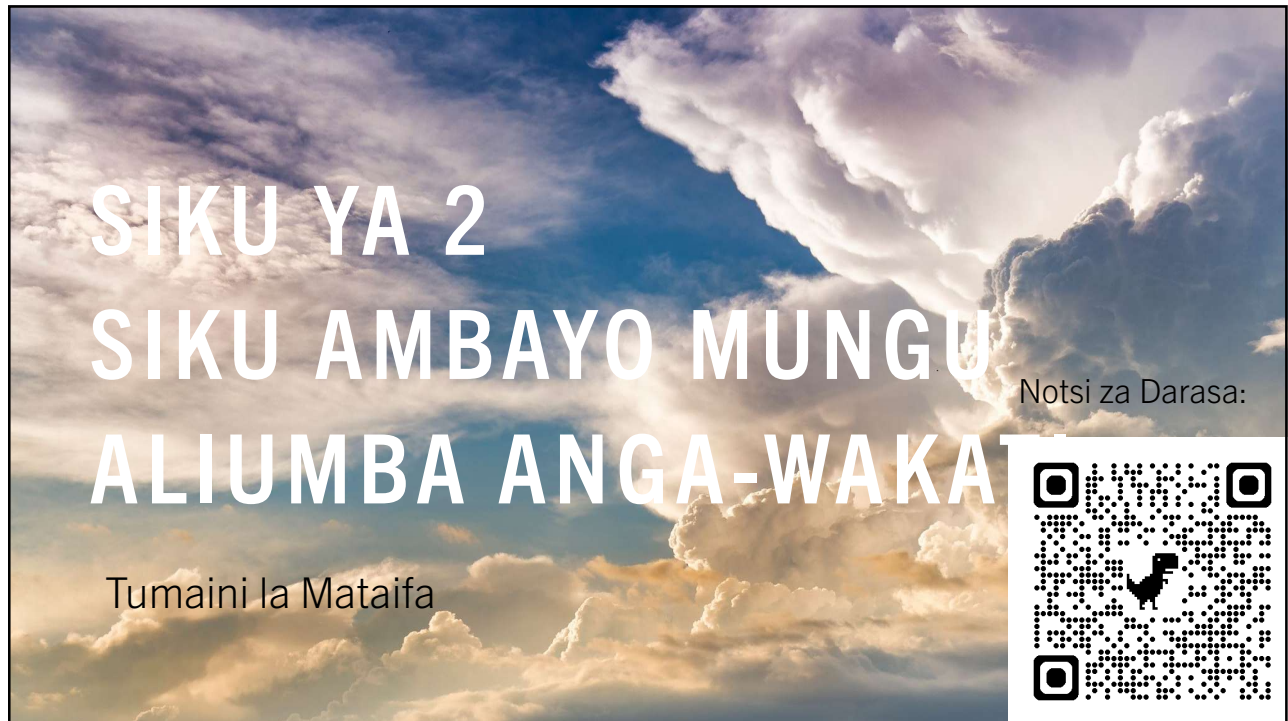
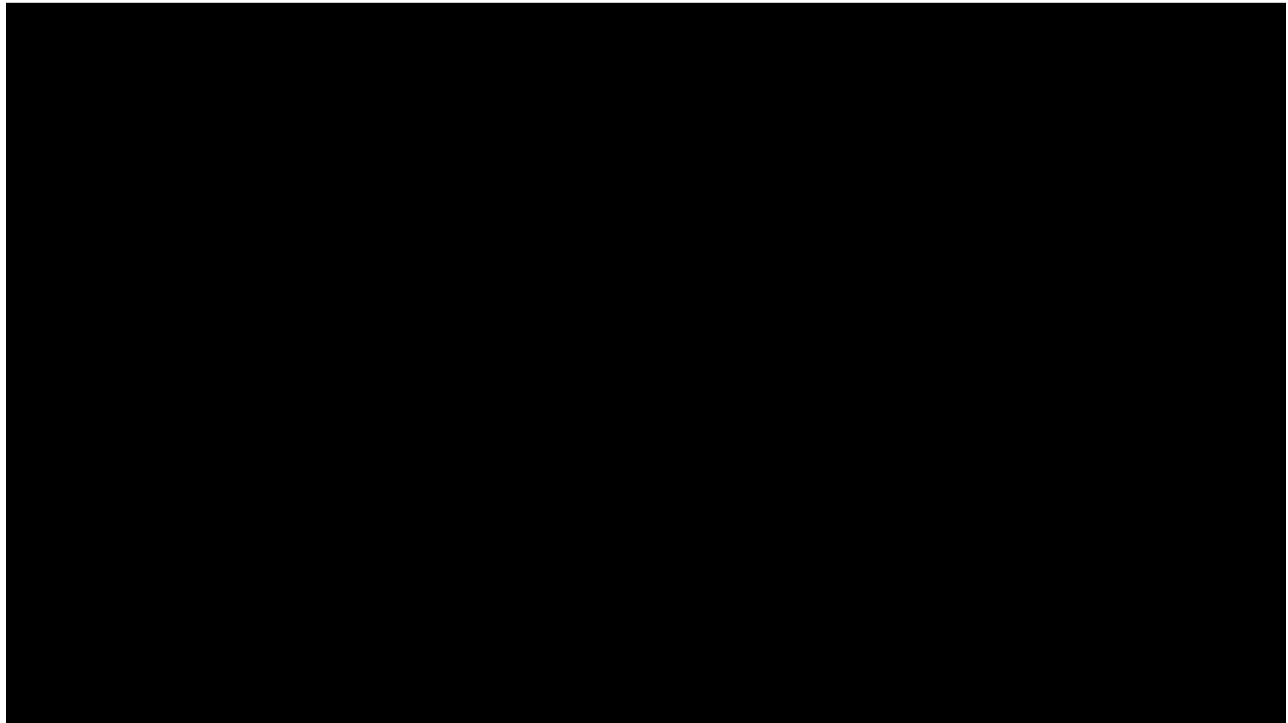


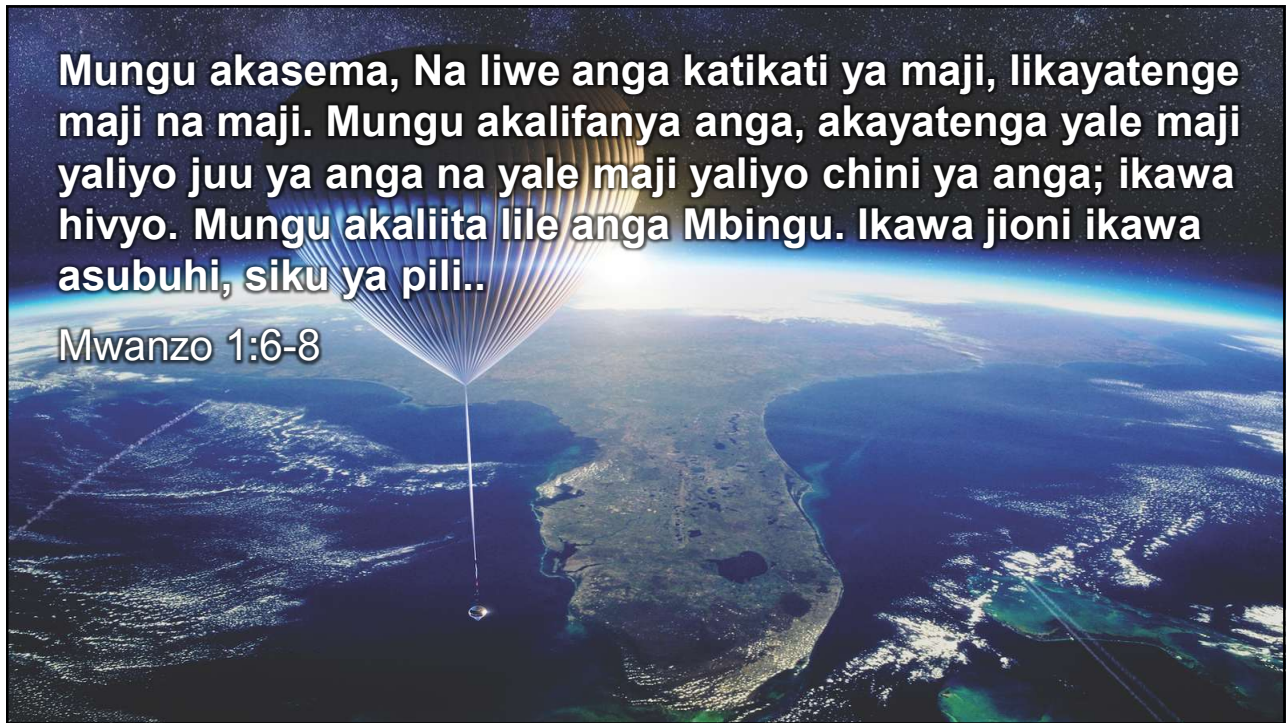
1



2



3



**Mungu akasema, Na liwe anga katikati ya maji, likayatenge maji na maji. Mungu akalifanya anga, akayatenga yale maji yaliyo juu ya anga na yale maji yaliyo chini ya anga; ikawa hivyo. Mungu akaliita lile anga Mbingu. Ikawa jioni ikawa asubuhi, siku ya pili..**

Mwanzo 1:6-8

4

Mungu akasema, Na liwe **anga** katikati ya maji, likayatenge maji na maji. Mungu akalifanya **anga**, akayatenga yale maji yaliyo juu ya **anga** na yale maji yaliyo chini ya **anga**; ikawa hivyo. Mungu akaliita lile **anga Mbingu**. Ikawa jioni ikawa asubuhi, siku ya pili.

Mwanzo 1:6-8

רָקִיעַ  
rāqîa'

Uso ulioenea, upanuzi, anga  
Lilionwa na Waebrania kama thabiti na lenyekushikilia maji juu

שָׁמַיִם  
Šāmayim

Mbingu zinazoweza kuonekana, mbingu

5

# Mtazamo wa Waebrania wa Kale Kuhusu Ulimwengu

**Ancient Hebrew Conception of the Universe**

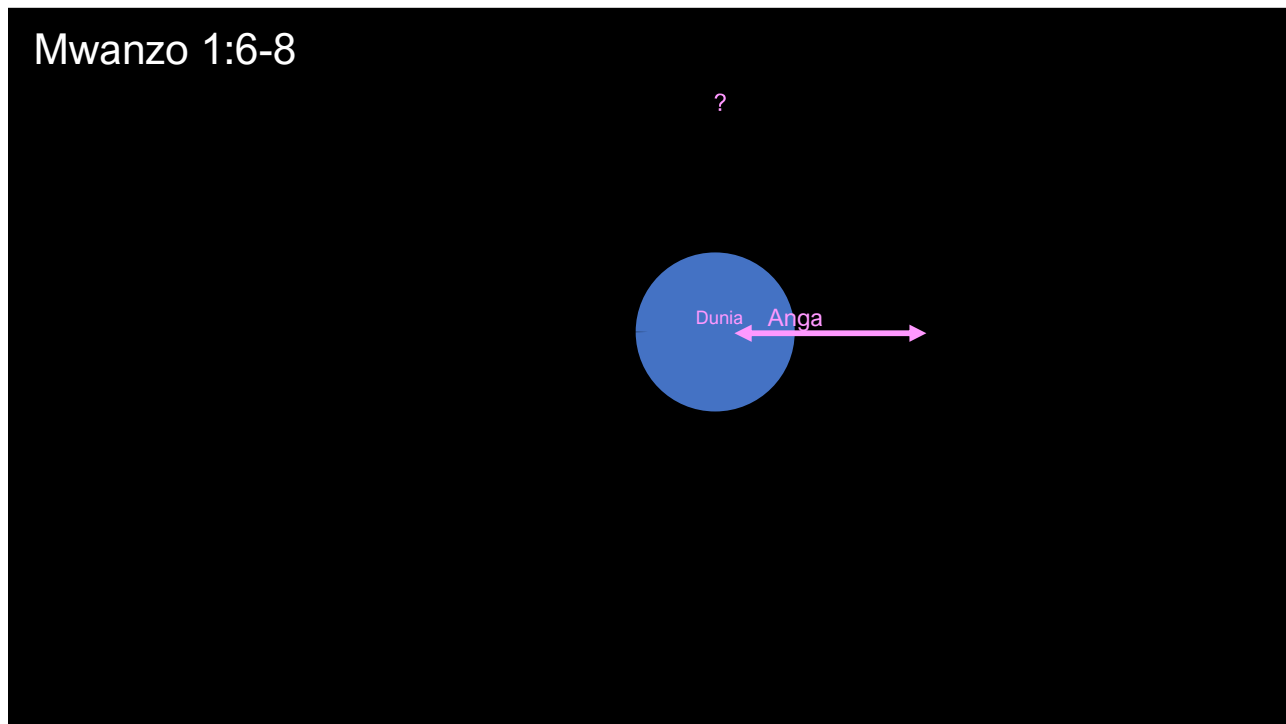
The ancient Israelites divided the world into Heaven, Earth, Sea, and the Underworld

They viewed the sky as a vault resting on foundations—perhaps mountains—with doors and windows that let in the rain. God dwelt above the sky, hidden in cloud and majesty.

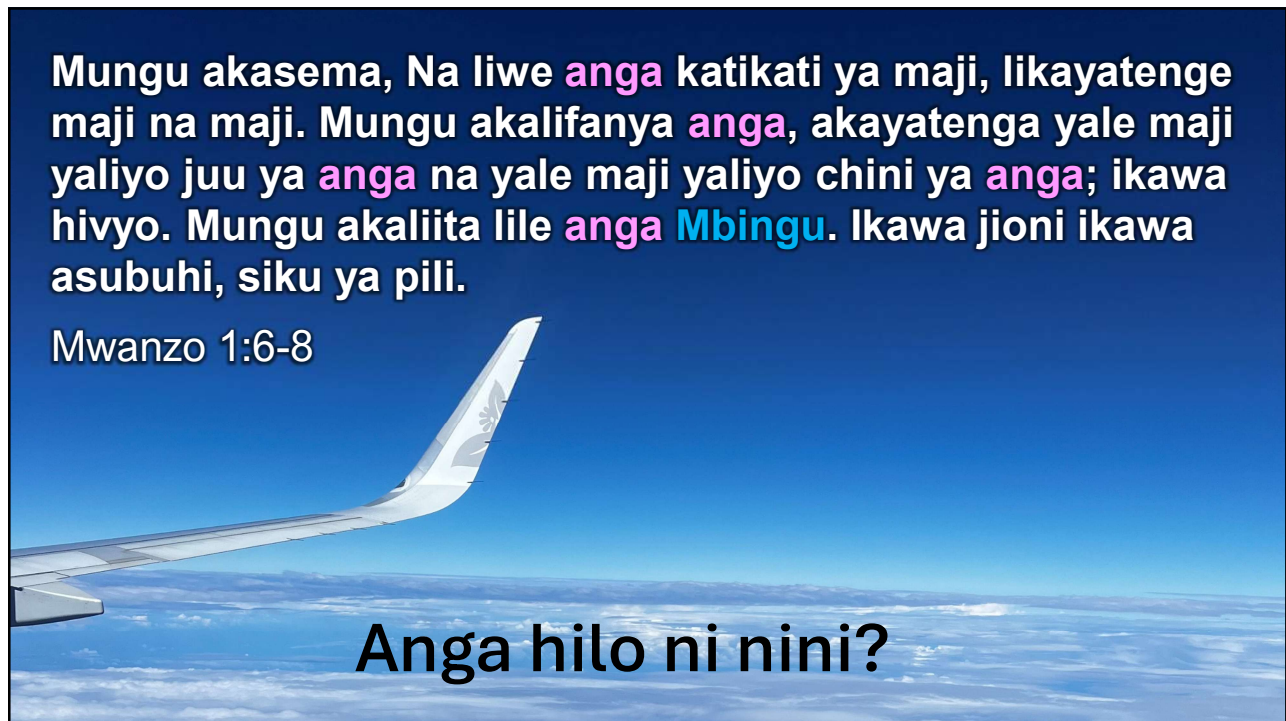
The world was viewed as a disk floating on the waters, secured or moored by pillars. The earth was the only known domain—the realm beyond it was considered unknowable.

The Underworld (Sheol) was a watery or dusty prison from which no one returned. Regarded as a physical place beneath the earth, it could be reached only through death.

6



7



8

## Fafanuzi Zinazowezekana Kuhusu Anga

- Anga; nafasi kati ya bahari na kifuniko/tabaka la mvuke?
- Siyo uhalisia bali mtazamo wa mbingu. Kuba ya mbinguni?
- Nafasi ya nje yenye ulimwengu ulio na mipaka ... uliopakana na maji?”

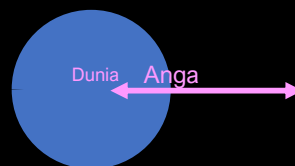
9

## Mwanzo 1:6-8

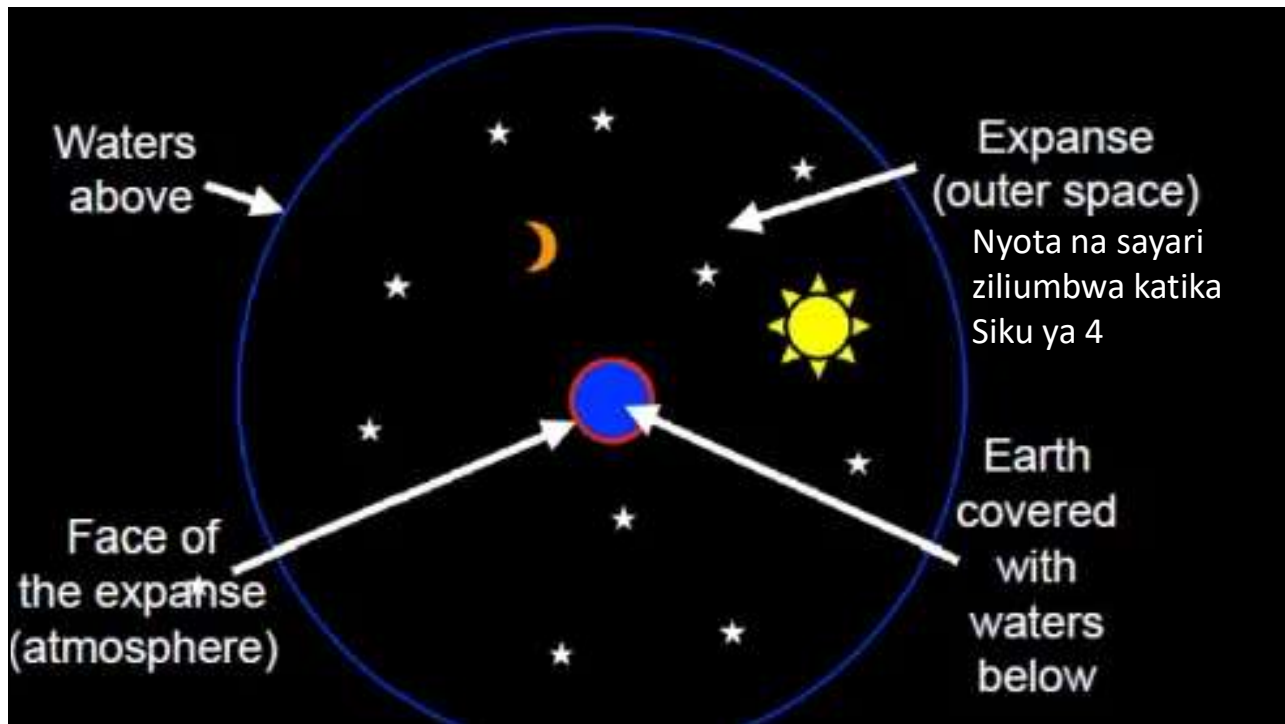
Mfano wa Ulimwengu Wenye Mipaka

- Dunia ikiwa katikati
- Ulimwengu wenye mipaka ya maji ungesababisha ulimwengu kupanuka
- Inaeleza uchunguzi wa Edwin Hubble kuhusu mkengeuko mwekundu (red shift)
- Ina athari za kuvutia katika uhusiano wa muda na upanuzi wa muda (time dilatation)

Mwisho wa ulimwengu



10



11



- Dunia iliumbwa na Mungu
- Siku ya pili, maji yaliondolewa kutoka duniani na kuhamishwa kwenda juu ya 'anga imara'
- Dunia ndiyo kitovu cha uumbaji wa Mungu wa ulimwengu
- Dunia ni muhimu kwa sababu ndiko Mungu anapofanya kazi yake.

Sisi tunaishi hapa.



- Dunia inapanuka bila kikomo (kutokana na mlipuko) katika nafasi tupu
- Kila kitu katika ulimwengu ni cha nasibu na dunia haina nafasi ya kipekee
- Huenda kuna uhai katika sayari nyingine zinazofanana na yetu
- Ni upuuzi na si wa kisayansi kudhani kwamba kuna lolote la kipekee kuhusu dunia.

12

# Nafasi (Space) ni Nini? Imefanyizwa na nini?

13

## Nadharia ya Aether

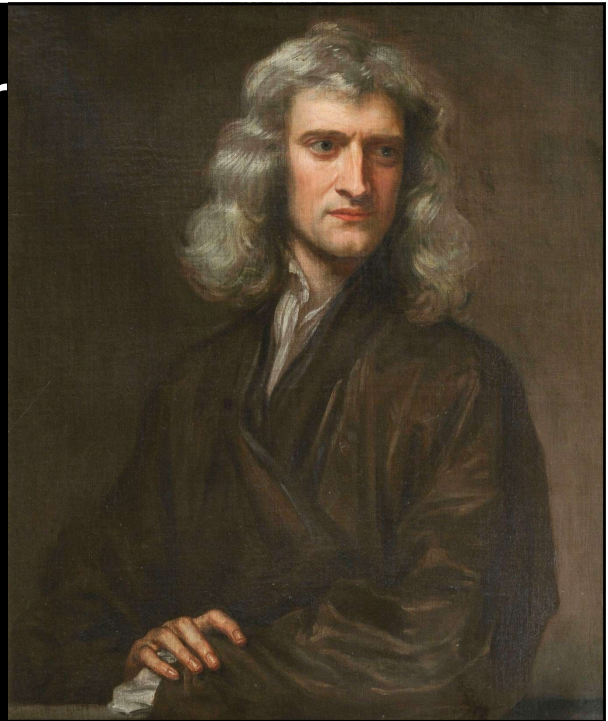
- Aristotle alidhani kwamba aether ni kipengele cha tano cha kiasili (pamoja na maji, moto, hewa na ardhi). Aristotle alidai kwamba mbingu haziwezi kutengenezwa na dutu yoyote ya kidunia kwa sababu hazibadiliki, hivyo lazima ziwe zimetengenezwa kwa dutu ya mbinguni – aether.



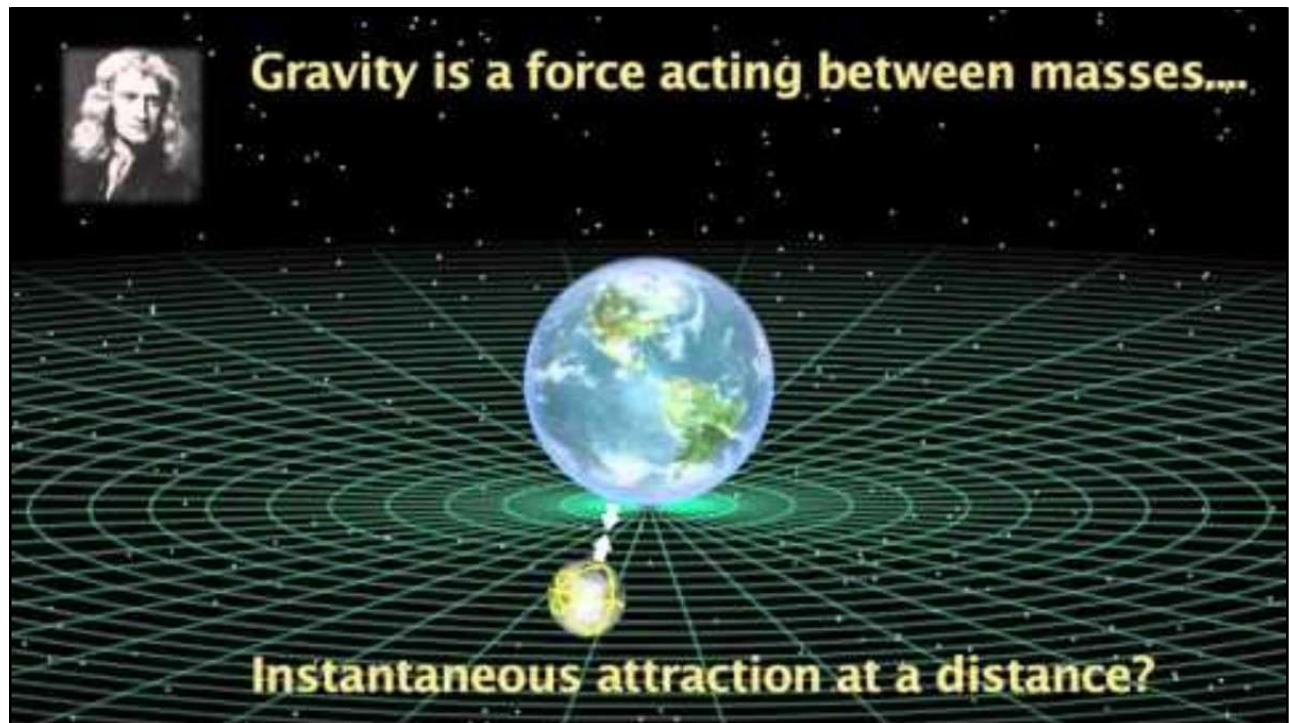
14

## Nadharia ya Aether

- Isaac Newton alidai kwamba aether ilihitajika ili kusafirisha mwanga au joto kupitia nafasi au ombwe.

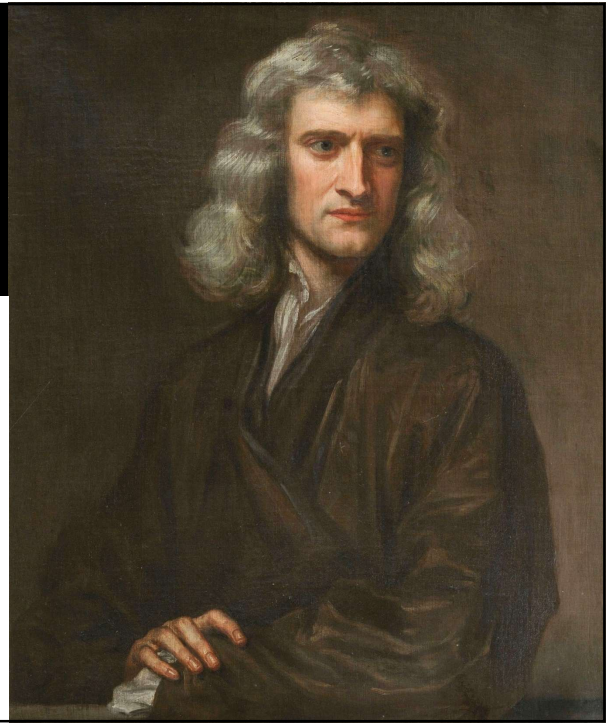
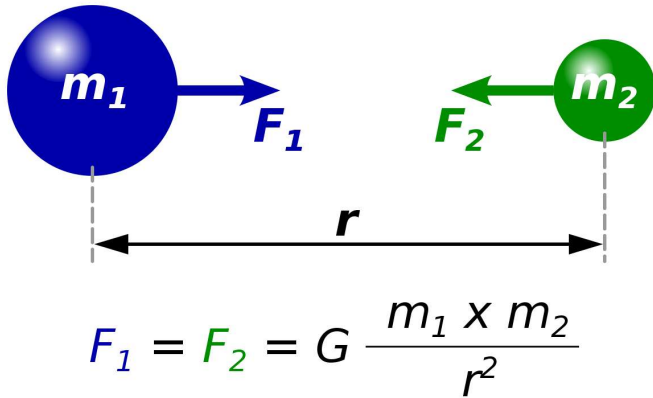


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# Nguvu ya Mvutano



17



18



Ameiumba dunia kwa uweza wake,  
Ameuthibitisha ulimwengu kwa hekima yake,  
Na kwa ufahamu wake amezitandika mbingu.  
Yeremia 51:15

Yeye hutandaza kaskazi juu  
ya nafasi isiyo na kitu,  
Na kuutundika ulimwengu  
pasipo kitu. Ayubu 26:7

Umejivika nuru kama vazi;  
Umezitandika mbingu kama pazia.  
Zaburi 104:2

Yeye ndiye anayeketi juu ya duara ya dunia, na  
hao wanaokaa ndani yake huwa kama panzi;  
yeye ndiye azitandazaye mbingu kama pazia  
na kuzikunjua kama hema ya kukaliwa.  
Isaya 40:22

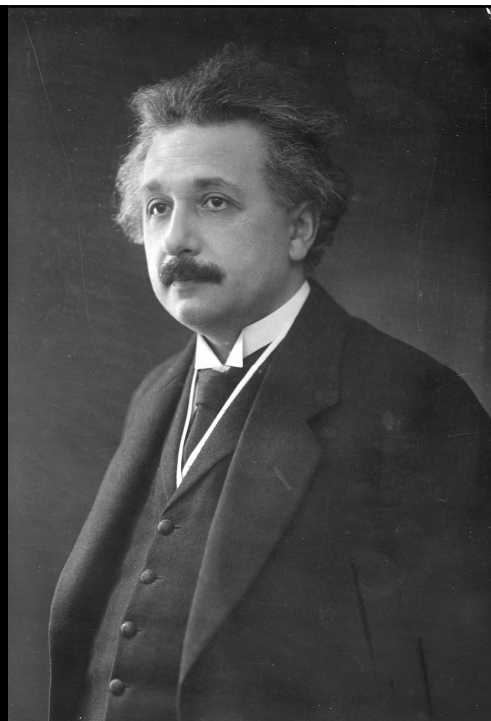
Mungu BWANA anena, yeye aliyeziumba  
mbingu, na kuzitanda; yeye aliyeitandaza  
nchi na mazao yake Isaya 42:5

Mimi nimeiumba dunia, nimemhuluku  
mwanadamu juu yake; Mimi, naam, mikono  
yangu mimi, imezitanda mbingu, na jeshi lake  
lote nimeliamuru. Isaya 45:12

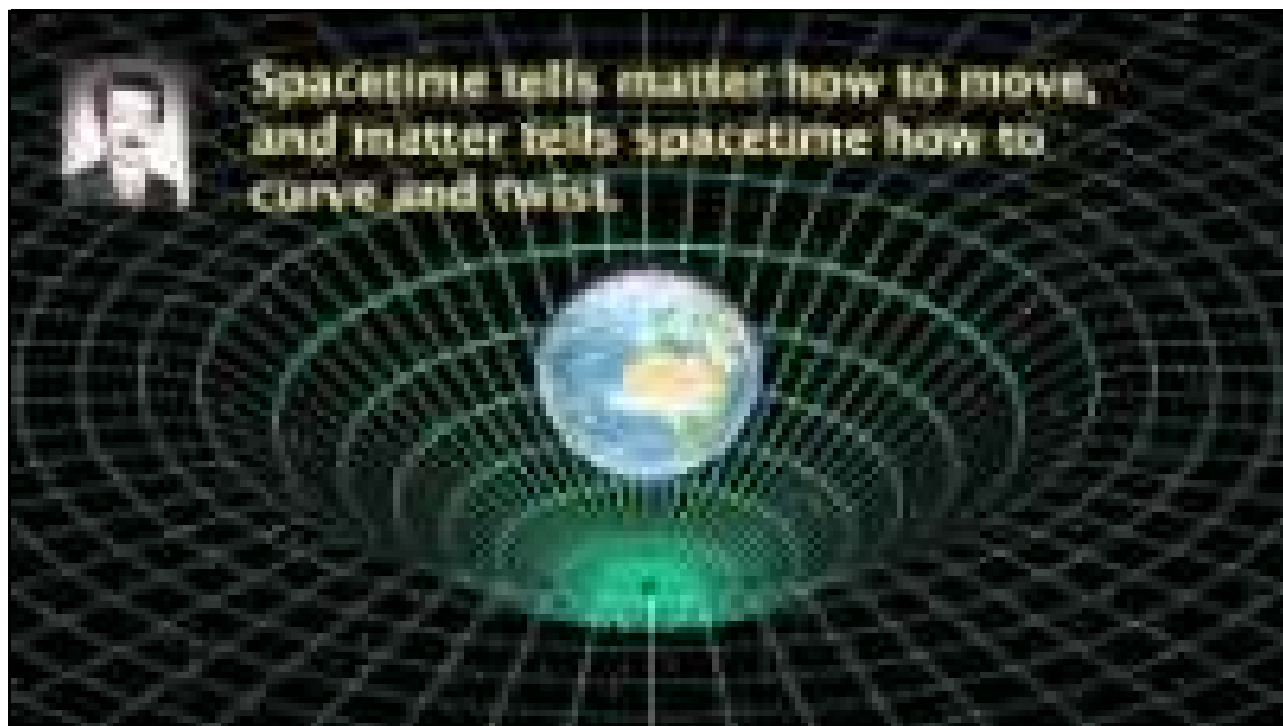
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## Nadharia ya Anga-Wakati

Mwaka 1915, Albert Einstein alichapisha Nadharia yake ya Jumla ya Uhusiano (General Theory of Relativity). Badala ya kitu kimoja kuvutwa na kingine kupitia aether, Albert Einstein aliona mvutano kama matokeo ya kupinda kwa anga. Alisema kwamba vitu vyote katika ulimwengu vimekaa juu ya **kitambaa** laini chenye vipimo vinne kinachoitwa **anga-wakati**. Miili mikubwa kama vile jua hupindisha anga-wakati livizunguke, na hivyo obiti ya dunia ni matokeo ya sayari yetu kufuata upinde huo.



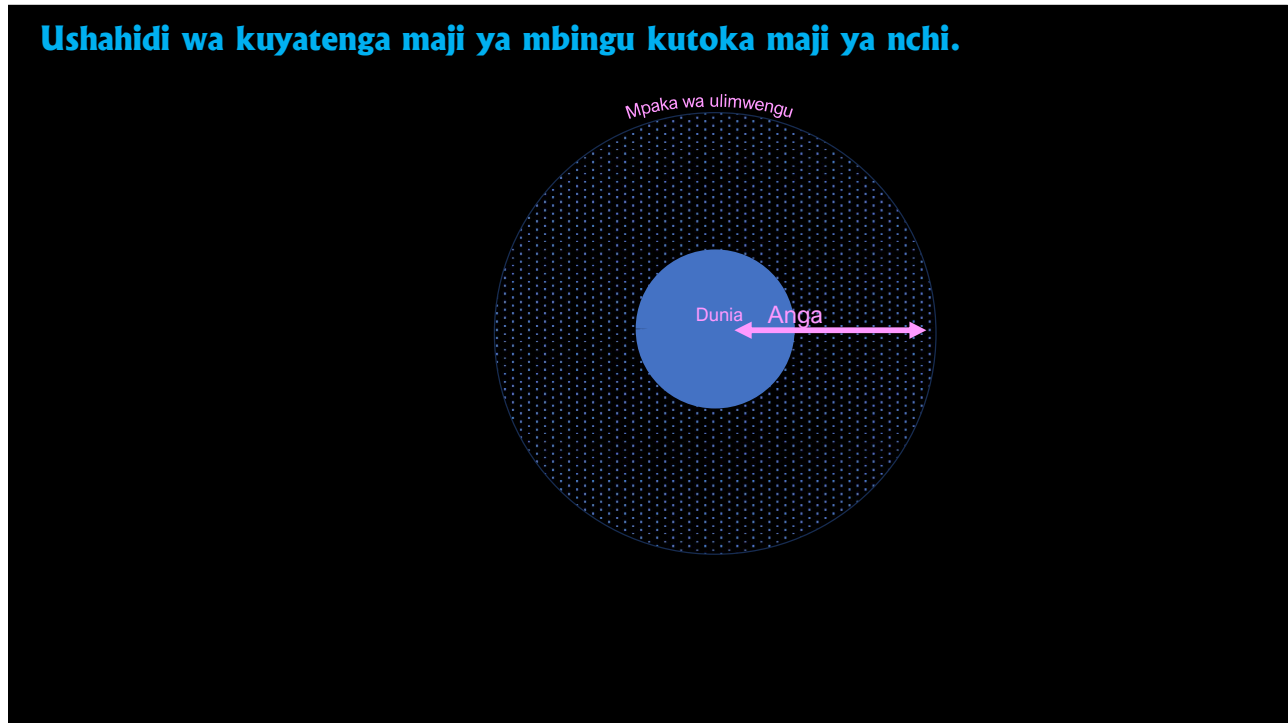
20



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Kama Mungu aliyatenga yale  
maji yaliyo juu ya anga kutoka  
yale maji yaliyo chini ya anga,  
je, hatupaswi kuona baadhi  
ya ushahidi?

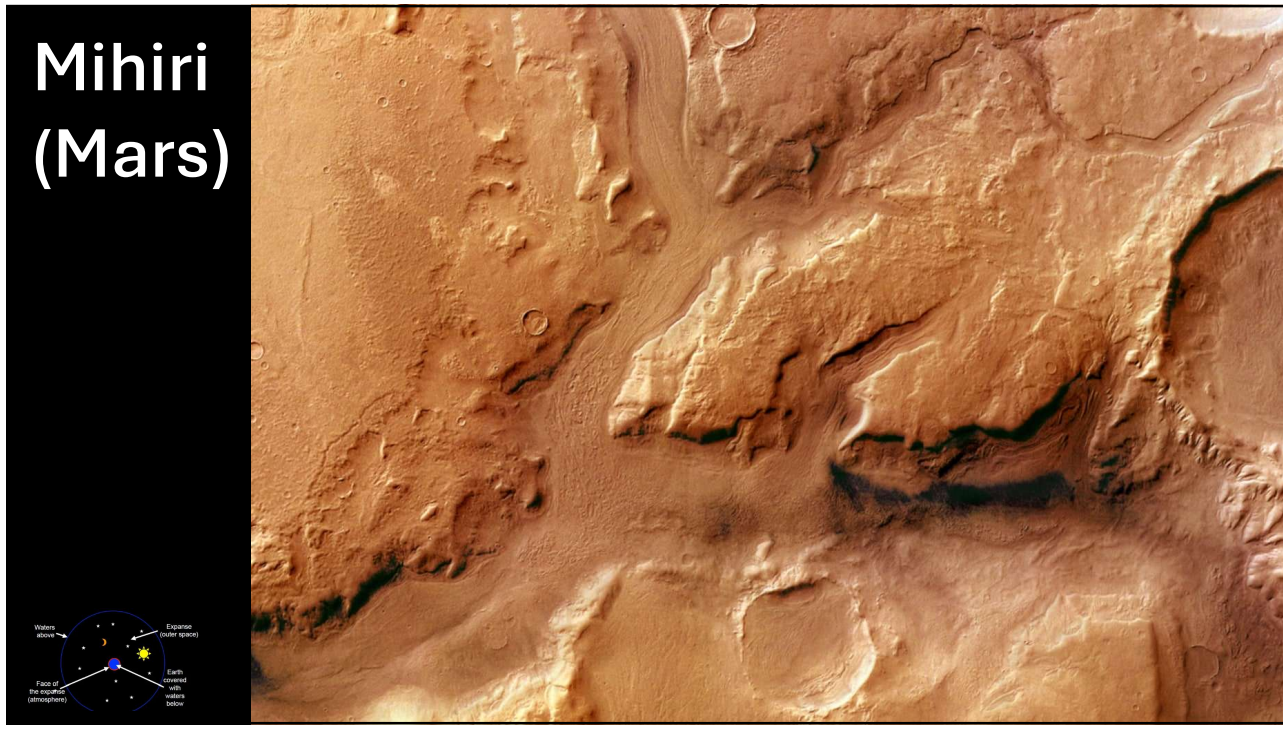
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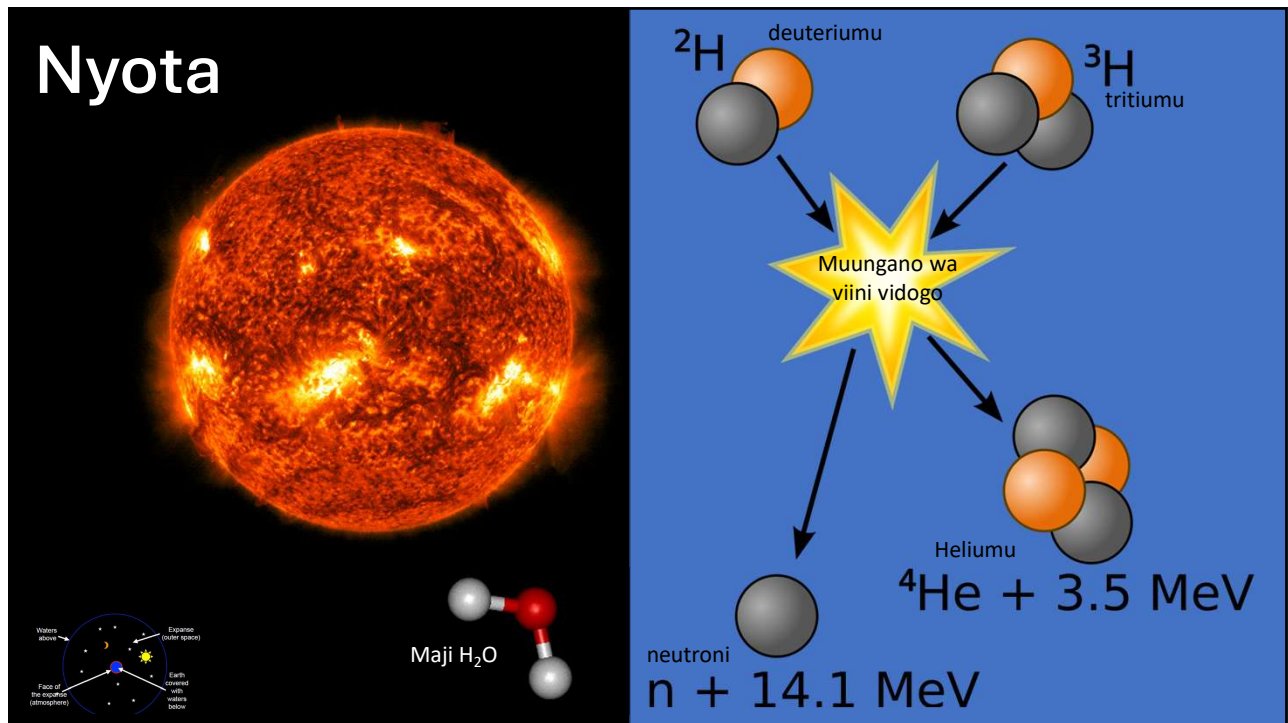
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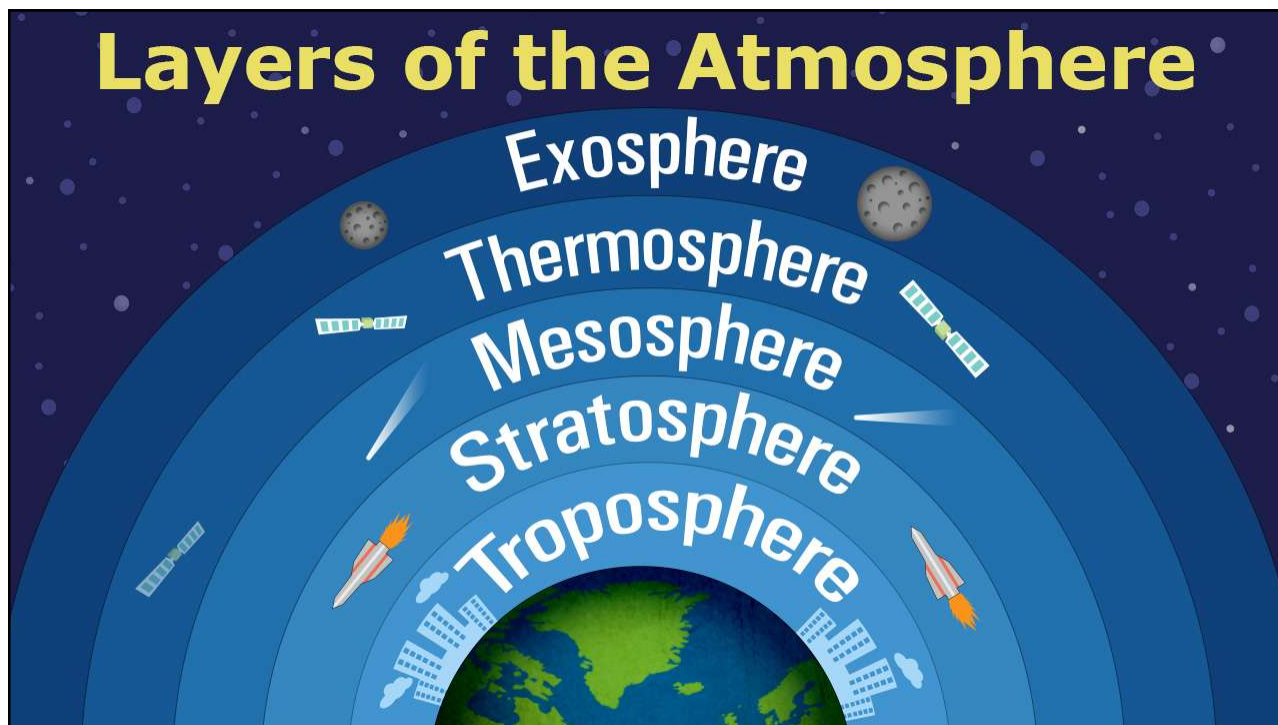


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**Zaburi 148:3-4**  
 Msifuni, jua na mwezi;  
 Msifuni, nyota zote zenye mwanga.  
 Msifuni, enyi **mbingu** za **mbingu**,  
 Nanyi **maji** mlioko juu ya **mbingu**

**שָׁמַיִם** *shamayim*  
*Mbingu moja, mbingu zaidi ya moja, mbingu (mf. ya mawingu)*

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32



Mawingu ya  
Kumulusi

33



Mawingu ya  
Stratusi

34



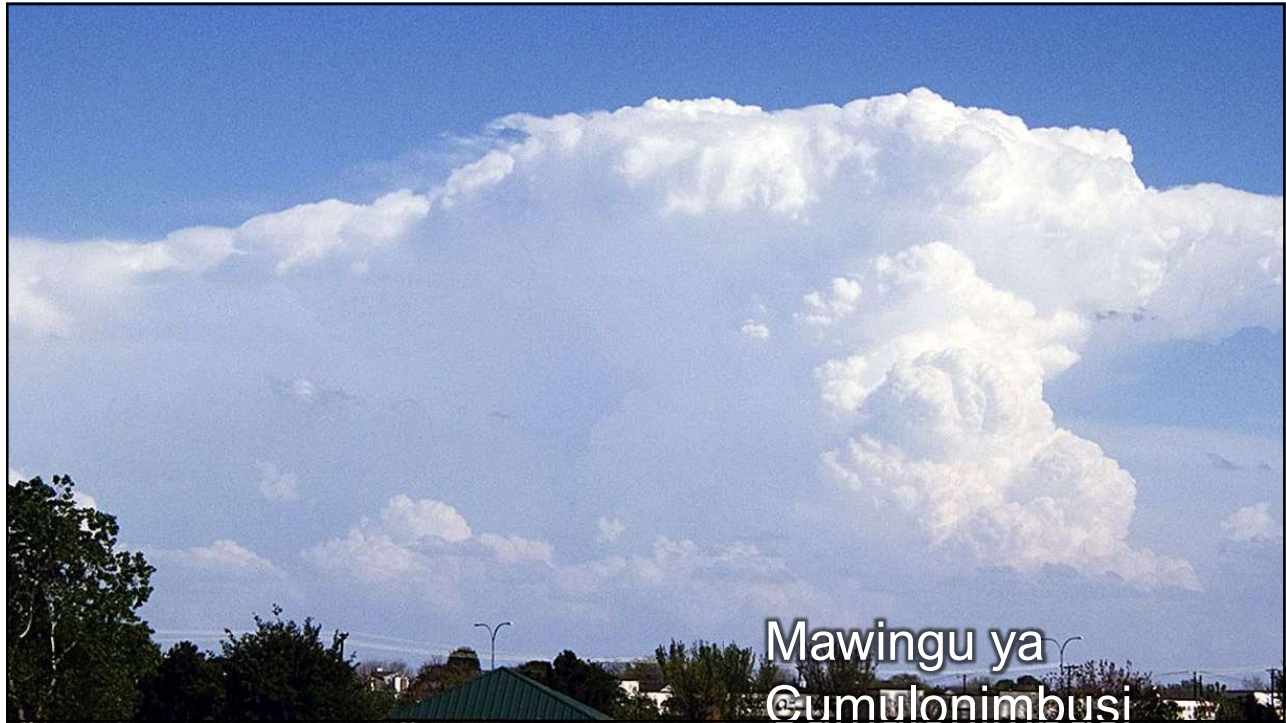
Mawingu ya  
Nimbostratusi

35



Mawingu ya  
Cirusi

36



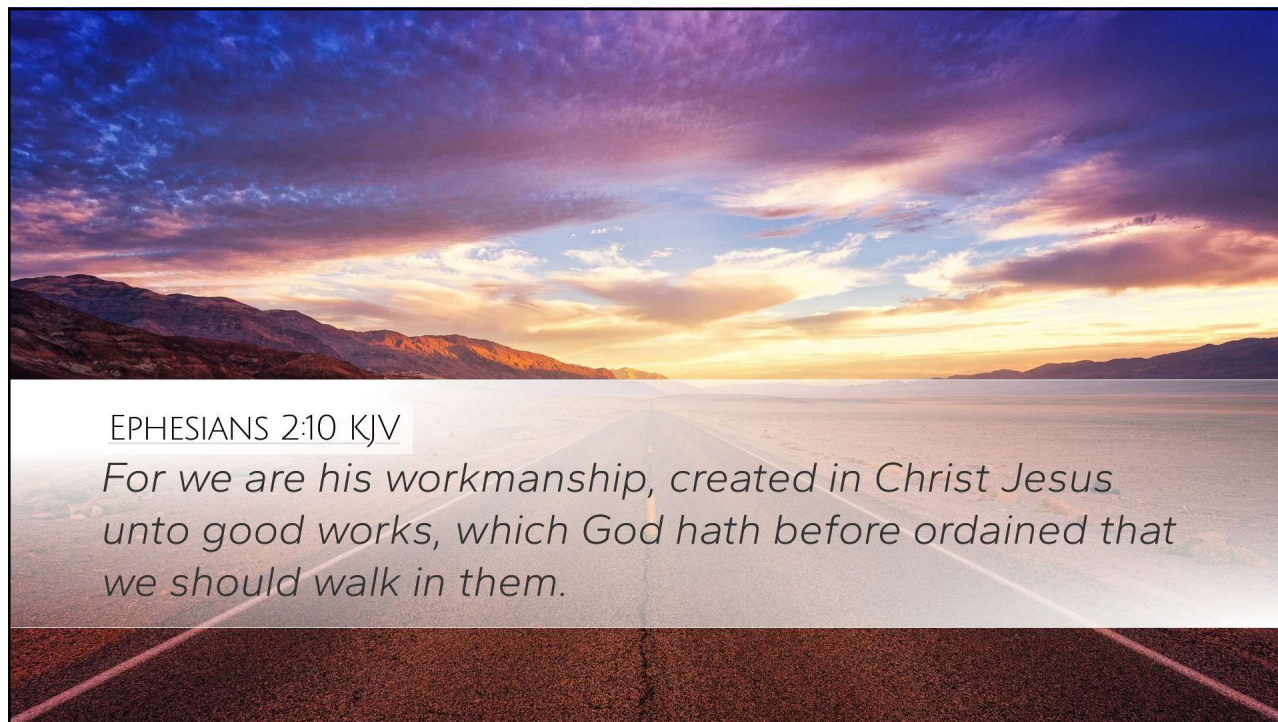
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Psalm 19:1  
Mbingu zauhubiri utukufu wa Mungu,  
Na anga litaingaza kazi ya mikono yake.

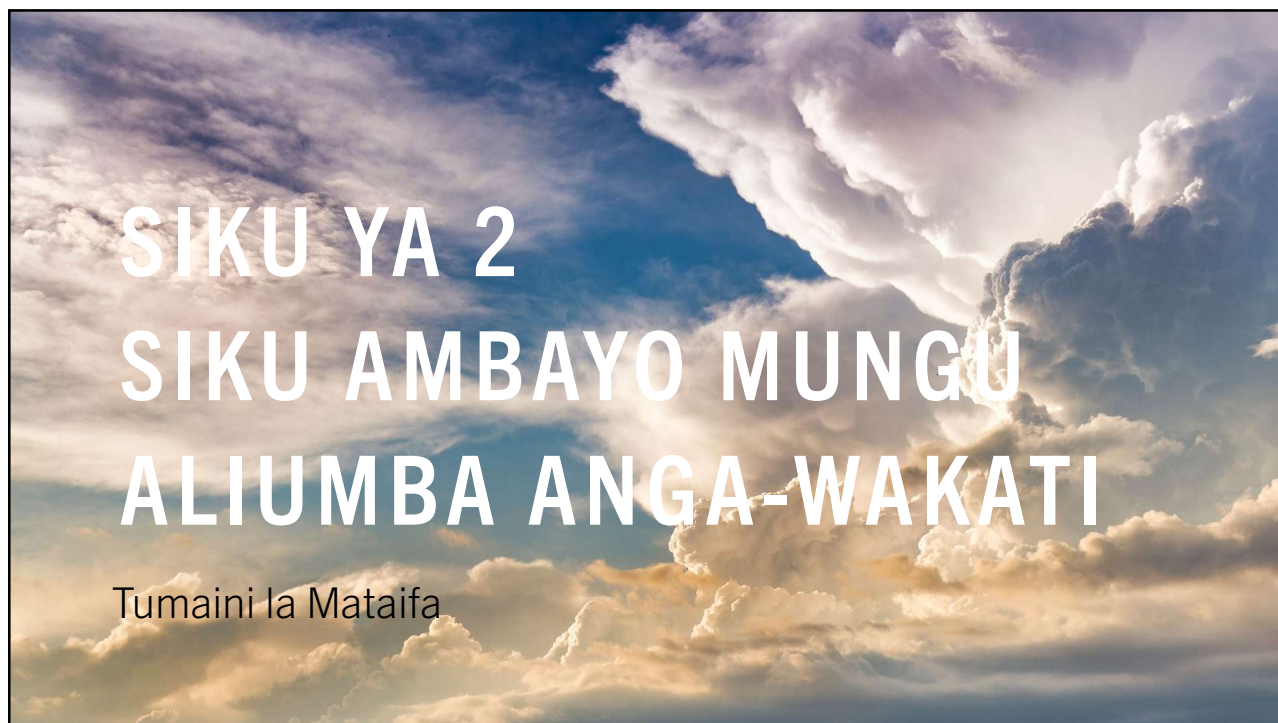
שָׁמַיִם *shamayim*  
Mbinngu moja, mbingu zaidi ya  
moja, mbingu (anga)

רָקִיעַ *raqiya*  
Upana au tao linaloweza  
kuonekana la anga

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