Table S1. Summary of macroscopic fabric groups and associated mineralogies by map scanning. Highlighted samples were sampled for SEM analysis.

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| Fabric group | Samples | Clay matrix (%) | Mineral inclusions (%) |
| 1 | W3W10W16W50W55 | Clay (79%) | Quartz (2%)Plagioclase feldspar (2%)Rock fragments (hornblendes)Alkali feldspar (<1%)Amphibole (<1%)Haematite (<1%)Rutile (<1%) |
| 2 | W2W4W5W13W54W35 | Clay (57%) | Quartz (12%)Plagioclase feldspar (oligoclase?) (14%)Andalusite (or another Kyanite?) (1%)Alkali feldspar (1%)Pyroxene (Ferroan augite) (1%)Chonnosite? (Fe rich silicate) (1%)Ilmenite (<1%)SiCaAlO? (<1%) |
| 3 | W52 | Clay (71%) | Quartz (8%)Pyroxene (augite) (8%)Amphibole (3%)Plagioclase feldspar (albite?) (3%)Alkali feldspar (<1%)Chegmite? (Ca rich silicate) (<1%)Fe-Oxide (<1%)Titanite? (<1%) |
| 4 | W6W9 | Clay (56%) | Quartz (16%)Plagioclase feldspar (oligolcase?) (3%)Alkali feldspar (orthoclase?) (2%)Pyroxene (1%)Andalusite (<1%)Ilmenite (<1%)Olivine? (<1%)SiCaAlO? (<1%) |
| 5 | W7W45 | Clay (69%) | Quartz (8%)Feldspathic rock fragments (present)Amphibole (<1%)Haematite (<1%)Ilmenite (<1%)Prehnite (or pumpellyite/porphyrite?) (<1%) |
| 6 | W1 | Clay (68%) | Quartz (2%)Rock (foliated hornblende) (present)Olivine? (3%)Amphibole (2%)SiCaAlO? (2%)Staurolite? (<1%) |
| 7 | W11W12W14 | Clay (52%) | Quartz (17%)Plagioclase feldspar (9%)Rock fragments (present)Mullite (<1%)Rutile (<1%)Fe-Oxide (<1%)Chalcopyrite? (<1%)Pumpellyite? (<1%) |