

# Russian Space Astrometrical Experiment “Svecha”

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General goals of the “Svecha” space experiment are:

- 1). astrometrical catalog of all objects (with coordinates, proper motions and parallaxes) with precision  $25 \mu\text{as}$  for objects till  $16^m$  and with precision  $100 \mu\text{as}$  till  $20^m$ .
- 2). catalog of multiband photometry (10–16 filters) with precision  $0.001^m$  for all objects till  $18^m$  and with precision  $0.01^m$  till  $22^m$ .
- 3). catalog of radial velocities for all objects brighter  $18 - 19^m$  in 4–6 spectral intervals independently.
- 4). medial resolution spectral catalog ( $R = 1/1000 - 1/3000$ ) for all objects till  $12^m$  and till  $16 - 18^m$  selectively.

Experiment based on autonomous satellite on geosynchronous orbit.

Mission on theoretical stage of development.

Construction of the satellite and astrophysical applications will be discussed.