

Project Details

ROSES ID: NNH15ZDA001N

Selection Year: 2015

Program Element: Focused Science Topic

Topic: The Solar-Stellar Connection

Project Title:

Exploring the Solar-Stellar Connection Using K2

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Project Member(s):

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Summary:

The proposed project involves using data from NASA's K2 mission to identify and characterize solar analogs in the K2 fields. We will make use of both primary targets (those specifically proposed by others) as well as secondary targets which serendipitously appear in the K2 "postage stamps"; we anticipate more than 1000 solar analogs in the latter category alone.

For each analog, we will determine rotation period, activity level, and spot and flare characteristics, as well as determine if the star is a Maunder Minimum candidate. In addition, for the brighter stars we will perform basic asteroseismology to better characterize physical characteristics. All results will be supplied to the focus team for follow-up and more detailed investigation.

The result of the proposed effort will be a well-defined, well-characterized, and statistically significant set of solar analogs which will be key to improving our understanding of the solar-stellar connection.

Publication References:

no references