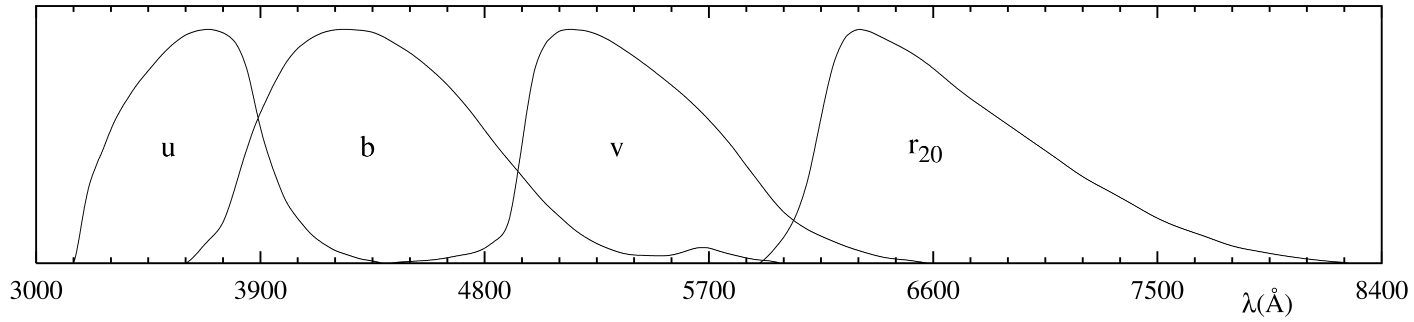
$ubvr_{20}$ - *Sandage and Smith - 1963*



u				*B3*	*Vega*	*Sun*	*K2*	*M2*	*Carbon*
$\lambda_c = 3597$	$\lambda_\circ = 3629$	$\lambda_{peak} = 3692$	$\lambda_{gauss} = 3619$	3619	3694	3656	3720	3803	3750
WHM = 647	W10% = 960	W80% = 422	FWHM = 604	[644]	[606]	[661]	[591]	[469]	[534]
$W_\circ = 643$	$\frac{A(\lambda)}{A(V)}\|_{5.0} = 1.34\,^{1.32}_{1.36}$	$a = \,^{0.956}_{0.963}$ $b = \,^{1.884}_{1.826}$	*B3*	*WN*	*WC*	PN_{Ne}	PN^{Ne}	*Nova*	*WDA*
$\mu = 226$	$\frac{A(\lambda)}{A(V)}\|_{3.1} = 1.57\,^{1.53}_{1.60}$	$a = \,^{0.961}_{0.966}$ $b = \,^{1.843}_{1.789}$	*Sun*	3588	3599	3700	3625	3621	3588
$I_{asym} = 0.17$	$\frac{A(\lambda)}{A(V)}\|_{2.1} = 1.88\,^{1.80}_{1.93}$	$\frac{A(\lambda)}{E(B-V)}$:	$(4.823, 0.061)^{r=0.99}_{B3}$	$(5.138, 0.080)^{r=1.00}_{Sun}$			$(5.684, 0.055)^{r=1.00}_{M2}$		
$I_{kurt} = -0.48$	$\lambda_{eff} = 3628.3 + 52.2 \times E(B-V)$ r=1.00			$W_{eff} = 654.5 - 47.3 \times E(B-V)$ r=−0.97					
	$\lambda_{eff}(T) = 3570 + 164 \times \theta + 99 \times \theta^2 - 60 \times \theta^3$			$W_{eff}(T) = 600 + 313 \times \theta - 654 \times \theta^2 + 215 \times \theta^3$					
b				*B3*	*Vega*	*Sun*	*K2*	*M2*	*Carbon*
$\lambda_c = 4350$	$\lambda_\circ = 4414$	$\lambda_{peak} = 4241$	$\lambda_{gauss} = 4344$	4325	4360	4465	4583	4712	4904
WHM = 1000	W10% = 1528	W80% = 643	FWHM = 957	[960]	[971]	[949]	[809]	[655]	[305]
$W_\circ = 1019$	$\frac{A(\lambda)}{A(V)}\|_{5.0} = 1.19\,^{1.13}_{1.20}$	$a = \,^{0.996}_{1.002}$ $b = \,^{1.104}_{0.944}$	*B3*	*WN*	*WC*	PN_{Ne}	PN^{Ne}	*Nova*	*WDA*
$\mu = 396$	$\frac{A(\lambda)}{A(V)}\|_{3.1} = 1.31\,^{1.22}_{1.32}$	$a = \,^{1.003}_{1.009}$ $b = \,^{0.923}_{0.745}$	*Sun*	4368	4436	4647	4391	4685	4353
$I_{asym} = 0.73$	$\frac{A(\lambda)}{A(V)}\|_{2.1} = 1.46\,^{1.32}_{1.47}$	$\frac{A(\lambda)}{E(B-V)}$:	$(4.144, 0.013)^{r=0.99}_{B3}$	$(4.311, 0.010)^{r=0.98}_{Sun}$			$(4.642, -0.043)^{r=-0.98}_{M2}$		
$I_{kurt} = 0.68$	$\lambda_{eff} = 4400.7 + 181.2 \times E(B-V)$ r=1.00			$W_{eff} = 1066.9 - 179.5 \times E(B-V)$ r=−0.97					
	$\lambda_{eff}(T) = 4284 + 242 \times \theta + 277 \times \theta^2 - 98 \times \theta^3$			$W_{eff}(T) = 910 + 639 \times \theta - 1094 \times \theta^2 + 249 \times \theta^3$					
v				*B3*	*Vega*	*Sun*	*K2*	*M2*	*Carbon*
$\lambda_c = 5370$	$\lambda_\circ = 5408$	$\lambda_{peak} = 5150$	$\lambda_{gauss} = 5351$	5343	5352	5399	5441	5495	5577
WHM = 844	W10% = 1337	W80% = 510	FWHM = 797	[822]	[826]	[846]	[833]	[759]	[663]
$W_\circ = 848$	$\frac{A(\lambda)}{A(V)}\|_{5.0} = 1.01\,^{1.02}_{1.02}$	$a = \,^{1.008}_{1.004}$ $b = \,^{0.079}_{0.036}$	*B3*	*WN*	*WC*	PN_{Ne}	PN^{Ne}	*Nova*	*WDA*
$\mu = 331$	$\frac{A(\lambda)}{A(V)}\|_{3.1} = 1.02\,^{1.02}_{1.03}$	$a = \,^{1.005}_{1.001}$ $b = \,^{0.048}_{0.006}$	*Sun*	5366	5460	5038	5376	5115	5351
$I_{asym} = 0.49$	$\frac{A(\lambda)}{A(V)}\|_{2.1} = 1.03\,^{1.03}_{1.04}$	$\frac{A(\lambda)}{E(B-V)}$:	$(3.201, 0.026)^{r=0.99}_{B3}$	$(3.389, 0.034)^{r=1.00}_{Sun}$			$(3.775, 0.014)^{r=0.96}_{M2}$		
$I_{kurt} = -0.15$	$\lambda_{eff} = 5405.7 + 90.1 \times E(B-V)$ r=1.00			$W_{eff} = 867.1 - 78.8 \times E(B-V)$ r=−0.98					
	$\lambda_{eff}(T) = 5330 + 115 \times \theta + 131 \times \theta^2 - 55 \times \theta^3$			$W_{eff}(T) = 809 + 159 \times \theta - 162 \times \theta^2 - 40 \times \theta^3$					
$\mathbf{r}_{20}$				*B3*	*Vega*	*Sun*	*K2*	*M2*	*Carbon*
$\lambda_c = 6576$	$\lambda_\circ = 6701$	$\lambda_{peak} = 6300$	$\lambda_{gauss} = 6557$	6612	6622	6662	6694	6794	6736
WHM = 899	W10% = 1736	W80% = 451	FWHM = 900	[930]	[937]	[949]	[952]	[973]	[971]
$W_\circ = 958$	$\frac{A(\lambda)}{A(V)}\|_{5.0} = 0.81\,^{0.81}_{0.83}$	$a = \,^{0.904}_{0.897}$ $b = \,^{-0.291}_{-0.306}$	*B3*	*WN*	*WC*	PN_{Ne}	PN^{Ne}	*Nova*	*WDA*
$\mu = 434$	$\frac{A(\lambda)}{A(V)}\|_{3.1} = 0.75\,^{0.75}_{0.78}$	$a = \,^{0.900}_{0.892}$ $b = \,^{-0.301}_{-0.317}$	*Sun*	6653	6700	6590	6619	6630	6614
$I_{asym} = 0.74$	$\frac{A(\lambda)}{A(V)}\|_{2.1} = 0.67\,^{0.67}_{0.71}$	$\frac{A(\lambda)}{E(B-V)}$:	$(2.354, 0.022)^{r=0.99}_{B3}$	$(2.502, 0.028)^{r=1.00}_{Sun}$			$(2.778, 0.006)^{r=0.90}_{M2}$		
$I_{kurt} = -0.00$	$\lambda_{eff} = 6696.9 + 100.4 \times E(B-V)$ r=1.00			$W_{eff} = 973.1 - 63.3 \times E(B-V)$ r=−0.97					
	$\lambda_{eff}(T) = 6599 + 104 \times \theta + 146 \times \theta^2 - 50 \times \theta^3$			$W_{eff}(T) = 919 + 106 \times \theta - 41 \times \theta^2 - 76 \times \theta^3$					