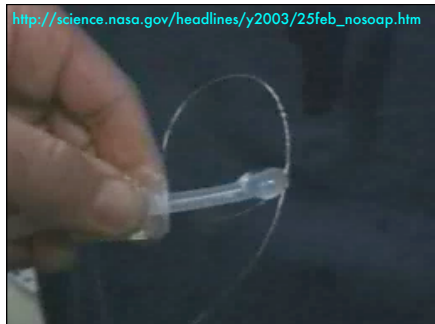
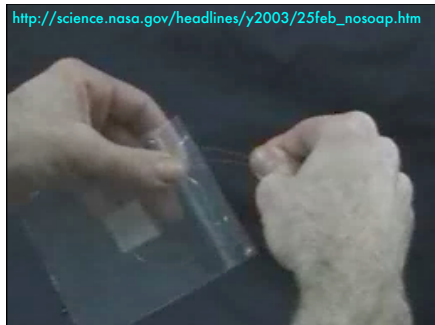




### Tensile Water

When we explore the movement of water from the soil matrix to the photosynthetic canopy, we need to consider the tensile strength of water: Whether it can withstand the pull of its own weight. Tensility is not quite the same as surface tension. Subjected to the tyranny of earth's gravity, we are not aware of how strong water is, but in space, it becomes self-evident.

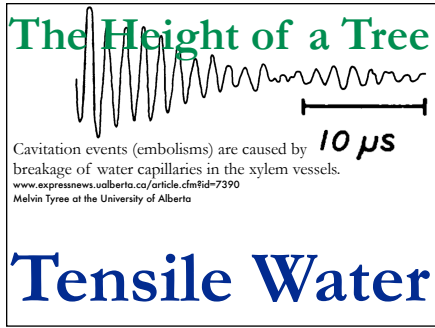
In space, it is possible to form water films similar to those we create using soap bubble mixes on earth.



Even large spheres can be formed. The vortexes explored in space aren't relevant to our exploration of tensile water, but they are cool.



The formation of gaseous bubbles within a sphere of water creates a dynamic multi-phase system.



In trees, the formation of gaseous bubbles (cavitation events) can be heard. These cavitation bubbles interrupt the water strands so that water can no longer be pulled to the top of the tree. This is likely the most crucial constraint on the height of a tree.

