Abstract: Mathematics has a long and distinguished history of being useful in understanding problems arising in oceanography. There are many areas of oceanography upon which mathematical analysis of one sort or another has been able to cast light.

There are far too many to survey them all in an hour, so I have chosen two topics to discuss in a little detail. One of these is the propagation of internal waves and the other is the formation of rogue waves - a.k.a. freak waves or giant waves.