

Figures, Tables, and Captions

- A. In lab text (GNS) see pp. 12, 13; examples p. 150 (figure) and p. 515 (tables).
- B. Work to make captions to figures self-contained, complete descriptions of the figure contents.
- C. Likewise with tables. Here footnotes can also be used.

NEVER submit printouts of long data files collected by the computer: We will **NOT** be impressed! Instead, select samples (where relevant to make particular points) or just specify file names and information permitting us to look them up if we choose to do so.

Figure 1. Absorption spectra of I_2 recorded using as source an RLP operating near 653 nm. The I_2 cell (silica, 9.93 cm) was maintained at a temperature of 60°C , with the pressure controlled by a cooler side tube, giving I_2 pressures from 1.5 Torr at top, decreasing to 0.17 Torr at bottom. The ordinate scale is quantitative, but with a zero offset. The actual recorded points are shown in the top spectrum, as logged at intervals of 0.2 s. The sharp peak near $15\,308.4\text{ cm}^{-1}$ in this spectrum is spurious, attributed to a laser "burp." The spectrum at top is from the I_2 atlas of Gerstenkorn and Luc.¹

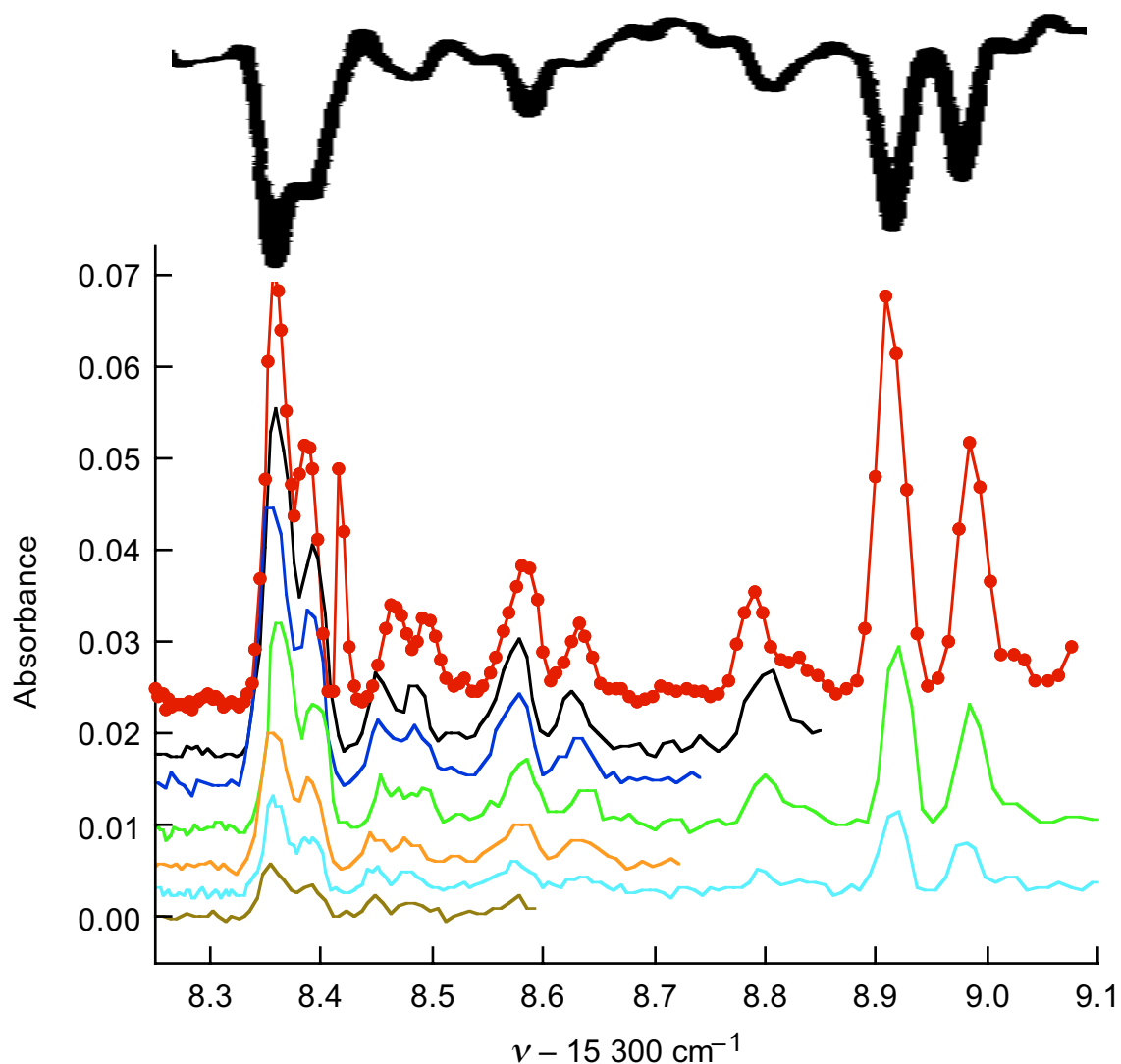


Table 1 Standard errors for a and b in linear calibration model, for both constant data error and proportional error, as obtained by analysis with correct weighting (from V_{prior}) and incorrect weighting (from V_{act} and V_{post})

		Incorrect weighting	
Correct weighting		Actual ($V_{\text{act}})^a$	Apparent ($V_{\text{post}})^a$
From V_{prior}			
Homoscedastic data, $\sigma = 1$, evenly spaced model.			
σ_a	0.7237	0.9990 (9970)	0.0304
σ_b	0.1195	0.2527 (2517)	0.1394
Geometric spacing			
σ_a	0.5503	0.9002 (8991)	0.425
σ_b	0.1181	0.5382 (5361)	0.667
Heteroscedastic data, $\sigma = 0.02 y$, evenly spaced model.			
σ_a	0.01999	0.4810 (4820)	0.867
σ_b	0.09157	0.1625 (1627)	0.1432
Geometric spacing			
σ_a	0.07603	0.3043 (3056)	0.363
σ_b	0.1194	0.1958 (1961)	0.0779

^a Last column and quantities in parentheses under “actual” from MC computations for 10^5 data sets.