transits of reasonable quality with ~20 control stars.

Appendix
Presented here for clarity is a mathematical summary of the flat field normalization and dark frame subtraction process applied to each aperture photometry source.

Given
\( \{s_i\} \) is the set of intensities of the source pixels
\( \{\sigma_i\} \) is the set of intensities of the sky (background) pixels
\( \{d_i\} \) is the set of intensities of the dark frame
\( \{f_i\} \) is a set of intensities of the flat field (of which there are several),

The set of the intensities of the normalized average of the flat fields \( \{F_i\} \) is given by:

\[
\{F_i\} = \frac{\{f_i\}}{\text{median}(\{f_i\})}
\]

The instrumental magnitude of the star is then:

\[
I = \sum_{all \ s} \left\{ \frac{s_i - \text{median}\{\sigma_i\} - d_i}{\{F_i\}} \right\}
\]

And the differential astronomical magnitude is given by:

\[
m = 2.5 \times \log_{10} I
\]

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