Chandra Deep Field South

Astronomers obtained what is known as the Chandra Deep Field South (CDFS) by using the telescope to observe the same patch of sky for over six weeks of time—making it the deepest X-ray image ever taken. This image, where the Chandra sources are colored blue, contains a small section of the CDFS that has been combined with optical and infrared data from Hubble. Using this unique data set, researchers determined that black holes are actively growing between 800 million and 950 million years after the Big Bang. This result has implications for how black holes in the very early Universe evolved.