the United Launch Alliance Delta for heavy one of the largest rockets in the world and it's not often NASA's launch services program chooses to launch it in fact they've never launched it until now I'm Nikki Fox project scientist for Parker Solar Probe and tonight you will witness up close and personal this spacecraft being launched on her journey to the Sun watch as we encapsulate the spacecraft as you can see Parker Solar Probe to your left looks pretty small compared to these enormous fairing
halves that protect her during launch

that is because the Delta 4 was made to

launch satellites the size of school buses so why on earth would NASA need a rocket this powerful to launch our little 1500 pound spacecraft to the Sun speed that's right pure and simple parka Solar Probe needs the most launch power she can get to leave Earth and get to the Sun it takes 55 times more energy to get to the Sun than Mars and we need all of it to get into the right orbit around our star parka Solar Probe built by the Johns Hopkins Applied Physics lab will
keep her protective heat shield between herself and the Sun once she's in that orbit the spacecraft will soar through the sun's three million degree plasma atmosphere that we call the corona and give our scientists some incredible data to answer long sought-after questions about the Sun [Music]
back on the launch pad United Launch Alliance as delta 4 heavy is just the right rocket 3 massive booster caused a cryogenic second stage and even a third stage specially made by northrop grumman
to propel parker over 94 miles per
second at spacecraft separation liftoff
in five four three two one zero
and liftoff of the Parker Solar Probe on
her way to unlock the mysteries of the Sun
that was awesome
why don't we watch it again from the front side bye-bye parka the coolest
hottest mission Under the Sun stay cool
baby girl
you