1. Physical and human geography

The Mount Changbaishan Aspiring Geopark is located in the administrative area of Administration Committee of Changbaishan Reserve and Development District, Southeast Jilin Province, the People’s Republic of China, Asia-Pacific Region, adjacent to the Democratic People’s Republic of Korea on Southeast, with its southeastern margin not crossing the P. R. China-D. P. R. Korea border. The geographic coordinates are between 41°38'18.49"-42°28'17.30"N and 127°32'16.986"-128°16'44.8"E. The total area is 2,723.832km². The major geographic features in the Mount Changbaishan Geopark are dominated by the volcanic landform (composed of huge composite volcanic cones and related various volcanic landforms), structural eroded landform and fluvial landform. The climate in the Geopark belongs to the monsoon-influenced temperate continental mountainous zone. The specific geographic location and geological setting have created a specific flora in the Geopark, predominated by Pinus koraiensis and broad-leaved forest, coniferous forest, Betula emanii forest and alpine tundra, with distinct vertical zonation. The Geopark is of a profound history.

2. Geological features and geology of international significance

Geologically, Mount Changbaishan Aspiring Geopark is located at the convergent site between the northeast margin of North China Plate, east Eurasian Continent and marginal Pacific volcanic orogenic belt, with strong magmatic activities. In the Archean-Early Proterozoic, three volcanic activities occurred resulted in mantle-derived magma intrusion due to the intra-plate extension. In the Paleozoic, there are island-arc and back-arc basin magmatic rocks related to a series of subduction in Bainaimiao Island-arc belt. In the Mesozoic, the Mesozoic was dominated by the large-scale lithosphere thinning derived from the intracontinental extension and mantle uplift, resulted in the occurrence of island-arc-type alkali-calcic volcanic rocks of andesite-dacite-rhyolite series (Late Triassic-Jurassic), and relatively large-scale basic magma eruption along the rift and adjacent fault zones (end Cretaceous). In the Cenozoic, especially in the Quaternary, the volcanism was most extensive in the Geopark territory, the multiphase, various volcanic eruptions created the diverse rock types, huge composite volcanic cones and extremely complex volcanic landforms. In particular, the explosive Plinian type eruption about 1,000 years ago, so-called millennium eruption was the most important, with a large-scale influence, produced special pyroclastic accumulation, with great international significance. Changbaishan Volcano, a representative of composite volcanoes, with large scale, complete forming process, is of great international significance in studying the volcano genetic mechanism, temporal and spatial distribution of volcanoes in northeastern China. The complete preservation, unique and typical volcanic landforms are of important scientific significance in studying the plate subduction, back-arc basin extension, magma source and magmatic intensity of different stages in the west Pacific.