$$P(||x|) = \prod_{i=1}^{N} \frac{1}{\sigma_{i}\sqrt{2\pi}} e^{-\frac{1}{2}\left(\frac{y_{i}-Ae^{-\lambda x_{i}}}{\sigma_{i}}\right)^{2}}$$

$$= \sum_{i=1}^{N} \left[-\ln\left(\frac{1}{\sigma_{i}\sqrt{2\pi}}\right) - \frac{1}{2}\left(\frac{y_{i}-Ae^{-\lambda x_{i}}}{\sigma_{i}}\right)^{2}\right]$$

$$= \sum_{i=1}^{N} \left[-\ln\left(\frac{\sigma_{i}}{\sigma_{i}}\right) - \frac{1}{2}\left(\frac{y_{i}-Ae^{-\lambda x_{i}}}{\sigma_{i}}\right)^{2}\right]$$

$$= -\frac{N}{2}\ln(2\pi) - \sum_{i=1}^{N} \left[\ln(\sigma_{i}) + \frac{1}{2}\left(\frac{y_{i}-Ae^{-\lambda x_{i}}}{\sigma_{i}}\right)^{2}\right]$$

$$= -\frac{N}{2}\ln(2\pi) - \sum_{i=1}^{N} \left[\ln(\sigma_{i}) - \frac{1}{2}\sum_{i=1}^{N}\left(\frac{y_{i}-Ae^{-\lambda x_{i}}}{\sigma_{i}}\right)^{2}\right]$$

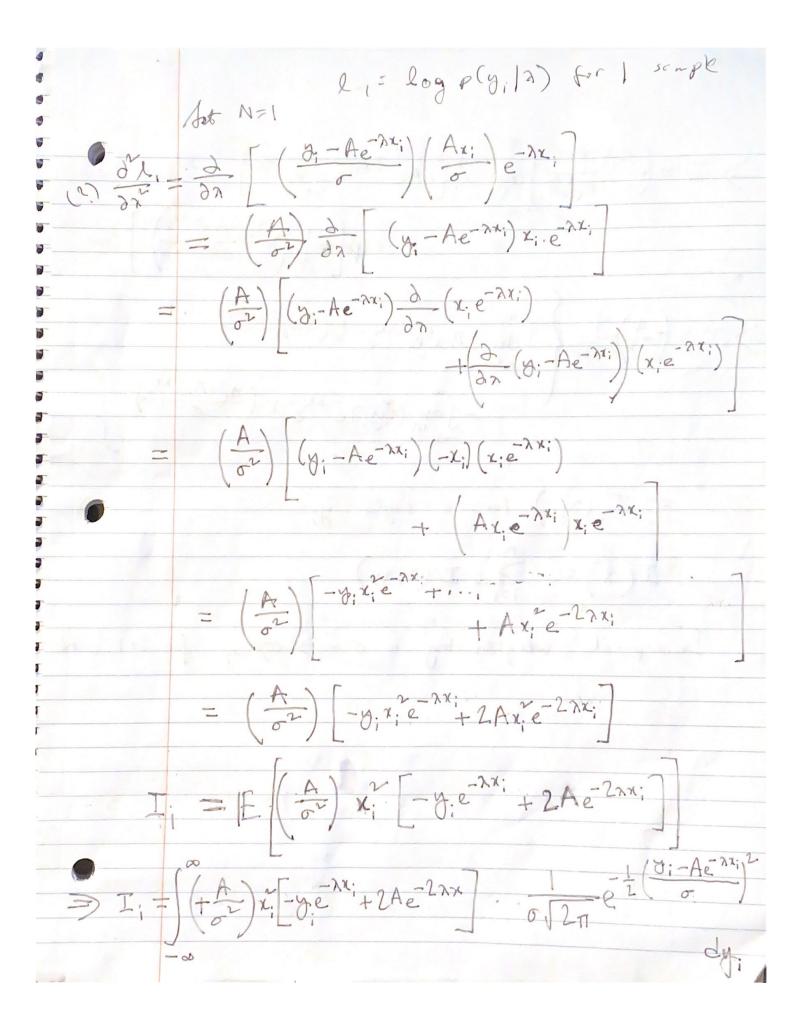
$$= -\frac{N}{2}\ln(2\pi) - \sum_{i=1}^{N} \left[\ln(\sigma_{i}) - \frac{1}{2}\sum_{i=1}^{N}\left(\frac{y_{i}-Ae^{-\lambda x_{i}}}{\sigma_{i}}\right)^{2}\right]$$

$$= -\frac{N}{2}\ln(2\pi) - \sum_{i=1}^{N} \left[\ln(\sigma_{i}) - \frac{1}{2}\sum_{i=1}^{N}\left(\frac{y_{i}-Ae^{-\lambda x_{i}}}{\sigma_{i}}\right)^{2}\right]$$

$$= -\frac{N}{2}\ln(2\pi) + N\ln(\sigma) + \frac{1}{2}\sum_{i=1}^{N}\left(\frac{y_{i}-Ae^{-\lambda x_{i}}}{\sigma_{i}}\right)^{2}$$

$$= -\frac{N}{2}\ln(2\pi) + N\ln(\sigma) + \frac{N}{2}\sum_{i=1}^{N}\left(\frac{y_{i}-Ae^{-\lambda x_{i}}}{\sigma_{i}}\right)^{2}$$

$$= -\frac{N}{2}\ln(2\pi) + \frac{N}{2}\ln(2\pi) + \frac{N}{2}\ln(2\pi$$



- Jdy (x.y.) = 2x; -1 (9: -Ae

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