

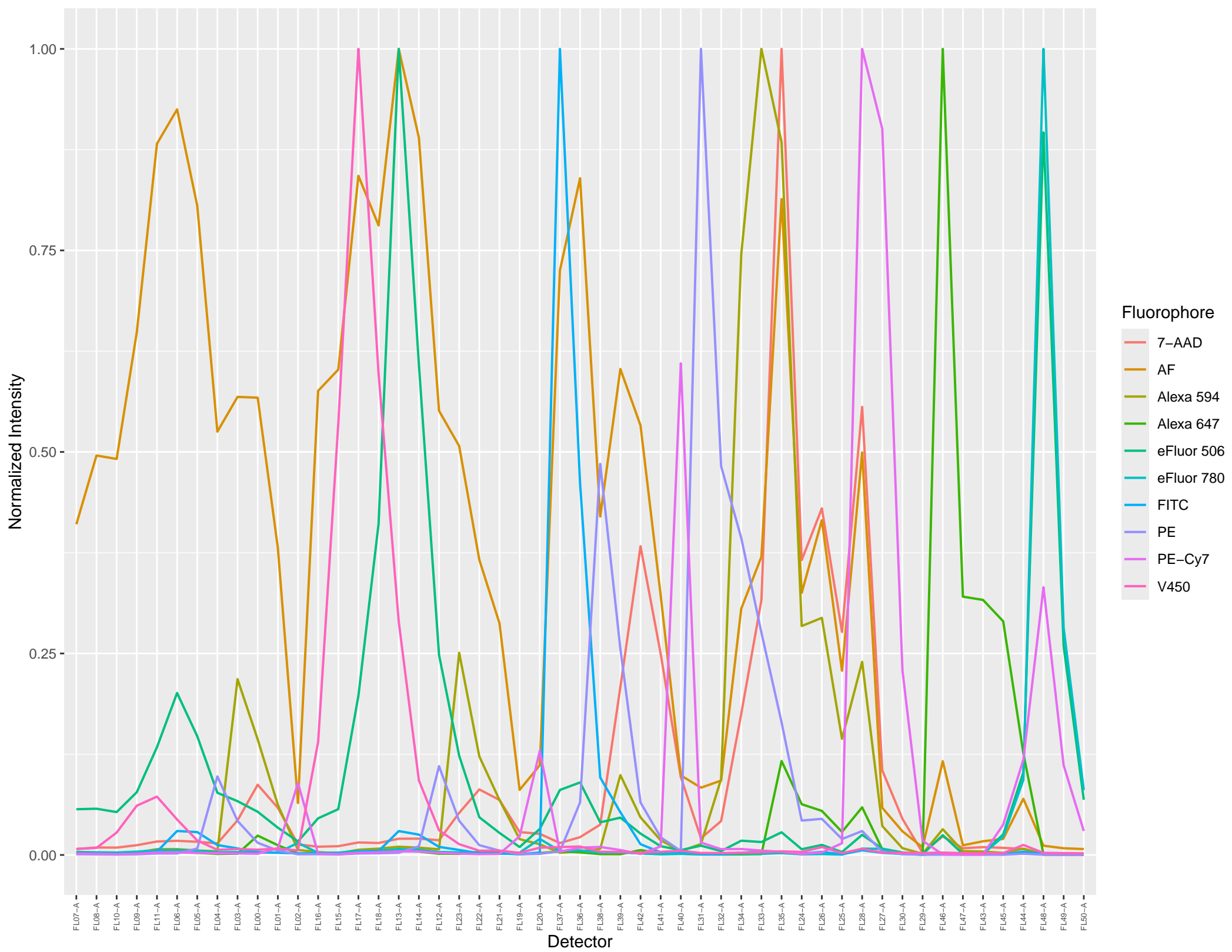
specRQC: Spectral Unmixing Quality Control Report
Generated on: 2025-12-27 12:01:44.772649

Files Processed: 2

Total Markers: 10

Global Median RRMSE: 0.35

Global Mean RRMSE: 0.49%

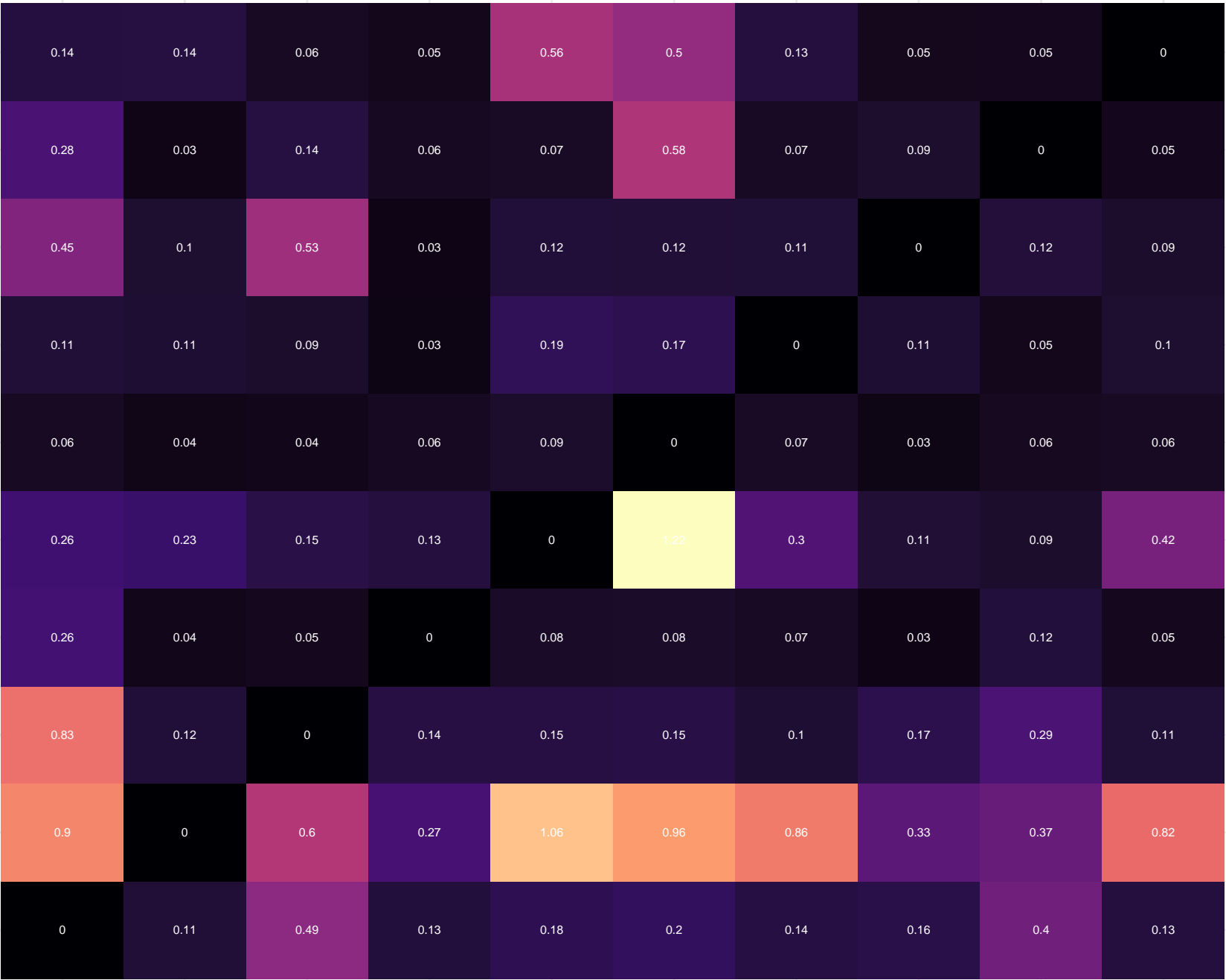


Spectral Spread Matrix

Rows: Source of noise (spilling marker). Columns: Destination of noise (receiving marker).
Values represent the standard deviation increase in column J caused by signal in row I.

Spilling Marker (Noise Source)

V450
PE-Cy7
PE
FITC
eFluor 780
eFluor 506
Alexa 647
Alexa 594
AF
7-AAD



Spread Factor



Receiving Marker (Noise Destination)

7-AAD

AF

Alexa 594

Alexa 647

eFluor 506

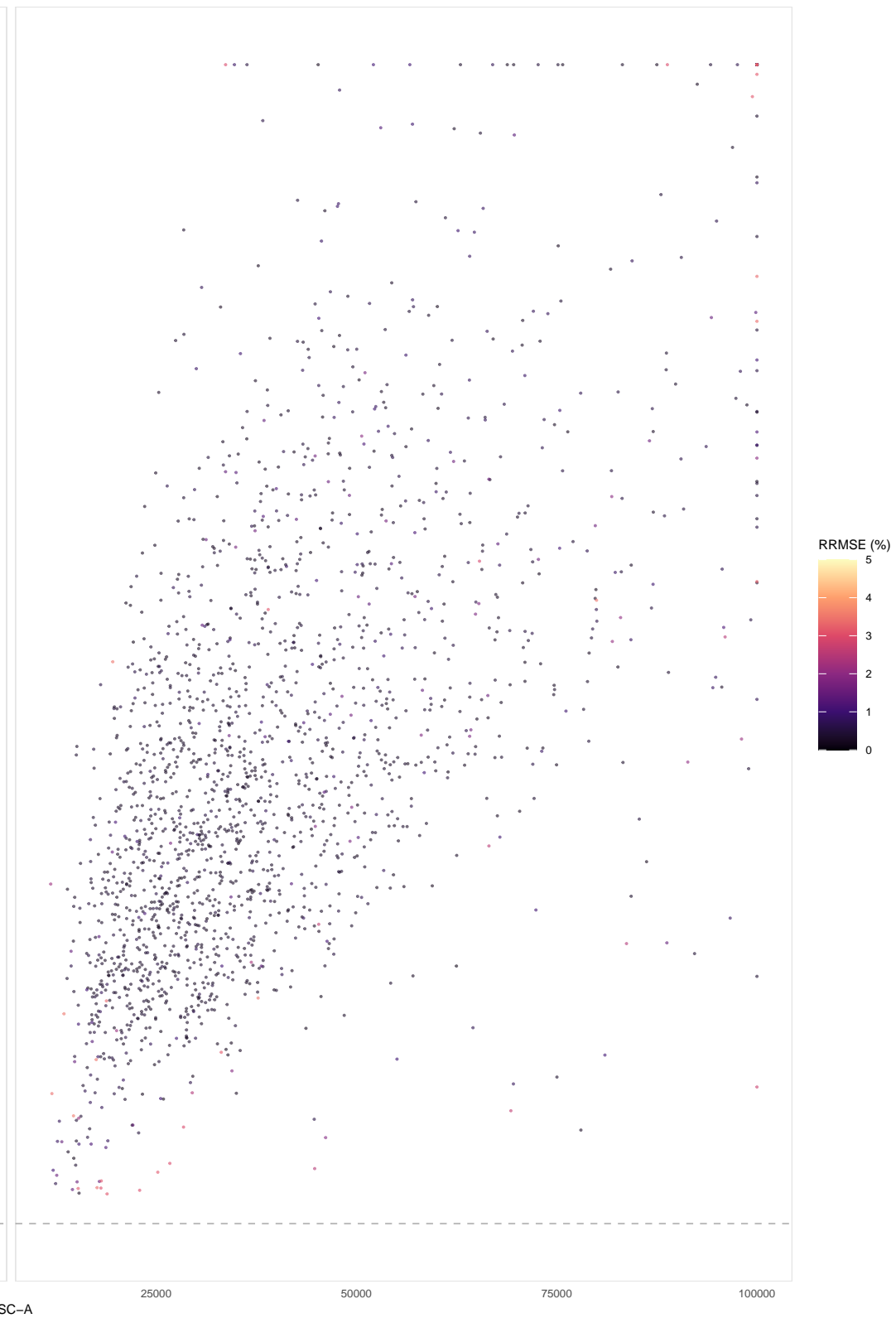
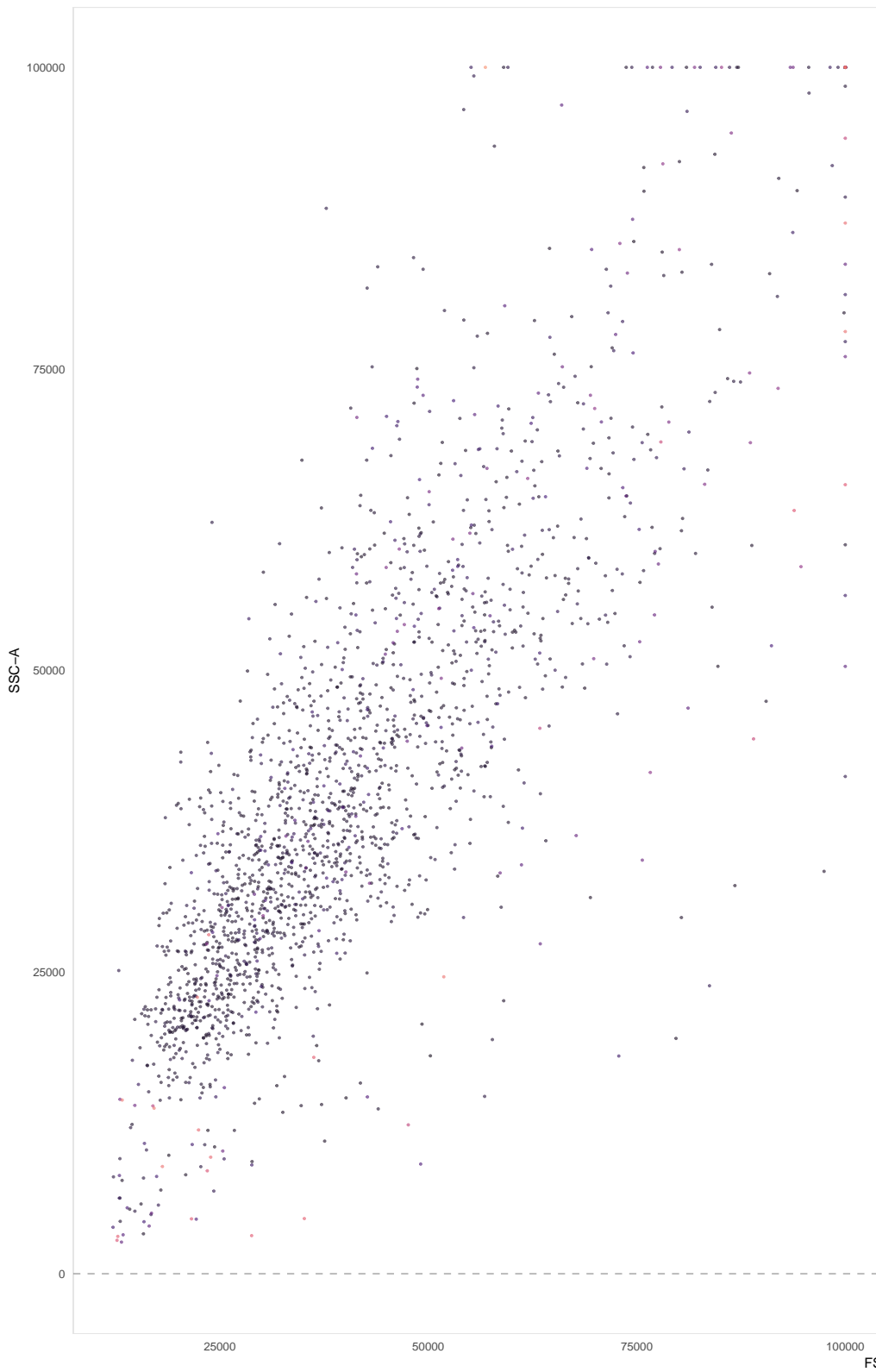
eFluor 780

FITC

PE

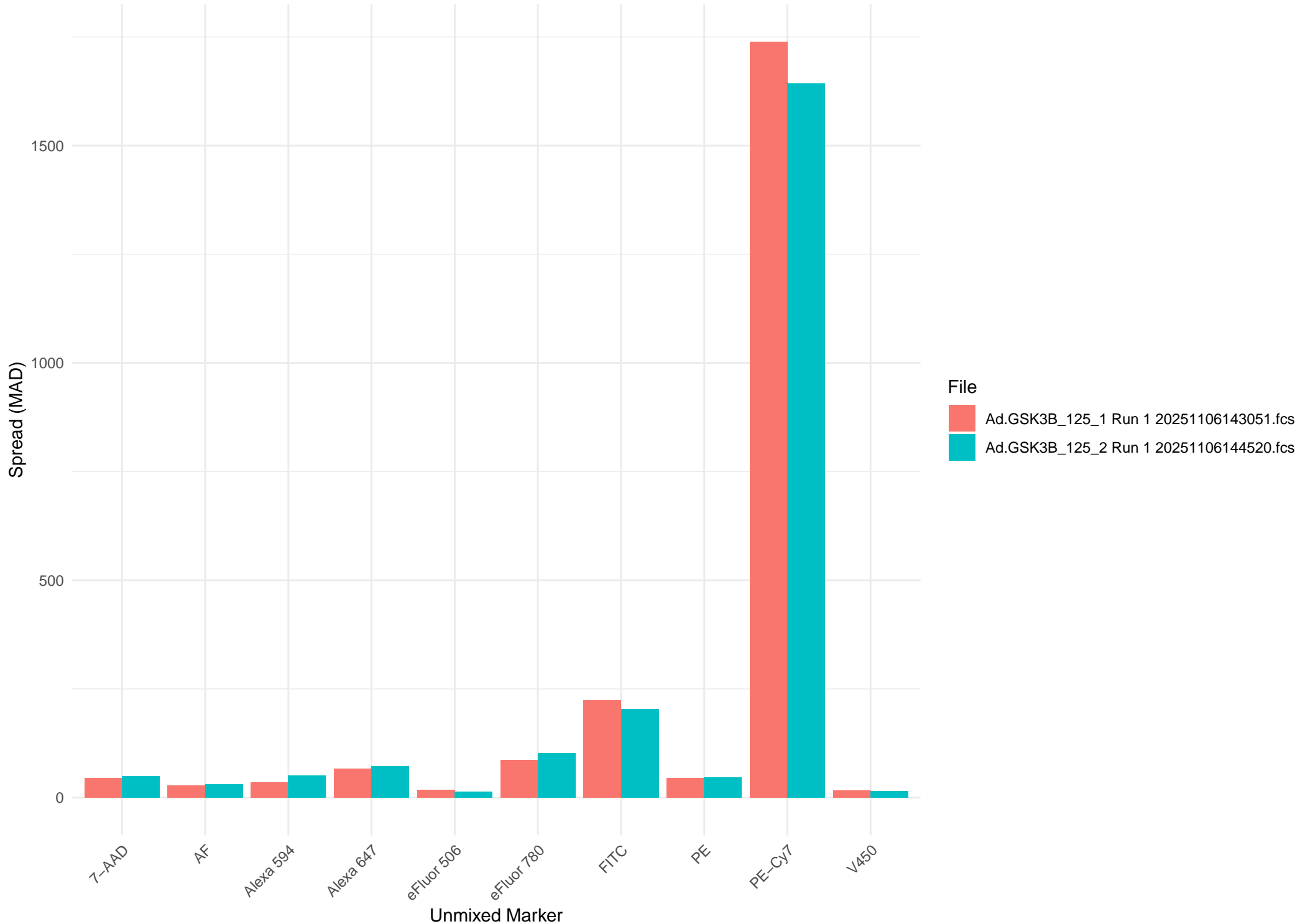
PE-Cy7

V450



Negative Population Spread (Unmixing Noise Floor)

High MAD indicates unmixing-induced spreading error.
This is often caused by spectral overlap with bright markers in the sample.



Residual Contributions for Top 50 High-Error Cells

Positive residuals = under-explained signal; Negative = over-explained

