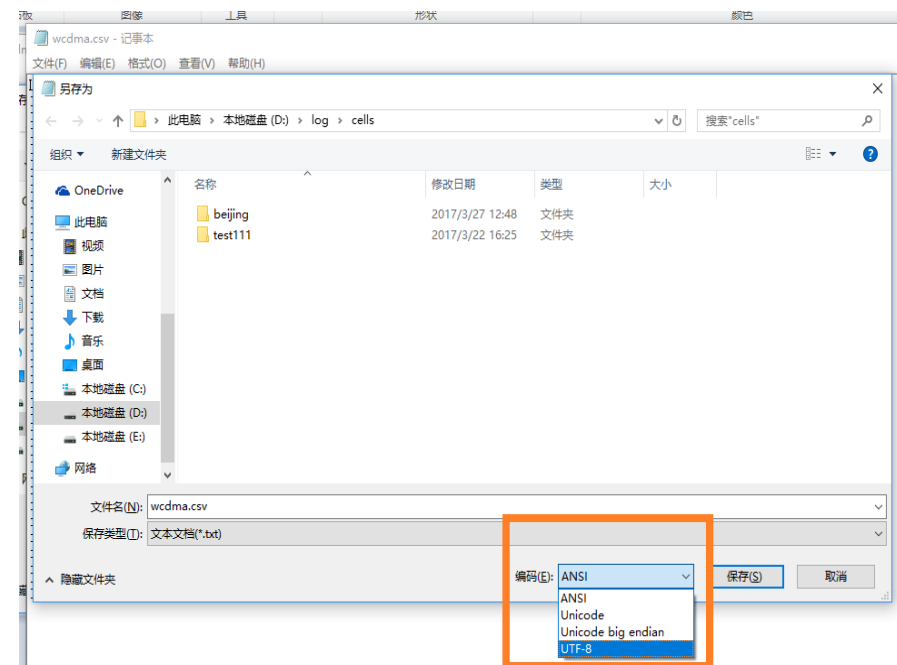


如何在NSG导入小区数据

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小区文件格式

- NSG支持导入的数据文件格式为.csv格式，可以通过excel将表格导出成.csv格式
- 支持不同的网络制式，GSM, WCDMA, CDMA, TD-SCDMA以及EvDO, LTE等
- 不同的网络不同的数据，多次导入，每次导入一个网络制式。
- 为了不出现乱码，请将.csv存成utf-8编码格式。(用记事本notepad打开，并另存为utf-8，如图)
- .csv是一个文本格式，可以用记事本打开



各种数据格式

数据列	内容以及定义
CellName	小区名称. 文本, 小于128个字节
Longitude	经度. 浮点型文本, -180.0 ... 180.0
Latitude	纬度. 浮点型文本, -90.0 ... 90
Azimuth	方位角. 整数型文本, 0...360
CellID	GSM, WCDMA, TD-SCDMA: 小区标识. 整数型文本, GSM为16位小区标识, WCDMA以及TD-SCDMA位28位小区标识。
ECellID	LTE ECI, 28位长度小区标识, 整型文本。
CPI	TDSCDMA, Cell Parameter ID. 整数型文本, 0 ... 511
PCI	LTE PCI, Physical Channel Identity, 整数型文本, 0...511
PSC	WCDMA PSC. 整数型文本, Integer(0 ... 511)
UARFCN	WCDMA and TD-SCDMA, UARFCN. 整数型文本, 0 ... 65536
ARFCN	Absolute Radio Frequency Channel Number. 整数型文本, 0...1023
EARFCN	EUTRA-ARFCN. 整数型文本, 0 ... 65535
Channel	The CDMA RF channel number. 整数型文本, 0...1023
PN	Pilot Number. 整数型文本, 0...511

各种网络的必须字段

- GSM: Longitude, Latitude, CellName, CellID, ARFCN, BSIC, Azimuth
- WCDMA: Longitude, Latitude, CellName, CellID, UARFCN, PSC, Azimuth
- TDSCDMA: Longitude, Latitude, CellName, CellID, UARFCN, CPI, Azimuth
- LTE: Longitude, Latitude, ECellID, CellName, PCI, EARFCN, Azimuth
- CDMA&EVDO: Longitude, Latitude, CellName, Channel, PN, Azimuth

• 字段区分大小写

其他非强制字段

- 全部当作字符串处理
- 每个字段最长256个字节
- 名称和字段内容对应
- 一共最多支持32个字段
- CellID转换：
 - WCDMA&TD-SCDMA: $\text{long_cellid} = \text{rnc_id} * 65536 + \text{short_cellid}$
 - ECELLID = $\text{eNB} * 256 + \text{short_cellid}$

GSM样本

- Excel

Longitude	Latitude	CellName	CellID	ARFCN	BSIC	Azimuth
116.463575	39.974739	SampleCell1	20231	642	13	0
116.464895	39.973986	SampleCell2	20235	639	51	120
116.465336	39.973426	SampleCell3	20239	648	11	240
116.461751	39.972486	SampleCell4	20243	654	17	0
116.462057	39.973695	SampleCell5	20247	96	2	120
116.466234	39.972603	SampleCell6	20251	124	16	240
116.466405	39.974504	SampleCell7	20255	645	33	0
116.465246	39.971809	SampleCell8	20259	658	60	120
116.462964	39.971912	SampleCell9	20263	653	17	240
116.46253	39.97189	SampleCell10	20267	651	23	0

- CSV

Longitude, Latitude, CellName, CellID, ARFCN, BSIC, Azimuth

116.463575,39.974739,SampleCell1,20231,642,13,0

116.464895,39.973986,SampleCell2,20235,639,51,120

116.465336,39.973426,SampleCell3,20239,648,11,240

116.461751,39.972486,SampleCell4,20243,654,17,0

116.462057,39.973695,SampleCell5,20247,96,2,120

116.466234,39.972603,SampleCell6,20251,124,16,240

116.466405,39.974504,SampleCell7,20255,645,33,0

116.465246,39.971809,SampleCell8,20259,658,60,120

116.462964,39.971912,SampleCell9,20263,653,17,240

WCDMA样本

- Excel

Longitude	Latitude	CellName	CellID	UARFCN	PSC	Azimuth
116.463575	39.974739	SampleCell1	20231	10713	243	0
116.464895	39.973986	SampleCell2	20235	10713	7	120
116.465336	39.973426	SampleCell3	20239	10713	55	240
116.461751	39.972486	SampleCell4	20243	10713	308	0
116.462057	39.973695	SampleCell5	20247	10713	286	120
116.466234	39.972603	SampleCell6	20251	10713	22	240
116.466405	39.974504	SampleCell7	20255	10713	142	0

- CSV

Longitude, Latitude, CellName, CellID, UARFCN, PSC, Azimuth

116.463575,39.974739,SampleCell1,20231,10713,243,0
116.464895,39.973986,SampleCell2,20235,10713,7,120
116.465336,39.973426,SampleCell3,20239,10713,55,240
116.461751,39.972486,SampleCell4,20243,10713,308,0
116.462057,39.973695,SampleCell5,20247,10713,286,120
116.466234,39.972603,SampleCell6,20251,10713,22,240
116.466405,39.974504,SampleCell7,20255,10713,142,0
116.465246,39.971809,SampleCell8,20259,10713,115,120
116.462964,39.971912,SampleCell9,20263,10688,243,240
116.462533,39.971891,SampleCell10,20267,10688,7,0

TD-SCDMA样本

- Excel

Longitude	Latitude	CellName	CellID	UARFCN	CPI	Azimuth
116.463575	39.974739	SampleCell1	20231	10114	4	0
116.464895	39.973986	SampleCell2	20235	10114	68	120
116.465336	39.973426	SampleCell3	20239	10114	12	240
116.461751	39.972486	SampleCell4	20243	10114	79	0
116.462057	39.973695	SampleCell5	20247	10114	99	120
116.466234	39.972603	SampleCell6	20251	10114	24	240
116.466405	39.974504	SampleCell7	20255	10114	55	0

- CSV

Longitude, Latitude, CellName, CellID, UARFCN, CPI, Azimuth

116.463575, 39.974739, SampleCell1, 20231, 10114, 4, 0

116.464895, 39.973986, SampleCell2, 20235, 10114, 68, 120

116.465336, 39.973426, SampleCell3, 20239, 10114, 12, 240

116.461751, 39.972486, SampleCell4, 20243, 10114, 79, 0

116.462057, 39.973695, SampleCell5, 20247, 10114, 99, 120

116.466234, 39.972603, SampleCell6, 20251, 10114, 24, 240

116.466405, 39.974504, SampleCell7, 20255, 10114, 55, 0

116.465246, 39.971809, SampleCell8, 20259, 10114, 38, 120

116.462964, 39.971912, SampleCell9, 20263, 10114, 35, 240

116.462533, 39.971891, SampleCell10, 20267, 10114, 7, 0

116.459649, 39.975285, SampleCell11, 20271, 10114, 55, 120

LTE样本

- Excel

ECellID	CellName	Longitude	Latitude	PCI	EARFCN	Azimuth
130023434	SampleCell1	115.90801	28.67221	13	38400	0
130023444	SampleCell2	115.90801	28.67221	12	38400	90
130023454	SampleCell3	115.90801	28.67221	14	38400	210
130023690	SampleCell4	115.88645	28.68774	38	38400	30
130023700	SampleCell5	115.88645	28.68774	36	38400	115
130023710	SampleCell6	115.88645	28.68774	37	38400	190
130023946	SampleCell7	115.89969	28.68162	18	38400	30
130023956	SampleCell8	115.89969	28.68162	20	38400	130
130023966	SampleCell9	115.89969	28.68162	19	38400	280
130024202	SampleCell10	115.89785	28.68687	28	38400	90
130024212	SampleCell11	115.89785	28.68687	29	38400	150

- CSV

```
ECellID,CellName,Longitude,Latitude,PCI,EARFCN,Azimuth
130023434,SampleCell1,115.90801,28.67221,13,38400,0
130023444,SampleCell2,115.90801,28.67221,12,38400,90
130023454,SampleCell3,115.90801,28.67221,14,38400,210
130023690,SampleCell4,115.88645,28.68774,38,38400,30
130023700,SampleCell5,115.88645,28.68774,36,38400,115
130023710,SampleCell6,115.88645,28.68774,37,38400,190
130023946,SampleCell7,115.89969,28.68162,18,38400,30
130023956,SampleCell8,115.89969,28.68162,20,38400,130
130023966,SampleCell9,115.89969,28.68162,19,38400,280
```

CDMA&EVDO样本

- Excel

Longitude	Latitude	CellName	Channel	PN	Azimuth
116.463575	39.974739	SampleCell1	283	274	0
116.464895	39.973986	SampleCell2	283	442	120
116.465336	39.973426	SampleCell3	283	106	240
116.461751	39.972486	SampleCell4	283	338	0
116.462057	39.973695	SampleCell5	283	294	120
116.466234	39.972603	SampleCell6	283	434	240
116.466405	39.974504	SampleCell7	283	356	0
116.465246	39.971809	SampleCell8	283	18	120
116.462964	39.971912	SampleCell9	283	328	240

- CSV

Longitude, Latitude, CellName, Channel, PN, Azimuth

116.463575,39.974739,SampleCell1,283,274,0

116.464895,39.973986,SampleCell2,283,442,120

116.465336,39.973426,SampleCell3,283,106,240

116.461751,39.972486,SampleCell4,283,338,0

116.462057,39.973695,SampleCell5,283,294,120

116.466234,39.972603,SampleCell6,283,434,240

116.466405,39.974504,SampleCell7,283,356,0

导入

- 菜单：加载小区文件->选择数据的类型即可进入导入过程，如有错误，报告相关的错误



注意事项

- 请确认转换后utf-8文件是否有乱码;
- 请确认csv文件是否含有一些非法字符, 如空格, 全角半角码的错误, 而导致字段导入失败;
- 本文中所有的字段区分大小写;
- 每次重新导入之前, 请将之前导入的数据清除;

关于utf-8

- UTF-8（8-bit Unicode Transformation Format）是一种针对Unicode的可变长度字符编码，又称万国码。
- NSG兼容的utf-8格式可以是微软的带BOM以及非BOM的格式。
- 如果在显示中出现乱码，一定是导入之前已经出现了乱码，请检查相关的流程是否正确。或者在导入之前，利用相关的文本工具查看是否有乱码。
- 一般发生乱码的语言，主要有日文，韩文，简体或者繁体中文等东亚双字节语言。