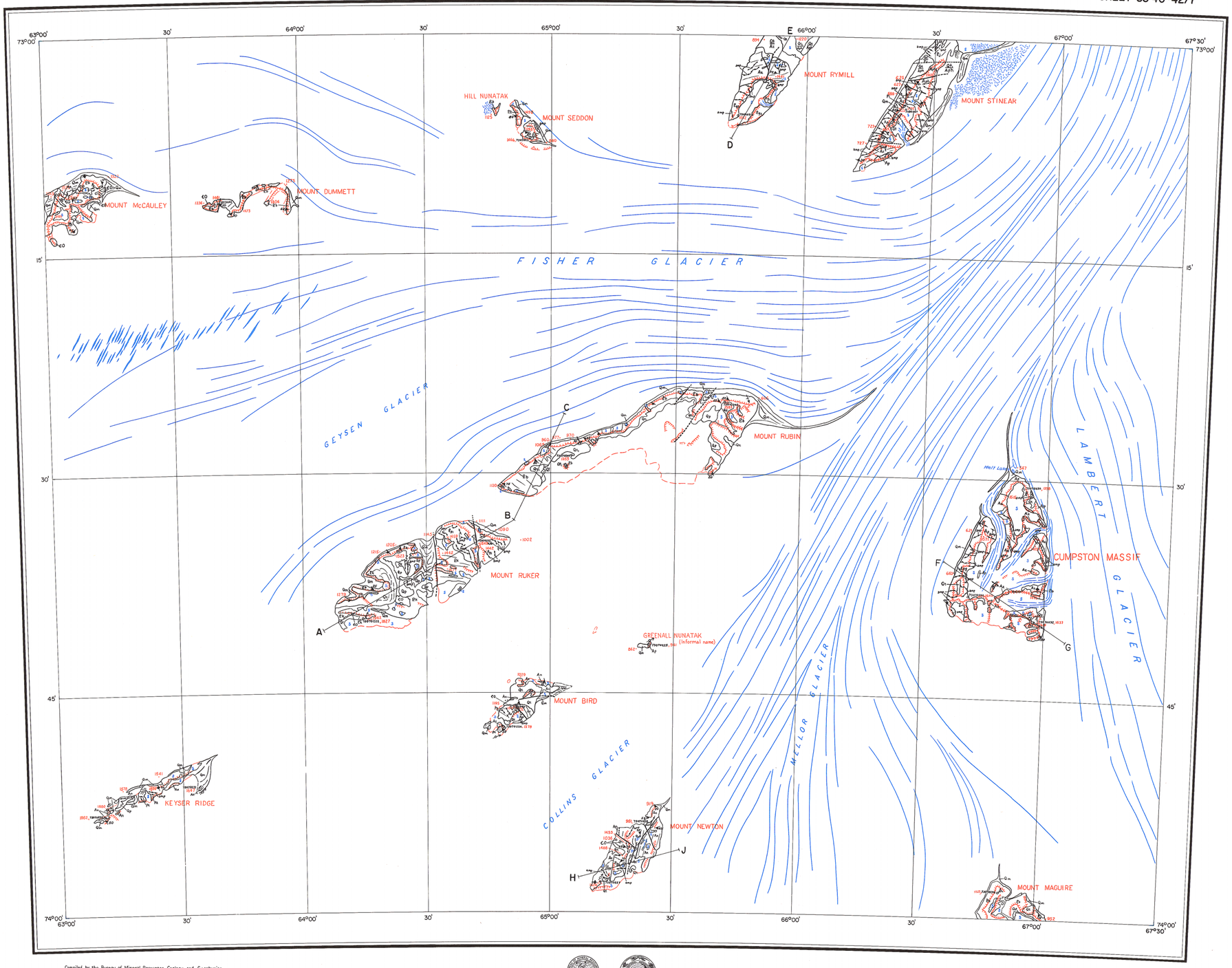
1:250 000 GEOLOGICAL SERIES

CUMPSTON MASSIF

AUSTRALIAN ANTARCTIC TERRITORY

SHEET SS 40-42/7



Reference

CAINOZOIC	QUATERNARY	S	Permanent snow and ice cover on mountains
		Qm	Moraine
		Qp	Patterned ground developed in in-situ debris
		Qt	Till and scree
		Qt1	Patterned ground developed upon till
		d	Dolerite dyke
PALAEOZOIC	CAMBRIAN TO ORDOVICIAN	€O Pz	Biotite granite, muscovite granite, and associated pegmatites commonly containing tourmaline
PROTEROZOIC	PRINCE CHARLES METAMORPHIC COMPLEX *	Pb	Weakly metamorphosed, isoclinally folded conglomerate, calcareous sandstone, siltstone, marl, shale and phyllite ; quartzite and calcareous schist
		Pj	Migmatite, locally garnetiferous, biotite-quartz-feldspar gneiss with minor calc-silicate gneiss and amphibolite
		amp	Metamorphosed basic dykes
		Pk	Low grade, broadly folded, quartzite, greywacke, slate, phyllite, chert, schist, and minor basic volcanics Banded iron formation
	Ruker Granite	Pg1	Foliated biotite granite with xenoliths of metasediment
	Rymill Granite	Pg2	Red, poorly foliated biotite granite
	Newton Granite	Pg3	Poorly foliated pegmatitic granite containing rafts of metasediment Locally forms an injection gneiss with An
ARCHAEAN		Pl	Muscovite pegmatite
	Menzies Quartzite	Az	Medium grade, folded, conglomerate, white quartzite, green quartzite impure quartzite, garnet mica-staurolite-kyanite schist, calc-silicate gneiss, banded metasediment and basic sills
		An	High grade garnet-sillimanite gneiss; spotted low grade chlorite-chloritoid schist, biotite gneiss, hornblende gneiss, quartzite, calc silicate schist and basic sills
		Ap	Biotitic gneiss, granitic gneiss, gneissic granite with interbanded quartzite, metagabbro and calc silicate
		Aph	Dark brown acid gneiss with ferrohastingsite
		Apg	Gneiss, massive gneissic granite

* The Prince Charles Metamorphic Complex has resulted from several metamorphic events. Because metamorphic effects vary from place to place, rock units that are locally distinctive mapping units may not be recognizable elsewhere. In the reference above the order of the rock units is determined by field observations and isotopic age determinations and does not necessarily have any stratigraphic significance

- Geological boundary
- Unconformity, section only
- Anticline, showing dip of axial plane
- Fault
- Fault, concealed
- Strike and dip of foliation
- Strike and dip of foliation, unmeasured
- Vertical foliation
- Plunge of lineation on vertical bedding
- Trend line / Joint pattern } airphoto interpretation
- Glacial striae, showing direction of ice movement
- Dyke or vein; amp-amphibolite, d-dolerite, p1-muscovite pegmatite, p2-muscovite pegmatite, biotite pegmatite
- Edge of rock, with snow covering
- Escarpment
- Arête
- Distorted ice
- Crevasses
- Flow lines on glacier
- Trigonometrical station
- 1578 Elevation in metres
- Gravity station BMR

CAUTION

Absence of the depiction of crevasses does not necessarily indicate a crevasse-free area.

Names have been approved by the Antarctic Names Committee of Australia.

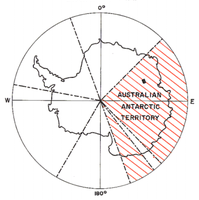
GEOLOGICAL RELIABILITY

Outcrop mapped by helicopter and foot traverse, and airphoto interpretation.

ka detail interpreted from ERTS 1 imagery (Band 7, 0.8-1.1 μm)

Compiled by the Bureau of Mineral Resources, Geology and Geophysics, Department of Minerals and Energy, issued under the authority of the Hon. R.F.X. Connor M.P., Minister for Minerals and Energy.
Base map compiled by the Antarctic Mapping Branch, Division of National Mapping from ERTS-1 imagery

LOCALITY MAP

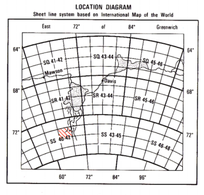


Scale 1:250 000

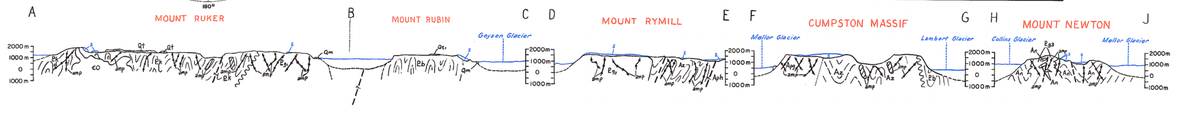
5 0 5 10 15 20 25 KILOMETRES

UNIVERSAL TRANSVERSE MERCATOR PROJECTION, INTERNATIONAL SPHEROID, ZONE 40-42

LOCATION DIAGRAM
Sheet line system based on International Map of the World



Section
Scale 1/4 = 1
Depth in metres



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CUMPSTON MASSIF

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