



Wavefront Sensing and Optical Control Software

wavefront sensing portfolio

Description

This software is a comprehensive suite of wavefront sensing and optical control tools designed to measure the wavefront and control the optical systems in order to correct for distortion. It combines phase retrieval and phase diversity algorithms with a variety of control strategies. This software will perform these operations for filled aperture telescopes, segmented aperture telescopes, sparse aperture telescopes and interferometric systems.

Features and Benefits

- This software package performs both image-based wavefront sensing and optical control.
- It is capable of modeling adaptive and active optical systems, coronagraphs, and optical response to MEMS devices.
- This software can do large scale modeling due to its inherently parallel nature.

Applications

- Ground Telescopes
- Remote Sensing
- Medical Imaging
- Camera Design
- Interferometry

For More Information

If you are interested in more information or want to pursue transfer of this technology, GSC-14725-1, please contact:

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To view Goddard's entire portfolio of wavefront sensing technologies, please visit:
<http://ipp.gsfc.nasa.gov/wavefront>