

Astronomische Navigation Examples: p. 70, 72
 by Helmut Knopp, Verlag Busse Seewald Herford 1996
 (grafical evaluation of position on the sea-chart)

Date	1989 july 31	Height-of-Eye: 2.0m	
DR-position	Latitude: N 43°18.6' Longitude: W 55°28.3'		
Celestial Body:	Venus	Moon (low)	Arcturus
Hor.Parallax	0.1'	56.7'	0'
Time UT1	19h04m13s	19h08m42s	19h09m59s
Sextant Angle	52°28.2'	35°52.4'	53°45.6'
+/- Index corr.	-2.0	-2.0	-2.0
Gb	-3.2	57.6	-3.2
Altitude obs.	52°23.0'	36°48.0'	53°40.4'
Altitude calc.	52°24.3'	36°46.4'	53°43.1'
Azimuth	211°	268°	121.3°
Δh	-1.3nm away	1.6nm towards	-2.7nm away

----- now calculate the Position-Fix for the 3 pairs, and plot the result:

POSITION FIX:	Latitude	Longitude	Deviation	Direction
Moon-Arcturus:	43°21'	-55°30.6'	3 nm	325°
Venus-Moon	43° 21.1'	-55°30.6'	3 nm	326.3°
Venus-Arcturus	43° 21.1'	-55°30.6'	3 nm	326.8°
AVERAGE:	43°21' N	55° 31' W	3 nm	325° (plotted)

The ASTRONOMICAL ALMANAC for the year 1989
 by U.S. Government Printing Office, Washington DC, USA,
 and HMSO Publication Center, London, UK .-page D14.
 The **MOON**. - For 00h Dynamical Time (i.e. **Delta_T=0**).

July 31, at time 00h:

apparent Right Ascension	Declination
7h 18m 03.9sec	N 25° 30' 56"

compare:

for comparison: AstroPositionMax-V05.html:

7h 18m 03.90sec	N 25° 30' 55.6"
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