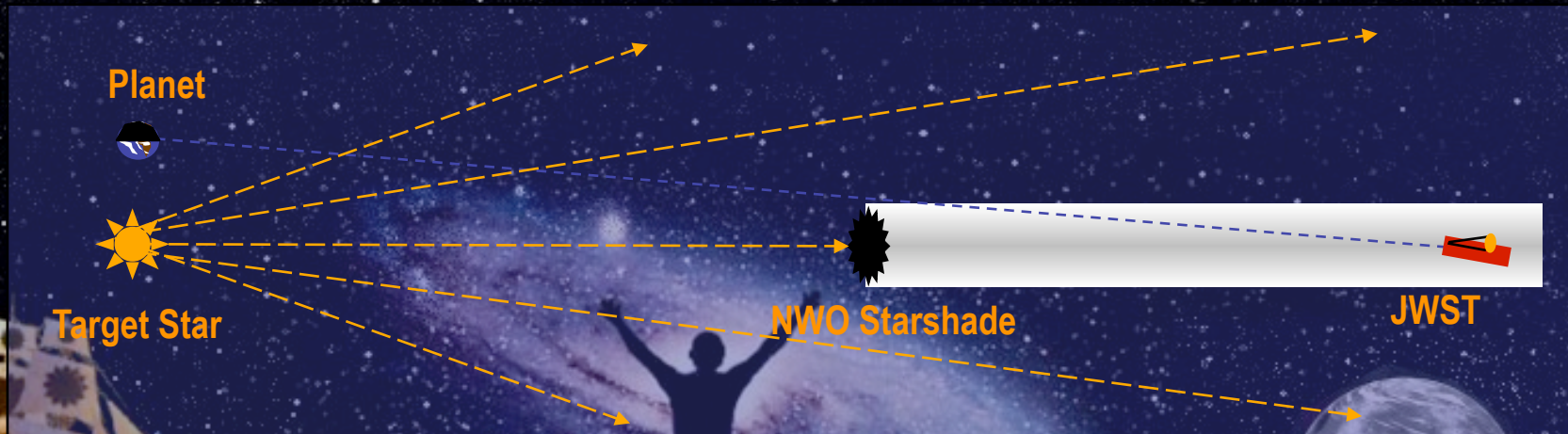
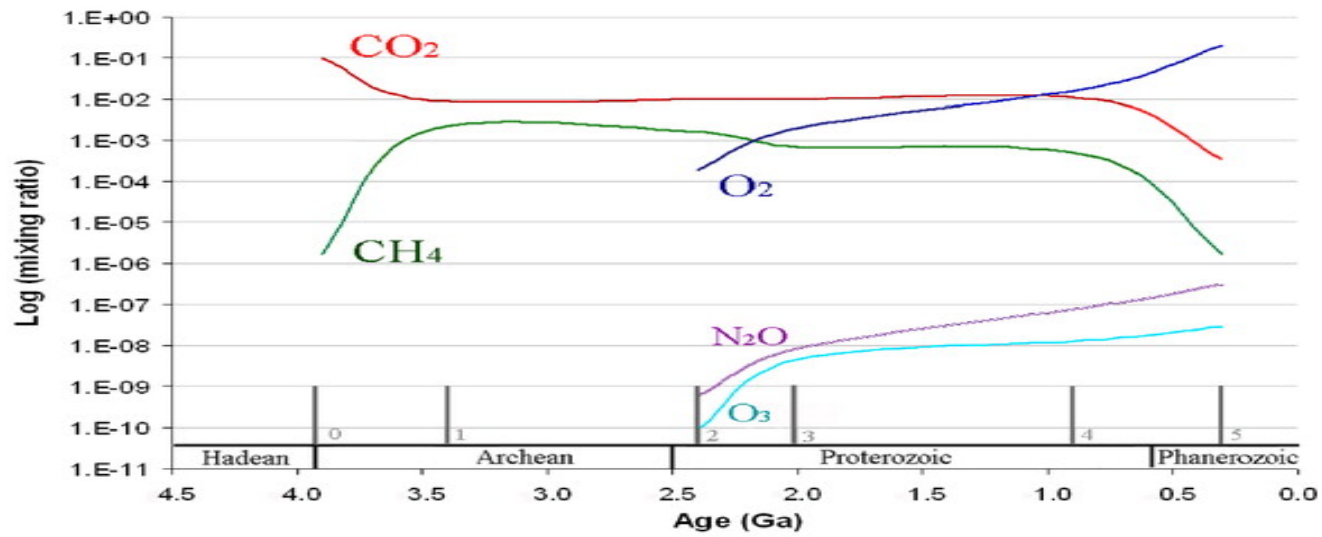


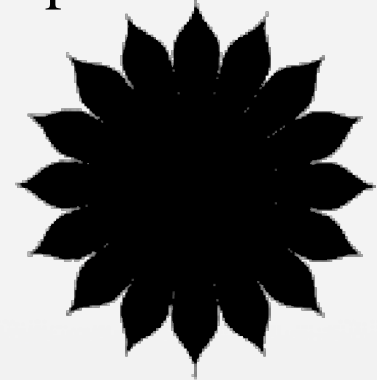
Detecting Biosignatures of an Evolving Earth-like Atmosphere via New Worlds Observer

Julia DeMarines
University of Colorado

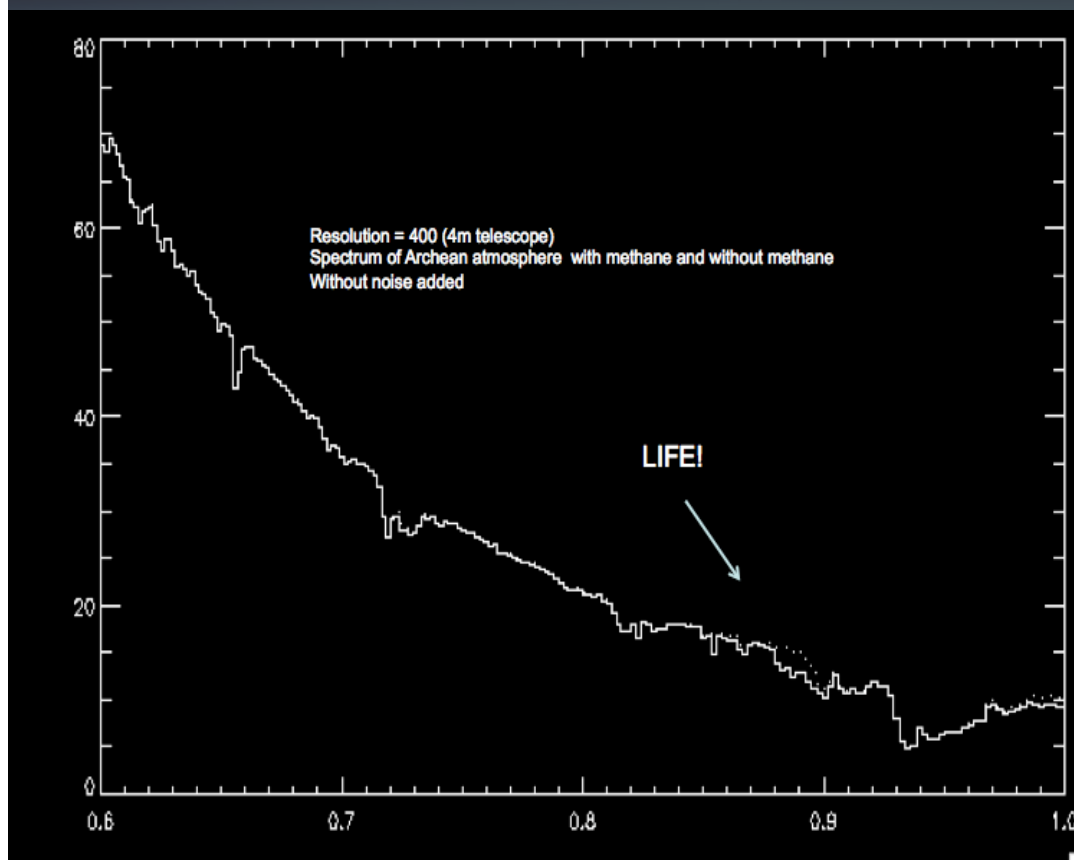




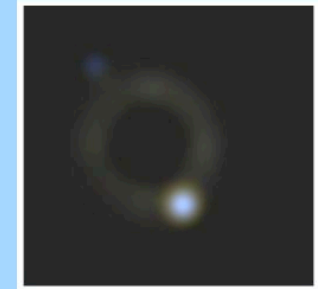
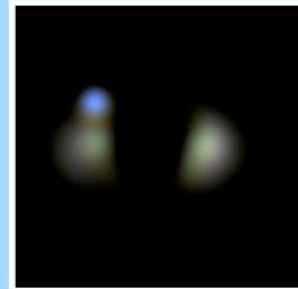
16 petal starshade



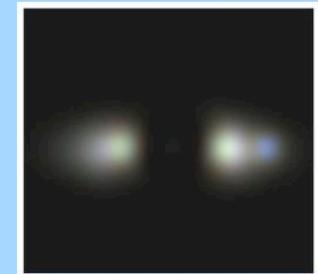
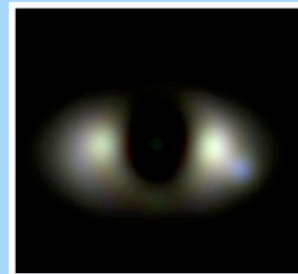
Courtesy Northrop Grumman



Simulated images: Earth (blue dot) and Venus (white dot) as viewed through the Starshade, at a distance of 10 parsecs using a 4m telescope. Courtesy of Phil Oakley



Both Earth and Venus are observed at angles of 60 and 0 degrees respectively



Just the Earth observed at angles of 60 and 90 degrees respectively