mRNA Production and Degradation Data Sets Bibliography

1) Castells-Roca, L., García-Martínez, J., Moreno, J., Herrero, E., Bellí, G., & Pérez-Ortín, J. E. (2011). Heat shock response in yeast involves changes in both transcription rates and mRNA stabilities. *PloS one*, *6*(2), e17272.

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0017272#s5>

Notes:

* Data set - Table S1
* TR = production rate
* kd = degradation, calculated as a ratio of TR to RA values at time 0

2) García-Martínez, J., González-Candelas, F., & Pérez-Ortín, J. E. (2007). Common gene expression strategies revealed by genome-wide analysis in yeast. *Genome Biol*, *8*(10), R222.

<http://genomebiology.com/2007/8/10/R222>

Notes:

* Data set - Additional data file 13
* analyzes translation rates as well…
* only has TR
* RS = RNA stability (related to degradation??)

3) Wang, Y., Liu, C. L., Storey, J. D., Tibshirani, R. J., Herschlag, D., & Brown, P. O. (2002). Precision and functional specificity in mRNA decay. *Proceedings of the National Academy of Sciences*, *99*(9), 5860-5865.

<http://www.pnas.org/content/99/9/5860.full>

Data from: <http://www-genome.stanford.edu/turnover/data.shtml> - 3.1 MB link

Notes:

* Raw data Excel file, expressed as timecourse

4) Sun, M., Schwalb, B., Pirkl, N., Maier, K. C., Schenk, A., Failmezger, H., ... & Cramer, P. (2013). Global analysis of eukaryotic mRNA degradation reveals Xrn1-dependent buffering of transcript levels. *Molecular cell*, *52*(1), 52-62.

<http://www.sciencedirect.com/science/article/pii/S1097276513006801>

Notes:

* Tables S2-S5.
* Includes differential analysis of SR (synthesis rate) and DR (degradation rate) -- these files are encoded in txt format

5) Miller, C., Schwalb, B., Maier, K., Schulz, D., Dümcke, S., Zacher, B., ... & Cramer, P. (2011). Dynamic transcriptome analysis measures rates of mRNA synthesis and decay in yeast. *Molecular systems biology*, *7*(1).

<http://msb.embopress.org/content/7/1/458#sec-27>

Notes:

* Supplementary datasets for the half-life and synthesis rates of transcription factors
* Raw txt file
* Lists genes
* Making an assumption that the numbers above (00 - 06, 06 - 12, etc.) deal with time

6) Gasch, A. P., Spellman, P. T., Kao, C. M., Carmel-Harel, O., Eisen, M. B., Storz, G., ... & Brown, P. O. (2000). Genomic expression programs in the response of yeast cells to environmental changes. *Molecular biology of the cell*, *11*(12), 4241-4257.

<http://www.molbiolcell.org/content/11/12/4241.short>

Notes:

* Conditions ranged from temperature shock, hydrogen peroxide, menadoine, and diamine among countless others
* Website/Search available to go through the dataset
  + <http://genome-www.stanford.edu/cgi-bin/yeast_stress/gx?n=megayeast&rx=5&ry=.1&$TARGET%20=>