

BIOSIGNATURES AND UV SURFACE ENVIRONMENTS OF EARTH-LIKE PLANETS ORBITING WHITE DWARFS. T. Kozakis¹ and L. Kaltenegger¹, ¹Carl Sagan Intitute, Cornell University, Ithaca, NY 14853 (tk543@cornell.edu)

Introduction: Earth-like planets orbiting white dwarfs would be exposed to different UV environments than planets hosted by main sequence stars of the same temperature, impacting both biosignatures and atmospheric photochemistry. We present model atmospheres and spectra of 1 AU equivalent white dwarf planets at different points in the white dwarf cooling process. Particular focus is put on changes in abundances for species that are thought to indicate habitability, along with biosignatures that can be detected by *JWST* as well other future missions. We find that cooler white dwarf models differ more from their main sequence temperature counterparts more so than hotter models, due to the greater difference in UV radiation with decreasing temperatures. These models can be used as inputs for instrument simulators for current and future missions.