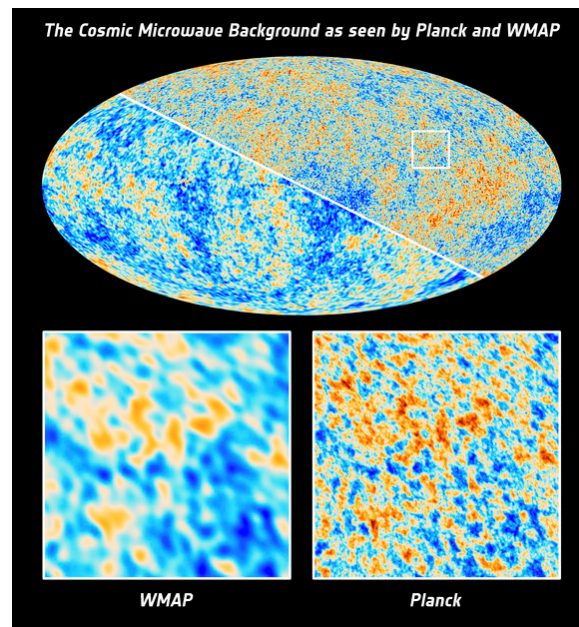


2013 Planck Data Shows Universe is Non-Copernican



On March 21, 2013, the European Space Agency finally released the data from the Planck probe they sent up in the sky in 2009.¹ We can tell by the title of the article (“Planck Reveals an Almost Perfect Universe”) that ESA is playing a shell game. The operative word in the title is “Almost.” As we know, when one plays games, the only time “almost” becomes significant is in the game of horseshoes. But if you “almost” hit a homerun in baseball, or “almost” get a touchdown in football or “almost” get a basket in basketball, you don’t get any points, and your effort is just as good as if you didn’t even make an attempt. Well, the same is true with the Planck probe, since we cannot play horseshoes with the data from the CMB. The Planck probe data is just as far away from confirming the Big Bang universe as a missed pass in the end zone is from scoring a touchdown. As a result, the score is now: CMB 21 and ESA/NASA 0. The CMB scored a touchdown with COBE in 1989, WMAP in 2001 and now Planck in 2013.

What did COBE, WMAP and now Planck show us? Astounding as it may seem, the data reveals the universe is non-Copernican, that is, it is not homogeneous as predicted by the Big Bang. There are warm and cool spots all over the universe, which means the universe is defined, with special locations and directions. Analogously, it is like the warm and cool spots in our ocean

¹ http://www.esa.int/Our_Activities/Space_Science/Planck/Planck_reveals_an_almost_perfect_Universe, with the title, “Planck Reveals an Almost Perfect Universe.”

which define and localize specific regions of the Earth. In fact, one can tell precisely where he is on the Earth just by comparing and contrasting the warm and cool spots in the oceans.

But that is only the beginning of what COBE, WMAP and Planck showed us. They showed us that if we draw lines that connect all these warm and cold spots (as if you were playing Connect the Dots), those lines would point like an arrow from the edge of the universe directly to the Earth. It is known in the scientific literature today as “The Axis of Evil.”² Why evil? Because today’s scientist have staked their careers on the idea that the universe is Copernican, that we cannot tell one place from another place in the universe because it is just one big homogeneous mass. As you may know, Copernicus took the Earth out of its central place in the universe and set the stage for Carl Sagan to put it out in the remote recesses of space, lost among the stars. So, if they find evidence that the universe is not homogeneous, it destroys the Copernican Principle upon which modern cosmology is based and thus it is “evil” from their perspective.

On its largest scales, in direct contradiction to the predictions of the Big Bang theory, the Planck probe confirmed that the universe is not homogeneous. It is anisotropic and inhomogeneous. The warm and cool spots of the CMB are systematically organized into distinct regions of the universe that, when graphed on an X and Y axis, point directly to the Earth as the center of the distribution. As the old saying goes, ‘three strikes and you’re out.’ COBE was the first strike; WMAP was the second; and Planck is the third as it totally uncovers the largest coverup in the last 500 years. The scientific data reveals, as clearly as it could be, that the Earth is NOT, as Carl Sagan used to preach, “an insignificant planet of a humdrum star lost in a galaxy tucked away in some forgotten corner of a universe in which there are far more galaxies than people.” It is very special and was placed in a very unique place in the universe – in the very center.

But, of course, NASA and ESA are not about to admit the astounding implications of the Planck probe. You won’t find any headlines coming from ESA on March 21, 2013 saying that the Planck probe has finally destroyed the Copernican Principle. What you will find is that they will attribute the data that doesn’t fit the Big Bang theory into euphemistic categories such as:

- “One of the most surprising findings is that the fluctuations in the CMB temperatures at large angular scales do not match those predicted by the standard model”

² <http://www.newscientist.com/article/dn23301-planck-shows-almost-perfect-cosmos--plus-axis-of-evil.html>. The article states: “Cosmologists can’t pack up and go home just yet though, as Planck’s map has also confirmed the presence of a mysterious alignment of the universe. The “axis of evil” was identified by Planck’s predecessor, NASA’s Wilkinson Microwave Anisotropy Probe (WMAP). The pattern of hot and cold variations in the CMB should be randomly distributed – and they are when comparing small patches of the universe. At larger scales, however, Planck reveals that one half of the universe has bigger variations than the other. Planck’s detectors are over 10 times more sensitive and have about 2.5 times the angular resolution of WMAP’s, giving cosmologists a much better look at this alignment. “We can be extremely confident that these anomalies are not caused by galactic emissions and not caused by instrumental effects, because our two instruments see very similar features,” said Efstathiou.

or

- “Another is an asymmetry in the average temperatures on opposite hemispheres of the sky. This runs counter to the prediction made by the standard model that the Universe should be broadly similar in any direction we look”

or

- “We see an almost perfect fit to the standard model of cosmology, but with intriguing features that force us to rethink some of our basic assumptions,”

You will see these sentences in the article written by ESA on March 21, 2013. In other words, they aren't about to admit their cherished Copernican universe has been destroyed by a simple satellite weighing a few hundred pounds.

Or, you might get lucky and get descriptions that are a little more honest with the Planck data. For example, in the March 21, 2013 article in *Huffpost Tech* by Michael Rundle, he says, “But the data could prove troubling for some scientists, as it includes ‘large scale anomalies’ which point to a preferred direction of energy fluctuations in the universe - the so-called ‘Axis of Evil’.”³ Once again, it is “evil” if you are a devout Copernican who believes the Earth is not in a special and central place in the universe. It is “evil” if you believe that the edge of the universe has no ‘knowledge’ or connection to our tiny little Earth that is said to be 13.7 billion light years away from it. But what Planck shows is that there is a direct line (aka “axis”) that connects the edge of the universe to the tiny Earth like the spokes of a bicycle wheel connect the rim to the hub.

Let's take a closer look at the European Space Agency's article:

ESA: 21 March 2013: Acquired by ESA's Planck space telescope, the most detailed map ever created of the cosmic microwave background – the relic radiation from the Big Bang – was released today revealing the existence of features that challenge the foundations of our current understanding of the Universe.

R. Sungenis: Notice two things here. It first states that the Cosmic Microwave Background Radiation (CMB) is “the relic radiation from the Big Bang.” They treat it as a fact of science, but it is not a fact. It is a theory that has no proof. Second, ESA surprisingly admits the results of the Planck probe “challenge the foundations of our current understanding of the Universe.” But that is quite an understatement. In the days of euphemisms (e.g., “visually challenged” instead of “almost blind,” or “mentally challenged” instead of “retarded”) to claim NASA and ESA are merely “challenged” by Planck's data really means that after three tries in the last 24 years,

³ http://www.huffingtonpost.co.uk/2013/03/21/european-space-agencys-planck-map_n_2922026.html?view=print&comm_ref=false

neither agency has been able to dismiss the evidence that the Earth is in a special place in the universe and that their Big Bang Copernican universe has just seen the last nail put into its coffin. Let see why.

ESA: The image is based on the initial 15.5 months of data from Planck and is the mission's first all-sky picture of the oldest light in our Universe, imprinted on the sky when it was just 380,000 years old.

R. Sungenis: Again, the "380,000" year figure is just theory, not fact.

ESA: At that time, the young Universe was filled with a hot dense soup of interacting protons, electrons and photons at about 2700°C. When the protons and electrons joined to form hydrogen atoms, the light was set free. As the Universe has expanded, this light today has been stretched out to microwave wavelengths, equivalent to a temperature of just 2.7 degrees above absolute zero.

R. Sungenis: Again, just theory, not fact. All they really know for sure is that the whole universe is saturated with a 2.7 degree Kelvin temperature. They haven't any solid facts as to where it came from, how it came to be, or even what it means. They only know that it exists.

ESA: This 'cosmic microwave background' – CMB – shows tiny temperature fluctuations that correspond to regions of slightly different densities at very early times, representing the seeds of all future structure: the stars and galaxies of today. According to the standard model of cosmology, the fluctuations arose immediately after the Big Bang and were stretched to cosmologically large scales during a brief period of accelerated expansion known as inflation.

R. Sungenis: Here ESA stretches the truth. It is true that the CMB shows temperature fluctuations, since that is precisely what we see in Planck's map in the red and blue shaded areas. But whether these were the "seeds of stars" is another story altogether. Neither NASA nor ESA have ever explained how they could be seeds, but it does make for a nice story in the Big Bang. In reality, Big Bang scientists are caught between a rock and a hard place. The original theories of the Big Bang predicted a totally isotropic and homogeneous expansion of the universe, a universe in which there was no center and no specific or preferred direction, just space expanding everywhere, evenly. But then they found bumps or lumps in this expansion, otherwise known as the "anisotropies of the CMB." So they had no choice but to abandon the isotropic/homogeneous prediction and conclude that the anisotropies made the galaxies. A great theory if you like the Big Bang, but there is not a shred of evidence for it.

ESA: Planck was designed to map these fluctuations across the whole sky with greater resolution and sensitivity than ever before. By analysing the nature and distribution of the seeds in Planck's CMB image, we can determine the composition and evolution of the Universe from its birth to the present day.

Overall, the information extracted from Planck's new map provides an excellent confirmation of the standard model of cosmology at an unprecedented accuracy, setting a new benchmark in our manifest of the contents of the Universe.

R. Sungenis: No it doesn't, really. What is really happening is that NASA and ESA found evidence in the universe that doesn't fit their previous predictions, so they had to change the theory in order to make it fit the observations. They then conveniently report to the world that the new observations fit the Big Bang. What they don't tell you is that they've changed the Big Bang theory about a half dozen times over the last century, but kept the same label – the Big Bang. The first change was “Inflation,” which changed it from an expanding universe to an exploding universe – a completely different theory requiring completely different physics, but nonetheless it kept the same name – the Big Bang.

Next came the addition of Dark Matter, since the matter that the Big Bang created wasn't obeying neither Newton's or Einstein's laws of motion. So NASA simply made up the matter it needed, to the tune of 25% of what constitutes the universe, in order to keep the Big Bang functioning as a viable cosmological theory.

Next came the addition of Dark Energy, since they found after observing class 1A supernovas that the universe was expanding much faster than they previously predicted. But where did the energy come from in order to propel it to such a high acceleration? They couldn't find it anywhere so they just invented it, to the tune of 73% of what makes up the energy in the universe.

No one has ever found Dark Matter or Dark Energy, and no one has any evidence for Inflation. These are just band-aids on a theory – the Big Bang – that is on the operating table taking its last breaths before it dies. And the Planck probe just put the knife into its heart.

ESA: But because precision of Planck's map is so high, it also made it possible to reveal some peculiar unexplained features that may well require new physics to be understood.

R. Sungenis: Need I say more? In other words, Planck has revealed things that don't fit into the Big Bang theory so ESA is forced to revamp their understanding of physics. The current understanding of physics predicted the Big Bang. The physics coming from the Planck probe denies the Big Bang. Although ESA refers to them euphemistically as “unexplained features,” these features are analogous to a pink elephant in a small room. These “unexplained features” are not merely little mosquitoes that you can swat away.

ESA: “The extraordinary quality of Planck's portrait of the infant Universe allows us to peel back its layers to the very foundations, revealing that our blueprint of the cosmos is far from complete. Such discoveries were made possible by the unique technologies developed for that purpose by European industry,” says Jean-Jacques Dordain, ESA's Director General.

“Since the release of Planck’s first all-sky image in 2010, we have been carefully extracting and analysing all of the foreground emissions that lie between us and the Universe’s first light, revealing the cosmic microwave background in the greatest detail yet,” adds George Efstathiou of the University of Cambridge, UK.

One of the most surprising findings is that the fluctuations in the CMB temperatures at large angular scales do not match those predicted by the standard model – their signals are not as strong as expected from the smaller scale structure revealed by Planck.

R. Sungenis: Notice what he just said: “the CMB temperatures at large angular scales do not match those predicted by the standard model.” There should be all kinds of bells and whistles going off. What this man said is that the CMB does not match what was predicted by the Big Bang for most of the universe! So, even after they added in the fudge factors of Inflation, Dark Matter and Dark Energy for 96% of the universe, the Planck probe comes back and says, “Sorry, the data from the universe doesn’t fit your model. Go back to the drawing board and try again.”

ESA: Another is an asymmetry in the average temperatures on opposite hemispheres of the sky. This runs counter to the prediction made by the standard model that the Universe should be broadly similar in any direction we look. Furthermore, a cold spot extends over a patch of sky that is much larger than expected.

R. Sungenis: Remember when I said the Big Bang predicted isotropy and homogeneity? Well, that is what this man is referring to when he says “the Universe should be broadly similar in any direction we look.” But Planck found such was not the case. The Planck probe affirmed the presence of what is known as the CMB dipole, quadrupole and octupole. In layman’s terms, it means the universe is cut in half by a gigantic equator running across its middle. On one side of the hemisphere there is a big warm region; on the other side there is a big cool region. How can that be? How can explosions (such as the Big Bang) produce distinct warm and cool distribution of the explosion contents? Explosions cannot be divided in two by warm and cool hemispheres.

ESA: The asymmetry and the cold spot had already been hinted at with Planck’s predecessor, NASA’s WMAP mission, but were largely ignored because of lingering doubts about their cosmic origin.

“The fact that Planck has made such a significant detection of these anomalies erases any doubts about their reality; it can no longer be said that they are artefacts of the measurements. They are real and we have to look for a credible explanation,” says Paolo Natoli of the University of Ferrara, Italy.

R. Sungenis: In other words, when COBE in 1989 and WMAP in 2001 showed the world that the Earth was in the center of the universe, NASA and ESA dismissed it as an “artefact,” that is, something that was not real but just looked like it was real. Even then, there were cosmologists

who were not so sure it was an artefact. For example, Lawrence Krauss of Arizona State University and author of the best-selling book *A Universe From Nothing*, said in 2006:

But when you look at CMB map, you also see that the structure that is observed, is in fact, in a weird way, correlated with the plane of the earth around the sun. Is this Copernicus coming back to haunt us? That's crazy. We're looking out at the whole universe. There's no way there should be a correlation of structure with our motion of the earth around the sun — the plane of the earth around the sun — the ecliptic. That would say we are truly the center of the universe.

The new results are either telling us that all of science is wrong and we're the center of the universe, or maybe the data is imply incorrect, or maybe it's telling us there's something weird about the microwave background results and that maybe, maybe there's something wrong with our theories on the larger scales. And of course as a theorist I'm certainly hoping it's the latter, because I want theory to be wrong, not right, because if it's wrong there's still work left for the rest of us.⁴

Well, the Planck probe just told us that Krauss's worst fears have finally been confirmed. The Earth is in the center, the data is correct, and there is nothing weird about the CMB, but there is something wrong with his theory on large scales. You know the old saying, "three strikes and you're out." Well, that is the case with Krauss and the rest of the scientific world. They have no place else to go. Time is run out and they have failed to uphold Copernicus' and Galileo's world. The scientific data simply cannot be compromised.

ESA: "Imagine investigating the foundations of a house and finding that parts of them are weak. You might not know whether the weaknesses will eventually topple the house, but you'd probably start looking for ways to reinforce it pretty quickly all the same," adds François Bouchet of the Institut d'Astrophysique de Paris.

R. Sungeis: Well, that's what they did to prop up the Big Bang when they invented, out of thin air, Inflation, Dark Matter and Dark Energy. The house would have toppled long ago if they didn't patch it up with these three big band-aids. But the fact is, these three band-aids exist only in their imagination. There is no empirical evidence for them, at all. So when François speaks about finding "reinforcements" for the toppling house, he is admitting that Big Bang theory has been nothing but patchwork physics, a house of cards to be more colloquial, and that the Planck data has just released a million more termites onto the property.

ESA: One way to explain the anomalies is to propose that the Universe is in fact not the same in all directions on a larger scale than we can observe. In this scenario, the light rays from the CMB may have taken a more complicated route through the Universe than previously understood, resulting in some of the unusual patterns observed today.

⁴ http://www.edge.org/3rd_culture/krauss06/krauss06.2_index.html

R. Sungenis: Sure, any ad hoc theory will suffice for now. For example, we can now just assume that light doesn't travel in straight lines for certain regions of space, and all will be fine.

ESA: "Our ultimate goal would be to construct a new model that predicts the anomalies and links them together. But these are early days; so far, we don't know whether this is possible and what type of new physics might be needed. And that's exciting," says Professor Efstathiou.

R. Sungenis: Yes, the Big Bang advocates will just ignore the astounding implications of the CMB in the Planck data for a special place for the Earth in the universe and they will just hope that they will be able to find an explanation someday to dismiss it. If they have to change the laws of physics in order to do so, well, that's exciting, isn't it? Let's not change our worldview to coincide with the observations we have; let's change our physics so that we can keep the same patched-up model with which we've been working and in which we have vested our careers, our sheepskins, not to mention all the grant money we receive for upholding it at all costs.

ESA: New cosmic recipe: Beyond the anomalies, however, the Planck data conform spectacularly well to the expectations of a rather simple model of the Universe, allowing scientists to extract the most refined values yet for its ingredients.

R. Sungenis: What is a "simple model of the universe"? It certainly isn't the Big Bang that is hobbling along with all its fudge factors (inflation, dark matter, dark energy) and all its changes to the Hubble "constant" over the last 75 years.

ESA: Normal matter that makes up stars and galaxies contributes just 4.9% of the mass/energy density of the Universe. Dark matter, which has thus far only been detected indirectly by its gravitational influence, makes up 26.8%, nearly a fifth more than the previous estimate. Conversely, dark energy, a mysterious force thought to be responsible for accelerating the expansion of the Universe, accounts for less than previously thought.

R. Sungenis: Speak of the devil! Not only does he admit the fudge factor of Dark Matter, he now says that Planck requires that they invent more of this unfound matter! But if you increase Dark Matter, obviously you have to decrease Dark Energy, since you can only have your percentages add up to 100. But if they don't have the same Dark Energy, how is the universe going to expand at the rate they need for the Big Bang? No explanation is offered.

ESA: Finally, the Planck data also set a new value for the rate at which the Universe is expanding today, known as the Hubble constant. At 67.15 kilometres per second per megaparsec, this is significantly less than the current standard value in astronomy. The data imply that the age of the Universe is 13.82 billion years.

R. Sungenis: They've changed the Hubble constant about a half dozen times since it was proposed in the mid-twentieth century. So why do they call it a "constant"? It is little more than a fudge factor so that they can tweak the Big Bang numbers to make it fit their wishes.

ESA: "With the most accurate and detailed maps of the microwave sky ever made, Planck is painting a new picture of the Universe that is pushing us to the limits of understanding current cosmological theories," says Jan Tauber, ESA's Planck Project Scientist.

"We see an almost perfect fit to the standard model of cosmology, but with intriguing features that force us to rethink some of our basic assumptions.

"This is the beginning of a new journey and we expect that our continued analysis of Planck data will help shed light on this conundrum."

R. Sungenis: One wonders how the Planck data could be "an almost perfect fit to the standard model of cosmology" yet at the same time have "features that force us to rethink some of our basic assumptions." It was precisely the "basic assumptions" about the laws of physics that created the standard model of cosmology, the Big Bang. So, if one has to revamp the basic assumptions, wouldn't that suggest the Big Bang has been nullified? This is nothing but double-speak. The Planck data has destroyed the Big Bang. It has destroyed the Friedmann-Lemaitre-Robertson-Walker interpretations of Einstein's General Relativity equations, for those equations predicted (or shall we say tweaked Einstein's tensor equation) to produce an isotropic and homogeneous universe. But Planck shows, in vivid color, that the universe is not isotropic and homogeneous on its largest scales. Not only that, Planck confirms the Axis of Evil, the axis that extends from the edge of the universe to the ecliptic and equinoxes of the Earth like the spokes of a bicycle wheel connect the rim to the hub.

The last nail has been put into the coffin of modern Copernican cosmology. May it rest in peace. Unfortunately, it appears that ESA, NASA and JPL will be late in coming to the funeral.

Robert Sungenis

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