

Supplementary Data

to the article:

Discovery of terrestrial allabogdanite (Fe,Ni)₂P, and the effect of Ni and Mo substitution on the barringerite-allabogdanite high-pressure transition

Sergey N. Britvin, Oleg S. Vereshchagin, Vladimir V. Shilovskikh, Maria G. Krzhizhanovskaya, Liudmila A. Gorelova,
Natalia S. Vlasenko, Anna S. Pakhomova, Anatoly N. Zaitsev, Andrey A. Zolotarev, Maxim Bykov, Maksim S.
Lozhkin, and Fabrizio Nestola

Table S1. Details of EBSD mapping experiments for grains #1 to 13 ^a

Parameter	Value
Acquisition speed (Hz)	5.6 – 22.0
Background (frames)	64, static+dynamic
Binning	1×1 to 4×4
Gain	high
Hough resolution	100 - 200
Band detection	12
MAD range	0.15 – 0.65
X step/Y step (μm)	0.6 – 1.0
Wildspike reduction	Yes
Zero solution extrapolation	Yes (7 [5] nearest neighbor zero solution)

^a Zero solution points as % of measured are not applicable due to measurements of a randomly selected area of amorphous surroundings of crystal grains

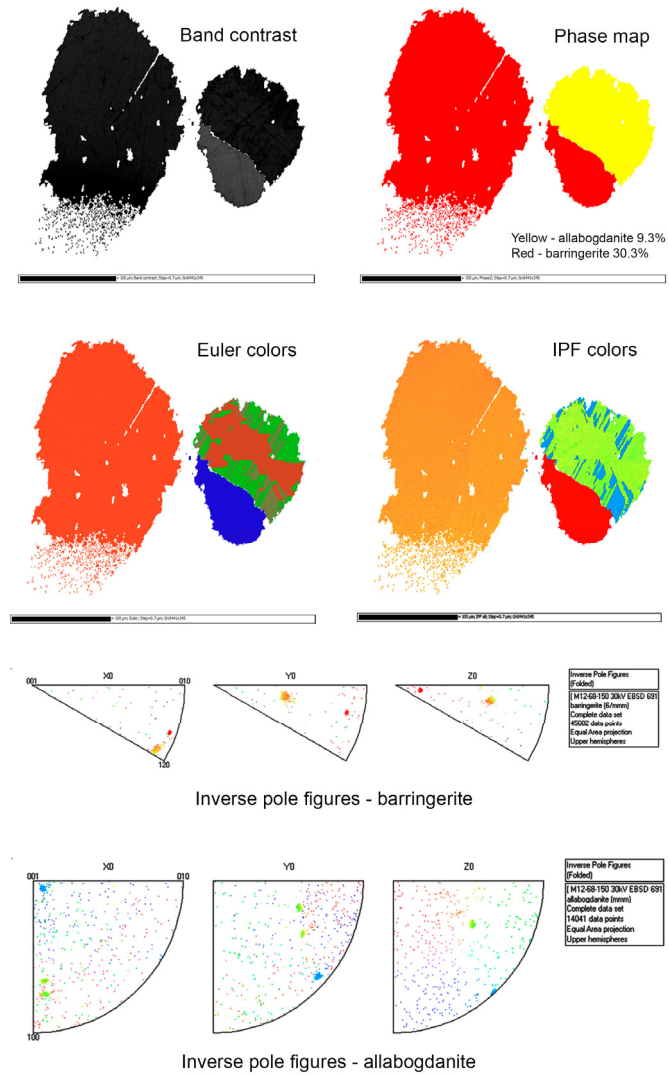


Figure S1. EBSD mapping details for the two-phase grain #3 (expanded variant of **Fig. 4b**)

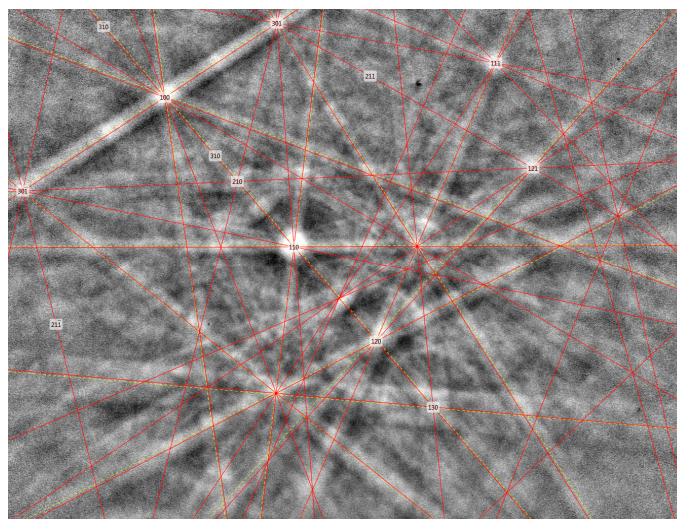


Figure S2. Example of electron backscatter pattern of allabogdanite (MAD = 0.25°, 12 bands)

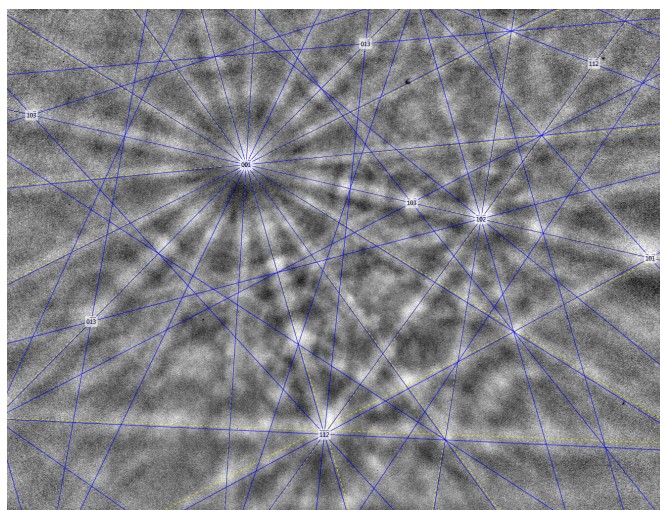


Figure S3. Example of electron backscatter pattern of barringerite (MAD = 0.33° , 12 bands)