Determing Suns GHA and dec with HO249 modified Table4, step by step

1. Write down the observed object info: **DATE**: dd-mm-yyyy, and **GMT**-TIME hh:mm:ss
2. Round the **GMT** 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
3. Look in table a for the Year correction with as input above yyyy.
   If date is after 29 feb, in a leap year, take the year value with the *.
4. Ad or subtract the hours from table a, to the rounded GMT time ± hh, to get the OT (Orbit time)
   There are now 3 answers possible.
   Or: OT is >00 h and <24 h. You can use de DATE and the calculated OT
   Or: OT is <00 h. Ad 24:h to the answer that is the OT. And subtract 1 day from the DATE.
   Or: OT is >24 h. Subtract 24 h from the answer that is the OT. And ad 1 day to the DATE.
5. Go to the main Table4. Find the intersection of Month →(horizontal) and the day ↓ (vertikal).
   For instance: E dec

01°29'	**S 15°29'**
Diff –1	**Diff -18**

6. Write down the E and the ± diff and the N/S dec ± diff
7. Go to table b first for E (minute ‘) and then for dec (minute ‘) correction.
   Intersection of diffvalue →(horizontal) and the OT time ↓ (vertikal).
   Write down: E1 correction is ± . .’ dec correction is ± . .’, ad the dec’s, the sum is the **dec**
8. Go to table c . Find the intersection of multiple of 10 minutes of the **GMT-TIME** (NOT the OT) →(horizontal) and the whole GMT hour ↓ (vertikal).
9. Write down the E2 correction is . . . ° . . ‘
10. Go to table d. Find the remaining GMT minutes and secondes. Interpolate to find . ° . . ‘ value.
11. Write down the E3 correction is . ° . . ‘.
12. Add E and the E1,E2,E3 values, the answer is the **GHA**.

E =	. . .° . . ‘ d= ± . .	N/S dec	. . ° . . ‘ d= ± . .
E1 = ±	000° . . ‘	dec corr ±	00° . . ‘
E2 =	. . . ° . . ‘	----------	+
E3 =	. ° . . ‘	**N/S dec**	**. . ° . . ‘**
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GHA =	. . . ° . . ‘		

HermanD-2018-12-05