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Application Note

Supporting SBIG Images from the STV

Introduction

This Application Note describes how to support STV Images created by SBIG's STV Server and CCDOPS software. A future Application Note will describe the hardware and software interface to the camera. The STV is a new genre of CCD camera, offering video display with high-speed readout (10 frames per second), exposure times from 1 millisecond to 600 seconds, stand-alone autoguiding and imaging with built in Track and Accumulate¹ and telescope diagnostic utilities. In a breath it's bitchn'. So much for the marketing.

SBIG STV Images

The first line in the header for SBIG format STV images shows "STV Image" or "STV Compressed Image" depending on whether the image is uncompressed or compressed, respectively. Additionally, since the image header uses integers for the Exposure and Each_exposure fields and these are in units of hundredths of a second (10 milliseconds), the image header for STV images will show exposures of less than 10 milliseconds as 10 milliseconds. To allow determination of the actual value for these fields, the User_2 field may have (not guaranteed to be there) the format:

User_2 = Exposure = XXX.XXX, Each_exposure = XXX.XXX

Where the exposures, in seconds, are show in floating point format. Also note that at this time, SBIG uses User_1 to indicate the Software and Version that captured the image and that User_4 is the format:

User_4 = Y2KYear = XXXX

To specify the full (4 digit) year the image was acquired. For compatibility with various SBIG readers, the year shown in the Date field only contains 2 digits.

¹ Track and Accumulate covered by SBIG US Patent 5,365,269