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GOBIERNO DE ESPAÑA
MINISTERIO DE AGRICULTURA, PESCA Y ALIMENTACIÓN

SOCIEDAD MERCANTIL ESTATAL DE INFRAESTRUCTURAS AGRARIAS
seiasa

COMUNIDAD DE REGANTES DE ALHAMA DE MURCIA

ANEJO Nº 4

DATOS DEL LEVANTAMIENTO TOPOGRÁFICO. REPLANTEO.

ANEJO Nº 4.

DATOS DEL LEVANTAMIENTO TOPOGRÁFICO.

REPLANTEO.

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1. OBJETO Y NATURALEZA DEL TRABAJO

Tiene por objeto el presente documento, da definición de los trabajos topográficos realizados en la elaboración del “Proyecto para la mejora de la regulación y gestión de las aguas para la Comunidad de Regantes de Alhama de Murcia (Murcia)”

Para la realización del mencionado proyecto, ser realizó un levantamiento completo de la parcela, así como de los puntos que condicionan de manera clara la definición geométrica del embalse (cota captación agua), realizándose el levantamiento topográfico del terreno con fecha 27 de julio del año 2021.

Las parcelas levantadas se corresponden con los números 283, 169 y 399 del polígono 28 del Término Municipal de Alhama de Murcia, se adjuntan fichas catastrales de las mismas en el Apéndice 1 del presente anejo.

Además de las parcelas mencionadas se ha levantado también la superficie afectada para la instalación de la tubería de llenado/vaciado.

A continuación, se definen los trabajos realizados.

2. SISTEMA DE COORDENADAS

Se ha utilizado como sistema de coordenadas planimetrías el Datum ETRS89, como proyección se ha utilizado la Universal Transversa de Mercator (UTM) referida al elipsoide Internacional de Hayford en su huso 30.

En altimetría, las cotas quedan referenciadas al nivel medio del mar definido por el mareógrafo fundamental de Alicante.

3. EQUIPOS UTILIZADOS

El equipo empleado para la realización del levantamiento fue:

- Receptor GPS Movil Stonex S900



Fig nº 1. Caja conteniendo GPS Móvil Stonex S900

En el Apéndice 2, se adjunta ficha técnica del mismo.

La aplicación utilizada para la toma de datos fue TopView

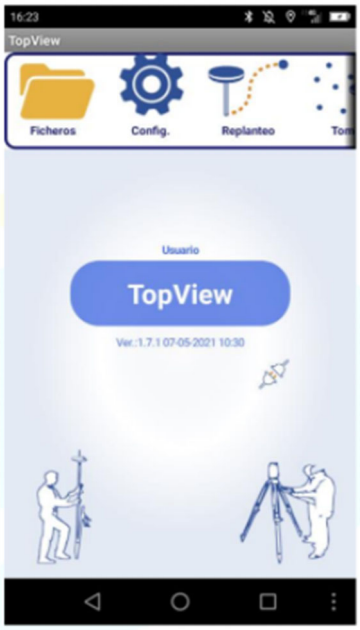


Fig nº 2. Indicaciones pantalla led.

4. METODOLOGÍA UTILIZADA

Para la realización del trabajo se ha optado por una solución GPS en tiempo real.

Se ha utilizado para tal fin el Servicio de Posicionamiento en Tiempo Real del Instituto Geográfico Nacional.



Fig nº 3. Servicio de Posicionamientos locallizables.

5. PROCEDIMIENTO DE TOMA DE DATOS.

El procedimiento empleado para los levantamientos topográficos ha sido:

- Estudio de la zona a levantar.
- Toma de datos de campo.

El primer paso ha consistido en el estudio de la zona de trabajo mediante ortofotografía digital, poniendo de manifiesto los límites hasta los que llegar con la toma de datos en campo, y conocimiento a priori de la orografía del terreno.

El listado de puntos tomados se muestra en el Apéndice 3.

6. REPLANTEO.

El replanteo consiste en trazar o marcar sobre el terreno los elementos constructivos del embalse, trazado de tuberías, obras de fábricas, etc., elementos de la obra que se describen en este proyecto de obra con especificaciones en los planos para llevar a cabo la ejecución prevista, conforme a la información proporcionada en este documento.

APENDICE 1

GOBIERNO DE ESPAÑA
MINISTERIO DE HACIENDA Y FUNCIÓN PÚBLICA
SECRETARÍA DE ESTADO DE HACIENDA
DIRECCIÓN GENERAL DEL CATASTRO

CONSULTA DESCRIPTIVA Y GRÁFICA DE DATOS CATASTRALES DE BIEN INMUEBLE

Referencia catastral: 30008A028001690000LA

DATOS DESCRIPTIVOS DEL INMUEBLE

Localización:

Polígono 28 Parcela 169
COSTERA. ALHAMA DE MURCIA [MURCIA]

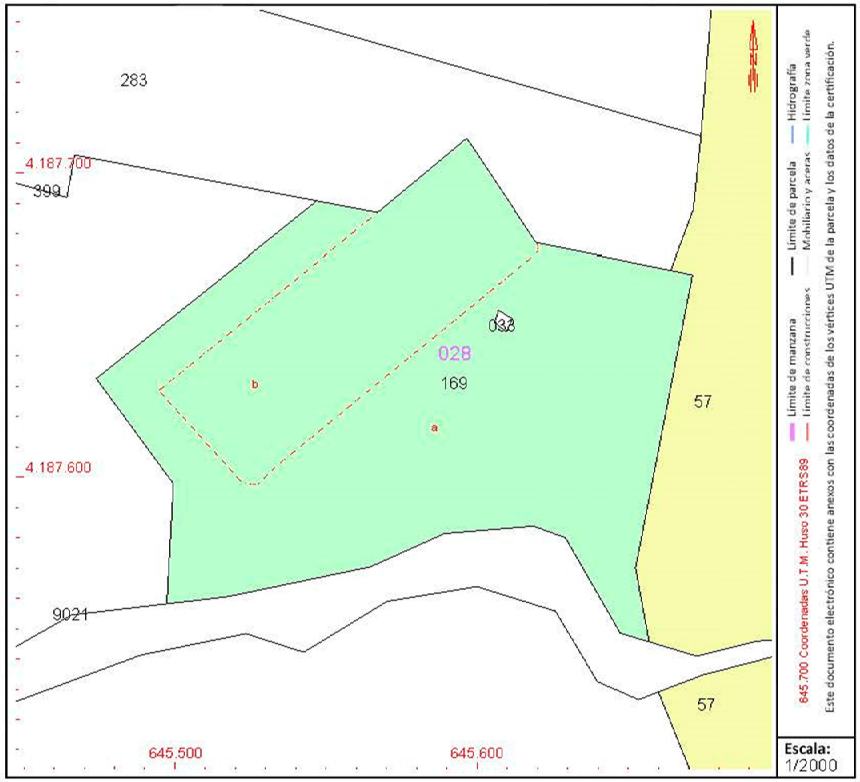
Clase: RÚSTICO
Uso principal: Agrario
Superficie construida:
Año construcción:

Cultivo

Subparcela	Cultivo/aprovechamiento	Intensidad Productiva	Superficie m²
a	C- Labor o Labradío secano	00	13.390
b	I- Improductivo	00	5.581

PARCELA

Superficie gráfica: 18.971 m2
Participación del inmueble: 100,00 %
Tipo:



Este documento no es una certificación catastral, pero sus datos pueden ser verificados a través del "Acceso a datos catastrales no protegidos de la SEC"

Lunes , 7 de Febrero de 2022

GOBIERNO DE ESPAÑA
MINISTERIO DE HACIENDA Y FUNCIÓN PÚBLICA
SECRETARÍA DE ESTADO DE HACIENDA
DIRECCIÓN GENERAL DEL CATASTRO

CONSULTA DESCRIPTIVA Y GRÁFICA DE DATOS CATASTRALES DE BIEN INMUEBLE

Referencia catastral: 30008A028002830000LK

DATOS DESCRIPTIVOS DEL INMUEBLE

Localización:

Polígono 28 Parcela 283
COSTERA. ALHAMA DE MURCIA [MURCIA]

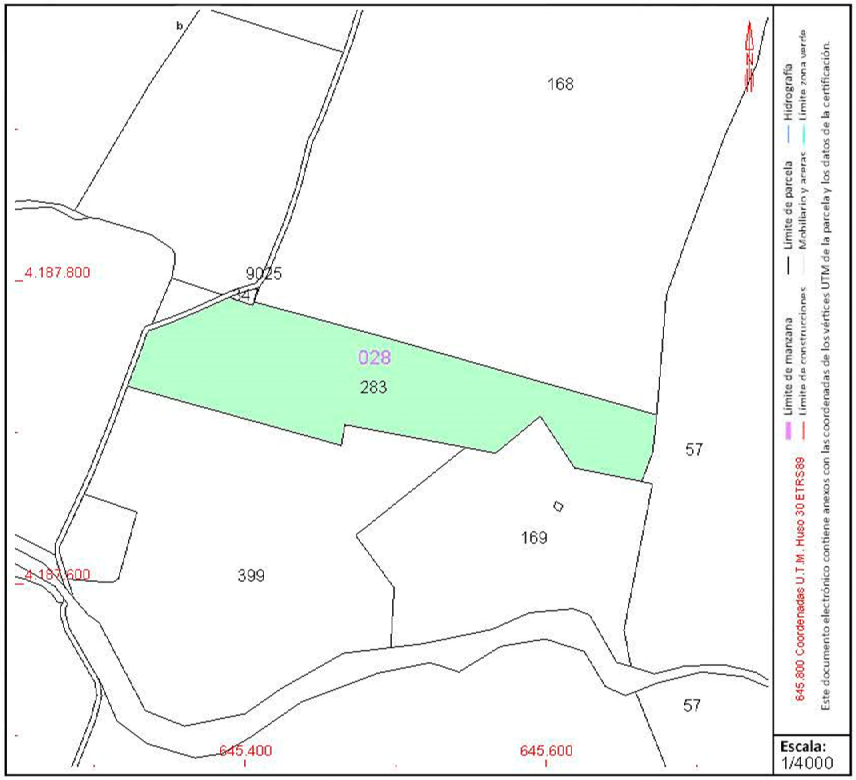
Clase: RÚSTICO
Uso principal: Agrario
Superficie construida:
Año construcción:

Cultivo

Subparcela	Cultivo/aprovechamiento	Intensidad Productiva	Superficie m²
0	E- Pastos	00	19.994

PARCELA

Superficie gráfica: 19.994 m2
Participación del inmueble: 100,00 %
Tipo:



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Lunes , 7 de Febrero de 2022

GOBIERNO DE ESPAÑA
MINISTERIO DE HACIENDA Y FUNCIÓN PÚBLICA
SECRETARÍA DE ESTADO DE HACIENDA
DIRECCIÓN GENERAL DEL CATASTRO

CONSULTA DESCRIPTIVA Y GRÁFICA DE DATOS CATASTRALES DE BIEN INMUEBLE

Referencia catastral: 30008A028003990000LQ

DATOS DESCRIPTIVOS DEL INMUEBLE

Localización:

DS COSTERA 399 Polígono 28 Parcela 399
30849 ALHAMA DE MURCIA [FUENTE DE ALEDO] [MURCIA]

Clase: RÚSTICO
Uso principal: Agrario
Superficie construida: 704 m2
Año construcción: 1888

Construcción

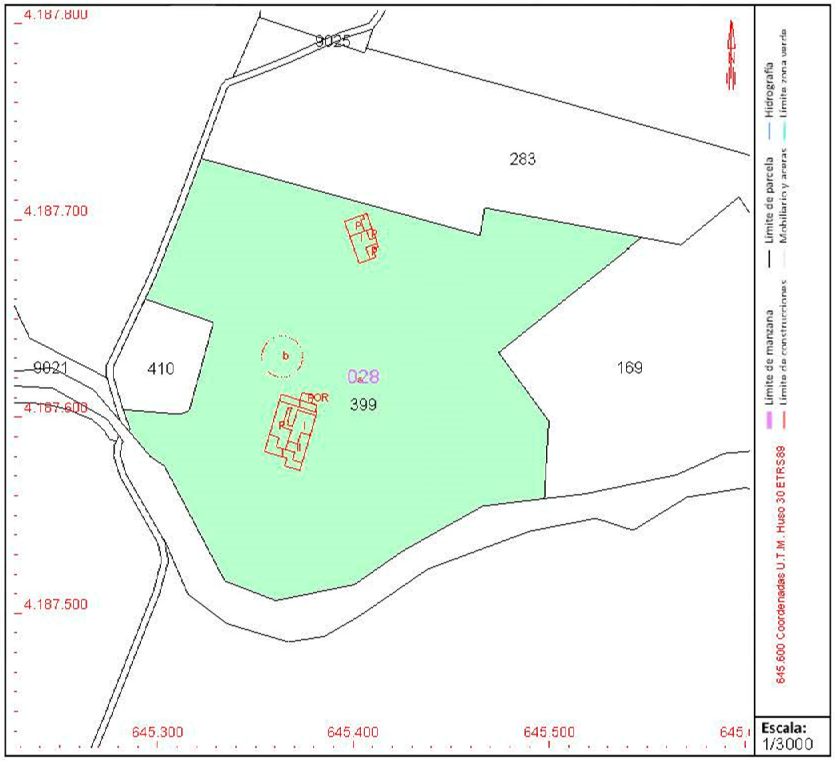
Destino	Escalera / Planta / Puerta	Superficie m²
VIVIENDA	/00/01	348
PORCHE 100%	/00/01	24
ALMACEN	/00/01	67
ALMACEN	/00/01	25
VIVIENDA	/00/01	117
ALMACEN	/00/01	28
ALMACEN	/00/01	95

Cultivo

Subparcela	Cultivo/aprovechamiento	Intensidad Productiva	Superficie m²
a	C- Labor o Labradío secano	00	33.320
b	I- Improductivo	00	338

PARCELA

Superficie gráfica: 34.569 m2
Participación del inmueble: 100,00 %
Tipo: Parcela construida sin división horizontal

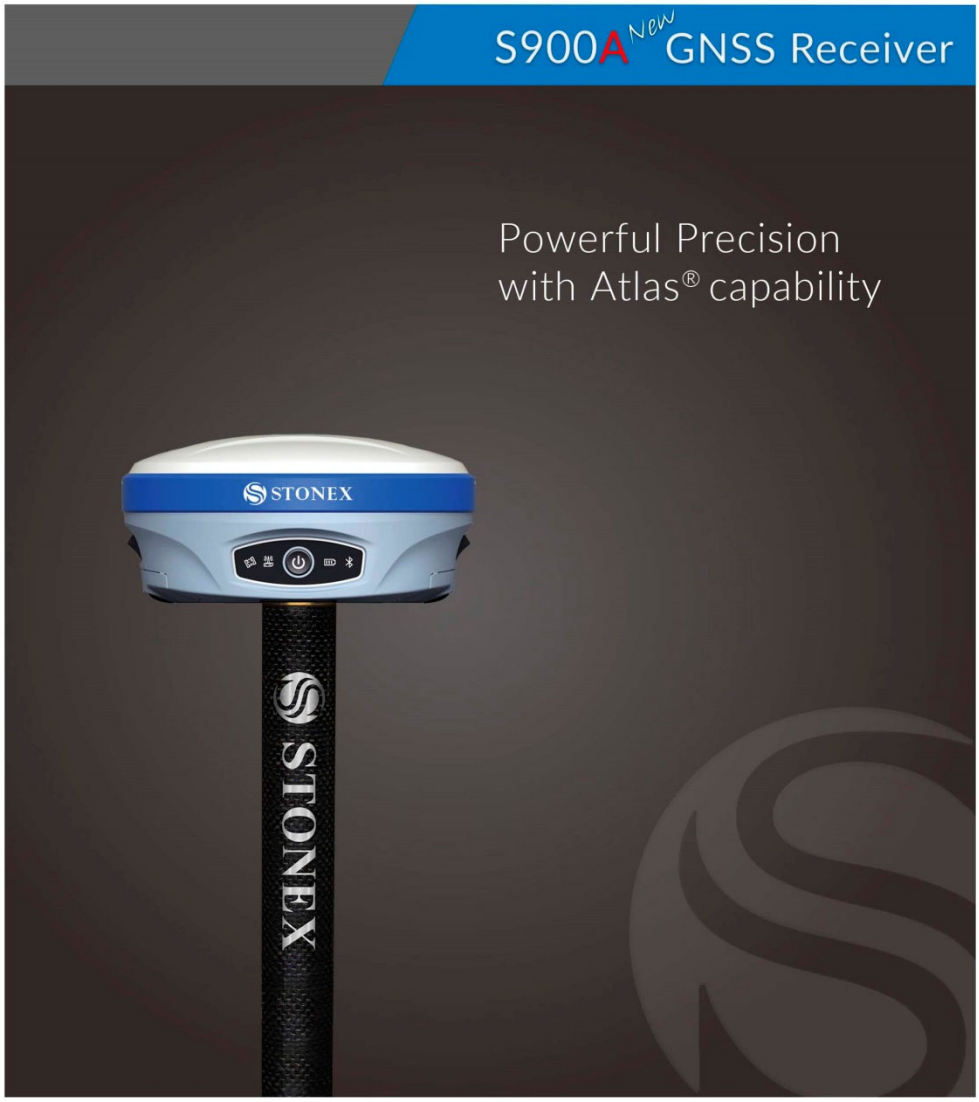


Este documento no es una certificación catastral, pero sus datos pueden ser verificados a través del "Acceso a datos catastrales no protegidos de la SEC"

Lunes , 7 de Febrero de 2022

APENDICE 2

STONEX



suite cube

S900A *New*

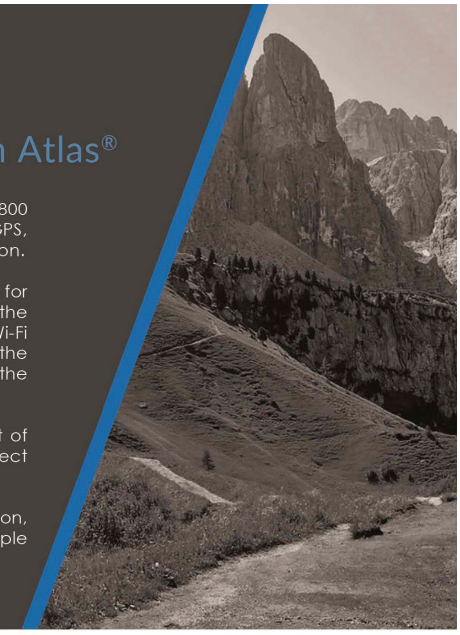
Powerful precision with Atlas®

Stonex S900A is equipped with an high performance GNSS board 800 channels and capable of supporting multiple satellite constellations: GPS, GLONASS, BEIDOU, GALILEO, QZSS and IRNSS, including L-Band correction.

Through the 4G GSM modem a fast internet connection is guaranteed for the reception of correction data and the management of the maps in the background. In the amazingly compact structure the Bluetooth and Wi-Fi modules allow always reliable data flow to the controller, and the integrated TX/RX UHF radio with selectable frequencies, make S900A the perfect system for a GNSS Base + Rover.

Stonex S900A integrates E-Bubble sensor that allows the measurement of difficult points with the pole not levelled. You can calculate the correct coordinate of a point by measuring from 3 different positions.

S900A is also equipped with the optional IMU technology. Fast initialization, up to 60° inclination and the correct coordinates of a point with a simple click.



MULTI CONSTELLATION

Stonex S900A with its 800 channels, provides an excellent on board real time navigation solution with high accuracy. All GNSS signals (GPS, GLONASS, BEIDOU, GALILEO, QZSS and IRNSS) are included, no additional cost.

4G MODEM

S900A has an internal 4G modem that operates with all world signals, a fast internet connection is guaranteed.

E-BUBBLE + IMU

S900A thanks to the E-Bubble can display directly on the software if the pole is vertical and the point will be recorded automatically when the pole is levelled. The IMU technology is also available as optional, only a fast initialization is requested.

INTELLIGENT BATTERIES

The dual slot for two Smart hot swappable batteries gives you up to 12 hours of battery life. The power level can be checked and seen on the controller or directly on a led bar on the battery.

DOUBLE FREQUENCY RADIO

S900A has integrated UHF double frequency radio, 410-470MHz and 902.4-928MHz. The needs of each country are supported.





STONEX SURVEYING SYSTEMS

S900A New

atlas

Atlas® correction service & aRTK

S900A is a Stonex GNSS Receiver capable to automatically select the best combination of GNSS signals with the possibility to receive Atlas® RTK L-band. ATLAS is an exclusive PPP technology that provides real-time, centimeter-level positions.

Atlas® is a subscription for S900A aimed to achieve 3 different levels of accuracy depending on precision type that you need.

Atlas® gives the precise centimeter-level positioning around the world, perfect when working in difficult areas.
aRTK is an innovative feature available in Stonex S900A GNSS Receiver that continue generating precise positions up to 20 minutes in case the receiver loses the land based RTK correction source.



BASIC
50 cm 95% (30 cm RMS)

H30
30 cm 95% (15 cm RMS)

H10
8 cm 95% (4 cm RMS)

SureFix Robust RTK Positioning

SureFix is the new processor that runs in combination with GNSS engine to provide high fidelity RTK quality information. The SureFix processor takes several inputs and determines the quality of the RTK solution in the form of "quality indicators". The indicators are then combined with RTK data and provide the user with high fidelity information about the quality of the RTK solution.

IMU Technology

S900A GNSS receivers have as optional feature the new IMU System that allows tilted measurement (TILT). Thanks to the new IMU technology, the edges of the buildings, the difficult and inaccessible points are no longer a problem.

What is an Inertial Measurement Unit (IMU)?

An Inertial Measurement Unit (IMU) is a self-contained system that measures linear and angular motion usually with a triad of gyroscopes and accelerometers.

What are the performances of the S900A with IMU?

- Fast initialization
- Up to 60° inclination
- 2 cm accuracy 30°
- 5 cm accuracy 60°
- Fast and precise survey
- No problem of electromagnetic disturbances



Stonex S900A with IMU system makes reliable every measurement, for both survey and stake-out jobs, and makes extremely faster the acquisition of points: up to 40% of the field work time can be saved!

S900A New TECHNICAL FEATURES

RECEIVER

Signal Tracking	GPS: L1 C/A, L1C, L1P, L2C, L2P, L5
	GLONASS: L1 C/A, L1P, L2 C/A, L2P, L3
	BEIDOU: B1, B2, B3, ACEBOC
	GALILEO: E1, E5a, E5b, ALTBOC, E6
	QZSS: L1 C/A, L1C, L2C, L5, LEX
	IRNSS: L5
	SBAS: L1, L5
L-Band	Atlas H10 / H30 / Basic (optional)[5]
Bridging of RTK outages	aRTK - Works up to 20 minutes
Channels	800
Position Rate	10 Hz (optional 20-50Hz)[5]
Signal Reacquisition	< 1 s
RTK Signal Initialization[4]	2 to 4 seconds
Hot Start	Typically < 15 s
Initialization Reliability	> 99.9 %
Internal Memory	8 GB
Micro SD Card	Expansion slot up to 32 GB
Tilt sensor	E-Bubble IMU (optional)[5]

POSITIONING[1]

STATIC GNSS SURVEYING	
High Precision Static Horizontal	2.5 mm + 0.1 ppm RMS
High Precision Static Vertical	3.5 mm + 0.4 ppm RMS
Static and Fast Static Horizontal	3 mm + 0.5 ppm RMS
Static and Fast Static Vertical	5 mm + 0.5 ppm RMS
CODE DIFFERENTIAL POSITIONING	
Accuracy	0.40 m RMS
SBAS POSITIONING[2]	
Accuracy	0.60 m RMS
REAL TIME KINEMATIC (< 30 Km) – NETWORK RTK[3]	
Fixed RTK Horizontal	5 mm + 0.5 ppm RMS
Fixed RTK Vertical	10 mm + 0.5 ppm RMS

INTEGRATED GNSS ANTENNA

High accuracy four constellation antenna, zero phase center, with internal multipath suppressive board

INTERNAL RADIO (optional)[5]

Type	Tx – Rx
Frequency Range	410 - 470 MHz 902.4 – 928 MHz
Channel Spacing	12.5 KHz / 25 KHz
Range	3-4 Km in urban environment Up to 10 Km with optimal conditions[4]

INTERNAL MODEM

Band	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/ B13/B18/B19/B20/B25/B26/B28 LTE TDD: B38/B39/B40/B41 UMTS: B1/B2/B4/B5/B6/B8/B19 GSM: B2/B3/B5/B8 Nano SIM card

COMMUNICATION

I/O Connectors	7-pins Lemo and 5-pins Lemo interfaces. Multifunction cable with USB interface for PC connection
Bluetooth	2.1 + EDR, V4.1
Wi-Fi	802.11 b/g/n
Web UI	To upgrade the software, manage the status and settings, data download, etc. via smartphone, tablet or other electronic device with Wi-Fi capability
Reference outputs	RTCM 2.1, 2.2, 2.3, 3.0, 3.1, 3.2 CMR, CMR+, ROX
Navigation outputs	NMEA 0183

POWER SUPPLY

Battery	2 rechargeable and replaceable 7.2 V – 3.400 mAh Intelligent lithium batteries
Voltage	9 to 28 V DC external power input with over-voltage protection (5 pins Lemo)
Working Time	Up to 12 hours (2 batteries hot swap)
Charge Time	Typically 4 hours

PHYSICAL SPECIFICATION

Dimensions	φ 157 mm x 76 mm
Weight	1.19 Kg (with one battery) 1.30 Kg (with two batteries)
Operating Temperature	-40°C to 65°C (-40°F to 149°F)
Storage Temperature	-40°C to 80°C (-40°F to 176°F)
Waterproof/Dustproof	IP67
MIL- STD	MIL-STD-810H
Shock Resistance	Designed to endure to a 2 m pole drop on concrete floor with no damage
Vibration	Vibration resistant

Illustrations, descriptions and technical specifications are not binding and may change

1. Accuracy and reliability are generally subject to satellite geometry (DOPs), multipath, atmospheric conditions and obstructions. In static mode they are subject even to occupation times: the longer is the Baseline, the longer must be the occupation time.
2. Depends on SBAS system performance.
3. Network RTK precision depends on the network performances and are referenced to the closest physical base station.
4. Varies with the operating environment and with electromagnetic pollution.
5. Optional, it can be activated via activation code.

STANDARD MIL-STD 810H



MADE IN ITALY

If you are looking for a "Made in Italy" instrument with a 3 years warranty, you can purchase the italian version of our S900A GNSS Receiver.

STONEX AUTHORIZED DEALER

STONEX®
Part of **UniStrong**

Viale dell'Industria 53 - 20037 Paderno Dugnano (MI) - Italy
Phone +39 02 78619201
www.stonex.it | info@stonex.it

UNI EN ISO 9001:2015 - S900A NEW - FEBRUARY 2020 - VER04 - REV-02

APENDICE 3

X	Y	Z	CODIGO
642207,924	4193878,86	232,499	arqueta_terreno
642206,696	4193876,897	233,526	arqueta_terreno
642179,187	4193877,157	234,576	canal
642183,329	4193882,61	233,489	lamina_agua
645644,543	4187603,151	243,033	camino
645641,032	4187603,845	242,898	camino
645642,967	4187600,233	243,289	camino
645639,02	4187599,188	243,367	camino
645641,249	4187593,047	244,272	camino
645636,106	4187594,192	244,237	camino
645636,18	4187587,834	245,001	camino
645632,371	4187589,056	244,66	camino
645630,74	4187593,096	244,203	camino
645623,184	4187593,975	243,563	camino
645621,291	4187590,898	243,632	camino
645614,978	4187591,956	242,905	camino
645615,039	4187595,305	242,804	camino
645604,895	4187596,434	241,891	camino
645603,138	4187593,032	241,884	camino
645594,454	4187593,537	241,124	camino
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645581,177	4187590,282	240,515	camino
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645551,397	4187586,103	238,096	camino
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645539,615	4187590,867	236,829	camino
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645527,014	4187589,793	235,586	camino
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645515,317	4187592,25	234,63	camino
645503,684	4187594,772	233,444	camino
645503,99	4187598,041	233,173	camino
645494,592	4187600,403	232,185	camino
645492,345	4187597,586	232,303	camino
645477,589	4187601,892	230,742	camino
645477,8	4187605,263	230,485	camino
645466,053	4187608,938	229,265	camino
645463,527	4187606,583	229,244	camino

645451,847	4187609,74	227,94	camino
645450,92	4187613,347	227,717	camino
645439,208	4187613,728	226,552	camino
645437,968	4187610,924	226,414	camino
645428,112	4187611,323	225,465	camino
645428,698	4187614,219	225,498	camino
645417,306	4187618,393	224,305	camino
645414,299	4187616,491	224,111	camino
645405,486	4187623,765	223,185	camino
645407,436	4187626,121	223,216	camino
645397,345	4187635,538	222,237	camino
645394,069	4187633,61	222,096	camino
645379,091	4187646,11	220,444	camino
645380,286	4187648,978	220,387	camino
645371,981	4187655,515	219,821	camino
645369,137	4187653,769	219,735	camino
645363,905	4187659,121	218,725	camino
645365,983	4187661,515	218,81	camino
645351,351	4187676,672	216,543	camino
645341,43	4187683,306	215,597	camino
645343,345	4187685,969	215,737	camino
645336,643	4187692,313	214,952	camino
645334,218	4187690,472	214,814	camino
645326,878	4187695,432	214,081	camino
645328,435	4187697,996	214,12	camino
645321,861	4187701,046	213,674	camino
645318,499	4187702,369	213,522	camino
645316,953	4187698,69	213,563	camino
645314,763	4187690,765	213,741	relleno
645318,193	4187688,925	214,237	relleno
645344,854	4187677,625	216,223	relleno
645348,719	4187669,269	216,903	relleno
645367,146	4187651,902	219,703	relleno
645377,931	4187641,705	220,674	relleno
645379,885	4187633,264	221,1	relleno
645384,039	4187625,043	221,616	relleno
645388,931	4187618,142	222,13	relleno
645391,086	4187614,736	222,857	relleno
645390,023	4187610,737	222,837	relleno
645391,094	4187600,182	222,636	relleno
645388,933	4187590,937	222,99	relleno
645386,552	4187584,658	223,239	relleno
645396,061	4187584,826	223,693	relleno
645396,005	4187575,859	223,931	relleno

645392,131	4187570,352	223,638	relleno
645403,422	4187564,124	224,64	relleno
645413,063	4187559,109	225,51	relleno
645419,967	4187553,57	225,129	relleno
645422,504	4187560,189	225,954	relleno
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645439,805	4187565,947	227,561	relleno
645449,093	4187563,552	227,901	relleno
645457,718	4187564,1	228,654	relleno
645468,437	4187563,131	229,178	relleno
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645473,512	4187572,191	230,832	relleno
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645488,799	4187577,58	232,362	relleno
645494,382	4187581,109	233,26	relleno
645499,383	4187580,184	233,85	relleno
645504,26	4187580,37	234,342	relleno
645509,416	4187583,052	234,87	relleno
645516,298	4187581,152	235,56	relleno
645522,701	4187580,057	236,245	relleno
645529,008	4187579,229	236,491	relleno
645537,069	4187577,476	236,945	relleno
645544,654	4187576,425	237,646	relleno
645552,07	4187578,072	238,176	relleno
645558,853	4187579,249	239,061	relleno
645551,288	4187581,147	238,293	relleno
645514,889	4187586,723	235,436	relleno
645507,715	4187586,067	234,586	relleno
645498,907	4187586,232	233,596	relleno
645491,256	4187588,385	232,763	relleno
645482,019	4187590,115	231,885	relleno
645472,324	4187593,34	231,01	relleno
645461,303	4187597,854	229,86	relleno
645452,241	4187596,056	228,935	relleno
645443,557	4187592,856	228,216	relleno
645436,862	4187592,593	227,568	relleno
645429,154	4187590,973	226,889	relleno
645424,707	4187588,705	226,521	relleno
645429,911	4187597,983	226,655	relleno
645343,483	4187691,578	215,397	relleno
645349,13	4187694,272	215,876	relleno
645357,555	4187693,788	216,387	relleno
645363,476	4187693,771	216,882	relleno

645371,579	4187694,885	217,565	relleno
645377,568	4187696,298	217,934	relleno
645384,259	4187698,094	218,393	relleno
645390,295	4187702,459	218,95	relleno
645393,903	4187704,299	218,839	relleno
645399,404	4187708,55	218,766	relleno
645405,858	4187710,912	218,802	relleno
645412,31	4187713,177	219,222	relleno
645422,722	4187712,673	219,581	relleno
645430,091	4187711,921	219,915	relleno
645440,528	4187713,602	220,076	relleno
645446,551	4187706,755	221,036	relleno
645457,544	4187706,609	221,767	relleno
645468,259	4187703,182	221,948	relleno
645477,744	4187702,976	221,854	relleno
645487,915	4187703,526	222,933	relleno
645496,247	4187693,173	224,224	relleno
645507,968	4187686,827	225,651	relleno
645514,667	4187686,145	226,135	relleno
645521,317	4187689,654	226,351	relleno
645529,387	4187691,524	226,997	relleno
645535,026	4187694,713	227,257	relleno
645546,274	4187697,196	228,456	relleno
645554,116	4187703,738	228,297	relleno
645558,88	4187707,068	228,228	relleno
645557,922	4187712,256	227,113	relleno
645564,084	4187717,585	227,24	relleno
645569,055	4187717,687	228,099	relleno
645576,028	4187721,545	228,279	relleno
645581,312	4187720,521	228,787	relleno
645583,673	4187726,174	228,625	relleno
645592,663	4187728,832	229,163	relleno
645592,669	4187728,933	229,158	relleno
645599,54	4187731,279	229,356	relleno
645608,073	4187731,628	229,253	relleno
645615,871	4187728,646	229,275	relleno
645615,446	4187724,385	230,264	relleno
645616,147	4187717,614	231,144	relleno
645620,037	4187707,735	231,975	relleno
645621,295	4187694,879	233,294	relleno
645623,476	4187685,507	234,237	relleno
645622,85	4187679,511	234,801	relleno
645623,342	4187672,095	235,364	relleno
645626,161	4187663,674	235,587	relleno

645627,338	4187658,037	236,236	relleno
645627,194	4187654,152	237,114	relleno
645626,174	4187650,285	237,483	relleno
645625,168	4187645,456	237,877	relleno
645623,334	4187637,235	238,803	relleno
645624,061	4187627,449	239,802	relleno
645627,841	4187619,307	240,775	relleno
645630,723	4187614,118	241,426	relleno
645631,417	4187608,989	242,044	relleno
645641,185	4187604,239	242,787	camino
645644,668	4187603,622	242,942	camino
645647,871	4187612,347	242,192	camino
645645,528	4187614,977	242,047	camino
645649,819	4187626,168	241,371	camino
645652,616	4187625,794	241,513	camino
645655,342	4187636,793	241,348	camino
645658,337	4187636,382	241,46	camino
645663,158	4187642,285	241,893	camino
645660,327	4187645,326	241,686	camino
645664,772	4187657,659	241,652	camino
645667,859	4187658,267	241,808	camino
645671,084	4187669,472	241,507	camino
645668,497	4187671,257	241,354	camino
645671,69	4187681,767	240,787	camino
645674,879	4187681,82	240,744	camino
645678,601	4187694,623	239,836	camino
645675,626	4187696,631	239,519	camino
645679,758	4187706,597	238,736	camino
645682,398	4187706,71	238,847	camino
645681,769	4187714,424	237,987	camino
645684,352	4187714,187	237,919	camino
645686,854	4187725,239	237,238	camino
645684,348	4187726,754	237,09	camino
645685,907	4187739,618	236,395	camino
645688,673	4187740,304	236,559	camino
645688,703	4187754,916	235,275	camino
645686,236	4187755,92	235,249	camino
645685,926	4187769,509	234,697	camino
645688,586	4187770,152	234,772	camino
645689,609	4187785,977	233,932	camino
645686,988	4187787,55	233,968	camino
645688,994	4187802,744	233,594	camino
645691,679	4187803,436	233,569	camino
645693,784	4187814,976	233,678	camino

645691,812	4187816,881	233,583	camino
645693,97	4187822,236	233,646	camino
645682,482	4187755,738	234,5	camino
645682,468	4187755,771	234,486	relleno
645676,579	4187756,738	232,825	relleno
645673,211	4187754,893	231,658	relleno
645669,404	4187753,575	230,797	relleno
645667,713	4187750,898	230,129	relleno
645664,105	4187751,266	230,726	relleno
645662,017	4187747,156	231,01	relleno
645657,117	4187748,221	231,39	relleno
645648,437	4187750,568	231,117	relleno
645641,997	4187748,843	230,59	relleno
645638,197	4187748,487	230,124	relleno
645636,939	4187755,532	229,246	relleno
645632,483	4187755,547	228,503	relleno
645627,259	4187754,663	228,238	relleno
645623,618	4187752,51	226,982	relleno
645621,206	4187751,335	226,065	relleno
645618,726	4187751,032	226,62	relleno
645617,867	4187756,949	225,977	relleno
645612,815	4187760,462	226,465	relleno
645608,089	4187765,163	226,522	relleno
645600,13	4187771,249	225,937	relleno
645588,23	4187771,13	225,164	relleno
645585,799	4187774,305	225,035	relleno
645580,92	4187774,687	223,794	relleno
645574,536	4187773,709	222,543	relleno
645568,967	4187772,193	221,58	relleno
645563,985	4187769,341	221,277	relleno
645553,452	4187768,246	221,127	relleno
645546,217	4187770,109	220,555	relleno
645538,033	4187770,948	220,245	relleno
645532,029	4187775,315	219,448	relleno
645526,815	4187771,489	219,393	relleno
645518,576	4187767,028	219,341	relleno
645509,565	4187764,466	219,461	relleno
645508,292	4187770,279	218,631	relleno
645502,902	4187774,623	217,881	relleno
645498,731	4187778,975	217,271	relleno
645490,096	4187784,932	216,752	relleno
645481,577	4187788,729	216,009	relleno
645473,495	4187791,766	215,385	relleno
645466,94	4187795,657	214,819	relleno

645458,561	4187799,067	214,129	relleno
645452,26	4187807,885	213,394	relleno
645449,523	4187809,583	212,412	relleno
645444,572	4187809,613	212,68	relleno
645440,112	4187814,377	211,528	relleno
645432,79	4187812,431	211,498	relleno
645428,669	4187814,401	211,474	relleno
645428,834	4187819,659	211,514	relleno
645429,788	4187823,443	211,538	relleno
645426,4	4187825,226	211,78	relleno
645427,028	4187833,234	211,844	camino
645424,68	4187834,02	211,57	camino
645420,545	4187826,879	211,357	camino
645422,303	4187823,113	211,178	camino
645414,907	4187812,33	210,811	camino
645416,185	4187807,761	210,998	camino
645411,371	4187801,753	211,252	camino
645408,401	4187802,308	211,131	camino
645402,136	4187795,936	211,351	camino
645399,658	4187797,373	211,273	camino
645390,305	4187793,877	211,502	camino
645390,057	4187791,37	211,6	camino
645376,952	4187786,096	211,415	camino
645375,053	4187787,506	211,346	camino
645361,124	4187781,521	211,063	camino
645360,684	4187778,78	211,099	camino
645346,795	4187772,088	210,891	camino
645343,455	4187773,108	210,807	camino
645338,229	4187769,429	210,644	camino
645339,149	4187767,366	210,753	camino
645332,997	4187760,316	210,779	camino
645330,643	4187760,395	210,859	camino
645325,546	4187748,378	211,223	camino
645327,089	4187745,906	211,336	camino
645320,832	4187730,282	212,056	camino
645318,264	4187730,182	212,129	camino
645314,57	4187719,963	212,446	camino
645316,009	4187717,876	212,524	camino
645313,058	4187709,96	212,835	camino
645310,637	4187709,363	212,781	camino
645307,516	4187700,511	213,16	camino
645308,595	4187695,788	213,302	camino
645320,637	4187703,97	213,698	relleno
645325,697	4187714,728	213,26	relleno

645333,225	4187716,374	214,171	relleno
645343,43	4187719,777	213,961	relleno
645351,963	4187723,59	215,024	relleno
645349,659	4187733,389	213,72	relleno
645360,474	4187745,185	213,659	relleno
645365,537	4187751,375	213,563	relleno
645373,53	4187756,677	213,606	relleno
645376,369	4187765,559	213,48	relleno
645382,871	4187769,61	213,846	relleno
645382,879	4187769,62	213,847	tapa
645383,004	4187769,926	213,841	tapa
645383,356	4187769,72	213,85	tapa
645383,247	4187769,484	213,863	tapa
645383,025	4187769,479	213,861	tapa
645383,083	4187769,662	213,862	tapa
645382,059	4187770,021	213,313	relleno
645382,962	4187770,523	213,353	relleno
645383,91	4187770,212	213,387	relleno
645384,194	4187769,368	213,403	relleno
645383,517	4187768,76	213,402	relleno
645382,723	4187768,87	213,419	relleno
645384,962	4187773,503	213,119	relleno
645392,715	4187777,242	212,883	relleno
645397,14	4187782,165	212,573	relleno
645389,399	4187788,67	212,513	mojon
645404,918	4187786,077	212,611	mojon
645410,254	4187795,626	212,273	mojon
645408,649	4187788,449	212,352	relleno
645412,129	4187779,746	213,341	relleno
645421,812	4187780,316	214,136	relleno
645425,545	4187778,145	214,473	relleno
645432,21	4187778,777	214,88	relleno
645441,271	4187778,914	214,827	relleno
645448,167	4187777,49	215,334	relleno
645449,992	4187775,901	215,37	relleno
645459,021	4187772,906	215,907	relleno
645464,229	4187770,865	216,582	relleno
645468,048	4187770,671	216,913	relleno
645472,126	4187767,72	217,455	mojon
645474,959	4187766,029	217,645	relleno
645467,201	4187759,512	217,343	relleno
645464,925	4187753,798	217,468	relleno
645461,795	4187746,717	217,886	relleno
645454,756	4187742,755	218,498	relleno

645448,528	4187740,307	218,779	relleno
645448,816	4187735,467	219,052	relleno
645445,671	4187729,608	219,197	relleno
645439,839	4187726,499	219,085	relleno
645449,455	4187727,48	219,541	relleno
645456,908	4187728,295	219,608	relleno
645447,808	4187718,212	220,07	relleno
645435,922	4187711,729	220,045	relleno
645444,734	4187712,42	220,359	relleno
645452,691	4187723,961	219,9	relleno
645462,055	4187727,967	220,042	relleno
645475,331	4187730,952	220,263	relleno
645483,78	4187730,663	220,878	relleno
645497,587	4187729,882	221,77	relleno
645513,617	4187734,352	222,254	relleno
645522,261	4187742,863	221,936	relleno
645527,326	4187749,134	221,79	relleno
645534,473	4187752,245	221,63	relleno
645548,779	4187753,204	222,177	relleno
645557,812	4187750,639	223,205	relleno
645561,938	4187755,913	222,903	relleno
645564,938	4187756,762	223,349	relleno
645570,688	4187759,445	223,043	relleno
645576,065	4187760,683	224,911	relleno
645579,88	4187765,923	224,903	relleno
645585,382	4187765,601	225,332	relleno
645584,619	4187758,188	226,046	relleno
645581,72	4187753,304	225,912	relleno
645577,913	4187753,185	226,138	relleno
645571,62	4187743,392	226,22	relleno
645575,952	4187737,681	227,171	mojon
645574,39	4187735,282	227,049	relleno
645566,519	4187733,461	226,116	relleno
645560,142	4187728,11	226,102	relleno
645550,851	4187717,725	225,981	relleno
645551,659	4187706,803	227,628	relleno
645551,342	4187706,387	227,714	relleno
645560,383	4187694,202	229,629	pie_t
645585,639	4187715,812	229,583	pie_t
645596,001	4187720,921	229,96	pie_t
645611,429	4187701,403	232,341	pie_t
645621,254	4187682,205	234,58	ºº
645619,943	4187672,984	235,427	relleno
645618,368	4187664,94	235,221	relleno

645620,646	4187655,864	237,185	relleno
645621,231	4187644,468	238,265	relleno
645622,24	4187635,331	239	relleno
645622,004	4187621,219	240,357	relleno
645630,516	4187613,541	241,458	relleno
645628,203	4187609,438	241,829	relleno
645630,806	4187609,14	242,032	relleno
645617,851	4187612,739	240,962	relleno
645605,345	4187614,244	240,313	relleno
645599,466	4187610,468	240,527	relleno
645592,962	4187615,15	239,608	relleno
645581,754	4187613,242	238,819	relleno
645573,744	4187615,282	238,218	relleno
645563,447	4187616,902	237,38	relleno
645557,162	4187610,622	236,989	relleno
645553,519	4187605,794	236,921	relleno
645548,538	4187596,378	237,388	relleno
645535,361	4187599,174	236,377	relleno
645518,84	4187599,946	235,408	balsa
645502,01	4187628,948	235,377	balsa
645502,727	4187631,15	235,342	balsa
645519,55	4187625,488	230,991	pie_t
645526,244	4187621,292	230,572	pie_t
645580,79	4187667,057	230,361	pie_t
645594,151	4187686,991	230,65	pie_t
645598,698	4187678,579	230,91	pie_t
645618,926	4187675,439	235,477	balsa
645619,256	4187678,966	235,532	balsa
645596,946	4187708,345	235,464	balsa
645593,791	4187708,8	235,484	balsa
645527,011	4187625,708	230,249	relleno
645527,879	4187598,533	235,427	balsa
645522,995	4187597,935	235,48	balsa
645518,805	4187600,124	235,411	balsa
645518,464	4187597,961	234,947	pie_t
645504,688	4187611,504	232,135	pie_t
645497,229	4187613,254	231,594	relleno
645489,759	4187619,875	230,682	relleno
645480,07	4187619,143	230,222	relleno
645473,641	4187614,622	230,01	relleno
645468,189	4187621,977	229,15	relleno
645466,353	4187633,794	228,281	relleno
645468,849	4187638,533	228,175	relleno
645475,065	4187643,69	228,202	relleno

645481,9	4187646,394	228,21	relleno
645485,87	4187654,332	227,687	relleno
645486,13	4187641,306	228,877	relleno
645489,121	4187631,71	229,892	relleno
645492,14	4187628,588	230,133	pie_t
645492,574	4187635,042	229,769	pie_t
645498,09	4187641,185	229,572	pie_t
645503,712	4187646,778	229,109	pie_t
645508,758	4187650,782	228,967	pie_t
645506,94	4187653,744	228,416	relleno
645497,201	4187654,671	228,094	relleno
645486,022	4187658,75	227,396	relleno
645482,034	4187665,272	226,599	relleno
645486,24	4187678,431	225,246	relleno
645475,366	4187677,899	224,956	relleno
645465,489	4187678,526	224,413	relleno
645453,083	4187679,491	223,842	relleno
645445,338	4187675,199	224,143	relleno
645438,46	4187674,42	223,837	relleno
645434,24	4187669,917	223,894	relleno
645418,269	4187663,742	222,943	relleno
645417,535	4187655,389	223,258	relleno
645411,133	4187649,847	222,807	relleno
645399,442	4187656,073	221,539	relleno
645392,73	4187654,872	220,961	relleno
645388,62	4187654,791	220,706	relleno
645679,805	4187708,505	238,717	estaca
645672,161	4187702,218	238,41	relleno
645664,638	4187705,754	237,152	relleno
645654,976	4187697,946	236,239	relleno
645650,464	4187692,984	235,672	relleno
645643,567	4187688,518	235,513	relleno
645638,991	4187687,165	234,441	relleno
645640,214	4187673,597	235,88	relleno
645636,209	4187670,567	235,418	relleno
645638,981	4187664,269	235,817	relleno
645644,218	4187662,609	237,009	relleno
645646,247	4187660,109	237,05	relleno
645645,171	4187654,71	237,755	relleno
645645,7	4187650,657	238,05	relleno
645646,104	4187647,371	238,568	relleno
645645,546	4187641,853	238,902	relleno
645646,315	4187634,287	239,637	relleno
645645,029	4187626,55	240,61	relleno

645376,762	4187557,4	222,5558	relleno
645380,373	4187578,227	222,546	relleno
645383,984	4187545,955	223,1622	relleno
645405,962	4187541,109	224,1458	relleno
645441,851	4187553,916	226,0492	relleno
645434,568	4187657,164	224,6544	relleno
645432,425	4187644,815	225,2319	relleno
645432,92	4187631,149	225,6104	relleno
645451,375	4187621,763	227,7373	relleno
645451,705	4187635,101	227,4086	relleno
645455,165	4187652,554	226,3397	relleno
645462,251	4187667,702	225,4312	relleno
645378,404	4187721,458	216,5799	relleno
645384,461	4187737,51	215,4659	relleno
645396,049	4187761,72	214,2478	relleno
645411,85	4187771,983	214,0627	relleno
645416,359	4187752,711	215,8735	relleno
645434,297	4187754,191	216,7941	relleno
645410,6	4187731,169	217,3943	relleno
645509,277	4187667,808	227,1618	relleno
645531,481	4187682,107	228,0595	relleno
645528,192	4187706,924	225,7333	relleno
645501,218	4187714,813	223,2187	relleno
645476,875	4187714,156	221,4665	relleno
645625,803	4187723,235	229,6617	relleno
645629,504	4187713,166	230,4838	relleno
645633,514	4187704,33	231,6414	relleno
645636,085	4187694,57	232,8319	relleno
645628,99	4187689,124	232,9415	relleno
645628,579	4187701,351	231,9551	relleno
645624,878	4187713,474	230,8783	relleno
645638,861	4187717,378	232,4007	relleno
645644,002	4187705,152	233,8841	relleno
645653,873	4187712,652	235,1864	relleno
645633,602	4187679,97	234,2165	relleno
645643,883	4187680,176	236,0408	relleno
645659,508	4187682,333	239,346	relleno
645636,013	4187650,354	237,7037	relleno
645636,013	4187635,247	239,1362	relleno
645636,013	4187624,082	240,4462	relleno
645625,379	4187599,728	243,0997	relleno
645614,374	4187601,041	242,3948	relleno
645601,89	4187602,847	241,4324	relleno
645582,178	4187604,16	239,8338	relleno

645397,544	4187666,668	221,14	relleno
645397,134	4187680,721	220,2323	relleno
645571,278	4187625,454	237,1925	relleno
645582,889	4187634,351	236,7709	relleno
645596,401	4187645,117	236,587	relleno
645610,158	4187660,305	236,5564	relleno
645604,867	4187634,831	237,8063	relleno
645609,485	4187624,257	239,4599	relleno
645594,958	4187624,065	238,7458	relleno
645610,68	4187667,357	235,5808	relleno
645594,521	4187653,709	235,6215	relleno
645577,112	4187639,389	235,593	relleno
645367,206	4187564,35	221,8507	relleno
645349,637	4187590,167	219,6285	relleno
645355,248	4187610,821	219,4265	relleno
645347,78	4187650,677	219,0222	relleno
645310,248	4187554,386	214,4507	relleno
645346,146	4187547,152	219,9821	relleno
645335,435	4187554,675	218,3236	relleno
645322,407	4187581,585	216,4912	relleno
645315,46	4187626,723	214,9851	relleno
645319,802	4187652,765	216,165	relleno
645312,65	4187679,033	214,3271	relleno
645368,218	4187641,541	218,7217	relleno
645356,641	4187610,993	219,5338	relleno
645355,409	4187580,017	221,0594	relleno
645359,87	4187567,948	221,3892	relleno
645381,185	4187544,341	222,8742	relleno
645405,728	4187549,896	224,8183	relleno
645366,83	4187587,85	221,1386	relleno
645364,514	4187624,416	218,1056	relleno
645356,641	4187651,724	219,0908	relleno
645340,717	4187752,935	212,0107	relleno
645359,927	4187768,063	211,9364	relleno
645361,091	4187766,899	212,2268	relleno
645381,465	4187738,972	215,2802	relleno
645373,024	4187715,117	216,6128	relleno
645341,009	4187702,317	215,0001	relleno
645368,076	4187704,935	216,715	relleno
645386,413	4187708,717	217,8541	relleno
645389,032	4187725,299	216,985	relleno
645402,711	4187756,135	215,22	relleno
645417,846	4187768,354	214,6701	relleno
645479,259	4187779,99	216,7579	relleno

645496,721	4187764,863	218,5224	relleno
645503,997	4187755,554	219,8289	relleno
645418,429	4187757,881	215,4634	relleno
645646,613	4187728,208	232,9776	relleno
645660,293	4187682,826	239,3522	relleno
645584,91	4187657,807	232,8394	relleno
645543,581	4187656,353	233,2429	relleno
645463,541	4187651,989	227,0654	relleno
645524,953	4187668,571	228,8653	relleno
645522,923	4187698,536	225,9267	relleno
645512,681	4187714,937	223,8847	relleno
645625,425	4187596,718	243,5359	relleno
645584,772	4187654,715	233,5662	relleno
645545,631	4187670,189	234,2887	relleno
645460,922	4187646,54	227,3	relleno
645444,922	4187621,464	227,2153	relleno
644552,12	4187266,343	189,1098	tu
644557,672	4187264,332	189,3474	tu
644555,741	4187270,766	189,1273	tu
644562,338	4187272,294	189,2963	tu
644560,005	4187280,738	189,0737	tu
644565,557	4187283,15	189,2032	tu
644562,178	4187289,905	188,9652	tu
644569,057	4187303,427	188,8977	tu
644575,704	4187311,076	189,0089	tu
644571,999	4187313,988	188,7675	tu
644576,108	4187319,94	188,7895	tu
644587,29	4187337,759	188,7877	tu
644586,269	4187343,063	188,6096	tu
644607,035	4187379,247	188,6656	tu
644602,449	4187384,617	188,4444	tu
644611,36	4187402,167	188,4318	tu
644617,78	4187404,393	188,745	tu
644626,739	4187426,99	188,5709	tu
644622,981	4187429,409	188,3787	tu
644637,399	4187452,383	188,5323	tu
644634,609	4187455,585	188,2826	tu
644646,36	4187469,837	188,6486	tu
644644,597	4187473,155	188,5165	tu
644657,025	4187484,227	188,9306	tu
644654,367	4187488,546	188,7316	tu
644665,501	4187493,114	189,1703	tu
644660,765	4187497,517	189,0084	tu
644679,813	4187509,707	189,5832	tu

644671,404	4187513,048	189,293	tu
644677,463	4187520,931	189,4376	tu
644686,446	4187516,493	189,7909	tu
644682,999	4187527,456	189,2757	tu
644689,684	4187522,236	189,8386	tu
644690,498	4187538,375	189,3649	tu
644699,719	4187531,83	190,1019	tu
644700,521	4187545,188	189,7679	tu
644721,103	4187539,31	190,8164	tu
644718,696	4187545,322	190,3952	tu
644753,626	4187538,162	192,1066	tu
644752,683	4187543,82	191,7913	tu
644770,872	4187539,472	192,7097	tu
644797,367	4187540,27	193,928	tu
644812,269	4187545,264	194,8857	tu
644826,255	4187546,156	195,3814	tu
644836,305	4187540,472	196,1342	tu
644847,658	4187543,225	196,8319	tu
644853,846	4187536,532	197,1481	tu
644869,44	4187531,704	197,9983	tu
644873,169	4187523,402	198,2641	tu
644893,099	4187516,446	199,4098	tu
644893,898	4187510,696	199,5846	tu
644906,363	4187506,809	200,2698	tu
644917,914	4187495,243	201,1346	tu
644933,992	4187485,755	202,1305	tu
644938,438	4187488,747	202,3453	tu
644953,063	4187481,054	203,1014	tu
644956,227	4187473,788	203,3551	tu
644971,749	4187473,081	204,0734	tu
644971,611	4187466,095	204,3762	tu
644990,936	4187461,986	205,4686	tu
644992,854	4187465,273	205,5256	tu
644984,631	4187470,478	205,0434	tu
644989,702	4187483,902	205,0065	tu
644993,265	4187480,067	205,3812	tu
645003,27	4187500,477	205,3786	tu
645002,036	4187509,244	204,9518	tu
645020,265	4187534,949	205,301	tu
645017,377	4187541,272	204,9249	tu
645027,142	4187547,184	205,3925	tu
645025,904	4187557,906	204,8123	tu
645059,301	4187600,676	205,2806	tu
645056,398	4187606,066	205,1281	tu

645069,949	4187616,985	205,3235	tu
645068,843	4187627,49	205,0265	tu
645084,73	4187640,555	205,3412	tu
645080,212	4187645,42	204,9149	tu
645090,727	4187659,406	204,8924	tu
645102,286	4187654,975	205,3991	tu
645096,289	4187648,373	205,5368	tu
645112,107	4187646,723	206,1138	tu
645110,804	4187642,466	206,2405	tu
645124,449	4187640,555	206,7152	tu
645124,709	4187636,299	206,9954	tu
645159,102	4187627,09	208,6845	tu
645158,127	4187622,496	208,9327	tu
645169,687	4187621,382	209,2695	tu
645169,549	4187616,649	209,5323	tu
645185,425	4187614,839	210,0915	tu
645190,997	4187607,183	210,7425	tu
645197,212	4187611,456	210,2576	tu
645202,543	4187605,255	211,0915	tu
645212,94	4187603,945	211,6803	tu
645212,154	4187608,312	210,9374	tu
645229,193	4187607,351	211,4666	tu
645230,679	4187602,024	212,1983	tu
645248,115	4187604,976	212,0113	tu
645248,995	4187601,456	212,6547	tu
645266,636	4187596,384	212,9274	tu
645264,664	4187602,998	211,5394	tu
645274,097	4187604,827	211,5279	tu
645267,762	4187614,818	211,3081	tu
645278,884	4187619,602	213,4839	tu
645276,349	4187631,423	212,9144	tu
645278,462	4187644,509	212,6544	tu
645290,992	4187649,997	214,5105	tu
645297,597	4187685,217	212,7973	tu
645305,227	4187685,076	213,7512	tu
645304,559	4187707,441	212,6831	tu
645306,14	4187719,188	211,9682	tu
645321,058	4187717,607	213,3108	tu
645323,543	4187704,73	213,6574	tu
645312,695	4187684,85	213,9279	tu