

## Parameter Study of 1998 PNG Tsunami by Numerical Simulation in SOS-4 Cruise

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1998 Papua New Guinea earthquake ( $M_s$  7.1) caused unusually large tsunami around Sissano. During the latest SOS-4 cruise conducted by JAMSTEC, we carried out parameter study by simulation based on linear shallow-water wave theory. We assume 11 tsunami sources, 4 for fault and 7 for slump origin. We calculate the volume of displaced surface water  $V$  and the potential energy  $E$ .

For the fault models,  $V$  is an order of magnitude larger than those of slump models, while  $E$  for the both models is about  $2E+12$  J, indicating that the coastal tsunami heights are controlled by  $E$  rather than  $V$ . Most models show concentration toward Sissano because of focusing due to offshore bathymetric feature, indicating that Sissano coast is the most susceptible to tsunamis from future earthquake and/or landslides.