

Much is unknown; particularly what factors influence their occurrence and what important results they may have. They are believed to have played a role in speciation within the family Bovidae. As further research reveals more information, it is likely we will find still another designed mechanism within the genome that points to an all-wise Creator.

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7. Although the offspring are viable, the males at least are infertile. Fontana, F. and Rubini, M., Chromosomal evolution in Cervidae, *Biosystems* **24**(2):157–174, 1990.
8. For example, the bongo (*Tragelaphus euryceros*,  $2n = 33$  in males, 34 in females). This species has been crossed with the sitatunga (*T. spekei*,  $2n = 30$ ) to form a fertile offspring. Koulischer, L., Tijskens, J. and Mortelmans, J., Chromosome studies of a fertile mammalian hybrid: the offspring of the cross bongo x sitatunga (Bovoidea), *Chromosoma* **41**(3):265–270, 1973.
9. For example, in humans there are five acrocentric chromosomes (13, 14, 15, 21, and 22). While any of these can be involved in a ROB, all combinations are rare except translocations between 13 and 14, and between 14 and 21. Bandyopadhyay, R., Heller, A., Knox-DuBois, C., McCaskill, C., Berend, S.A., Page, S.L. and Shaffer, L.G., Parental origin and timing of de novo Robertsonian translocation formation, *Am. J. Hum. Gen.* **71**(6):1456–1462, 2002.

## The big bang fails another test

John Hartnett

One of the alleged ‘proofs’ of the big bang model of origins is said to be the Cosmic Microwave Background (CMB). This is claimed to be the ‘afterglow’ of the original ‘explosion’.

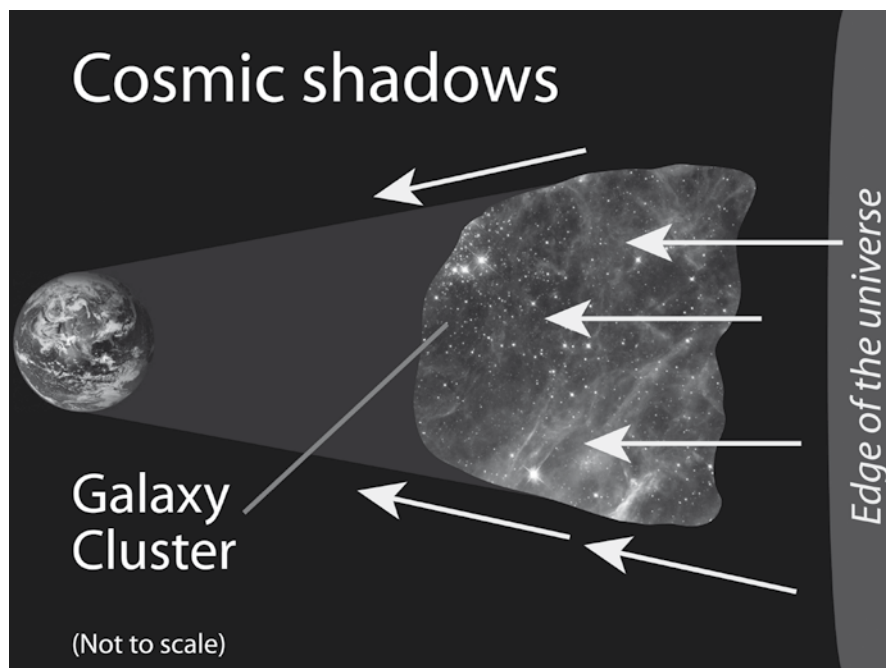
I previously reported<sup>1</sup> that there was found to be a correlation between the relatively cooler spots of the two-dimensional surface temperature maps of the CMB and the locations of galaxy clusters and superclusters. Since the source of the CMB radiation is supposed to be the putative big bang fireball, this correlation indicates that at least some of the important features of the CMB maps are related to the galaxy clusters themselves.

According to theory, the big bang fireball should be the most distant light source of all. Thus all galaxies would be in the foreground of this source. Therefore all CMB radiation must pass the intervening galaxies between the source and the observer, here on Earth. This radiation passes through

the intergalactic medium, between the galaxies in a cluster, and is scattered by electrons, through inverse Compton scattering,<sup>2</sup>—the *Sunyaev–Zel’dovich effect* (SZE).<sup>3</sup> When this happens, the path of the CMB radiation is interrupted and distorted.

The previously reported (2004) analysis by Prof. Shanks of the University of Durham,<sup>4</sup> showed that there was such a strong correlation of this effect that it could be disputed that the CMB radiation contains any information at all from its distant source. This was because the alleged 70  $\mu\text{K}$  anisotropies (unevennesses) that were claimed as a prediction of the big bang theory, and claimed to be the seeds of galaxies, could instead be attributed to this SZE. They also reported that if it could be shown that this SZE was indeed the cause of the cooler regions in the CMB temperature maps out to one degree from the centre of a cluster, and if it is also found that the effect applies to more distant clusters, then the contamination may be significantly greater, and that would be very damaging to the idea of the source being in the background.

Now (2006) it has been reported and published in the *Astrophysical*



If the source of the CMB radiation was in the background to the galaxy cluster shown it should cast a shadow as seen from Earth. (After ref. 6)

*Journal*<sup>5</sup> that indeed there is strong evidence, out to at least one degree from the cluster centre, of an anomalous cooling. This new work looked for a shadow in the CMB radiation cast by foreground galaxies and compared the observed shadow to what was expected from the SZE. However, the expected cooling due to the shadowing effect of the galaxy cluster was found to be deficient by about a factor of 4 and consistent with there being no shadowing at all. For example it might have been expected that the foreground cluster would cast a 160  $\mu\text{K}$  shadow (i.e. would be cooler by this amount) but only 40  $\mu\text{K}$  was observed. The decrement was sometimes found to be an increment in some clusters. This analysis was averaged over 31 clusters observed with a net result indicating that on average no shadow was detected. Due to the statistical nature of the analysis, if one quarter of the galaxies show a shadow that means there is no shadow. In fact, the questions are asked: Why are the clusters so relatively hot? Is there an additional source of emission that cancels out the expected shadow?

This was reported in *ScienceDaily.com* under the headline ‘Big Bang’s Afterglow Fails Intergalactic “Shadow” Test’.<sup>6</sup> A team of University of Alabama Huntsville scientists, led by Dr Richard Lieu, used data from NASA’s Wilkinson Microwave Anisotropy Probe (WMAP) to scan the CMB for shadows. Previous groups have made these sorts of studies but this was the first with WMAP data. Remember WMAP was designed specifically to detect the signature or echoes of the big bang. But Lieu said, ‘Either it (the microwave background) isn’t coming from behind the clusters, which means the Big Bang is blown away or ... there is something else going on’.

More woes for a big bang history of the universe. Another problem for those Christians who hang their apologetics on the beliefs of so-called modern science.

The evidence seems to be mounting<sup>7</sup> in favour of the source of the CMB being local instead. This favours a galactocentric creation model, one in

which the Milky Way galaxy is somewhere near the centre of the universe, as has been strongly suggested by other observational data.<sup>8</sup> And it also seems that physicists are using the data from the precise WMAP measurements to undermine the very paradigm that it was built to bolster.

Lieu’s words resonate here: ‘*There is something else going on!*’

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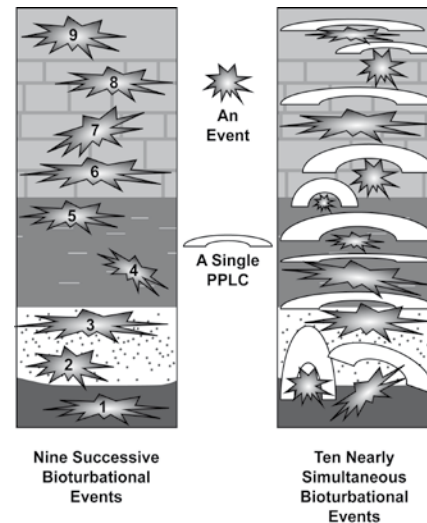
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- Compton scattering means that a photon collides with an electron, imparting some energy to the electron which recoils, while another photon carrying the remaining energy (so a lower frequency) is emitted at an angle from the original so momentum is conserved. Inverse Compton scattering means that a very energetic electron *loses* energy, so the scattered photon has a higher energy and thus higher frequency.
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## Errata

### *Journal of Creation* **20**(2)

Woodmorappe, J., Are soft-sediment trace fossils (ichnofossils) a time problem for the Flood? *Journal of Creation* **20**(2):113–122, 2006.

- On p. 118, figure 4 should be:



**Figure 4.** The PPLC hypothesis. In contrast to the time-consuming one-horizon-at-a-time bioturbation posited by conventional uniformitarian thinking (left), several horizons are bioturbed simultaneously (right). This can happen thanks to the fact that PPLCs (idealized as arches in this figure) temporarily protect the deeply-buried marine organisms from the immobilizing action of thick overlying sediment.