

Antarctic mountains belong to dinosaur era

The root of the mysterious range of Antarctic mountains completely hidden under the continent's massive ice sheet may be over 200 million years old, dating back to the dinosaur age, scientists have claimed.

Researchers, on a project to understand the Gamburtsev Subglacial Mountains in east Antarctica better, said the mountains rise up to 10,000 feet above the planet's surface, but are covered by up to 15,750 feet of ice.

"This icy coat makes them the least understood mountain range on Earth," researcher Fausto Ferraccioli said. "It is very fitting that the initial results of the project are coming out 100 years after the great explorers raced to the South Pole," said Alexandra Isern at the National Science Foundation.

"The scientific explorers of the project worked in harsh conditions to collect the data and detailed images of this major mountain range. The results of their work will guide research in this region for many years to come."

The details the scientists have gathered about the mountains provide conflicting evidence about how they got there and how old they are. For instance, nearby rocks suggest they are very ancient, but their steep, rugged shapes, which resemble the Alps, are what one would expect of young mountains.

To learn more about their origins, the team collected new data from the region by flying about 120,000km with two aircraft equipped with icepenetrating radars, lasers and magnetic and gravity meters.

Magnetic anomalies seen throughout the Gamburtsevs match those of about one-billion-year-old rocks seen to the north that predate the evolution of animals and plants on Earth. This suggests the root of this mountain range was born around that time from collisions of several continents or microcontinents, findings corroborated by gravity and other data, the team reported.

The research then suggested that rifting events between 250 and 100 million years ago, back when dinosaurs roamed the Earth, triggered the uplift of these mountains (PTI 22-11-11).