



Integrating petrography, clay mineral assemblages and illite crystallinity on Hsuehshan Range Belt, Taiwan

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This study firstly integrates petrography, clay mineral assemblages, and illite crystallinity on Hsuehshan Range Belt of Taiwan, which belongs to slate formation including meta-sandstone and slate.

According to the preliminary results of petrography, clay mineral assemblages, and illite crystallinity, they can be classified two parts which one is thick meta-sandstone with a few slate, and the other one is alternations of meta-sandstone and slate.

In the thick meta-sandstone with a few slate, it shows pressure solution and less recrystallinity, illite, chlorite, kaolinite, and illite crystallinity value between 0.22-0.39. In the alternations of meta-sandstone and slate, it displays the more pressure solution and recrystallinity, illite, chlorite, kaolinite, and illite crystallinity value between 0.19-0.26. Finally, this study infers to that is more and more metamorphism from northern to southern in Hsuehshan Range Belt of middle Taiwan.