

LATE PALEOZOIC BOULDER PAVEMENTS AND THE SENSE  
OF MOVEMENT OF GONDWANA GLACIERS IN CENTRAL  
EASTERN SÃO PAULO STATE, PARANÁ  
BASIN, BRAZIL

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Two extensive intratill boulder pavements were identified included at two levels within a single diamictite horizon of the Late Paleozoic Itararé Subgroup in the northern part of the Paraná Basin, Brazil.

Measurement of striae on cobbles and boulders of the lower and upper pavements averaged N 75°W and N-S, respectively. Interpretation of sense of the Gondwana glaciers movement in the area was based on the probable upglacier inclination of the upper plane surface of clasts in the pavements, which indicated flow towards N and NW. A detailed study of surface characteristics of clasts dispersed in the diamictite showed that up to 48% of the clasts are striated, mostly in the subparallel fashion. The striae are most commonly oriented parallel with the largest axes of the clasts.

A glacial mode of origin already established for the Itararé Subgroup in the Paraná Basin is reinforced by the occurrence of the boulder pavements and features of diamictite clasts. The available geological evidences on the origin of the pavements indicate that they may have been formed along shear planes inside a basal till.