

STRATIGRAPHY, SEDIMENTOLOGY AND FACIES OF LATE PALEOZOIC DIAMICTITES IN NORTHEASTERN PARANÁ BASIN, BRAZIL\*

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Abstract

Diamictites (tillites) of the Itararé Subgroup (late Paleozoic) in the northeastern part of the Paraná Basin, Brazil, are predominantly silty-clayey-sandy matrix sediments displaying: a) lenticular, tabular or complex shapes; b) variable lateral extension (up to several hundreds of meters) and thickness (up to several tens of meters); c) massive aspect or faint foliation, or faint to conspicuous lamination or stratification; d) inclusions of stratified sediments, sometimes interlayered, or dispersed as lenses, spherical bodies, "dykes", venules and wedge-shaped bodies; e) dispersed or concentrated clasts (up to 29% in volume), of variable composition, either rarely or commonly faceted and striated (up to 48%); f) association with folds, slump/sliding structures and faults.

Thicker diamictite bodies and sections are associated to thicker sections of the diamictite-bearing sequence and may be related to the positioning of ice lobes.

Analysis of facies of the diamictites indicate that they have been affected by mass movement processes including viscous mud-flow, sliding/slumping in terrestrial or subaquatic environment. Set of features comparable to those of flow-tills associated to stagnant-retreating ice, and of deposition in contact with ice are common.

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