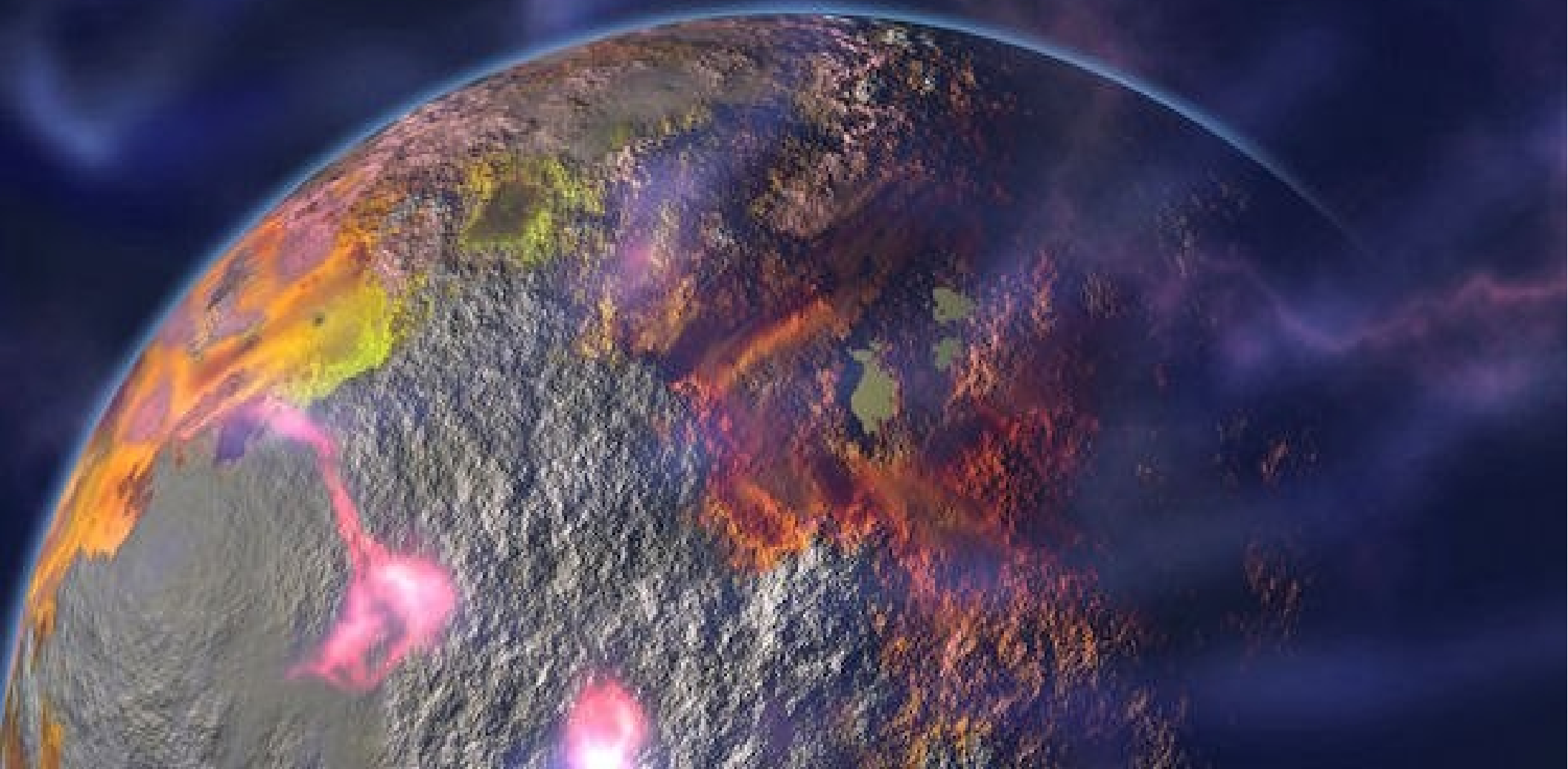


Understanding the Atmospheres of Hot Earths and
the Impact on Solar System Formation

Year 2 milestones



Things we said would be
accomplished in our proposal
during year 2.

Listed straight from the
proposal for us to discuss.

Year 2 ends January 14, 2015

Theory: Bruce

- * Complete first year modeling and

- * Prepare a paper for publication.

Theory: Bruce

* Model the effect of fractional vaporization on the bulk composition and density on Corot-7b, Kepler-10b, and 55 Cnc e for Earth-like, Moon-like, and Mercury-like starting compositions.

Theory: Bruce

- * Model the pressure and composition of vapor in equilibrium with komatiite magmas.

Lab work: Dave and Nate

- * Multipass optical system will be constructed. (MSU)

- * Second chamber modified to allow full IR sampling of the molecular beam. (MSU)

Lab work: Dave and Nate

- * Data from mass populations to IR of both condensed gases and species in the pre-condensed beam.

- * Provide spectral signatures to Mike's team for comparison with observations.

Observation: Mike

- * Complete examination of lab atmospheric spectra and stellar model spectra..

- * Order filters to distinguish atmospheric components.

Observation: Mike

* Apply for observing time at national and/or international facilities.

Other:

- * Outreach to our K-12 partners, including Boyd Elementary School and Willard Intermediate School.

- * 2 Grad Students and

- * 3-4 Undergrads

- * Group collaboration meeting (NASA-Ames?)

Wrap up

- * Web page (with these presentations and progress reports)?
- * Quarterly discussions with our NASA Technical Advisor: Pam Marcum
- * Reports to Rolla
- * Next year's meeting at NASA Ames? - open presentation day with their scientists?