Photodissociation of acetaldehyde occurs via different pathways, including the "roaming" mechanism. However, the details of these mechanisms are not always clear.

Can we study the different reaction pathways by tracking the time evolution of product distributions?

Joint experimental and theoretical study of the reaction

Isomerisation of energised molecules prior to dissociation might well be the rule rather than the exception in many polyatomic unimolecular processes.