





- (A) upper panel: beat amplitude compared to head-midpiece axis, bottom panel: asymmetry compared to head-midpiece axis
- (C) upper panel: local bending amplitude, bottom panel: local bending asymmetry
- (D) upper panel: orientation of head-midpiece axis in space, middle panel: velocity of head in space, bottom panel: rolling
- (E) local beat frequency in z
- (F) upper panel: beat amplitude in z, bottom panel: asymmetry in z