



Figure 3. Preimpact structures seen far outside the Meteor Crater deformation zone. (a and b) Great circles and pole density contours representing the geometry of bedding planes in the Moqui Member of the Moenkopi Formation and Alpha Member of the Kaibab Formation; The Wupatki Member is not included here because bedding orientations were sometimes difficult to isolate from strong cross-bedded laminae in the unit. (c) A field photograph showing horizontal bedding surfaces of the Kaibab Formation. (d, e, and f) Great circles, pole density contours, and bidirectional rose diagram showing the orientation of fractures in both Moqui and Wupatki members of the Moenkopi Formation. (g, h, and i) Great circles, pole density contours, and bidirectional rose diagram showing the orientation of fractures in the Kaibab Formation, respectively. Equal-area (or Schmidt) net is used to show the great circles and pole density contours throughout the paper. Pole density range (in percent) and contour interval (in percent) are shown inside the equal-area plots of Figures 3a, 3b, 3e, and 3h; n represents a number of strike/dip measurements. Throughout the paper, the strikes are shown with reference to the geographic north considering the magnetic declination value of $\sim 11^\circ$ east for June 2007 [*National Geophysical Data Center, 2007*].