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Data Access

- [FTPS from the MMS SDC \(not with most browsers\)](#)
- [HTTPS from the MMS SDC](#)
- [FTPS from SPDF \(not with most browsers\)](#)
- [HTTPS from SPDF](#)
- [CDAWeb](#)
- [HAPl: CDAWeb HAPI Server](#)

MMS 1 Electric Double Probe (EDP) Three-Dimensional Electric Field, Level 2 (L2), Burst Mode, 0.1220703125 ms Data

Ergun, R.E., Lindqvist, P., Torbert, R.B., Ahmadi, N., Graham, D.B., and Burch, J.L. (2022). MMS 1 Electric Double Probe (EDP) Three-Dimensional Electric Field, Level 2 (L2), Burst Mode, 0.1220703125 ms Data [Data set]. NASA Space Physics Data Facility. <https://doi.org/10.48322/rxbn-r719>. Accessed on 2023-April-5.

ResourceID

spase://NASA/NumericalData/MMS/1/FIELDS/EDP/Burst/Level2/DCElectricField/PT0.0001220703125

Description

Electric Double Probe, Three-Dimensional Electric Field, Level 2, Burst Mode Data

Details

[View XML](#) | [View JSON](#) | [Edit](#)

Version:2.5.0

NumericalData

ResourceID

spase://NASA/NumericalData/MMS/1/FIELDS/EDP/Burst/Level2/DCElectricField/PT0.0001220703125S

ResourceHeader**ResourceName**

MMS 1 Electric Double Probe (EDP) Three-Dimensional Electric Field, Level 2 (L2), Burst Mode, 0.1220703125 ms Data

AlternateName

MMS1_EDP_BRST_L2_DCE

DOI

<https://doi.org/10.48322/rxbn-r719>

ReleaseDate

2023-03-28 12:34:56.789

RevisionHistory**RevisionEvent****ReleaseDate**

2021-04-27 15:38:11

Note

Only known prior ReleaseDate of the metadata

RevisionEvent**ReleaseDate**

2022-08-04 12:34:56.789

Note

Added DOI and PublicationInfo minted by LFB, updated the RepositoryID, updated the SPDF MetadataContact Person to Robert M. Candey, metadata updated to SPASE 2.4.1, reviewed by LFB 20220803

RevisionEvent**ReleaseDate**

2023-03-04 12:34:56.789

Note

Standardized the ResourceName Format, Set AlternateName equal to the ProductKey, Revised the Acknowledgement, PublicationInfo Authors, and Contact Person list per request of the MMS EDP team, metadata updated to SPASE 2.5.0, reviewed by LFB 20230304

RevisionEvent**ReleaseDate**

2023-03-28 12:34:56.789

Note

FIELDS/EDP, both E fields and SC potential, Description: remove "Quick Look" and replace "burst survey" with "burst mode" per request of the MMS EDP team, revised by LFB 20230328

Description

Electric Double Probe, Three-Dimensional Electric Field, Level 2, Burst Mode Data

Acknowledgement

Please acknowledge R.E. Ergun, P.-A. Lindqvist, R.B. Torbert, N. Ahmadi, D.B. Graham, and J.L. Burch for use of these data

PublicationInfo**Authors**

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PublicationDate

2022-01-01 00:00:00

PublishedBy

NASA Space Physics Data Facility

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InformationURL**Name**

At NASA GSFC

URL

<https://mms.gsfc.nasa.gov/>

Description

Magnetospheric Multiscale (MMS) mission home page

PriorIDs

<spase://VSPO/NumericalData/MMS/1/FIELDS/EDP/Burst/Level2/DCElectricField/PT0.0001220703125S>

AccessInformation**RepositoryID**

spase://SMWG/Repository/UCOLO/LASP/MMS_SDC

Availability

Online

AccessRights

Open

AccessURL**Name**

FTPS from the MMS SDC (not with most browsers)

URL

<ftp://lasp.colorado.edu/mms/sdc/public/data/mms1/edp/brst/12/dce/>

Description

In CDF via ftp from the MMS Science Data Center

AccessURL**Name**

HTTPS from the MMS SDC

URL

<https://lasp.colorado.edu/mms/sdc/public/data/mms1/edp/brst/12/dce/>

Description

In CDF via http from the MMS Science Data Center

Format

CDF

Encoding

None

Acknowledgement

Please acknowledge R.E. Ergun, P.-A. Lindqvist, R.B. Torbert, N. Ahmadi, D.B. Graham, and J.L. Burch. Also please acknowledge the data providers and CDAWeb when using these data.

AccessInformation
RepositoryID

<spase://SMWG/Repository/NASA/GSFC/SPDF/CDAWeb>

Availability

Online

AccessRights

Open

AccessURL**Name**

FTPS from SPDF (not with most browsers)

URL

<ftps://spdf.gsfc.nasa.gov/pub/data/mms/mms1/edp/brst/l2/dce/>

Description

In CDF via ftp from SPDF

AccessURL**Name**

HTTPS from SPDF

URL

<https://spdf.gsfc.nasa.gov/pub/data/mms/mms1/edp/brst/l2/dce/>

Description

In CDF via http from SPDF

AccessURL**Name**

CDAWeb

URL

https://cdaweb.gsfc.nasa.gov/cgi-bin/eval2.cgi?dataset=MMS1_EDP_BRST_L2_DCE&index=sp_phys

ProductKey

MMS1_EDP_BRST_L2_DCE

Description

Access to ASCII, CDF, and plots via NASA/GSFC CDAWeb

Format

CDF

Encoding

None

Acknowledgement

Please acknowledge R.E. Ergun, P.-A. Lindqvist, R.B. Torbert, N. Ahmadi, D.B. Graham, and J.L. Burch. Also please acknowledge the data providers and CDAWeb when using these data.

AccessInformation
RepositoryID

<spase://SMWG/Repository/NASA/GSFC/SPDF/CDAWeb>

Availability

Online

AccessRights

Open

AccessURL**Name**

CDAWeb HAPI Server

URL

<https://cdaweb.gsfc.nasa.gov/hapi>

Style

HAPI

ProductKey

MMS1_EDP_BRST_L2_DCE

Description

Web Service to this product using the HAPI interface

Format

CSV

Acknowledgement

Please acknowledge R.E. Ergun, P.-A. Lindqvist, R.B. Torbert, N. Ahmadi, D.B. Graham, and J.L. Burch. Also please acknowledge the data providers and CDAWeb when using these data.

ProcessingLevel

Calibrated

InstrumentIDs

[spase://SMWG/Instrument/MMS/1/FIELDS/ADP](#)
[spase://SMWG/Instrument/MMS/1/FIELDS/SDP](#)

MeasurementType

ElectricField

TemporalDescription**TimeSpan****StartDate**

2015-08-02 00:03:44

RelativeStopDate

-P2M

Cadence

PT0.0001220703125S

ObservedRegion

Earth.Magnetosheath

ObservedRegion

Earth.Magnetosphere

ObservedRegion

Earth.Magnetosphere.Magnetotail

ObservedRegion

Earth.Magnetosphere.Main

ObservedRegion

Earth.Magnetosphere.RadiationBelt

ObservedRegion

Earth.NearSurface.EquatorialRegion

ObservedRegion

Earth.NearSurface.Plasmasphere

ObservedRegion

Heliosphere.NearEarth

Parameter #1

Name

Epoch Time

ParameterKey

mms1_edp_epoch_brst_I2

Description

Epoch Time Tags, Interval Centered, in Terrestrial Time 2000 (TT2000)

Caveats

This parameter exhibits an increasing monotonic progression.

Cadence

PT0.0001220703125S

Units

ns

UnitsConversion

1.0e-9>s

ValidMin

1990-01-01T00:00:00.000000000

ValidMax

2100-01-01T00:00:01.000000000

FillValue

9999-12-31T23:59:59.999999999

Support**SupportQuantity**

Temporal

Parameter #2

Name

ADP and SDP Calibrated DC Electric Field (GSE)

Set

Time series defined by using: MMS1_EDP_EPOCH_BRST_L2

ParameterKey

mms1_edp_dce_gse_brst_l2

Description

Axial Double Probe (ADP) and Spin-Plane Double Probe (SDP) Calibrated DC Electric Field, Geocentric Solar Ecliptic (GSE) Coordinates, Level 2, Burst Mode

Cadence

PT0.0001220703125S

Units

mV/m

UnitsConversion

1.0e-3>V m^-1

CoordinateSystem**CoordinateRepresentation**

Cartesian

CoordinateSystemName

GSE

RenderingHints**DisplayType**

TimeSeries

ValueFormat

f8.3

Structure**Size**

3

Element**Name**

Ex

Index

1

Element**Name**

Ey

Index

2

Element**Name**

Ez

Index

3

ValidMin

-700.0

ValidMax

700.0

FillValue

-1.0e+31

Field**Qualifier**

Vector

FieldQuantity

Electric

Parameter #3

Name

ADP and SDP Calibrated DC Electric Field (DSL)

Set

Time series defined by using: MMS1_EDP_EPOCH_BRST_L2

ParameterKey

mms1_edp_dce_dsl_brst_l2

Description

Axial Double Probe (ADP) and Spin-Plane Double Probe (SDP) Calibrated DC Electric Field, Despun Angular Momentum (DSL) Coordinates, Level 2, Burst Mode

Cadence

PT0.0001220703125S

Units

mV/m

UnitsConversion

1.0e-3>V m^-1

CoordinateSystem**CoordinateRepresentation**

Cartesian

CoordinateSystemName

SC

RenderingHints**DisplayType**

TimeSeries

ValueFormat

f8.3

Structure**Size**

3

Element**Name**

Ex

Index

1

Element**Name**

Ey

Index

2

Element**Name**

Ez

Index

3

ValidMin

-700.0

ValidMax

700.0

FillValue

-1.0e+31

Field**Qualifier**

Vector

FieldQuantity

Electric

Parameter #4

Name

Electric Field Difference, L2 Output to L1 input (DSL)

Set

Time series defined by using: MMS1_EDP_EPOCH_BRST_L2

ParameterKey

mms1_edp_dce_dsl_res_brst_l2

Description

Electric Field Difference between the L2, output and the L1 input, Despun Angular Momentum (DSL) Coordinates, Level 2, Burst Mode

Cadence

PT0.0001220703125S

Units

mV/m

UnitsConversion1.0e-3>V m⁻¹**CoordinateSystem****CoordinateRepresentation**

Cartesian

CoordinateSystemName

SC

RenderingHints**DisplayType**

TimeSeries

ValueFormat

f8.3

Structure**Size**

3

Element**Name**

Ex

Index

1

Element**Name**

Ey

Index

2

Element**Name**

Ez

Index

3

ValidMin

-700.0

ValidMax

700.0

FillValue

-1.0e+31

Field**Qualifier**

Vector

FieldQuantity

Electric

Parameter #5

Name

DC Electric Field Error Estimate

Set

Time series defined by using: MMS1_EDP_EPOCH_BRST_L2

ParameterKey

mms1_edp_dce_err_brst_l2

Description

Approximate DC Electric Field Error derived from the Spine Plane DoubleProbe (SDP) Quality and Bitmask and the Axial Double Probe (ADP) Residue Data, Level 2, Burst Mode

Cadence

PT0.0001220703125S

Units

mV/m

UnitsConversion1.0e-3>V m⁻¹**RenderingHints****DisplayType**

TimeSeries
ValueFormat f8.3
Structure
Size 3
Element
Name Ex
Index 1
Element
Name Ey
Index 2
Element
Name Ez
Index 3
ValidMin -700.0
ValidMax 700.0
FillValue -1.0e+31
Field
Qualifier Uncertainty
FieldQuantity Electric

Parameter #6

Name Status Bitmask
Set Time series defined by using: MMS1_EDP_EPOCH_BRST_L2
ParameterKey mms1_edp_bitmask_burst_l2
Description Status Bitmask, Values Used: Bitmask and 0x001: True when probe(s) are disabled, Bitmask and 0x002: True when probe(s) have bad bias settings, Bitmask and 0x004: True when probe(s) are saturated, Bitmask and 0x008: True when probe(s) are saturated due to low density, Bitmask and 0x016: True when probe(s) are sweeping bias, Bitmask and 0x032: True when SDP probe(s) are in shadow from the ADP booms, Bitmask and 0x064: True when ASPOC is emitting non-zero current
Cadence PT0.0001220703125S
RenderingHints
ValueFormat i7
ValidMin 0
ValidMax 65534
FillValue 65535
Support
SupportQuantity Other

Parameter #7

Name

Data Quality indicator

Set

Time series defined by using: MMS1_EDP_EPOCH_BRST_L2

ParameterKey

mms1_edp_quality_brst_l2

Description

Data Quality Indicator: 4, Best; 3, Good; 2, Data OK, Use with some Caution; 1, Bad Data, Use with Caution; 0, Really Bad Data or No Data

Cadence

PT0.0001220703125S

RenderingHints**ValueFormat**

i7

ValidMin

0

ValidMax

4

FillValue

255

Support**SupportQuantity**

Other

Parameter #8

Name

Epoch Time Delta Plus/Minus

ParameterKey

mms1_edp_deltap_brst_l2

Description

The Time Interval of Data Measurements is given by the Epoch Time Tags and Delta Plus/Minus

Cadence

PT0.0001220703125S

Units

ns

UnitsConversion

1.0e-9>s

RenderingHints**ValueFormat**

f20.6

ValidMin

61000.0

ValidMax

6.25e+07

FillValue

-1.0e+31

Support**SupportQuantity**

Temporal