

## Supporting Information

### Pixel-Based Analysis of Comprehensive Two-Dimensional Gas Chromatograms (Color Plots) of Petroleum : A Tutorial

Søren Furbo, Asger B. Hansen, Thomas Skov and Jan H. Christensen

<b>Step</b>	<b>A</b>
Raw data	27.5%
Background removed (different number of splines)	28.3%-28.6%
<sup>2</sup> t <sub>E</sub> aligned	39.8%
<sup>1</sup> t <sub>R</sub> aligned (different segment lengths and slacks)	40.0%-46.0%
Normalized	38.5%
Transformed	40.9%
Scaled	78.9%

Table S1: A at different preprocessing steps for dataset 1

<b>Step</b>	<b>A from facilitator chromatograms</b>	<b>A from chromatograms from quality control sample</b>
Raw	24.7%	28.7%
50 Hz noise removed	49.17%	66.5%
Background removed	72.2%	74.5%
Smoothed	76.2%	79.8%
<sup>2</sup> t <sub>R</sub> aligned	84.6%	88.4%
Normalized to maximum	84.2%	82.9%
Normalized to Euclidean norm	41.5%	68.9%
Normalized to sum	82.4%	83.5%
Normalized weighted sum	84.5%	82.8%
Scaled	87.5%	83.6%

Table S1: A at different preprocessing steps for dataset 2

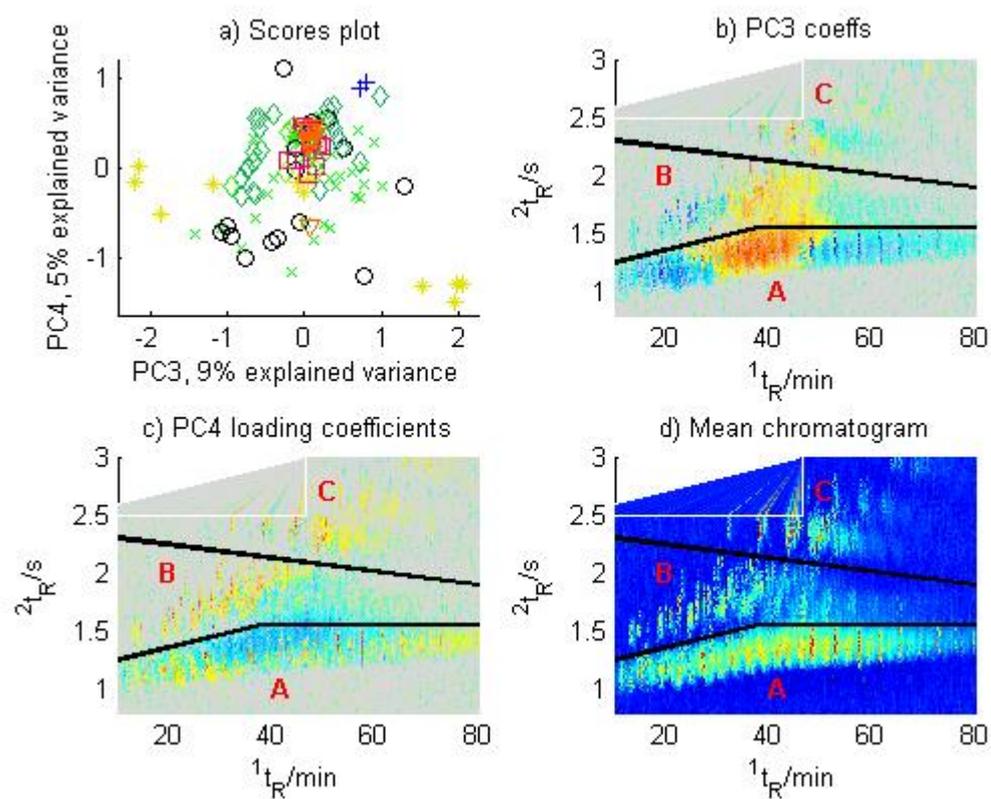


Figure S1: PC3 versus PC4 for dataset 2

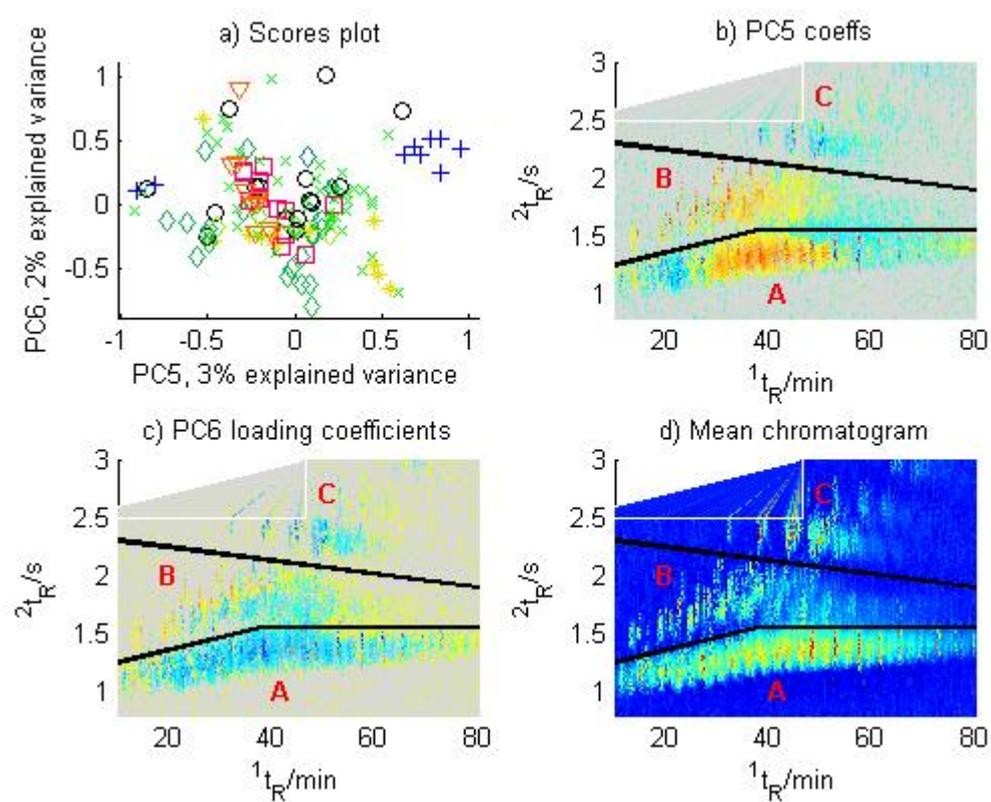


Figure S2: PC5 versus PC6 for dataset 2