Historic England

THE ATLAS OF RURAL SETTLEMENT IN ENGLAND GIS

Data Dictionary

Andrew G Lowerre

INTRODUCTION

This document is a data dictionary for the shapefiles and KMZ files making up the Atlas of Rural Settlement in England GIS data collection, describing the attributes stored with the spatial data. For details of the nature and limitations of the data and the processes by which the data a were created, please see the accompanying document entitled 'AtlasRuralSettlmentEngland_Documentation.pdf'.

Terrain Types

(TerrainTypes.shp and TerrainTypes.kmz)

Field Name	Type	Length	Suitable Alias	Description
FID	Object Identifier	4	Feature ID	Unique identifier for each feature
Shape	Geometry	0	Shape	Geometry of each feature (Polygon)
Shape_Leng	Double	19	Perimeter	Perimeter of each feature in metres
Shape_Area	Double	19	Area	Area of each feature in square metres
T_TYPE	String	20	Terrain Type	Type of terrain, i.e., Uplands, Intermediate Lands or Lowlands
T_TYPEDSC	String	40	Type Description	Description of Terrain Type

Terrain Zones

(TerrainZones.shp and TerrainZones.kmz)

Field Name	Type	Length	Suitable Alias	Description
FID	Object Identifier	4	Feature ID	Unique identifier for each feature
Shape	Geometry	0	Shape	Geometry of each feature (Polygon)
Shape_Leng	Double	19	Perimeter	Perimeter of each feature in metres
Shape_Area	Double	19	Area	Area of each feature in square metres
T_TYPE	String	20	Terrain Type	Type of terrain, i.e., Uplands, Intermediate Lands or Lowlands
T_TYPEDSC	String	40	Type Description	Description of Terrain Type
T_ZONEGRP	String	50	Terrain Zone Group	Group (if any) to which multiple Terrain Zones belong
T_ZONE	String	50	Terrain Zone	Terrain Zones, subdivisions within each Terrain Type
T_ZONEDSC	String	230	Zone Description	Description of Terrain Zone

Terrain Escarpments

(TerrainEscarpments.shp and TerrainEscarpments.kmz)

Field Name	Type	Length	Suitable Alias	Description
FID	Object Identifier	4	Feature ID	Unique identifier for each feature
Shape	Geometry	0	Shape	Geometry of each feature (Polyline)
Shape_Leng	Double	19	Length	Length of each feature in metres

Dispersion and Hamlet Scores

(DispersionHamletScores.shp and DispersionHamletScores.kmz)

Field Name	Type	Length	Suitable Alias	Description
FID	Object Identifier	4	Feature ID	Unique identifier for each feature
Shape	Geometry	0	Shape	Geometry of each feature (Point)
DSP_SCR_A	String	10	Dispersion Score	The dispersion score recorded for each point, stored as text to allow 'range' values, eg '3-5'; scores are regularised to fit the Fibonacci sequence (1, 2, 3, 5, 8, 13, 21, 34)
DSP_SCR_N1	Short Integer	4	Dispersion Score Numeric High	The dispersion score recorded for each point, stored as a number; where 'range' values are recorded in DSP_SCR_A, the higher numeric value is recorded here
DSP_SCR_N2	Short Integer	4	Dispersion Score Numeric Medium	The dispersion score recorded for each point, stored as a number; where 'range' values are recorded in DSP_SCR_A, a median numeric value – rounded down to the nearest value in the Fibonacci sequence – is recorded here
DSP_SCR_N3	Short Integer	4	Dispersion Score Numeric Low	The dispersion score recorded for each point, stored as a number; where 'range' values are recorded in DSP_SCR_A, the lower numeric value is recorded here
HAM_CNT_A	String	10	Hamlet Count	The hamlet count recorded for each point, stored as text, with the count prefixed with the letter 'H', to give values such as 'H2'
HAM_CNT_N	Short Integer	4	Hamlet Count Numeric	The hamlet count recorded for each point, stored as a number
UNUSUAL	String	3	Unusual Score	A Yes/No value indicating whether a given point was picked out in the source material as having an unusually high dispersion score and/or hamlet count

Nucleations

(Nucleations.shp and Nucleations.kmz)

Field Name	Type	Length	Suitable Alias	Description
FID	Object Identifier	4	Feature ID	Unique identifier for each feature
Shape	Geometry	0	Shape	Geometry of each feature (Point)
NUCLCAT_A	String	1	Nucleation Category Letter	Letter codes for categories of nucleations, from A (largest) to E (smallest)
NUCLCAT_N	Short Integer	4	Nucleation Category Numeric	Numeric codes corresponding to the letter codes for nucleations, from 5 (largest) to 1 (smallest)
NUCL_DSC	String	35	Nucleation Category Description	Description of each category of nucleation

Settlement Provinces

(SettlementProvinces.shp and SettlementProvinces.kmz)

Field Name	Type	Length	Suitable Alias	Description
FID	Object Identifier	4	Feature ID	Unique identifier for each feature
Shape	Geometry	0	Shape	Geometry of each feature (Polygon)
Shape_Leng	Double	19	Perimeter	Perimeter of each feature in metres
Shape_Area	Double	19	Area	Area of each feature in square metres
PROVINCE	String	30	Province	Name of one of the three contrasting settlement provinces

Settlement Sub-Provinces

(SettlementSubProvinces.shp and SettlementSubProvinces.kmz)

Field Name	Type	Length	Suitable Alias	Description
FID	Object Identifier	4	Feature ID	Unique identifier for each feature
Shape	Geometry	0	Shape	Geometry of each feature (Polygon)
Shape_Leng	Double	19	Perimeter	Perimeter of each feature in metres
Shape_Area	Double	19	Area	Area of each feature in square metres
PROVINCE	String	30	Province	Name of one of the three contrasting settlement regions
SUB_PROV	String	35	Sub-Province	Name of the smaller area within a settlement Province
SUB_PROV_C	String	8	Sub-Province Code	Alphabetic code for each Sub-Province

Settlement Local Regions

(SettlementLocalRegions.shp and SettlementLocalRegions.kmz)

Field Name	Type	Length	Suitable Alias	Description
FID	Object Identifier	4	Feature ID	Unique identifier for each feature
Shape	Geometry	0	Shape	Geometry of each feature (Polygon)
Shape_Leng	Double	19	Perimeter	Perimeter of each feature in metres
Shape_Area	Double	19	Area	Area of each feature in square metres
PROVINCE	String	30	Province	Name of one of the three contrasting settlement regions
SUB_PROV	String	35	Sub-Province	Name of the smaller area within a settlement Province
SUB_PROV_C	String	8	Sub-Province Code	Alphabetic code for each Sub-Province
LOC_REG	String	75	Local Region	Name of local settlement region
LOC_REG_C	String	10	Local Region Code	Alphanumeric code for each Local Region
DISPERSION	String	40	Dispersion	Textual description of the density of dispersed settlement

England Wales Background

(EnglandWalesBackground.shp and EnglandWalesBackground.kmz)

Field Name	Type	Length	Suitable Alias	Description
FID	Object Identifier	4	Feature ID	Unique identifier for each feature
Shape	Geometry	0	Shape	Geometry of each feature (Polygon)
Shape_Leng	Double	19	Perimeter	Perimeter of each feature in metres
Shape_Area	Double	19	Area	Area of each feature in square metres
COUNTRY	String	7	Country	The country (England or Wales) to which each feature belongs

Analysis Project Data

(EnvironmentSettlement_AnalysisData.shp)

Field Name	Type	Length	Suitable Alias	Description
FID	Object Identifier	4	Feature ID	Unique identifier for each feature
Shape	Geometry	0	Shape	Geometry of each feature (Polygon)
NGR_ALPHNM	String	6	NGR	Alphanumeric 6-figure (2 letters and 4 numbers) National Grid Reference for the south-west corner of the feature
UID_XY	Integer	9	UID XY	A unique identifier for each feature based on the XY coordinates of the centroid of the feature
SUBSET	Short Integer	4	Subset	The subset (1, 2 or 3) to which the feature belongs, as used in the regression analysis described in Lowerre (2015)
DSTNCL_ALL	Double	19	DstNcl All	Distance in metres from the centroid of the feature to the nearest Nucleation point of any category (A, B, C, D or E)
DSTNCL_A	Double	19	DstNcl A	Distance in metres from the centroid of the feature to the nearest category A Nucleation point
DSTNCL_B	Double	19	DstNcl B	Distance in metres from the centroid of the feature to the nearest category B Nucleation point
DSTNCL_C	Double	19	DstNcl C	Distance in metres from the centroid of the feature to the nearest category C Nucleation point
DSTNCL_D	Double	19	DstNcl D	Distance in metres from the centroid of the feature to the nearest category D Nucleation point
DSTNCL_E	Double	19	DstNcl E	Distance in metres from the centroid of the feature to the nearest category E Nucleation point
DSTNCL_BCD	Double	19	DstNcl BCD	Distance in metres from the centroid of the feature to the nearest Nucleation point of category B, C or D
DSTNCL_AB	Double	19	DstNcl AB	Distance in metres from the centroid of the feature to the nearest Nucleation point of category A or B
DSTNCL_BC	Double	19	DstNcl BC	Distance in metres from the centroid of the feature to the nearest Nucleation point of category B or C
DSTNCL_CD	Double	19	DstNcl CD	Distance in metres from the centroid of the feature to the nearest Nucleation point of category C or D
DSTNCL_DE	Double	19	DstNcl DE	Distance in metres from the centroid of the feature to the nearest Nucleation point of category D or E

Field Name	Type	Length	Suitable Alias	Description
DSINTRP	Double	19	Interpolated Dispersion Score	The interpolated Dispersion Score for the feature, recorded as a double-precision floating-point number
DSINTRPINT	Integer	9	Dispersion Score Integer	The interpolated Dispersion Score for the feature (from the field DSINTRP) rounded to the nearest integer value
HCINTRP	Double	19	Interpolated Hamlet Count	The interpolated Hamlet Count for the feature, recorded as a double-precision floating-point number
HCINTRPINT	Integer	9	Hamlet Count Integer	The interpolated Hamlet Count for the feature (from the field HCINTRP) rounded to the nearest integer value
CSS_NA1	Double	19	CSS Na1	Combined Settlement Score (see Lowerre 2015), using distance to all nucleations, emphasising nucleation (i.e., locations closer to nucleations have a higher score), and where Hamlet Count contributes toward nucleation (i.e., locations with a higher Hamlet Count are considered to be more nucleated)
CSS_NB1	Double	19	CSS Nb1	Combined Settlement Score (see Lowerre 2015), using distance to category B, C and D nucleations, emphasising nucleation (i.e., locations closer to nucleations have a higher score), and where Hamlet Count contributes toward nucleation (i.e., locations with a higher Hamlet Count are considered to be more nucleated)
CSS_NA2	Double	19	CSS Na2	Combined Settlement Score (see Lowerre 2015), using distance to all nucleations, emphasising nucleation (i.e., locations closer to nucleations have a higher score), and where Hamlet Count contributes toward dispersion (i.e., locations with a higher Hamlet Count are considered to be more dispersed)
CSS_NB2	Double	19	CSS Nb2	Combined Settlement Score (see Lowerre 2015), using distance to category B, C and D nucleations, emphasising nucleation (i.e., locations closer to nucleations have a higher score), and where Hamlet Count contributes toward dispersion (i.e., locations with a higher Hamlet Count are considered to be more dispersed)

Field Name	Type	Length	Suitable Alias	Description
CSS_DA1	Double	19	CSS Da1	Combined Settlement Score (see Lowerre 2015), using distance to all nucleations, emphasising dispersion (i.e., locations further away from nucleations have a higher score), and where Hamlet Count contributes toward nucleation (i.e., locations with a higher Hamlet Count are considered to be more nucleated)
CSS_DB1	Double	19	CSS Db1	Combined Settlement Score (see Lowerre 2015), using distance to category B, C and D nucleations, emphasising dispersion (i.e., locations further away from nucleations have a higher score)), and where Hamlet Count contributes toward nucleation (i.e., locations with a higher Hamlet Count are considered to be more nucleated)
CSS_DA2	Double	19	CSS Da2	Combined Settlement Score (see Lowerre 2015), using distance to all nucleations, emphasising dispersion (i.e., locations further away from nucleations have a higher score), and where Hamlet Count contributes toward dispersion (i.e., locations with a higher Hamlet Count are considered to be more dispersed)
CSS_DB2	Double	19	CSS Db2	Combined Settlement Score (see Lowerre 2015), using distance to category B, C and D nucleations, emphasising dispersion (i.e., locations further away from nucleations have a higher score), and where Hamlet Count contributes toward dispersion (i.e., locations with a higher Hamlet Count are considered to be more dispersed)
ELEVATION	Double	19	Elevation	Average elevation for the feature in metres above Ordnance Survey datum
TRI	Double	19	TRI	Average Topographic Roughness Index for the feature
SDELV3X3	Double	19	SD Elevation 3x3	Average standard deviation of Elevation (calculated over a 3x3 cell window) for the feature
SDELV11X11	Double	19	SD Elevation 11x11	Average standard deviation of Elevation (calculated over an 11x11 cell window) for the feature

Field Name	Type	Length	Suitable Alias	Description
SDELV21X21	Double	19	SD Elevation 21x21	Average standard deviation of Elevation (calculated over a 21x21 cell window) for the feature
RLF3X3	Double	19	Relief 3x3	Average Relief (maximum elevation minus minimum elevation, calculated over a 3x3 cell window) for the feature
RLF11X11	Double	19	Relief 11x11	Average Relief (maximum elevation minus minimum elevation, calculated over an 11x11 cell window) for the feature
RLF21X21	Double	19	Relief 21x21	Average Relief (maximum elevation minus minimum elevation, calculated over a 21x21 cell window) for the feature
SRFCRATIO	Double	19	Surface Ratio	Average Surface Ratio for the feature
SDSLP3X3	Double	19	SD Slope 3x3	Average standard deviation of slope (calculated over a 3x3 cell window) for the feature
SDSLP11X11	Double	19	SD Slope 11x11	Average standard deviation of slope (calculated over an 11x11 cell window) for the feature
SDSLP21X21	Double	19	SD Slope 21x21	Average standard deviation of slope (calculated over a 21x21 cell window) for the feature
VRM3X3	Double	19	VRM 3x3	Average Vector Ruggedness Measure value (calculated over a 3x3 cell window) for the feature
VRM11X11	Double	19	VRM 11x11	Average Vector Ruggedness Measure value (calculated over an 11x11 cell window) for the feature
VRM21X21	Double	19	VRM 21x21	Average Vector Ruggedness Measure value (calculated over a 21x21 cell window) for the feature
BIO12	Double	19	Bio 12	Average annual precipitation for the feature
P_1	Double	19	Precip 1	Average precipitation in January for the feature
P_2	Double	19	Precip 2	Average precipitation in February for the feature
P_3	Double	19	Precip 3	Average precipitation in March for the feature
P_4	Double	19	Precip 4	Average precipitation in April for the feature
P_5	Double	19	Precip 5	Average precipitation in May for the feature
P_6	Double	19	Precip 6	Average precipitation in June for the feature

Field Name	Type	Length	Suitable Alias	Description
P_7	Double	19	Precip 7	Average precipitation in July for the feature
P_8	Double	19	Precip 8	Average precipitation in August for the feature
P_9	Double	19	Precip 9	Average precipitation in September for the feature
P_10	Double	19	Precip 10	Average precipitation in October for the feature
P_11	Double	19	Precip 11	Average precipitation in November for the feature
P_12	Double	19	Precip 12	Average precipitation in December for the feature
P_AV2M12	Double	19	Precip av2m 12	Two-month (January–February) average for precipitation for the feature
P_AV2M23	Double	19	Precip av2m 23	Two-month (February–March) average for precipitation for the feature
P_AV2M34	Double	19	Precip av2m 34	Two-month (March–April) average for precipitation for the feature
P_AV2M45	Double	19	Precip av2m 45	Two-month (April–May) average for precipitation for the feature
P_AV2M56	Double	19	Precip av2m 56	Two-month (May–June) average for precipitation for the feature
P_AV2M67	Double	19	Precip av2m 67	Two-month (June–July) average for precipitation for the feature
P_AV2M78	Double	19	Precip av2m 78	Two-month (July–August) average for precipitation for the feature
P_AV2M89	Double	19	Precip av2m 89	Two-month (August–September) average for precipitation for the feature
P_AV2M910	Double	19	Precip av2m 910	Two-month (September–October) average for precipitation for the feature
P_AV2M1011	Double	19	Precip av2m 1011	Two-month (October–November) average for precipitation for the feature
P_AV2M1112	Double	19	Precip av2m 1112	Two-month (November–December) average for precipitation for the feature
P_AV2M121	Double	19	Precip av2m 121	Two-month (December–January) average for precipitation for the feature
P_AV3M123	Double	19	Precip av3m 123	Three-month (January–March) average for precipitation for the feature
P_AV3M234	Double	19	Precip av3m 234	Three-month (February–April) average for precipitation for the feature
P_AV3M345	Double	19	Precip av3m 345	Three-month (March–May) average for precipitation for the feature
P_AV3M456	Double	19	Precip av3m 456	Three-month (April–June) average for precipitation for the feature
P_AV3M567	Double	19	Precip av3m 567	Three-month (May–July) average for precipitation for the feature
P_AV3M678	Double	19	Precip av3m 678	Three-month (June–August) average for precipitation for the feature

Field Name	Type	Length	Suitable Alias	Description
P_AV3M789	Double	19	Precip av3m 789	Three-month (July–September) average for precipitation for the feature
P_AV3M8910	Double	19	Precip av3m 8910	Three-month (August–October) average for precipitation for the feature
PAV3M91011	Double	19	Precip av3m 91011	Three-month (September–November) average for precipitation for the feature
PA3M101112	Double	19	Precip av3m 101112	Three-month (October–December) average for precipitation for the feature
PAV3M11121	Double	19	Precip av3m 11121	Three-month (November–January) average for precipitation for the feature
P_AV3M1212	Double	19	Precip av3m 1212	Three-month (December–February) average for precipitation for the feature
BIO1	Double	19	Bio 1	Average annual temperature for the feature
T_1	Double	19	Temp 1	Average temperature in January for the feature
T_2	Double	19	Temp 2	Average temperature in February for the feature
T_3	Double	19	Temp 3	Average temperature in March for the feature
T_4	Double	19	Temp 4	Average temperature in April for the feature
T_5	Double	19	Temp 5	Average temperature in May for the feature
T_6	Double	19	Temp 6	Average temperature in June for the feature
T_7	Double	19	Temp 7	Average temperature in July for the feature
T_8	Double	19	Temp 8	Average temperature in August for the feature
T_9	Double	19	Temp 9	Average temperature in September for the feature
T_10	Double	19	Temp 10	Average temperature in October for the feature
T_11	Double	19	Temp 11	Average temperature in November for the feature
T_12	Double	19	Temp 12	Average temperature in December for the feature
T_AV2M67	Double	19	Temp av2m 67	Two-month (June–July) average for temperature for the feature
T_AV2M78	Double	19	Temp av2m 78	Two-month (July–August) average for temperature for the feature
T_AV2M89	Double	19	Temp av2m 89	Two-month (August–September) average for temperature for the feature
T_AV3M678	Double	19	Temp av3m 678	Three-month (June–August) average for temperature for the feature
T_AV3M789	Double	19	Temp av3m 789	Three-month (July–September) average for temperature for the feature

Field Name	Type	Length	Suitable Alias	Description
DSR_1	Double	19	DSR 1	Average duration of solar radiation in January for the feature
DSR_2	Double	19	DSR 2	Average duration of solar radiation in February for the feature
DSR_3	Double	19	DSR 3	Average duration of solar radiation in March for the feature
DSR_4	Double	19	DSR 4	Average duration of solar radiation in April for the feature
DSR_5	Double	19	DSR 5	Average duration of solar radiation in May for the feature
DSR_6	Double	19	DSR 6	Average duration of solar radiation in June for the feature
DSR_7	Double	19	DSR 7	Average duration of solar radiation in July for the feature
DSR_8	Double	19	DSR 8	Average duration of solar radiation in August for the feature
DSR_9	Double	19	DSR 9	Average duration of solar radiation in September for the feature
DSR_10	Double	19	DSR 10	Average duration of solar radiation in October for the feature
DSR_11	Double	19	DSR 11	Average duration of solar radiation in November for the feature
DSR_12	Double	19	DSR 12	Average duration of solar radiation in December for the feature
DSRAV2M67	Double	19	DSR av2m 67	Two-month (June–July) average for duration of solar radiation for the feature
DSRAV2M78	Double	19	DSR av2m 78	Two-month (July–August) average for duration of solar radiation for the feature
DSRAV2M89	Double	19	DSR av2m 89	Two-month (August–September) average for duration of solar radiation for the feature
DSRAV3M678	Double	19	DSR av3m 678	Three-month (June–August) average for duration of solar radiation for the feature
DSRAV3M789	Double	19	DSR av3m 789	Three-month (July–September) average for duration of solar radiation for the feature
DSR_AV12M	Double	19	DSR av12m	Average annual duration of solar radiation for the feature
C_DNALLK9	Integer	9	Clstrs DstNclAll K9	IDs for clusters generated by ISODATA algorithm for variable DstNclAll, where number of clusters = 9
C_DABCDEK5	Integer	9	Clstrs DstA-E K5	IDs for clusters generated by ISODATA algorithm for variables DstNcl A, B, C, D and E, where number of clusters = 5

Field Name	Type	Length	Suitable Alias	Description
C_DABCDEK6	Integer	9	Clstrs DstA-E K6	IDs for clusters generated by ISODATA algorithm for variables DstNcl A, B, C, D and E, where number of clusters = 6
C_DBCDK4	Integer	9	Clstrs DstBCD K4	IDs for clusters generated by ISODATA algorithm for variables DstNcl B, C and D, where number of clusters = 4
C_DBCDK6	Integer	9	Clstrs DstBCD K6	IDs for clusters generated by ISODATA algorithm for variables DstNcl B, C and D, where number of clusters = 6
C_CSSNA2K5	Integer	9	Clstrs CSS Na2 K5	IDs for clusters generated by ISODATA algorithm for variable CSS Na2, where number of clusters = 5
C_CSSNB2K5	Integer	9	Clstrs CSS Nb2 K5	IDs for clusters generated by ISODATA algorithm for variable CSS Nb2, where number of clusters = 5
C_A2EDHK3	Integer	9	Clstrs DstA-E DSHC K3	IDs for clusters generated by ISODATA algorithm for variables DstNcl A, B, C, D and E, Dispersion Score Integer and Hamlet Count Integer, where number of clusters = 3
C_A2EBHK10	Integer	9	Clstrs DstA-E DSHC K10	IDs for clusters generated by ISODATA algorithm for variables DstNcl A, B, C, D and E, Dispersion Score Integer and Hamlet Count Integer, where number of clusters = 10
C_B2DDHK3	Integer	9	Clstrs DstB-D DSHC K3	IDs for clusters generated by ISODATA algorithm for variables DstNcl B, C and D, Dispersion Score Integer and Hamlet Count Integer, where number of clusters = 3
C_ENVS1K5	Integer	9	Clstrs EnvSet1 K5	IDs for clusters generated by ISODATA algorithm for environmental variables set 1, where number of clusters = 5
C_ENVS1K8	Integer	9	Clstrs EnvSet1 K8	IDs for clusters generated by ISODATA algorithm for environmental variables set 1, where number of clusters = 8
C_ENVS2K5	Integer	9	Clstrs EnvSet2 K5	IDs for clusters generated by ISODATA algorithm for environmental variables set 2, where number of clusters = 5
C_ENVS2K7	Integer	9	Clstrs EnvSet2 K7	IDs for clusters generated by ISODATA algorithm for environmental variables set 2, where number of clusters = 7
C_ENVS3K5	Integer	9	Clstrs EnvSet3 K5	IDs for clusters generated by ISODATA algorithm for environmental variables set 3, where number of clusters = 5
C_ENVS3K11	Integer	9	Clstrs EnvSet3 K11	IDs for clusters generated by ISODATA algorithm for environmental variables set 3, where number of clusters = 11

Field Name	Type	Length	Suitable Alias	Description
C_ENVS4K3	Integer	9	Clstrs EnvSet4 K3	IDs for clusters generated by ISODATA algorithm for environmental variables set 4, where number of clusters = 3
C_ENVS4K9	Integer	9	Clstrs EnvSet4 K9	IDs for clusters generated by ISODATA algorithm for environmental variables set 4, where number of clusters = 9
Shape_Leng	Double	19	Perimeter	Perimeter of each feature in metres
Shape_Area	Double	19	Area	Area of each feature in square metres

REFERENCES CITED

Lowerre, A 2015 *Rural Settlement: Analysing Environmental Factors and Regional Variation in Historic Rural Settlement Organisation Using Regression and Clustering Techniques*. (English Heritage Research Report Series 72-2014). English Heritage