Fine laminated structure of stromatolite suggests summer and winter in cretaceous period?

*Taiga Tsujimoto¹

1. Saitama prefectural Kasukabe High School

I studied formation processes of fine laminated structures of three types with different lithology stromatolites in the El Morino formation (latter term of cretaceous period) in the Andes, Bolivia in South America. According to observation of thin sections, fine laminated structures consist of the thin layers of light layers and dark layers less than 2mm thickness, made from calcium carbonate(CaCO₃). Light layers and dark layers are acknowledged the differences of variation width of layer thickness and particle sizes and shapes of CaCO₃. Especially, difference in size of thickness is remarkable. That`s because there is a difference in crystallization amount of CaCO₃ with variation of carbon dioxide concentration in sea water. And I considered variation of carbon dioxide concentration by relating the amount of photosynthesis of cyanobacteria and carbon dioxide solubility. As a result, I concluded that fine laminated structures are corresponded seasonal seasonal changes.

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