Rating Stability, and Frequency and Magnitude of Shifts, for Streamgages in Virginia Through Water Year 2013

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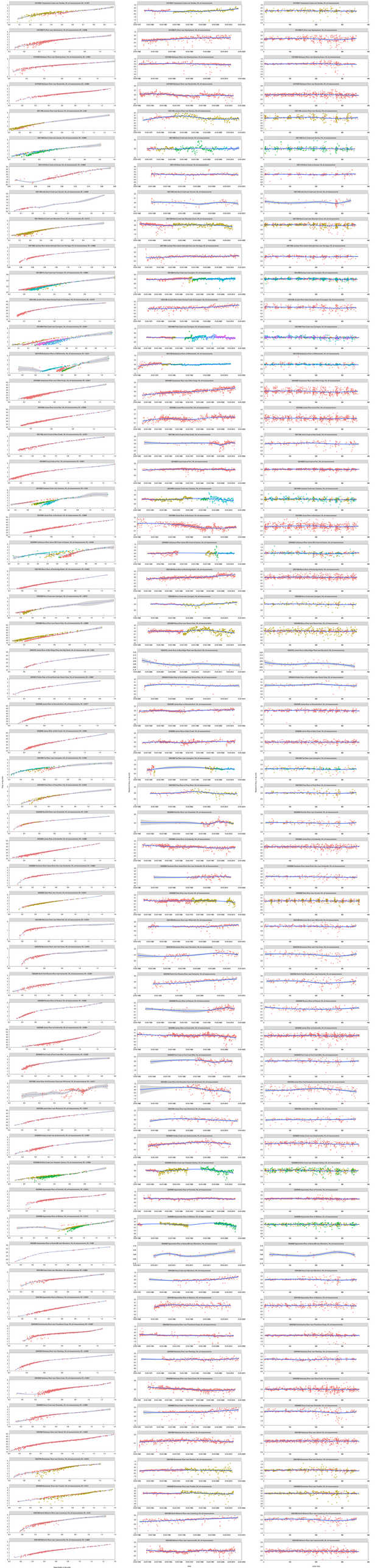
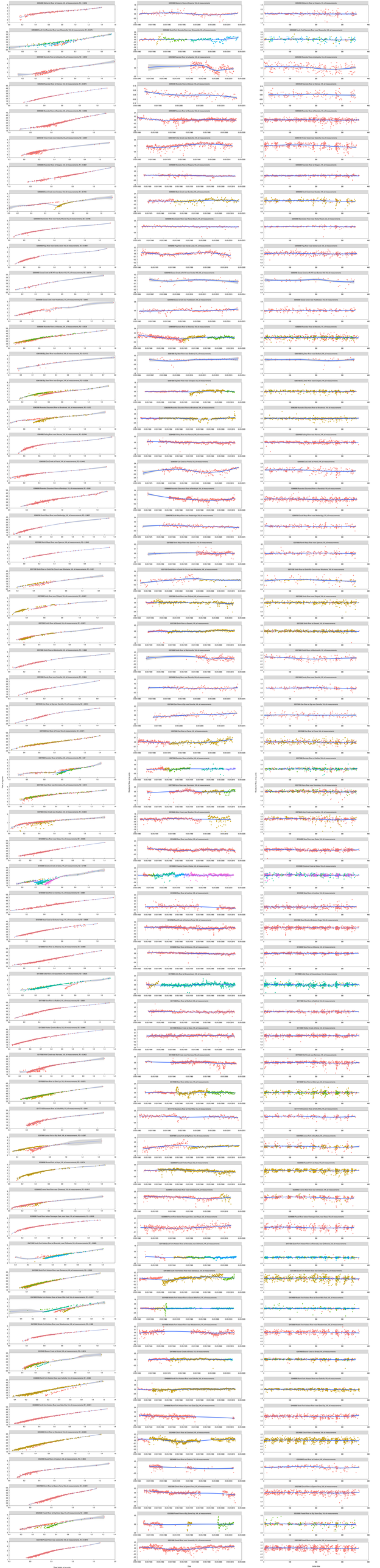
Appendix 1. Plots for real-time streamgages in Virginia

A. All available measurements

Three columns of plots for all real-time streamgages in Virginia active on September 30, 2013, with 20 or more flow measurements with positive flow values, organized by major river basin, with all available measurements for each site, color coded by rating family showing (1) stage, flow, and a generalized additive model (GAM) curve. Appendix 1A depicts all available measurements for each plot, unlike appendix 1B, which groups measurements at each site by rating families. Rating families represent a series of measurements made during a period when a streamgage control was at relative equilibrium. For streamgages where more than one rating family was identified, they were numbered sequentially in chronological order as RF1, RF2, … RFn; non-sequential rating family numbers result from situations in which a rating family was omitted because its period of equilibrium did not last long enough for a sufficient number of measurements to be made to allow a meaningful GAM to be developed. The coefficient of determination for the GAM curve, R2, is a measure of the amount of variation in the stage-streamflow relation explained by the GAM; (2) residuals from the GAM curve by date (times series scale of graphs vary), with a LOESS smoother; and (3) residuals from the GAM curve by Julian date, with a LOESS smoother. Shaded areas represent the 99-percent confidence interval of the relevant curve.

EXPLANATION

Smoother—Shaded area represents 99-percent confidence interval

Streamgage measurement—Color denotes rating-family number

RF1
RF2
RF3
RF4
RF5
RF6