

earth,¹⁸ to govern the day and the night, and to separate light from darkness. And God saw that it was good.¹⁹ And there was evening, and there was morning—the fourth day.

²⁰And God said, "Let there be light." And there was light. And God separated the light from the darkness, and let birds fly above the earth across the expanse of the sky.

²¹So God created the great creatures of the sea and every living animal that moves with which the water abounds, according to their kinds, and every winged bird according to its kind. And God saw that it was good.

And God blessed them and said, "Be fruitful and increase in number and fill the water with living creatures. Let the birds increase on the earth." ²³And there was evening, and there was morning—the fifth day.

²⁴And God said, "Let the land produce living creatures according to their kinds: livestock, creatures that move along the ground, and wild animals, each according to its kind." And it was so. ²⁵God made the wild animals according to their kinds, the livestock according to their kinds, and all the creatures that move along the ground according to their

kinds. And God saw that it was good.

²⁶Then God said, "Let us make man in our image, in our likeness, and let them rule over the fish of the sea and the birds of the air, over the livestock, over all the earth, and over every creeping thing that crawls on the ground."

²⁷So God created man in his own image,

in the image of God he created him;

male and female he created them.

²⁸God blessed them and said to them, "Be fruitful and increase in number; fill the earth and subdue it. Rule over the fish of the sea and over the birds of the air and over every living creature that moves on the ground."

²⁹Then God said, "I give you every seed-bearing plant on the face of the whole earth and every tree that has fruit with seed in it. They will be yours for food. ³⁰And to all the beasts of the earth and all the birds of the air and all the creatures that move on the ground—everything that has the breath of life in it—I give every green plant for food." And it was so.

³¹God saw all that he had made, and it was very good.

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made, and it was very good. And there was evening, and there was morning—the sixth day.

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Thus the heavens and the earth were completed in all their vast array.

³And God blessed the seventh day and made it holy, because he rested^a from all his work.

⁴This is the account of the heavens and the earth when they were created.

When the LORD God made the earth and the heavens—⁵and no shrub of the field had yet appeared on the earth^b and no plant of the field had yet sprung up, for the LORD God had not sent rain on the earth^b and there was no man to work the ground,

⁶but streams^c came up from the earth and watered the whole surface of the ground—⁷the LORD God formed the man^d from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being.

⁸Now the LORD God had planted a garden in the east, in Eden; and there he put the man he had formed.

⁹And the LORD God made all kinds of trees grow out of the ground—trees that were pleasing to the eye and good for food. In the middle of the garden were the tree of life and the tree of the knowledge of good and evil.

¹⁰A river watering the garden flowed from Eden; from there it was separated into four headwaters. ¹¹The name of the first is the Pishon; it winds through the entire land of Havilah, where there is gold.

¹²(The gold of that land is good; aromatic resin^e and onyx^f are also found there.) ¹³The name of the second river is the Gihon; it winds through the entire land of Cush.

¹⁴The name of the third river is the Tigris; it runs along the east side of Asshur. And the fourth river is the Euphrates.

¹⁵The LORD God took the man and put him in the Garden of Eden to work it and take care of it. ¹⁶And the LORD God commanded the man, "You are free to eat from any tree in the garden; ¹⁷but you must not eat from the tree of the knowledge of good and evil, for when you eat of it you will surely die."

¹⁸The LORD God said, "It is not good for the man to be alone. I will make a helper suitable for him."

¹⁹Now the LORD God had formed

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Biblical Date for Adam

Calibration of Genesis 11 geneology puts Adam's time at 60,000 ± 30,000 years ago.

^a26 Hebrew, Syriac all the wild animals

^a2 Or ceased; also in verse 3 ^b5 Or land; also in verse 6 ^c6 Or mist ^d7 The Hebrew for man (adam) sounds like and may be related to the Hebrew for ground (adamah); it is also the name Adam. (see Gen. 2:20). ^e12 Or good; pearls ^f13 Possibly southeast Mesopotamia

earth,¹⁸ to govern the day and the night, and to separate light from darkness. And God saw that it was good.¹⁹ And there was evening, and there was morning—the fourth day.

Ps 74:16; 104:19; 136:9

²⁰And God said, "Let there be light," and God made light, and let birds fly above the earth across the expanse of the sky."²¹ So God created the great creatures of the sea and every living animal with which the water abounds, according to their kinds, and every winged bird according to its kind. And God blessed them and said, "Be fruitful and increase in number and fill the water in the sky." And it was so.²² And there was evening, and there was morning—the fifth day.

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Ps 104:24

² Thus the heavens and the earth were completed in all their vast array.

³ And God blessed the seventh day and made it holy, because on it he rested from all his work.

⁴ This is the account of the heavens and the earth when they were created.

When the LORD God made the earth and the heavens—⁵ and no field had yet sprung up, for the LORD God had not sent rain on the earth^b and there was no man to work the ground,⁶ but streams^c came up from the earth and watered the whole surface of the ground—⁷ the LORD God formed the man^d from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being.

1Co 15:45

⁸ Now the LORD God had planted a garden in the east, in Eden; and there he put the man he had formed.⁹ And the LORD God made all kinds of trees grow out of the ground—trees that were pleasing to the eye and good for food. In the middle of the garden were the tree of life and the tree of the knowledge of good and evil.

¹⁰ A river watering the garden flowed from Eden; from there it was separated into four headwaters.¹¹ The name of the first is the Tigris; it winds through the entire land of Assyria.

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¹⁴ The name of the third river is the Tigris; it runs along the east side of Assyria. And the fourth river is the Euphrates.

Da 10:4

¹⁵ The LORD God took the man and put him in the Garden of Eden to work it and take care of it.¹⁶ And the LORD God commanded the man, "You are free to eat from any tree in the garden; ¹⁷ but you must not eat from the tree of the knowledge of good and evil, for when you eat of it you will surely die."

¹⁸ The LORD God said, "It is not good for the man to be alone. I will make a helper suitable for him."

¹⁹ Now the LORD God had formed

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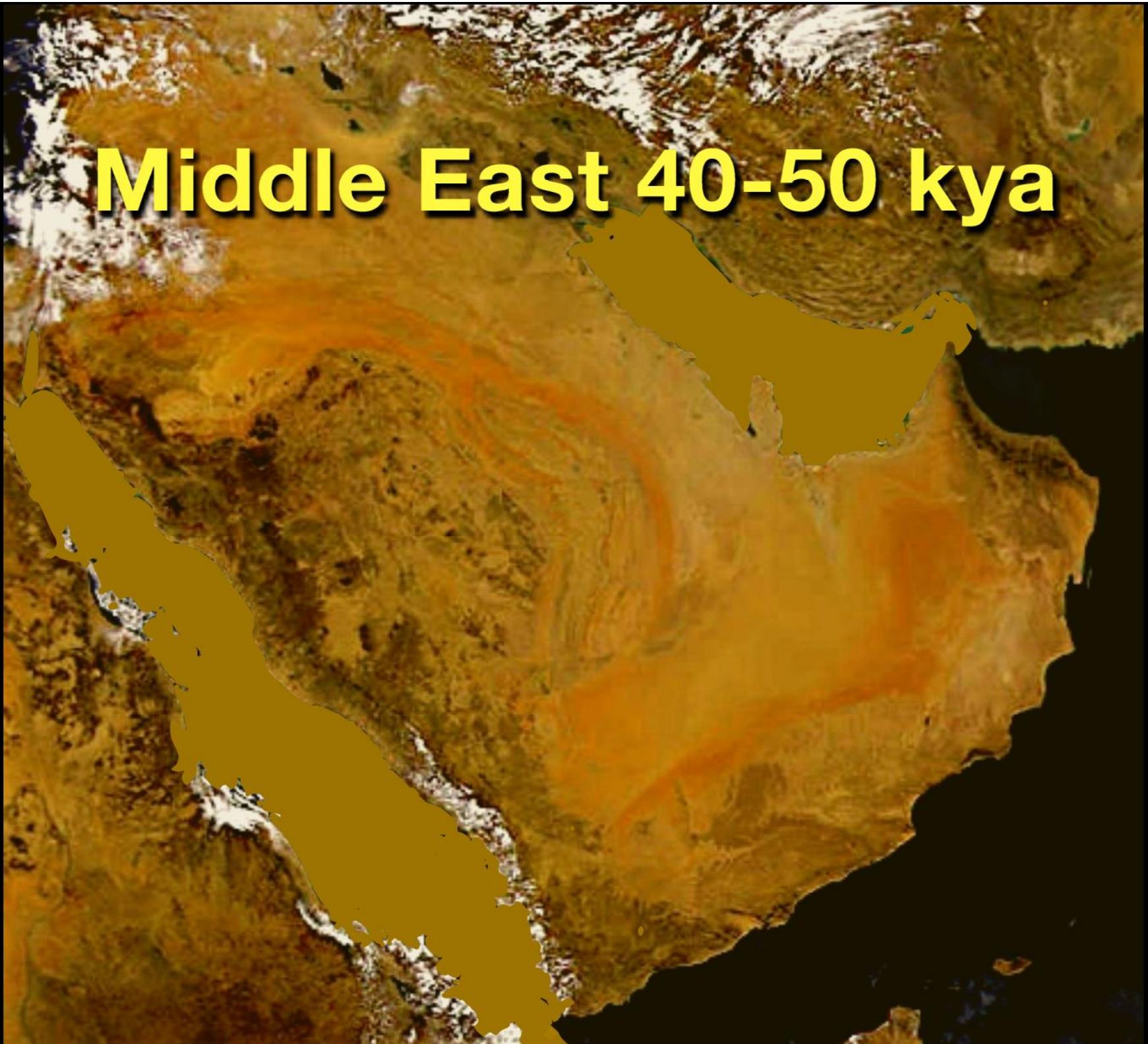
A map of the ancient Near East, showing the Tigris and Euphrates rivers. The land is depicted in shades of yellow and orange, while the water bodies are dark blue. The labels are in white, bold, sans-serif font.

Asshur

Havilah

Cush

Middle East 40-50 kya



Asshur

Nod

Eden



Havilah

Cush





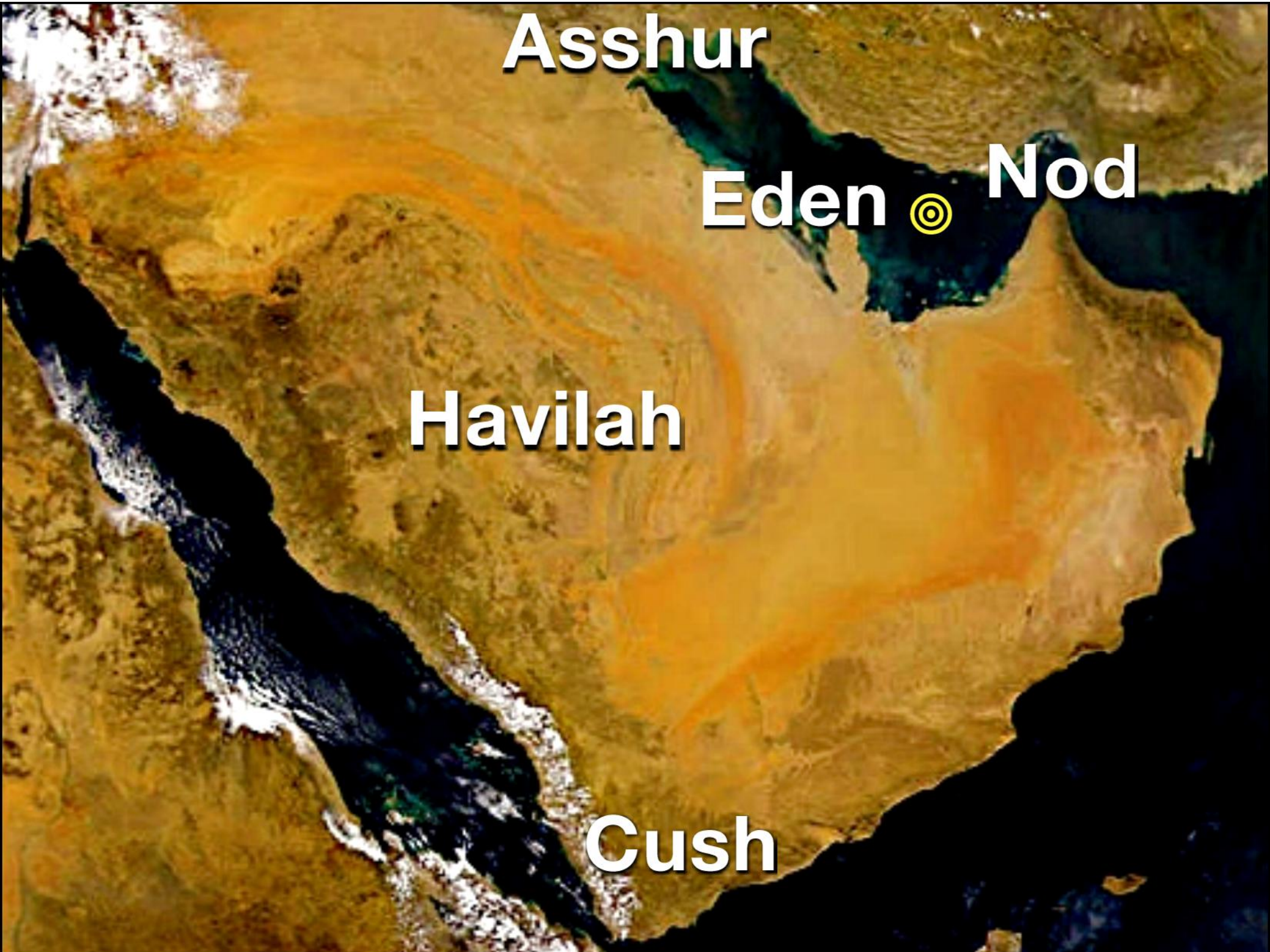


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⁴And God blessed the seventh day and made it holy, because he rested^a from all his work. ⁵And God blessed the seventh day and made it holy, because he rested from all his work that he had done.

⁶This is the account of the heavens and the earth when they were created.

⁷When the LORD God made the earth and the heavens—⁸and no vegetation had yet sprung up, and no plants had yet appeared on the earth—⁹and there was no man to work the ground,¹⁰ but streams came up from the earth and watered the whole surface of the ground—¹¹the LORD God formed the man^d from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being.

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Dates for Abraham and Peleg permit calibration of Genesis 11 geneology: Adam's birthday = 60,000 ± 30,000 years ago.

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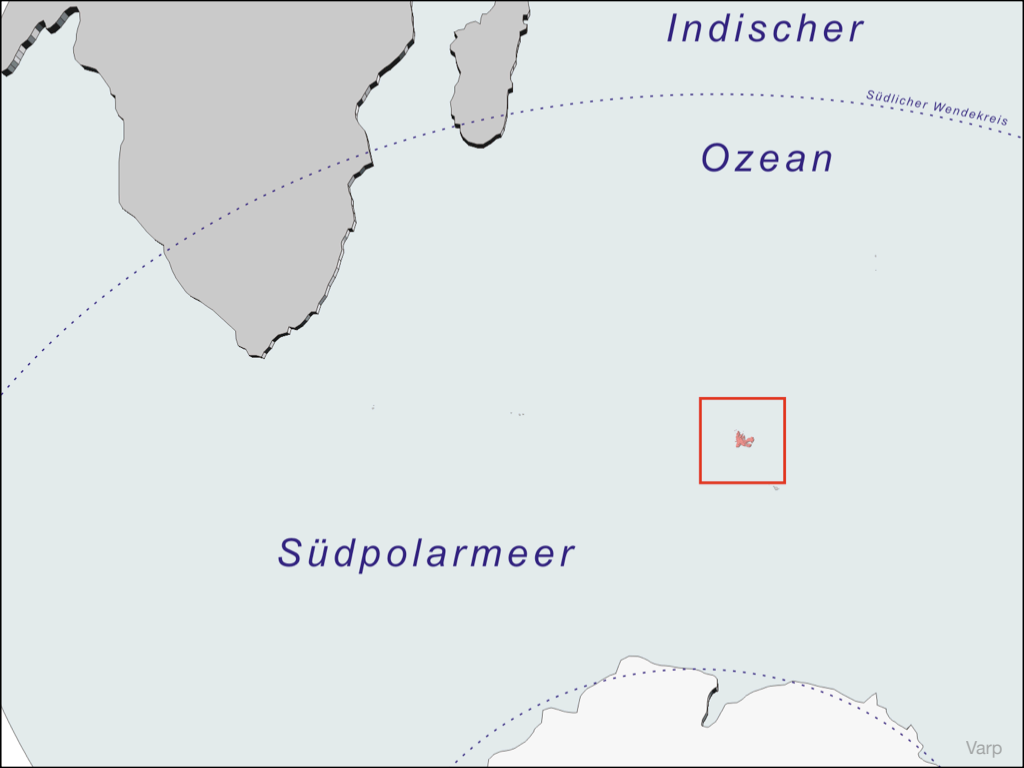
Cultural Big Bangs

art and music	33,000 BP
jewelry	40,000 BP
clothing	40,000 BP
language	40,000 BP
complex tools	40,000 BP

Chromosome 21

Only three haplotypes (sets of mutated nucleotides) describe 80% of the human population.

So few indicates a recent origin for humanity.



Indischer

Südlicher Wendekreis

Ozean

Südpolarmeer

Varp









Jessica Dennett





The 7,000 Sumatran orangutans showed more genetic diversity than the 45,000 orangutans in Borneo.



“We don’t fully understand the relationship between genetic diversity and population size.”

—William Arnos, quoted by John Milton in *Nature News*, Jan. 26, 2011