

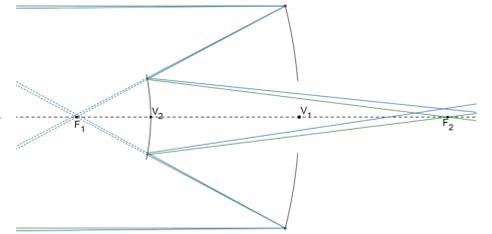
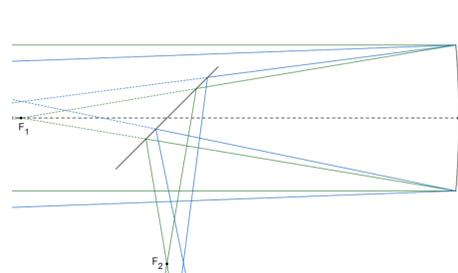
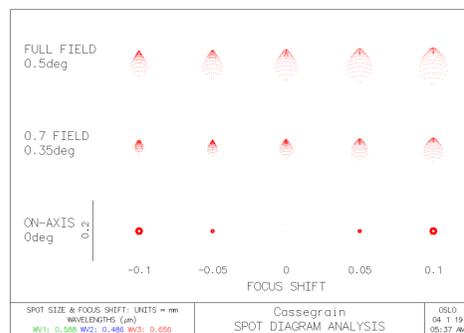
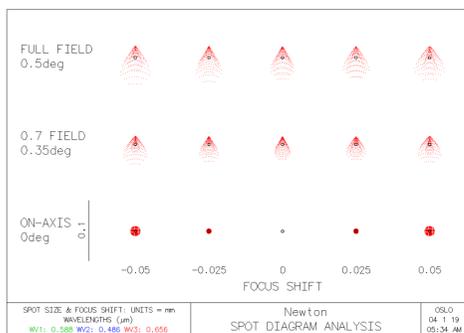
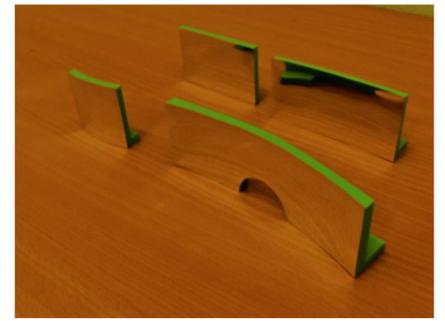
TECHNOLOGIES IN STEM EDUCATION

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Mirror Telescopes Models

Newtonian and Cassegrain telescope models can be created on a 3D printer. These models are available for download from <https://kdf.mff.cuni.cz/optickasada>. After printing the body of the model, it is necessary to glue a mirror foil on it. Carefulness is required, otherwise the mirror imaging would be inaccurate.

There is also a possibility to add four magnets (6 mm diameter) to the bottom of the model, so it may be used on a magnetic board. Two sheets with outline of the telescopes can be downloaded from the webpage above.



These models have the ability to show not only ray paths, but also mirror optical aberrations, like spherical or commatic aberration.

If usage of software is preferred, Geogebra or OSLO EDU can be deployed. The figures above were designed with them. OSLO EDU is

commonly used among astronomers when developing optical systems because of its comprehensive analysis of optical aberrations. Secondary and high school students can work with both these programs themselves.

