

THE 1991 ERUPTION OF PINATUBO VOLCANO, PHILIPPINES AND EASTERN SOUTH CHINA SEA FORAMINIFERA: OCCURRENCE AND RECOVERY

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Cores taken from the Eastern South China Sea exhibit a unique assemblage of foraminifera following the eruption of the Pinatubo Volcano. In 1991, the sea floor was covered by a layer of volcanic ash that resulted to the mass decimation of foraminifera. The post-eruption samples show a low total number of foraminifera. Diversity is also low with significant abundance of certain species. Studies about the rates of recovery and faunal succession following a large scale deep-sea disturbance such as this are very few. A study has demonstrated that recovery and recolonisation nine months after a disturbance in the Pacific Ocean are still in the early stage. Thus, in order to establish recovery patterns, observation should be made on the scale of years. In 1998, the R/V Sonne Cruise 132 collected samples from South China Sea. A documentation of the foraminiferal occurrence in these samples provides a large scale picture of the recovery process seven years after the eruption. Initial findings show that seven years after the eruption, the total count of foraminifera is still far from recovery to background levels. The information generated from this type of studies will help provide insights on the effects of the eruption of Pinatubo Volcano on the foraminiferal communities. Moreover, it will add in the understanding of the relationship between Recent foraminiferal distribution and the deep-sea environment. This in effect, will help make interpretation based on foraminiferal associations in relation to paleoenvironmental studies easier.