



First solar observations from St. George (School & Preschool) observatory - Sofia

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Observatory “St. George”: Location



The observatory is hosted by St. George international private School - Sofia at:

$\varphi = 42^{\circ} 39' 59.0'' \text{ N}$, $\lambda = 23^{\circ} 19' 23.5'' \text{ E}$, $h = 653 \text{ m}$

Observatory “St. George”

Instrumentation: Main Telescope



PlaneWave CDK17
Astrograph with Fused Silica
Optics

$D_1 = 17'' = 432 \text{ cm}$

$f = 2939 \text{ mm}$

Focal ratio: $f/6.3$

Optical system: Dall-Kirkham
(prolate ellipsoid mirrors with
coma corrector triplet lens)

Obstruction: 43%

Automated Hendricks focuser

Observatory “St. George”

Instrumentation: Guiding Telescope



Refractor Celestron
Omni XLT 120

$D = 120 \text{ mm}$

$f = 1000 \text{ mm}$

Focal ratio: $f/8.3$

Possibility of attaching a solar filter for visual and CCD observations.



Observatory “St. George”

Instrumentation: CMOS Camera



Camera: Atik Horizon Color
CMOS Panasonic MN34230

Chip size: 17.6 x 13.3 mm
(22 mm diagonal)

Pixel size: 3.8 μm

Pixel area: 4644 x 3506

Bit depth: 12

min. exp. time = 18 μ

max. exp. time: unlimited

Observatory “St. George”

Instrumentation: CMOS Camera



Camera: Atik Horizon Color
CMOS Panasonic MN34230

Chip size: 17.6 x 13.3 mm
(22 mm diagonal)

Pixel size: 3.8 μm

Pixel area: 4644 x 3506

Bit depth: 12

min. exp. time: 18 μs

max. exp. time: unlimited

FOV (with guiding telescope)
0.5 x 0.5 deg

Observatory “St. George”: First eyepiece observations and images



The old radara system of Vitosha mounting – “Gabata”

Observatory “St. George”: First eyepiece observations and images



The old radara system of Vitosha mounting – “Gabata”

Observatory “St. George”: First eyepiece images of the Sun



20250416T094533 UTC



Observatory “St. George”: First CMOS images of the Sun

COMING SOON 😊

THANK YOU FOR YOUR ATTENTION

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