was observed from 40 to 60 kilobars above 1600 °C. The $LaSb_2$ type orthorhombic structure was not observed.

Erbium

The reaction product diagram found for the Er + 2 Sb system is shown in Figure 9. Cubic ErSb plus Sb were formed over most of the region investigated. This product was found at pressures below 40 to 60 kilobars depending on the temperature. The ErSb plus unknown product, type I, region was found in a small area from 40 to 50 kilobars at temperatures from 500 to 800 °C. A second complex X ray diffraction pattern was obtained from runs between 50 to 60 kilobars and temperatures from 1200 to 1700 °C. This diffraction pattern was quite different from the lower temperature unknown product, type I, and was not investigated futher. It was called unknown products, type II.

The apparent no reaction region was observed at pressures above 60 kilobars and temperatures above 1600 °C. High pressure orthorhombic $ErSb_2$ was found at pressures above 45 kilobars and temperatures from 500 to 1600 °C. The $LaSb_2$ type orthorhombic structure was not observed.

Thulium

The reaction product diagram found for the Tm + 2 Sb system is shown in Figure 10. As in the case of erbium the cubic TmSb plus Sb phase was found over a broad region of up to 30 to 65 kilobars depending on the temperature.