

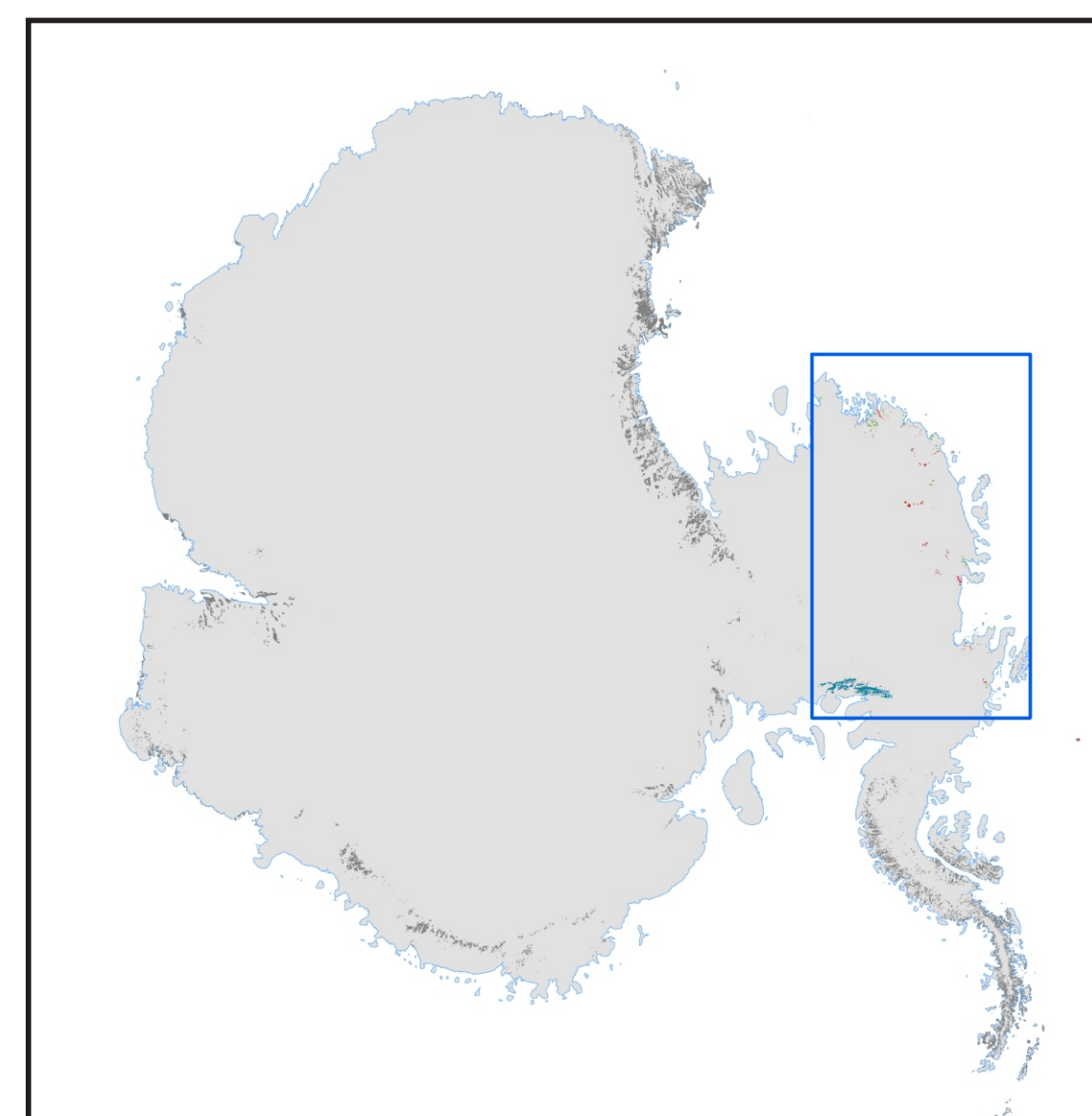


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To make Antarctica's geological framework accessible for a variety of research, we have compiled a digital geological map of Marie Byrd Land and the Ellsworth Mountains from first-hand observations, published geological maps and other literature.

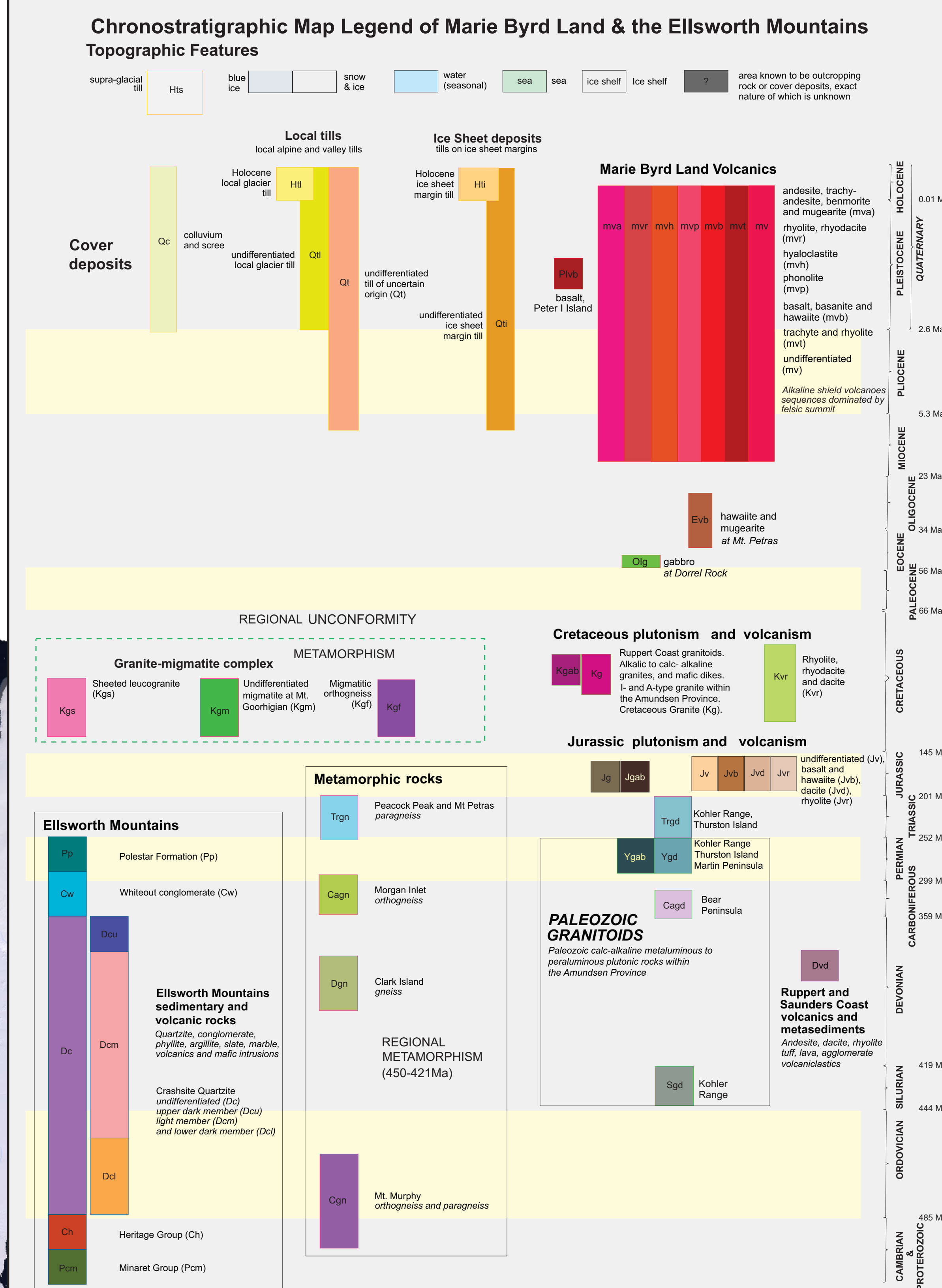


The GIS database employs international Geoscience Markup Language (GeoSciML) data protocols for feature classification and description of rock and moraine polygons that are attribute-rich and queriable; including links to bibliographic source files for primary literature and maps.

Covering an on-continent coastal area of $\sim 1\,300\,000\text{ km}^2$ between 080°E to 138°W , from 68°S to 81°S , this digital map is suitable for use at 1:250 000 scale. It contributes to the international SCAR GeoMAP initiative to compile a unified geological dataset of Antarctica.

Geology

West Antarctica consists of a wide variety of bedrock ranging from granitoids and metamorphic complexes of Marie Byrd Land to the Paleozoic sedimentary sequence of the Ellsworth Mountains. Overlying bedrock is a variety of glacial and volcanic cover sequences, as well as seasonal water and blue ice.



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