

Name	Description
GEN	Intermediate and outgoing stable ( $c\tau \gtrsim 1$ cm) particles from the collision simulation. May include Les Houches accord event (LHE) data from the matrix-element generator, if applicable.
SIM	Detailed description of energy deposits left by stable outgoing particles in the detector material. Two options are available: a highly-accurate GEANT4-based application (Full MC); and a parametric fast simulation application (Fast MC), which trades accuracy for a 100-fold decrease in detector simulation time or 10-fold decrease in total CPU time per simulated event. The level of inaccuracy introduced by Fast MC is typically a difference of less than 10% in final analysis observables.
DIGI	Digitized detector readout or simulation thereof. In simulation, the effect of additional collision events (pileup) is folded into the event description in this step. In Run 2, a “premixing” technique was introduced, where the additional events are summed in a separate processing step and then applied to the simulated primary event.
RAW	Packed detector readout data.
RECO	Detailed description of calibrated detector hits and low-level physics objects.
AOD	Reduced description of calibrated detector hits and low-level physics objects, uncalibrated high-level physics objects.
MiniAOD	Reduced low-level physics objects and calibrated high-level physics objects. A truncated floating-point representation is used for most object attributes. Introduced for Run 2 to reduce the number of analyses requiring AOD inputs.
NanoAOD	Compact data format containing only high-level physics object attributes stored as (arrays of) primitive data types. Introduced during Run 2 to reduce the number of analyses requiring MiniAOD inputs.