OPEN THREAD: NASA'S PERSEVERANCE ROVER MARS LANDING

OMG it feels soooo good to be able to think about future-looking science instead of worrying about the country blowing up!

We're waiting now for NASA'S latest Mars rover craft to land on the red planet. Follow along with these videos:

This is NASA Mission Control with a 360-degree video feed (some browsers may not support this):

This is raw feed from NASA's Jet Propulsion Lab:

Some of the content may be duplicative, but it's still exciting to listen to this team as they reach a major landmark in their Perseverance project.

Why is Perseverance so different and important compared to the previous Mars rover missions? From the Mission Overview site:

The Perseverance rover has four science objectives that support the Mars Exploration Program's science goals:

Looking for Habitability: Identify past environments capable of supporting microbial life.

Seeking Biosignatures: Seek signs of possible past microbial life in those habitable environments, particularly in special rocks known to preserve signs of life over time.

Caching Samples: Collect core rock and "soil" samples and store them on the Martian surface.

Preparing for Humans: Test oxygen production from the Martian atmosphere.

In other words, we've moved beyond successfully arriving at the planet, landing, and taking a

look around. We're now ready to engage in the science which supports humans once they arrive in a near-future stage of exploration.

That last goal is huge; if we can't manufacture oxygen on Mars using the planet's resources, we're going to have to bring means to support humans with us in future exploration.

UPDATE-1 - 3:39 PM ET -

10 minutes ago from The Oatmeal:

20 minutes until EDL
pic.twitter.com/nWlSK0wsZP

- The Oatmeal (@Oatmeal) February 18,
2021

RunPeeNowHURRYL0L

UPDATE-2 - 3:55 PM ET -

TANGO DELTA.

Touchdown!! Perseverance is on Mars' surface!! W00H00!!

Poor scientist calling the tick-tock just gave a massive sigh of relief over the raw feed.

And now they have an image from the surface!



Congratulations, Team Perseverance!!

UPDATE-3 - 4:25 PM ET -

And now the first tweet from Perseverance on Mars!

Hello, world. My first look at my

forever home. #CountdownToMars
pic.twitter.com/dkM9jE9I6X

NASA's Perseverance Mars Rover(@NASAPersevere) February 18, 2021

Team Perseverance has run through their postlanding review. The next phase of the mission has now begun.

Wow, it feels so good to have some successful science under the belt today!

What science would you like to see tackled this year? Share in comments.