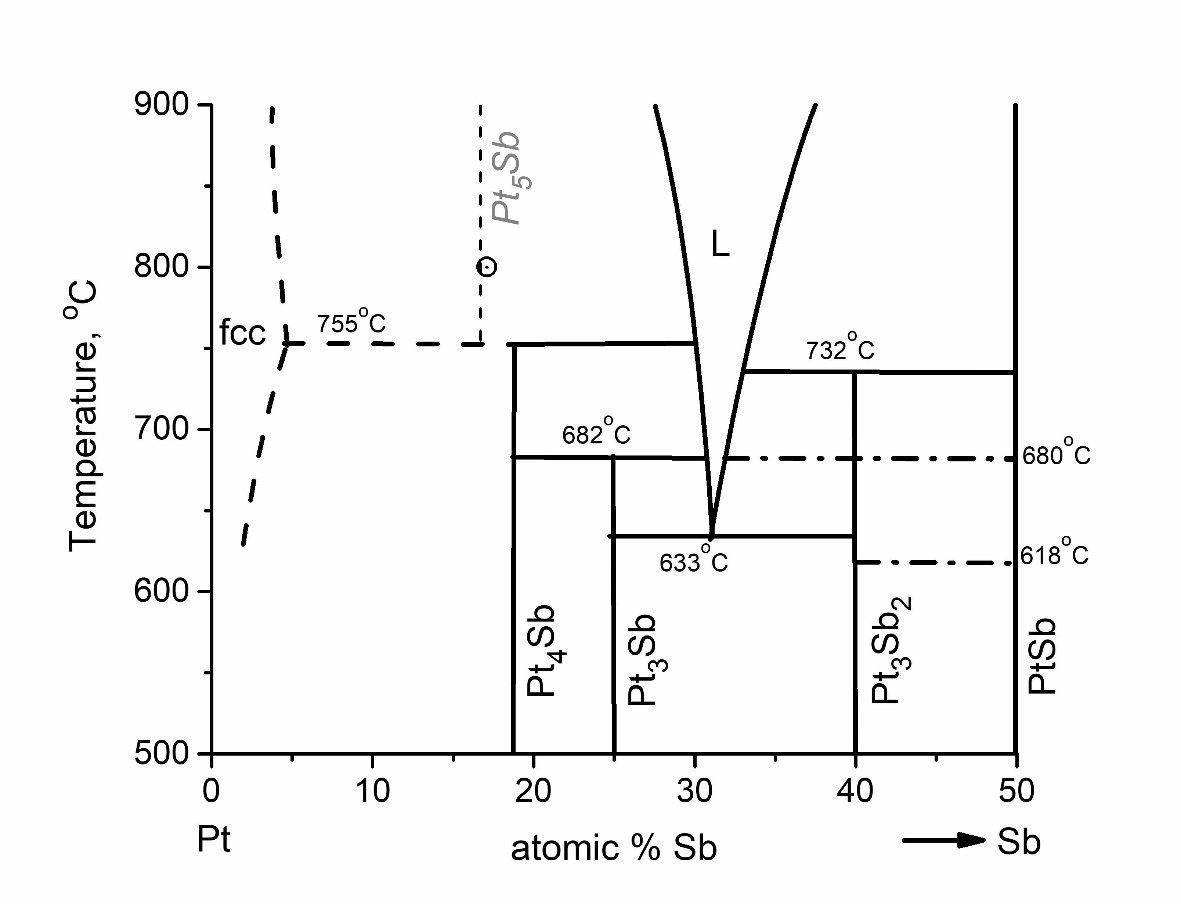
*3 E-mail address:* [andrew.podobrazhnykh123@gmail.com](mailto:andrew.podobrazhnykh123@gmail.com), *URL:* [www.geol.msu.ru](http://www.geol.msu.ru)

E-mail address of the corresponding author: [redkin@iem.ac.ru](mailto:redkin@iem.ac.ru), URL: [www.iem.ac.ru](http://www.iem.ac.ru)

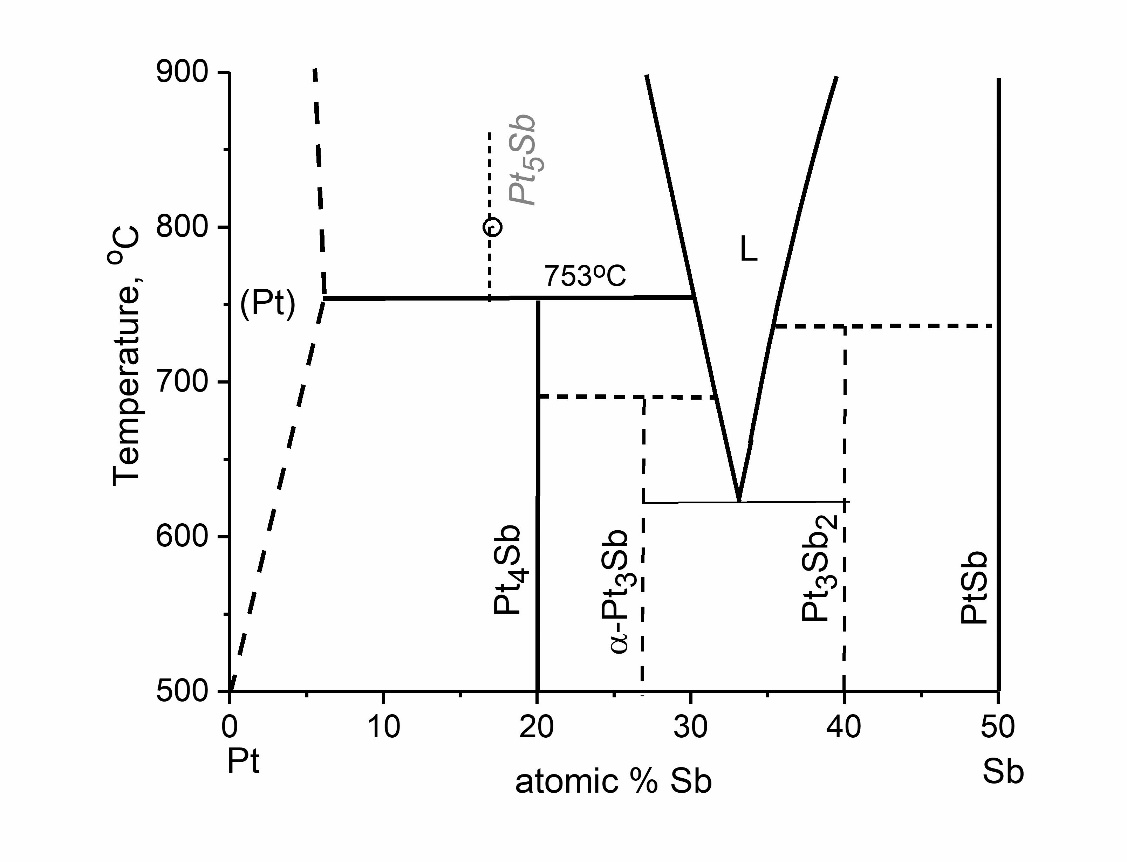
Supplementary materials include phase diagrams in the Pt-Sb system by various authors in the temperature range 500–900 °C, containing from 0 to 50 at% Sb, which demonstrate a wide range of data on the temperature stability of the Pt-Sb phases. The composition of the newly formed Pt5Sb phase at 800 °C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



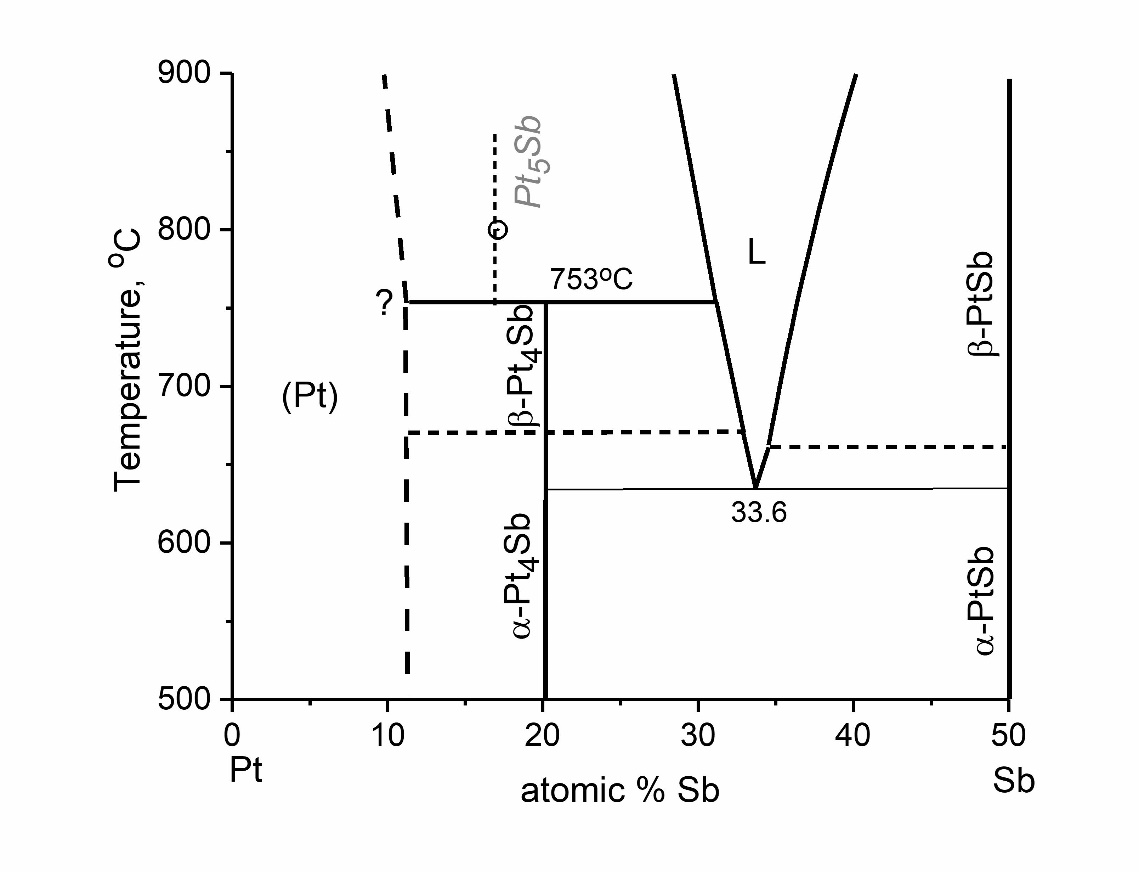
**Fig. S1.** Phase diagram in the Pt-Sb system according to (Hansen 1936; Hansen and Anderko 1958).



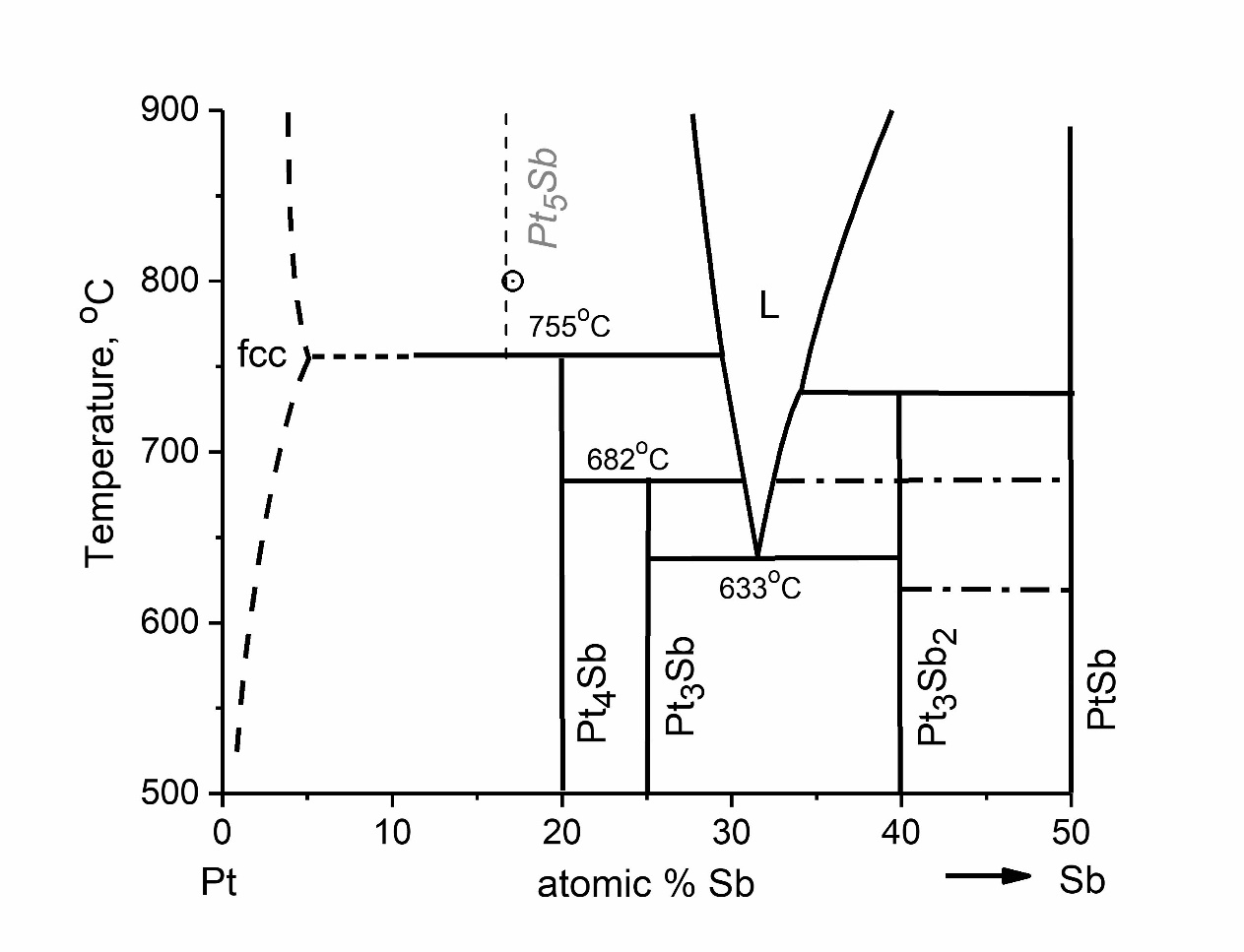
**Fig. S2.** Phase diagram in the Pt-Sb system according to (Bhan et al. 1969).



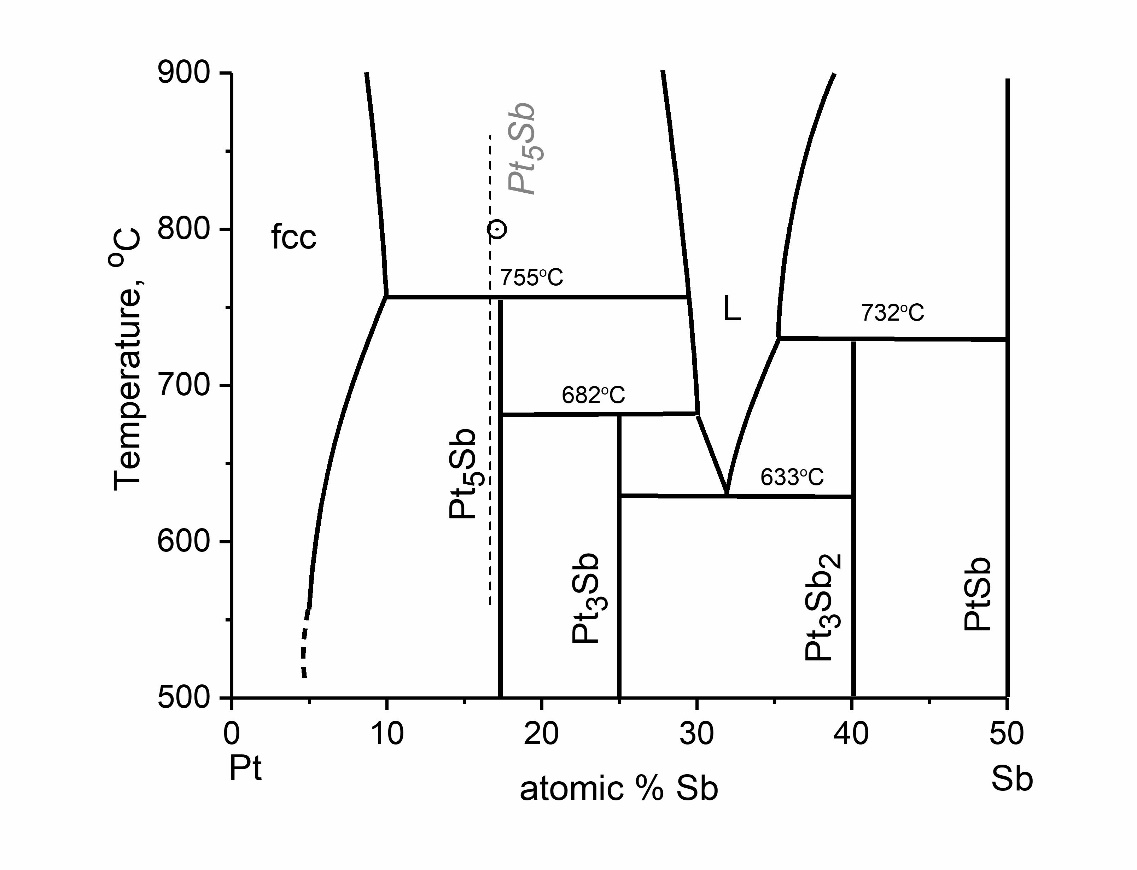
**Fig. S3.** Phase diagram in the Pt-Sb system according to (Srivastava et al. 1972).



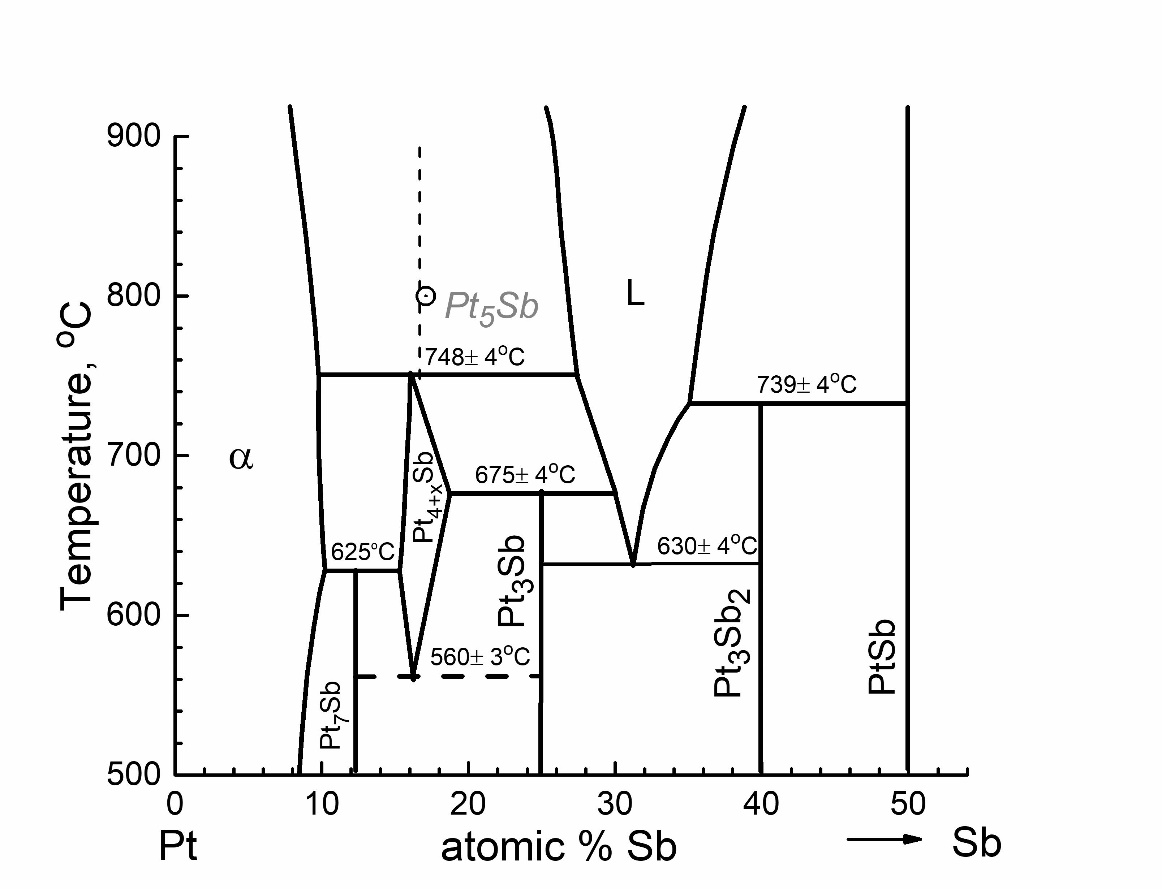
**Fig. S4.** Phase diagram in the Pt-Sb system according to (Massalski et al. 1986)



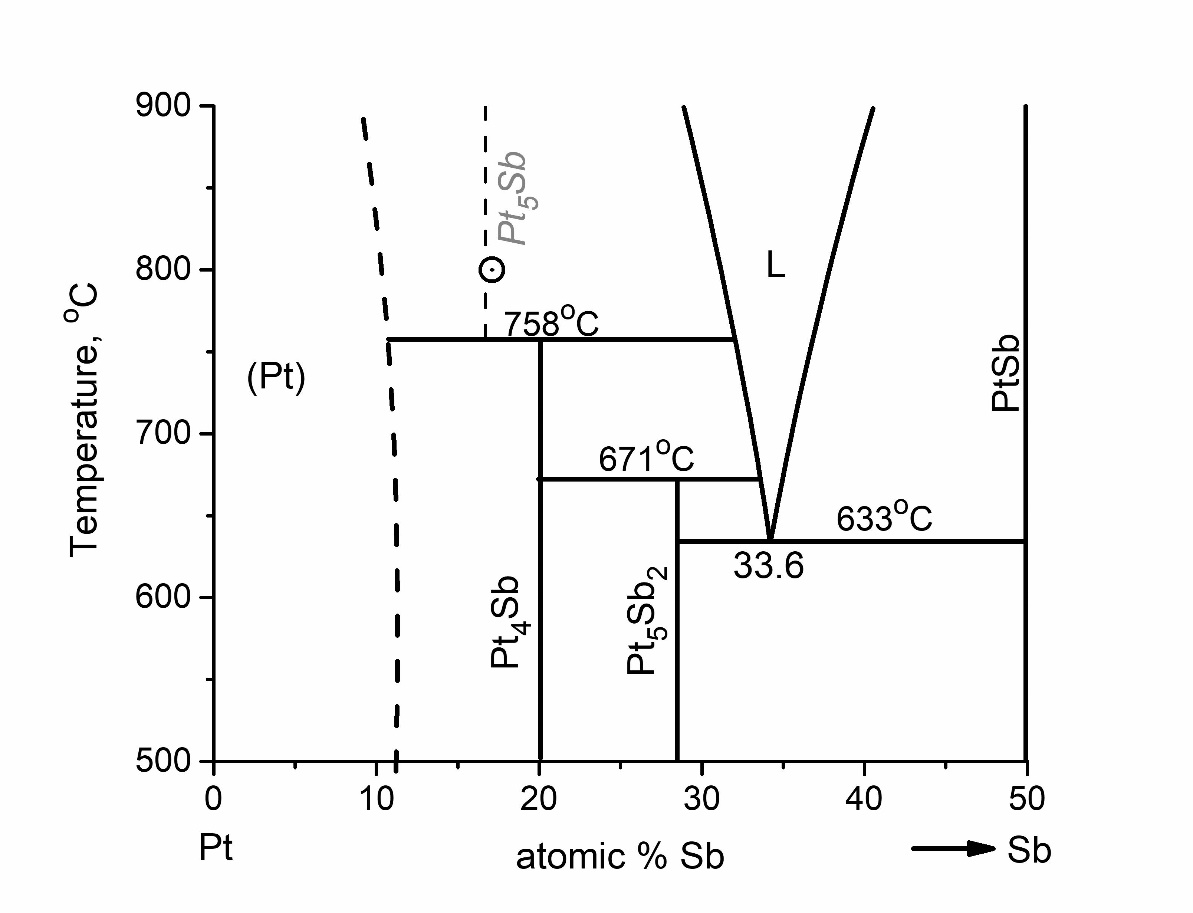
**Fig. S5.** Phase diagram in the Pt-Sb system according to (Kim 1988). fcc-face-centered cubic structure.



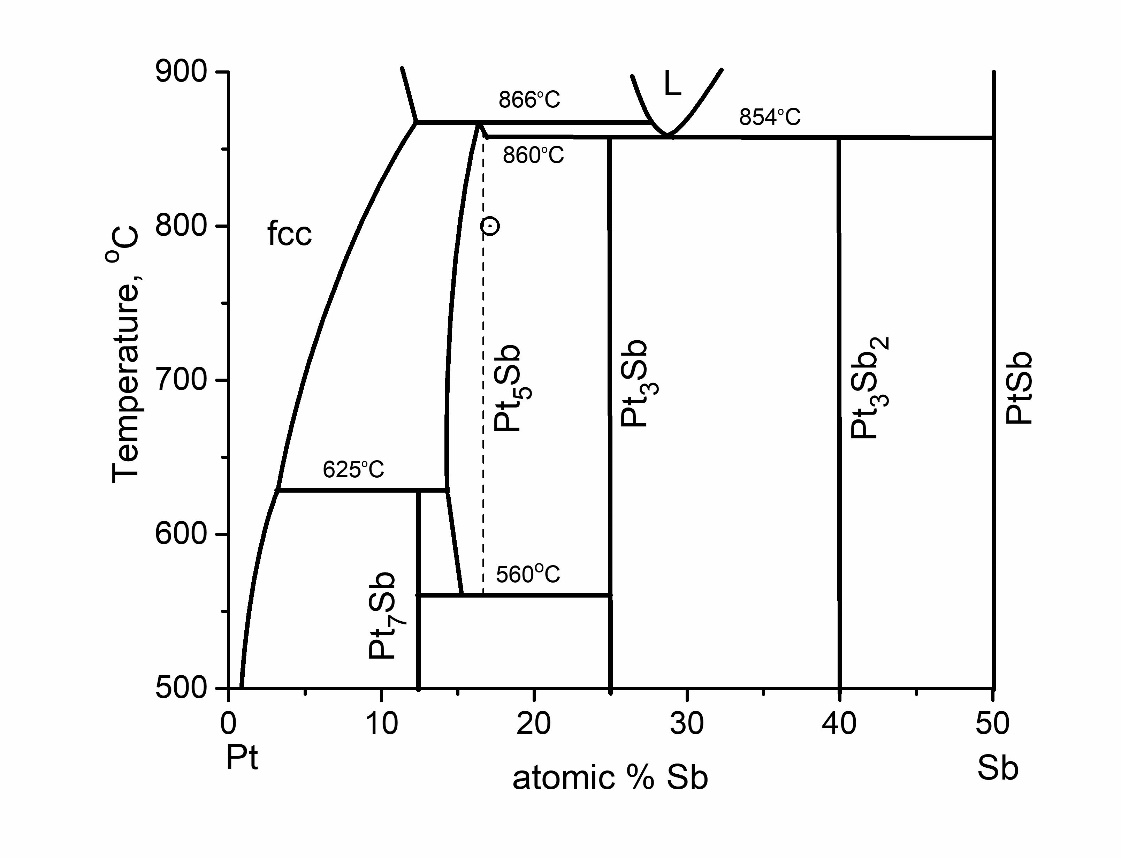
**Fig. S6.** Phase diagram in the Pt-Sb system according to (Kim and Chao 1990; Kim 1993).



**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 *Fmm*) with more homogeneity ranges 0.155 – 0.189 Sb will treated as solid solution compound.

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