

Finding SUN's GHA / Dec with Table 4 from HO249 Vol 2 or 3

Date d m y

Time GMT h m s !! Round this Time to the nearest integral hour

Before or on xx h 30 m use xx h

After or on xx h 31 m use xx+1 h

Rounded GMT h

Corr. Time for Year Table a.

h !! For date after 29 feb in leap year use next line (") in table a.

----- ± !!Sign depends on value found in Table a

Orbit Time "OT" h

If "OT" is negative use date one day earlier and count 24 h to "OT" to get correct "OT"

If "OT" is > 24 h use date for next day and subtract 24 h from "OT" to get correct "OT"

Date for "OT" d

"OT" h

Go to main TABLE 4 with horizontal Month en Vertikal Date for "OT" for E

Find first E and correct it tot GHA

Correction table b for E ° '
 ° '

----- ±
 Corrected E ° '

Go to Table c with GMT hour and rounded lower 10 minutes

° '

Go to table d with GMT rest of minutes and GMT seconds

° '
 ----- +

GHA sun ° '
 ° '

Find Diff E (subtract ' value from NEXT DAY ' value. Watch on sign)

Go to table 4: Horz. = Diff, Vert= OT

Find E correction in ± '

Diff is minus? Corr is minus. Vise versa

Diff E=

Go to Table b. for correction in E

Go again to main TABLE 4 with horizontal Month en Vertikal Date for "OT" for Dec and N or S value

Correction table b for Dec ° '
 ° '
 ----- ±
 Dec Sun ° '
 ° '
 Sign from Diff Dec

Find Diff Dec, last column, ½ line lower

(If Dec ° ' value from NEXT DAY is less then "OT" Date value, Sign is minus -, if it is more then Sign is plus +.

Diff Dec=

Go to Table b. for correction in Dec