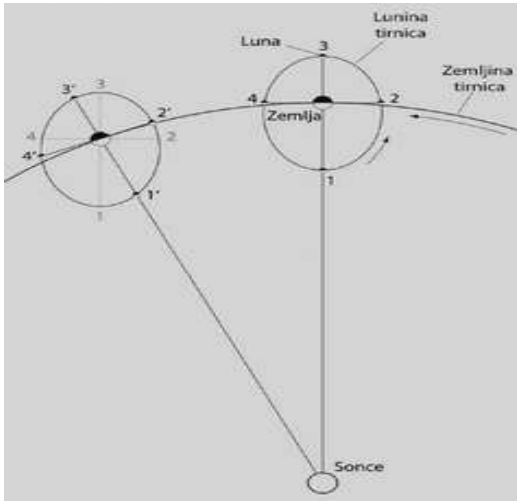


Kdaj bo naslednji Sončni mrk? Geometrija... Saroški cikel, drakonski, anomalistični, sinodski mesec

Sinodski mesec

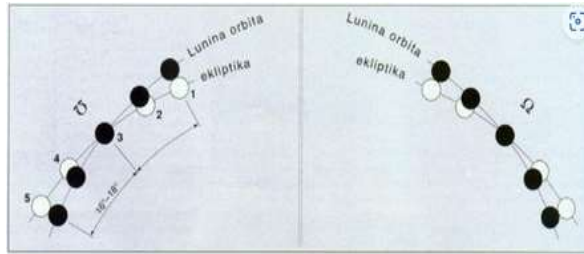
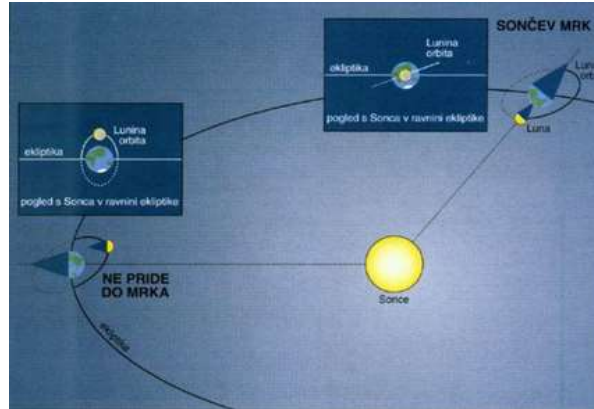
(od mlaja do mlaja)
povprečno = 29,5306 dni



Vir: <https://astronomska-revija-spika.si/luna-lunine-mene-bolj-ali-manj-dolge-lunine-mene/>

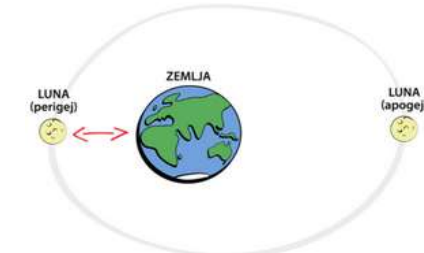
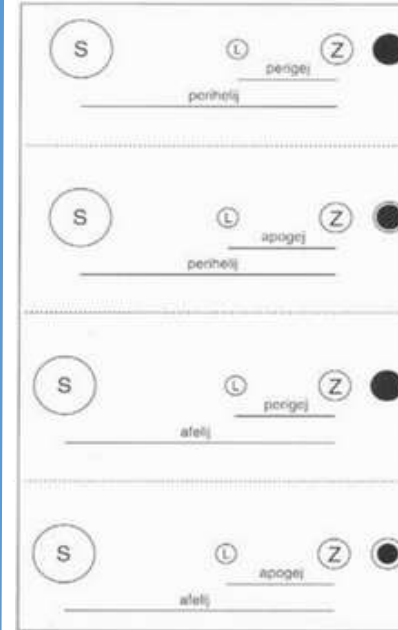
Drakonski mesec

(od vozla do vozla)
povprečno = 27,2122 dni

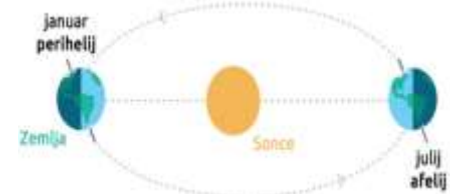


Anomalistični mesec

navidezni premer (perigej)
povprečno = 27,5545 dni
dolžina in vrsta mrka



Vir: <https://astronomska-revija-spika.si/super-polna-luna-mini-polna-luna/>



Vir: <https://astronomska-revija-spika.si/prihaja-super-sonce-videli-ga-bomo-4-januarja-2017/sonce-zemlja-perigej-afelij/>

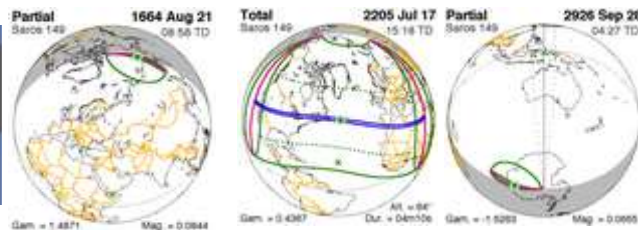
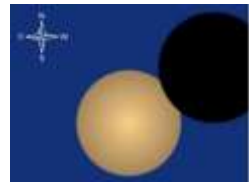
Saroški cikel

18 let 11 dni 8 ur
 $223 \times 29,5306 = 6585,32$
 $242 \times 27,2122 = 6585,35$
 $239 \times 27,5545 = 6585,54$

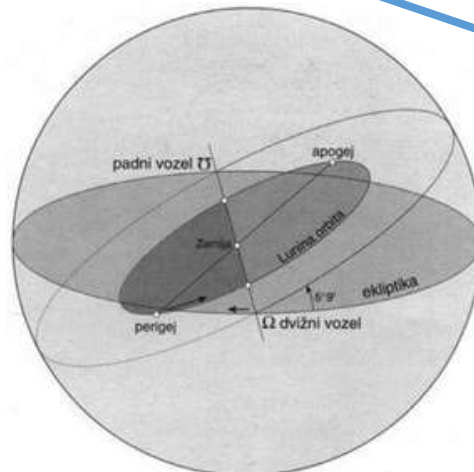
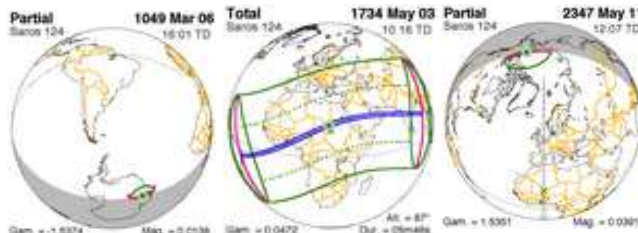
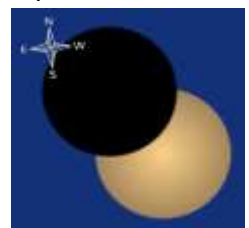
Sonca v vozlu = 34 dni premer Sonca = 1,392 m.km
Luna v vozlu = 3 dni navidezni premer = 32'
Zemlja-Sonca = 148,77 m.km premer Lune = 3479 km
Zemlja-Luna = 373062 km navidezni premer = 32'

Magnituda mrka:	0,1	0,2	0,3	0,4	0,5
Zakritost Sončevega površja	0,04	0,11	0,19	0,29	0,40
Magnituda mrka:	0,6	0,7	0,8	0,9	1,0
Zakritost Sončevega površja	0,51	0,64	0,76	0,89	1,0

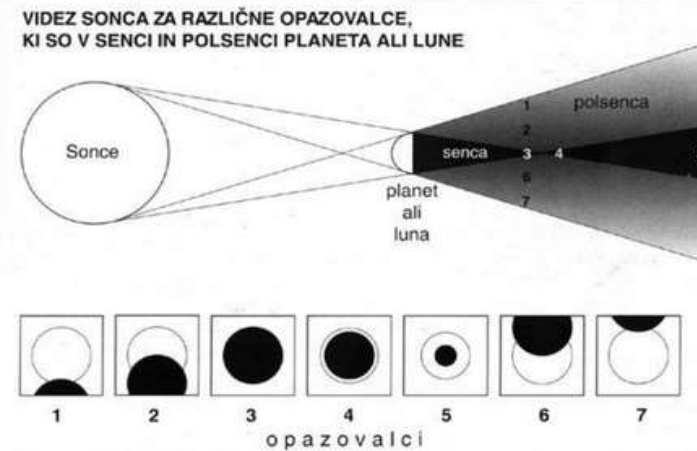
dvižni vozlel



padni vozlel

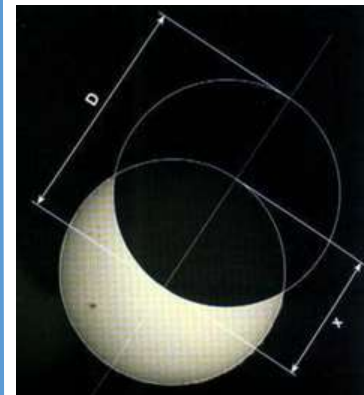


Sonca navidezno potuje po ekliptiki
nagib Lunine tirnice 5,1°



Vir: <https://kvarkadabra.net/1999/01/mrk-geometrija/>

Magnituda mrka



$$M = x/D$$