



Preliminary investigation on the relation between maximum wave height and wave spectra

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The maximum wave height is important not only for the determination of design wave parameters but also for the marine disaster defense. While it cannot be predicted straightforwardly at present, since the general numerical models for wave forecasting are all based on phase averaged spectra model. Then it becomes very useful to make clear the relationship between the maximum wave height and wave spectra parameters, such as average wave steepness, spectra width and spectra type, such as one single peak spectra or multi peaks spectra. In order to perform this research procedure, plenty of observed wave data are required. We collected ten years wave data measured from a ship in North Sea, one year wave pressure data from nine points around Korea, four years buoy data from three points along Chinese coast. The preliminary investigation results on the relations between maximum waves and spectra via the mention observed data will be present here.