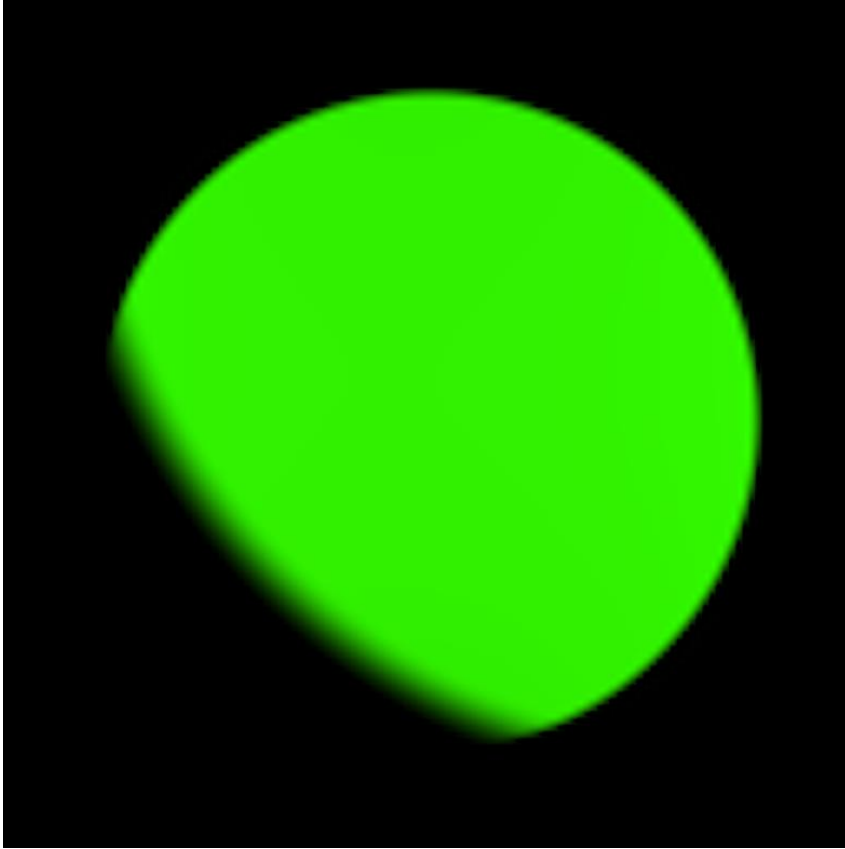


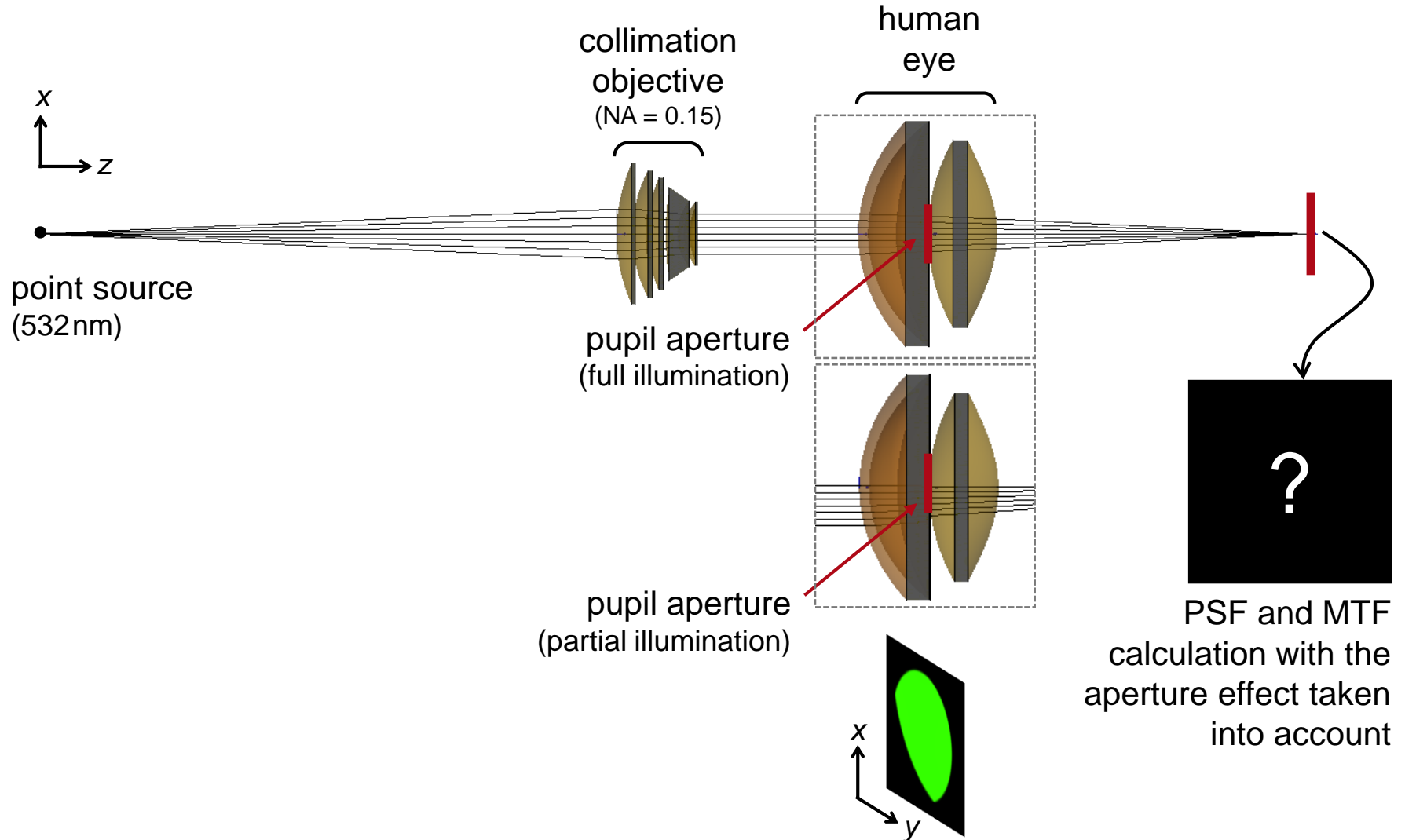
Advanced PSF and MTF Calculation of Imaging System

Abstract



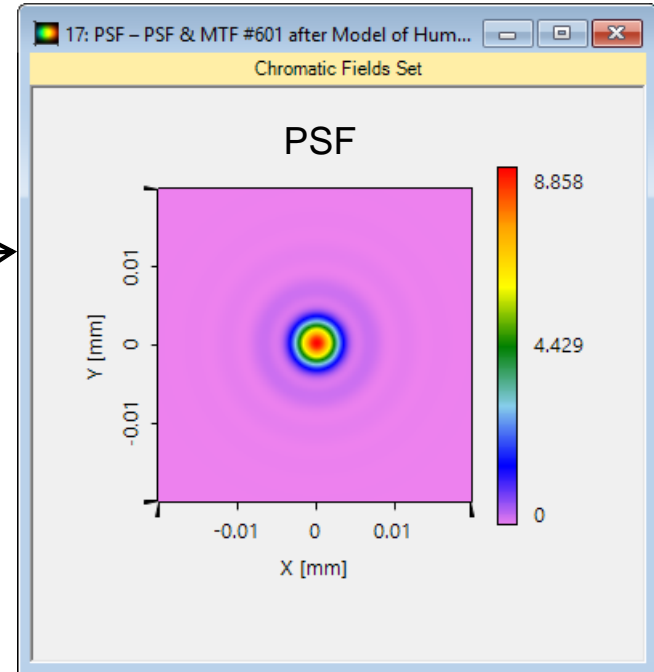
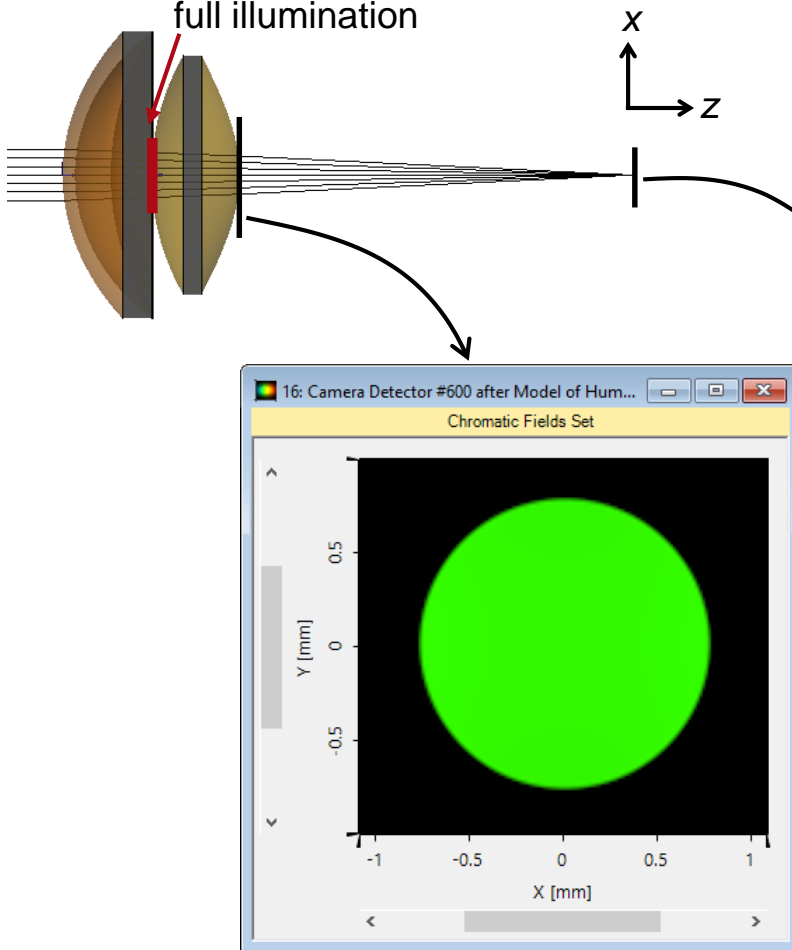
For practical imaging systems, their performance can be greatly affected by the apertures. In different system setups and under different illumination conditions, the actual shape of the apertures may vary a lot. To investigate such effects, an imaging system consisting of a collimation objective and human eye is modeled. By changing the illumination conditions, the cases with fully and partially illuminated apertures are studied by checking the PSF and MTF.

Modeling Task

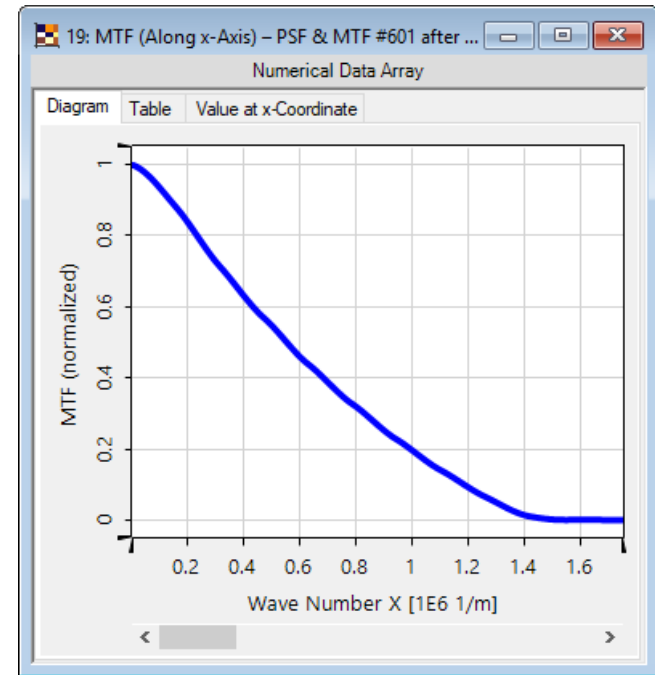
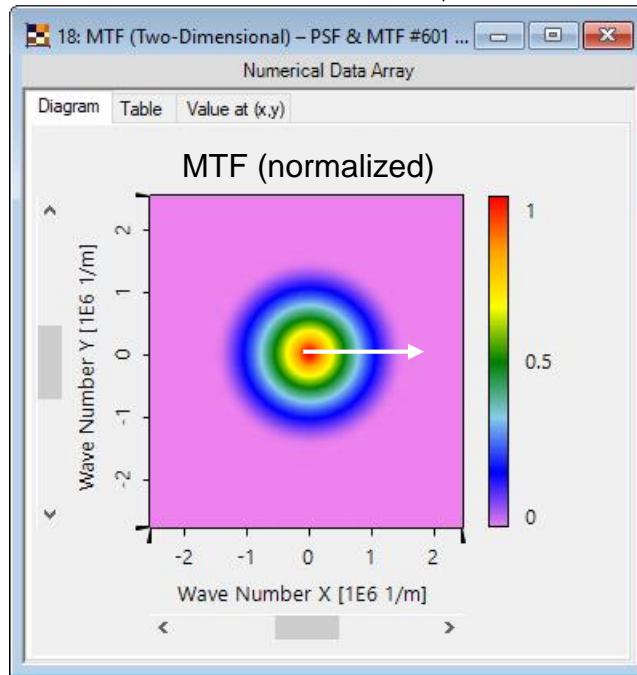
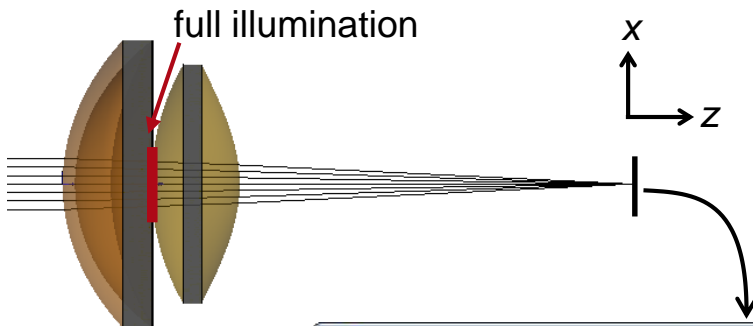


Results

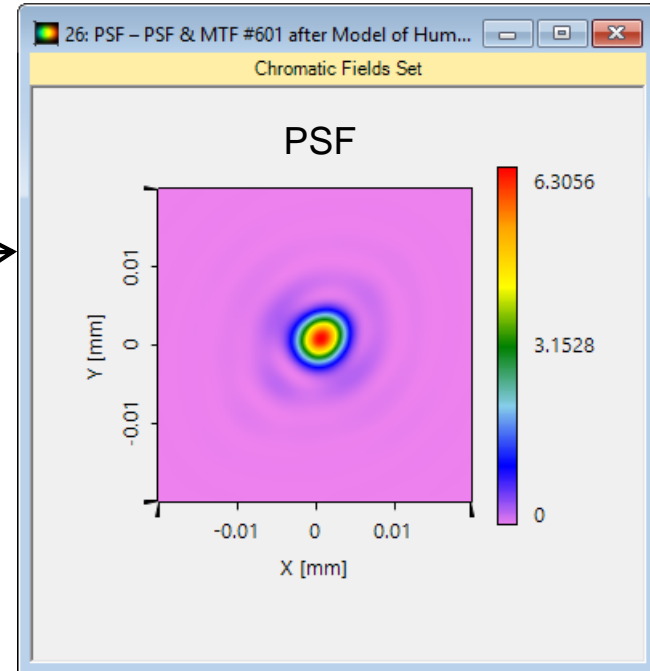
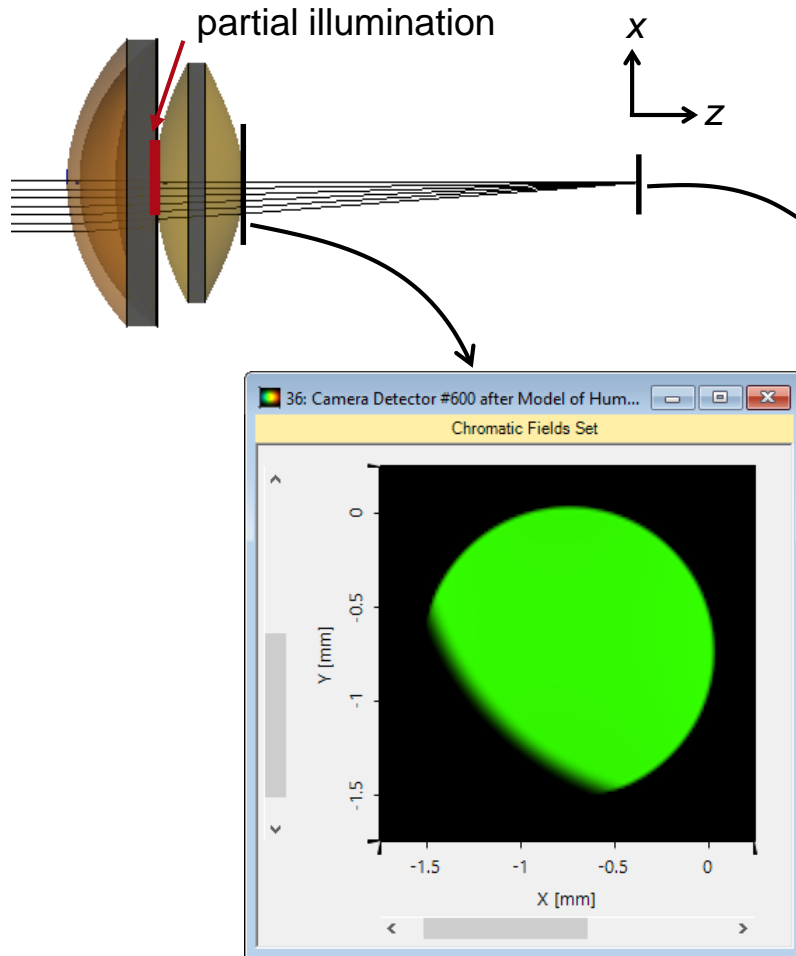
full illumination



Results

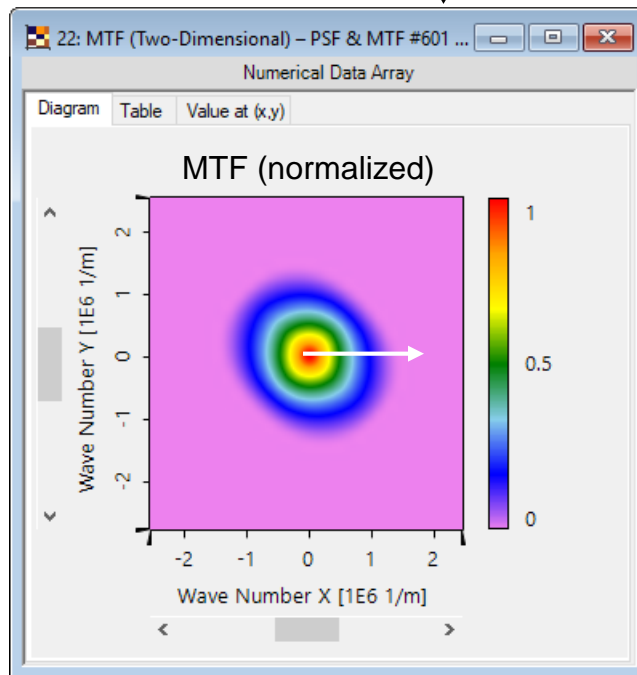
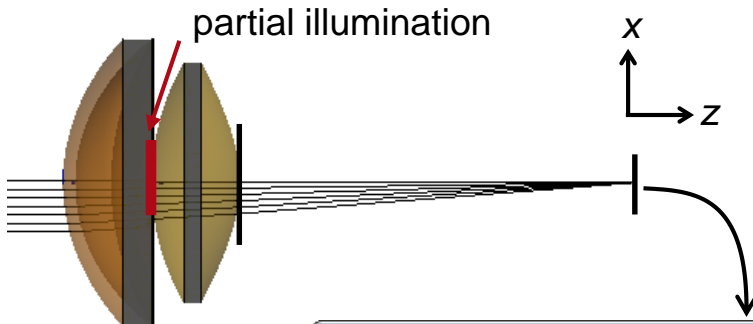


Results

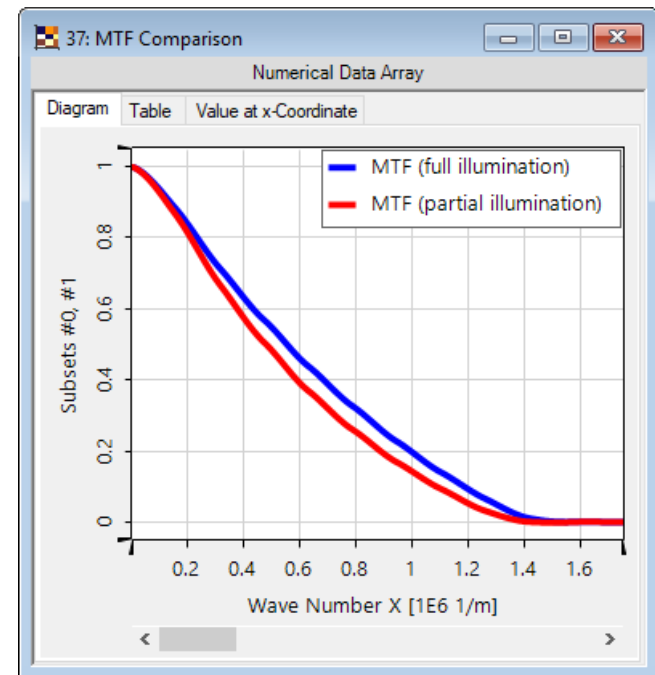


PSF calculation with partially illuminated aperture taken into account takes 9 seconds.

Results



comparison between MTFs
with full and partial
illumination of the aperture



Document Information

title	Advanced PSF and MTF Calculation of Imaging System
version	1.1
VL version used for simulations	7.4.0.45
category	Application Use Case
