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Analysis Comparing Henden Data to Both APASS & Pan-STARRS1

A total of 47 Stars, overall, from 7 Different FOV's, picked randomly, with Henden V magnitudes running from 14.658 to 19.103 were analyzed against Pan-STARRS1 data Using both Pan-STARRS1 AP magnitude data as well as Pan-STARRS1 PSF Magnitude Data.

In this case only the converted data from the PSF Magnitudes of Pan-STARRS1 is relevant and only summaries will be presented showing differences for V filter only.

Those with an interest can see the SS (Hendon vs Pan-Starrs w-APASS) with all data on our team website.

V filter average magnitude difference for all 47 stars for Pan-STARRS1 compared against Henden data:

.032

A total of 31 Stars, overall, from 7 different FOV's with Henden V magnitudes running from 14.658 to 16.933 were analyzed for both Pan-STARSS1 V magnitudes as well as APASS V magnitudes (for differences herein, all negative signs, if any, were removed). APASS data <17 V excluded as differences >.1.

APASS V filter difference: .048

Pan-STARRS1 V filter difference: .036

As a further exercise, the 31 stars were broken up into 3 different groups

Star V magnitudes	APASS Difference	Pan-STARRS1 Difference
140's 8 stars	.030	.029
150's 14 stars	.034	.043
160's 9 stars	.084	.033

Please Note: two stars (Lines 13 & 47) from the SS were omitted from the above in that Line 13 & 47 were 169 on one survey and 170 on the other.

14 Fainter stars from Henden vs Pan-STARRS1 data.

Ranging from 17.029 V – 19.103V

Pan-STARRS1 V Filter Difference: .026

As a further exercise, the 14 stars were broken up into 3 different groups

Star V magnitudes	Pan-STARRS1 Difference
170's 7 stars	.027
180's 5 stars	.031
190's 2 stars	.024

[to few to indicate what a larger sample in the 190's V would probably show]

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