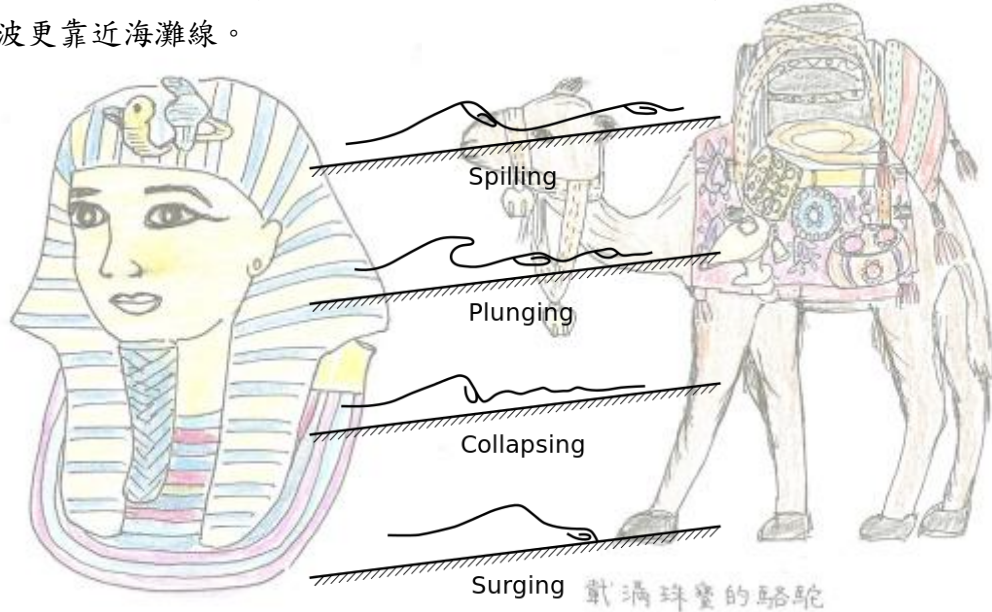


## 崩潰波(Collapsing breaker)

Galvin 在 1968 年在捲入波與洶湧間增加一種崩潰波，其碎波發生位置比捲入波更靠近海灘線。



摘自：[https://www.wikiwand.com/en/Breaking\\_wave](https://www.wikiwand.com/en/Breaking_wave)

| Type                                       | Diagram | Example | Description  |
|--|---------|---------|--|
| <b>Spilling</b><br>$\zeta_0 < 0.5$         |         |         | -Wave crest becomes unstable and spills down while introducing air bubbles inside.<br>-Characteristic foamy water.<br>-High-steepness waves over mild slopes.                                  |
| <b>Plunging</b><br>$0.5 < \zeta_0 < 2.5$   |         |         | -Wave shoreward face becomes first vertical, curls over and finally plunges into the water ahead.<br>-Air can be trapped inside the curl.<br>-Medium steepness waves over intermediate slopes. |
| <b>Collapsing</b><br>$2.5 < \zeta_0 < 3.7$ |         |         | -Wave crest becomes vertical, until the base collapses arriving to the shoreline as a thin water layer.<br>-Low steepness waves over steep slopes.   |
| <b>Surging</b><br>$\zeta_0 > 3.7$          |         |         | -Wave crest remains unbroken, and the wave arrives to the shoreline with small shape changes.<br>-Low steepness waves over very steep slopes.  |

摘自：<https://inductiva.ai/blog/article/perspectives-on-the-sea-6>