

1. PI goes to headquarters for the Science Mission Directorate (SMD) and Human Research Program (HRP) and works with NASA to explain the mission and acquire funding.
 2. Next, a team will be formed, and there will be a conference to design the mission.
 3. In the conference, the goals and requirements will be created
 4. All three of those components will take approximately 3-4 months to finalize.
 5. Throughout the next 6-7 months, the team will design the rocket and payload and work together with the subject matter experts.
 6. For the next year or so, the engineers will build the rocket and input the payload, including the instrumentation.
 7. Testing will occur thoroughly, and it can range from 1-2 months, but we will test for closer to 2 months to be precise with our data.
 8. Additionally, mission readiness testing will occur.
 9. Then the launch happens! The launch will be around 20 minutes.
 10. The recovery will be done by water. To be safe 1-2 days will be allocated for this, as the Navy/Coast Guard/our own boat will need to recover this.
 - a. Remember, for this, the parachutes/other recovery instrumentation need to be included in the payload weight.
- Finally, post-flight reports will be created.
- b. I am not entirely sure how long this will take because there are different types of reports. I think around 2- 4 months should be good to have everything ready to release, and also to send data to the partners and the media, perhaps. The data also has to be converted to actually benefit the stakeholders and audience.

Overall, this process will take between 12 months at the fastest pace and around 18 months at the slowest.

Mission timeline speaking:

The start of this mission timeline will be in 2028. First, the principal investigator needs to go to the Science Mission Directorate as well as the Human Research Program in order to explain the mission idea and acquire adequate funding. Following the acceptance of the mission, a team will be formed and a conference will be held to design the mission goals and requirements. This process will take around 3-4 months to finalize. Next, 6-7 months will be spent designing the rocket and the payload with the help of subject matter experts. In addition, engineers will spend

the next year or so building the actual rocket and the payload components, including all of the instrumentation. Thorough rocket and mission readiness testing will also occur in the next 1-2 months to ensure precise data is collected. After all of this, the launch will finally happen in August 2030, and the flight will take roughly 20 minutes. Next, the recovery will take place, specifically a water recovery in correlation with the Coast Guard for 1-2 days. Finally, 2-4 months after the mission will be spent creating post-flight reports. Overall, this process will take roughly 2 years.