Nucleosomes, the primary repeating unit of chromatin, package DNA by wrapping 147 base pairs tightly around an octamer of histone proteins in approximately 1.7 helical turns. In order to allow central nuclear processes such as DNA replication, recombination, repair and transcription to happen, regulated exposure of the template DNA is required and therefore, the nucleosome has to undergo certain conformational changes. One possible strategy for such a regulated exposure is the translocation or ‘sliding’ of nucleosomes along the DNA by the class of ATP-hydrolyzing enzymatic machines called chromatin remodelers. We apply single pair-FRET for direct observation of intrinsic nucleosome dynamics as well as conformational changes of mononucleosomes induced by chromatin-remodeling complexes. The movement of DNA around the nucleosome surface is tracked in the presence and absence of remodeler by using mononucleosomes, which are reconstituted with a 200 bp long DNA containing the nucleosome positioning sequence 601 and a donor- and acceptor-dye pair at well-defined positions.