Microarray Quality Metrics

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Although microarrays are widely used and the interest in expression data is increasing with the appearance of new applications, the assessment of data quality remains a major concern. arrayQualityMetrics is a new Bioconductor package that provides a HTML report with diagnostic plots for one or dual color microarray on the level of data sets. The report contains the evaluation of different categories of quality metrics to cover the identification of numerous types of problems. The individual array quality, the existence of spatial effects, the reproducibility, the homogeneity between experiments and the biological signal to noise ratio are evaluated. This report can be used as a first step of microarray analysis or to compare the efficiency of different methods of normalisation.