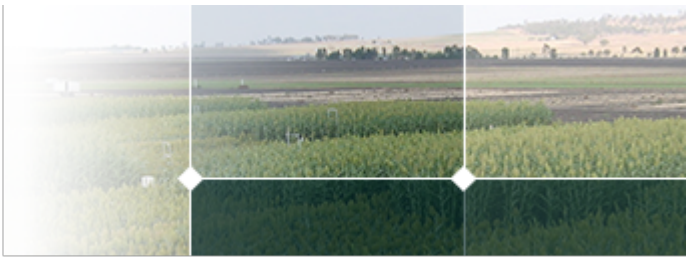

1 Clock

The clock model is resonsible for controlling the daily timestep in APSIM. It keeps track of the simulation date and loops from the start date to the end date, publishing events that other models can subscribe to.

2 Clock

Function OnDoCommence(object _, CommenceArgs e) of Model Clock contains the following Events in the given order.

Event Handle	Summary
StartOfSimulation	Occurs once at the start of the simulation.
FinalInitialise	Final Initialise event. Occurs once at start of simulation.
DoWeather	Occurs each day to calculuate weather
DoDailyInitialisation	Occurs each day to do daily updates to models
StartOfDay	Occurs at start of each day.
StartOfMonth	Occurs at start of each month.
StartOfYear	Occurs at start of each year.
StartOfWeek	Occurs at start of each week.
DoManagement	Occurs each day to do management actions and changes
DoPestDiseaseDamage	Occurs to do Pest/Disease actions
DoEnergyArbitration	Occurs when the canopy energy balance needs to be calculated with MicroCLimate
DoSoilErosion	Occurs to tell soil erosion to perform its calculations.
DoSoilWaterMovement	Occurs each day to do water calculations such as irrigation, swim, water balance etc
DoSoilTemperature	Occurs to perform soil temperature calculations to do solute processes.
DoSolute	Occurs each day
DoSoilOrganicMatter	Occurs each day to perform daily calculations of organic soil matter
DoSurfaceOrganicMatterDecomposition	Occurs each day to do the daily residue decomposition
DoUpdateWaterDemand	Occurs each day to do daily growth increment of total plant biomass
DoWaterArbitration	Occurs each day to do water arbitration
PrePhenology	Occurs each day to perform sorghum final leaf no calcs. Must happen between DoWaterArbitration and DoPhenology
DoPhenology	Occurs each day to perform phenology
DoPotentialPlantGrowth	Occurs each day to do potential growth

Event Handle	Summary
DoDCAPST	Occurs each day when when dcaps performs its calculations. This must happen between DoPotentialPlantGrowth and DoPotentialPlantPartitioning.
DoPotentialPlantPartioning	Occurs each day to do the water limited dm allocations. Water constaints to growth are accounted for in the calculation of DM supply and does initial N calculations to work out how much N uptake is required to pass to SoilArbitrator
DoNutrientArbitration	Occurs each day to do nutrient arbitration
DoActualPlantPartioning	Occurs each day to do nutrient allocations
DoActualPlantGrowth	Occurs each day to do nutrient allocations
PartitioningComplete	Occurs each day to finish partitioning
DoStock	Occurs each day to process stock methods in GrazPlan Stock
DoLifecycle	Occurs each day to process a Pest and Disease lifecycle object
DoUpdate	Occurs near end of each day to do checks and finalising
DoManagementCalculations	Occurs each day after the simulation is done. Does managment calculations
DoReportCalculations	Occurs at end of each day
EndOfWeek	Occurs at end of each week.
EndOfYear	Occurs at end of each year.
EndOfMonth	Occurs at end of each month.
EndOfDay	Occurs at end of each day
DoReport	Occurs at end of each day
EndOfSimulation	Occurs at end of simulation.