THE SEA LEVEL CHANGES ESTIMATED FROM THE RESULTS OF DRILLINGS ON THE DEEP SEE

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RESULTS OF DSDP, IPOD, ODP, AND DREDGING FROM DEEP SEA FLOORS SHOW THE WIDESPREAD DISTRIBUTION OF SHALLOW WATER SEDIMENTS AND VOLCANIC ROCKS ERUPTED IN SHALLOW ENVIRONMENT. FROM THE SEDIMENTS FROM THE EACH SITE WHICH ARE IN DEEP WATER AT PRESENT INDICATE SHALLOW SEA ENVIRONMENT. THE SEDIMENTS AND EXTRUSIVE ROCKS WERE EXAMINED. THE SEDIMENTS WHICH SUGGEST THE ENVIRONMENT OF THE SHALLOW SEA DISTRIBUTED IN THE LIMITED AREAS. IN A WARD, THESE SEDIMENTS WERE MOSTLY FOUND ON TOP OF TOPOGRAPHIC HIGHS SUCH AS THE TOP OF SEAMOUNTS AND RIDGES WHICH ARE BELIEVED TO BE SUNKEN AFTER THE SUCCESSION OF VOLCANIC ACTIVITIES. THE SHALLOW MARINE FACIES WERE FOUND IN THE CRETACEOUS, MIOCENE, AND EOCENE SEDIMENTS IN DESCENDING ORDER. THIS STUDY INDICATES THAT THE SEA LEVEL OF THE MIDDLE CRETACEOUS WAS 4000 M LOWER THAN THE PRESENT ONE AND THE LATE MIOCENE SEA LEVEL WAS 2000 M LOWER THAN THE PRESENT ONE AND THE EOCENE SEA LEVEL WAS 2500 M LOWER THAN THE PRESENT ONE. THE DEEPEST SITE OF AUTOCHTHONIC SHALLOW SEA SEDIMENTS REFLECTS THE SEA LEVEL OF A PAST STAGE. THE FOSSILS INDICATE THE SHALLOW SEA ENVIRONMENT, WHICH WERE COLLECTED FROM A SITE SHALLOWER THAN THE DEEPEST SITE, SHOW THAT THE SUBMARINE CRUST OF THAT SITE MIGHT HAVE BEEN RAISED DURING SUBSEQUENT GEOLOGIC HISTORY. THE INCREASE OF THE DISTRIBUTION DEPTH OF SUCH SEDIMENTS ALONG WITH INCREASING AGES IMPLIES STEP-BY STEP SEA LEVEL RISE THROUGH GEOLOGIC TIME.