

In situ X-ray observation of decomposition and synthesis of dolomite at high pressure and high temperature

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In order to investigate the reaction of dolomite to aragonite and magnesite at high pressure, we carried out in situ X-ray observation of decomposition of dolomite. We used MAX80 at KEK. Pressure was calculated from X-ray diffraction of Au (Anderson et al. 1989). This experimental result show that dolomite decomposes to aragonite and magnesite at 5~6 GPa with increasing pressure at given temperatures (900, 1100, 1200, 1300 K).

Fig. 1. ドロマイトの分解実験の温度圧力履歴

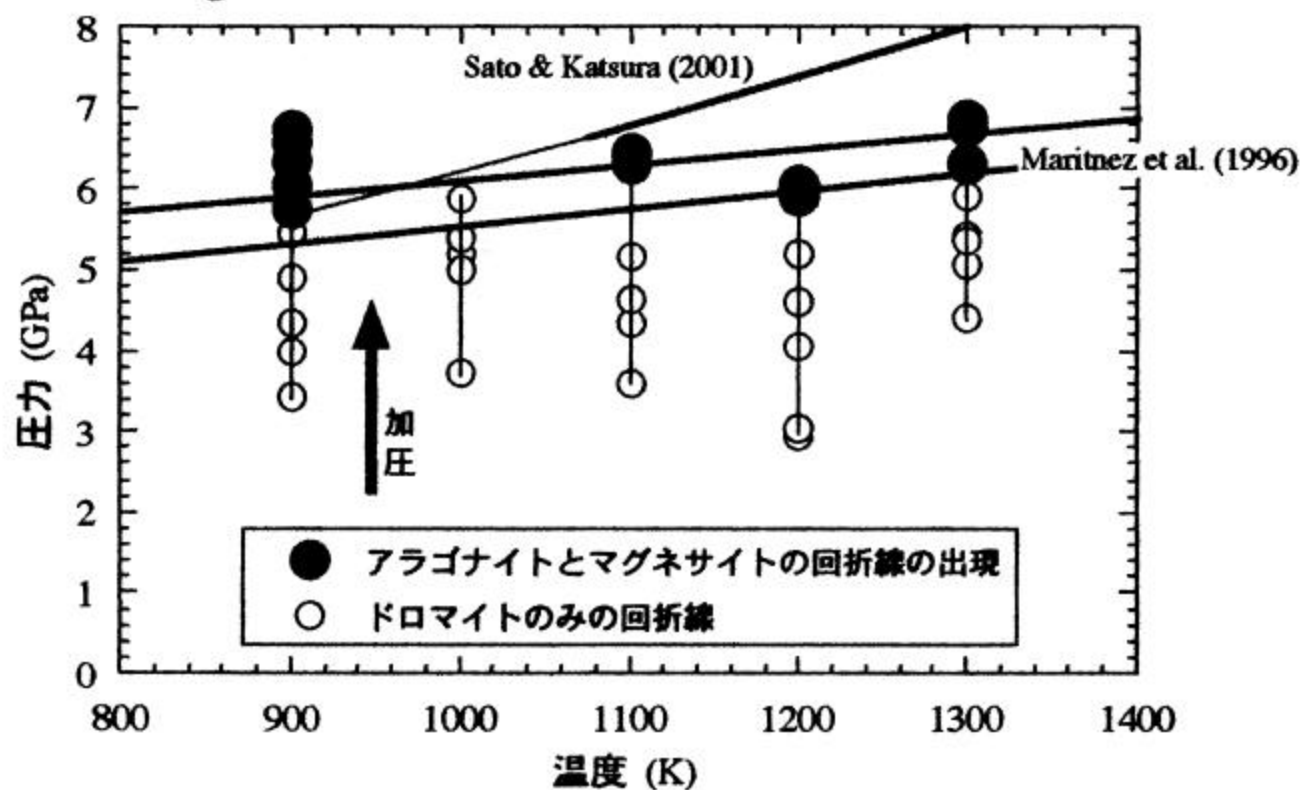


Fig. 2. ドロマイト分解実験 (1100 K) のX線パターン

