The Charlevoix Astroblem Geopark Project

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Charlevoix is a popular tourist destination, mainly because of its terrain, climate and more importantly its cultural heritage. But few people know that Charlevoix is geologically unique in Quebec and even Canada because of its geological history and the tectonic and catastrophic events that shaped and still model its landscape today.

Three major geological provinces of North America occur in the Charlevoix: (1). Precambrian rocks of the Canadian Shield north of the St. Lawrence; (2). Paleozoic rocks of the platform of the St. Lawrence, which is just south of the Shield and mainly near the north shore of the St. Lawrence; and (3). Appalachian rocks which we find traces of in Isle-aux-Coudres.

All these rocks have witnessed a meteoritic impact which transformed profoundly the geology from Petite-Rivière-Saint-François to Saint-Siméon on the Upper North-Shore of the Saint-Lawrence River. The Charlevoix astroblem was discovered in 1966 and several impact structures and typical meteorite impact rocks have been identified. The central peak and ring grabens are among the most visible and accessible impact structures in the world. Charlevoix is still an active seismic zone as well, which significantly influences its landscape.

In addition to highlighting the astroblem and the ongoing seismic activity, the proposed geopark also wants to highlight the current processes that change the landscape and which are natural hazards such as bank erosion and landslides.

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