

MODFLOW DATA MODEL

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Draft Design
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Arc Hydro Groundwater

Cell2D	HydroID Long Int. HydroCode Text Long Int.	Node2D	HydroID Long Int. HydroCode Text Long Int.	CellIndex	I Long Int. J Long Int. K Long Int. L Long Int.
Cell3D	HydroID Long Int. HydroCode Text Long Int.	Node3D	HydroID Long Int. HydroCode Text Long Int.		

Discretization (DIS)

DISVars	NLAY Long Int. NROW Long Int. NCOL Long Int. ITMUNI Short Int. LENUNI Short Int. RelTime Date	TopElev	LJK Long Int. TopElev Double	StressPeriods	SPID Long Int. PERLEN Double Long Int. NSTP Double TSMULT Double SSorTr Text RIV_ITMP Short Int. WEL_ITMP Short Int. DRN_ITMP Short Int. GHB_ITMP Short Int. CHD_ITMP Short Int. RCH_NRECH Short Int. RCH_INIRCH Short Int. EVT_INSURF Short Int. EVT_INEVTR Short Int. EVT_INEXDP Short Int.
DELRC	Direction Text Num Long Int. Width Double	BotmElev	LJK Long Int. BotmElev Double BotmElevCBD Double	DISLayers	Layer Long Int. LAYCBD Short Int. AM_TopElev Double AM_BotmElev Double AM_BotmElevCBD Double

Output Control (OC)

OCVars	IHEDFM Short Int. IDONFM Short Int. IHEDUN Long Int. IDONUN Long Int. IBDOPT Long Int. IAUXSV Short Int.	OCTS	SPID Long Int. TSNum Long Int. IBDFL Short Int. IBDFL Short Int. IBDFL Short Int. Hdpr Short Int. Hdsv Short Int. Ddsv Short Int.
CBFlags	IBCFB Short Int. ILFCB Short Int. IRVCB Short Int. IWELCB Short Int. IDRNCB Short Int. IGHCB Short Int. IRCHCB Short Int. IEVTCB Short Int.		

Global Settings

MDFGlobals	MODFLOW_Version Text DataModel/Version Text	NameFile	FileType Text Num Long Int. Fname Text Use Short Int.
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Basic (BAS6)

BASVars	Options Text HNDFLO Double HEADNG1 Text HEADNG2 Text	Basic	LJK Long Int. IBOUND Long Int. STRT Long Int.
BasicArrayMult	Layer Long Int. AM_IBOUND Long Int. AM_STRT Double		

Block-Centered Flow (BCF6)

BCFVars	HDRY Double IWDFLG Short Int. WETFCF Double IWETIT Long Int. IHDWET Short Int.	BCFLayers	Layer Long Int. LAYAVG Short Int. LAYCON Tran TRPY Double AM_S1 Double AM_Tran Double AM_HY Double AM_Vcont Double AM_S2 Double AM_WETDRY Double	BCFProperties	LJK Long Int. HY Double Tran Double Vcont Double S1 Double S2 Double WETDRY Double
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Layer-Property Flow (LPF)

LPFVars	HDRY Double WETFCF Double IWETIT Long Int. IHDWET Short Int.	LPFLayers	Layer Long Int. LAYTYP Short Int. LAYAVG Short Int. CHANI Double LAYVKA Short Int. AM_HK Double AM_HANI Double AM_VKA Double AM_Ss Double AM_Sy Double AM_WETDRY Double AM_VKCB Double	LPFProperties	LJK Long Int. HK Double HANI Double VKA Double Ss Double Sy Double WETDRY Double VKCB Double
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Array-Based Stress Packages

Recharge (RCH)

RCHVars	NRCHOP Short Int.	RCHArrays	IJ Long Int. SPID Long Int. RECH Long Int. IRCH Long Int.
RCHArrayMult	SPID Long Int. AM_RECH Double AM_IRCH Long Int.		

Evapotranspiration (EVT)

EVTVars	NEVTOP Short Int.	EVTArrays	IJ Long Int. SPID Long Int. SURF Long Int. EVT Long Int. EXPD Long Int. IEVT Long Int.
EVTArrayMult	SPID Long Int. AM_SURF Double AM_EVTR Double AM_EXPD Double AM_IEVT Long Int.		

List-Based Stress Packages

RIV	LJK Long Int. SPID Long Int. Stage Double Cond Double Rbot Double IFACE Double Conduct Double SourceID Long Int.	CHD	LJK Long Int. SPID Long Int. Shead Double Ehead Double Shdfrac Double Ehfrac Double SourceID Long Int.	WEL	LJK Long Int. SPID Long Int. Q Double Ofact Double IFACE Long Int. SourceID Long Int.
DRN	LJK Long Int. SPID Long Int. Elevation Double Cond Double IFACE Long Int. Conduct Double SourceID Long Int.	GHB	LJK Long Int. SPID Long Int. Bhead Double Cond Double IFACE Long Int. Conduct Double SourceID Long Int.	HFB6	LJK1 Long Int. LJK2 Long Int. Hydchr Double Factor Double SourceID Long Int.

Parameters

Params	ParamID Text PARNAM Text PARTYPE Text TableCode Text FieldCode Text Parval Double B Double Keyval Double BU Double BSCAL Double LN Short Int. ISENS Short Int. LogMinVal Short Int. Tied Text Source Short Int.	ParInstSP	ParInstID Long Int. SPID Long Int.	ParInstances	ParInstID Long Int. InstName Text ParamID Long Int.	Clusters	ClusterID Long Int. ParInstID Long Int. Layer Long Int. ZoneID Long Int. MultiID Long Int.	IZ	ClusterID Long Int. IZ Long Int.
PilotPts	ParamID Long Int. PointName Text Parval Double B Double ISENS Short Int. MultiID Short Int. SourceID Long Int.	Zones	ZoneID Long Int. ZoneName Text ArrayMult Long Int.	Multipliers	MultiID Long Int. OID Long Int. RMLT Double	MultNames	MultiID Long Int. MultiName Text ArrayMult Text Function Text	ZoneNames	ZoneID Long Int. ZoneName Text ArrayMult Long Int.

Observations

OBSVars	OUTNAM Text ISCALS Long Int. TOMULTH Double EVH Double TOMULTGB Double EVFBG Double TOMULTDR Double EVDPR Double TOMULTTRV Double EVRVR Double TOMULTCH Double EVFCH Double	HOB	HOBID Long Int. OBSNAM Long Int. IJ Long Int. ROFF Long Int. COFF Short Int. ITT Short Int.	HOBLayers	HOBID Long Int. Layer Long Int. PR Double	HOBTimes	HOBID Long Int. OBSNAM Long Int. IREFSP Long Int. TOFFSET Long Int. HOBS Double HSIM Double STATh Double STATdd Double STATFLAG Short Int. PLOTSYMBOL Long Int.	FLOB	FLOBID Long Int. FLOBType Long Int. OBSNAM Long Int. IREFSP Long Int. TOFFSET Long Int. HOBS Double HSIM Double STATISTIC Double STATFLAG Short Int. PLOTSYMBOL Long Int.
				FLOBFactors	FLOBID Long Int. LJK Long Int. Factor Long Int.				

SEN, PES Processes

SEN	ISENALL Short Int. IUHEAD Short Int. IPRINTS Short Int. ISENSU Short Int. ISENPU Short Int. ISENFM Short Int.	PES	MAXITER Double MAXCHANGE Double TOL Double SOSC Double IBEFGL Short Int. IYFCFL Short Int. IOSTAR Short Int. NOPT Short Int. NFIT Long Int. SOSR Double RMAR Double RMARM Double IAP Short Int. IPRCOV Short Int. IPRINT Short Int. IPRINT Short Int. CSA Double FCONV Double LASTX Double
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Solvers

SIP	MXITER Long Int. NPARM Long Int. ACCL Double HCLOSE Double IPCALC Short Int. WSEED Double IPRSIP Long Int.	GMG	RCLOSE Double ITER Long Int. HCLOSE Double MXITER Long Int. DAMP Short Int. INDAMP Short Int. IOUTGMG Short Int. ISM Short Int. ISC Short Int. RELAX Double	LMG	STOR1 Double STOR2 Double STOR3 Double ICG Short Int. MXITER Long Int. MXCYC Double BCLOSE Double DAMP Short Int. IOUTAMG Short Int. DUP Double DLOW Double
PCG	MXITER Long Int. ITER1 Long Int. NPCOND Short Int. HCLOSE Double RELAX Double NBPOL Short Int. IPRPCG Short Int. MUTPCG Short Int. DAMP Double	DE4	ITMX Long Int. MXUP Long Int. MXLOW Long Int. MXBW Long Int. IFREQ Short Int. MUTD4 Short Int. ACCL Double HCLOSE Double IPRD4 Long Int.	SOR	MXITER Long Int. ACCL Double HCLOSE Double IPRSOR Long Int.

Output

OutputFiles	FileType Text Description Text Format Text Compress Text File Text Blob Text Path Text	OutputTime	TimeID Long Int. SPNum Long Int. TSNum Long Int. TotalTime Long Int. PeriodTime Double AbsoluteTime Date
OutputFlow	TimeID Long Int. LJK Long Int. FlowType Long Int. Flow Double	OutputHead	TimeID Long Int. LJK Long Int. Head Long Int. Double
		OutputDrawdown	TimeID Long Int. LJK Long Int. Drawdown Long Int. Double