

A glance at Drake data on peanut preferences
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Sensory measurement

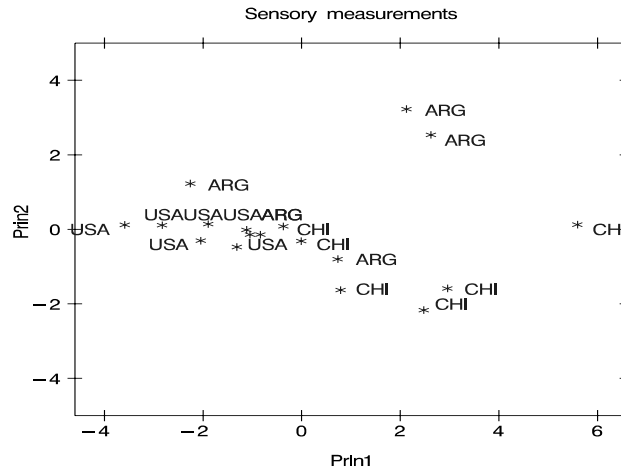
Principal components analysis of sensory measurements on 18 peanut samples (varieties). Six of these samples come from each of three countries: Argentina, Chile, USA. The samples from Chile score high on the PC1 and a little low on PC2, the samples from USA score low on PC1, the samples from Argentina score high on PC2. This can be seen from inspection of the means and figure below:

The SAS System

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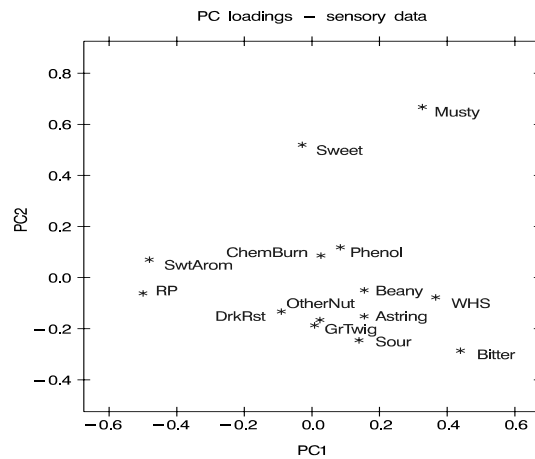
The MEANS Procedure

Country	N Obs	Variable	Mean	N	Std Dev
ARG	6	Prin1	0.2117440	6	1.9353419
		Prin2	1.0060721	6	1.6093834
CHI	6	Prin1	1.9074326	6	2.2421465
		Prin2	-0.9152467	6	0.9963916
USA	6	Prin1	-2.1191766	6	0.9506008
		Prin2	-0.0908254	6	0.2587561



PC1 accounted for 54% of the total sample variance in the 14 descriptive attributes, PC2 accounted for 16% for a cumulative total of 70%.

The graph below depicts the contributions or "loadings" of the 14 attributes to the first two principal components:



The graph below overlays the means by country on the attribute loadings map. It seems to indicate some associations between attributes and preferences for peanuts from the three countries, like "musty" and "sweet" loading high on PC2, where Argentina peanuts scored high.

