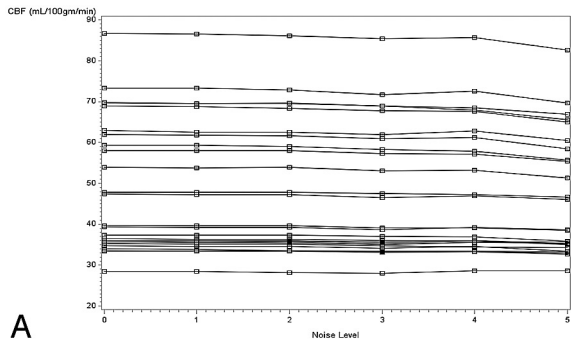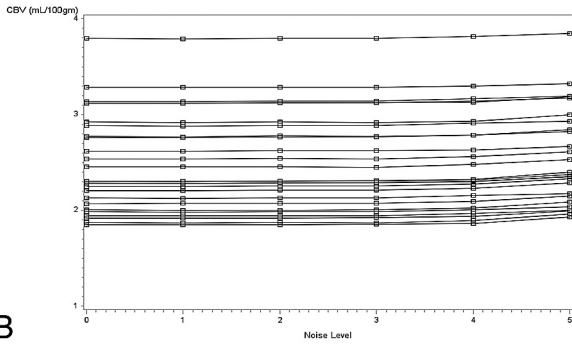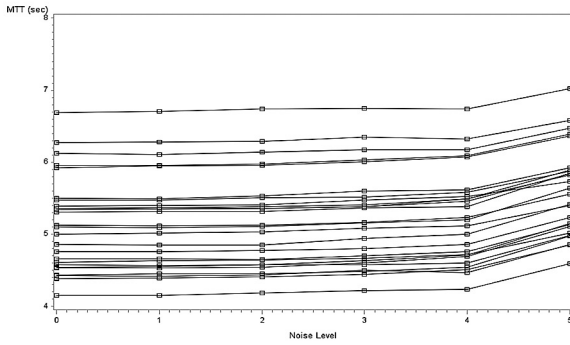ON-LINE FIG 1. Plot of noise vs $1/\sqrt{mAs}$ obtained after scanning a 16-cm head phantom at multiple tube currents and with all other settings matching the CTP protocol on a LightSpeed scanner at our institution. The linearity of the plot supports our notion that noise can be added to CT images to predictably simulate dose reduction on the same scanners used to obtain CTP data in this study.

ON-LINE FIG 2. Average (*A*) CBF, (*B*) CBV, and (*C*) MTT values across all participants, all sections at each noise level. Each line represents the same ROI placed in similar positions in all scans, for a total of 26 lines. All ROIs demonstrate the same trends across noise levels, supporting our use of averages across all ROIs, all participants, and all sections in comparing perfusion parameters between reference datasets and noise datasets.