

NASA, planetary resources sign agreement to crowdsource asteroid detection

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NASA and Planetary Resources Inc., of Bellevue, Wash., are partnering to develop crowd-sourced software solutions to enhance detection of near-Earth objects using agency-funded data. The agreement is NASA's first partnership associated with the agency's Asteroid Grand Challenge.

Under a non-reimbursable Space Act Agreement, Planetary Resources will facilitate the use of NASA-funded sky survey data and help support the algorithm competition and review results. NASA will develop and manage the contests and explore use of the best solutions for enhancing existing survey programs. The first contest is expected to launch early in 2014 based on Planetary Resources' and Zooniverse's Asteroid Zoo platform currently in development. The partnership was announced Thursday at NASA's Asteroid Initiative Ideas Synthesis Workshop in Houston.

"This partnership uses NASA resources in innovative ways and takes advantage of public expertise to improve identification of potential threats to our planet," said Lindley Johnson, program executive of NASA's near Earth object observation program. "This opportunity is one of many efforts we're undertaking as part of our [asteroid](#) initiative."

Through NASA's asteroid initiative, the agency is enhancing its ongoing efforts to identify and characterize near-Earth objects for scientific investigation, find asteroids potentially hazardous to Earth and find candidates viable for redirection to a stable orbit near the moon as a destination for exploration by astronauts.

"The foundation of the asteroid grand challenge is partnerships like this one," said Jason Kessler, program executive for the asteroid grand challenge. "It fits the core purpose of the [grand challenge](#) perfectly: find innovative ways to combine ideas and resources to solve the problem of dealing with potentially hazardous asteroids."

NASA's efforts capitalizes on activities across the agency's human exploration, science and space technology efforts

"Asteroids hold the resources necessary to enable a sustainable, even indefinite presence in space—for science, commerce and continued prosperity here on Earth," said Chris Lewicki, president and chief engineer of Planetary Resources. "By harnessing the public's interest in space and asteroid detection, we can more quickly identify the potential threats, as well as the opportunities."

The algorithm contests are managed and executed by NASA's Center of Excellence for Collaborative Innovation (CoECI). CoECI was established at the request of the White House Office of Science and Technology Policy to advance NASA open innovation efforts and extend that expertise to other federal agencies. CoECI uses NASA Tournament Lab (NTL) for its advanced algorithmic and software development contests. Through its contract with Harvard Business School in association with Harvard's Institute of Quantitative Social Sciences, NTL uses the TopCoder platform to enable a community of over 600,000 competitors to create the most innovative, efficient and optimized solutions for specific, real-world challenges faced by NASA.

More information: For more information on NASA's Center of Excellence for Collaborative Innovation, visit: www.nasa.gov/coeci

Provided by NASA

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