



# The Mikulski Archive for Space Telescopes Newsletter

October 2013

Space Telescope Science Institute

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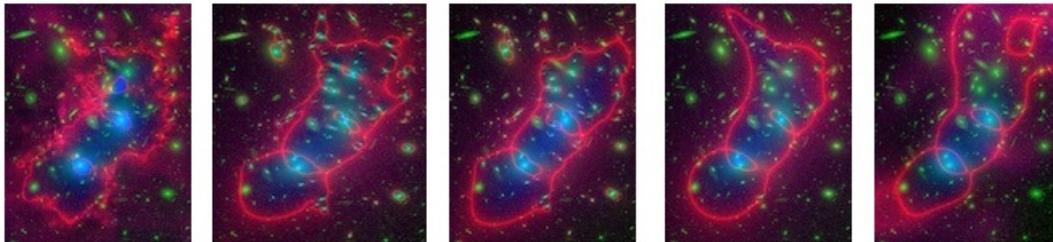
The Mikulski Archive for Space Telescopes (MAST) Newsletter disseminates information about new data, analysis tools, and site functionality at MAST. Inquiries should be sent to [archive@stsci.edu](mailto:archive@stsci.edu).

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## First Lensing Models From The Frontier Fields Arrive At MAST

Abell 2744: Overlay of magnification (red) and mass models (blue) on the full-band HST imaging (green)



Bradac et al.

Ebeling et al. (CATS)

Merten, Zitrin et al.

Sharon et al.

Williams et al.

We are pleased to announce that the first set of models are now available from the [Frontier Fields project at MAST](#). These first set of models cover the Abell 2744 cluster, while other clusters will have models made available in the near future. Gravitational lensing models from five independent research groups are provided. The data products include, for each group's models:

- Lensing magnification maps at redshifts  $z = 1, 2, 4,$  and  $9$ .
- A weak lensing shear map.
- A mass surface density map.
- An online web tool to calculate magnification at any given redshift for any of the models.
- Interactive, 3-color displays of the magnification maps; a first for models at MAST.

Each group generated models based on a common set of input data. The current observational data for Abell 2744 come from drizzled archival data, while the first set of new observations for the Frontier Field are scheduled to begin later this month. You can access the observational data used in the calculations, all of the models, the online magnification tool, and the interactive displays at [MAST's Frontier Field Models](#) project page.

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