

UMkhathilibe Ephaketheni Lami



Imifanekiso Emkhathini



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Lomdwebo
olinganiselwa kwizi-
17,000 ubudala
osentabeni iLascaux
eFransi ukhombisa
iqoqo leziNkanyezi
elibizwa ngesiLimela.



Isicaba esatholakala eJalimane
esikholelwa ukuthi senziwa
eminyakeni eyizi-4000 eyedlule
sikhombisa iLanga, iNyanga,
kanye neziNkanyezi ezimubalwa,
okubalwa kuzona nesiLimela.



`Inkazimulo
yomkhathi
eRhône'
umdwebo
odumile
owadwetshwa
ibhunu uVincent
Van Gogh, lapho
khona umuntu



ekwazi ukubona isiShomo ufeleba
weBhele.

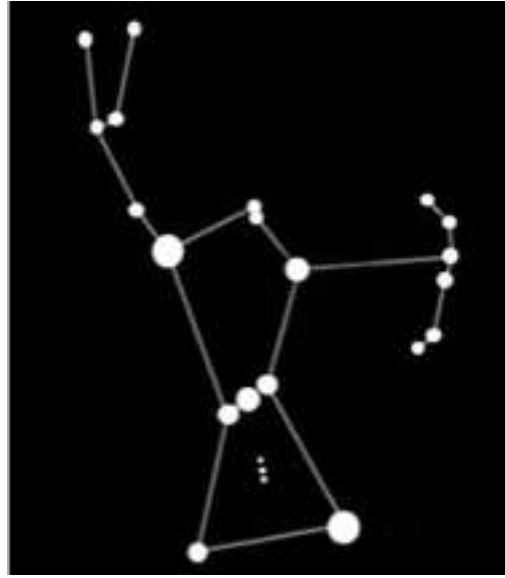
Uma ubuka umkhathi ebusku obuthe gwe, uzobona ukuthi iziNkanyezi kuba sengathi zidweba imidwebo thizeni.

Lemidwebo, ebizwa ngeziShomo, ayishintshi nhlobo nobusuku.

Kodwa-ke iyanyakaza : njengeLanga, iziShomo « ziyabalela » empumalanga ziphinde « zishone » entshonalanga. Umdwebo wonke uyagwebuka ngobusuku nobusuku kodwa utholakala endaweni efanayo emva konyaka owodwa.

Akuzumi nhlobo ukuthi kusukela emandulo, abantu bazo zonke izinhlanga babewubhekisisa umkhathi, owawudlala indima yomtholandlela enkathini kanye nasemkhathini.

Iyona ndlela imfundondalo yezomkhathi eyaqala ngayo.



IziNkanyezi zesiShomo iMpambano nemigqha yokuzakhela ezixhumanisayo.

Ngenhla: Umdwebo wesiShomo iMpambano owadwetshwa ngo-1687 udwetshwa imfundindalo yomkhathi yamaPholishi uJohannes Hevelius kwibalazwe lakhe lomkhathi.

Kwesokudla: IMephu kaDunhuang, ishadi lamaShayina leziNkanyezi lesentshuri lesi-7, likhombisa isiShomo iMpambano.



IMpambano : Isishomo esidumile

Kusukela emandulo abantu babeqamba iziShomo-ikakhulukazi amagama ezilwane noma onkulunkulu babo-baphinde bazakhela izinganekwane ngazo lezoziShomo.

Isibonelo, isiShomo impambano ngesingisi ebizwa nge-Orion, yaqanjwa ngamaGrikhi. Ziningi izinganekwane ezixoxwa ngayo i-Orion, unkulunkulwana omuhle.

ososayensi baseShayina babazi ngempambano beyibiza ngoShen, umzingeli noma Iqhawe.

AbaseGhibithe babematanisa lesisiShomo nonkulunkulu wabo u-Osiris.

Abokuqala ukuthi bayiqambe kwakungamaSumeriyeni; bayiqamba ngo-Uru An-na, okusho ukuthi 'ukukhanya kwezulu'.

IsiShomo iMpambano
 ibukwa eningizimu
 nenkabazwe, lapho
 sibukeka sibheke
 phansi.

Isishishila somdwebo
 wengwanekwane
 abantu base-Australia
 abayibunganisa nalesi
 isiSomo.

Ikhehla igama
 lomdabu
 laseBrazil
 elisho
 isiShomo
 esakhiwe
 iziShomo
 iMpambano
 kanye
 noCwazibe
 (isithombe
 sithathwe
 emnyuziyemu
 yase-
 Amazonia.)



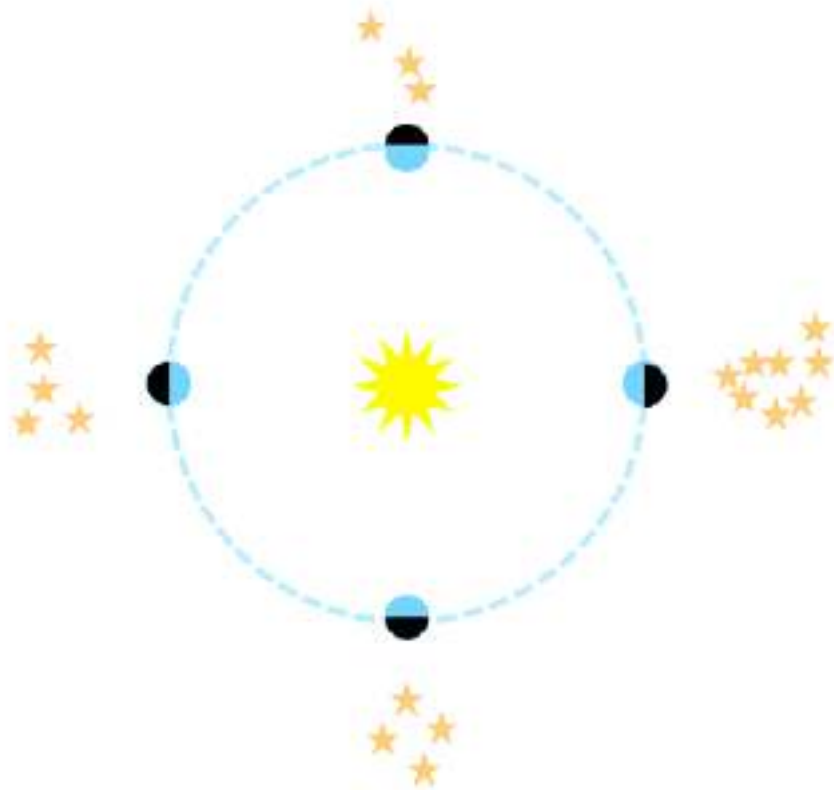
IMpambano « eguqukezelwe »

Izinganekwane zakwamanye
amasiko zihlukile kakhulu.

Kusukela kumaYollngu, abomdabu
base-Australia, IMpambano
iyisiklebhe esiphethe izinsizwa
ezintathu ezilamanyo
ababeyodoba. Oyedwa wabo wadla
iNhlanzi ababengavunyelwe
ukuyidla. Ngokudinwa, inkosikazi
yelanga, yakha iNkanyamba
eyathatha isiklebhe esasithwele lezi
izelamani yasiyisa esibhakabhakeni.

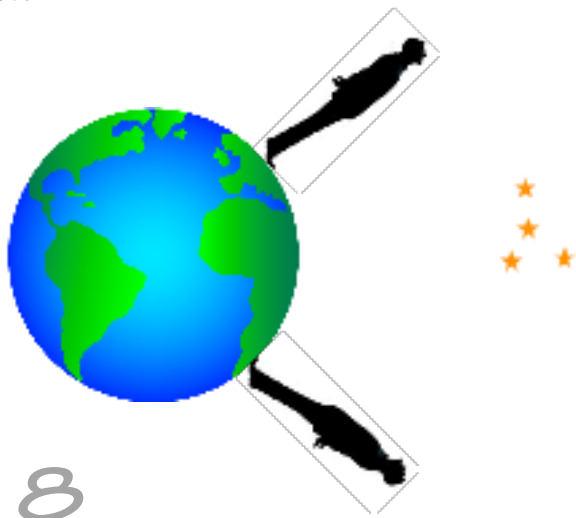
Inganekwane ehlukile exoxwa
ngabomdabu baseBrazil: isiShomo
sendoda simele indoda uNkosikazi
wayo owayefela umfowabo.

Wabulala umyeni wakhe,
wamunqamula umulenze owodwa.
Onkulunkulu bamuzwela base
bemushintsha bemenza isiShomo.



Umzungezo welanga kaNomkhubulwana.
Izinhlobo ezahlukene zezishomo
ziyabonakala ebususku ngezikhathi
ezahlukene zonyaka.

Abantu abami
mabhekana
kwizigungu
zomhlaba
bahlanezekile
mawubaqhathani
sa, kanti futhi
babona izishomo
zihlancezekile.



UMkhathi ezikhathini ezahlukene

IziNkanyezi zibonakala ebusuku kuphela: emini, zisuke zifihlwe ukukhazimula kwelanga.

Onyakeni, uMhlaba uzungeza iLanga okudala ukuthi izingxenye ezahlukene zoMkhathi zibonakale ngezikhathi ezahlukene zonyaka (Bheka umdwebo ekhasini elilandelayo).

Imbulunga yezinkanyezi iyimbulunga yokuziqambela ezimeke eMhlabeni lapho khona iziNkanyezi ezikhokhelwe khona kanti futhi zibonakala sengathi zinyakaza khona.

Indlela yeLanga kwimbulunga yezinkanyezi iyindilinga enqamula kwiziShomo ezisondelene nesicaba somjikezelo somhlaba ekuyingelezeni kweLanga. Lendlela ibizwa ngecathamo.



Isiwahla sesentshuri lesi-6 esikhombisa iSondo lesicathamo elinemidwebo yamaGrikhi.



Icathamo lamaShayina, lalisetshenziselwa ingoboco, lihlukile kunecathamo lasentshonalanga 10

Ezomkhathi kanye nokufundwa kwezinkanyezi

Igama elithi icathamo lidume kakhulu ngenxa yobudlelwano elinabo nokubhula ngokusebenzisa indawo lapho iLanga lisuke likhona kwicathamo ngosuku lakho lokuzalwa. Ababhali balemibhulo babizwa ngezicathamo, kanti bahlukile kunezimfundindalo zomkhathi!

Ezomkhathi ziyisayensi echaza iphinde izame ukuqondisisa zonke izinto ezisemkhathini (imizulane, iziNkanyezi, imiThalakazi). Ukubhula ngokusebenzisa icathamo akusiyo isayensi. Ligabadela ukuthi kunobudlelwano phakathi kwendawo ilanga elikuyona kanye nemizulane kanye nezimpilo zabantu. Asikho isizathu sokuthi lokhu kubenjalo. Inganinjalo, kunobufakazi obuningi obukhombisa ukuthi lokhu akusilo iqiniso.

Ifulegi laseBrazil likhombisa iziShomo, okukhombisa ukubaluleka koMkhathi kuBantu, ngisho nangesimanje-manjethe

Ngo-1927 kwabanjwa umncintiswano wokukhetha ifulegi lase-Alaska. Umnqobi kwaba uBenny Benson, umfana oneminyaka eyi-13 wase-Alaska. Wabhala wathi: `Inkanyezi yasenyakatho iyikusasa le-Alaska, esenyakatho kakhulu kwinyunyana. Isidwenguli esafeleba weBhele —esikhombisa amandla.

Ifulegi laseBrazil. IziNkanyezi zalo ezama-27 zimele izifundazwe zakhona kanti zihlelwe ngendlela efanayo naseMkhathini obonakala eBrazil.

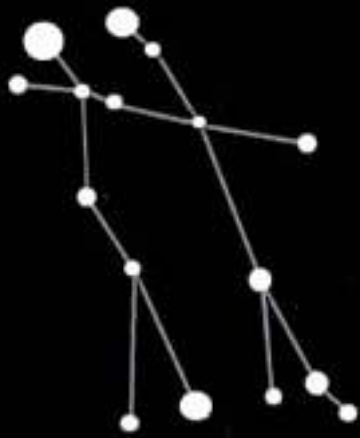


IziShomo kanye nezomkhathi

Ikhulu leziNkanyezi ziyabonakala ngaphandle kokusebenzisa izipopolo zomkhathi. ekuhambeni kweminyaka, sezafakwa kwiziNdumayezi zomkhathi ezinemidwebo emihle ekhombisa iziShomo.

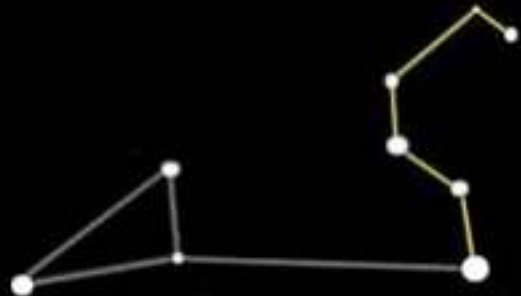
Ngesinamuhla ososayensi sebekwazi nokuklala ibanga elisuka eMuhlabeni liya kwiziNkanyezi. KwisiShomo esisodwa iziNkanyezi zisuke zigqagqene kanti ayikho into ezihlanganisayo. Yize sithanda ukuzibona ziyinto eyodwa.

Ngokusebenzisa izipopolo, singathola iningi leziNkanyezi. Ngowezi-2014, kusetshenziswa izipopolo i-Newton Telescope eCanary Islands, ososayensi baklabhuza indumayezi eyayiqukethe inani eliyizigidi ezingama-219 leziNkanyezi.



Amawele

IziShomo
ezidumile



IBhubesi



UFezela

Idadandlovu



Amawele, kwisifanisa somngcikikisha wokudalwa sasePersia sowe-1537, esasilotshwe ngu-al-Qazwini ngowe-1250.



IBhubesi, kwi-Uranometria yasosayensiwe Jalimana uJohan Bayer (1603).



UFezela, kwisivumelano sezimbulunga sidwetsiwe ngu-Andalo di Negro ngowe-1330.



Idadandlovu, kwindumayezi yasomkhathi wamaNgisi uJohn Flamsteed (1729).



UMkhathilibe Ephaketheni Lami No. 5

LeNcwajana ilotshwe ngowezi-2015 ilotshwa uGrażyna Stasińska waseParis Observatory (eFransi) yase iningilizwa uStan Kurtz wase UNAM Radio Astronomy Institute eMorelia (eMeksikho).

Isithombe esiseKhaveni sikhombisa umdwebo "imu esemkhathini", isiShomo esikhona cishe kuwona wonke amasiko abomdabu base-Ostreliya. Asichazwa iziNkanyezi kepha sichazwa amabala amunyama abonakalayo mawuqhathanisa neNdlela entusi.



Ukuze ufunde kabanzi ngalolu uchungechunge kanye nesihloko esithulwe kuleNcwajana, sicela uvakashele

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