

Quick reference for AERMOD – Version 21112

SUMMARY OF CONTROL PATHWAY KEYWORDS AND PARAMETERS

Keyword	Parameters
TITLEONE	Title1
TITLETWO	Title2
MODELOPT	<p><u>DFAULT</u> <u>ALPHA</u> <u>BETA</u> <u>CONC</u> <u>AREADPLT</u> <u>FLAT</u> <u>NOSTD</u> <u>NOCHKD</u> <u>NOWARN</u> <u>SCREEN</u> <u>SCIM</u> <u>PVMMR</u> <u>DEPOS</u> and/or or or <u>OLM</u> <u>DDEF</u> <u>ELEV</u> <u>WARNCHKD</u> or <u>ARM2</u> and/or or <u>TRM</u> <u>WDEF</u> <u>GRSM</u></p> <p><u>FASTALL</u> <u>DRYDPLT</u> <u>WETDPLT</u> <u>NOURBTRAN</u> <u>VECTORWS</u> <u>PSDCREDIT</u> or or or <u>FASTAREA</u> <u>NODRYDPLT</u> <u>NOWETDPLT</u></p>
AVERTIME	Time1 Time2 . . . TimeN <u>MONTH</u> <u>PERIOD</u> or <u>ANNUAL</u>
URBANOPT	UrbanID Urbpop (Urbname) (UrbRoughness) [For multiple urban areas] or Urbpop (Urbname) (UrbRoughness) [For single urban areas]
POLLUTID	Pollut (<u>H1H</u> or <u>H2H</u> or <u>INC</u>)
HALFLIFE	Haflif
DCAYCOEF	Decay
GASDEPDF	React F_Seas2 F_Seas5 (Refpoll)
GASDEPVD	Uservd
GDLANUSE	Sec1 Sec2 ... Sec36
GDSEASON	Jan Feb ... Dec
LOW_WIND	SVmin (WSmin) or SVmin WSmin (FRANmax) or SVmin WSmin FRANmax (SWMin) or SVmin WSmin FRANmax SWMin (BigT)
AWMADWNW	<u>AWMAUEFF</u> and/or <u>AWMAENTRAIN</u> and/or ((<u>AWMAUTURB</u> or <u>AWMAUTURBHx</u>) w/wo <u>STREAMLINE(D)</u>)
ORD_DWNW	<u>ORDUEFF</u> and/or <u>ORDTURB</u> and/or <u>ORDCAV</u>
NO2EQUIL	NO2Equil
NO2STACK	NO2Ratio
ARMRATIO	ARM2_Min ARM2_Max [for ARM2 Option]
O3SECTOR	StartSect1 StartSect2 . . . StartSectN, where N is ≤ 6
OZONEFIL	O3FileName (O3Units) (O3Format) [without O3SECTORS] or SECTn O3FileName (O3Units) (O3Format) [with O3SECTORS]
OZONEVAL	O3Value (O3Units) [without O3SECTORS] or

Keyword	Parameters
	SECTn O3Value (O3Units) [with O3SECTOR]
O3VALUES	O3Flag O3values(i), i=1,n) [without O3SECTORS] or SECTn O3Flag O3values(i), i=1,n) [with O3SECTORS]
OZONUNIT	(OzoneUnits)
NOXSECTR	StartSect1 StartSect2 . . . StartSectN, where N is ≤ 6
NOX_FILE	NOXFileName (NOXUnits) (NOXFormat) [without NOXSECTORS] or SECTn NOXFileName (NOXUnits) (NOXFormat) [with NOXSECTORS]
NOXVALUE	NOXValue (NOX3Units) [without NOXSECTORS] or SECTn NOXValue (NOXUnits) [with NOXSECTOR]
NOX_VALS	NOXFlag NOXvalues(i), i=1,n) [without NOXSECTORS] or SECTn NOXFlag NOXvalues(i), i=1,n) [with NOXSECTORS]
FLAGPOLE	(Flagdf)
RUNORNOT	<u>RUN</u> or <u>NOT</u>
EVENTFIL	(Evfile) (Evopt)
SAVEFILE	(Savfil) (Dayinc) (Savfl2)
INITFILE	(Inifil)
MULTYEAR	<u>H6H</u> Savfil (Inifil)
DEBUGOPT	<u>MODEL</u> (Dbgfil) and/or <u>METEOR</u> (Dbmfil) and/or <u>PRIME</u> (Prmfil) and/or <u>AWMADW</u> (AwmaDWfil) and/or <u>DEPOS</u> and/or [<u>AREA</u> (AreaDbFil) or <u>LINE</u> (LineDbFil)] and/or [<u>PVMRM</u> (Dbpvfil) or <u>OLM</u> (OLMfil) or <u>ARM2</u> (ARM2fil) or <u>TTRM</u> (TTRMfil) or <u>GSRM</u> (GSRMfil)]
ERRORFIL	(Errfil)

SUMMARY OF SOURCE PATHWAY KEYWORDS AND PARAMETERS

Keyword	Parameters
ELEVUNIT	<u>METERS</u> or <u>FEET</u>
LOCATION	SrcID Srcotyp Xs Ys (Zs) [All except LINE, BUOYLINE, RLINE, and RLINEXT sources] or (FLAT) [for 'FLAT & ELEV' option] SrcID Srcotyp Xs1 Ys1 Xs2 Ys2 (Zs) [LINE, RLINE, or BUOYLINE source] or (FLAT) [for 'FLAT & ELEV' option] SrcID Srcotyp Xs1 Ys1 Zs1 Xs2 Ys2 Zs2 (Zs) [for RLINEXT source] or (FLAT) [for 'FLAT & ELEV' option]
RLEMCONV	No parameters
SRCPARAM	SrcID Ptemis Stkhgt Stktmp Stkvel Stkdia [<u>POINT</u> , <u>POINTCAP</u> , <u>POINTHOR</u> source] Vlemis Relhgt Syinit Szinit [<u>VOLUME</u> source] Aremis Relhgt Xinit (Yinit) (Angle) (Szinit) [<u>AREA</u> source] Aremis Relhgt Nverts (Szinit) [<u>AREAPOLY</u> source] Aremis Relhgt Radius (Nverts) (Szinit) [<u>AREACIRC</u> source] Opemis Relhgt Xinit Yinit Pitvol (Angle) [<u>OPENPIT</u> source] Lnemis Relhgt Width (Szinit) [LINE or RLINE source] Blemis Relhgt [<u>BUOYLINE</u> source] Qemis DCL Szinit Width [RLINEXT source]
BLPINPUT	BLPGrpID blavgblen blavgbhgt blavgbwid blavglwid blavgbsep blavgfprm
BLPGROUP	SO BLPGROUP BLPGrpID SrcID's (or SrcRng)
BUILDHGT	SrcID (or SrcRange) Dsbh(i), i=1,36
BUILDLEN	SrcID (or SrcRange) Dsbl(i), i=1,36
BUILDWID	SrcID (or SrcRange) Dsbw(i), i=1,36
XBADJ	SrcID (or SrcRange) Xbadj(i), i=1,36
YBADJ	SrcID (or SrcRange) Ybadj(i), i=1,36
AREAVERT	SrcID Xv(1) Yv(1) Xv(2) Yv(2) ... Xv(i) Yv(i)
RBARRIER	SrcID Htwall DCLwall (Htwall2 DCLwall2)
RDEPRESS	SrcID Htwall DCLwall Depth Wtop Wbottom
BLPINPUT	(BLPGrpID) Blavglen Blavgbhgt Blavgbwid Blavglwid Blavgbsep Blavgfprm
URBANSRC	UrbanID SrcID's and/or SrcRng's [For multiple urban areas] or SrcID's and/or SrcRng's [For single urban areas] User may also specify 'ALL' for SrcID's to assign all sources as urban
EMISFACT	SrcID (or SrcRange) Qflag Qfact(i), i=1,n
EMISUNIT	Emifac Emilbl Outlbl
RLEMCONV	No parameters or secondary keywords
CONCUNIT	Emifac Emilbl Conlbl
DEPOUNIT	Emifac Emilbl Deplbl
PARTDIAM	SrcID (or SrcRange) Pdiam(i), i=1,Npd
MASSFRAX	SrcID (or SrcRange) Phi(i), i=1,Npd
PARTDENS	SrcID (or SrcRange) Pdens(i), i=1,Npd
METHOD_2	SrcID (or SrcRange) FineMassFraction Dmm
GASDEPOS	SrcID (or SrcRange) Da Dw rcl Henry

Keyword	Parameters
NO2RATIO	SrcID (or SrcRange) NO2Ratio
HOUREMIS	Emifil SrcID's SrcRange's
BGSECTOR	StartSect1 StartSect2 . . . StartSectN, where N is ≤ 6
BACKGRND	BGflag BGvalue(i), i=1,n and/or [without BGSECTORS] HOURLY BGfilnam (BGformat) or SECTn BGflag BGvalue(i), i=1,n and/or [with BGSECTORS] SECTn HOURLY BGfilnam (BGformat)
BACKUNIT	BGunits
INCLUDED	Incfil
OLMGROUP	OLMGrpID SrcID's SrcRange's
BLPGROUP	BLPGrpID SrcID's SrcRange's
PSDGROUP	PSDGrpID SrcID's SrcRange's
SRCGROUP	SrcGrpID SrcID's SrcRange's

SUMMARY OF RECEPTOR PATHWAY KEYWORDS AND PARAMETERS

Keyword	Parameters
ELEVUNIT	<u>METERS</u> or <u>FEET</u>
GRIDCART	Netid <u>STA</u> <u>XYINC</u> Xinit Xnum Xdelta Yinit Ynum Ydelta, or <u>XPNTS</u> Gridx1 Gridx2 Gridx3 GridxN, and <u>YPNTS</u> Gridy1 Gridy2 Gridy3 GridyN <u>ELEV</u> Row Zelev1 Zelev2 Zelev3 ... ZelevN <u>HILL</u> Row Zhill1 Zhill2 Zhill3 ... ZhillN <u>FLAG</u> Row Zflag1 Zflag2 Zflag3 ... ZflagN <u>END</u>
GRIDPOLR	Netid <u>STA</u> <u>ORIG</u> Xinit Yinit, or <u>ORIG</u> Srcid <u>DIST</u> Ring1 Ring2 Ring3 ... RingN <u>DDIR</u> Dir1 Dir2 Dir3 ... DirN, or <u>GDIR</u> Dirnum Dirini Dirinc <u>ELEV</u> Dir Zelev1 Zelev2 Zelev3 ... ZelevN <u>HILL</u> Dir Zhill1 Zhill2 Zhill3 ... ZhillN <u>FLAG</u> Dir Zflag1 Zflag2 Zflag3 ... ZflagN <u>END</u>
DISCCART	Xcoord Ycoord (Zelev Zhill) (Zflag)
DISCPOLR	Srcid Dist Direct (Zelev Zhill) (Zflag)
EVALCART	Xcoord Ycoord Zelev Zhill Zflag Arcid (Name)
INCLUDED	RecIncFile

SUMMARY OF METEOROLOGY PATHWAY KEYWORDS AND PARAMETERS

Keyword	Parameters
SURFFILE	Sfcfil
PROFFILE	Profil
SURFDATA	Stanum Year (Name) (Xcoord Ycoord)
UAIRDATA	Stanum Year (Name) (Xcoord Ycoord)
SITEDATA	Stanum Year (Name) (Xcoord Ycoord)
PROFBASE	BaseElev (Units)
STARTEND	Strtyr Strtmn Strtdy (Strthr) Endyr Endmn Enddy (Endhr)
DAYRANGE	Range1 Range2 Range3 ... RangeN
NOSA	<i>No parameters or secondary keywords</i>
NOSACO	<i>No parameters or secondary keywords</i>
NOSAST	<i>No parameters or secondary keywords</i>
NOSW	<i>No parameters or secondary keywords</i>
NOSWCO	<i>No parameters or secondary keywords</i>
NOSWST	<i>No parameters or secondary keywords</i>
NOTURB	<i>No parameters or secondary keywords</i>
NOTURBCO	<i>No parameters or secondary keywords</i>
NOTURBST	<i>No parameters or secondary keywords</i>
SCIMBYHR	NRegStart NRegInt (SfcFilnam PflFilnam)
WDROTATE	Rotang
WINDCATS	Ws1 Ws2 Ws3 Ws4 Ws5

SUMMARY OF EVENT PATHWAY KEYWORDS AND PARAMETERS

Keyword	Parameters
EVENTPER	Evname Aveper Grpid Date
EVENTLOC	Evname <u>XR=</u> Xr <u>YR=</u> Yr (Zelev Zhill) (Zflag) or <u>RNG=</u> Rng <u>DIR=</u> Dir (Zelev Zhill) (Zflag)
INCLUDED	EventIncFile

Note: EVENT locations can be input as either discrete Cartesian receptors (XR=, YR=) or as discrete polar receptors (RNG=, DIR=). Events that are specified in the file generated by the AERMOD model (CO EVENTFIL card) are always given as discrete Cartesian coordinates. Discrete polar receptors are assumed to be relative to an origin of (0,0).

SUMMARY OF OUTPUT PATHWAY KEYWORDS AND PARAMETERS

Keyword	Parameters
RECTABLE	Aveper <u>FIRST</u> <u>SECOND</u> . . . <u>SIXTH</u> . . . <u>TENTH</u> and/or Aveper <u>1ST</u> <u>2ND</u> . . . <u>6TH</u> . . . <u>10TH</u> and/or Aveper <u>1</u> <u>2</u> . . . <u>6</u> . . . <u>10</u> . . . <u>N</u> . . . <u>999</u>
MAXTABLE	Aveper Maxnum
DAYTABLE	Avper1 Avper2 Avper3 . . .
MAXIFILE	Aveper GrpID Thresh Filnam (Funit)
POSTFILE	Aveper GrpID Format Filnam (Funit)
PLOTFILE	Aveper GrpID Hivalu Filnam (Funit) [Short-Term values] Aveper GrpID Filnam (Funit) [PERIOD or ANNUAL averages]
TOXXFILE	Aveper Cutoff Filnam (Funit)
RANKFILE	Aveper Hinum Filnam (Funit)
EVALFILE	SrcID Filnam (Funit)
SEASONHR	GrpID FileName (FileUnit)
MAXDAILY	GrpID FileName (FileUnit)
MXDYBYR	GrpID FileName (FileUnit)
MAXDCONT	GrpID UpperRank LowerRank FileName (FileUnit) or GrpID UpperRank <u>THRESH</u> ThreshValue FileName (FileUnit)
SUMMFILE	SummFileName
FILEFORM	<u>EXP</u> or <u>FIX</u>
NOHEADER	FileType1 FileType2 FileType3 . . . FileTypeN or <u>ALL</u>
EVENTOUT	<u>SOCONT</u> or <u>DETAIL</u> [EVENT Only]