

TABLE 7

## Sb-Sb BOND LENGTHS

Compound	Sb-Sb Bond Length (Å)	
Sb (Metal)	2.90	
CdSb, ZnSb	2.81	
LaSb <sub>2</sub> Type Rare Earth Diantimonides		
	Published*	Correct**
LaSb <sub>2</sub>	2.803	2.878
CeSb <sub>2</sub>	2.760	2.832
PrSb <sub>2</sub>		2.811
NdSb <sub>2</sub>		2.806
NdSb <sub>2</sub>	2.742	2.814
SmSb <sub>2</sub>	2.720	2.788
GdSb <sub>2</sub>		2.771
TbSb <sub>2</sub>		2.758

\*From Wang and Steinfink (1)

\*\*Calculated from SmSb<sub>2</sub> atomic positions from Wang and Steinfink (1) and lattice parameters in Table 5.

represents a considerable compression of the Sb-Sb bond.

The variation of lattice parameters for the high pressure orthorhombic structure is very smooth as shown in Figure 21. The ionic radius of yttrium is usually given as 0.93 Å but it fits at 0.923 Å in the high pressure orthorhombic diantimonide structure and was plotted there.

Cell parameter variation of the Th<sub>3</sub>P<sub>4</sub> type rare earth