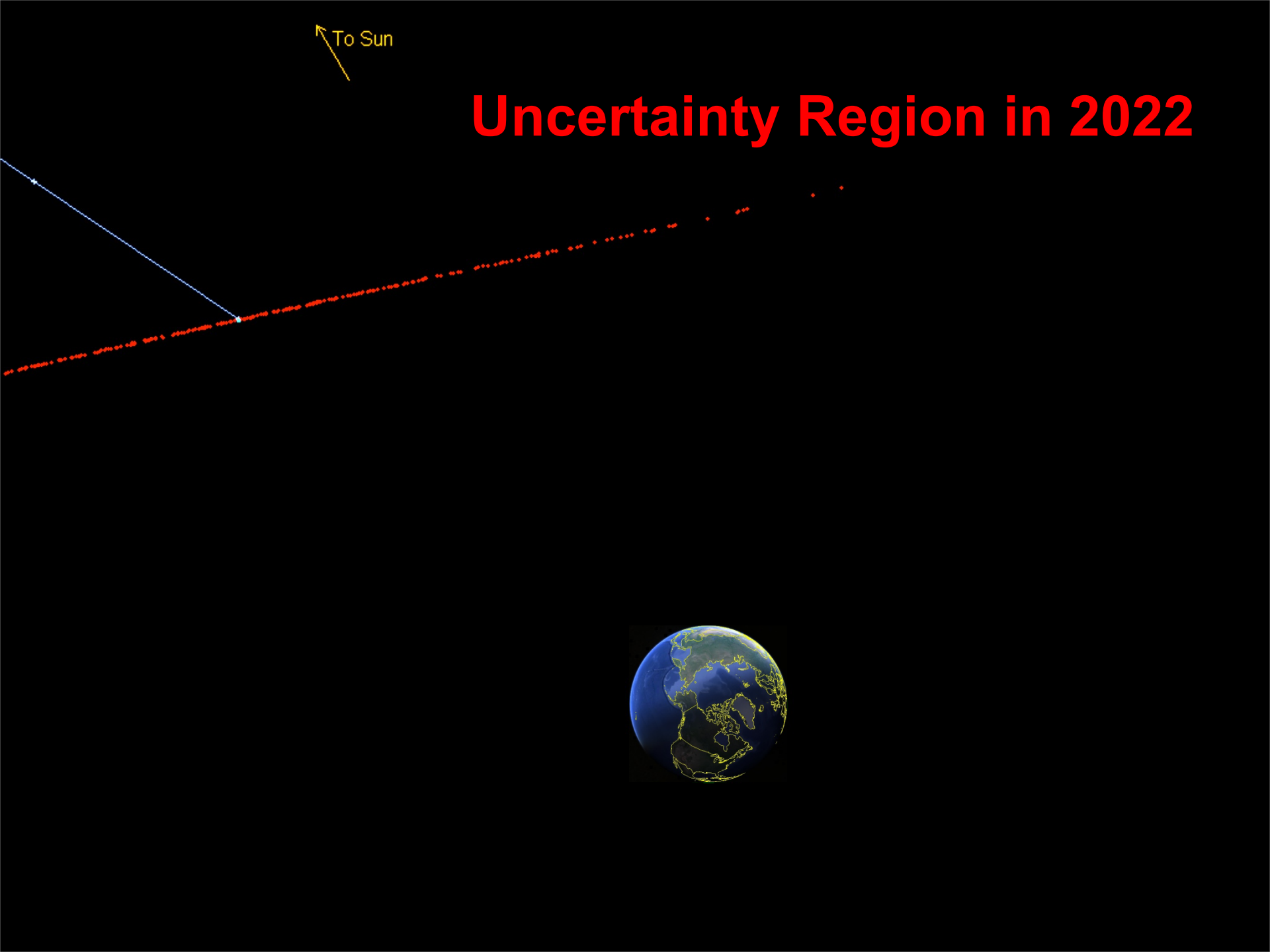
Asteroid's Chance of Impacting Earth in 2022 Now 43%

Paul W. Chodas (International Asteroid Warning Network/JPL)

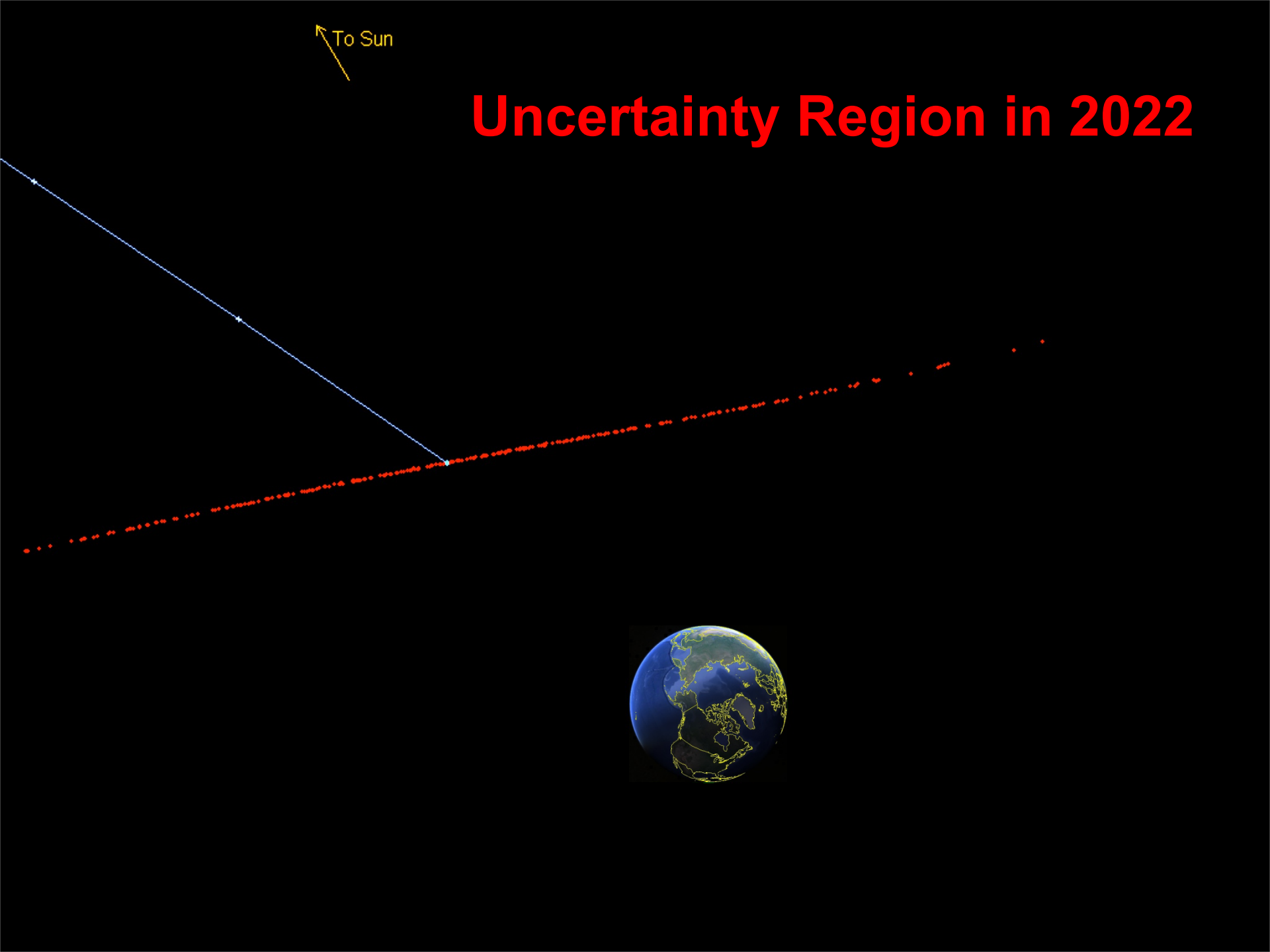
Press Conference, April 4, 2016

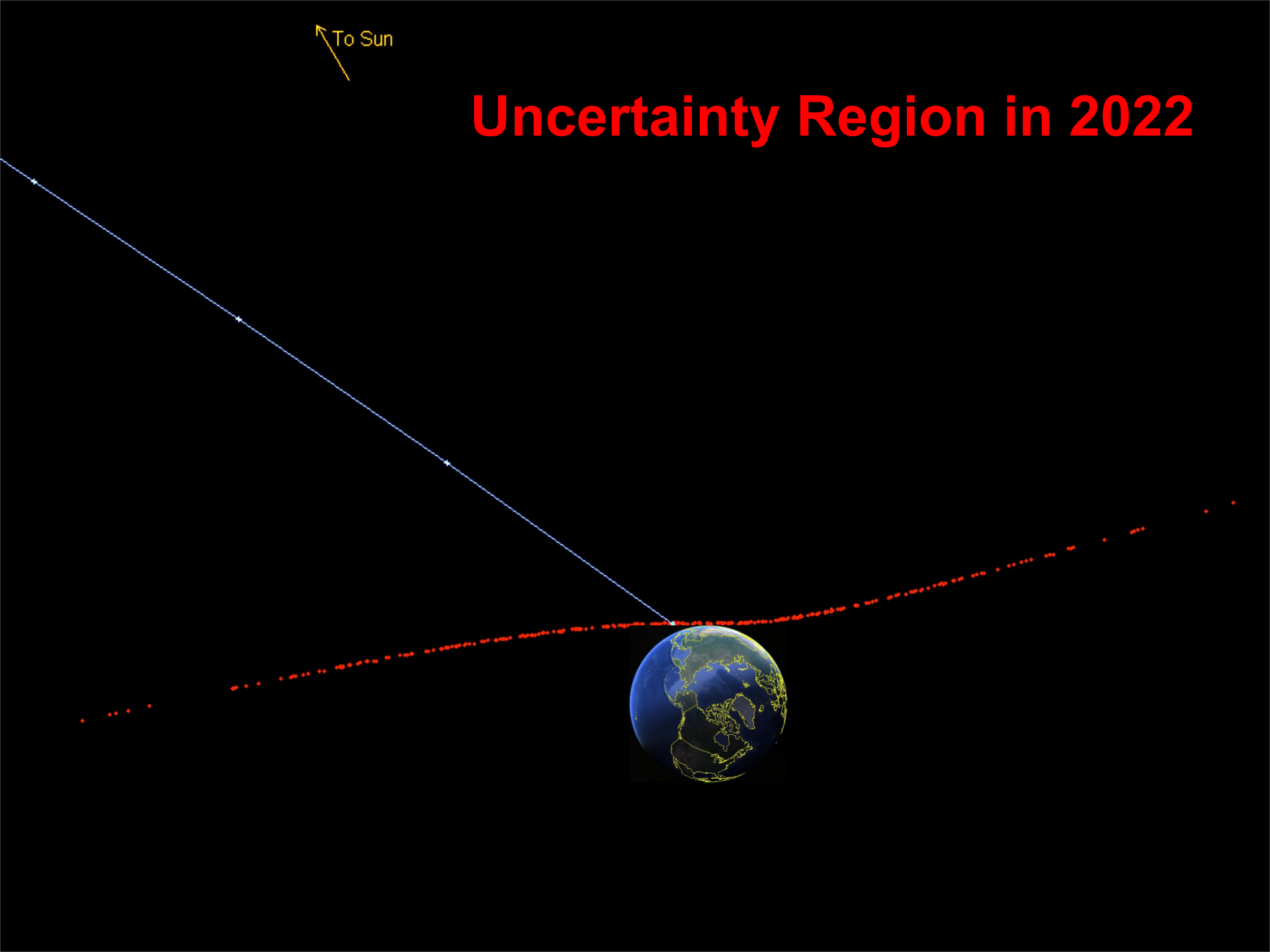
Chance of Impact in 2022 is Now 43%

- After nearly a full year of continuous tracking, the orbit of asteroid 2015 PDC is known more accurately
- The new data did not eliminate the possibility of impact
- IAWN now estimates the likelihood of impact on Sept. 3, 2022 at **43%**; the Torino Scale rating is 5 (Orange)
- **No further updates are possible for 8 months**
- Several space-faring nations have already begun developing deflection missions; they would launch 3 years from now, in August 2019
- Size of 2015 PDC is still very uncertain, but the Spitzer Space Telescope might be able to observe it in early 2018
- For more info: **http://neo.jpl.nasa.gov/pdc15/day2.html**

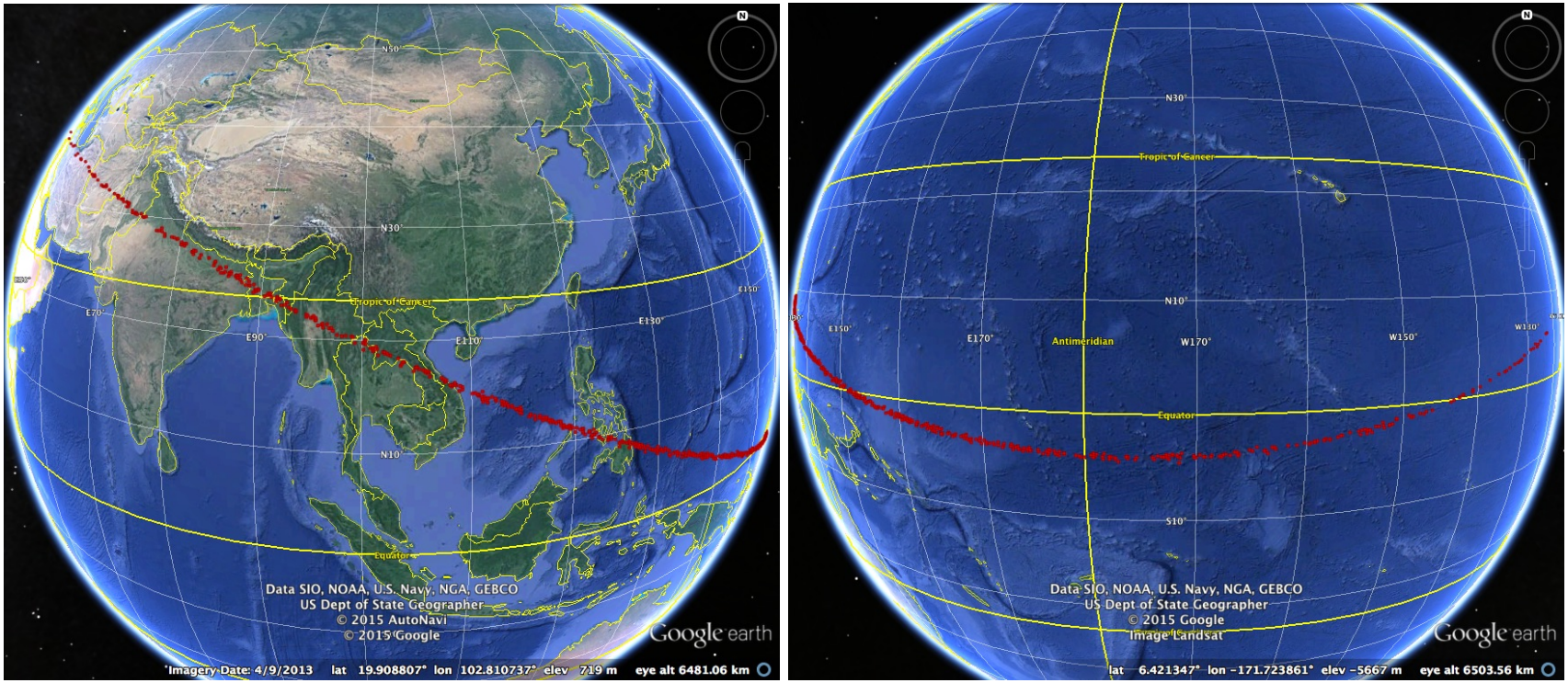


Uncertainty Region in 2022


To Sun
Uncertainty Region in 2022

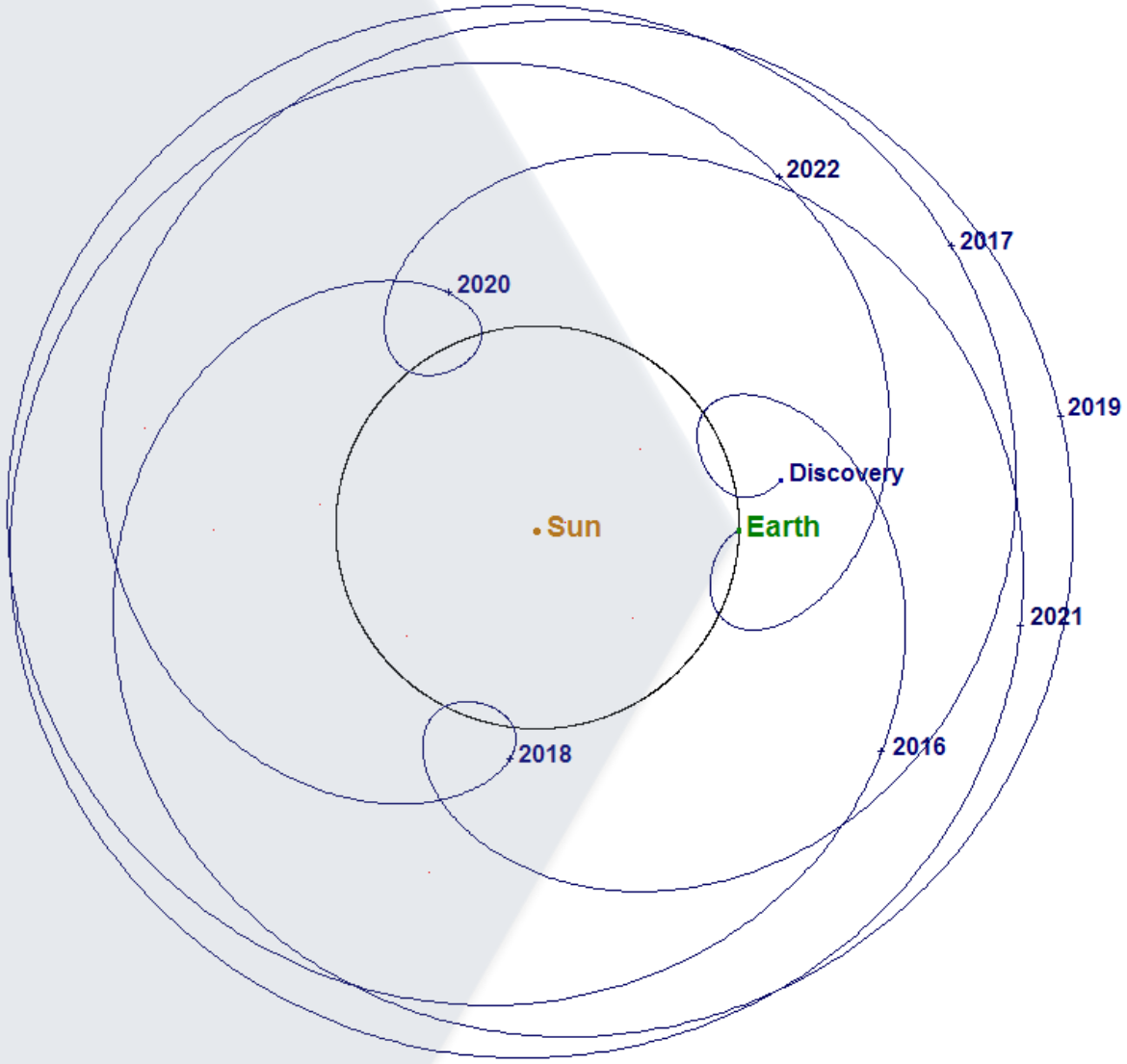

To Sun
Uncertainty Region in 2022

Risk Corridor for 2015 PDC

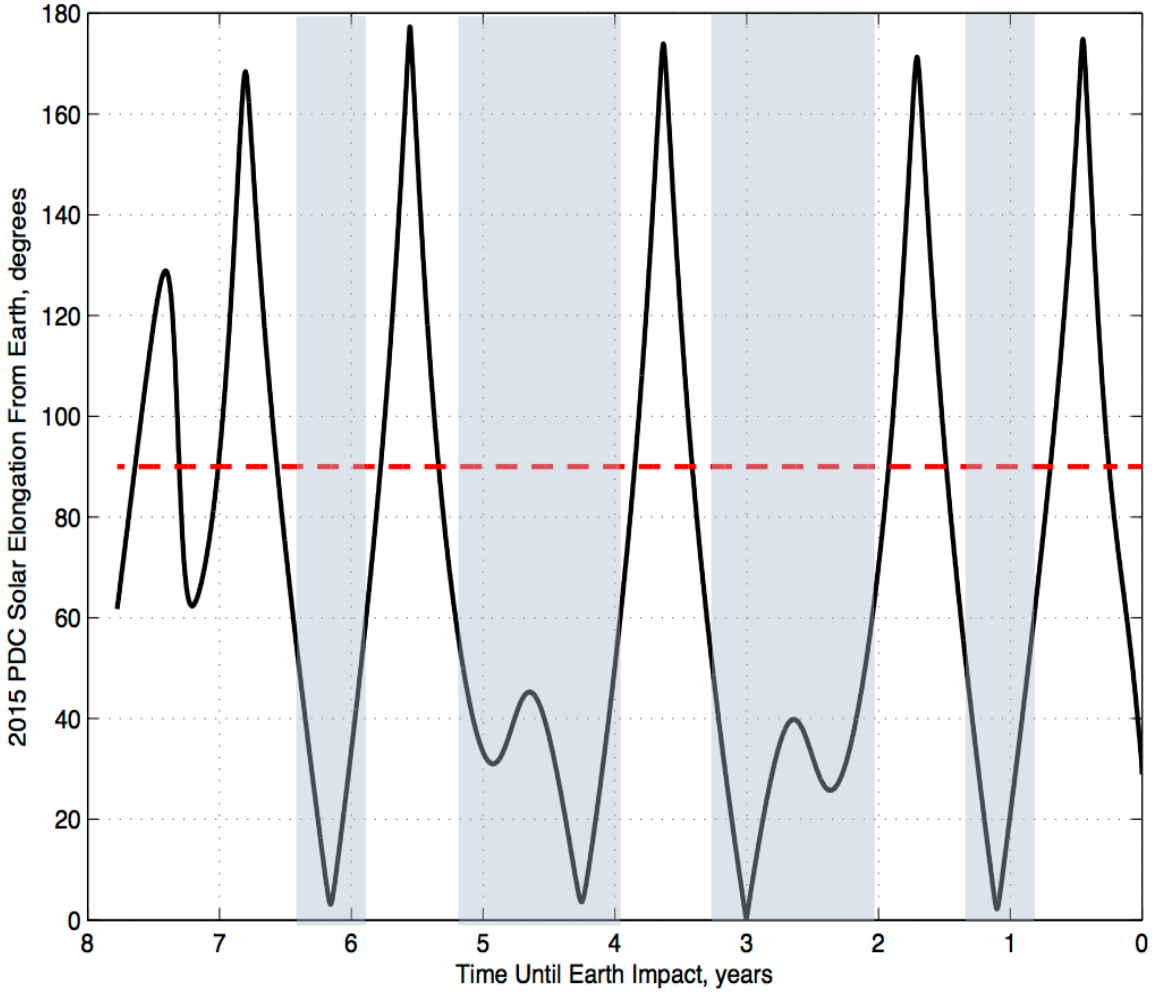


Risk corridor extends more than halfway around the world, from the eastern Pacific Ocean, across the South Pacific, through the Philippines, South China Sea, Southeast Asia, Myanmar, Bangladesh, India, Pakistan, Afghanistan, Iran, and Turkey

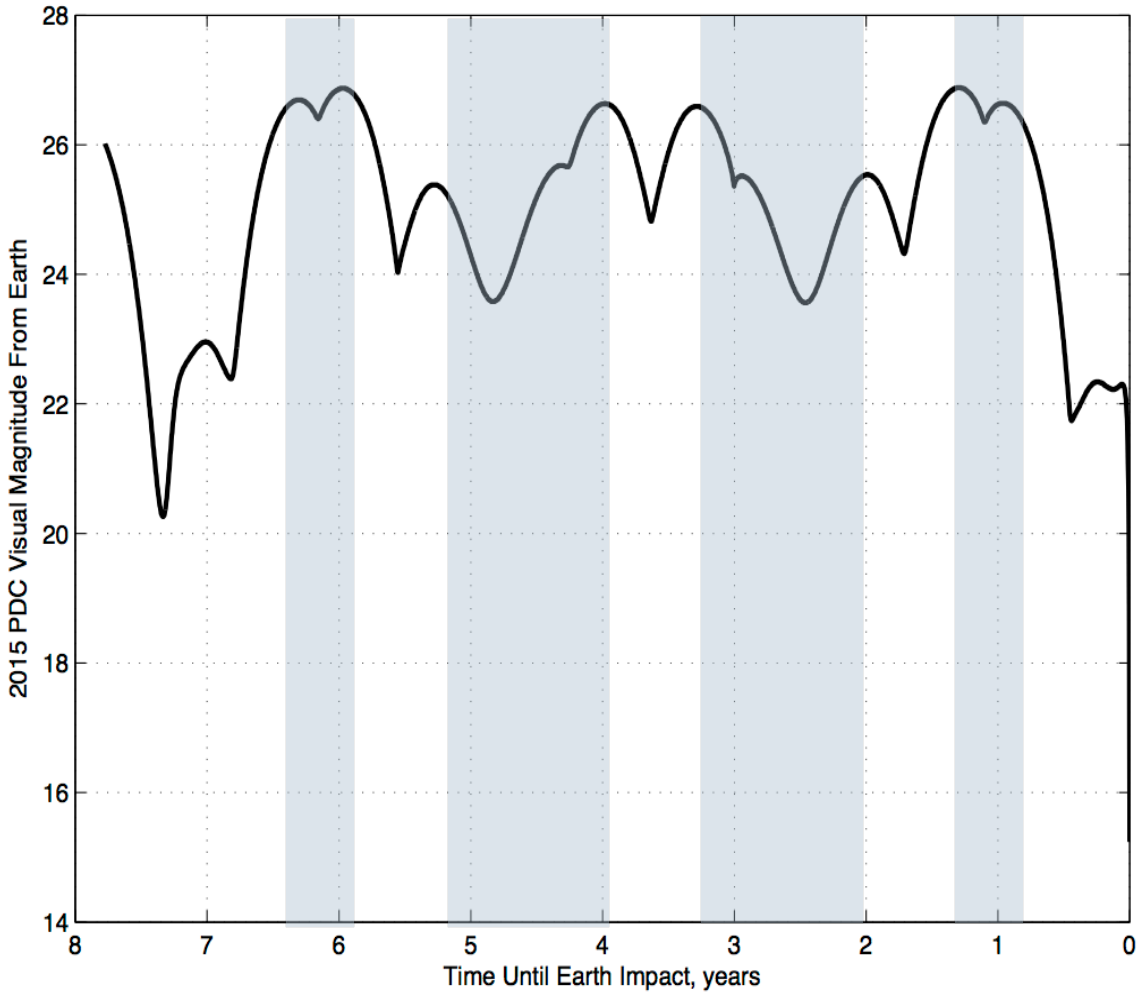
Apparent Motion of 2015 PDC



Solar Elongation vs. Time to Impact

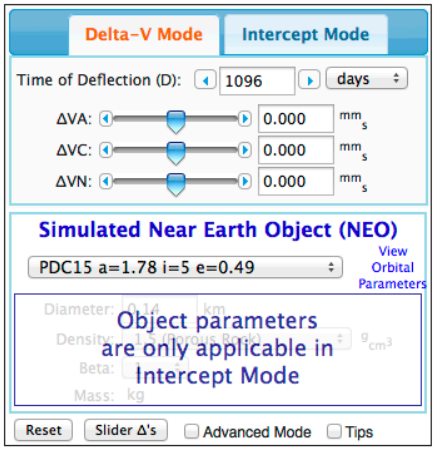


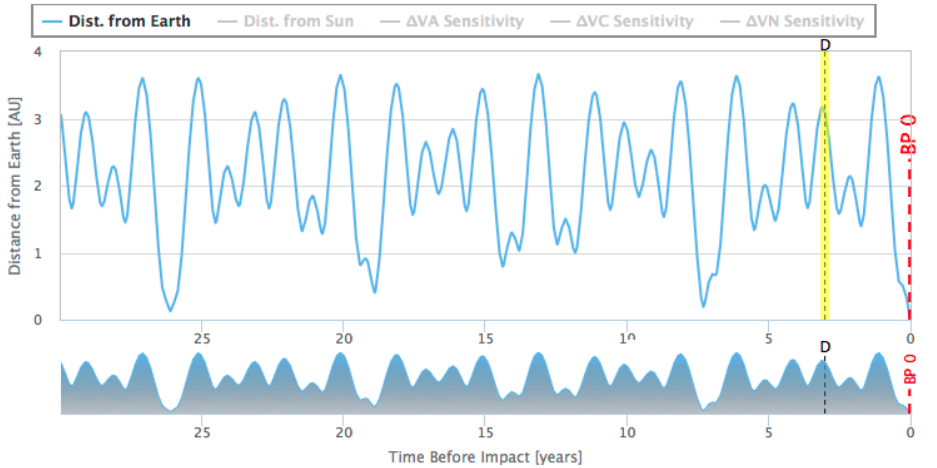
Visual Magnitude vs. Time to Impact

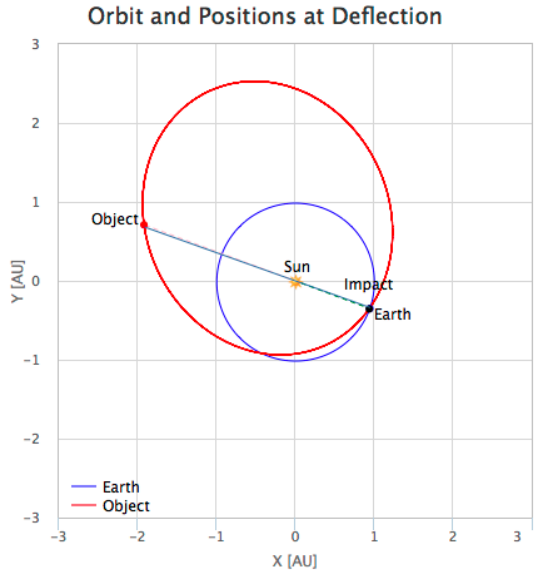


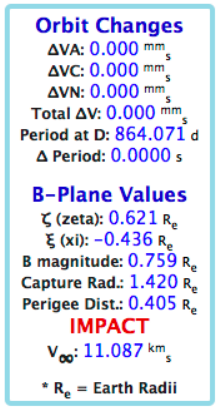
Design Your Own Deflection Mission

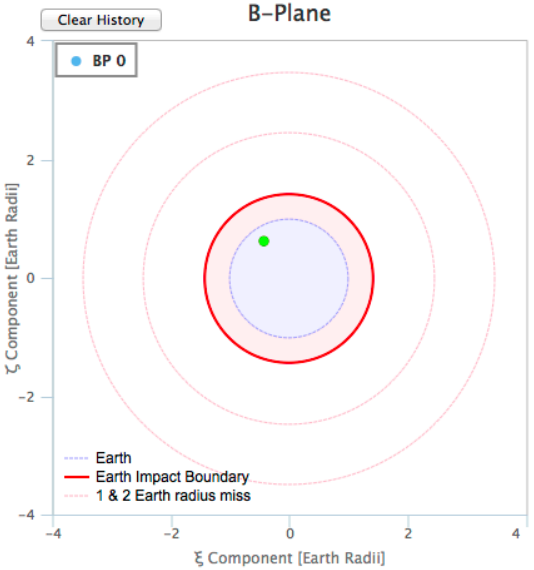
http://neo.jpl.nasa.gov/nda











Read overview

Start the app

Take a tour of the app using the 2015 PDC scenario