Distant large galaxies with 'old' stars—another unpleasant surprise for big bang supporters

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Astronomers have recently used the Spitzer Space Telescope to analyze the spectra of high-redshift ($z \approx 6$) galaxies.[1,2] These galaxies had been previously identified using the Hubble Space Telescope and are part of the Hubble Ultra Deep Field. The extreme redshifts, interpreted as extreme distances, were confirmed using the 10-metre Keck Telescope. In secular thinking, looking farther out into space means looking back in time—closer to the big bang. The extreme distance of these galaxies means we are seeing them as they appeared at a time *less* than 1,000 million years after the alleged big bang.[3]

The results are surprising from a secular, big bang perspective. First of all, the galaxies are more massive than expected for this distance. Dr Mark Lacy, one of the researchers involved in this new discovery states:

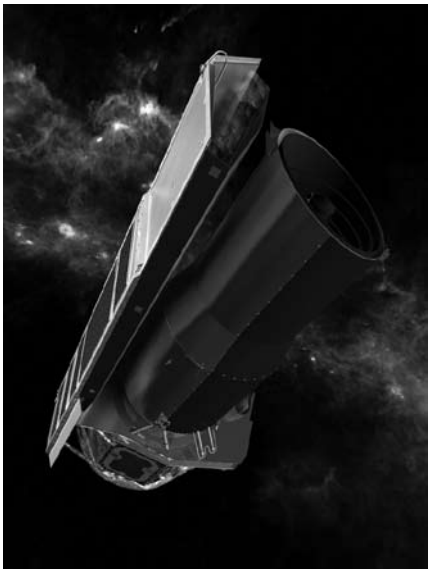

Image by NASA/JPL-Caltech

The Spitzer Space Telescope (SIRTF) against the infrared sky with the Milky Way Galaxy and Orion.

> 'It seems that in a couple of cases these early galaxies are nearly as massive as galaxies we see around us today, which is a bit surprising when the theory is that galaxies start small and grow by colliding and merging with other galaxies.'[4]

Of course, in a creationist cosmology, we would expect the galaxies to be fully formed right from the start. There is no need to build large galaxies from small ones in a biblical worldview.

Second, the spectra revealed the existence of a 'mature' stellar population. These galaxies contain relatively 'old' stars[5] (ages in excess of 100 million years)—according to the secular astronomers' interpretation of the data. However, since the age of universe at the distance of these galaxies is less than 1,000 million years, this means that the stars formed surprisingly soon after the supposed big bang. From a secular standpoint, it is surprising that the galaxies can appear so *old* if they are really so *young*. Professor Richard Ellis, one of the scientists on the project states:

> 'The real puzzle is that these galaxies seem to be already quite old when the Universe was only about 5 percent of its current age. This means star formation must have started very early in the history of the Universe—*earlier than previously believed* ' [emphasis added].

Of course, biblical creationists would not agree with many of the interpretations of the data. In particular, we would question the assumptions used in determining the age of the stars. However, this new discovery is an example of an internal inconsistency in the big bang worldview. The secular standard model (the big bang and stellar evolution) is used to interpret the observations; this then leads to conclusions that go against some of the assumptions of the standard model.

In the creationist worldview, stars are young (thousands of years old from Earth's perspective—not millions). But it is not surprising that secular astronomers would estimate a much older age. Since God created stars 'mature' (in the sense that they were functional right from the start), and since secular astronomers assume that stars came to be by a natural process, they would necessarily compute an age for stars that is vastly inflated (since it would take time for them to become 'mature' naturalistically). Likewise, in the Christian worldview, large galaxies do not need to be assembled from smaller ones. Since God does not do anything 'half-way', we would not expect partially formed galaxies. Observing fully-formed large galaxies at extreme distance is consistent with the principles of Scripture. These latest results support biblical creation and provide yet another example of observations that contradict the predictions of the big bang.

References

1. Eyles, L.P., Bunker, A.J., Stanway, E.R., Lacy, M., Ellis, R.S. and Doherty, M., Spitzer Imaging of *i'*-drop Galaxies: Old Stars at $z \approx 6$, *M.N.R.A.S.* Preprint **22**, February, 2005; <uk.arxiv.org/PS_cache/astro-ph/pdf/0502/0502385.pdf>, 2 May 2005.
2. The interpretation of the data presented here is predicated on the correctness of the Hubble redshift-distance interpretation. No independent method of distance hence age determination is available, hence the reliance of the redshift as a distance determination at these extreme redshifts.
3. The universe is supposedly 13,700 million years old according to the current big bang model.
4. <www.astro.ex.ac.uk/people/bunker/spitzer/Spitzer.html>, 1 August 2005.
5. These stars are old (by secular dating methods) relative to their expected age for that distance. They are not old when compared with nearby stars (some of which are supposedly many times older).