Relations between the *br* magnitudes in the USNO A2.0 Catalogue and the standard Johnson-Cousins *UBVRI* magnitudes

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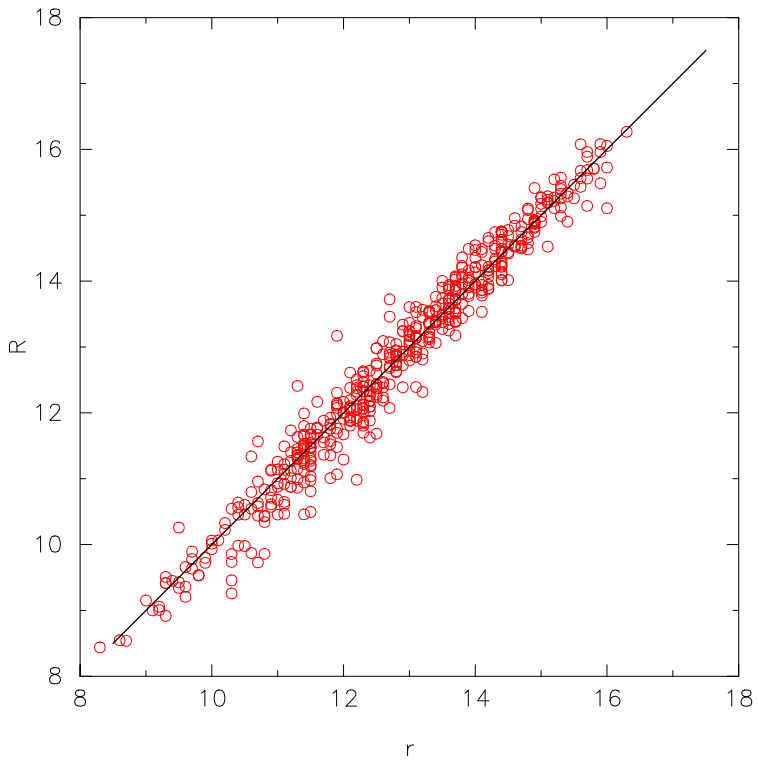
- Cross correlation with the Online USNO-A2 Catalogue Server at the ESO/SF-ECF Archive for 505 stars

R vs r & B vs b



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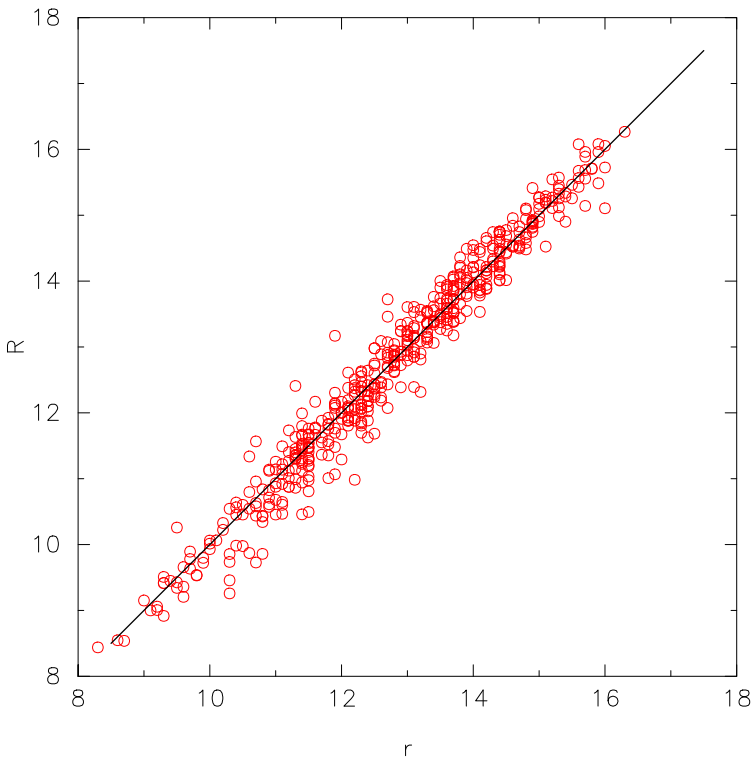

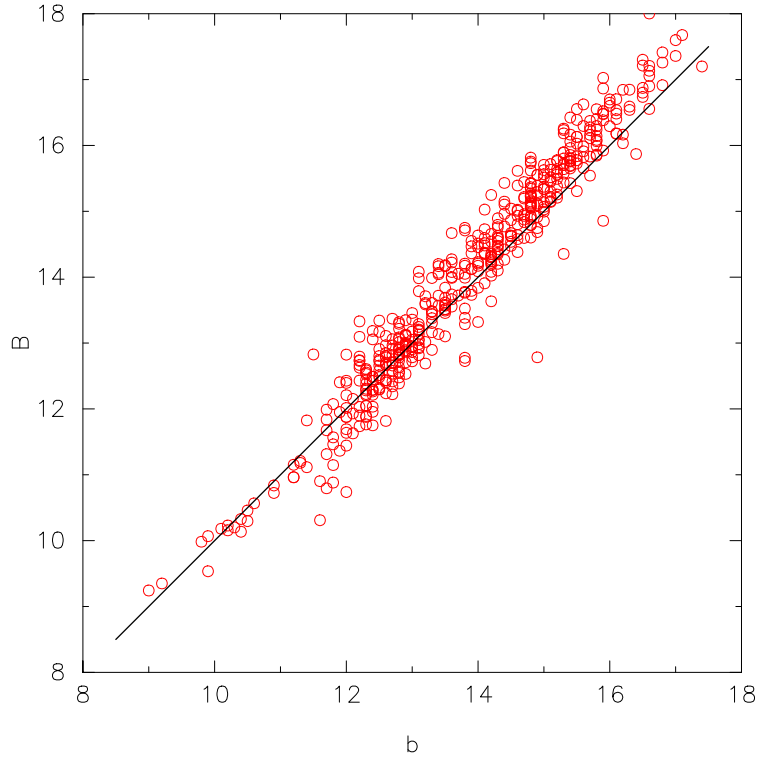

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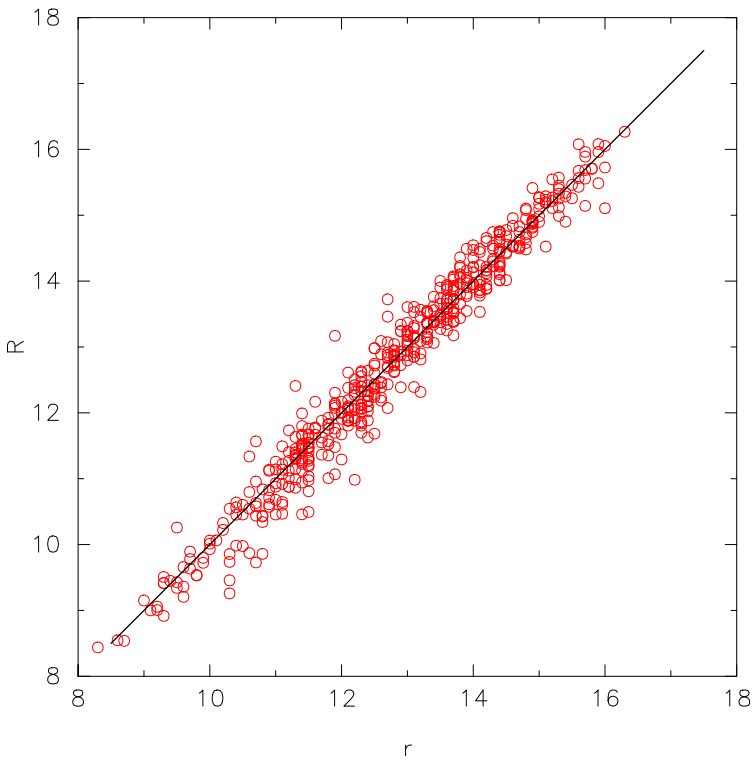
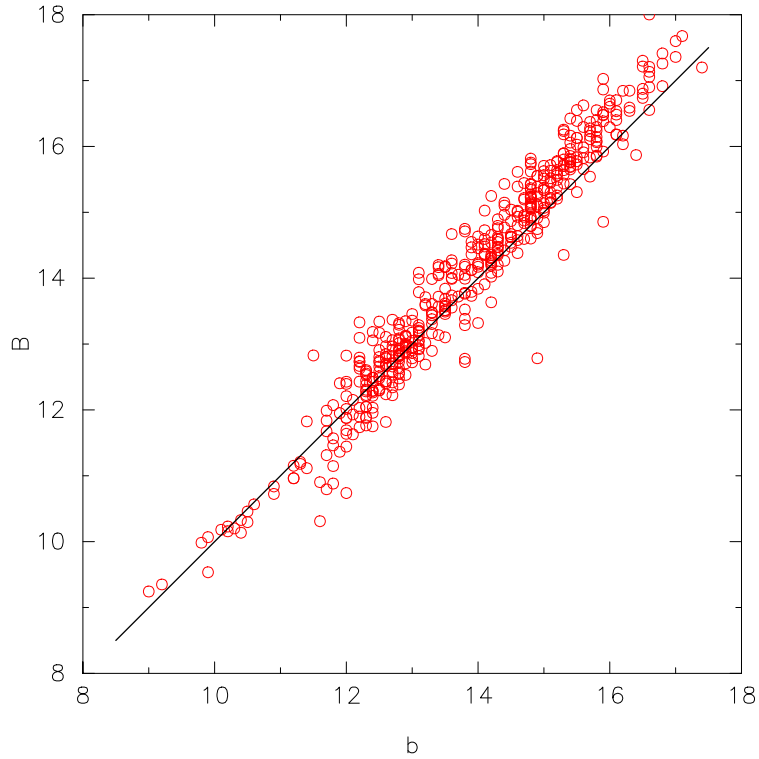
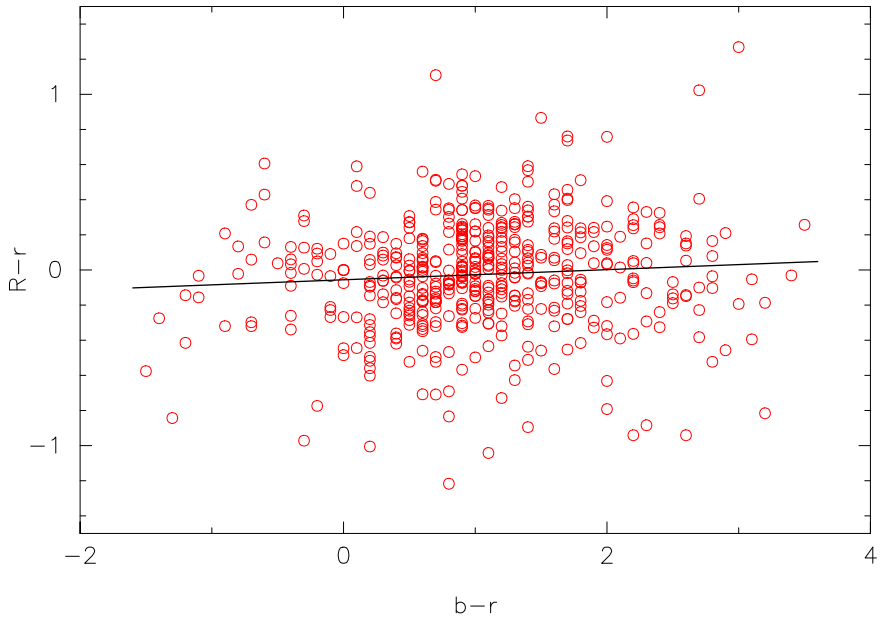


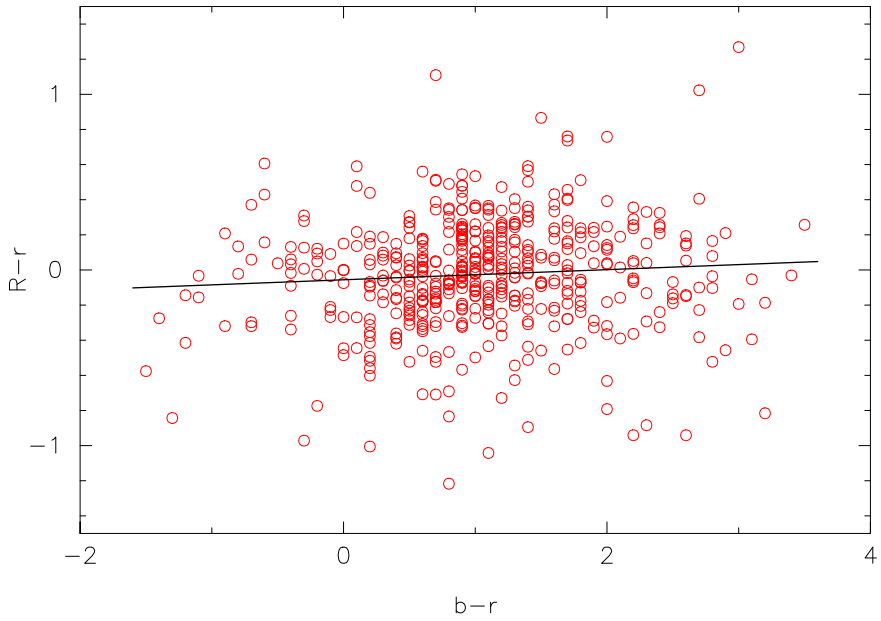


- Mean differences:
  - R - r = -0.03 mag. σ = 0.32 mag.
  - B - b = 0.20 mag. σ = 0.41 mag.

R vs r & (b-r)

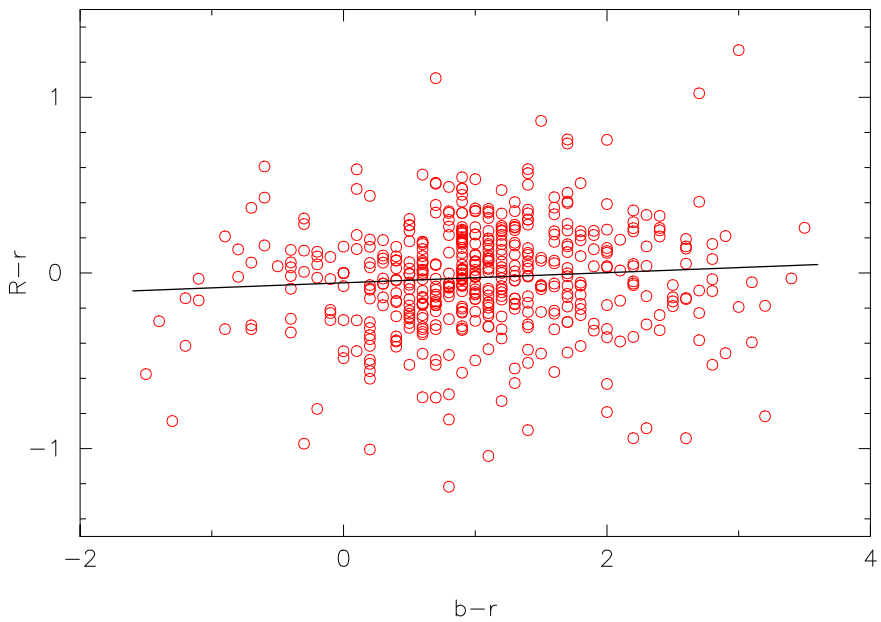


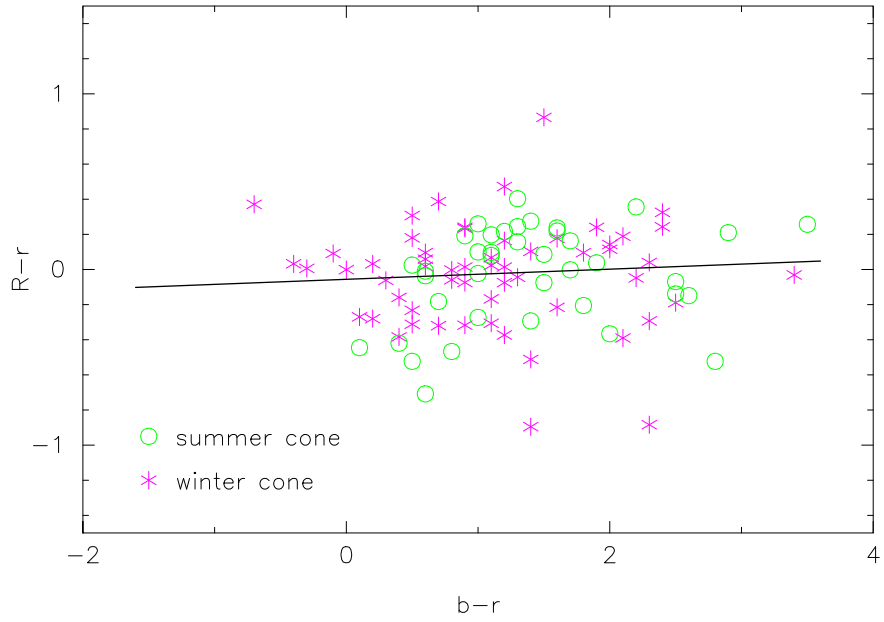
R vs r & (b-r)



- All sky (505 stars): R = r + 0.029 (b-r) - 0.056 σ = 0.31 mag.

R vs r & (b-r)





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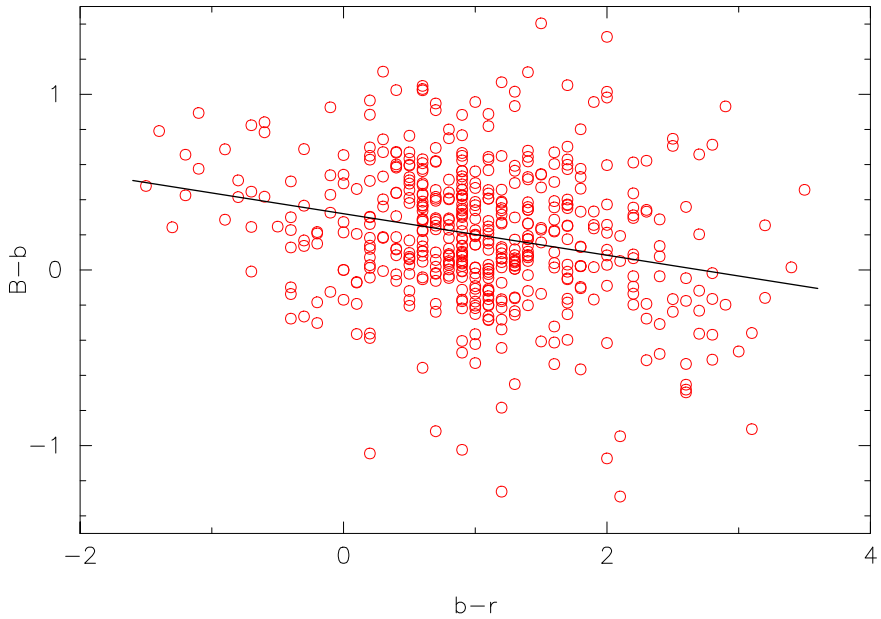
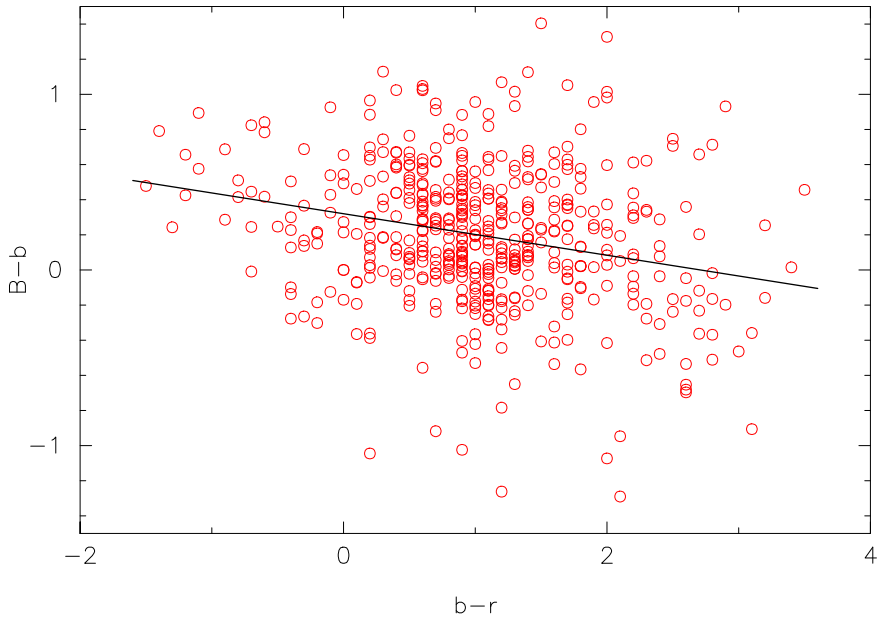
B vs b & (b-r)

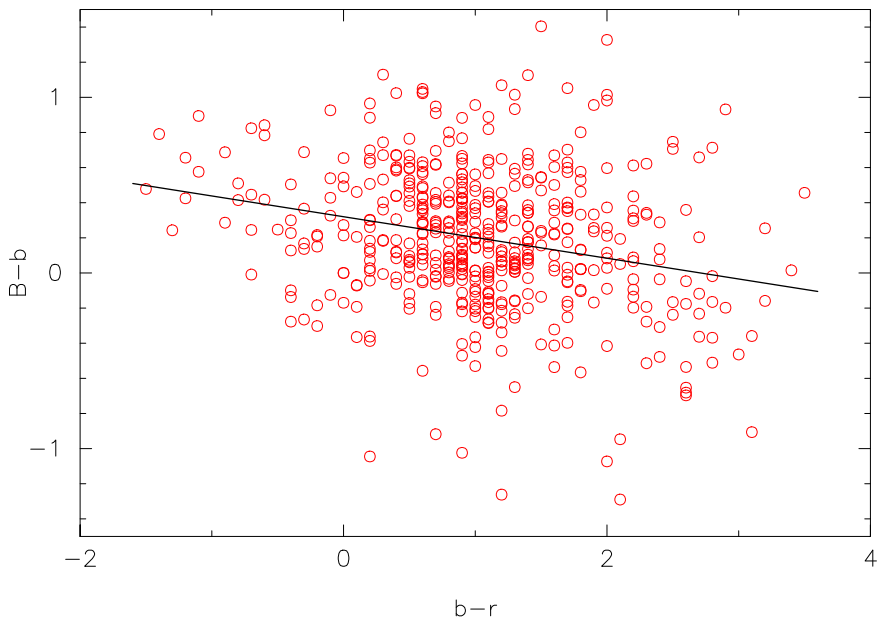


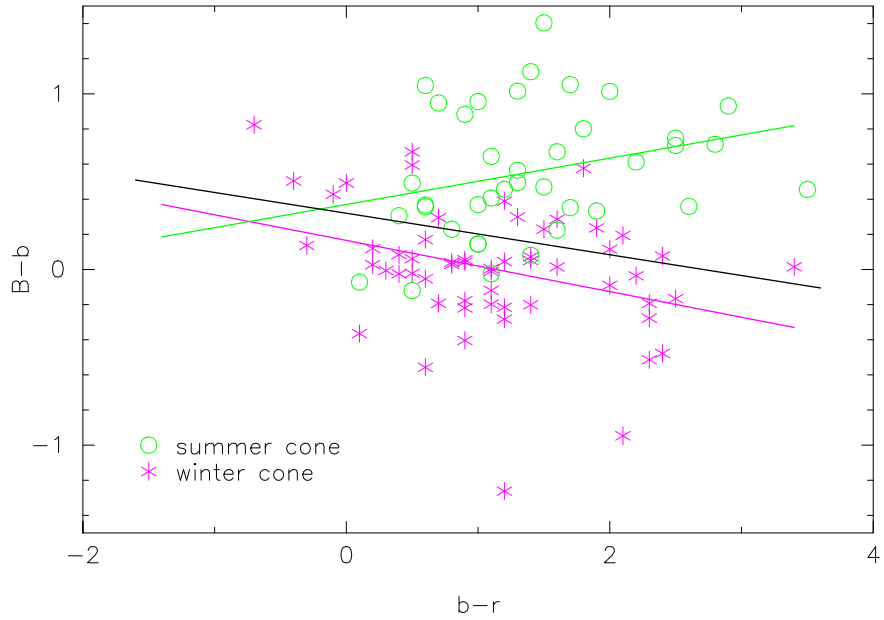
B vs b & (b-r)



- All sky (505 stars): B = b - 0.118 (b-r) + 0.320 σ = 0.40 mag.

B vs b & (b-r)





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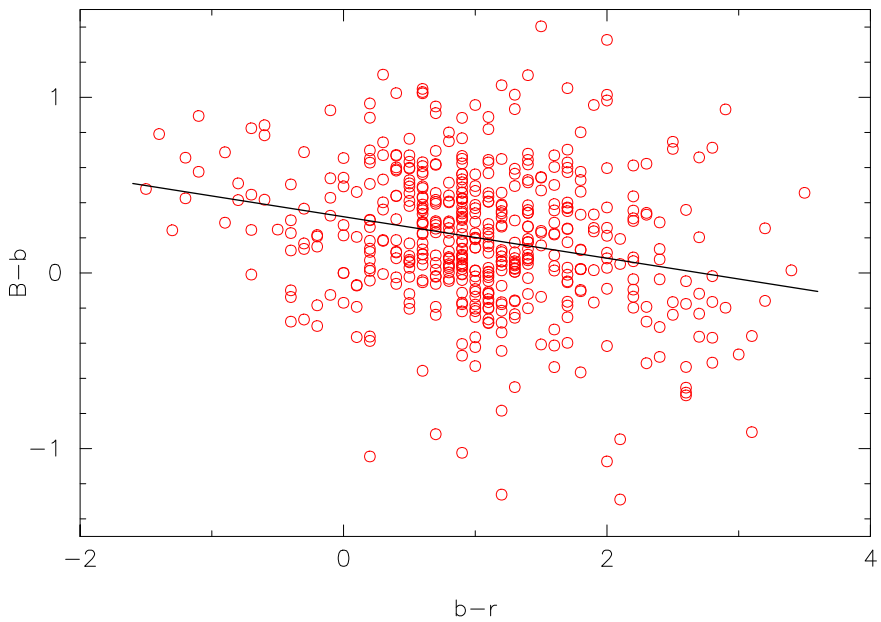
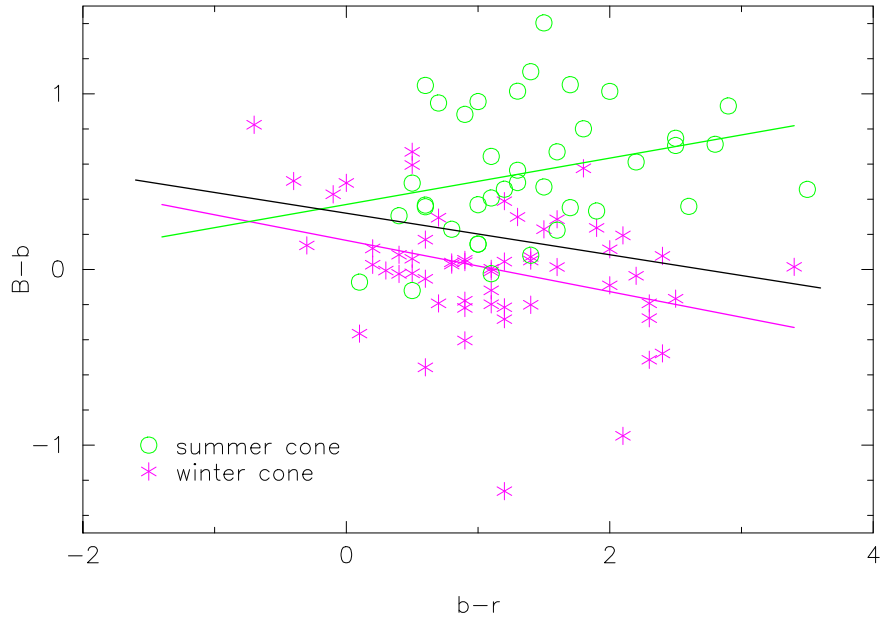
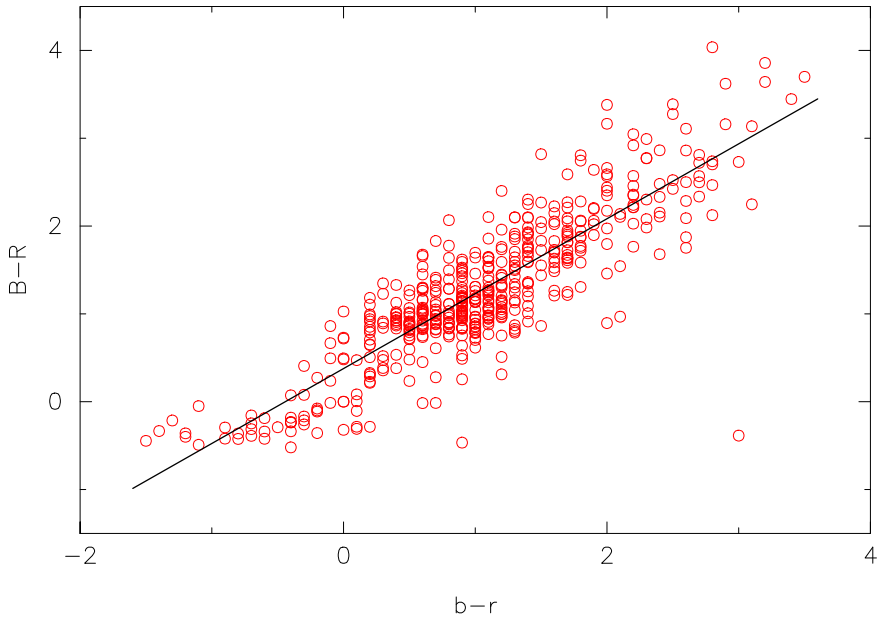
B vs b & (b-r)



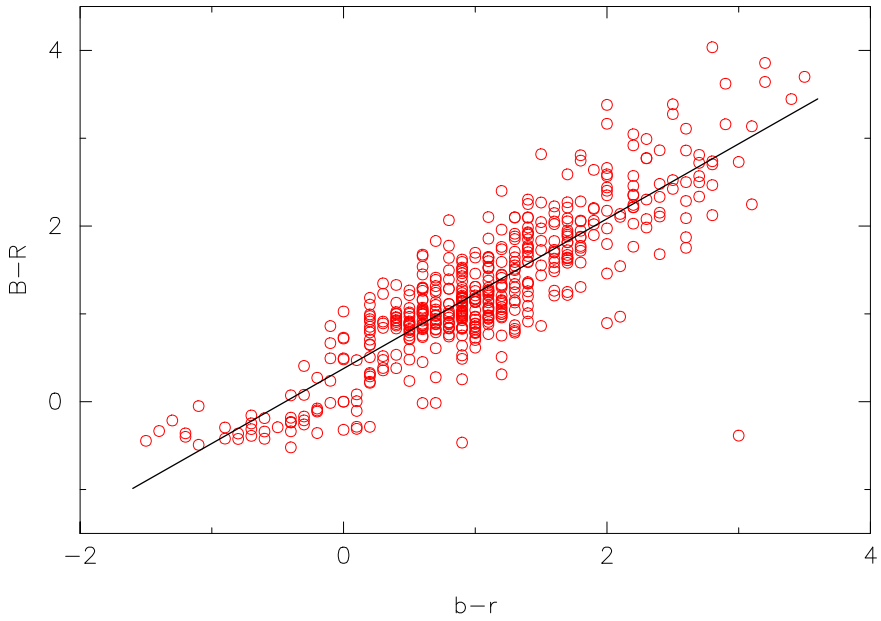


- All sky (505 stars): B = b - 0.118 (b-r) + 0.320 σ = 0.40 mag.
- Winter cone (56 stars): B = b - 0.146 (b-r) + 0.166 σ = 0.34 mag.
- Summer cone (38 stars): B = b + 0.132 (b-r) + 0.370 σ = 0.35 mag.

(B-R) vs (b-r)

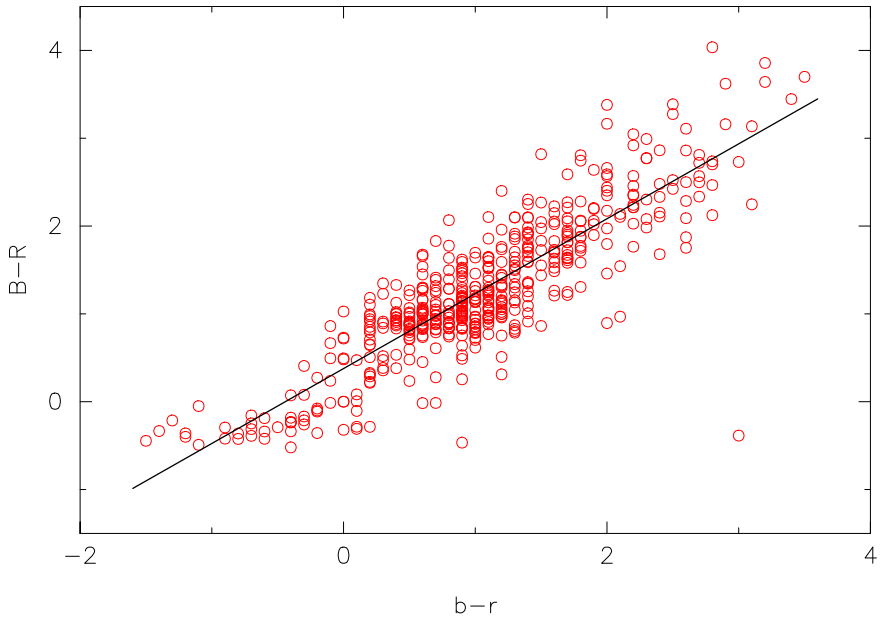


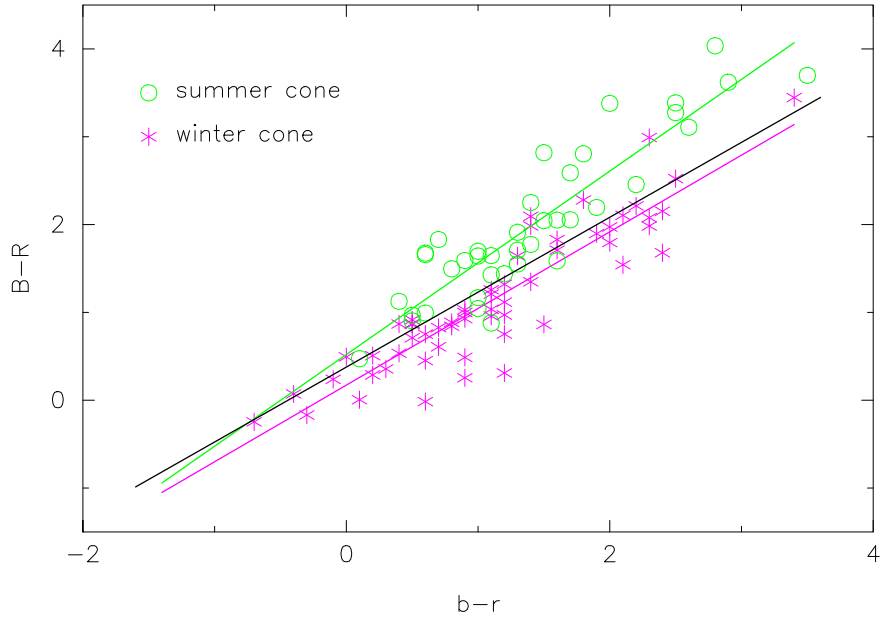
(B-R) vs (b-r)



- All sky (505 stars): (B-R) = 0.853 (b-r) + 0.377 σ = 0.43 mag.

(B-R) vs (b-r)





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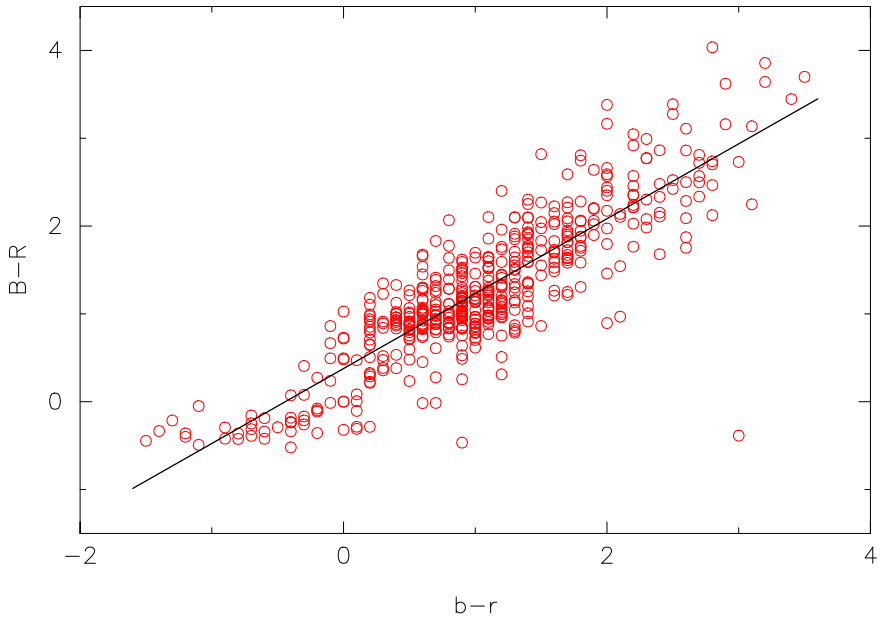
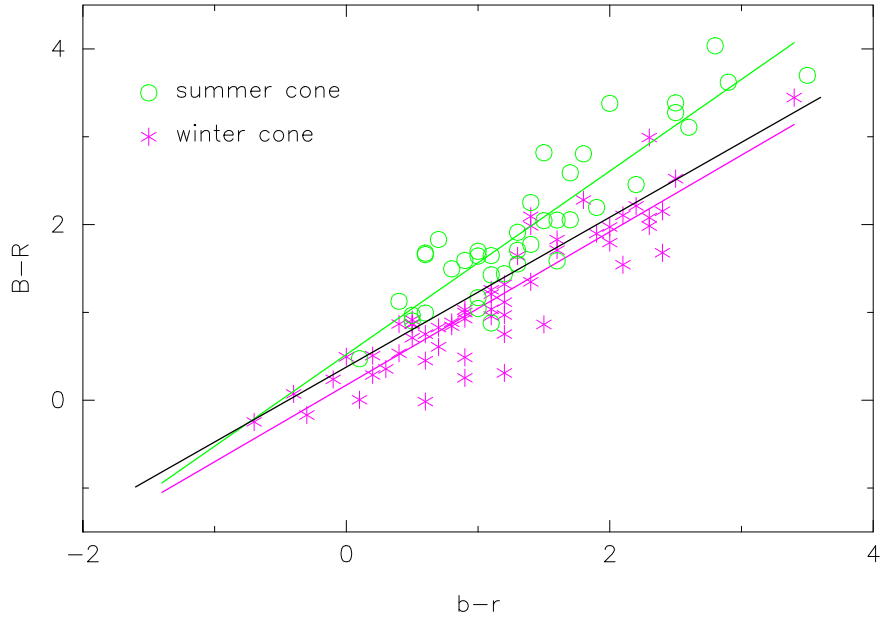
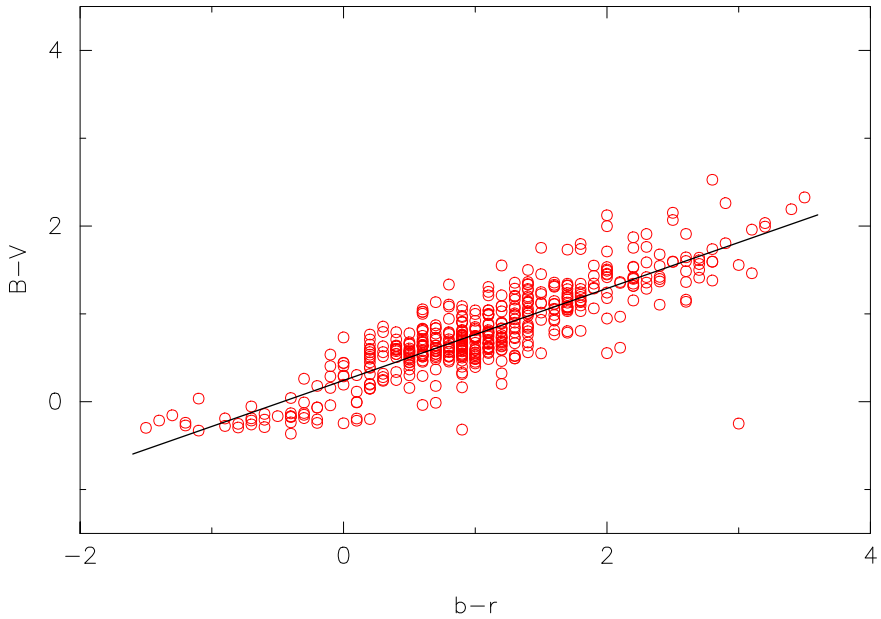


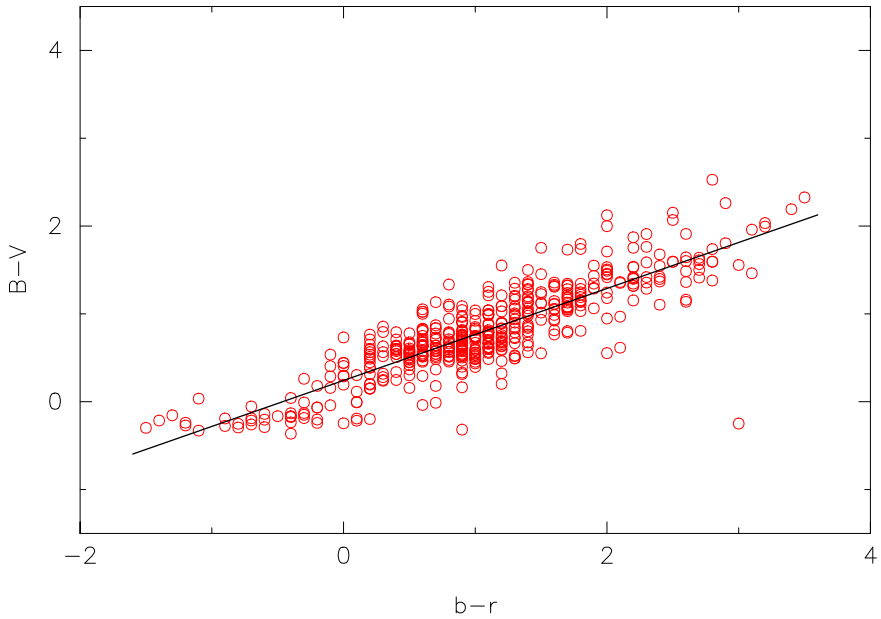


- All sky (505 stars): (B-R) = 0.853 (b-r) + 0.377 σ = 0.43 mag.
- Winter cone (56 stars): (B-R) = 0.873 (b-r) + 0.172 σ = 0.34 mag.
- Summer cone (38 stars): (B-R) = 1.044 (b-r) + 0.521 σ = 0.38 mag.

(B-V) vs (b-r)

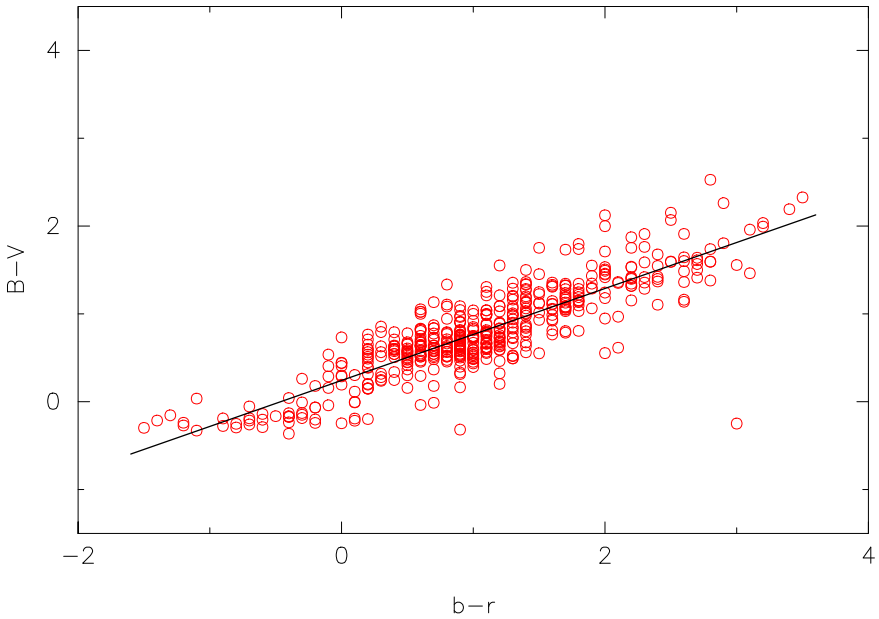


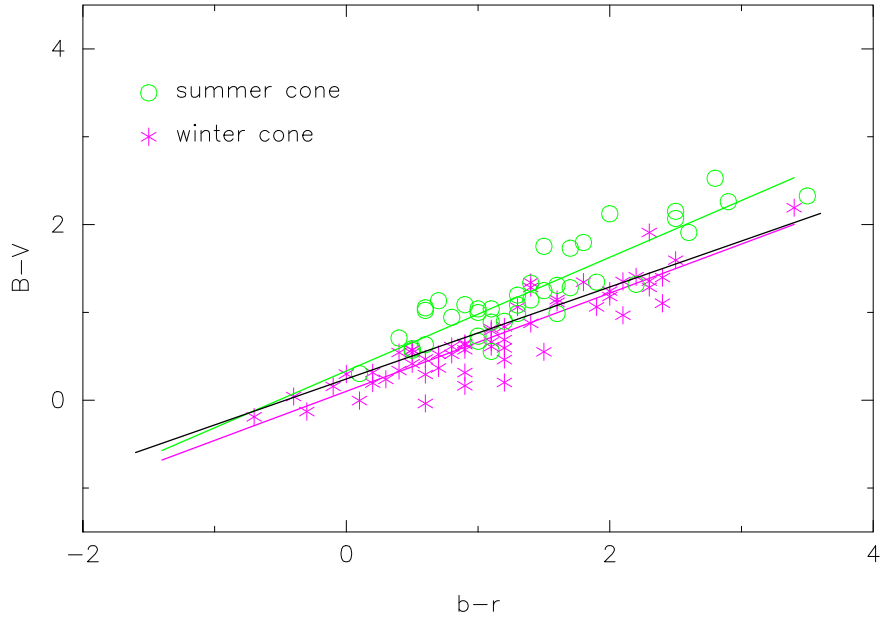
(B-V) vs (b-r)



- All sky (505 stars): (B-V) = 0.524 (b-r) + 0.242 σ = 0.26 mag.

(B-V) vs (b-r)





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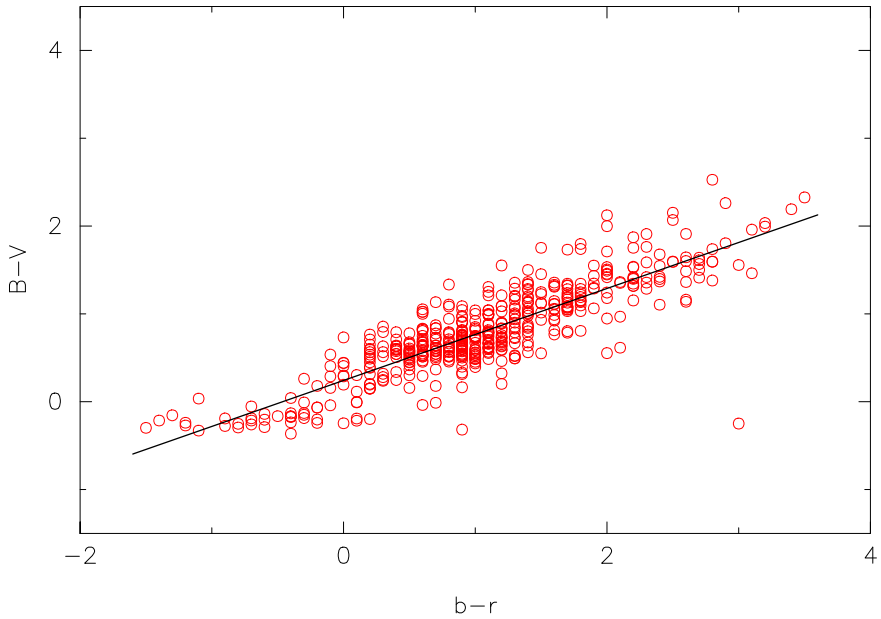
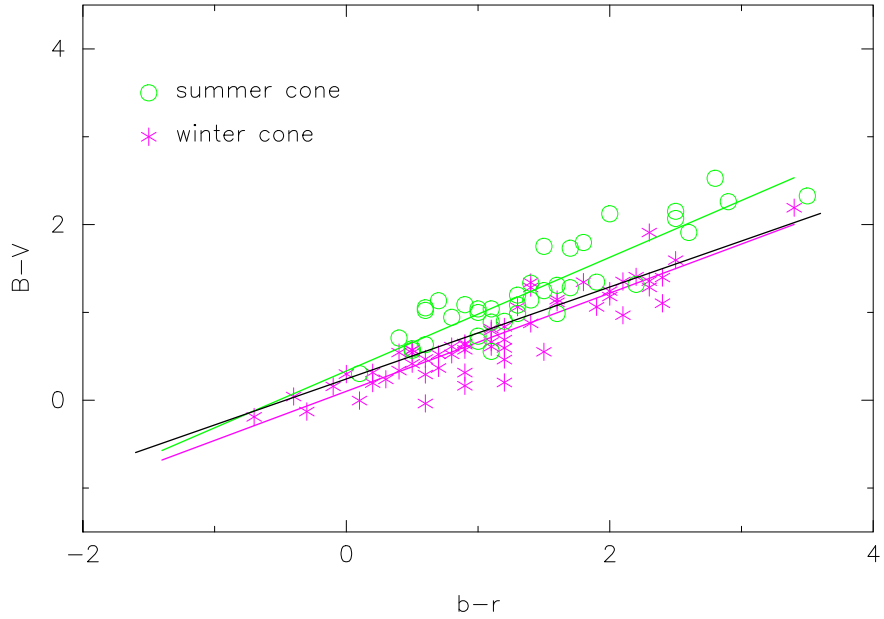
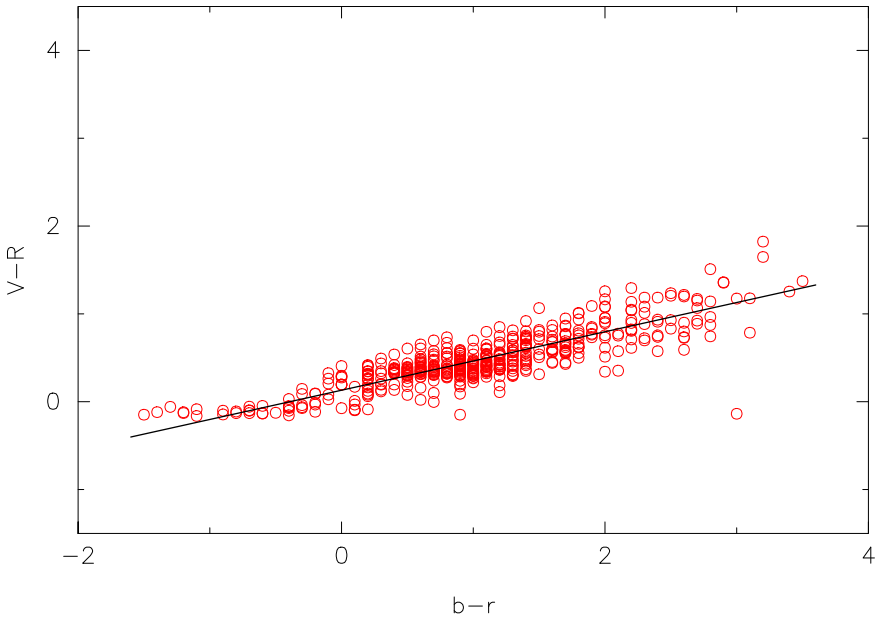


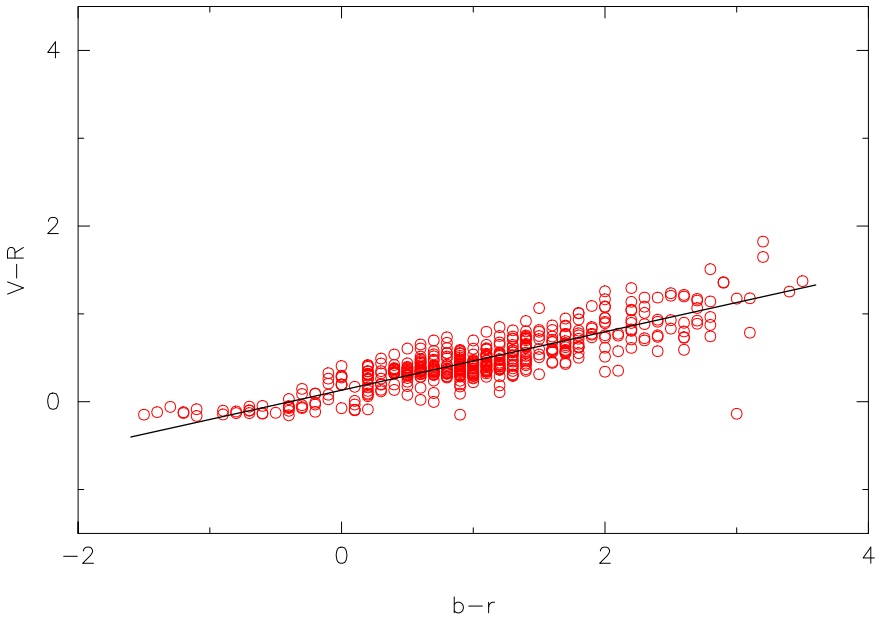


- All sky (505 stars): (B-V) = 0.524 (b-r) + 0.242 σ = 0.26 mag.
- Winter cone (56 stars): (B-V) = 0.559 (b-r) + 0.102 σ = 0.21 mag.
- Summer cone (38 stars): (B-V) = 0.647 (b-r) + 0.334 σ = 0.25 mag.

(V-R) vs (b-r)

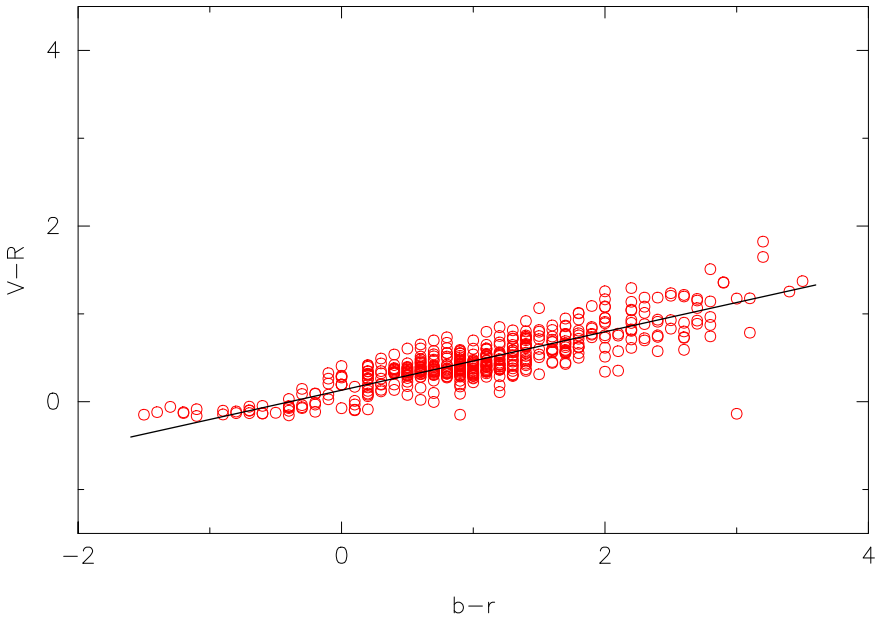


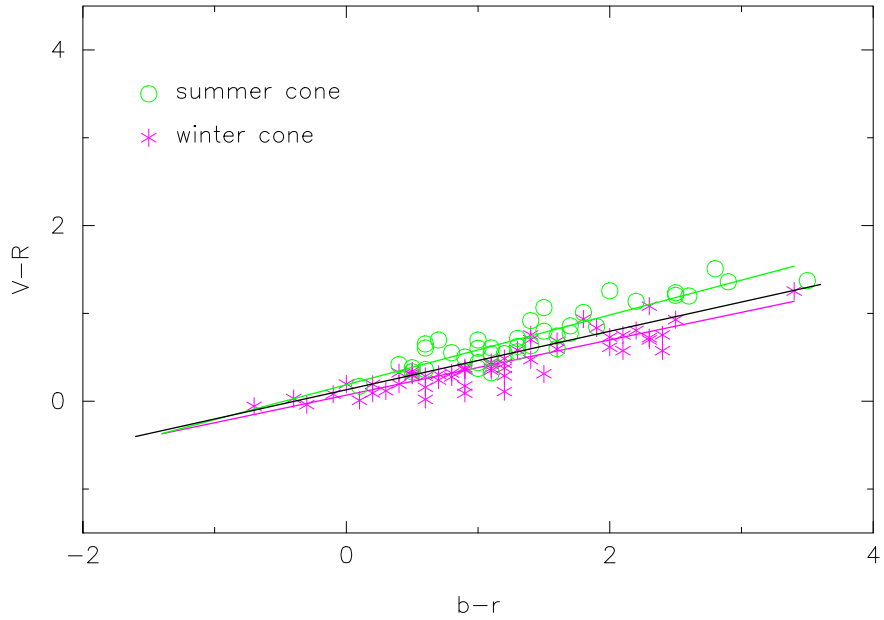
(V-R) vs (b-r)



- All sky (505 stars): (V-R) = 0.333 (b-r) + 0.130 σ = 0.19 mag.

(V-R) vs (b-r)





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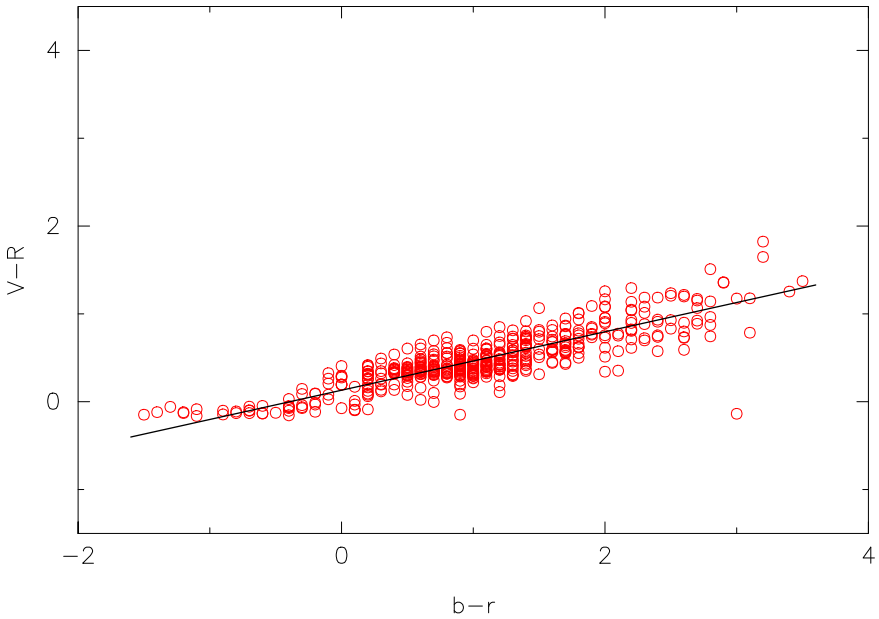
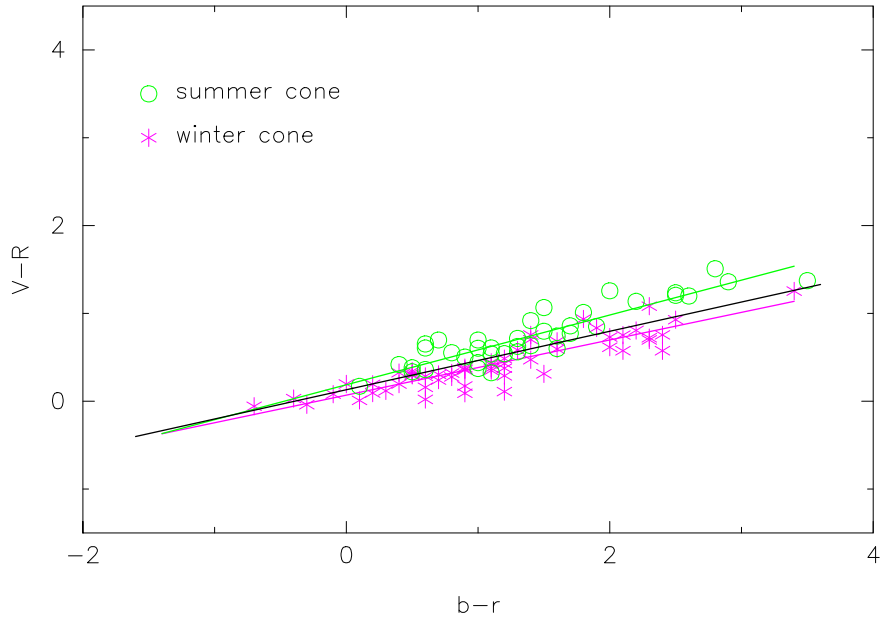
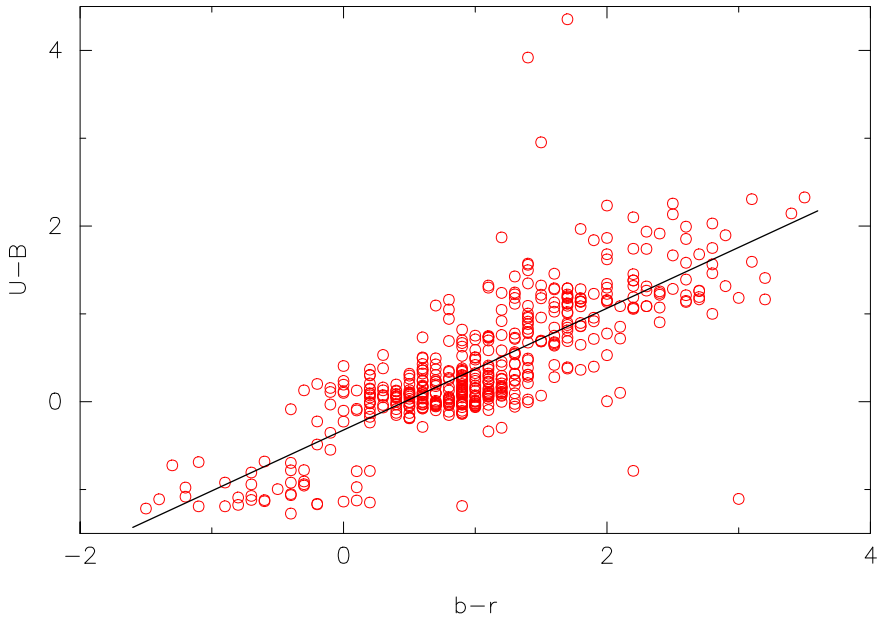
(V-R) vs (b-r)



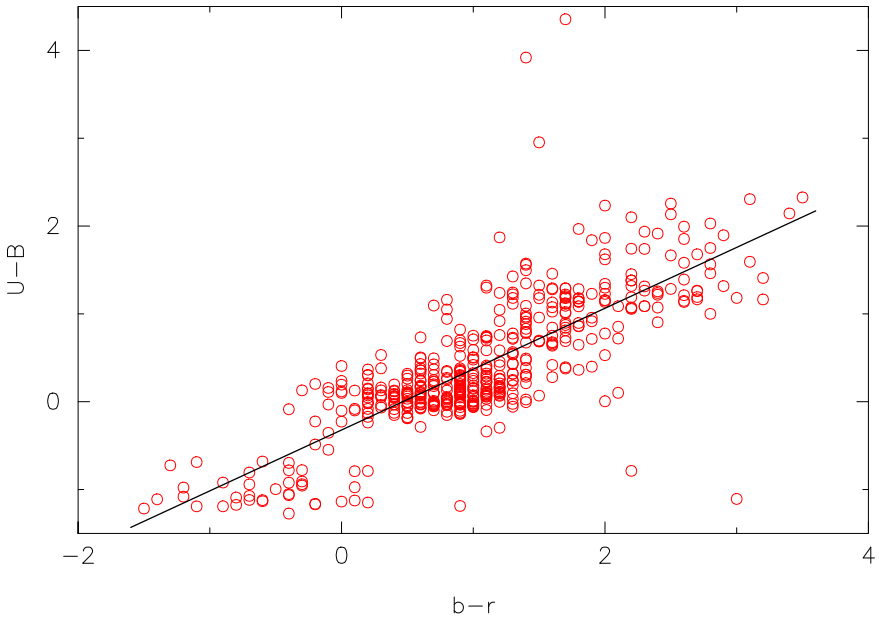


- All sky (505 stars): (V-R) = 0.333 (b-r) + 0.130 σ = 0.19 mag.
- Winter cone (56 stars): (V-R) = 0.314 (b-r) + 0.070 σ = 0.13 mag.
- Summer cone (38 stars): (V-R) = 0.397 (b-r) + 0.188 σ = 0.14 mag.

(U-B) vs (b-r)

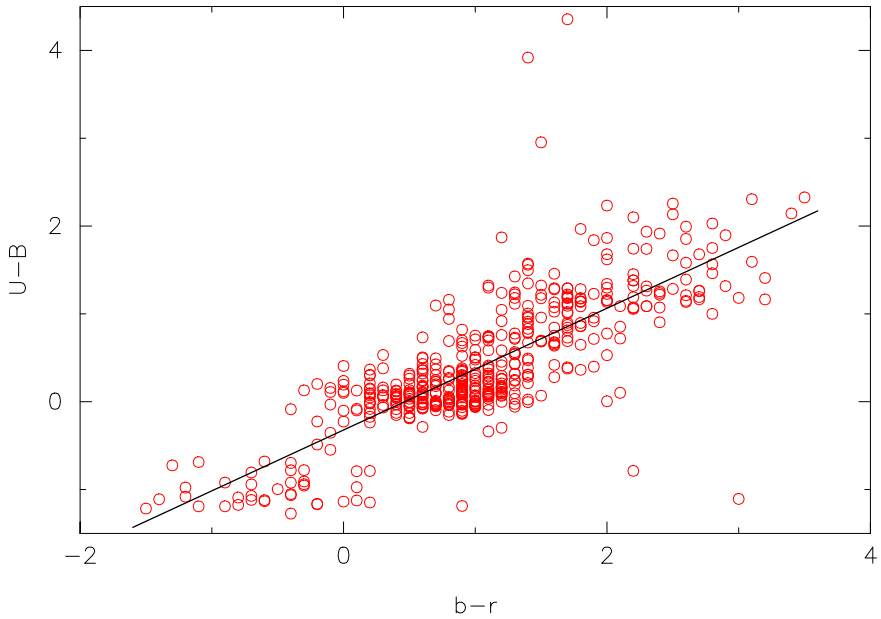


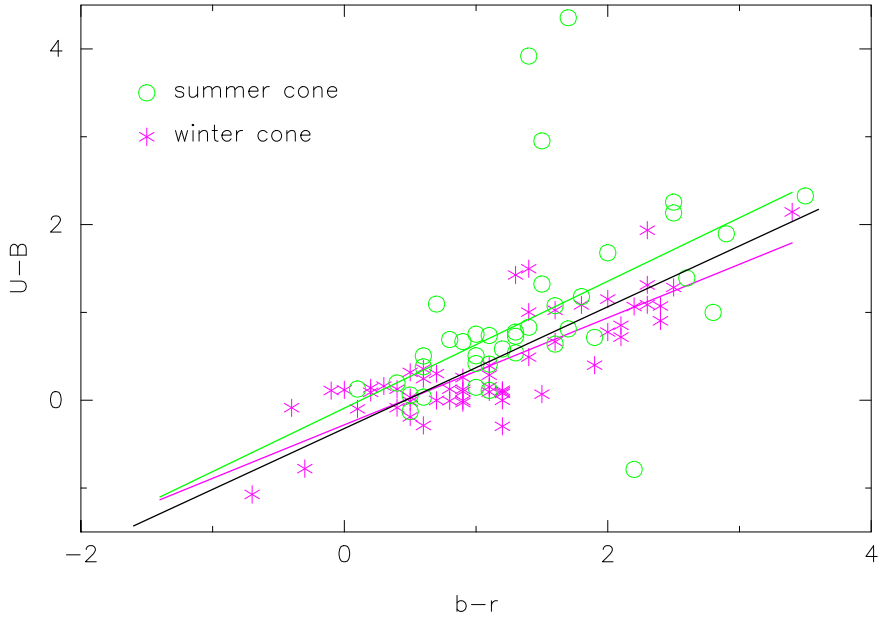
(U-B) vs (b-r)



- All sky (505 stars): (U-B) = 0.693 (b-r) - 0.323 σ = 0.46 mag.

(U-B) vs (b-r)





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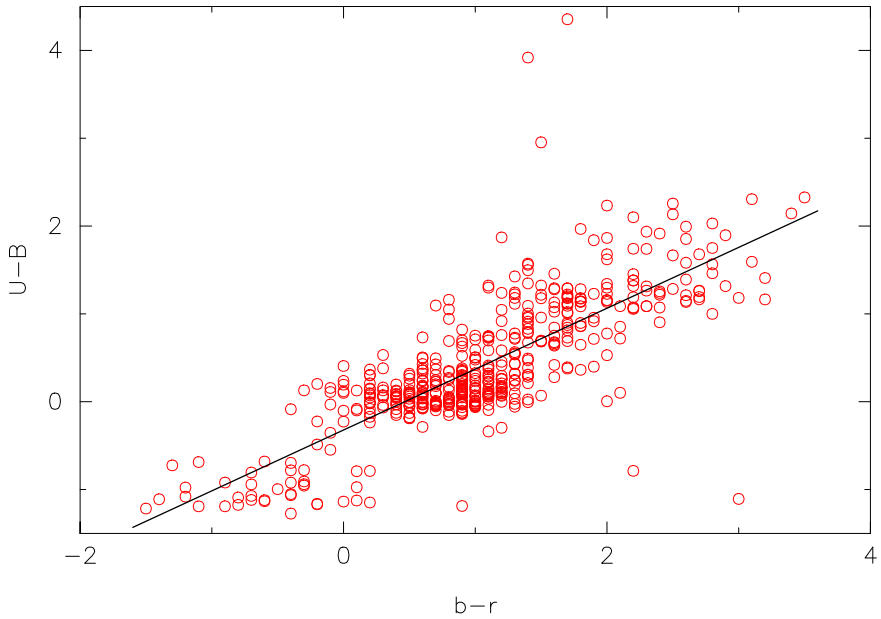
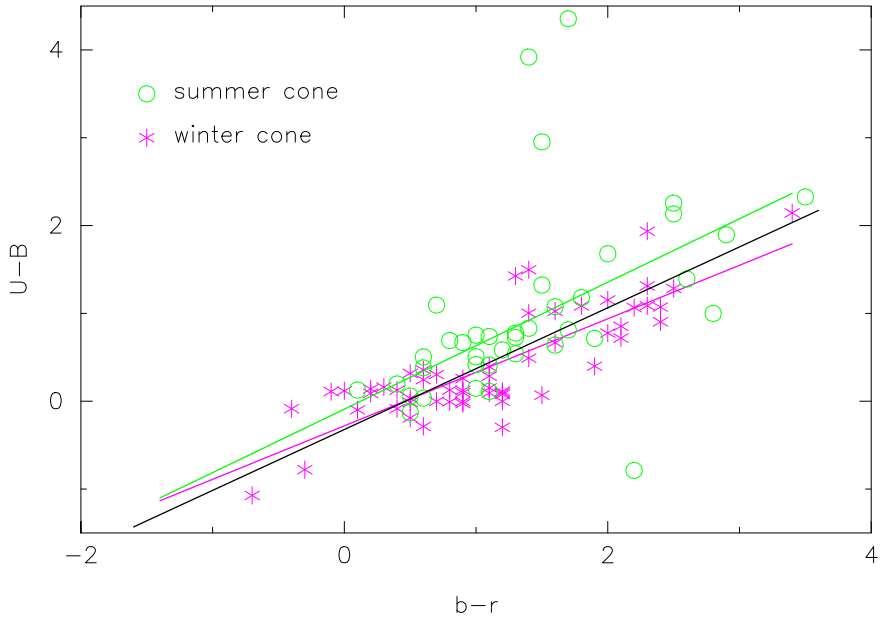
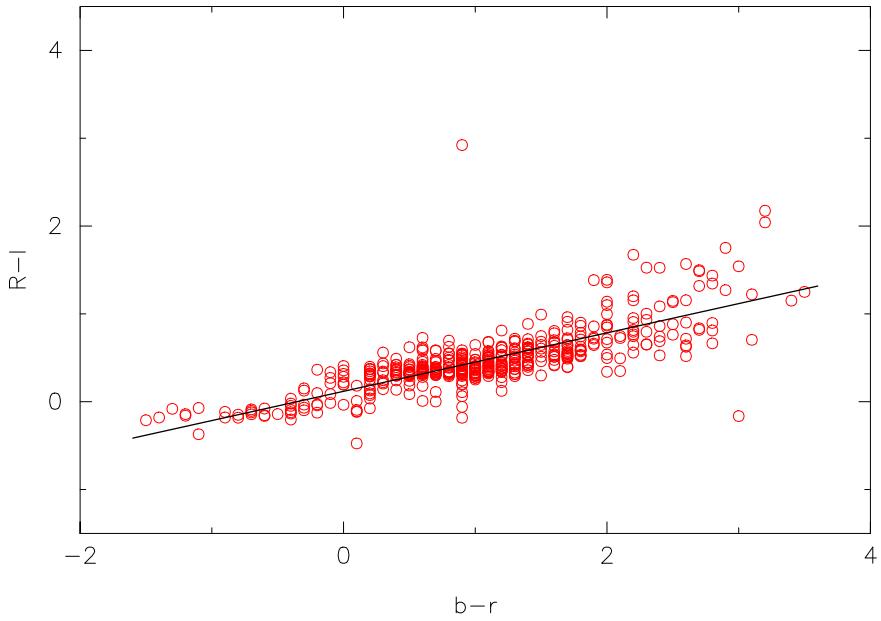


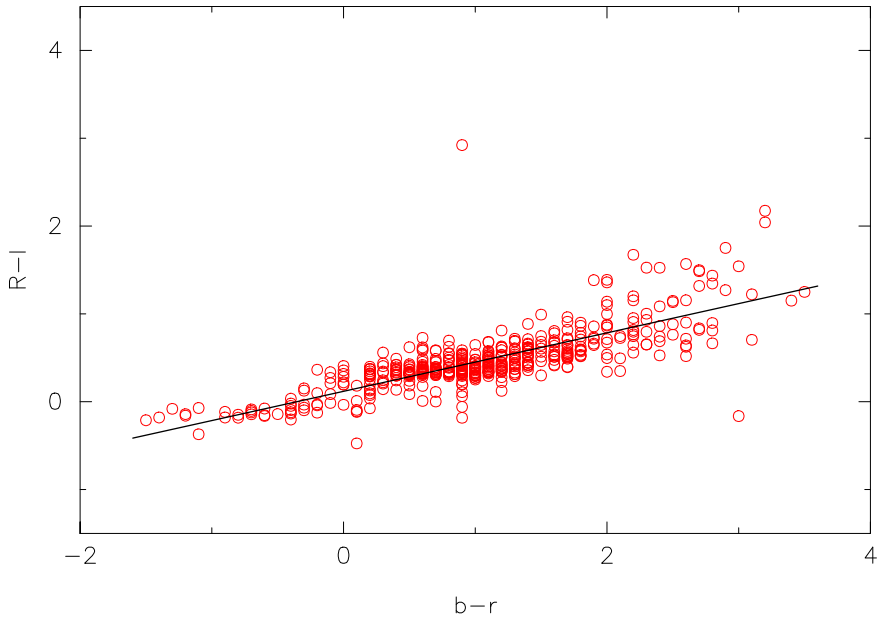


- All sky (505 stars): (U-B) = 0.693 (b-r) - 0.323 σ = 0.46 mag.
- Winter cone (56 stars): (U-B) = 0.609 (b-r) - 0.280 σ = 0.35 mag.
- Summer cone (38 stars): (U-B) = 0.723 (b-r) - 0.091 σ = 0.65 mag.

(R-I) vs (b-r)

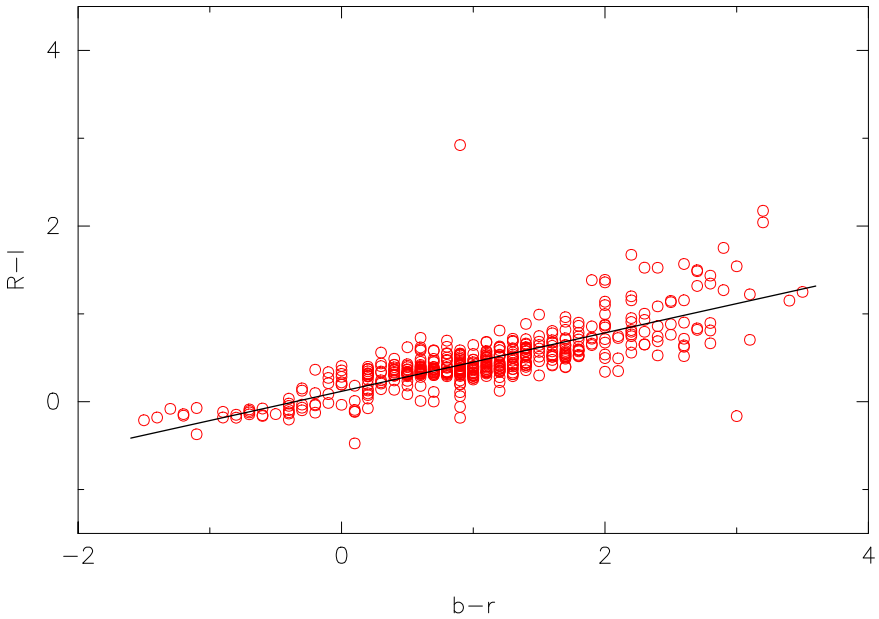


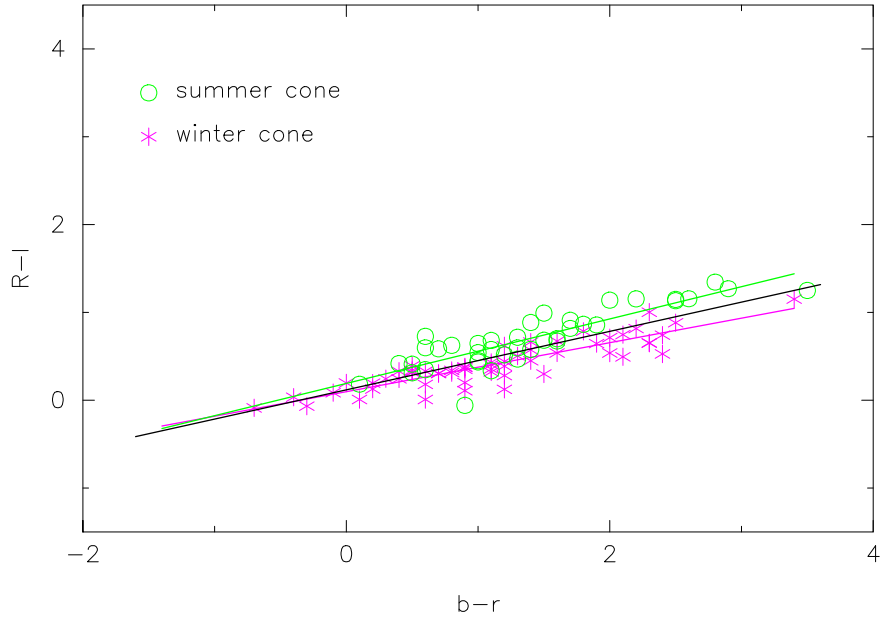
(R-I) vs (b-r)



- All sky (505 stars): (R-I) = 0.333 (b-r) + 0.118 σ = 0.26 mag.

(R-I) vs (b-r)





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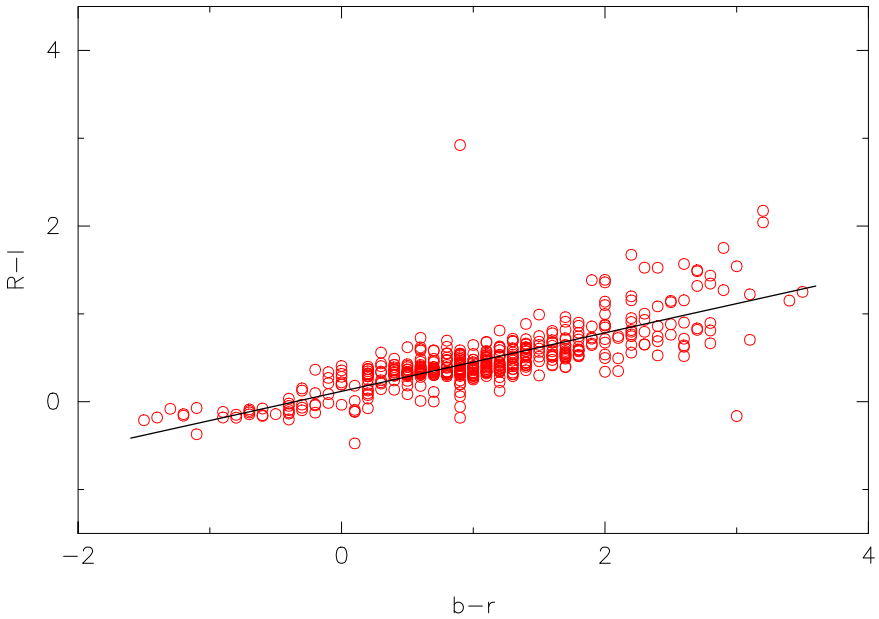

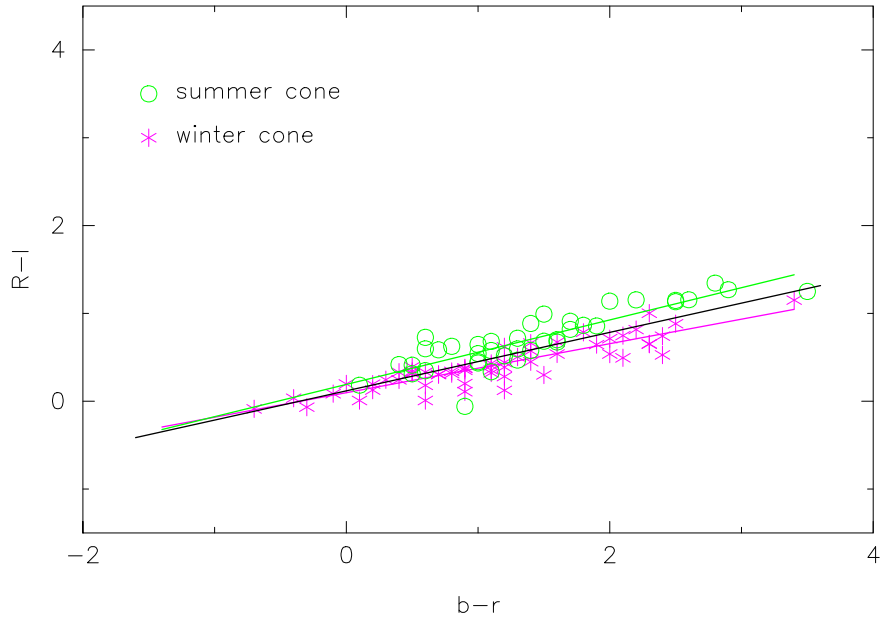

- All sky (505 stars): (R-I) = 0.333 (b-r) + 0.118 σ = 0.26 mag.
- Winter cone (56 stars): (R-I) = 0.279 (b-r) + 0.097 σ = 0.12 mag.
- Summer cone (38 stars): (R-I) = 0.367 (b-r) + 0.191 σ = 0.16 mag.