

## Video captions

### Breakup\_7727

Video of a *complete* droplet *breakup*. The droplet breaks up into two large hemispheres. A small additional secondary particle is ejected at 13.99543 s.

### Breakup\_7897

Video of a *complete breakup* into three large fragments.

### Cracking\_7901

Video of *cracking*. A crack is opening in the freezing droplet at 45.25492 s. The ice shell hemispheres seal back together at 45.25504 s. The cracking process here is accompanied by the trapping of an air bubble.

### Jetting\_7858

Video of a *jetting* droplet. The droplet is ejecting matter at 50.13651 s. Afterwards the droplet is recoiling in response to the ejection.

### Spicular\_bubble\_burst\_9025

Video of multiple *spicular bubble bursts* occurring in the same droplet (aqueous solution of sea salt aerosol). The first burst of this sequence occurs at 30.11672 s. The second burst is accompanied by a visually detectable ejection at 30.13282 s. A third bubble burst is followed after 30.13992 s. After the last bubble burst, a rim of ice is left at the site of bubble burst.

### Surface\_bubble\_burst\_9145

Video of multiple *surface bubble bursts* occurring in the same droplet (aqueous solution of sea salt aerosol) at two different spots (see figure on the right for orientation).

2019/07/24, 12:16 23.91150 s exp\_id:9145

