REV 2 TonyOz http://fer3.com/arc/m2.aspx/Venus-merpass-for-Lat-Sun-time-sight-for-Lon-TonyOz-apr-2020-g47480

10 Apr 2020 *HoE = 4.5 m*, T = +5°C P = 1,000 hPa (1,000mb)

Ha (Tony): Sextant heights corrected for instrument Error and Dip, *hence process with HoE=0.0 m*

Ho (Tony) : Geocentric heights derived from Ha. Values not used in my own computations.

I finally computed : Hg (AMC) *:* Geocentric heights derived from sextant observations, and :

Hdr (AMC) : Geocentric heights computed from assumed DR position. *Antoine M. "Kermit" Couëtte*

Intercepts and Azimuths are computed from DR Position **N60°14.2' E029°46.9'**

Body	UT;	Ha (Tony)	Intercept + : T / - : A	Azimuth	Weight	Ho(Tony)	Hg (AMC)/ Hdr (AMC)
① Sun	11:58:38 12:00:23	33°24,4' 33°16,9'				33°38,9' 33°31,4'	
Mean values	*11:59:30.5*	*33°20.65′*	*+0.5′*	*215.6°*	*2*		*33°35.26′ / 33°34.81′*
② Venus	12:09:40	54°19,3'				54°19,0'	
Mean value	*12:09:40.0*	*54°19.30′*	*+0.2′*	*161.6°*	*1*		*54°18.75′ / 54°18.58′*
③ Sun	12:12:02	32°23,7'				32°28,2'	
Mean value	*12:12:02.0*	*32°23.70′*	*-0.0′*	*219.1°*	*1*		*32°38.26′ / 32°38.24′*
④ Venus	12:14:12 12:16:56 12:18:58 12:20:35	54°29,9' 54°34,8' 54°38,4' 54°41,7'				54°29,6' 54°34,5' 54°38,1' 54°41,4'	
Mean values	*12:17:40.25*	*54°36.20′*	*-0.3′*	*164.7°*	*4*		*54°35.65′ / 54°35.99′*
⑤ Sun	12:22:30 12:23:36 12:24:46	31°33,0' 31°27,5' 31°21,7'				31°47,4' 31°38,0' 31°32,2'	
Mean values	*12:23:37.33*	*31°27.40′*	*-0.1′*	*222.4°*	*3*		*31°41.90′ / 31°41.97′*
⑥ Venus	12:40:30 12:42:05 ? 12:43:05 ? 12:44:12 12:45:37 12:46:33	55°08,8' 55°10,7' ? 55°10,7' ? 55°11,8' 55°13,6' 55°13,6'				55°08,5' 55°10,4' ? 55°10,7' ? 55°11,5' 55°13,3' 55°13,3'	
Mean values	*12:43:40.33*	*55°11.53′*	*+0.2′*	*174.8°*	*6*		*55°11.00′ / 55°10.80′*
⑦Sun	12:50:23 12:51:46 12:53:01 12:54:05	29°04,0' 28°55,6' 28°48,4' 28°38,6'				29°14,4' 29°05,9' 28°58,7' 28°49,0'	
Mean values	*12:52:18.75*	*28°51.65′*	*-1.9′*	*230.0°*	*4*		*29°05.98′ / 29°07.92′*
⑧ Venus	12:55:55 12:57:01 13:00:15 13:02:35	55°15,4' 55°15,4' 55°15,4' 55°14,9'				55°15,1' 55°15,1' 55°15,1' 55°14,6'	
Mean values	*12:58:56.50*	*55°15.275*	*-0.5′*	*180.9°*	*4*		*55°14.74′ / 55°15.21′*

① Venus LAN method : Transit Time at 12h56m45.0s, yielding Fix at **N60°10.5' E029°46.9'**

② From Position ① here-above, treat 8 sets of averaged observations as classical LOP's with individual weights equal to each number of observations. Final Fix at **N60°10.6' E029°48.8'**

GPS position : **N60°10.3' E029°48.5'** **Difference between fixes : 0.3 NM**

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