

## To Measure the Sky

Errors for correction in second printing (November 2010).

P 18. Figure 1.5 – direction of y-axis labels should be horizontal

P 24. Figure 1.8 – Labels on curves should be (top to bottom) 5000K, 4000K, 3000K

P 28. Section 1.6.2, line 4 – Exponent incorrect, correct in red: “1 parsec = 3.086 x 10<sup>16</sup> meters”

P 92. RHS of last equation on page, remove superfluous “1’s” should read:

$$\frac{(z+1)^2 - 1}{(z+1)^2 + 1}$$

P 97. Problem 13, second sentence, insert word: “supernova of **absolute** magnitude -20”.

P 127. Section 5.2.2 – last two sentences of the section should read:

Likewise note that with the substitution  $s_2 = -s_0$ , the equation for a thin lens (5.8) is identical to the equation for a mirror (5.5). In the discussion that follows then...or vice versa, **so long as the object point is “reflected” to the other side of the vertex.**

P 154. No boldface on lines 5, 8 and 9. No boldface on the last line.

P 156. Problem 5 – Delete the last sentence “show...(5.11)”

P 195. Problem 10, last sentence, insert words:

“Assume **a perfect AO system and that** the background for the ELT...”

P 233. Problem 2, lines 1-2 “Table 7.2” should read **Figure 7.2**

P 233. Problem 3, “rotation” and “vibration” are incorrectly switched. Beginning with the third line, text should read:

“...ground state, state ( $J=0, \nu=1$ ) has an energy of 1 eV. Suppose also that, no matter what the **vibrational** state is, the relative energies of the lowest **rotational** states are  $J(J+1)d$  where  $d=10^{-5}$  eV and  $J$  is the **rotational** quantum number. (a) Compute the wavelengths of all permitted emission line arising between **vibration levels  $\nu=0$  and  $\nu=1$ , and involving rotation states  $J=0, 1, 2, 3$  and 4. Permitted transitions require  $\Delta J = \pm 1$ .** (b) Sketch the emission spectrum for these lines.”

P 234. Problem 9 line 5 should read “resolution ( $R=\lambda/\delta\lambda$ ) of this device”

P 270. Equation (8.4) the leading “ $\Delta$ ” should be omitted from the left-hand side. It should read:

$$T(t) = T_o + \dots$$

P 274. Problem 11, last line – exponents should be omitted. Should read: “exposure time if  $R_g > \sigma_G N$ ”

P 321. Problem 1. Add sentence at the end of the paragraph

“Assume  $R_z = 0$  and  $R_1 = 100$ .”

P 322. Problem 8, line 4. Delete “persec.” The text should read “expected to be 7 ADU per second over a digital...”