



**Figure S6** RAD-51 dynamics differs in *him-5* and *xnd-1*. DNA (grey) and RAD-51 (white foci) are shown as maximum projections from confocal stacks through wild type (top), *him-5(ok1896)* (middle), and *xnd-1(ok709)* (bottom) germlines. The germlines were divided into seven equal sized regions from the transition zone (zygotene) to the pachytene- diplotene border and number of RAD-51 foci/ nucleus was quantified (see Figure 7B). The white foci in wild type in regions 5 and 6 are due to background staining with the anti-RAD-51 antibody and can be discerned in the rachis in 3D projections (not shown). In *him-5*, arrows point to small RAD-51 foci in the distal region. Breaks in this region can readily be observed in this region in Figure 7A.