Curiosity Tweaks Course to Mars

TCM is a trajectory correction maneuver. It's something we do to change the direction the spacecraft is moving through space.

We're not aiming for Mars; we're aiming for Mars to a point where Mars will be in its orbit on August 5 so that Mars will be there when we get there.

We do about four, five of these as we get close to Mars and this is just the first and the biggest of all of them. We will be break these TCM's into two pieces. One is an axial component where we fire the rockets in the direction of the solar panels. The other part which we are doing right now is called the lateral component which is where we actually fire our rockets going in sideways and the spaceship pushes itself laterally and that happens as it rotates. It goes, it fires its thrusters...poof and comes back around, it puffs again using the thrusters again as it rotates so it actually allows us to move sideways. In this particular case we're doing about a five meter per second change in speed of the vehicle so by the time it gets to Mars it will be in the right spot.

Everything looks good. It's doing its job fine, perfectly. And it's doing everything we need it to do. It's measuring the temperature, its controlling the thermal conditions of the vehicle. The computer is working fine, everything is working just as we expect. It's whole job is basically to get us to Mars so we can land this rover.

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