

1. Introduction

A few minutes after midnight on 17 August 1976, a violent earthquake originating beneath Moro Gulf spawned a tsunami that affected 700 km of coastline bordering Moro Gulf. Residents in those areas experienced what seemed to be the longest thirty minutes of their lives.

When the sea had spent its fury and rolled back to its normal cadence, the survivors looked upon scenes of death and destruction. About 8,000 were dead or missing. About 10,000 were injured and about 90,000 were homeless. The disaster received more than ample media coverage, local and international. Priority was given to relief and rehabilitation efforts, to help the living rebuild lives and livelihoods. Little noticed were the tsunami studies jointly made by PAGASA and ITIC scientists.

A tsunami does not come as often as typhoons, earthquakes or conflagrations. One consequence is lack of information and interest on the part of the general public. One year after the event, on the first anniversary of the tsunami, there was not a single line in the Manila papers, except for a full page ad by BFAR detailing rehabilitation progress in Bongo Island. The purpose of this study is to present findings about this tsunami for a better understanding of it and that steps may be taken to lessen loss to lives and property in future tsunamis. Since much work has already been done on earthquakes and earthquake engineering, emphasis will be put on the tsunami. Only those aspects of earthquakes that are needed to understand tsunamis will be considered.

2. The Earthquake

The earthquake responsible for the tsunami occurred a few minutes after midnight (120° East local time) beneath Moro Gulf, 40 km off the shores of Sultan Kudarat province. G.M.T. time of occurrence was 16:11:07.2 on 16 August 1976. It was a shallow earthquake of magnitude variedly determined between 7.9 and 8.2, whose epicenter was 124.E, 6.3N. The isoseismal zones determined by PAGASA using the Rossi-Forel scale (Kintanar 1976) is shown in Fig. 1. VII, the highest intensity determined, was felt in the coastal regions of the crescent shaped gulf. These were the regions that felt the force of the ensuing tsunami. While not the highest intensity possible, it was enough to waken people and to render standing straight difficult. Useful and vital effects to remember by people in coastal areas. Almost universally, no one made the connection between the severe earthquake and probable tsunami. They just stayed where they were. Tragically some ran to the shores. Besides the tsunami, the earthquake also