**Small Binocular Telescope**

**the new epoch of BART**

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**BART** (Burst Alert Robotic Telescope) is an autonomous robotic observatory located at Ondřejov observatory in the Czech Republic. It was constructed in 1998 in order to follow-up satellite triggers in hope to provide early observations of Gamma-Ray Burst optical afterglows.

The original configuration consisted of the 0.25m Schmidt-Cassegrain, carried by fork mount (both standard Meade product), supplemented by small WF camera (Meopta 64mm f/1.7 lens + SBIG ST-8 CCD).

During the early epoch, the WF camera was the most important instrument of BART (covering large errors boxes of GRB localization). The setup of the telescope was progressively changed in time, reflecting actual needs of GRB research.

In 2016, we decided to turn the BART into purely wide-field telescope, replacing the 0.25m SC by pair of 0.2m WF astrographs, getting decently wide FOV 3.5x3.5 deg and zero dead-time between exposures.

The main motivation was to cover significant fraction of Fermi/GBM GRBs alerts. Another intention is in search of optical transients.

The new telescope is called Small Binocular Telescope (SBT), usually referred to as BART/SBT.

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**Optics & CCD #2**

ASA H200 Astrograph 8" f/ 2.8
D = 20 cm, f = 560 mm
hyperbolic primary mirror
fully corrected FOV 60mm

CCD MII G4-16000
9μ pixels, 4k x 4k
7-position filter-wheel
filters r, i, Hα, SII, clear
FOV 3.5° x 3.5°

**Optics & CCD #1**

ASA H200 Astrograph 8" f/ 2.8
D = 20 cm, f = 560 mm
hyperbolic primary mirror
fully corrected FOV 60mm

CCD MII G4-16000
9μ pixels, 4k x 4k
7-position filter-wheel
filters r, i, Hα, SII, clear
FOV 3.5° x 3.5°

**Mount & drive**

Losmandy HGM Titan 50
Driving unit Gemini2
New high-torque motors

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SBT's First Light celebration, 4.4.2019

NGC7000, taken by BART/SBT filter Hα, 60s single exposure, full-size image (3.5x3.5 deg).

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**Disassembly**

The main optical component (0.25m SC) removed to became part of CTA-Ri/FRAM telescope at ORM, La Palma.

**Idea and proposal**

to rebuild BART into purely WF telescope