

eROSITA Factsheet

eROSITA Telescope:

Start of the project: 1 April 2007 (DLR funding approved)

SRG Mission adoption: 18 August 2009 (contract signed between DLR and Roscosmos)

Mirror modules: 7 (with 54 mirror shells each)

Mirror shell smoothness: ~ 0.3 nm

Cameras: 7 pnCCDs with 384 x 384 pixels each

Field of view: ~ 1 degree in diameter

Operating temperature: around -85°C

Energy range: 0.2-8 keV

Launch: 13 July 2019

Start of camera commissioning: 22 August 2019

Start of operation of all 7 cameras: 13 October 2019

Orbit: Halo orbit around L2

Spacecraft: Spectrum-Roentgen-Gamma (together with ART-XC telescope)

eRASS-1: First SRG/eROSITA All-Sky Survey

Start: 13 December 2019

Completed: 11 June 2020

Days to complete all-sky image: 182

Data downloaded (eROSITA only): ~ 165 Gb

Number of commands issued (eROSITA only): > 15000

Photons collected: ~ 400 million (in the energy range 0.12-5 keV)

Average exposure: 180 seconds

Sources detected: 1.1 Million

Approximate break-down of sources:

- 77% Active Galactic Nuclei
- 20% stars with strong, magnetically active hot coronae
- 2 % clusters of galaxies
- others: bright X-ray binaries, supernova remnants, extended star forming regions, transient (e.g. Gamma-Ray Bursts)