Site no.: B19

Site name: Cairn Leuchan to Pannanaich Hill

**Grid reference**: [NO 38516 92375]

Locality: ~5 km SE of Ballater

GCR Status: Proposed

**GCR No.:** 0

Type: Natural exposures

**Description:** Scattered crags and small exposures on the upper slopes of Cairn Leuchan. The GCR volume 'Dalradian rocks of Scotland' (Stephenson et al., 2010) contains a full description of the site.

**Justification:** The site encompasses rocks that have made a major contribution to the understanding of conditions of high-grade regional metamorphism, both in the Grampian Terrane and globally. Most notably: (i) it lies within the area where Barrow established the concept of metamorphic zones and index minerals; (ii) it lies close to the trace of the kyanite-andalusite isograd, which effectively defines the boundary between the Barrovian and Buchan styles of metamorphism in the Grampian Highlands; (iii) the temperature (~820 °C) and pressure (>8 kbar) during peak metamorphic conditions are the most extreme so far recorded in the Scottish Dalradian.

## **References**