

Marshall_Ar-Ar_supplementary_material_photomicrographs

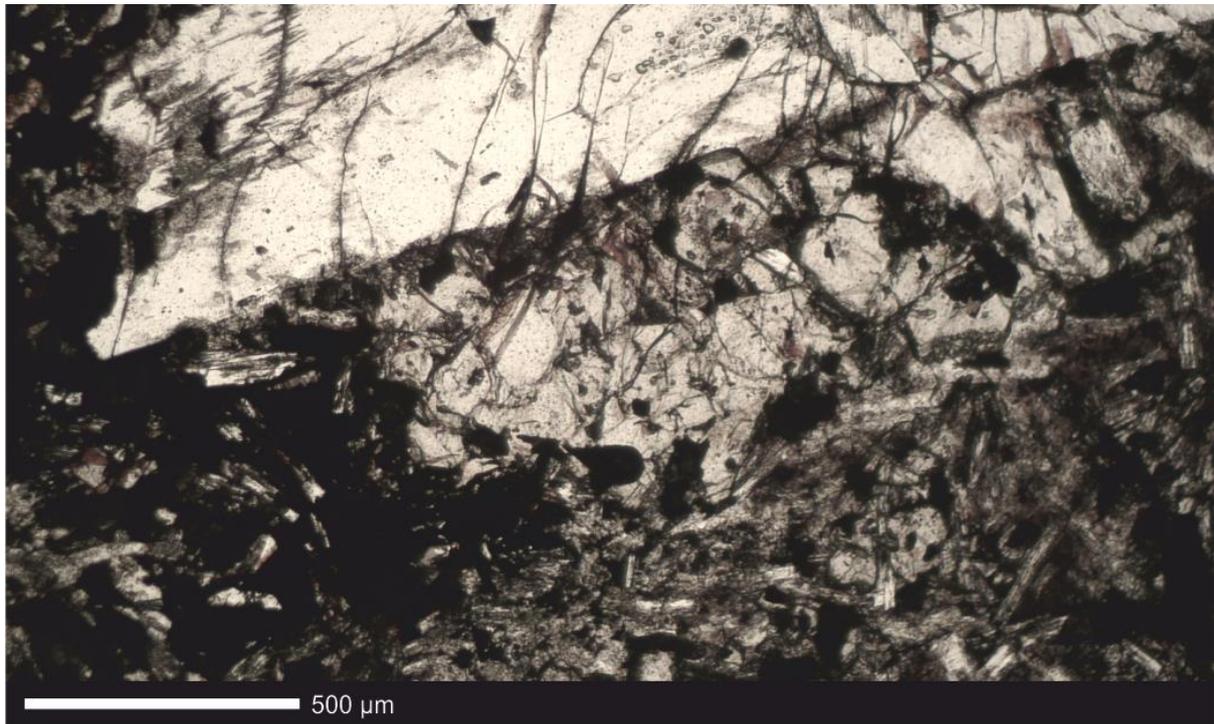
Supplementary Table 3:

Summary table of the alteration of crystal structures and mineral compositions. Pph = plagioclase phenocryst (>2 mm), Pgm = plagioclase groundmass (<1 mm), Cpx = clinopyroxene, Op = opaques, S = sericite, Ch = chlorine, UC = unidentified clays.

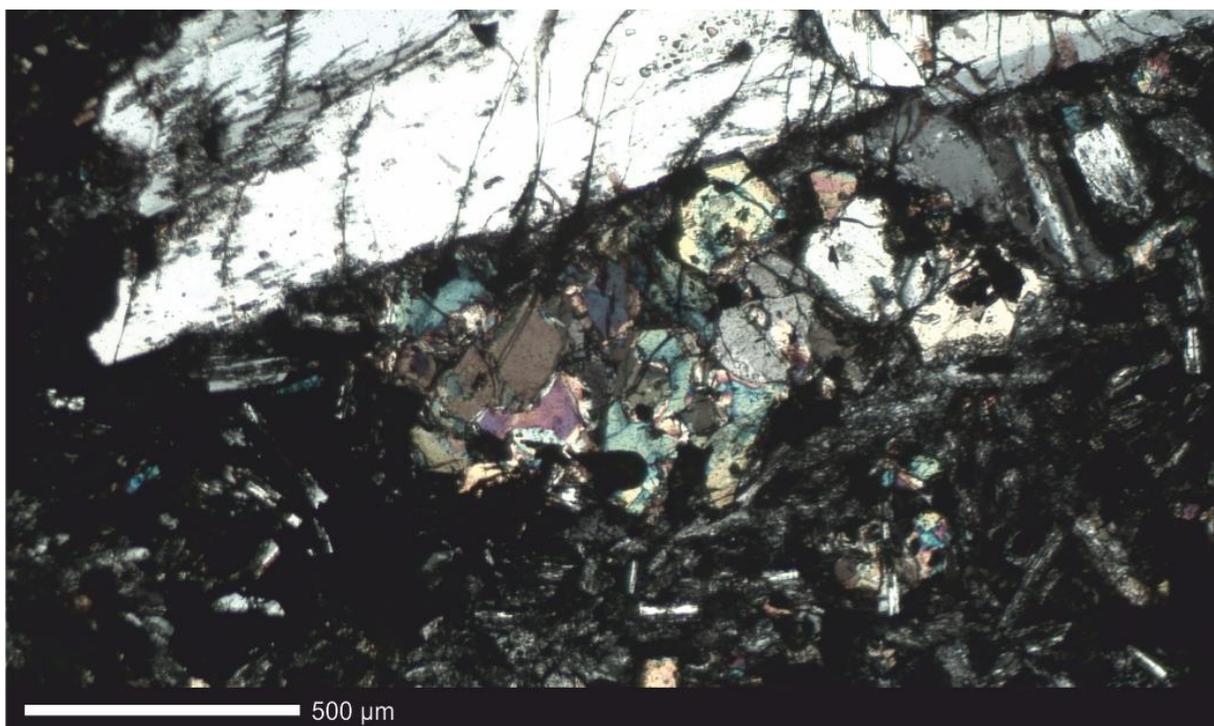
Sample	Elevation (m AOD)	Alteration (0-10)	Composition	Description
BTDF-001	134	3	Pgm: ~50% Pph: ~20% Cpx: ~15% Op: ~10% S: ~5%	Plagioclase phenocrysts display some sericite alteration with some fractures and albite twinning. Some reabsorption on crystal boundaries.
LB1-955-960	6	1	Pgm: ~70% Cpx: ~25% Op: ~5%	Clean, clear delineation between plagioclase & clinopyroxene - plagioclase with 1 st order birefringence greys and albite twinning.
LB1-970-975	1	2	Pgm: ~55% Cpx: ~30% Op: ~10% S: ~5%	Microcrystalline groundmass of plagioclase displaying 1 st order birefringence greys with slight sericite alteration on crystal boundaries.
NLBT-006	351	4	Pgm: ~40% Pph: ~15% Cpx: ~15% S: ~15% Op: ~10% Ch: ~5%	Plagioclase crystals are partly altered to sericite, but display albite twinning in groundmass. Slight chlorine alteration of clinopyroxene and growth of secondary clays.
VCAQ-001	198	1	Pg: ~55% Cpx: ~30% Op: ~10% S: ~5%	Plagioclase displays albite twinning and sharp crystal edges, some zonation in larger crystals. Sericite alteration in small amount of crystals.

BTDF-001 - 3/10

Plane Polarised Light



Cross Polarised Light

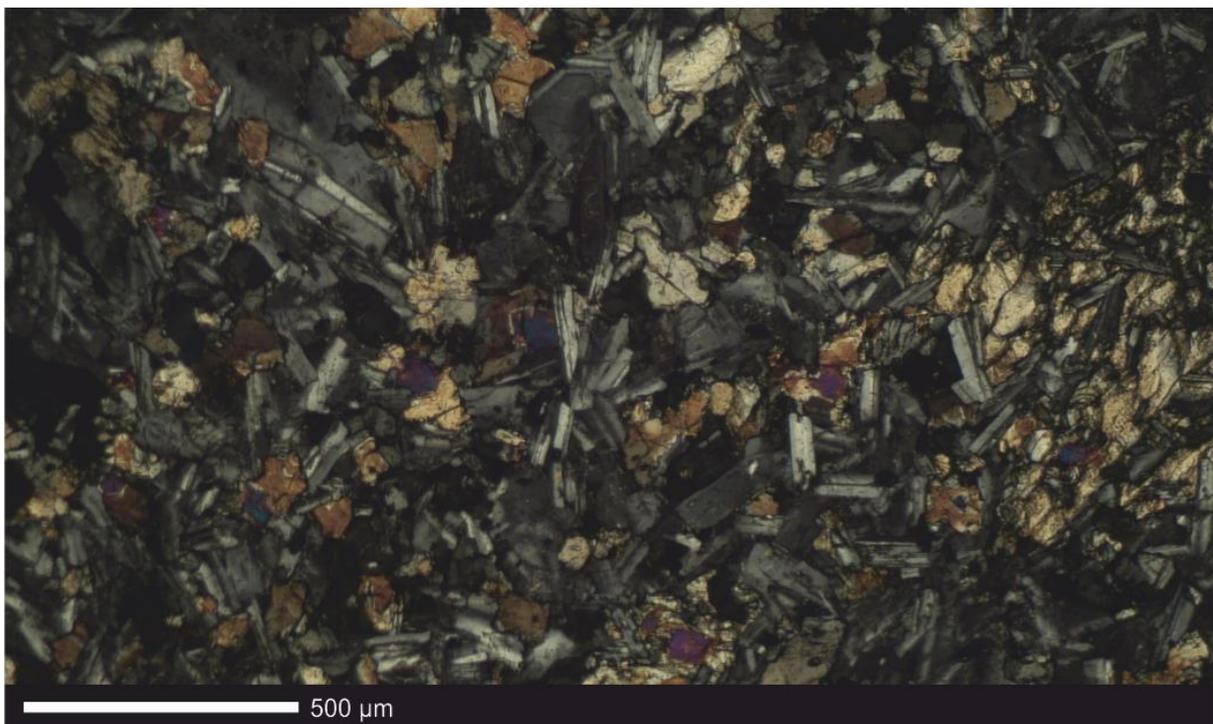


LB1-955-960 - 1/10

Plane Polarised Light

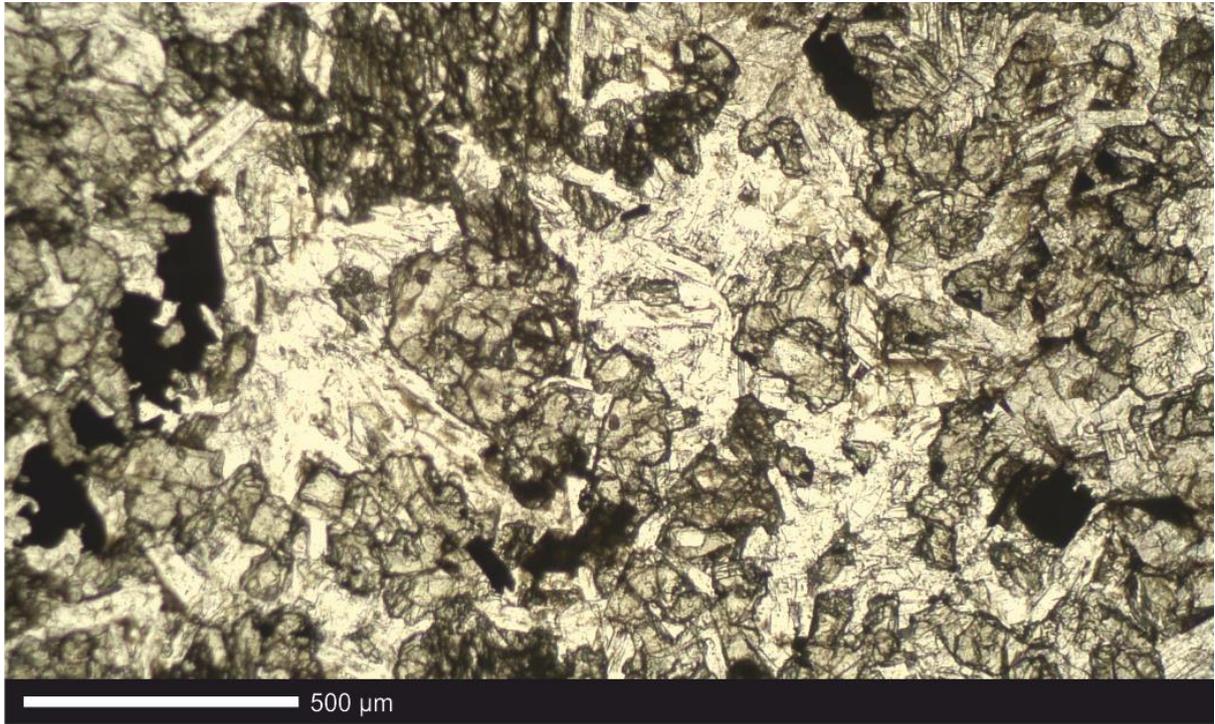


Cross Polarised Light

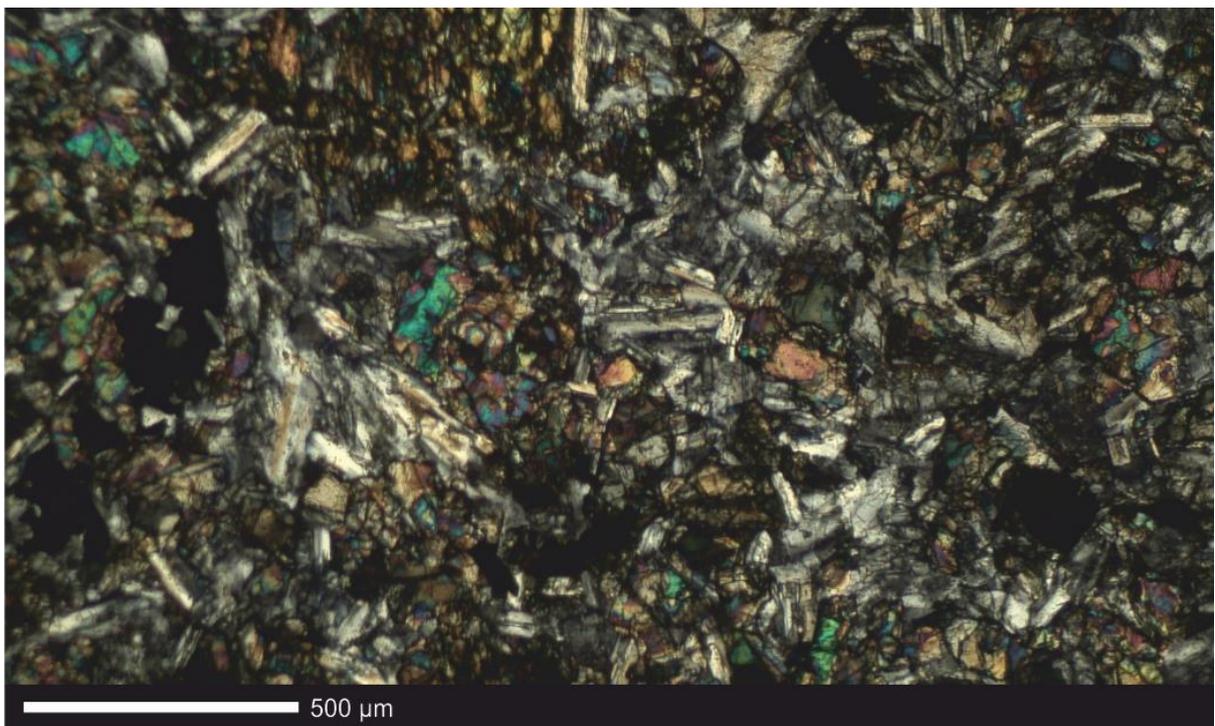


LB1-970-975 - 2/10

Plane Polarised Light

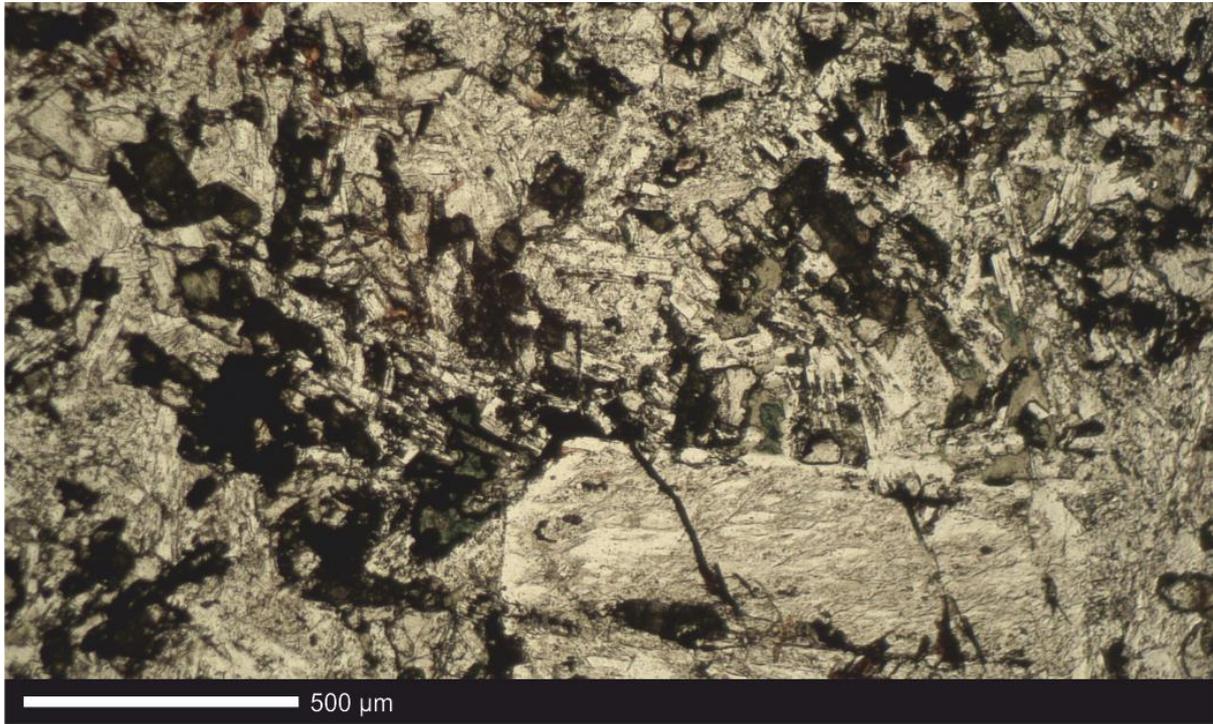


Cross Polarised Light

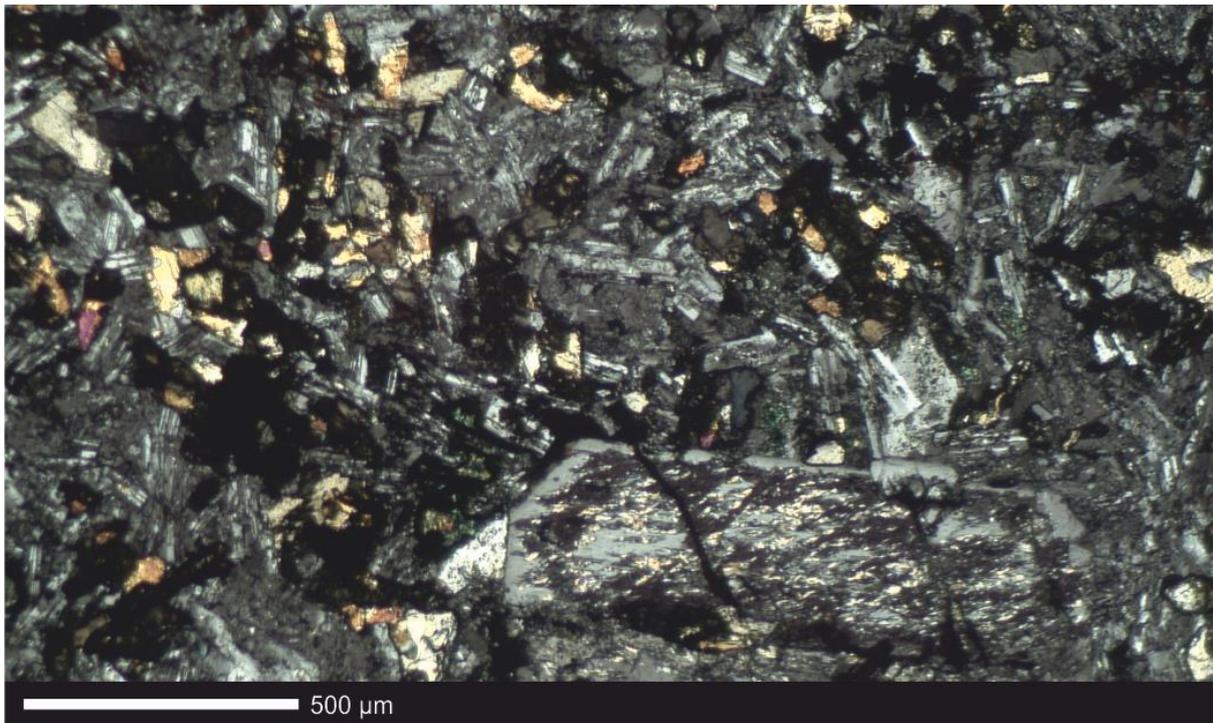


NLBT-006 - 4/10

Plane Polarised Light

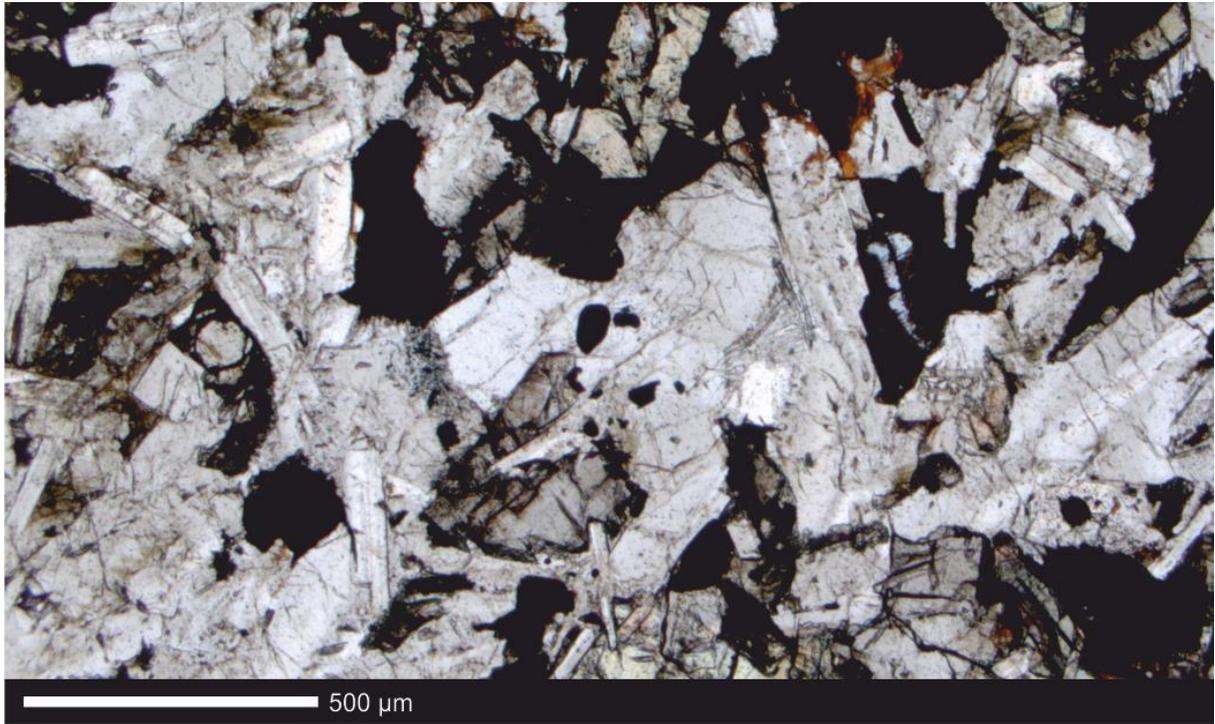


Cross Polarised Light



VCAQ-001 - 1/10

Plane Polarised Light



Cross Polarised Light

