datcomimport

Bring DATCOM file into MATLAB environment

Syntax

```
aero = datcomimport(file)
aero = datcomimport(file, usenan)
aero = datcomimport(file, usenan, verbose)
aero = datcomimport(file, usenan, verbose, filetype)
```

Description

`aero = datcomimport(file)` takes a file name, `file`, as a character vector (or a cell array of file names as character vectors), and imports aerodynamic data from `file` into a cell array of structures, `aero`. Before reading the DATCOM file, the function initializes values to 99999 to show when there is not a full set of data for the DATCOM case.

`aero = datcomimport(file, usenan)` is an alternate method allowing the replacement of data points with NaN or zero where no DATCOM methods exist or where the method is not applicable. The default value for `usenan` is `true`.

`aero = datcomimport(file, usenan, verbose)` is an alternate method to display the status of the DATCOM file being read. The default value for `verbose` is `2`, which displays a wait bar. Other options are `0`, which displays no information, and `1`, which displays text to the MATLAB® Command Window.

`aero = datcomimport(file, usenan, verbose, filetype)` is an alternate method that allows you to specify which type of DATCOM file to read. The possible values are listed in this table:

`filetype` Value	Output File from DATCOM
`6`	(Default) `for006.dat` output by all DATCOM versions
`21`	`for021.dat` output by DATCOM 2007, DATCOM 2008, DATCOM 2011, and DATCOM 2014
`42`	`for042.csv` output by DATCOM 2008, DATCOM 2011, and DATCOM 2014

When `filetype` is `6`, the function reads the `for006.dat` file output by DATCOM.

> **Note:** If `filetype` is `21`, the function collates the breakpoints and data from all the cases and appends them as the last entry of `aero`.

When `filetype` is `21`, the function reads the `for021.dat` file output by DATCOM 2007.

When file type is `42`, the function reads the `for042.csv` file output by DATCOM 2008, DATCOM 2011, and DATCOM 2014.

Fields for the 1976, 1999, 2007, 2008, 2011, and 2014 versions of the type `6` output files:

- Fields for 1976 Version (File Type 6)
- Fields for 1999 Version (File Type 6)
- Fields for 2007, 2008, 2011, and 2014 Versions (File Type 6)

Fields for 2007, 2008, 2011, and 2014 versions of the type 21 output file:

- Fields for 2007, 2008, 2011, and 2014 Versions (File Type 21)

Fields for 2008, 2011, and 2014 versions of the type 42 output file are described in:

- Fields for 2008, 2011, and 2014 Version (File Type 42)

Fields for 1976 Version (File Type 6)

The fields of `aero` depend on the data within the DATCOM file.

Common Fields for the 1976 Version (File Type 6)

Field	Description	Default
`case`	Character vector containing the case ID.	`[]`
`mach`	Array of Mach numbers.	`[]`
`alt`	Array of altitudes.	`[]`
`alpha`	Array of angles of attack.	`[]`
`nmach`	Number of Mach numbers.	`0`
`nalt`	Number of altitudes.	`0`
`nalpha`	Number of angles of attack.	`0`
`rnnub`	Array of Reynolds numbers.	`[]`
`hypers`	Logical denoting, when `true`, that `mach` numbers above `tsmach` are hypersonic. Default values are supersonic.	`false`
`loop`	Scalar denoting the type of looping done to generate the DATCOM file. When `loop` is `1`, `mach` and `alt` are varied together. When `loop` is `2`, `mach` varies while `alt` is fixed. Altitude is then updated and Mach numbers are cycled through again. When `loop` is `3`, `mach` is fixed while `alt` varies. `mach` is then updated and altitudes are cycled through again.	`1`
`sref`	Scalar denoting the reference area for the case.	`[]`
`cbar`	Scalar denoting the longitudinal reference length.	`[]`
`blref`	Scalar denoting the lateral reference length.	`[]`
`dim`	Character vector denoting the specified system of units for the case.	`'ft'`
`deriv`	Character vector denoting the specified angle units for the case.	`'deg'`
`stmach`	Scalar value setting the upper limit of subsonic Mach numbers.	`0.6`
`tsmach`	Scalar value setting the lower limit of supersonic Mach numbers.	`1.4`
`save`	Logical denoting whether the input values for this case are used in the next case.	`false`
`stype`	Scalar denoting the type of asymmetric flap for the case.	`[]`
`trim`	Logical denoting the reading of trim data for the case. When trim runs are read, this value is set to `true`.	`false`

`damp`	Logical denoting the reading of dynamic derivative data for the case. When dynamic derivative runs are read, this value is set to `true`.	`false`
`build`	Scalar denoting the reading of build data for the case. When build runs are read, this value is set to 10.	`1`
`part`	Logical denoting the reading of partial data for the case. When partial runs are written for each Mach number, this value is set to `true`.	`false`
`highsym`	Logical denoting the reading of symmetric flap high-lift data for the case. When symmetric flap runs are read, this value is set to `true`.	`false`
`highasy`	Logical denoting the reading of asymmetric flap high-lift data for the case. When asymmetric flap runs are read, this value is set to `true`.	`false`
`highcon`	Logical denoting the reading of control/trim tab high-lift data for the case. When control/trim tab runs are read, this value is set to `true`.	`false`
`tjet`	Logical denoting the reading of transverse-jet control data for the case. When transverse-jet control runs are read, this value is set to `true`.	`false`
`hypeff`	Logical denoting the reading of hypersonic flap effectiveness data for the case. When hypersonic flap effectiveness runs are read, this value is set to `true`.	`false`
`lb`	Logical denoting the reading of low aspect ratio wing or lifting body data for the case. When low aspect ratio wing or lifting body runs are read, this value is set to `true`.	`false`
`pwr`	Logical denoting the reading of power effects data for the case. When power effects runs are read, this value is set to `true`.	`false`
`grnd`	Logical denoting the reading of ground effects data for the case. When ground effects runs are read, this value is set to `true`.	`false`
`wsspn`	Scalar denoting the semi-span theoretical panel for wing. This value is used to determine if the configuration contains a canard.	`1`
`hsspn`	Scalar denoting the semi-span theoretical panel for horizontal tail. This value is used to determine if the configuration contains a canard.	`1`
`ndelta`	Number of control surface deflections: `delta`, `deltal`, or `deltar`.	`0`
`delta`	Array of control-surface streamwise deflection angles.	`[]`
`deltal`	Array of left lifting surface streamwise control deflection angles, which are defined positive for trailing-edge down.	`[]`
`deltar`	Array of right lifting surface streamwise control deflection angles, which are defined positive for	`[]`

	trailing-edge down.	
`ngh`	Scalar denoting the number of ground altitudes.	`0`
`grndht`	Array of ground heights.	`[]`

`config`	Structure of logicals denoting whether the case contains horizontal tails.	`false`, as follows.
		`config.downwash = false;`
		`config.body = false;`
		`config.wing = false;`
		`config.htail = false;`
		`config.vtail = false;`
		`config.vfin = false;`

`version`	Version of DATCOM file.	`1976`

Static Longitude and Lateral Stability Fields Available for the 1976 Version (File Type 6)

Field	Matrix of...	Function of...
`cd`	Drag coefficients, which are defined positive for an aft-acting load.	`alpha`, `mach`, `alt`, `build`, `grndht`, `delta`
`cl`	Lift coefficients, which are defined positive for an up-acting load.	`alpha`, `mach`, `alt`, `build`, `grndht`, `delta`
`cm`	Pitching-moment coefficients, which are defined positive for a nose-up rotation.	`alpha`, `mach`, `alt`, `build`, `grndht`, `delta`
`cn`	Normal-force coefficients, which are defined positive for a normal force in the +Z direction.	`alpha`, `mach`, `alt`, `build`, `grndht`, `delta`
`ca`	Axial-force coefficients, which are defined positive for a normal force in the +X direction.	`alpha`, `mach`, `alt`, `build`, `grndht`, `delta`
`xcp`	Distances between moment reference center and the center of pressure divided by the longitudinal reference length. Distances are defined positive for a location forward of the center of gravity.	`alpha`, `mach`, `alt`, `build`, `grndht`, `delta`
`cla`	Derivatives of lift coefficients relative to `alpha`.	`alpha`, `mach`, `alt`, `build`, `grndht`, `delta`
`cma`	Derivatives of pitching-moment coefficients relative to `alpha`.	`alpha`, `mach`, `alt`, `build`, `grndht`, `delta`
`cyb`	Derivatives of side-force coefficients relative to sideslip angle.	`alpha`, `mach`, `alt`, `build`, `grndht`, `delta`
`cnb`	Derivatives of yawing-moment coefficients relative to sideslip angle.	`alpha`, `mach`, `alt`, `build`, `grndht`, `delta`
`clb`	Derivatives of rolling-moment coefficients relative to sideslip angle.	`alpha`, `mach`, `alt`, `build`, `grndht`, `delta`
`qqinf`	Ratios of dynamic pressure at the horizontal tail to the freestream value.	`alpha`, `mach`, `alt`, `build`, `grndht`, `delta`
`eps`	Downwash angle at horizontal tail in degrees.	`alpha`, `mach`, `alt`, `build`, `grndht`, `delta`
`depsdalp`	Downwash angle relative to angle of attack.	`alpha`, `mach`, `alt`, `build`, `grndht`, `delta`

Dynamic Derivative Fields for the 1976 Version (File Type 6)

Field	Matrix of...	Function of...
`clq`	Rolling-moment derivatives due to pitch rate.	`alpha`, `mach`, `alt`, `build`
`cmq`	Pitching-moment derivatives due to pitch rate.	`alpha`, `mach`, `alt`, `build`

clad	Lift-force derivatives due to rate of angle of attack.	alpha, mach, alt, build
cmad	Pitching-moment derivatives due to rate of angle of attack.	alpha, mach, alt, build
clp	Rolling-moment derivatives due to roll rate.	alpha, mach, alt, build
cyp	Lateral-force derivatives due to roll rate.	alpha, mach, alt, build
cnp	Yawing-moment derivatives due to roll rate.	alpha, mach, alt, build
cnr	Yawing-moment derivatives due to yaw rate.	alpha, mach, alt, build
clr	Rolling-moment derivatives due to yaw rate.	alpha, mach, alt, build

High-Lift and Control Fields for Symmetric Flaps for the 1976 Version (File Type 6)

Field	Matrix of...	Function of...
dcl_sym	Incremental lift coefficients due to deflection of control surface, valid in the linear-lift angle of attack range.	delta, mach, alt
dcm_sym	Incremental pitching-moment coefficients due to deflection of control surface, valid in the linear-lift angle of attack range.	delta, mach, alt
dclmax_sym	Incremental maximum lift coefficients.	delta, mach, alt
dcdmin_sym	Incremental minimum drag coefficients due to control or flap deflection.	delta, mach, alt
clad_sym	Lift-curve slope of the deflected, translated surface.	delta, mach, alt
cha_sym	Control-surface hinge-moment derivatives due to angle of attack. These derivatives, when defined positive, tend to rotate the flap trailing edge down.	delta, mach, alt
chd_sym	Control-surface hinge-moment derivatives due to control deflection. When defined positive, these derivatives tend to rotate the flap trailing edge down.	delta, mach, alt
dcdi_sym	Incremental induced drag coefficients due to flap detection.	alpha, delta, mach, alt

High-Lift and Control Fields Available for Asymmetric Flaps for the 1976 Version (File Type 6)

Field	Matrix of...	Function of...
xsc	Streamwise distances from wing leading edge to spoiler tip.	delta, mach, alt
hsc	Projected height of spoiler measured from normal to airfoil meanline.	delta, mach, alt
ddc	Projected height of deflector for spoiler-slot-deflector control.	delta, mach, alt
dsc	Projected height of spoiler control.	delta, mach, alt
clroll	Incremental rolling-moment coefficients due to asymmetrical deflection of control surface. The coefficients are defined positive when right wing is down.	delta, mach, and alt, or alpha, delta, mach, and alt for differential horizontal stabilizer
cn_asy	Incremental yawing-moment coefficients due to asymmetrical deflection of control surface. The coefficients are defined positive when nose is right.	delta, mach, and alt, or alpha, delta, mach, and alt for plain flaps

High-Lift and Control Fields Available for Control/Trim Tabs for the 1976 Version (File Type 6)

Field	Matrix of...	Function of...
fc_con	Stick forces or stick force coefficients.	alpha, delta, mach, alt
fhmcoeff_free	Flap-hinge moment coefficients tab free.	alpha, delta, mach, alt
fhmcoeff_lock	Flap-hinge moment coefficients tab locked.	alpha, delta, mach, alt
fhmcoeff_gear	Flap-hinge moment coefficients due to gearing.	alpha, delta, mach, alt
ttab_def	Trim-tab deflections for zero stick force.	alpha, delta, mach, alt

High-Lift and Control Fields Available for Trim for the 1976 Version (File Type 6)

Field	Matrix of...	Function of...
cl_utrim	Untrimmed lift coefficients, which are defined positive for an up-acting load.	alpha, mach, alt
cd_utrim	Untrimmed drag coefficients, which are defined positive for an aft-acting load.	alpha, mach, alt
cm_utrim	Untrimmed pitching-moment coefficients, which are defined positive for a nose-up rotation.	alpha, mach, alt
delt_trim	Trimmed control-surface streamwise deflection angles.	alpha, mach, alt
dcl_trim	Trimmed incremental lift coefficients in the linear-lift angle of attack range due to deflection of control surface.	alpha, mach, alt
dclmax_trim	Trimmed incremental maximum lift coefficients.	alpha, mach, alt
dcdi_trim	Trimmed incremental induced drag coefficients due to flap deflection.	alpha, mach, alt
dcdmin_trim	Trimmed incremental minimum drag coefficients due to control or flap deflection.	alpha, mach, alt
cha_trim	Trimmed control-surface hinge-moment derivatives due to angle of attack.	alpha, mach, alt
chd_trim	Trimmed control-surface hinge-moment derivatives due to control deflection.	alpha, mach, alt
cl_tailutrim	Untrimmed stabilizer lift coefficients, which are defined positive for an up-acting load.	alpha, mach, alt
cd_tailutrim	Untrimmed stabilizer drag coefficients, which are defined positive for an aft-acting load.	alpha, mach, alt
cm_tailutrim	Untrimmed stabilizer pitching-moment coefficients, which are defined positive for a nose-up rotation.	alpha, mach, alt
hm_tailutrim	Untrimmed stabilizer hinge-moment coefficients, which are defined positive for a stabilizer rotation with leading edge up and trailing edge down.	alpha, mach, alt
aliht_tailtrim	Stabilizer incidence required to trim.	alpha, mach, alt
cl_tailtrim	Trimmed stabilizer lift coefficients, which are defined positive for an up-acting load.	alpha, mach, alt
cd_tailtrim	Trimmed stabilizer drag coefficients, which are defined positive for an aft-acting load.	alpha, mach, alt
cm_tailtrim	Trimmed stabilizer pitching-moment coefficients, which are defined positive for a nose-up rotation.	alpha, mach, alt

hm_tailtrim	Trimmed stabilizer hinge-moment coefficients, which are defined positive for a stabilizer rotation with leading edge up and trailing edge down.	alpha, mach, alt
cl_trimi	Lift coefficients at trim incidence. These coefficients are defined positive for an up-acting load.	alpha, mach, alt
cd_trimi	Drag coefficients at trim incidence. These coefficients are defined positive for an aft-acting load.	alpha, mach, alt

Transverse Jet Control Fields for the 1976 Version (File Type 6)

Field	Description	Stored with Indices of...
time	Matrix of times.	mach, alt, alpha
ctrlfrc	Matrix of control forces.	mach, alt, alpha
locmach	Matrix of local Mach numbers.	mach, alt, alpha
reynum	Matrix of Reynolds numbers.	mach, alt, alpha
locpres	Matrix of local pressures.	mach, alt, alpha
dynpres	Matrix of dynamic pressures.	mach, alt, alpha
blayer	Cell array of character vectors containing the state of the boundary layer.	mach, alt, alpha
ctrlcoeff	Matrix of control force coefficients.	mach, alt, alpha
corrcoeff	Matrix of corrected force coefficients.	mach, alt, alpha
sonicamp	Matrix of sonic amplification factors.	mach, alt, alpha
ampfact	Matrix of amplification factors.	mach, alt, alpha
vacthr	Matrix of vacuum thrusts.	mach, alt, alpha
minpres	Matrix of minimum pressure ratios.	mach, alt, alpha
minjet	Matrix of minimum jet pressures.	mach, alt, alpha
jetpres	Matrix of jet pressures.	mach, alt, alpha
massflow	Matrix of mass flow rates.	mach, alt, alpha
propelwt	Matrix of propellant weights.	mach, alt, alpha

Hypersonic Fields for the 1976 Version (File Type 6)

Field	Matrix of...	Stored with Indices of...
df_normal	Increments in normal force per spanwise foot of control.	alpha, delta, mach
df_axial	Increments in axial force per spanwise foot of control.	alpha, delta, mach
cm_normal	Increments in pitching moment due to normal force per spanwise foot of control.	alpha, delta, mach
cm_axial	Increments in pitching moment due to axial force per spanwise foot of control.	alpha, delta, mach
cp_normal	Center of pressure locations of normal force.	alpha, delta, mach
cp_axial	Center of pressure locations of axial force.	alpha, delta, mach

Auxiliary and Partial Fields Available for the 1976 Version (File Type 6)

Field	Matrix of...	Stored with Indices of...
wetarea_b	Body wetted area.	mach, alt, number of runs

xcg_b	Longitudinal locations of the center of gravity.	mach, alt, number of runs (normally 1, 2 for hypers = true)
zcg_b	Vertical locations of the center of gravity.	mach, alt, number of runs (normally 1, 2 for hypers = true)
basearea_b	Body base area.	mach, alt, number of runs (normally 1, 2 for hypers = true)
cd0_b	Body zero lift drags.	mach, alt, number of runs (normally 1, 2 for hypers = true)
basedrag_b	Body base drags.	mach, alt, number of runs (normally 1, 2 for hypers = true)
fricdrag_b	Body friction drags.	mach, alt, number of runs (normally 1, 2 for hypers = true)
presdrag_b	Body pressure drags.	mach, alt, number of runs (normally 1, 2 for hypers = true)
lemac	Leading edge mean aerodynamic chords.	mach, alt
sidewash	sidewash	mach, alt
hiv_b_w	iv-b(w)	alpha, mach, alt
hiv_w_h	iv-w(h)	alpha, mach, alt
hiv_b_h	iv-b(h)	alpha, mach, alt
gamma	gamma*2*pi*alpha*v*r	alpha, mach, alt
gamma2pialpvr	gamma*(2*pi*alpha*v*r)t	alpha, mach, alt
clpgammacl0	clp(gamma=cl=0)	mach, alt
clpgammaclp	clp(gamma)/cl (gamma=0)	mach, alt
cnptheta	cnp/theta	mach, alt
cypgamma	cyp/gamma	mach, alt
cypcl	cyp/cl (cl=0)	mach, alt
clbgamma	clb/gamma	mach, alt
cmothetaw	(cmo/theta)w	mach, alt
cmothetah	(cmo/theta)h	mach, alt
espeff	(epsoln)eff	alpha, mach, and alt
despdalpeff	d(epsoln)/d(alpha) eff	alpha, mach, alt
dragdiv	drag divergence mach number	mach, alt
cd0mach	Four Mach numbers for the zero lift drag.	index, mach, alt
cd0	Four zero lift drags.	index, mach, alt
clbclmfb_****	(clb/cl)mfb, where **** is either wb (wing-body) or bht (body-horizontal tail).	mach, alt.
cnam14_****	(cna)m=1.4, where **** is either wb (wing-body) or bht (body-horizontal tail).	mach,alt
area_*_**	Areas, where * is either w (wing), ht (horizontal tail), vt (vertical tail), or vf (ventral fin) and ** is either tt (total theoretical), ti (theoretical inboard), te (total exposed), ei (exposed inboard), or o (outboard).	mach, alt, number of runs (normally 1, 2 for hypers = true)

taperratio_*_**	Taper ratios, where * is either w (wing), ht (horizontal tail), vt (vertical tail), or vf (ventral fin) and ** is either tt (total theoretical), ti (theoretical inboard), te (total exposed), ei (exposed inboard), or o (outboard).	mach, alt, number of runs (normally 1, 2 for hypers = true)
aspectratio_*_**	Aspect ratios, where * is either w (wing), ht (horizontal tail), vt (vertical tail), or vf (ventral fin) and ** is either tt (total theoretical), ti (theoretical inboard), te (total exposed), ei (exposed inboard), or o (outboard).	mach, alt, number of runs (normally 1, 2 for hypers = true)
qcsweep_*_**	Quarter chord sweeps, where * is either w (wing), ht (horizontal tail), vt (vertical tail), or vf (ventral fin) and ** is either tt (total theoretical), ti (theoretical inboard), te (total exposed), ei (exposed inboard), or o (outboard).	mach, alt, number of runs (normally 1, 2 for hypers = true)
mac_*_**	Mean aerodynamic chords, where * is either w (wing), ht (horizontal tail), vt (vertical tail), or vf (ventral fin) and ** is either tt (total theoretical), ti (theoretical inboard), te (total exposed), ei (exposed inboard), or o (outboard).	mach, alt, number of runs (normally 1, 2 for hypers = true)
qcmac_*_**	Quarter chord x(mac), where * is either w (wing), ht (horizontal tail), vt (vertical tail), or vf (ventral fin) and ** is either tt (total theoretical), ti (theoretical inboard), te (total exposed), ei (exposed inboard), or o (outboard).	mach, alt, number of runs (normally 1, 2 for hypers = true)
ymac_*_**	y(mac), where * is either w (wing), ht (horizontal tail), vt (vertical tail), or vf (ventral fin) and ** is either tt (total theoretical), ti (theoretical inboard), te (total exposed), ei (exposed inboard), or o (outboard).	mach, alt, number of runs (normally 1, 2 for hypers = true)
cd0_*_**	Zero lift drags, where * is either w (wing), ht (horizontal tail), vt (vertical tail), or vf (ventral fin) and ** is either tt (total theoretical), ti (theoretical inboard), te (total exposed), ei (exposed inboard), or o (outboard).	mach, alt, number of runs (normally 1, 2 for hypers = true)
friccoeff_*_**	Friction coefficients, where * is either w (wing), ht (horizontal tail), vt (vertical tail), or vf (ventral fin) and ** is either tt (total theoretical), ti (theoretical inboard), te (total exposed), ei (exposed inboard), or o (outboard).	mach, alt, number of runs (normally 1, 2 for hypers = true)
cla_b_***	cla-b(***), where *** is either w (wing) or ht (stabilizer).	mach, alt, number of runs (normally 1, 2 for hypers = true)
cla_***_b	cla-***(b), where *** is either w (wing) or ht (stabilizer).	mach, alt, number of runs (normally 1, 2 for hypers = true)
k_b_***	k-b(***), where *** is either w (wing) or ht	mach, alt, number of runs (normally 1, 2

	(stabilizer).	for `hypers = true`)
`k_***_b`	`k-***(b)`, where *** is either `w` (wing) or `ht` (stabilizer).	`mach`, `alt`, number of runs (normally 1, 2 for `hypers = true`)
`xacc_b_***`	`xac/c-b(***)`, where *** is either `w` (wing) or `ht` (stabilizer).	`mach`, `alt`, number of runs (normally 1, 2 for `hypers = true`)
`cdlcl2_***`	`cdl/cl^2`, where *** is either `w` (wing) or `ht` (stabilizer).	`mach`, `alt`
`clbcl_***`	`clb/cl`, where *** is either `w` (wing) or `ht` (stabilizer).	`mach`, `alt`
`fmach0_***`	Force break Mach numbers with zero sweep, where *** is either `w` (wing) or `ht` (stabilizer).	`mach`, `alt`
`fmach_***`	Force break Mach numbers with sweep, where *** is either `w` (wing) or `ht` (stabilizer).	`mach`, `alt`
`macha_***`	`mach(a)`, where *** is either `w` (wing) or `ht` (stabilizer).	`mach`, `alt`
`machb_***`	`mach(b)`, where *** is either `w` (wing) or `ht` (stabilizer).	`mach`, `alt`
`claa_***`	`cla(a)`, where *** is either `w` (wing) or `ht` (stabilizer).	`mach`, `alt`
`clab_***`	`cla(b)`, where *** is either `w` (wing) or `ht` (stabilizer).	`mach`, `alt`
`clbm06_***`	`(clb/cl)m=0.6`, where *** is either `w` (wing) or `ht` (stabilizer).	`mach`, `alt`
`clbm14_***`	`(clb/cl)m=1.4`, where *** is either `w` (wing) or `ht` (stabilizer).	`mach`, `alt`
`clalpmach_***`	Five Mach numbers for the lift curve slope, where *** is either `w` (wing) or `ht` (stabilizer).	`index`, `mach`, `alt`
`clalp_***`	Five lift-curve slope values, where *** is either `w` (wing) or `ht` (stabilizer).	`index`, `mach`, `alt`

Fields for 1999 Version (File Type 6)

Common Fields for the 1999 Version (File Type 6)

Field	Description	Default
`case`	Character vector containing the case ID.	`[]`
`mach`	Array of Mach numbers.	`[]`
`alt`	Array of altitudes.	`[]`
`alpha`	Array of angles of attack.	`[]`
`nmach`	Number of Mach numbers.	`0`
`nalt`	Number of altitudes.	`1`
`nalpha`	Number of angles of attack.	`0`
`rnnub`	Array of Reynolds numbers.	`[]`
`beta`	Scalar containing sideslip angle.	`0`

`phi`	Scalar containing aerodynamic roll angle.	`0`
`loop`	Scalar denoting the type of looping performed to generate the DATCOM file. When `loop` is `1`, `mach` and `alt` are varied together. The only loop option for the 1999 version of DATCOM is `loop` is equal to `1`.	`1`
`sref`	Scalar denoting the reference area for the case.	`[]`
`cbar`	Scalar denoting the longitudinal reference length.	`[]`
`blref`	Scalar denoting the lateral reference length.	`[]`
`dim`	Character vector denoting the specified system of units for the case.	`'ft'`
`deriv`	Character vector denoting the specified angle units for the case.	`'deg'`
`save`	Logical denoting whether the input values for this case are used in the next case.	`false`
`stype`	Scalar denoting the type of asymmetric flap for the case.	`[]`
`trim`	Logical denoting the reading of trim data for the case. When trim runs are read, this value is set to `true`.	`false`
`damp`	Logical denoting the reading of dynamic derivative data for the case. When dynamic derivative runs are read, this value is set to `true`.	`false`
`build`	Scalar denoting the reading of build data for the case. When build runs are read, this value is set to the number of build runs depending on the vehicle configuration.	`1`
`part`	Logical denoting the reading of partial data for the case. When partial runs are written for each Mach number, this value is set to `true`.	`false`
`hypeff`	Logical denoting the reading of hypersonic data for the case. When hypersonic data is read, this value is set to `true`.	`false`
`ngh`	Scalar denoting the number of ground altitudes.	`0`
`nolat`	Logical denoting the calculation of the lateral-direction derivatives is inhibited.	`false`

`config`	Structure of logicals and structures detailing the case configuration and fin deflections.	`config.body = false`
		`config.fin1.avail = false;`
		`config.fin1.npanel = [];`
		`config.fin1.delta = [];`
		`config.fin2.avail = false;`
		`config.fin2.npanel = [];`
		`config.fin2.delta = [];`
		`config.fin3.avail = false;`
		`config.fin3.npanel = [];`
		`config.fin3.delta = [];`
		`config.fin4.avail = false;`
		`config.fin4.npanel = [];`
		`config.fin4.delta = [];`

`version`	Version of DATCOM file.	`1999`

Static Longitude and Lateral Stability Fields Available for the 1999 Version (File Type 6)

Field	Matrix of...	Function of...
`cd`	Drag coefficients, which are defined positive for an aft-acting load.	`alpha`, `mach`, `alt`, `build`
`cl`	Lift coefficients, which are defined positive for an up-acting load.	`alpha`, `mach`, `alt`, `build`
`cm`	Pitching-moment coefficients, which are defined positive for a nose-up rotation.	`alpha`, `machalt`, `build`
`cn`	Normal-force coefficients, which are defined positive for a normal force in the +Z direction.	`alpha`, `mach`, `alt`, `build`
`ca`	Axial-force coefficients, which are defined positive for a normal force in the +X direction.	`alpha`, `mach`, `alt`, `build`
`xcp`	Distances between moment reference center and the center of pressure divided by the longitudinal reference length. These distances are defined positive for a location forward of the center of gravity.	`alpha`, `mach`, `alt`, `build`
`cna`	Derivatives of normal-force coefficients relative to `alpha`.	`alpha`, `mach`, `alt`, `build`
`cma`	Derivatives of pitching-moment coefficients relative to `alpha`.	`alpha`, `mach`, `alt`, `build`
`cyb`	Derivatives of side-force coefficients relative to sideslip angle.	`alpha`, `mach`, `alt`, `build`
`cnb`	Derivatives of yawing-moment coefficients relative to sideslip angle.	`alpha`, `mach`, `alt`, `build`
`clb`	Derivatives of rolling-moment coefficients relative to sideslip angle.	`alpha`, `mach`, `alt`, `build`
`clod`	Ratios of lift coefficient to drag coefficient.	`alpha`, `mach`, `alt`, `build`
`cy`	Side-force coefficients.	`alpha`, `mach`, `alt`, `build`
`cln`	Yawing-moment coefficient in body-axis.	`alpha`, `mach`, `alt`, `build`
`cll`	Rolling-moment coefficient in body-axis.	`alpha`, `mach`, `alt`, `build`

Dynamic Derivative Fields for the 1999 Version (File Type 6)

Field	Matrix of...	Function of...
`cnq`	Normal-force derivatives due to pitch rate.	`alpha`, `mach`, `alt`, `build`
`cmq`	Pitching-moment derivatives due to pitch rate.	`alpha`, `mach`, `alt`, `build`
`caq`	Axial-force derivatives due to pitch rate.	`alpha`, `mach`, `alt`, `build`
`cnad`	Normal-force derivatives due to rate of angle of attack.	`alpha`, `mach`, `alt`, `build`
`cmad`	Pitching-moment derivatives due to rate of angle of attack.	`alpha`, `mach`, `alt`, `build`
`clp`	Rolling-moment derivatives due to roll rate.	`alpha`, `mach`, `alt`, `build`
`cyp`	Lateral force derivatives due to roll rate.	`alpha`, `mach`, `alt`, `build`
`cnp`	Yawing-moment derivatives due to roll rate.	`alpha`, `mach`, `alt`, `build`
`cnr`	Yawing-moment derivatives due to yaw rate.	`alpha`, `mach`, `alt`, `build`
`clr`	Rolling-moment derivatives due to yaw rate.	`alpha`, `mach`, `alt`, `build`
`cyr`	Side force derivatives due to yaw rate.	`alpha`, `mach`, `alt`, `build`

Fields for 2007, 2008, 2011, and 2014 Versions (File Type 6)

Common Fields for the 2007, 2008, 2011, and 2014 Versions (File Type 6)

Field	Description	Default
`case`	Character vector containing the case ID.	`[]`
`mach`	Array of Mach numbers.	`[]`
`alt`	Array of altitudes.	`[]`
`alpha`	Array of angles of attack.	`[]`
`nmach`	Number of Mach numbers.	`0`
`nalt`	Number of altitudes.	`1`
`nalpha`	Number of angles of attack.	`0`
`rnnub`	Array of Reynolds numbers.	`[]`
`beta`	Scalar containing sideslip angle. **Note:** This value does not appear correctly for the 2014 version. It always displays 0.	`0`
`phi`	Scalar containing aerodynamic roll angle.	`0`
`loop`	Scalar denoting the type of looping performed to generate the DATCOM file. When `loop` is `1`, `mach` and `alt` are varied together. The only loop option for the 2007 version of DATCOM is `loop`, equal to `1`.	`1`
`sref`	Scalar denoting the reference area for the case.	`[]`
`cbar`	Scalar denoting the longitudinal reference length.	`[]`
`blref`	Scalar denoting the lateral reference length.	`[]`
`dim`	Character vector denoting the specified system of units for the case.	`'ft'`
`deriv`	Character vector denoting the specified angle units for the case.	`'deg'`
`save`	Logical denoting whether the input values for this case are used in the next case.	`false`
`stype`	Scalar denoting the type of asymmetric flap for the case.	`[]`
`trim`	Logical denoting the reading of trim data for the case. When trim runs are read, this value is set to `true`.	`false`
`damp`	Logical denoting the reading of dynamic derivative data for the case. When dynamic derivative runs are read, this value is set to `true`.	`false`
`build`	Scalar denoting the reading of build data for the case. When build runs are read, this value is set to the number of build runs depending on the vehicle configuration.	`1`
`part`	Logical denoting the reading of partial data for the case. When partial runs are written for each Mach number, this value is set to `true`.	`false`
`hypeff`	Logical denoting the reading of hypersonic data	`false`

	for the case. When hypersonic data is read, this value is set to `true`.	
`ngh`	Scalar denoting the number of ground altitudes.	`0`
`nolat`	Logical denoting the calculation of the lateral-direction derivatives is inhibited.	`false`

`config`	Structure of logicals and structures detailing the case configuration and fin deflections.	`config.body = false;`
		`config.fin1.avail = false;`
		`config.fin1.npanel = [];`
		`config.fin1.delta = [];`
		`config.fin2.avail = false;`
		`config.fin2.npanel = [];`
		`config.fin2.delta = [];`
		`config.fin3.avail = false;`
		`config.fin3.npanel = [];`
		`config.fin3.delta = [];`
		`config.fin4.avail = false;`
		`config.fin4.npanel = [];`
		`config.fin4.delta = [];`

`nolat_namelist`	Logical denoting the calculation of the lateral-direction derivatives is inhibited in the DATCOM input case.	`false`
`version`	Version of DATCOM file.	`2007`

Static Longitude and Lateral Stability Fields Available for the 2007, 2008, 2011, and 2014 Versions (File Type 6)

Field	Matrix of...	Function of...
`cd`	Drag coefficients, which are defined positive for an aft-acting load.	`alpha`, `mach`, `alt`, `build`
`cl`	Lift coefficients, which are defined positive for an up-acting load.	`alpha`, `mach`, `alt`, `build`
`cm`	Pitching-moment coefficients, which are defined positive for a nose-up rotation.	`alpha`, `machalt`, `build`
`cn`	Normal-force coefficients, which are defined positive for a normal force in the +Z direction.	`alpha`, `mach`, `alt`, `build`
`ca`	Axial-force coefficients, which are defined positive for a normal force in the +X direction.	`alpha`, `mach`, `alt`, `build`
`xcp`	Distances between moment reference center and the center of pressure divided by the longitudinal reference length. These distances are defined positive for a location forward of the center of gravity.	`alpha`, `mach`, `alt`, `build`
`cna`	Derivatives of normal-force coefficients relative to `alpha`.	`alpha`, `mach`, `alt`, `build`
`cma`	Derivatives of pitching-moment coefficients relative to `alpha`.	`alpha`, `mach`, `alt`, `build`
`cyb`	Derivatives of side-force coefficients relative to sideslip angle.	`alpha`, `mach`, `alt`, `build`
`cnb`	Derivatives of yawing-moment coefficients relative to sideslip angle.	`alpha`, `mach`, `alt`, `build`
`clb`	Derivatives of rolling-moment coefficients relative to sideslip angle.	`alpha`, `mach`, `alt`, `build`
`clod`	Ratios of lift coefficient to drag coefficient.	`alpha`, `mach`, `alt`, `build`
`cy`	Side-force coefficients.	`alpha`, `mach`, `alt`, `build`

`cln`	Yawing-moment coefficient in body-axis.	`alpha, mach, alt, build`
`cll`	Rolling-moment coefficient in body-axis.	`alpha, mach, alt, build`

Dynamic Derivative Fields for the 2007, 2008, 2011, and 2014 Versions (File Type 6)

Field	Matrix of...	Function of...
`cnq`	Normal-force derivatives due to pitch rate.	`alpha, mach, alt, build`
`cmq`	Pitching-moment derivatives due to pitch rate.	`alpha, mach, alt, build`
`caq`	Axial-force derivatives due to pitch rate.	`alpha, mach, alt, build`
`cnad`	Normal-force derivatives due to rate of angle of attack.	`alpha, mach, alt, build`
`cmad`	Pitching-moment derivatives due to rate of angle of attack.	`alpha, mach, alt, build`
`clp`	Rolling-moment derivatives due to roll rate.	`alpha, mach, alt, build`
`cyp`	Lateral-force derivatives due to roll rate.	`alpha, mach, alt, build`
`cnp`	Yawing-moment derivatives due to roll rate.	`alpha, mach, alt, build`
`cnr`	Yawing-moment derivatives due to yaw rate.	`alpha, mach, alt, build`
`clr`	Rolling-moment derivatives due to yaw rate	`alpha, mach, alt, build`
`cyr`	Side-force derivatives due to yaw rate.	`alpha, mach, alt, build`

Fields for 2007, 2008, 2011, and 2014 Versions (File Type 21)

For 2008, 2011, and 2014, the version is 2008. There are no discernible differences in the outputs of these versions.

Common Fields for the 2007, 2008, 2011, and 2014 Versions (File Type 21)

Field	Description	Default
`mach`	Array of Mach numbers.	`[]`
`alt`	Array of altitudes.	`[]`
`alpha`	Array of angles of attack.	`[]`
`nalpha`	Number of angles of attack.	`0`
`beta`	Scalar containing sideslip angle. **Note:** This value does not appear correctly for the 2014 version. It always displays 0.	`0`
`total_col`	Scalar denoting the type of looping performed to generate the DATCOM file. When `loop` is 1, `mach` and `alt` are varied together. The only loop option for the 2007, 2008, 2011, and 2014 versions of DATCOM is `loop` equal to 1.	`[]`
`deriv_col`	Logical denoting the calculation of the lateral-direction derivatives is inhibited.	`0`

`config`	Structure of logicals and structures detailing the case configuration and fin deflections.	`config.fin1.delta = zeros(1,8);`
		`config.fin2.delta = zeros(1,8);`
		`config.fin3.delta = zeros(1,8);`
		`config.fin4.delta = zeros(1,8);`

`version`	Version of DATCOM file.	`2007`

Static Longitude and Lateral Stability Fields Available for the 2007, 2008, 2011, and 2014 Versions (File Type 21)

Field	Matrix of...	Function of...
cn	Normal-force coefficients, which are defined positive for a normal force in the +Z direction.	alpha, mach, alt, beta, config.fin1.delta, config.fin2.delta, config.fin3.delta, config.fin4.delta
cm	Pitching-moment coefficients, which are defined positive for a nose-up rotation.	alpha, mach, alt, beta, config.fin1.delta, config.fin2.delta, config.fin3.delta, config.fin4.delta
ca	Axial-force coefficients, which are defined positive for a normal force in the +X direction.	alpha, mach, alt, beta, config.fin1.delta, config.fin2.delta, config.fin3.delta, config.fin4.delta
cy	Side-force coefficients.	alpha, mach, alt, beta, config.fin1.delta, config.fin2.delta, config.fin3.delta, config.fin4.delta
cln	Yawing-moment coefficient in body-axis.	alpha, mach, alt, beta, config.fin1.delta, config.fin2.delta, config.fin3.delta, config.fin4.delta
cll	Rolling-moment coefficient in body-axis.	alpha, mach, alt, beta, config.fin1.delta, config.fin2.delta, config.fin3.delta, config.fin4.delta

Dynamic Derivative Fields for the 2007, 2008, 2011, and 2014 Versions (File Type 21)

Field	Matrix of...	Function of...
cnad	Normal-force derivatives due to rate of angle of attack.	alpha, mach, alt, beta, config.fin1.delta, config.fin2.delta, config.fin3.delta, config.fin4.delta
cmad	Pitching-moment derivatives due to rate of angle of attack.	alpha, mach, alt, beta, config.fin1.delta, config.fin2.delta, config.fin3.delta, config.fin4.delta
cnq	Normal-force derivatives due to pitch rate.	alpha, mach, alt, beta, config.fin1.delta, config.fin2.delta, config.fin3.delta, config.fin4.delta

`cmq`	Pitching-moment derivatives due to pitch rate.	`alpha`, `mach`, `alt`, `beta`, `config.fin1.delta`, `config.fin2.delta`, `config.fin3.delta`, `config.fin4.delta`
`caq`	Axial-force derivatives due to pitch rate.	`alpha`, `mach`, `alt`, `beta`, `config.fin1.delta`, `config.fin2.delta`, `config.fin3.delta`, `config.fin4.delta`
`cyq`	Side-force due to pitch rate.	`alpha`, `mach`, `alt`, `beta`, `config.fin1.delta`, `config.fin2.delta`, `config.fin3.delta`, `config.fin4.delta`
`clnq`	Yawing-moment due to pitch rate.	`alpha`, `mach`, `alt`, `beta`, `config.fin1.delta`, `config.fin2.delta`, `config.fin3.delta`, `config.fin4.delta`
`cllq`	Rolling-moment due to pitch rate.	`alpha`, `mach`, `alt`, `beta`, `config.fin1.delta`, `config.fin2.delta`, `config.fin3.delta`, `config.fin4.delta`
`cnp`	Yawing-moment derivatives due to roll rate.	`alpha`, `mach`, `alt`, `beta`, `config.fin1.delta`, `config.fin2.delta`, `config.fin3.delta`, `config.fin4.delta`
`cap`	Axial-force due to roll rate.	`alpha`, `mach`, `alt`, `beta`, `config.fin1.delta`, `config.fin2.delta`, `config.fin3.delta`, `config.fin4.delta`
`cyp`	Lateral-force derivatives due to roll rate.	`alpha`, `mach`, `alt`, `beta`, `config.fin1.delta`, `config.fin2.delta`, `config.fin3.delta`, `config.fin4.delta`
`clnp`	Yawing-moment due to roll rate.	`alpha`, `mach`, `alt`, `beta`, `config.fin1.delta`, `config.fin2.delta`, `config.fin3.delta`, `config.fin4.delta`
`cllp`	Rolling-moment due to roll rate.	`alpha`, `mach`, `alt`, `beta`, `config.fin1.delta`, `config.fin2.delta`, `config.fin3.delta`, `config.fin4.delta`
`cnr`	Yawing-moment derivatives due to yaw rate.	`alpha`, `mach`, `alt`, `beta`, `config.fin1.delta`, `config.fin2.delta`,

		config.fin3.delta, config.fin4.delta
car	Axial-force due to yaw rate.	alpha, mach, alt, beta, config.fin1.delta, config.fin2.delta, config.fin3.delta, config.fin4.delta
cyr	Side-force derivatives due to yaw rate.	alpha, mach, alt, beta, config.fin1.delta, config.fin2.delta, config.fin3.delta, config.fin4.delta
clnr	Yawing-moment due to yaw rate.	alpha, mach, alt, beta, config.fin1.delta, config.fin2.delta, config.fin3.delta, config.fin4.delta
cllr	Rolling-moment due to yaw rate.	alpha, mach, alt, beta, config.fin1.delta, config.fin2.delta, config.fin3.delta, config.fin4.delta

Fields for 2008, 2011, and 2014 Version (File Type 42)

Fields for the 2008, 2011, and 2014 Version (File Type 42)

Field	Description	Default
case	Character vector containing the case ID.	[]
totalCol	Scalar containing number of columns of data in file.	[]
mach	Array of Mach numbers.	[]
alt	Array of altitudes.	[]
alpha	Array of angles of attack.	[]
nmach	Number of Mach numbers.	0
nalpha	Number of angles of attack.	0
rnnub	Array of Reynolds numbers.	[]
q	Dynamic pressure.	[]
beta	Scalar containing sideslip angle. **Note:** This value does not appear correctly for the 2014 version. It always displays 0.	0
phi	Scalar containing aerodynamic roll angle.	0
sref	Scalar denoting the reference area for the case.	[]
cbar	Scalar denoting the longitudinal reference length.	[]
blref	Scalar denoting the lateral reference length.	[]
xcg	Distance from nose to center of gravity.	[]
xmrp	Distance from nose to center of gravity,	[]

	measured in calibers.	
`deriv`	Character vector denoting the specified angle units for the case.	`'deg'`
`trim`	Logical denoting the reading of trim data for the case. When trim runs are read, this value is set to `true`.	`false`
`damp`	Logical denoting the reading of dynamic derivative data for the case. When dynamic derivative runs are read, this value is set to `true`.	`false`
`build`	Scalar denoting the reading of partial data for the case. This value is set to the number of partial runs depending on the vehicle configuration.	`1`
`part`	Logical denoting the reading of partial data for the case. When partial runs are written for each Mach number, this value is set to `true`.	`false`
`nolat`	Logical denoting the calculation of the lateral-direction derivatives is inhibited.	`true`

`config`	Structure of logicals and structures detailing the case configuration and fin deflections.	`config.body = false;`
		`config.fin1.avail = false;`
		`config.fin1.npanel = [];`
		`config.fin1.delta = [];`
		`config.fin2.avail = false;`
		`config.fin2.npanel = [];`
		`config.fin2.delta = [];`
		`config.fin3.avail = false;`
		`config.fin3.npanel = [];`
		`config.fin3.delta = [];`
		`config.fin4.avail = false;`
		`config.fin4.npanel = [];`

`version`	Version of DATCOM file.	`2008`

Static Longitude and Lateral Stability Fields Available for the 2008, 2011, and 2014 Versions (File Type 42)

Field	Matrix of...	Function of...
`delta`	Trim deflection angles.	`alpha`, `mach`
`cd`	Drag coefficients, which are defined positive for an aft-acting load.	`alpha`, `mach`, `build`
`cl`	Lift coefficients, which are defined positive for an up-acting load.	`alpha`, `mach`, `build`
`cm`	Pitching-moment coefficients, which are defined positive for a nose-up rotation.	`alpha`, `mach`, `build`
`cn`	Normal-force coefficients, which are defined positive for a normal force in the +Z direction.	`alpha`, `mach`, `build`
`ca`	Axial-force coefficients, which are defined positive for a normal force in the +X direction.	`alpha`, `mach`, `build`
`caZeroBase`	Axial-force coefficient with no base drag included.	`alpha`, `mach`, `build`
`caFullBase`	Axial-force coefficient with full base drag included.	`alpha`, `mach`, `build`

xcp	Distance from nose to center of pressure.	alpha, mach, build
cna	Derivatives of normal-force coefficients relative to alpha.	alpha, mach, build
cma	Derivatives of pitching-moment coefficients relative to alpha.	alpha, mach, build
cyb	Derivatives of side-force coefficients relative to sideslip angle.	alpha, mach, build
cnb	Derivatives of yawing-moment coefficients relative to sideslip angle.	alpha, mach, build
clb	Derivatives of rolling-moment coefficients relative to sideslip angle.	alpha, mach, build
clod	Ratios of lift coefficient to drag coefficient.	alpha, mach, build
cy	Side-force coefficient.	alpha, mach, build
cln	Yawing-moment coefficient.	alpha, mach, build
cll	Rolling-moment coefficient.	alpha, mach, build

Dynamic Derivative Fields for the 2008, 2011, and 2014 Version (File Type 42)

Field	Matrix of...	Function of...
cnq	Normal-force derivatives due to pitch rate.	alpha, mach, alt, build
cmq	Pitching-moment derivatives due to pitch rate.	alpha, mach, alt, build
caq	Axial-force derivatives due to pitch rate.	alpha, mach, alt, build
cnad	Normal-force derivatives due to rate of angle of attack.	alpha, mach, alt, build
cmad	Pitching-moment derivatives due to rate of angle of attack.	alpha, mach, alt, build
cyq	Lateral-force derivatives due to pitch rate.	alpha, mach, alt, build
clnq	Yawing-moment derivatives due to pitch rate.	alpha, mach, alt, build
cllq	Rolling-moment derivatives due to pitch rate.	alpha, mach, alt, build
cyr	Side-force derivatives due to yaw rate.	alpha, mach, alt, build
clnr	Yawing-moment derivatives due to yaw rate.	alpha, mach, alt, build
cllr	Rolling-moment derivatives due to yaw rate.	alpha, mach, alt, build
cyp	Lateral-force derivatives due to roll rate.	alpha, mach, alt, build
clnp	Yawing-moment derivatives due to roll rate.	alpha, mach, alt, build
cllp	Rolling-moment derivatives due to roll rate.	alpha, mach, alt, build
cnp	Normal-force derivatives due to roll rate.	alpha, mach, alt, build
cmp	Pitching-moment derivatives due to roll rate.	alpha, mach, alt, build
cap	Axial-force derivatives due to roll rate.	alpha, mach, alt, build
cnr	Normal-force derivatives due to yaw rate.	alpha, mach, alt, build
cmr	Pitching-moment derivatives due to roll rate.	alpha, mach, alt, build
car	Axial-force derivatives due to yaw rate.	alpha, mach, alt, build

Examples

Read the 1976 version Digital DATCOM output file `astdatcom.out`:

```
aero = datcomimport('astdatcom.out')
```

Read the 1976 Digital DATCOM output file `astdatcom.out` using zeros to replace data points where no DATCOM methods exist and displaying status information in the MATLAB Command Window:

```
usenan = false;
aero = datcomimport('astdatcom.out', usenan, 1 )
```

Assumptions and Limitations

The operational limitations of the 1976 version DATCOM apply to the data contained in AERO. For more information on DATCOM limitations, see [1], section 2.4.5.

USAF Digital DATCOM data for wing section, horizontal tail section, vertical tail section, and ventral fin section are not read.

References

1. AFFDL-TR-79-3032: *The USAF Stability and Control DATCOM*, Volume 1, User's Manual

2. AFRL-VA-WP-TR-1998-3009: *MISSILE DATCOM*, User's Manual – 1997 FORTRAN 90 Revision

3. AFRL-RB-WP-TR-2009-3015: *MISSILE DATCOM*, User's Manual – 2008 Revision

4. AFRL-RB-WP-TR-2011-3071: *MISSILE DATCOM*, User's Manual – 2011 Revision

5. AFRL-RQ-WP-TR-2014-3999: *MISSILE DATCOM*, Users Manual – 2014 Revision

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Introduced in R2006b