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Title: An Eta-Earth Projection, Based on a New Analysis of Kepler Completeness  
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Abstract: Projecting Kepler's planet frequency as a function of planet radius and period depends sensitively on an accurate estimate of the detection completeness. This is particularly important for terrestrial planets in habitable-zone orbits, because it is precisely in this regime (small radii, long periods) where photon noise makes such detections essentially impossible below a fairly sharply-defined threshold signal level. I show that this threshold can be estimated from the existing data, and that by taking this cutoff into account, the distribution of planets, as a function of radius and period, can be estimated with minimal bias. Extending this function to terrestrial planets in habitable-zone orbits yields an estimate of eta-sub-Earth.