

Are Crop Formations at Chilbolton Observatory A Response to 1974 Earth Transmission?

by Linda Moulton Howe

2001

from [EarthFiles](#) Website

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The "binary code" on the left and "face" to the right
in the wheat field near Chilbolton Observatory near Wherwell, Hampshire, U. K.
were first seen on different dates, according to a Chilbolton Observatory employee.

The "face" near top center was reported on Tuesday, August 14, 2001.

The "binary code" to the left was reported on Monday, August 20, 2001.

Aerial photograph © 2001 by Steve Alexander.
August 25, 2001 Wherwell, Hampshire, England

For the past few years, crop formations have appeared in the wheat field near the Chilbolton Observatory in Wherwell, Hampshire.

The one from August 2000 now seems linked to the August 2001 formations. Last year's was one of England's largest 2000 formations in terms of square footage and appeared next to the Chilbolton government-owned land upon which the radio telescope complex is built.

The facility is sectioned off from the public and is surrounded by a high barbed wire fence. The estimated measurements of the code formation is 200 feet long and 85 feet wide; the estimated face measurements are approximately 160 feet wide and 180 feet long.

Both are framed with crops laid down in almost identical fashion, according to field researcher, **Charles Mallett**, from Roundway, Wiltshire.



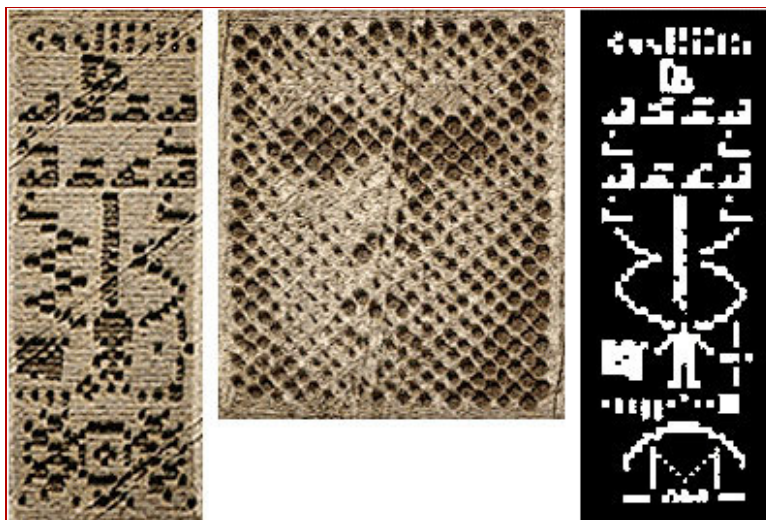
August 2000 aerial photograph of the large formation that emerged in wheat field next to Chilbolton Observatory, Hampshire, England.
Aerial photograph © 2000 by Peter R. Sorensen.

Then, according to an employee at the Chilbolton Observatory, on Tuesday, August 14, 2001, a framed "face" appeared, followed the next Monday, August 20, 2001 by a "binary code."

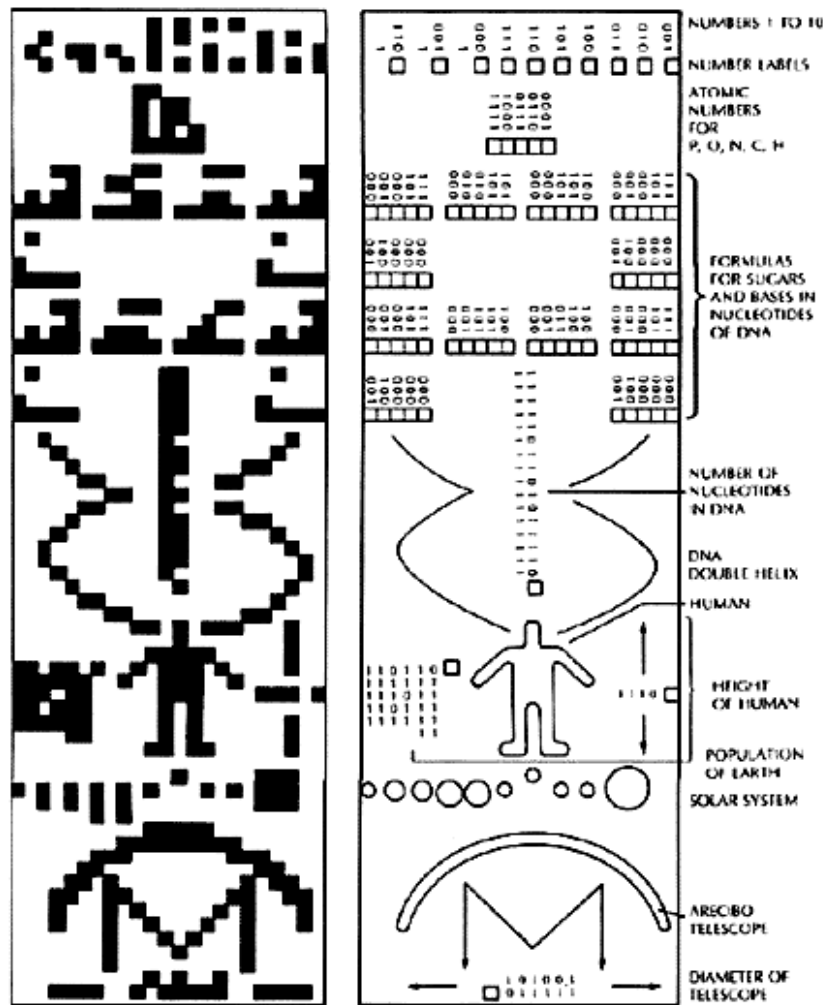
When **Paul Vigay**, Director, *Independent Research Center for Unexplained Phenomena* in Southsea, Hampshire, England, first saw the aerial photograph of the "code" formation, he immediately recognized it as extremely similar to the November 16, 1974 digitally-encoded transmission sent from the Arecibo, Puerto Rico radio telescope out into space.

The Arecibo transmission was planned by astronomers at Cornell University, including the late **Carl Sagan**. Cornell University operates the 300-meter-diameter (985 feet) radio telescope built into a mountain under a cooperative agreement with the National Science Foundation.

That original 1974 Arecibo transmission is shown below on the right in a black and white graphic of the binary code beamed at a star cluster called M-13, about 23,000 light years from earth; in the middle is the Chilbolton 2001 face; on the left is the Chilbolton 2001 "transmission code" for comparison to Arecibo's.



Comparison produced by Paul Vigay to show the Chilbolton "transmission code" on left (aerial photograph © 2001 Lucy Pringle); Chilbolton "face" in the middle (aerial photograph © 2001 Steve Alexander); and the actual November 16, 1974 Arecibo radio telescope transmission to M13 star cluster from book, Cosmos © 1976 Carl Sagan.



Translation of the November 16, 1974 Arecibo, Puerto Rico radio telescope binary code transmission by Cornell University astronomers to M-13 star cluster.

Source: Cosmos © 1976 by Carl Sagan.

The 1974 Arecibo transmission indicated human double helix DNA with the double arched lines above the humanoid figure. In the crop formation at Chilbolton, there is a difference in the pattern on the left compared to the right and compared to the Arecibo transmission.

I asked **Paul Vigay** what he thought about that discrepancy and others he has analyzed.



The "pixels" of the face with Chilbolton Observatory in background near Wherwell, Hampshire, England.
Photograph © 2001 by Charles Mallett.



"Face" in the wheat field near Chilbolton Observatory, Wherwell, Hampshire, first noticed on Tuesday, August 14, 2001. The "transmission code" that followed was first noticed on Monday, August 20, 2001 by observatory employees.

Aerial photograph © 2001 by Steve Alexander.

Interview **Paul Vigay**, Director, *Independent Research Center for Unexplained Phenomena*, Southsea, Hampshire, England:

"It could be that their DNA is uneven in the helix, so it's got extra components. I won't know for certain until I've decoded the center bit. Because if you look down between the two strands, there's like a vertical bar in the middle between the two."

Now, the original Arecibo transmission that corresponded to the number of nucleotides in the DNA itself as a binary code. Now that was subtly different on the ground. So obviously that could give a key to why the strands are different on the outside.

Because if they have a different number of strands in the DNA itself, then that could account for the off balance as it were.



Excerpt from B&W 1974 Arecibo radio transmission on right in which double helix DNA is shown in upper curving lines. Below is the humanoid depicting people between binary information about population and height of the human figure. Below the symbolic human, the sun is depicted as a square with its 9 planets.

The third planet from the sun is raised up toward the human figure. The bottom symbol of the arc over the "M" depicts the shape of the Arecibo radio telescope and the bottom binary code states its diameter at 300 meters. You can compare each segment in the Chilbolton formation on the left.

Image comparisons produced by Paul Vigay.

Linda Moulton Howe: IS THAT WHAT YOU WERE ABLE TO CONFIRM TODAY IN THE FIELD?

Paul Vigay: Yes, I confirmed that on the ground. There is a single dot. It's a single digit that has been changed in the middle.

A SINGLE DIGIT.

Basically where you've got the binary code where you have the zeros and ones, the squares and empty squares in the vertical bar between the two sides of the DNA. There's actually change in the original in the middle there. But I won't know until I actually count those on the computer and run it through to calculate the DNA sequence. Then hopefully that may give an indicator as to why the outside is different.

OK, THERE IS SOMETHING BEING IMPLIED THAT THERE IS A DIFFERENCE IN DNA. ON THE PLANETS, OURS IS VERY CLEAR THAT WE SHOWED IT WAS THE 3RD PLANET FROM THE SUN. THAT PLANET IN THE SEQUENCE WAS MOVED TOWARDS THE HUMANOID FIGURE THAT WE DEPICTED IN THE ARECIBO TRANSMISSION AS A FIGURE WITH A HEAD, TWO ARMS, TWO LEGS AND A TORSO, STANDING ABOVE WHERE THAT THIRD PLANET WOULD BE.

Right.

IN THIS TRANSMISSION WHICH IS NOW IN THE CHILBOLTON WHEAT FIELD, IT GOES OVER TWO PLANETS AND THEN THREE PLANETS ARE MOVED UP THE WAY WE MOVED THE THIRD PLANET UP.

The third one is moved up. The fourth one is also moved up. The 5th one is moved up, but it is also changed from a single dot into four little dots, forming a sort of cross.

WHAT DO YOU THINK THAT IS?

That one is interesting. It could mean that there are 3 planets in their solar system are inhabited and they actually come from the 5th planet. Because it looks like they've indicated 3 planets, but they have also indicated that 5th because they have highlighted that all the more, as it were. Or it could mean that possibly the 5th planet could have 3 moons around it.

IF THERE IS A ONE-TO-ONE RELATIONSHIP BETWEEN THE NEW CODE AND THE 1974 EARTH CODE, WHERE WE PUT A HUMAN FIGURE, THERE IS WHAT COULD BE PERCEIVED AS A FIGURE IN THIS NEW CHILBOLTON CODE. IT LOOKS LIKE IT HAS A VERY LARGE HEAD AND WHAT LOOK LIKE VERY LARGE, PROTRUDING EYES AND A SHORT, THIN BODY. WOULD YOU THINK THAT IS A FAIR DESCRIPTION?

Yes, some people have likened it to a gray alien or something. The other thing that also ties in with that. there is another discrepancy, but on the other side of the population, there is a little chart that shows the height of a human. Now on the original Arecibo one, you've got 3 digits there which in binary would correspond to 7.

Obviously, if you are transmitting to the other side of the galaxy, you're not going to use feet, inches, metric. I interpret that as 7 units, whatever that is. If you then look on the crop circle one, you've only got one there, 1 unit. So it is indicating that whatever it is, it's a lot shorter than the human.

IT'S CONFUSING BECAUSE IF IT IS A CODE TRANSMISSION REPLY ABOUT THEM IN RESPONSE TO OUR 1974 TRANSMISSION FROM ARECIBO, WHY WOULD THE FACE - ASSUMING THEY WERE PUTTING DOWN SOMETHING REFLECTING THEM - WHY WOULD IT SEEM TO RESEMBLE A HUMAN FACE?

I wouldn't like to speculate on the origin. I like to focus on my research and let people come to their own conclusions by showing them the research. But I can't for the life of me see how you would go about hoaxing that. You can't see the pattern at all from the ground. It's very neat and tidy, but it looks a mess if you follow in terms of the shape.

You can't say, 'Oh, yes, this is a circle and crescents like a normal crop circle.' It just looks like a load of random dots. And yet to get that effect from the air which is obviously designed to be seen from, it's quite incredible. I can't see how you could hoax it without someone in a helicopter speaking to you on a radio or something saying, 'Left a bit. Right a bit.'

Because it's just so complex and unrecognizable on the ground. And you can't see how you would, especially in the dark, to go from one to the next and not make a mistake or go off to get that full effect from the air is actually quite incredible.

NOW, LET'S TALK ABOUT THE BOTTOM SEGMENT OF BOTH TRANSMISSIONS. IN 1974, ARECIBO SENT OUT AN ARC OVER A BINARY CODE INDICATING THE DIAMETER OF THE ARECIBO DISH THAT WAS SENDING THE TRANSMISSION. ON THE TRANSMISSION CODE IN THE CHILBOLTON WHEAT FIELD THAT SAME LINE ITEM IS IDENTICAL TO THE FORMATION LAST AUGUST OF 2000 ALSO AT CHILBOLTON.

AND NOW, WE REALIZE THAT THERE APPEARS TO BE A CONNECTION BETWEEN THE LAST FORMATION THERE IN 2000 AT CHILBOLTON AND THESE TWO IN AUGUST OF 2001. IN THE SAME PLACE OF THE CODE THAT INDICATED THE SIZE OF THE ARECIBO RADIO TELESCOPE IN THE 1974 TRANSMISSION, IS THE EXACT GLYPH THAT WAS FOUND LAST YEAR IN AUGUST 2000 NEXT TO CHILBOLTON.

Right.

The key to understanding the code is that underneath the representation of Arecibo is the size of the dish which ultimately affects the transmission frequency that it goes out from. That was another discrepancy in this new 2001 code in the field because the actual size indication is different. It's a different code and I need to find out how the original wavelength was encoded in the original (Arecibo) transmission and then apply to the new pattern and see what that yields.

Because I have a suspicion that might give a key implying that the previous crop circle (August 2000) was some form of communication of origination or has relevance to decoding it all. When you transmit the signal from the Arecibo one, if aliens had picked it up on the other side of the universe, then obviously they got as far as decoding it and they get down into the box there about where it originates, you would find the frequency that they picked it up on.

There is one other discrepancy and it's encoded in the atomic numbers. At first when I saw it on the aerial photo, I thought it was an error or a smudge on the photo that you couldn't make out. which is one of the main reasons I drove up there today to have a look.

But it's not an error because it's a very precise error and it's encoded in the sequence.

AND THIS IS IN THE SEQUENCE OF THE ELEMENTS? THE RADIO-NUCLIDES?

No, right at the top, you've got the bit that's the sequence of the numbers 1 to 10. But immediately beneath those, you've got the atomic numbers for basically the main elements on Earth, the building blocks that support life.

AND THAT'S WHAT THAT P.O.N.C.H. MEANS?

It's actually *Phosphorus, Oxygen, Nitrogen, Carbon and Hydrogen*. Now you can decode that. The one that corresponds to the "P" is a complete line. Like it's all there, which in binary would be 15. It would be 1111. The following one, if you read it vertically, would be 0001. So that corresponds to 8. If you right down 0001 in binary, you get 8. And of course, the 8 corresponds to the oxygen.

Then the next one would be 1110, which is 7, which corresponds to nitrogen. The next one is 011, which is 6 in binary, which is carbon. And then the very last one is the single 1 which corresponds to 1 which is hydrogen.

AND YOU'RE SAYING THAT IN THE CHILBOLTON FIELD, IT'S CHANGED?

In the Arecibo transmission, you've got the five columns going across, hydrogen, carbon nitrogen, oxygen and phosphorous. But on the ground which you can't see unless you analyze it in detail - and I did confirm it today - there are actually 6 columns. So whoever did this code formation inserted an extra element.

Now they have inserted it between the oxygen and the phosphorous. so instead of going 1, 6, 7, 8, 15, they've actually coded it as 0111, which is 14. So, it then goes 1, 6, 7, 8, 14, 15 in the code.

Then, if you look up the atomic number for 14, you get silicon. That is very interesting because lots of people have speculated that if there are alien life forms, which are not carbon-based life forms as everything is on Earth, then about the only other element in the entire periodic table that could possibly support life is silicon-based life forms. So you could theoretically have a planet that could have silicon as its dominant element which I think is very significant.

If it's genuine binary code communication, I think the insertion of silicon in there is possibly a significant find."

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ultimamente attraverso Internet) con la "Nuova Informazione" ed in una Nuova maniera di vedere ed interpretare la Storia, la Scienza, la Sociopolitica, i Miti e le Leggende, l'Archeologia, l'Astronomia, etc.; si dedicano a gettare una Luce più effettiva sulla formazione mistica e "religiosa" che abbiamo ricevuto con un sistema dogmatico, molte volte poco chiaro, e per il resto deformato e manipolato. Essi hanno l'opportunità di informarci sui nuovi capitoli della odierna conoscenza quali la Exopolitica, la Nuova Archeologia, la Parascienza, la Medicina Alternativa, la Vita nel nostro Universo e molto di più ancora...

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Subir - Up

Arecibo message

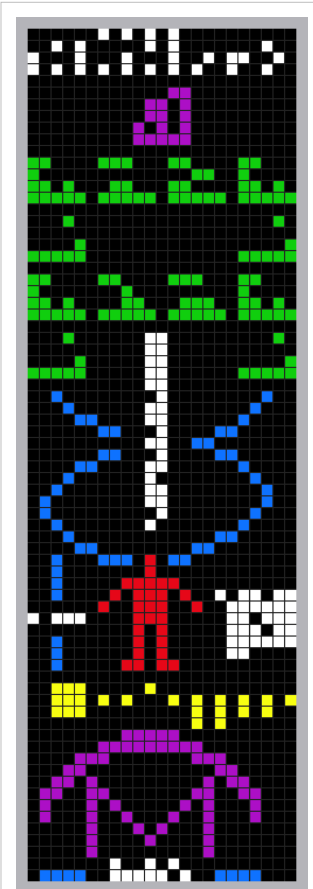
The **Arecibo message** was broadcast into space a single time via frequency modulated radio waves at a ceremony to mark the remodeling of the Arecibo radio telescope on 16 November 1974.^[1] It was aimed at the globular star cluster M13 some 25,000 light years away because M13 was a large and close collection of stars that was available in the sky at the time and place of the ceremony.^[1] The message consisted of 1679 binary digits, approximately 210 bytes, transmitted at a frequency of 2380 MHz and modulated by shifting the frequency by 10 Hz, with a power of 1000 kW. The "ones" and "zeros" were transmitted by frequency shifting at the rate of 10 bits per second. The total broadcast was less than three minutes.^{[1][2]}

The cardinality of 1679 was chosen because it is a semiprime (the product of two prime numbers), to be arranged rectangularly as 73 rows by 23 columns. The alternative arrangement, 23 rows by 73 columns, produces jumbled nonsense (File:AreciboMessageShifted.svg). The message forms the image shown on the right, or its inverse, when translated into graphics characters and spaces.^[1]

Dr. Frank Drake, then at Cornell University and creator of the Drake equation, wrote the message, with help from Carl Sagan, among others.^[1] The message consists of seven parts that encode the following (from the top down):^[1]

1. The numbers one (1) to ten (10)
2. The atomic numbers of the elements hydrogen, carbon, nitrogen, oxygen, and phosphorus, which make up deoxyribonucleic acid (DNA)
3. The formulas for the sugars and bases in the nucleotides of DNA
4. The number of nucleotides in DNA, and a graphic of the double helix structure of DNA
5. A graphic figure of a human, the dimension (physical height) of an average man, and the human population of Earth
6. A graphic of the Solar System
7. A graphic of the Arecibo radio telescope and the dimension (the physical diameter) of the transmitting antenna dish

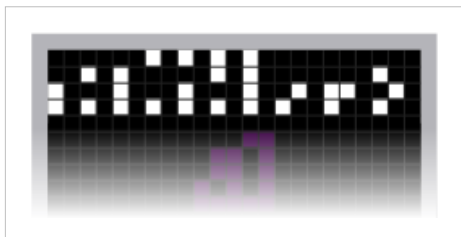
Because it will take 25,000 years for the message to reach its intended destination of stars (and an additional 25,000 years for any reply), the Arecibo message was more a demonstration of human technological achievement than a real attempt to enter into a conversation with extraterrestrials. In fact, the stars of M13, that the message was aimed at, will no longer be in that location when the message arrives.^[1] According to the Cornell News press release of November 12, 1999, the real purpose of the message was not to make contact, but to demonstrate the capabilities of newly installed equipment.^[1]



This is the message with color added to highlight its separate parts. The actual binary transmission carried no color information.

Explanation

Numbers



```

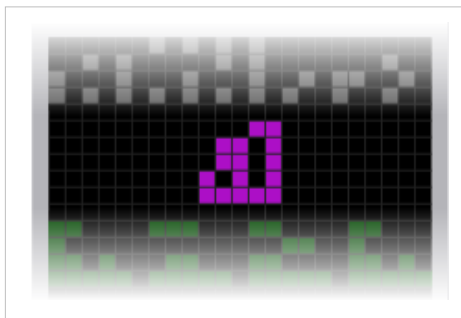
1 2 3 4 5 6 7 8 9 10
-----
0 0 0 1 1 1 1 00 00 00
0 1 1 0 0 1 1 00 00 10
1 0 1 0 1 0 1 01 11 01
X X X X X X X X X X <-least-significant-digit marker

```

The numbers from 1 to 10 appear in binary format (the bottom row marks the beginning of each number).

Even assuming that recipients would recognize binary, the encoding of the numbers may not be immediately obvious due to the way they have been written. To read the first seven digits, ignore the bottom row, and read them as three binary digits from top to bottom, with the top digit being the most significant. The readings for 8, 9 and 10 are a little different, as they have been given an additional column next to the first (to the right in the image). This is probably intended to show that numbers too large to fit in a column can be written in several contiguous ones, where the contiguous columns do not have the base marker.

DNA elements



```

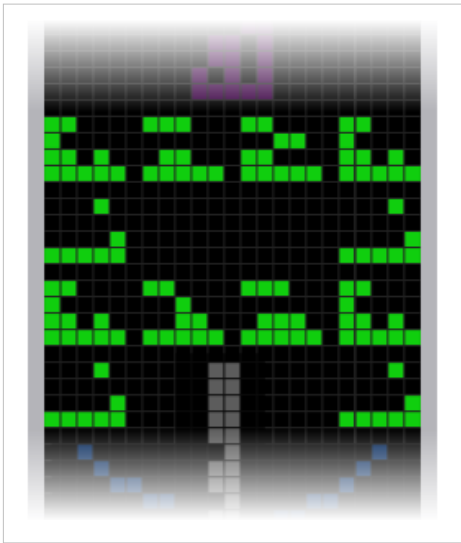
H C N O P
1 6 7 8 15
-----
0 0 0 1 1
0 1 1 0 1
0 1 1 0 1
1 0 1 0 1
X X X X X

```

The numbers 1, 6, 7, 8 and 15 appear. These are the atomic numbers of hydrogen (H), carbon (C), nitrogen (N), oxygen (O), and phosphorus (P), the components of DNA.

The numbers 8 and 15 are written in a logical extension of binary encoding, rather than with the contiguous-columns method shown in the message's number figures at the top.

Nucleotides



Deoxyribose (C ₅ H ₇ O)	Adenine (C ₅ H ₄ N ₅)	Thymine (C ₅ H ₅ N ₂ O ₂)	Deoxyribose (C ₅ H ₇ O)
Phosphate (PO ₄)			Phosphate (PO ₄)
Deoxyribose (C ₅ H ₇ O)	Cytosine (C ₄ H ₄ N ₃ O)	Guanine (C ₅ H ₄ N ₅ O)	Deoxyribose (C ₅ H ₇ O)
Phosphate (PO ₄)			Phosphate (PO ₄)

The nucleotides are described as sequences of the five atoms that appear on the preceding line. Each sequence represents the molecular formula of the nucleotide as incorporated into DNA (as opposed to the free form of the nucleotide).

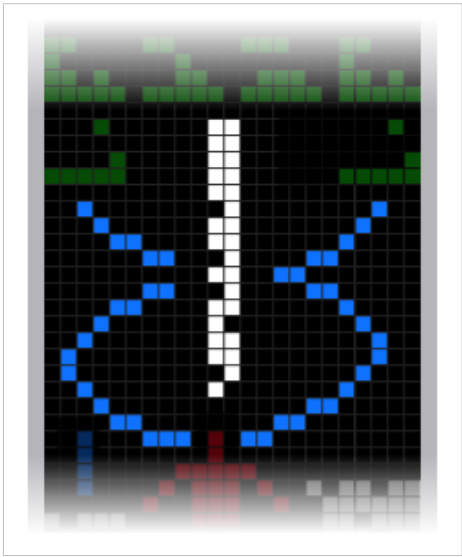
For example, deoxyribose (C₅H₇O in DNA, C₅H₁₀O₄ when free), the nucleotide in the top left in the image, is read as:

11000
10000
11010
XXXXX

75010

i.e. 7 atoms of hydrogen, 5 atoms of carbon, 0 atoms of nitrogen, 1 atom of oxygen, and 0 atoms of phosphorus.

Double helix

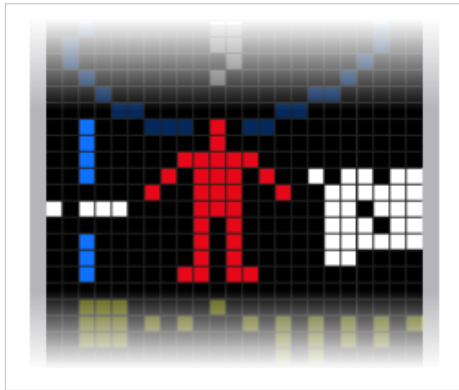


11
11
11
11
11
01
11
11
01
11
01
11
10
11
11
01
X

1111111111110111 1111101101011110 (binary)
= 4,294,441,822 (decimal)

DNA double helix (the vertical bar represents the number of nucleotides, but the value depicted is around 4.3 billion when in fact there are about 3.2 billion base pairs in the human genome).Wikipedia:Please clarify

Humanity



```

      X011011
        111111
X0111  110111
        111011
        111111
        110000

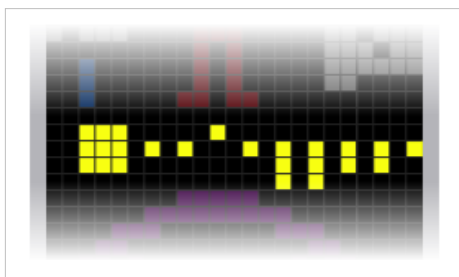
1110 (binary) = 14 (decimal)

000011 111111 110111 111011 111111 110110 (binary)
= 4,292,853,750 (decimal)

```

The element in the center represents a human. The element on the left (in the image) indicates the average height of an adult male: 1.764 m (5 ft 9.45 in). This corresponds to the horizontally written binary 14 multiplied by the wavelength of the message (126 mm). The element on the right depicts the size of human population in 1974, around 4.3 billion. In this case, the number is oriented in the data horizontally rather than vertically. The least-significant-digit marker is in the upper left in the image, with bits going to the right and more significant digits below.

Planets



```

                        Earth
Sun Mercury Venus      Mars Jupiter Saturn Uranus Neptune Pluto

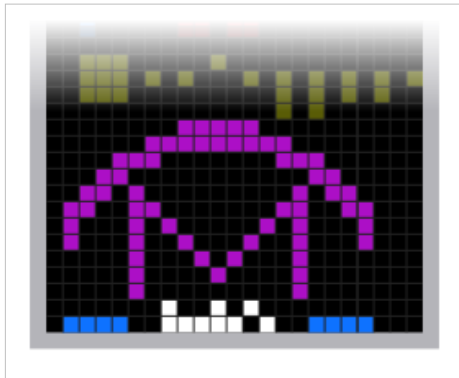
```

The solar system, showing the Sun and the planets in the order of their position from the Sun: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, and Pluto. (Pluto has since been reclassified as a dwarf planet by the International Astronomical Union, but it was still considered a planet at the time the message was transmitted.)

The Earth is the third planet from the Sun - its graphic is shifted up to identify it as the planet from where the signal was sent. Additionally the human figure is shown "standing on" the Earth graphic.

In addition to showing position, the graphic provides a general, not-to-scale size reference of each planet and the Sun.

Telescope



bottom two rows:

```
100101
<--- 111110X --->
```

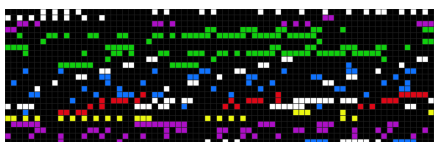
100101 111110 (binary) = 2,430 (decimal)

The last part represents the Arecibo radio telescope with its diameter: 2,430 multiplied by the wavelength gives 306.18 m (1,004 ft 6 in). In this case, the number is oriented horizontally, with the least-significant-digit marker to the lower right in the image. The part of the image that looks like a letter "M" is there to demonstrate to the reader of the message that the curved line is a parabolic mirror.

Message as binary string[¶]

```
000000101010100000000000 00101000001010000000100 10001000100010010110010 10101010101010100100100
000000000000000000000000 00000000000011000000000 00000000001101000000000 00000000001101000000000
00000000010101000000000 00000000011111000000000 00000000000000000000000 11000011100011000011000
10000000000000110010000 11010001100011000011010 11111011111011111011111 00000000000000000000000
00010000000000000000010 00000000000000000000000 000010000000000000000001 111110000000000000011111
00000000000000000000000 11000011000011100011000 10000000100000000010000 11010000110001110011010
11111011111011111011111 00000000000000000000000 00010000001100000000010 00000000001100000000000
00001000001100000000001 11111000001100000011111 00000000001100000000000 00100000000100000000100
00010000001100000001000 00001100001100000010000 00000011000100001100000 00000000001100110000000
00000011000100001100000 00001100001100000010000 00010000001000000001000 00100000001100000000100
01000000001100000000100 01000000000100000001000 00100000001000000010000 000100000000000001100000
00001100000000110000000 00100011101011000000000 00100000001000000000000 00100000111110000000000
00100001011101001011011 00000010011100100111111 10111000011100000110111 00000000010100000111011
00100000010100000111111 00100000010100000110000 00100000110110000000000 00000000000000000000000
00111000001000000000000 00111010100010101010101 00111000000000101010100 00000000000000101000000
00000000111110000000000 00000011111111100000000 00001110000000111000000 000110000000000001100000
00110100000000001011000 01100110000000110011000 01000101000001010001000 01000100100010010001000
00000100010100010000000 00000100001000010000000 00000100000000010000000 00000001001010000000000
01111001111101001111000
```

or



The Arecibo message as decoded into 23 rows
and 73 columns.

```
00000010101010100000000000
0010100000010100000000100
10001000100010010110010
10101010101010100100100
000000000000000000000000
000000000000110000000000
000000000001101000000000
000000000001101000000000
000000000001010100000000
000000000011111000000000
000000000000000000000000
11000011100011000011000
100000000000000110010000
11010001100011000011010
11111011111011111011111
000000000000000000000000
000100000000000000000010
000000000000000000000000
000010000000000000000001
111110000000000000011111
000000000000000000000000
11000011000011100011000
10000000100000000010000
11010000110001110011010
11111011111011111011111
000000000000000000000000
00010000001100000000010
000000000001100000000000
00001000001100000000001
11111000001100000011111
000000000001100000000000
00100000000100000000100
00010000001100000001000
00001100001100000010000
00000011000100001100000
00000000001100110000000
00000011000100001100000
00001100001100000010000
00010000001000000001000
00100000001100000000100
```

```
010000000001100000000100
01000000000100000001000
001000000001000000010000
000100000000000001100000
000011000000000110000000
001000111010110000000000
001000000010000000000000
001000001111100000000000
00100001011101001011011
00000010011100100111111
10111000011100000110111
00000000010100000111011
00100000010100000111111
00100000010100000110000
00100000110110000000000
000000000000000000000000
00111000001000000000000
00111010100010101010101
00111000000000101010100
000000000000000101000000
00000000111110000000000
00000011111111100000000
00001110000000111000000
00011000000000001100000
00110100000000010110000
01100110000000110011000
01000101000001010001000
01000100100010010001000
00000100010100010000000
00000100001000010000000
00000100000000010000000
00000001001010000000000
01111001111101001111000
```

References

External links

- SETI homepage on the message (<http://www.seti.org/Page.aspx?pid=688>)
- Interstellar Radio Messages (<http://www.cplire.ru/html/ra&sr/irm/index.html>)
- The Arecibo Message explained (<http://www.physics.utah.edu/~cassiday/p1080/lec06.html>)

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