US-LHC Magnets Database

Table: Magnets

Magnet name table. Each magnet will have one row in this table.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
Magnet	Character	10	-	-	-	-	Magnet ID
ModelNum	Character	3	-	-	-	-	Combined element magnet model number
Length	Numeric	4.2	0	9.99	m	x.xx	Magnet length at room temperature
Aperture	Numeric	4	0	200	mm	xxx	Magnet aperture
TunnelLoc	Character	10	-	-	-	-	Exact location in ring
Leads	Character	3	-	-	-	-	Leads at which end (CW, CCW)
SeqNum	Numeric	3	1	999	-	xxx	Vendor's construction sequence number
PartNum	Character	12	-	-	-	-	Part number of the magnet
Revision	Character	2	-	-	-	-	Revision to which the magnet was built
Completed	DateTime	8	-	-	-	xx/xx/xxxx	Date completed or recieved at BNL
Dispo	Character	10	-	-	-	-	Disposition: Accepted, Rejected, Returned
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified

US-LHC Magnets Database

Table: Assembly

Combined element assembly information.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
AssemblyID	Character	10	-	-	-	-	Assembly magnet ID
ColdMass	Character	10	-	-	-	-	Cold mass ID
Position	Character	1	-	-	-	-	Position of cold mass in assembly
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified

US-LHC Magnets Database

Table: Quench

Quench performance table. Each quench for each magnet cold tested will have an entry here.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
Magnet	Character	10	-	-	-	-	Magnet ID
ColdMass	Character	10	-	-	-	-	ID of Cold mass being tested
RunNum	Numeric	4	1	9999	-	xxxx	Run # of quench for this magnet
Element	Character	3	-	-	-	-	Magnet element being tested (beam tube, corrector element, etc.)
TestDate	DateTime	8	-	-	-	xx/xx/xxxx	Date tested
QuenchTime	Character	8	-	-	-	xx:xx:xx	Time of quench
QuenchNum	Numeric	2	1	20	-	xx	Quench number for this magnet
Current1	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Quench current
RampRate	Numeric	6.2	-200	+200	amp/sec	±xxx.xx	Ramp rate
MoleFinger	Character	1	-	-	-	-	Mole finger warm or cold
UpLow	Character	5	-	-	-	-	Half where quench occured (U/L) or coil number.
LE	Numeric	7.3	0	20	°K	xxx.xxx	Lead end temperature at quench
RE	Numeric	7.3	0	20	°K	xxx.xxx	Non-lead (return) end temperature at quench
MIITS	Numeric	5.2	0	99	MIITS	xx.xx	MIITS
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified

US-LHC Magnets Database

Table: Integral

Integral geometric multipoles table.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
Magnet	Character	10	-	-	-	-	Magnet ID
ColdMass	Character	10	-	-	-	-	ID of Cold mass being tested
RunNum	Numeric	4	1	9999	-	xxxx	Run # for this magnet
TestDate	DateTime	8	-	-	-	xx/xx/xxxx	Date tested
BenchName	Character	20	-	-	-		Test station
MeasCoil	Character	10	-	-	-	-	Serial number of measurement coil used
Element	Character	3	-	-	-	-	Magnet element being tested (beam tube, corrector element, etc.)
RefRadius	Numeric	4	0	200	mm	xxx	Reference radius
Analysis	Character	8	-	-	-	-	History number generated by field program
TestType	Character	10	-	-	-	-	Horizontal or vertical test
Current1	Numeric	8.2	-7000	+7000	amps	xxxx.xx	Current at which measurements were made
Current2	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current in other half of dual aperture magnets
UpDown	SmallInt	2	-1	+1	-	±1	Up (+1) or down (-1) ramp measurements
RampRate	Numeric	6.2	-200	+200	amp/sec	±xxx.xx	Ramp rate
WarmCold	Character	1	-	-	-	-	Warm or Cold measurements
MeasTemp	Numeric	5.2	0	310	°K	xxx.xx	Temperature (K)
a1	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew dipole
a2	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew quadrupole
a3	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew sextupole
a4	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew octupole
a5	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew decapole
a6	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew dodecapole
a7	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 14-pole
a8	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 16-pole
a9	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 18-pole
a10	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 20-pole
a11	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 22-pole
a12	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 24-pole
a13	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 26-pole
a14	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 28-pole
a15	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 30-pole
b1	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal dipole
b2	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal quadrupole
b3	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal sextupole
b4	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal octupole
b5	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal decapole
b6	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal dodecapole
b7	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 14-pole
b8	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 16-pole
b9	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 18-pole
b10	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 20-pole
b11	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 22-pole
b12	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 24-pole
b13	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 26-pole
b14	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 28-pole

b15	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 30-pole
FieldAngle	Numeric	6.2	-10	+10	mrad	±xx.xx	Integral field angle
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified

US-LHC Magnets Database

Table: LocalHarm

Multipoles measured at one position.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
Magnet	Character	10	-	-	-	-	Magnet ID
ColdMass	Character	10	-	-	-	-	ID of Cold mass being tested
RunNum	Numeric	4	1	9999	-	xxxx	Run # for this magnet
TestDate	DateTime	8	-	-	-	xx/xx/xxxx	Date tested
BenchName	Character	20	-	-	-		Test station
MeasCoil	Character	10	-	-	-	-	Serial number of measurement coil used
Element	Character	3	-	-	-	-	Magnet element being tested (beam tube, corrector element, etc.)
RefRadius	Numeric	4	0	200	mm	xxx	Reference radius
Analysis	Character	8	-	-	-	-	History number generated by field program
Current1	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current at which measurments were made
Current2	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current in other half of dual aperture magnets
RampRate	Numeric	6.2	-200	+200	amp/sec	±xxx.xx	Ramp rate
UpDown	SmallInt	2	-1	+1	-	±1	Up (+1) or down (-1) ramp measurements
WarmCold	Character	1	-	-	-	-	Warm or Cold measurements
MeasTemp	Numeric	5.2	0	310	°K	xxx.xx	Temperature (K)
Position	Numeric	10.3					
ProbeLength	Numeric	4.2					
a1	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew dipole
a2	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew quadrupole
a3	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew sextupole
a4	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew octupole
a5	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew decapole
a6	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew dodecapole
a7	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 14-pole
a8	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 16-pole
a9	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 18-pole
a10	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 20-pole
a11	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 22-pole
a12	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 24-pole
a13	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 26-pole
a14	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 28-pole
a15	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 30-pole
b1	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal dipole
b2	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal quadrupole
b3	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal sextupole
b4	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal octupole
b5	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal decapole
b6	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal dodecapole
b7	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 14-pole
b8	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 16-pole
b9	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 18-pole
b10	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 20-pole
b11	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 22-pole
b12	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 24-pole
b13	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 26-pole

b14	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 28-pole
b15	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 30-pole
BTransFunc	Numeric	9.5	-10	+10	tesla/kA	±xx.xxxxx	Transfer function at reference radius
FieldAngle	Numeric	6.2	-10	+10	mrad	±xx.xx	Average field angle
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified

US-LHC Magnets Database

Table: BodyHarmAvg

The Dipoles and Quadrupoles will have multipoles measured at the ends and at the center. If so the average center(body) data will be stored in this table.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
Magnet	Character	10	-	-	-	-	Magnet ID
ColdMass	Character	10	-	-	-	-	ID of Cold mass being tested
RunNum	Numeric	4	1	9999	-	xxxx	Run # for this magnet
TestDate	DateTime	8	-	-	-	xx/xx/xxxx	Date tested
BenchName	Character	20	-	-	-		Test station
MeasCoil	Character	10	-	-	-	-	Serial number of measurement coil used
Element	Character	3	-	-	-	-	Magnet element being tested (beam tube, corrector element, etc.)
RefRadius	Numeric	4	0	200	mm	xxx	Reference radius
Analysis	Character	8	-	-	-	-	History number generated by field program
Current1	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current at which measurments were made
Current2	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current in other half of dual aperture magnets
UpDown	SmallInt	2	-1	+1	-	±1	Up (+1) or down (-1) ramp measurements
RampRate	Numeric	6.2	-200	+200	amp/sec	±xxx.xx	Ramp rate
WarmCold	Character	1	-	-	-	-	Warm or Cold measurements
MeasTemp	Numeric	5.2	0	310	°K	xxx.xx	Temperature (K)
a1	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew dipole
a2	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew quadrupole
a3	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew sextupole
a4	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew octupole
a5	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew decapole
a6	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew dodecapole
a7	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 14-pole
a8	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 16-pole
a9	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 18-pole
a10	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 20-pole
a11	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 22-pole
a12	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 24-pole
a13	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 26-pole
a14	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 28-pole
a15	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 30-pole
b1	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal dipole
b2	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal quadrupole
b3	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal sextupole
b4	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal octupole
b5	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal decapole
b6	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal dodecapole
b7	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 14-pole
b8	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 16-pole
b9	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 18-pole
b10	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 20-pole
b11	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 22-pole
b12	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 24-pole
b13	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 26-pole
b14	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 28-pole
b15	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 30-pole

BTransFunc	Numeric	9.5	-10	+10	tesla/kA	±xx.xxxxx	Transfer function at reference radius
FieldAngle	Numeric	6.2	-10	+10	mrad	±xx.xx	Average field angle
FldAngVar	Numeric	6.2	-10	+10	mrad	±xx.xx	Maximum difference from the mean
FldAngRMS	Numeric	6.2	-10	+10	mrad	±xx.xx	RMS variation in field angle
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified

US-LHC Magnets Database

Table: EndsHarm

This table will store the multipole data from the ends. There should be twice as many rows here as in the BodyHarm table. Typically, higher order end harmonics are negligible and hard to measure. Therefore harmonics above a11 and b11 will not be recorded.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
Magnet	Character	10	-	-	-	-	Magnet ID
ColdMass	Character	10	-	-	-	-	ID of Cold mass being tested
Region	Character	8	-	-	-	-	Region covered (lead, return)
RunNum	Numeric	4	1	9999	-	xxxx	Run # for this magnet
TestDate	DateTime	8	-	-	-	xx/xx/xxxx	Date tested
BenchName	Character	20	-	-	-		Test station
MeasCoil	Character	10	-	-	-	-	Serial number of measurement coil used
Element	Character	3	-	-	-	-	Magnet element being tested (beam tube, corrector element, etc.)
RefRadius	Numeric	4	0	200	mm	xxx	Reference radius
Analysis	Character	8	-	-	-	-	History number generated by field program
Current1	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current at which measurments were made
Current2	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current in other half of dual aperture magnets
UpDown	SmallInt	2	-1	+1	-	±1	Up (+1) or down (-1) ramp measurements
RampRate	Numeric	6.2	-200	+200	amp/sec	±xxx.xx	Ramp rate
WarmCold	Character	1	-	-	-	-	Warm or Cold measurements
MeasTemp	Numeric	5.2	0	310	°K	xxx.xx	Temperature (K)
a1	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Skew dipole
a2	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Skew quadrupole
a3	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Skew sextupole
a4	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Skew octupole
a5	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Skew decapole
a6	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Skew dodecapole
a7	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Skew 14-pole
a8	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Skew 16-pole
a9	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Skew 18-pole
a10	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Skew 20-pole
a11	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Skew 22-pole
b1	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Normal dipole
b2	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Normal quadrupole
b3	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Normal sextupole
b4	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Normal octupole
b5	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Normal decapole
b6	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Normal dodecapole
b7	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Normal 14-pole
b8	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Normal 16-pole
b9	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Normal 18-pole
b10	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Normal 20-pole
b11	Numeric	10.3	-999	+999	Units*m	±xxx.xxx	Normal 22-pole
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified

US-LHC Magnets Database

Table: IntField

Integral field table.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
Magnet	Character	10	-	-	-	-	Magnet ID
ColdMass	Character	10	-	-	-	-	ID of Cold mass being tested
RunNum	Numeric	4	1	9999	-	xxxx	Run # for this magnet
TestDate	DateTime	8	-	-	-	xx/xx/xxxx	Date tested
BenchName	Character	20	-	-	-		Test station
MeasCoil	Character	10	-	-	-	-	Serial number of measurement coil used
Element	Character	3	-	-	-	-	Magnet element being tested (beam tube, corrector element, etc.)
RefRadius	Numeric	4	0	200	mm	xxx	Reference radius
Analysis	Character	8	-	-	-	-	History number generated by field program
Current1	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current at which measurments were made
Current2	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current in other half of dual aperture magnets
UpDown	SmallInt	2	-1	+1	-	±1	Up (+1) or down (-1) ramp measurements
RampRate	Numeric	6.2	-200	+200	amp/sec	±xxx.xx	Ramp rate
WarmCold	Character	1	-	-	-	-	Warm or Cold measurements
MeasTemp	Numeric	5.2	0	310	°K	xxx.xx	Temperature (K)
Transfunc	Numeric	9.5	-10	+10	tesla*m/kA	±xx.xxxxx	Integral transfer function at reference radius
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified

US-LHC Magnets Database

Table: Magz

Magnetization multipoles.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
Magnet	Character	10	-	-	-	-	Magnet ID
ColdMass	Character	10	-	-	-	-	ID of Cold mass being tested
RunNum	Numeric	4	1	9999	-	xxxx	Run # for this magnet
TestDate	DateTime	8	-	-	-	xx/xx/xxxx	Date tested
BenchName	Character	20	-	-	-		Test station
MeasCoil	Character	10	-	-	-	-	Serial number of measurement coil used
Element	Character	3	-	-	-	-	Magnet element being tested (beam tube, corrector element, etc.)
RefRadius	Numeric	4	0	200	mm	xxx	Reference radius
Analysis	Character	8	-	-	-	-	History number generated by field program
Current1	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current at which measurments were made
Current2	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current in other half of dual aperture magnets
UpDown2	Numeric	5.2	-	-	-	-	(Up + down)/2
RampRate	Numeric	6.2	-200	+200	amp/sec	±xxx.xx	Ramp rate
MeasTemp	Numeric	5.2	0	310	°K	xxx.xx	Temperature (K)
Position	Numeric	2	0	99	-	xx	Axial position of test coil in magnet
ProbeLength	Numeric	4.2					
a1	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew dipole
a2	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew quadrupole
a3	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew sextupole
a4	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew octupole
a5	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew decapole
a6	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew dodecapole
a7	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 14-pole
a8	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 16-pole
a9	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 18-pole
a10	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 20-pole
a11	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 22-pole
a12	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 24-pole
a13	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 26-pole
a14	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 28-pole
a15	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 30-pole
b1	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal dipole
b2	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal quadrupole
b3	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal sextupole
b4	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal octupole
b5	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal decapole
b6	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal dodecapole
b7	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 14-pole
b8	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 16-pole
b9	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 18-pole
b10	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 20-pole
b11	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 22-pole
b12	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 24-pole
b13	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 26-pole
b14	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 28-pole

b15	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 30-pole
BTransfunc	Numeric	9.5	-10	+10	tesla/kA	±xx.xxxxx	Transfer function at reference radius
FieldAngle	Numeric	6.2	-10	+10	mrad	±xx.xx	Primary field angle
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified

US-LHC Magnets Database

Table: Eddy

Eddy current multipoles.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
Magnet	Character	10	-	-	-	-	Magnet ID
ColdMass	Character	10	-	-	-	-	ID of Cold mass being tested
RunNum	Numeric	4	1	9999	-	xxxx	Run # for this magnet
TestDate	DateTime	8	-	-	-	xx/xx/xxxx	Date tested
BenchName	Character	20	-	-	-		Test station
MeasCoil	Character	10	-	-	-	-	Serial number of measurement coil used
Element	Character	3	-	-	-	-	Magnet element being tested (beam tube, corrector element, etc.)
RefRadius	Numeric	4	0	200	mm	xxx	Reference radius
Analysis	Character	8	-	-	-	-	History number generated by field program
Current1	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current at which measurments were made
Current2	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current in other half of dual aperture magnets
UpDown	SmallInt	2	-1	+1	-	±1	Up (+1) or down (-1) ramp measurements
RampRate	Numeric	6.2	-200	+200	amp/sec	±xxx.xx	Ramp rate
MeasTemp	Numeric	5.2	0	310	°K	xxx.xx	Temperature (K)
Position	Numeric	2	0	99	-	xx	Axial position of test coil in magnet
a1	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew dipole
a2	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew quadrupole
a3	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew sextupole
a4	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew octupole
a5	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew decapole
a6	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew dodecapole
a7	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 14-pole
a8	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 16-pole
a9	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 18-pole
a10	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 20-pole
a11	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 22-pole
a12	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 24-pole
a13	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 26-pole
a14	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 28-pole
a15	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 30-pole
b1	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal dipole
b2	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal quadrupole
b3	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal sextupole
b4	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal octupole
b5	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal decapole
b6	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal dodecapole
b7	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 14-pole
b8	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 16-pole
b9	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 18-pole
b10	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 20-pole
b11	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 22-pole
b12	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 24-pole
b13	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 26-pole
b14	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 28-pole
b15	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 30-pole

BTransFunc	Numeric	9.5	-10	+10	tesla/kA	±xx.xxxxx	Transfer function at reference radius
FieldAngle	Numeric	6.2	-10	+10	mrad	±xx.xx	Primary field angle
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified

US-LHC Magnets Database

Table: TDecay

Time decay multipoles - up ramp only.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
Magnet	Character	10	-	-	-	-	Magnet ID
ColdMass	Character	10	-	-	-	-	ID of Cold mass being tested
RunNum	Numeric	4	1	100	-	xxxx	Run # for this magnet
TestDate	DateTime	8	-	-	-	xx/xx/xxxx	Date tested
BenchName	Character	20	-	-	-		Test station
MeasCoil	Character	10	-	-	-	-	Serial number of measurement coil used
Element	Character	3	-	-	-	-	Magnet element being tested (beam tube, corrector element, etc.)
RefRadius	Numeric	4	0	200	mm	xxx	Reference radius
Analysis	Character	8	-	-	-	-	History number generated by field program
Current1	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current at which measurments were made
Current2	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current in other half of dual aperture magnets
MeasTemp	Numeric	5.2	0	310	°K	xxx.xx	Temperature (K)
Time	Numeric	5	0	99999	sec	xxxxx	Time in seconds since start of constant current
Position	Numeric	2	0	99	-	xx	Axial position of test coil in magnet
a1	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew dipole
a2	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew quadrupole
a3	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew sextupole
a4	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew octupole
a5	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew decapole
a6	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew dodecapole
a7	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 14-pole
a8	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 16-pole
a9	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 18-pole
a10	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 20-pole
a11	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 22-pole
a12	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 24-pole
a13	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 26-pole
a14	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 28-pole
a15	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Skew 30-pole
b1	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal dipole
b2	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal quadrupole
b3	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal sextupole
b4	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal octupole
b5	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal decapole
b6	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal dodecapole
b7	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 14-pole
b8	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 16-pole
b9	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 18-pole
b10	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 20-pole
b11	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 22-pole
b12	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 24-pole
b13	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 26-pole
b14	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 28-pole
b15	Numeric	10.3	-10000	+10000	Units	±xxxxx.xxx	Normal 30-pole
BTransFunc	Numeric	9.5	-10	+10	tesla/kA	±xx.xxxxx	Transfer function at reference radius

FieldAngle	Numeric	6.2	-10	+10	mrad	±xx.xx	Primary field angle
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified

US-LHC Magnets Database

Table: Centers

This table will contain the centering offsets from the magnetic measurements.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
Magnet	Character	10	-	-	-	-	Magnet ID
ColdMass	Character	10	-	-	-	-	Cold Mass ID
RunNum	Numeric	4	1	100	-	xxxx	Run number for this magnet
TestDate	DateTime	8	-	-	-	xx/xx/xxxx	Date tested
BenchName	Character	20	-	-	-		Test station
MeasCoil	Character	10	-	-	-	-	Serial number of measurement coil used
Element	Character	3	-	-	-	-	Magnet element being tested (beam tube, corrector element, etc.)
Analysis	Character	8	-	-	-	-	History number generated by field program
Current1	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current at which measurements were made
Current2	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current in other half of dual aperture magnets
UpDown	SmallInt	2	-1	+1	-	±1	Up (+1) or down (-1) ramp measurements
WarmCold	Character	1	-	-	-	-	Warm or Cold measurements
MeasTemp	Numeric	5.2	0	310	°K	xxx.xx	Temperature (K)
Xoff	Numeric	6.3	-5	+5	mm	±x.xxx	x offset
Yoff	Numeric	6.3	-5	+5	mm	±x.xxx	Y offset
FieldAngle	Numeric	6.2	-10	+10	mrad	±xx.xx	Integral field angle
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified

US-LHC Magnets Database

Table: WarmCold

This table will hold the warm/cold transfer function and harmonics conversion values. The Delta_a1 --> Delta_b15 values are in Units*m for the lead and return regions and in Units otherwise.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
MagnetType	Character	3	-	-	-	-	3 letter magnet type (DRG,D5I, etc)
MagnetRev	Character	2	-	-	-	-	Magnet revision designation
Region	Character	8	-	-	-	-	Magnet region (Lead, Return, Body, Integral)
BenchName	Character	20	-	-	-		Test station
Current1	Numeric	8.2	-7000	+7000	amps	±xxxx.xx	Current for which conversion is calculated
UpDown	SmallInt	2	-1	+1	-	±1	Up (+1) or down (-1) ramp measurements
TFRatio	Numeric	8.4	0	+99	-	xx.xxxx	Transfer function ratio cold/warm
Delta_a1	Numeric	6.2	-999	+999	Units	±xx.xx	Skew dipole
Delta_a2	Numeric	6.2	-999	+999	Units	±xx.xx	Skew quadrupole
Delta_a3	Numeric	6.2	-999	+999	Units	±xx.xx	Skew sextupole
Delta_a4	Numeric	6.2	-999	+999	Units	±xx.xx	Skew octupole
Delta_a5	Numeric	6.2	-999	+999	Units	±xx.xx	Skew decapole
Delta_a6	Numeric	6.2	-999	+999	Units	±xx.xx	Skew dodecapole
Delta_a7	Numeric	6.2	-999	+999	Units	±xx.xx	Skew 14-pole
Delta_a8	Numeric	6.2	-999	+999	Units	±xx.xx	Skew 16-pole
Delta_a9	Numeric	6.2	-999	+999	Units	±xx.xx	Skew 18-pole
Delta_a10	Numeric	6.2	-999	+999	Units	±xx.xx	Skew 20-pole
Delta_a11	Numeric	6.2	-999	+999	Units	±xx.xx	Skew 22-pole
Delta_a12	Numeric	6.2	-999	+999	Units	±xx.xx	Skew 24-pole
Delta_a13	Numeric	6.2	-999	+999	Units	±xx.xx	Skew 26-pole
Delta_a14	Numeric	6.2	-999	+999	Units	±xx.xx	Skew 28-pole
Delta_a15	Numeric	6.2	-999	+999	Units	±xx.xx	Skew 30-pole
Delta_b1	Numeric	6.2	-999	+999	Units	±xx.xx	Normal dipole
Delta_b2	Numeric	6.2	-999	+999	Units	±xx.xx	Normal quadrupole
Delta_b3	Numeric	6.2	-999	+999	Units	±xx.xx	Normal sextupole
Delta_b4	Numeric	6.2	-999	+999	Units	±xx.xx	Normal octupole
Delta_b5	Numeric	6.2	-999	+999	Units	±xx.xx	Normal decapole
Delta_b6	Numeric	6.2	-999	+999	Units	±xx.xx	Normal dodecapole
Delta_b7	Numeric	6.2	-999	+999	Units	±xx.xx	Normal 14-pole
Delta_b8	Numeric	6.2	-999	+999	Units	±xx.xx	Normal 16-pole
Delta_b9	Numeric	6.2	-999	+999	Units	±xx.xx	Normal 18-pole
Delta_b10	Numeric	6.2	-999	+999	Units	±xx.xx	Normal 20-pole
Delta_b11	Numeric	6.2	-999	+999	Units	±xx.xx	Normal 22-pole
Delta_b12	Numeric	6.2	-999	+999	Units	±xx.xx	Normal 24-pole
Delta_b13	Numeric	6.2	-999	+999	Units	±xx.xx	Normal 26-pole
Delta_b14	Numeric	6.2	-999	+999	Units	±xx.xx	Normal 28-pole
Delta_b15	Numeric	6.2	-999	+999	Units	±xx.xx	Normal 30-pole
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified

US-LHC Magnets Database

Table: FidMagInfo

Summary information about magnet survey data including measurement date and data analysis date. In the case of more than one measurement for a magnet, only one will have BestData set to True.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
Magnet	Character	10	-	-	-	-	Magnet ID
JobName	Character	8	-	-	-	-	Unique survey filename
MeasDate	DateTime	8	-	-	-	xx/xx/xxxx	Measured date
MeasTemp	Numeric	4.2	-	-	℃	xx.xx	Magnet temperature during survey (℃)
MeasBy	Character	4	-	-	-	-	Measured by FNAL, BNL, CERN
ProcDate	DateTime	8	-	-	-	xx/xx/xxxx	Data processed date
ProcBy	Character	15	-	-	-	-	Data processed by
BestData	Character	1	-	-	-	-	Best data flag (T or F)
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified

US-LHC Magnets Database

Table: FidOpt

Fiducial positions from optical survey in external coordinates.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
Magnet	Character	10	-	-	-	-	Magnet ID
ColdMass	Character	10	-	-	-	-	Cold mass ID
PointName	Character	10	-	-	-	-	Measurement point name
JobName	Character	8	-	-	-	-	Unique survey filename
MeasDate	DateTime	8	-	-	-	xx/xx/xxxx	Measured date
MeasBy	Character	4	-	-	-	-	Measured by FNAL, BNL, CERN
ProcDate	DateTime	8	-	-	-	xx/xx/xxxx	Data processed date
Xvalue	Numeric	8.4	-	-	cm	±xxx.xxxx	Radial coordinate (cm)
Yvalue	Numeric	8.4	-	-	cm	±xxx.xxxx	Longitudinal coordinate (cm)
Zvalue	Numeric	8.4	-	-	cm	±xxx.xxxx	Vertical coordinate (cm)
Xstd	Numeric	5.4	-	-	-	x.xxxx	Radial standard deviation
Ystd	Numeric	5.4	-	-	-	x.xxxx	Longitudinal standard deviation
Zstd	Numeric	5.4	-	-	-	x.xxxx	Vertical standard deviation
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified

US-LHC Magnets Database

Table: CentMag

Magnetic center measurement relative to external references from antenna measurement (or an equivalent technique), and position of the external references in external coordinates.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
Magnet	Character	10	-	-	-	-	Magnet ID
ColdMass	Character	10	-	-	-	-	Cold mass ID
PointName	Character	10	-	-	-	-	Measurement point name
JobName	Character	8	-	-	-	-	Unique survey filename
MeasDate	DateTime	8	-	-	-	xx/xx/xxxx	Measured date
MeasBy	Character	4	-	-	-	-	Measured by FNAL, BNL, CERN
Xvalue	Numeric	8.4	-	-	cm	±xxx.xxxx	Radial offset
Yvalue	Numeric	8.4	-	-	cm	±xxx.xxxx	Logitudinal position
Zvalue	Numeric	8.4	-	-	cm	±xxx.xxxx	Vertical offset
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified

US-LHC Magnets Database

Table: Angle

Magnetic field angle relative to external refernce from coil measurement, and position of the external refernces in external coordinate system. This will be used for combined element assemblies only.

Column Name	Data Type	Size	Minimum Value	Maximum Value	Units	Display Format	Description
Magnet	Character	10	-	-	-	-	Magnet ID
ColdMass	Character	10	-	-	-	-	Cold mass ID
Element	Character	3	-	-	-	-	Magnet element being tested
RunNum	Numeric	4	1	1000	-	xxxx	Run # for this magnet
JobName	Character	8	-	-	-	-	Unique survey filename
TestDate	DateTime	8	-	-	-	xx/xx/xxxx	Date tested
MeasBy	Character	4	-	-	-	-	Measured by FNAL, BNL, CERN
MeasCoil	Character	10	-	-	-	-	Serial number of measurement coil used
WarmCold	Character	1	-	-	-	-	Warm or cold measurements
FieldAngle	Numeric	5.2	-30	+30	mrad	±xx.xx	Field angle
Notes	Character	255	-	-	-	-	Comments
LoginName	Character	15	-	-	-	-	Login name of person entering or modifying data
ModDate	DateTime	8	-	-	-	-	Date & time row of data was last modified