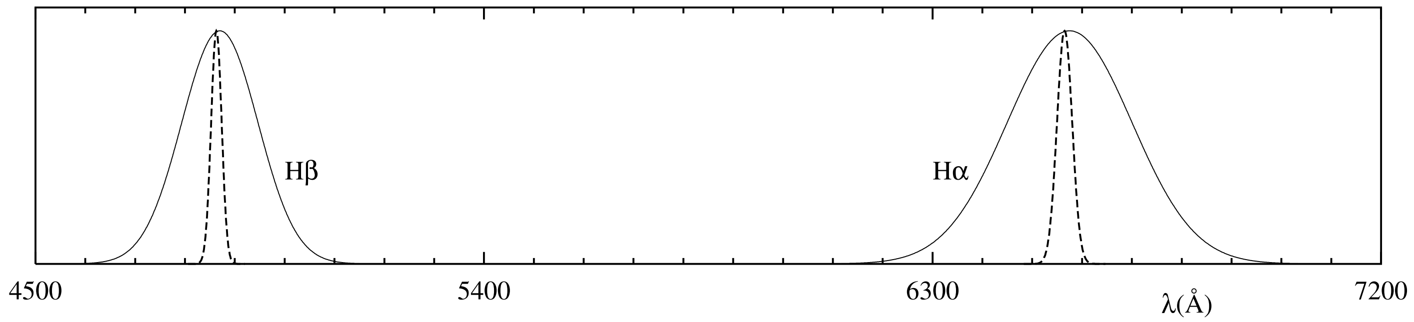
$H\alpha, \beta$ - Guinan and McCook - 1974



$\boxed{\mathbf{H}\alpha_{wide}}$	(interference filter) assumed profile: gaussian		*B3*	*Vega*	*Sun*	*K2*	*M2*	*Carbon*
$\lambda_c = 6575$			6567	6568	6572	6575	6571	6599
WHM = 295			[313]	[314]	[314]	[314]	[309]	[305]
$W_\circ = 314$	$\frac{A(\lambda)}{A(V)}\vert_{5.0} = 0.84\ ^{0.83}_{0.86}$	$a = ^{0.908}_{0.908}$ $b = ^{-0.283}_{-0.284}$ *B3*	*WN*	*WC*	PN_{Ne}	PN^{Ne}	*Nova*	*WDA*
	$\frac{A(\lambda)}{A(V)}\vert_{3.1} = 0.77\ ^{0.76}_{0.81}$	$a = ^{0.908}_{0.907}$ $b = ^{-0.284}_{-0.285}$ *Sun*	6573	6590	6574	6571	6568	6568
	$\frac{A(\lambda)}{A(V)}\vert_{2.1} = 0.69\ ^{0.68}_{0.73}$	$\frac{A(\lambda)}{E(B-V)}$: $(2.366, 0.042)^{r=1.00}_{B3}$	$(2.539, 0.054)^{r=1.00}_{Sun}$			$(2.901, 0.045)^{r=1.00}_{M2}$		
	$\lambda_{eff} = 6574.9 + 8.1 \times E(B-V)$ r=1.00		$W_{eff} = 314.6 - 2.1 \times E(B-V)$ r=-0.97					
	$\lambda_{eff}(T) = 6565.3 + 11.9 \times \theta + 12.3 \times \theta^2 - 5.6 \times \theta^3$		$W_{eff}(T) = 312.7 + 4.0 \times \theta - 2.0 \times \theta^2 - 2.2 \times \theta^3$					

$\boxed{\mathbf{H}\alpha_{narrow}}$	(interference filter) assumed profile: gaussian		*B3*	*Vega*	*Sun*	*K2*	*M2*	*Carbon*
$\lambda_c = 6565$			6565	6565	6565	6565	6565	6566
WHM = 36			[39]	[39]	[39]	[39]	[39]	[38]
$W_\circ = 38$	$\frac{A(\lambda)}{A(V)}\vert_{5.0} = 0.84\ ^{0.83}_{0.87}$	$a = ^{0.909}_{0.909}$ $b = ^{-0.283}_{-0.283}$ *B3*	*WN*	*WC*	PN_{Ne}	PN^{Ne}	*Nova*	*WDA*
	$\frac{A(\lambda)}{A(V)}\vert_{3.1} = 0.78\ ^{0.76}_{0.81}$	$a = ^{0.909}_{0.909}$ $b = ^{-0.283}_{-0.283}$ *Sun*	6565	6568	6569	6567	6566	6565
	$\frac{A(\lambda)}{A(V)}\vert_{2.1} = 0.69\ ^{0.68}_{0.74}$	$\frac{A(\lambda)}{E(B-V)}$: $(2.366, 0.044)^{r=1.00}_{B3}$	$(2.542, 0.056)^{r=1.00}_{Sun}$			$(2.903, 0.048)^{r=1.00}_{M2}$		
	$\lambda_{eff} = 6565.0 + 0.1 \times E(B-V)$ r=1.00		$W_{eff} = 38.3 - 0.0 \times E(B-V)$ r=-0.97					
	$\lambda_{eff}(T) = 6564.9 + 0.2 \times \theta + 0.2 \times \theta^2 - 0.1 \times \theta^3$		$W_{eff}(T) = 38.3 + 0.0 \times \theta - 0.0 \times \theta^2 - 0.0 \times \theta^3$					

$\boxed{\mathbf{H}\beta_{wide}}$	(interference filter) assumed profile: gaussian		*B3*	*Vega*	*Sun*	*K2*	*M2*	*Carbon*
$\lambda_c = 4870$			4866	4867	4868	4870	4877	4859
WHM = 180			[191]	[192]	[190]	[189]	[184]	[165]
$W_\circ = 192$	$\frac{A(\lambda)}{A(V)}\vert_{5.0} = 1.11\ ^{1.10}_{1.15}$	$a = ^{1.016}_{1.016}$ $b = ^{0.456}_{0.451}$ *B3*	*WN*	*WC*	PN_{Ne}	PN^{Ne}	*Nova*	*WDA*
	$\frac{A(\lambda)}{A(V)}\vert_{3.1} = 1.19\ ^{1.17}_{1.25}$	$a = ^{1.016}_{1.016}$ $b = ^{0.454}_{0.449}$ *Sun*	4857	4852	4959	4871	4959	4867
	$\frac{A(\lambda)}{A(V)}\vert_{2.1} = 1.28\ ^{1.25}_{1.37}$	$\frac{A(\lambda)}{E(B-V)}$: $(3.623, 0.065)^{r=1.00}_{B3}$	$(3.889, 0.083)^{r=1.00}_{Sun}$			$(4.432, 0.070)^{r=1.00}_{M2}$		
	$\lambda_{eff} = 4869.9 + 5.6 \times E(B-V)$ r=1.00		$W_{eff} = 192.0 - 1.5 \times E(B-V)$ r=-0.96					
	$\lambda_{eff}(T) = 4865.0 + 9.3 \times \theta + 7.5 \times \theta^2 - 3.7 \times \theta^3$		$W_{eff}(T) = 191.0 + 2.8 \times \theta - 3.1 \times \theta^2 - 0.9 \times \theta^3$					

$\boxed{\mathbf{H}\beta_{narrow}}$	(interference filter) assumed profile: gaussian		*B3*	*Vega*	*Sun*	*K2*	*M2*	*Carbon*
$\lambda_c = 4863$			4863	4863	4863	4863	4864	4862
WHM = 25			[27]	[28]	[27]	[27]	[27]	[26]
$W_\circ = 27$	$\frac{A(\lambda)}{A(V)}\vert_{5.0} = 1.12\ ^{1.10}_{1.15}$	$a = ^{1.015}_{1.015}$ $b = ^{0.459}_{0.459}$ *B3*	*WN*	*WC*	PN_{Ne}	PN^{Ne}	*Nova*	*WDA*
	$\frac{A(\lambda)}{A(V)}\vert_{3.1} = 1.19\ ^{1.17}_{1.25}$	$a = ^{1.015}_{1.015}$ $b = ^{0.459}_{0.459}$ *Sun*	4863	4863	4861	4862	4862	4863
	$\frac{A(\lambda)}{A(V)}\vert_{2.1} = 1.28\ ^{1.25}_{1.37}$	$\frac{A(\lambda)}{E(B-V)}$: $(3.625, 0.068)^{r=1.00}_{B3}$	$(3.895, 0.086)^{r=1.00}_{Sun}$			$(4.448, 0.074)^{r=1.00}_{M2}$		
	$\lambda_{eff} = 4863.0 + 0.1 \times E(B-V)$ r=1.00		$W_{eff} = 26.6 - 0.0 \times E(B-V)$ r=-0.96					
	$\lambda_{eff}(T) = 4862.9 + 0.2 \times \theta + 0.1 \times \theta^2 - 0.1 \times \theta^3$		$W_{eff}(T) = 26.6 + 0.0 \times \theta - 0.0 \times \theta^2 - 0.0 \times \theta^3$					