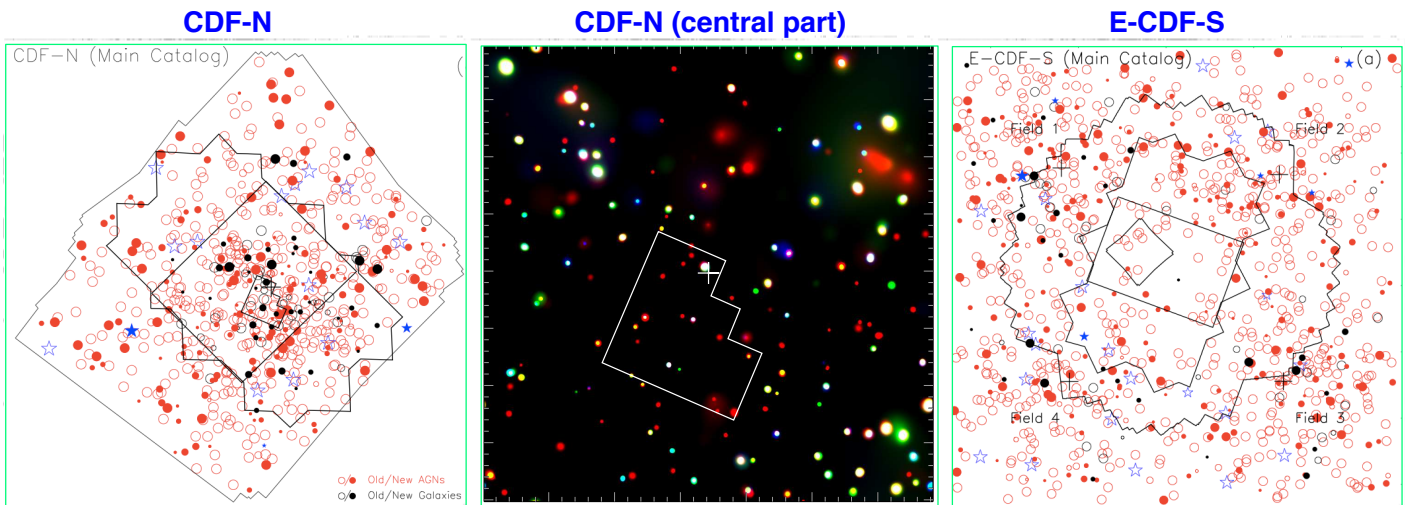


# THE 2 MS CDF-N SURVEY AND THE 250 KS E-CDF-S SURVEY: IMPROVED POINT-SOURCE CATALOGS

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(1. USTC; 2. PSU; 3. Durham; 4. PUC; 5. JHU) (\* Send catalog requests to [xuey@ustc.edu.cn](mailto:xuey@ustc.edu.cn) <http://staff.ustc.edu.cn/~xuey>)  
(2016, ApJS, in press; arXiv: 1602.06299)

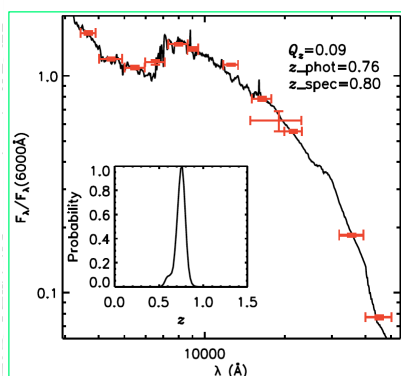


- **Two-stage source-detection approach:**
  - 1. wavdetect run at  $1E-5$  → liberal candidate sources
  - 2. no-source probability cut → reliable final sources
- **Sophisticated and reliable X-ray photometry extraction**
- **~1800 (~500 new) sources detected in the two fields with lots of info:**
  - X-ray positions, counts, fluxes, luminosity
  - multiwavelength identifications, redshifts
  - source classifications, observed AGN and galaxy source densities
- **A factor of ~1.5-2 improvement in on-axis flux limits than before**
- **Catalogs, images, and data products publicly available at**
  - <http://www2.astro.psu.edu/users/niel/hdf/hdf-chandra.html>



## PHOTOMETRIC REDSHIFTS IN THE HAWAII-HUBBLE DEEP FIELD-NORTH (H-HDF-N)

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(1. USTC; 2. PSU; 3. Durham) (published as 2014, ApJS, 215, 27)



- **Photo-z for sources in the entire (~0.4 deg<sup>2</sup>) H-HDF-N**
- **Based on PSF-matched broadband (U band to IRAC 4.5  $\mu\text{m}$ ) photometry**
- **A total of 131,678 sources:**
  - AGN/galaxy/star classification
  - $\sigma_{\text{NMAD}} = 0.029$  for non-X-ray sources
  - $\sigma_{\text{NMAD}} = 0.035$  for X-ray sources
- **Catalog (multi-band photometry plus photo-z) publicly available**

