
Introduction to the Habitable Worlds Observatory

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Abstract

Humans have long wondered if there were worlds around other stars – and life on those worlds. Over the last two decades, astronomers have found that the answer to the first question is a resounding YES. Those accomplishments have put us in a position to possibly answer the second question. The 2020 US Astrophysics Decadal Survey (Astro2020) laid out a path to the first telescope that can find out if habitable exoplanets are common or rare and search them for signs of global biospheres, while performing a wide range of transformative astrophysics studies and Solar System remote sensing observations. NASA has dubbed that space telescope the Habitable Worlds Observatory (HWO). This presentation will briefly cover Astro2020's recommendations and expectations for HWO in terms of scientific goals and technical capabilities. I'll then move on to NASA's current efforts to mature the HWO concept, highlighting key activities. This multi-faceted journey will require enthusiastic collaboration between a wide range of disciplines, interests, and stakeholders.

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