Correlation Between Spectral Unmixing and Classification Results

The results from the spectral unmixing and classification procedures suggest a possible correlation based on feature separability and sparsity:

- **Sparse Abundance Maps and Class Boundaries:**
  LASSO's sparse abundance maps highlight dominant materials, aligning with the distinct class boundaries utilized by classifiers like KNN and Naive Bayes, leading to high accuracy.
- **Constraints and Overlapping Features:**
  Constraints in unmixing methods (e.g., non-negativity, sum-to-one) may reflect the challenges faced by classifiers like the Euclidean Distance Classifier, which struggles with overlapping features and lower accuracy.

Both processes emphasize how feature characteristics influence accuracy and interpretability in their respective domains.