



# IGN

Instituto Geográfico Nacional  
**REPÚBLICA ARGENTINA**



Ministerio de Defensa  
Presidencia de la Nación



# RAMSAC NTRIP

Red Argentina de Monitoreo Satelital Continuo

**Instituto Geográfico Nacional**

# Temario:

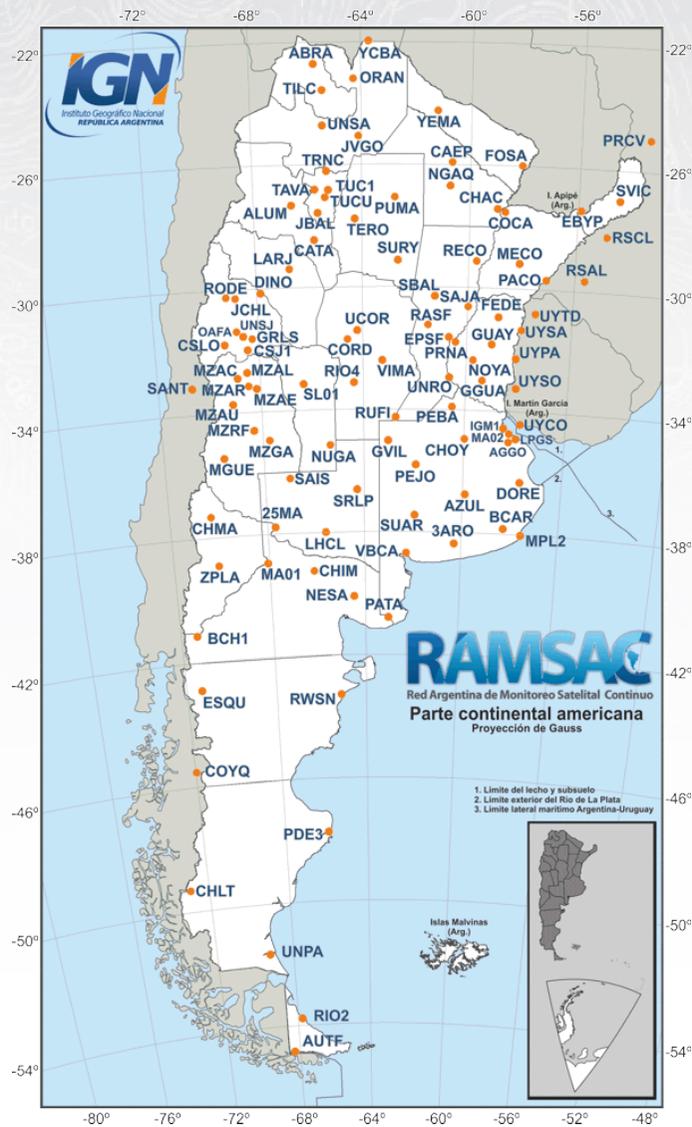
- **Características del servicio RAMSAC-NTRIP**
- **Estructura del sistema**
- **Estadísticas de uso**



# CARACTERÍSTICAS DEL SERVICIO RAMSAC-NTRIP



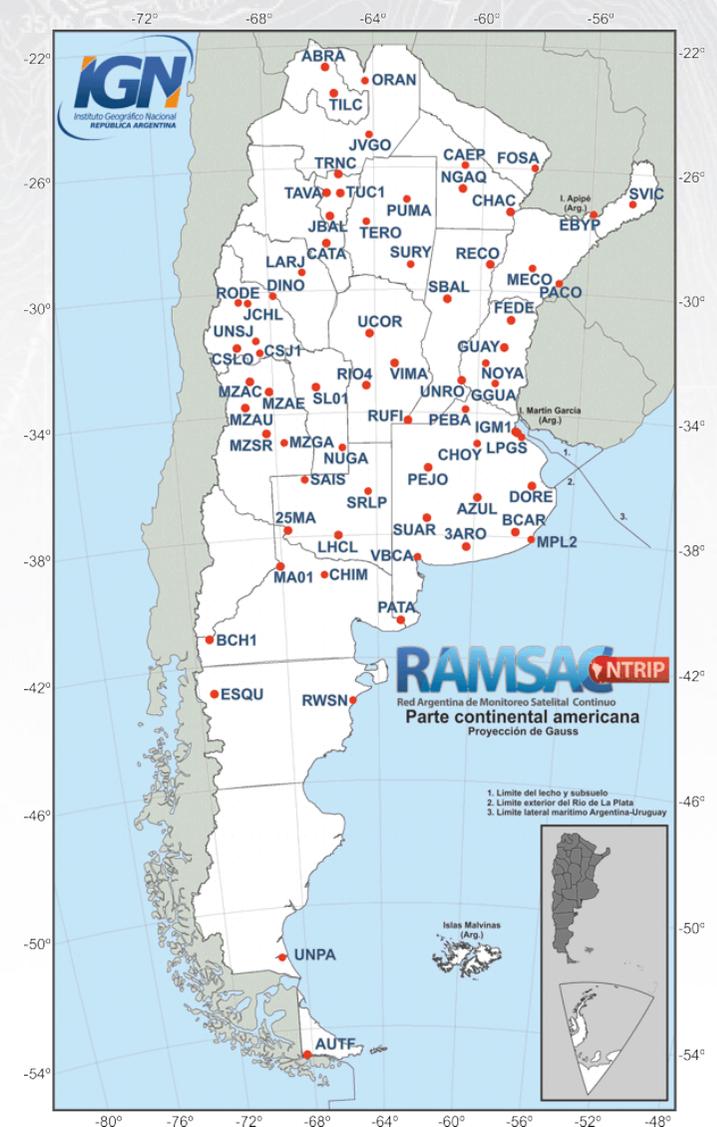
- **Nació en 2010**
- **Aporte de Instituciones Nacionales y Provinciales (Catastros), Universidades, Consejos Profesionales y Empresas Privadas**
- **Compuesta por 69 estaciones GPS/GNSS permanentes con capacidad para transmitir correcciones**
- **Servicio gratuito de correcciones diferenciales en tiempo real (para aplicaciones RTK)**



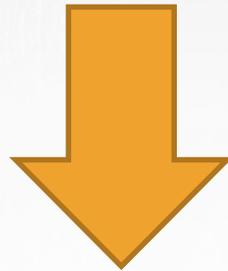
107 estaciones  
GNSS Permanentes

69 estaciones  
pertenecientes a  
RAMSAC-NTRIP

65% DE  
COBERTURA EN  
TIEMPO REAL



**Todas las estaciones generan correcciones  
en el Marco de Referencia Oficial de la  
Argentina**



**POSGAR<sub>07</sub>**

Posiciones Geodésicas Argentinas

**ÉPOCA 2006.632**

- **El NTRIP Caster se encuentra en el IGN (CABA)**
- **Servicio libre y gratuito**
- **Los usuarios deben registrarse**

Ingresando a la página web del IGN: [www.ign.gov.ar](http://www.ign.gov.ar)



The screenshot shows the homepage of the Instituto Geográfico Nacional (IGN) website. At the top, there is a navigation bar with the IGN logo on the left and the text "Ministerio de Defensa Presidencia de la Nación" on the right. Below this, there are social media icons for Facebook, Twitter, Instagram, YouTube, and a contact icon, along with menu items: "Nuestro Instituto", "Nuestras Actividades", and "Nuestros Servicios".

The main content area features three large promotional banners:

- Left banner:** A group photo of students in front of a building. Text: "Visita de estudiantes de Ingeniería en Agrimensura de la UBA".
- Middle banner:** "VENTA de productos" with "Horarios de Atención De Lunes a Viernes de 8:00 a 14:00hs." and "Quiero Saber más...".
- Right banner:** "POSGAR07" and "CCCCG Centro de Capacitación en Ciencias Geográficas" with "Quiero Saber más...".

Below the banners is a section titled "MAPAS E INFORMACIÓN GEOGRÁFICA DE LA REPÚBLICA ARGENTINA". The text reads: "En el Instituto Geográfico Nacional desarrollamos mapas e información geográfica de la República Argentina en distintos formatos. Descubrí las cartas e imágenes aéreas digitales que confecciona el IGN." Below this text are three buttons: "Sitios IGN", "Datos Abiertos y Descargas", and "Publicaciones".

At the bottom, there are three columns of content:

- Trabajo de Campo:** A thumbnail image showing a person looking at a globe.
- Eventos:** A thumbnail image for "FOSS4G - STATE OF THE MAP ARGENTINA 2017".
- Buscar Contenido:** A search bar with a "ir" button.

Below the search bar is a link for "Agenda".

## Seleccionando la solapa «Nuestras Actividades»

The screenshot shows the website [www.ign.gov.ar/#](http://www.ign.gov.ar/#) with the 'Nuestras Actividades' menu open. The header includes the IGN logo and the text 'Ministerio de Defensa, Presidencia de la Nación'. The menu lists several categories:

- GEODESIA**
  - Introducción
  - RAMSAC
  - RAMSAC-NTRIP
  - POSGAR 07
  - POSGAR 94
  - CPC-Ar
  - GEOIDE-Ar16
  - Red de Nivelación
  - Red Gravimétrica
  - Modelo Digital de Elevaciones
  - Servicio Internacional de la Hora
  - Trabajos y publicaciones
  - Georreferenciación de parcelas
- FOTOGRAMETRÍA**
  - Introducción
  - Vuelos Fotogramétricos
  - Mapa de cubrimiento aerofotográfico
- BASE DE DATOS GEOGRÁFICA**
  - Introducción
  - Catálogo de Objetos Geográficos
- I+D**
  - El rol de la investigación en el IGN
  - Proyectos IGN
  - Acuerdos y convenios
- DOCUMENTACIÓN TÉCNICA**
  - Manual de signos cartográficos
  - Normas ISO TC-211
  - Normas Abreviaturas
  - Modificaciones al manual de signos cartográficos
- GEOGRAFÍA**
  - Introducción
  - Información geográfica
- CARTOGRAFÍA**
  - Introducción
  - Cartografía de línea
  - Carta de imagen

At the bottom, there are sections for 'Trabajo de Campo', 'Eventos', and a search bar labeled 'Buscar Contenido' with an 'ir' button. The footer includes 'Agenda' and the URL [www.ign.gov.ar/#](http://www.ign.gov.ar/#).

Se despliega un menú, luego se selecciona el ítem «RAMSAC-NTRIP»



The screenshot shows the website interface for the RAMSAC-NTRIP service. At the top, there is a navigation bar with the IGN logo, the text 'Ministerio de Defensa Presidencia de la Nación', and social media icons. Below this, the main content area is divided into several sections:

- BÚSQUEDA:** A search bar with a red 'ir' button.
- ACCESOS RÁPIDOS:** A list of quick links including 'Productos y servicios...', 'Descargas...', and 'Enlaces útiles'.
- INTRODUCCIÓN:** The main heading for the service, with the text 'Red Argentina de Monitoreo Satelital Continuo' and an 'English Version' button.
- RAMSAC NTRIP:** A navigation menu with a red starburst graphic highlighting the 'Registro' option. The menu items are 'Introducción', 'Registro', and 'Descarga de archivos RINEX'.
- TE PUEDE INTERESAR...:** A list of related topics including 'Introducción', 'Nueva estación gps permanente en la provincia del chaco', 'Taller de marcos de referencia geodésico para catastro', 'Estado de Estaciones GNSS Permanentes', 'Descarga de archivos RINEX', and 'RAMSAC - Descarga de archivos RINEX'.
- Usuarios:** A section explaining the service's orientation towards users of specific methods.
- RTK (cinemático en tiempo real):** A section detailing receiver types and precision requirements.
- DGPS (Diferencial GPS):** A section detailing receiver types and precision requirements.
- El sistema NTRIP:** A section for NTRIP system details.
- Servidores NTRIP:** A section for NTRIP server details.

At the bottom right of the page, there is a pagination indicator showing '1 of 32' and a right arrow.

# SERVICIO RAMSAC-NTRIP



 **Ministerio de Defensa**  
**Presidencia de la Nación**

f t i YouTube [Nuestro Instituto](#) [Nuestras Actividades](#) [Nuestros Servicios](#)

## BÚSQUEDA

- ### ACCESOS RÁPIDOS
- Productos y servicios...
  - Descargas...
  - Enlaces útiles

## NTRIP - REGISTRO

Usuario

Contraseña

Repetir Contraseña

Nombre Completo

Correo electrónico

Institución / Empresa

País

Provincia/Estado

¿Tiene un receptor apto para recibir correcciones diferenciales en formato RTCM?  
 Sí  No

¿De cuántas frecuencias es su receptor?

¿Con qué fin utilizará el servicio?



[Términos y Condiciones](#)

## RAMSAC NTRIP

- Introducción
- Mapa de la red
- Registro
- Documentación técnica

Nombre de usuario con el cual se loguea el cliente para comunicar el GPS con el cáster

Contraseña de ingreso

Las estaciones que transmiten correcciones y sus MountPoint las podemos observar en <http://www.ign.gov.ar/NuestrasActividades/Geodesia/RamsacNtrip>

Las estaciones que están transmitiendo correcciones en tiempo real y sus MountPoint las podemos observar en <http://ntrip.ign.gov.ar:2101>

### Resumen de las correcciones RTCM generadas por las Estaciones GNSS

#### Permanentes de la red RAMSAC

Estación	Mountpoint RTCM 2.3	Mountpoint RTCM 3.0
25MA	25MA-v2.3	25MA-v3.0
3ARO	3ARO-v2.3	3ARO-v3.0
ABRA	ABRA-v2.3	ABRA-v3.0
AUTF	AUTF-v2.3	AUTF-v3.0
AZUL	AZUL-v2.3	AZUL-v3.0
BCAR		BCAR
BCH1	BCH1-v2.3	BCH1-v3.0
BCHE	BCHE-v2.3	BCHE-v3.0
CAEP	CAEP-v2.3	CAEP-v3.0
CATA	CATA-v2.3	CATA-v3.0
CHAC	CHAC-v2.3	CHAC-v3.0
CHIM	CHIM-v2.3	CHIM-v3.0
CHMA	CHMA-v2.3	CHMA-v3.0
CHOY	CHOY-v2.3	CHOY-v3.0
CSLO	CSLO	
DINO	DINO-v2.3	DINO-v3.0
DORE	DORE-v2.3	DORE-v3.0
EBYP	EBYP-v2.3	EBYP-v3.0
ESQU	ESQU-v2.3	ESQU-v3.0
FEDE	FEDE-v2.3	FEDE-v3.0

← → ↻ ↗ ntrip.ign.gov.ar:2101

SOURCETABLE 200 OK

Server: NTRIP Caster 2.0.14/2.0

Date: Wed, 15 Nov 2017 18:53:55 GMT

Connection: close

Content-Type: text/plain

Content-Length: 18792

CAS;rtcm-ntrip.org;2101;NtripInfoCaster;BKG;0;DEU;50.12;8.69;http://www.rtcn-ntrip.org/home

CAS;ntrip.ign.gov.ar;2101;RAMSAC-NTRIP;IGN;0;ARG;-34.57;-58.44;http://www.ign.gov.ar/

NET;RAMSAC;IGN;B;N;http://ign.gov.ar/NuestrasActividades/Geodesia/Ramsac;http://ign.gov.ar/NuestrasActividades/Geodesia/

STR;25MA-v2.3;25 de Mayo, La Pampa (25MA-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-37.77;-67.70;

STR;25MA-v3.0;25 de Mayo, La Pampa (25MA-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-

STR;3ARO-v2.3;Tres Arroyos, Buenos Aires (3ARO-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-38.37;-

STR;3ARO-v3.0;Tres Arroyos, Buenos Aires (3ARO-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10),1033(10);2;GPS+

STR;ABRA-v2.3;Abra Pampa, Jujuy (ABRA-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-22.72;-65.68;0;

STR;ABRA-v3.0;Abra Pampa, Jujuy (ABRA-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-22.

STR;AZUL-v2.3;Azul, Buenos Aires (AZUL-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-36.77;-59.87;0;

STR;AZUL-v3.0;Azul, Buenos Aires (AZUL-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-36.

STR;BCAR;Balcarce, Buenos Aires (BCAR-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-37.

STR;BCH1-v2.3;Bariloche, Río Negro (BCH1-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-41.13;-71.28;

STR;BCH1-v3.0;Bariloche, Río Negro (BCH1-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10),1033(10);2;GPS+GLO;RAI

STR;CATA-v2.3;Catamarca, Catamarca (CATA-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-28.47;-65.77;

STR;CATA-v3.0;Catamarca, Catamarca (CATA-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-

STR;CHIM-v2.3;Chimpay, Río Negro (CHIM-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-39.15;-66.13;0;

STR;CHIM-v3.0;Chimpay, Río Negro (CHIM-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-39.

STR;CHOY-v2.3;Chivilcoy, Buenos Aires (CHOY-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-34.88;-60.

STR;CHOY-v3.0;Chivilcoy, Buenos Aires (CHOY-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10),1033(10);2;GPS+GLO;

STR;CSJ1-v2.3;Sarmiento, San Juan (CSJ1-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-31.97;-68.42;0;

STR;CSJ1-v3.0;Sarmiento, San Juan (CSJ1-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-

STR;DINO-v2.3;Ischigualasto, San Juan (DINO-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-30.16;-67.

STR;DINO-v3.0;Ischigualasto, San Juan (DINO-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10),1033(10);2;GPS+GLO;

STR;DORE-v2.3;Dolores, Buenos Aires (DORE-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-36.30;-57.6;

STR;DORE-v3.0;Dolores, Buenos Aires (DORE-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10),1033(10);2;GPS+GLO;RF

STR;ESQU-v2.3;Esquel, Chubut (ESQU-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-42.92;-71.32;0;0;

STR;ESQU-v3.0;Esquel, Chubut (ESQU-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-42.92;

STR;FEDE-v2.3;Federal, Entre Rios (FEDE-v2.3);RTCM 2.3;1(5),3(10),18(1),19(1),20(1),21(1);2;GPS;RAMSAC;ARG;-30.95;-59.02;

STR;FEDE-v3.0;Federal, Entre Rios (FEDE-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS;RAMSAC;ARG;-30.95;

STR;GUAY-v2.3;Villaguay, Entre Rios (GUAY-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-31.87;-59.0;

STR;GUAY-v3.0;Villaguay, Entre Rios (GUAY-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;

STR;IGM1-v2.3;CABA IGN (IGM1-v2.3);RTCM 2.3;1(5),3(10),18(1),19(1),20(1),21(1);2;GPS+GLO;RAMSAC;ARG;-34.57;-58.44;0;0;TR;

STR;IGM1-v3.0;CABA IGN (IGM1-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-34.57;-58.44;

STR;JCHL-v2.3;San Jose de Jachal, San Juan (JCHL-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-30.2;

STR;JCHL-v3.0;San Jose de Jachal, San Juan (JCHL-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10),1033(10);2;GP;

STR;JVGO-v2.3;Joaquín V Gonzalez, Salta (JVGO-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-25.12;-(-

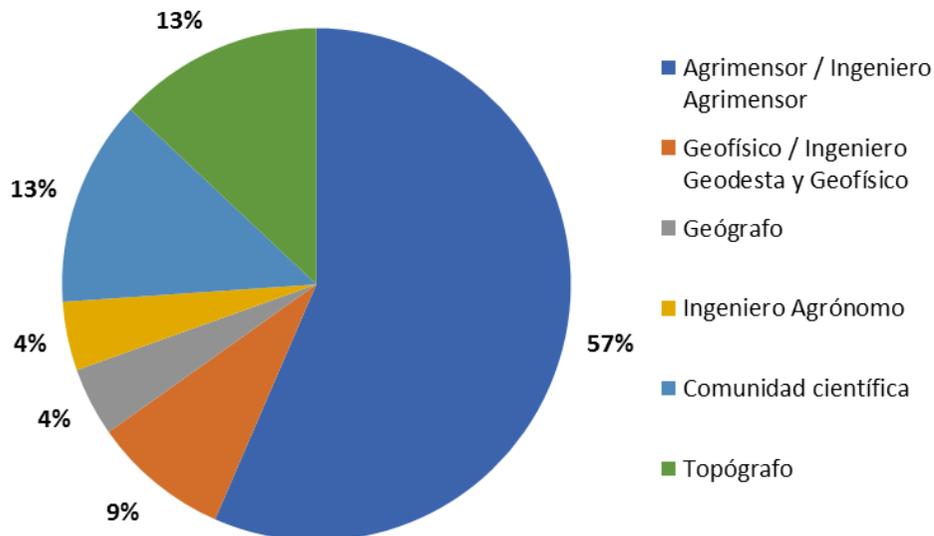
STR;JVGO-v3.0;Joaquín V Gonzalez, Salta (JVGO-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;

STR;LARJ-v2.3;La Rioja, La Rioja (LARJ-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-29.41;-66.85;0;

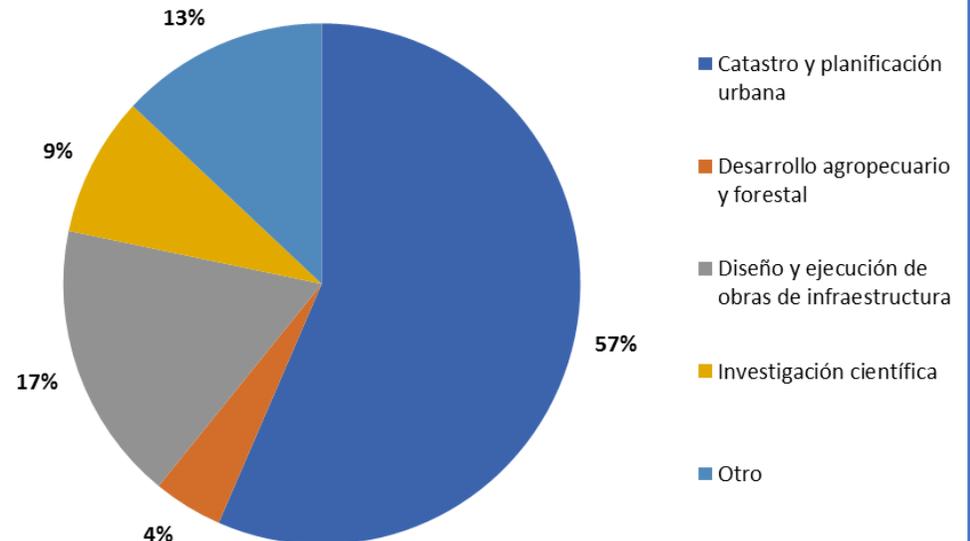
## Usuarios de RAMSAC-NTRIP

- El servicio es usado principalmente por Ing. Agrimensores, Topógrafos, Geofísicos y Comunidad Científica.

### Profesión de los Usuarios



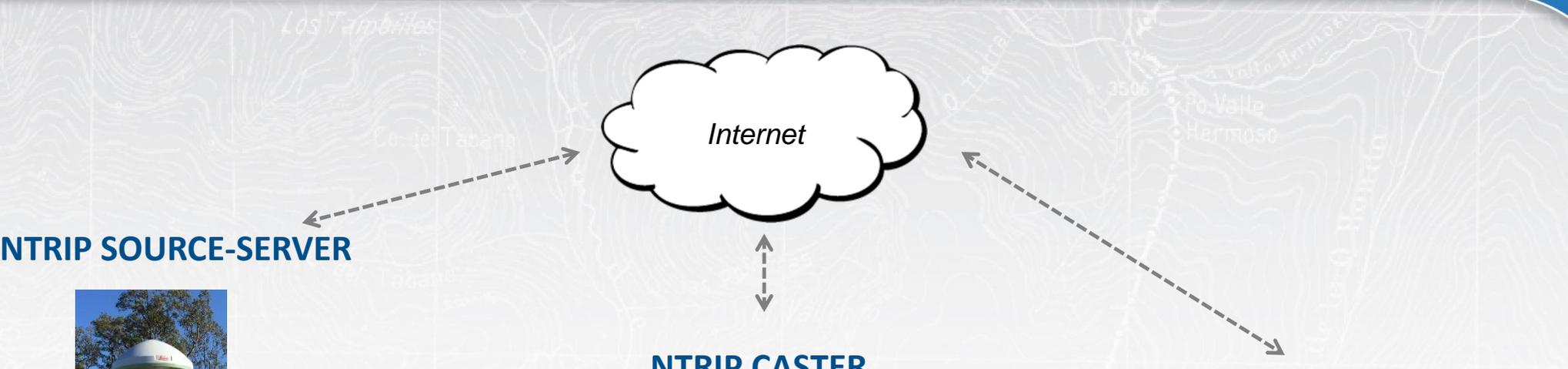
### Área de trabajo



Datos relevados según encuesta desde el sitio web del IGN desde el día 27/7/17 hasta la actualidad.

# ESTRUCTURA DEL SISTEMA

# ESTRUCTURA DEL SISTEMA



UNRO



SAJA



**RAMSAC** NTRIP  
Red Argentina de Monitoreo Satelital Continuo



NTRIP CLIENT

## NTRIP Server/Source

- Las correcciones se transmiten en el protocolo NTRIP mediante HTTP 1.1
- Utilizando como transporte el protocolo TCP
- Las estaciones tienen en su mayoría configurados dos MountPoints, uno que transmite correcciones RTCM en versión v2.3 y otro en v3.0.
- La comunicación se da por los puertos 8000, 8001 y 2101.



## NTRIP Server/Source

Ejemplo de configuración, estación CATA, Trimble NetR9:

Trimble
CATA
NetR9  
SN: 5046K71637

- Receiver Status
- Satellites
- Data Logging
- Receiver Configuration
- I/O Configuration**
- Port Summary
- Port Configuration
- Bluetooth
- OmniSTAR
- Network Configuration
- Security
- Firmware
- Help

**I/O Configuration**

	Type	Port	Input	Output
<b>1</b>	TCP/IP	8000	-	RTCM
<b>2</b>	TCP/IP	8001	-	RTCM_V3
	TCP/IP	28001	-	-
	TCP/IP	28002	-	-
	NTRIP Client	-	-	-
<b>3</b>	NTRIP Server	200.3.123.65:2101/CATA-v3.0	-	RTCM_V3
	NTRIP Caster 1	2101	-	-
	NTRIP Caster 2	2102	-	-
	NTRIP Caster 3	2103	-	-
	Serial	Serial 1 (38.4K-8N1)	-	-
	Serial	Serial 2 (38.4K-8N1)	-	-
	Bluetooth	1	-	-
	Bluetooth	2	-	-
	Bluetooth	3	-	-
	USB	-	-	-



## NTRIP Server/Source

### 1 I/O Configuration

TCP/IP 8000 ▾ RTCM ▾

Server: TCP 10.0.0.5: 8000

Connected to remote 186.33.235.49:50235

- Client
- Output only/Allow multiple connections
- UDP Mode
- Authenticate, set password:

#### Input/Output

Output:RTCM

#### RTCM

Enabled ▾ Version: 2.3 ▾ Type: RTK+DGPS ▾

##### Advanced Settings

- Ephemeris Holdoff: Off ▾
- Record Type 1: 1 Sec. ▾
- Record Type 31: Off ▾
- Record Type 3: 10 Sec. ▾
- Record Type 32: Off ▾
- GLONASS Datum: PZ90 ▾
- Record Type 2:
- Other Record Types:
- CR/LF:

OK Delete

### 2 I/O Configuration

TCP/IP 8001 ▾ RTCM ▾

Server: TCP 10.0.0.5: 8001

Connected to remote 186.33.235.49:59155

- Client
- Output only/Allow multiple connections
- UDP Mode
- Authenticate, set password:

#### Input/Output

Output:RTCM\_V3

#### RTCM

Enabled ▾ Version: 3.0 ▾ Type: RTK ▾

Bandwidth limit :

##### Advanced Settings

- Record Type 1004: 1 Sec. ▾
- Record Type 1012: 1 Sec. ▾
- Record Type 1019: Off ▾
- Record Type 1020: Off ▾
- Fugro Type 4087 Variants:
- Reference Station Records:

OK Delete

### 3 I/O Configuration

NTRIP Server ▾

#### NTRIP Server

Status: Up and Connected

Enable:

NTRIP Version: NTRIP v2.0 ▾

NTripCaster http://200.3.123.65:2101

Mount Point: CATA-v3.0

Username:

Password:

Verify Password:

Identifier: CATA3

Country: ARG

Network: RAMSAC

CMR: Disabled ▾ Delay: 0 msec ▾

Epoch Interval

Off ▾

Measurements

Positions

RT27

Concise

R-T Flag

Send Raw GPS Data

Send Raw SBAS Data

#### Options

Multi-System Support

Smooth Pseudorange

Smooth Phase

Include Doppler

GPS Ephemeris: When new one is available ▾

GLONASS Ephemeris: When new one is available ▾

Galileo Ephemeris: When new one is available ▾

Enabled ▾ Version: 3.0 ▾ Type: RTK ▾

RTCM:

##### Advanced Settings

Record Type 1004: 1 Sec. ▾

Record Type 1012: 1 Sec. ▾

Record Type 1019: Off ▾

Record Type 1020: Off ▾

Fugro Type 4087 Variants:

Reference Station Records:

OmniSTAR: Data for Trimble: Disabled ▾

OK

#### Input/Output

Output:RTCM\_V3

## NTRIP CASTER

Sistema de virtualización  
VMWare con réplica

MEMORIA  
RAM 8GB

DISCO HDD  
200GB

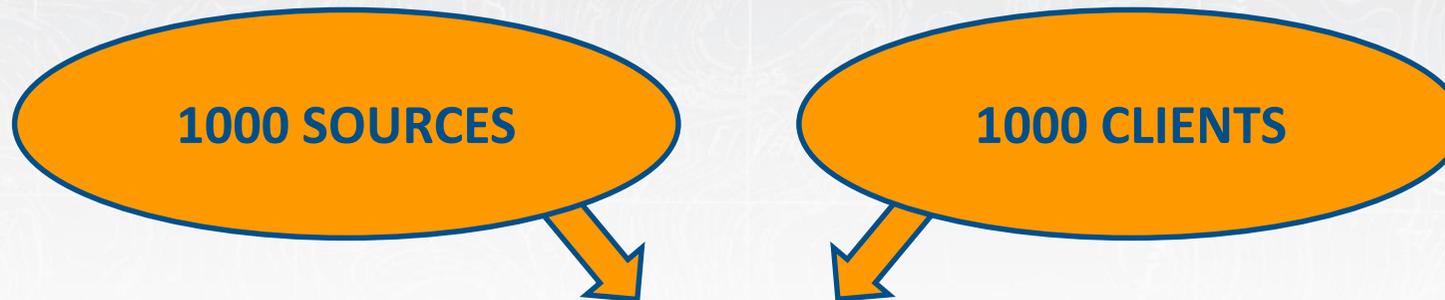
LINUX UBUNTU  
12.04.1 LTS

BKG Professional  
NtripCaster v2.0.14

El NTRIP Caster cuenta con un servicio simétrico de 50Mbps de Internet de fibra óptica provisto por ARSAT (Empresa Argentina de Soluciones Satelitales).



**El caster está configurado para soportar**



**El acceso de cada uno de ellos lo observamos en logs automáticos que nos muestran información de cada uno.**

# ESTRUCTURA DEL SISTEMA

**Date, Time, User, IP, Station, Client, Seconds, Bytes**

```

08/Jun/2016,15:56:45,1403,172.20.203.254,IGM1-v2.3,NTRIP Carlson,126,78125
08/Jun/2016,16:36:51,sirgas,172.20.203.254,AUTF,NTRIP Caster/2.0.15,9237,4607125
08/Jun/2016,17:24:33,runco,172.20.203.254,TUC1-v3.0,NTRIP SurveyPro,459,155814
08/Jun/2016,17:47:13,ezequiel08,172.20.203.254,CATA-v3.0,NTRIP STX-S9,4644,1617931
08/Jun/2016,18:11:00,paulo_catastro,172.20.203.254,CATA-v3.0,NTRIP SurveyController/1.80,1860,639095
08/Jun/2016,18:42:13,osvaldobonini,172.20.203.254,BCH1-v3.0,NTRIP SurveyController/6.02,583,226253
08/Jun/2016,18:46:22,paulo_catastro,172.20.203.254,CATA-v3.0,NTRIP SurveyController/1.80,2054,772632
08/Jun/2016,18:53:37,osvaldobonini,172.20.203.254,BCH1-v3.0,NTRIP SurveyController/6.02,607,229404
08/Jun/2016,19:04:52,osvaldobonini,172.20.203.254,BCH1-v3.0,NTRIP SurveyController/6.02,600,222655
08/Jun/2016,19:13:38,runco,172.20.203.254,TUC1-v3.0,NTRIP SurveyPro,705,274094
08/Jun/2016,19:18:05,runco,172.20.203.254,TUC1-v3.0,NTRIP SurveyPro,157,61780
08/Jun/2016,19:18:06,osvaldobonini,172.20.203.254,BCH1-v3.0,NTRIP SurveyController/6.02,598,236539
08/Jun/2016,19:25:16,runco,172.20.203.254,TUC1-v3.0,NTRIP SurveyPro,325,127299
08/Jun/2016,19:34:43,DABAGAL,172.20.203.254,RIO4-v3.0,NTRIP SurveyController/11.21,362,112292
08/Jun/2016,19:40:43,osvaldobonini,172.20.203.254,BCH1-v3.0,NTRIP SurveyController/6.02,1295,463923
08/Jun/2016,19:40:48,sirgas,172.20.203.254,AUTF,NTRIP Caster/2.0.15,10943,5412150
08/Jun/2016,19:48:17,DABAGAL,172.20.203.254,UCOR,NTRIP SurveyController/11.21,706,252360
08/Jun/2016,19:49:06,osvaldobonini,172.20.203.254,BCH1-v3.0,NTRIP SurveyController/6.02,159,56860
08/Jun/2016,20:00:49,DABAGAL,172.20.203.254,UCOR,NTRIP SurveyController/11.21,386,138034
08/Jun/2016,21:17:13,sirgas,172.20.203.254,AUTF,NTRIP Caster/2.0.15,5779,2587300
08/Jun/2016,21:23:11,sirgas,172.20.203.254,AUTF,NTRIP Caster/2.0.15,95,42770
08/Jun/2016,21:23:54,sirgas,172.20.203.254,AUTF,NTRIP Caster/2.0.15,43,19426
08/Jun/2016,21:25:26,sirgas,172.20.203.254,AUTF,NTRIP Caster/2.0.15,57,25512
08/Jun/2016,21:29:09,DABAGAL,172.20.203.254,UCOR,NTRIP SurveyController/11.21,237,76124
08/Jun/2016,21:36:05,DABAGAL,172.20.203.254,UCOR,NTRIP SurveyController/11.21,132,41746
08/Jun/2016,21:42:00,DABAGAL,172.20.203.254,UCOR,NTRIP SurveyController/11.21,149,47744
08/Jun/2016,21:53:46,sirgas,172.20.203.254,AUTF,NTRIP Caster/2.0.15,1667,707395
08/Jun/2016,21:58:01,ezequiel08,172.20.203.254,CATA-v3.0,NTRIP STX-S9,1457,423567

```

**Date, Time, User, IP, Station, Client, Seconds, Bytes**

# ESTRUCTURA DEL SISTEMA

## Podemos observar la configuración de los MountPoints y su estado actual en el administrador de NTRIP

[home](#) | [statistics](#) | [sourcetable](#) | [listeners](#) | [sources](#) | [admins](#) | [settings](#)

### Sourcetable

- CAS;ntrip.ign.gov.ar;2101;RAMSAC-NTRIP;IGN;0;ARG;-34.57;-58.44;http://www.ign.gov.ar/
- CAS;rtcm-ntrip.org;2101;NtripInfoCaster;BKG;0;DEU;50.12;8.69;http://www.rtcn-ntrip.org/home
- NET;RAMSAC;IGN;B;N;http://ign.gov.ar/NuestrasActividades/Geodesia/Ramsac;http://ign.gov.ar/NuestrasActividades/Geodesia/RamsacNtrip;http://ign.gov.ar/NuestrasActividades/Geodesia/RamsacNtrip;none
- STR;25MA-v2.3;25 de Mayo, La Pampa (25MA-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-37.77;-67.70;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;25MA-v3.0;25 de Mayo, La Pampa (25MA-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-37.77;-67.70;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;3ARO-v2.3;Tres Arroyos, Buenos Aires (3ARO-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-38.37;-60.27;0;0;LEICA GR10;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;3ARO-v3.0;Tres Arroyos, Buenos Aires (3ARO-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10),1033(10);2;GPS+GLO;RAMSAC;ARG;-38.37;-60.27;0;0;LEICA GR10;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;ABRA-v2.3;Abra Pampa, Jujuy (ABRA-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-22.72;-65.68;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;ABRA-v3.0;Abra Pampa, Jujuy (ABRA-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-22.72;-65.68;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;AUTF-v2.3;Ushuaia, Tierra del Fuego (AUTF-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-54.83;-68.30;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;AUTF-v3.0;Ushuaia, Tierra del Fuego (AUTF-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-54.83;-68.30;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;AZUL-v2.3;Azul, Buenos Aires (AZUL-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-36.77;-59.87;0;0;TRIMBLE NETR5;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;AZUL-v3.0;Azul, Buenos Aires (AZUL-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-36.77;-59.87;0;0;TRIMBLE NETR5;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;BCAR;Balcance, Buenos Aires (BCAR-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-37.76;-58.30;0;0;TRIMBLE NETR5;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;BCH1-v2.3;Barioche, Rio Negro (BCH1-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-41.13;-71.28;0;0;LEICA GR10;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;BCH1-v3.0;Barioche, Rio Negro (BCH1-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10),1033(10);2;GPS+GLO;RAMSAC;ARG;-41.13;-71.28;0;0;LEICA GR10;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;CAEP-v2.3;Juan Jose Castelli, Chaco (CAEP-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-25.95;-60.62;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;CAEP-v3.0;Juan Jose Castelli, Chaco (CAEP-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-25.95;-60.62;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;CATA-v2.3;Catamarca, Catamarca (CATA-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-28.47;-65.77;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;CATA-v3.0;Catamarca, Catamarca (CATA-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-28.47;-65.77;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;CHAC-v2.3;Resistencia, Chaco (CHAC-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-27.42;-58.95;0;0;LEICA GRX1200+GNSS;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;CHAC-v3.0;Resistencia, Chaco (CHAC-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-27.42;-58.95;0;0;LEICA GRX1200+GNSS;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;CHIM-v2.3;Chimpay, Rio Negro (CHIM-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-39.15;-66.13;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;CHIM-v3.0;Chimpay, Rio Negro (CHIM-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-39.15;-66.13;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;CHOY-v2.3;Chivilcoy, Buenos Aires (CHOY-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-34.88;-60.02;0;0;LEICA GR10;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;CHOY-v3.0;Chivilcoy, Buenos Aires (CHOY-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10),1033(10);2;GPS+GLO;RAMSAC;ARG;-34.88;-60.02;0;0;LEICA GR10;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;CSJ1-v2.3;Sarmiento, San Juan (CSJ1-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-31.97;-68.42;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;CSJ1-v3.0;Sarmiento, San Juan (CSJ1-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-31.97;-68.42;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;CSLO;El Leoncito, San Juan (CSLO-v2.3);RTCM 2.3;1(5),3(10),18(1),19(1),20(1),21(1);2;GPS;RAMSAC;ARG;-31.78;-69.30;0;0;TRIMBLE NETR5;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;DINO-v2.3;Ischigualasto, San Juan (DINO-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-30.16;-67.84;0;0;LEICA GR25;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;DINO-v3.0;Ischigualasto, San Juan (DINO-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10),1033(10);2;GPS+GLO;RAMSAC;ARG;-30.16;-67.84;0;0;LEICA GR25;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;DORE-v2.3;Dolores, Buenos Aires (DORE-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-36.30;-57.67;0;0;LEICA GR10;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;DORE-v3.0;Dolores, Buenos Aires (DORE-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10),1033(10);2;GPS+GLO;RAMSAC;ARG;-36.30;-57.67;0;0;LEICA GR10;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;EBYP;Posadas, Misiones (EBYP-v2.3);RTCM 2.3;1(5),3(10),18(1),19(1),20(1),21(1);2;GPS;RAMSAC;ARG;-27.37;-55.89;0;0;TRIMBLE NETR5;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;EBYP-v3.0;Posadas, Misiones (EBYP-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS;RAMSAC;ARG;-27.37;-55.89;0;0;TRIMBLE NETR5;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
- STR;ESQU-v2.3;Esquel, Chubut (ESQU-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-42.92;-71.32;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS

## Observamos también los actuales usuarios conectados

[home](#) | [statistics](#) | [sourcetable](#) | [listeners](#) | [sources](#) | [admins](#) | [settings](#)

### Connected Listeners

- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: SGM-ROU] [Mountpoint /TGM1-v3.0] [Id: 220505] [Connected for: 9 hours, 18 minutes and 38 seconds] [Bytes written: 9223939] [Errors: 0] [User agent: NTRIP WindowsClient1.0 ] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: SGM-ROU] [Mountpoint /GUAY-v3.0] [Id: 220506] [Connected for: 9 hours, 18 minutes and 38 seconds] [Bytes written: 10699023] [Errors: 0] [User agent: NTRIP WindowsClient1.0 ] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: SGM-ROU] [Mountpoint /GGUA-v3.0] [Id: 220507] [Connected for: 9 hours, 18 minutes and 38 seconds] [Bytes written: 35792977] [Errors: 0] [User agent: NTRIP WindowsClient1.0 ] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: fcamisay] [Mountpoint /MZAC-v3.0] [Id: 220510] [Connected for: 9 hours, 18 minutes and 28 seconds] [Bytes written: 8843968] [Errors: 0] [User agent: NTRIP WindowsClient1.0 ] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: droma] [Mountpoint /LARJ-v3.0] [Id: 227767] [Connected for: 6 hours, 14 minutes and 4 seconds] [Bytes written: 7362617] [Errors: 0] [User agent: NTRIP BNC/2.12.2 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: droma] [Mountpoint /TRNC-v3.0] [Id: 227768] [Connected for: 6 hours, 14 minutes and 3 seconds] [Bytes written: 6565194] [Errors: 0] [User agent: NTRIP BNC/2.12.2 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: fcamisay] [Mountpoint /MZAU-v3.0] [Id: 234258] [Connected for: 3 hours, 35 minutes and 48 seconds] [Bytes written: 4230476] [Errors: 0] [User agent: NTRIP WindowsClient1.0 ] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: droma] [Mountpoint /LHCL] [Id: 234749] [Connected for: 3 hours, 25 minutes and 18 seconds] [Bytes written: 6257095] [Errors: 0] [User agent: NTRIP BNC/2.12.2 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: ASviridov] [Mountpoint /UCOR-v3.0] [Id: 235490] [Connected for: 3 hours, 5 minutes and 20 seconds] [Bytes written: 3532265] [Errors: 0] [User agent: NTRIP client (c) A.S. [IAC]] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: ASviridov] [Mountpoint /UCOR-v3.0] [Id: 235491] [Connected for: 3 hours, 5 minutes and 20 seconds] [Bytes written: 3532265] [Errors: 0] [User agent: NTRIP client (c) A.S. [IAC]] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: droma] [Mountpoint /MZAC-v3.0] [Id: 235878] [Connected for: 2 hours, 54 minutes and 18 seconds] [Bytes written: 2792930] [Errors: 0] [User agent: NTRIP BNC/2.12.2 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: droma] [Mountpoint /MPL2] [Id: 235880] [Connected for: 2 hours, 54 minutes and 15 seconds] [Bytes written: 3334246] [Errors: 0] [User agent: NTRIP BNC/2.12.2 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: droma] [Mountpoint /TILC-v3.0] [Id: 235881] [Connected for: 2 hours, 54 minutes and 14 seconds] [Bytes written: 3066636] [Errors: 0] [User agent: NTRIP BNC/2.12.2 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: presidente] [Mountpoint /UCOR-v3.0] [Id: 238447] [Connected for: 1 hours, 50 minutes and 14 seconds] [Bytes written: 2035337] [Errors: 0] [User agent: NTRIP BKG Caster/2.0.29] [Type: puller]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: ASviridov] [Mountpoint /RECO-v3.0] [Id: 238653] [Connected for: 1 hours, 44 minutes and 27 seconds] [Bytes written: 1922320] [Errors: 0] [User agent: NTRIP client (c) A.S. [IAC]] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: ASviridov] [Mountpoint /RECO-v3.0] [Id: 238654] [Connected for: 1 hours, 44 minutes and 26 seconds] [Bytes written: 1922320] [Errors: 0] [User agent: NTRIP client (c) A.S. [IAC]] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: fcamisay] [Mountpoint /MZAE] [Id: 239834] [Connected for: 1 hours, 19 minutes and 18 seconds] [Bytes written: 2369760] [Errors: 0] [User agent: NTRIP WindowsClient1.0 ] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: droma] [Mountpoint /SUAR-v3.0] [Id: 241065] [Connected for: 44 minutes and 17 seconds] [Bytes written: 736948] [Errors: 0] [User agent: NTRIP BNC/2.12.2 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: jaragon] [Mountpoint /25MA-v3.0] [Id: 241382] [Connected for: 36 minutes and 15 seconds] [Bytes written: 594466] [Errors: 0] [User agent: NTRIP BNC/2.12.3 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: jaragon] [Mountpoint /3ARO-v3.0] [Id: 241383] [Connected for: 36 minutes and 15 seconds] [Bytes written: 608358] [Errors: 0] [User agent: NTRIP BNC/2.12.3 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: jaragon] [Mountpoint /ABRA-v3.0] [Id: 241384] [Connected for: 36 minutes and 15 seconds] [Bytes written: 569079] [Errors: 0] [User agent: NTRIP BNC/2.12.3 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: jaragon] [Mountpoint /AZUL-v3.0] [Id: 241386] [Connected for: 36 minutes and 15 seconds] [Bytes written: 615438] [Errors: 0] [User agent: NTRIP BNC/2.12.3 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: jaragon] [Mountpoint /BCAR] [Id: 241387] [Connected for: 36 minutes and 14 seconds] [Bytes written: 2319558] [Errors: 0] [User agent: NTRIP BNC/2.12.3 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: jaragon] [Mountpoint /BCH1-v3.0] [Id: 241388] [Connected for: 36 minutes and 14 seconds] [Bytes written: 643198] [Errors: 0] [User agent: NTRIP BNC/2.12.3 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: jaragon] [Mountpoint /CAEP-v3.0] [Id: 241390] [Connected for: 36 minutes and 14 seconds] [Bytes written: 2233456] [Errors: 0] [User agent: NTRIP BNC/2.12.3 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: jaragon] [Mountpoint /CATA-v3.0] [Id: 241391] [Connected for: 36 minutes and 14 seconds] [Bytes written: 625105] [Errors: 0] [User agent: NTRIP BNC/2.12.3 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: jaragon] [Mountpoint /CHIM-v3.0] [Id: 241393] [Connected for: 36 minutes and 14 seconds] [Bytes written: 629263] [Errors: 0] [User agent: NTRIP BNC/2.12.3 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: jaragon] [Mountpoint /CHOY-v3.0] [Id: 241395] [Connected for: 36 minutes and 14 seconds] [Bytes written: 609644] [Errors: 0] [User agent: NTRIP BNC/2.12.3 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: jaragon] [Mountpoint /DINO-v3.0] [Id: 241398] [Connected for: 36 minutes and 13 seconds] [Bytes written: 617516] [Errors: 0] [User agent: NTRIP BNC/2.12.3 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: jaragon] [Mountpoint /DORE-v3.0] [Id: 241399] [Connected for: 36 minutes and 13 seconds] [Bytes written: 601006] [Errors: 0] [User agent: NTRIP BNC/2.12.3 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: jaragon] [Mountpoint /ESQU-v3.0] [Id: 241402] [Connected for: 36 minutes and 13 seconds] [Bytes written: 672444] [Errors: 0] [User agent: NTRIP BNC/2.12.3 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: jaragon] [Mountpoint /FEDE-v3.0] [Id: 241403] [Connected for: 36 minutes and 13 seconds] [Bytes written: 383043] [Errors: 0] [User agent: NTRIP BNC/2.12.3 (LINUX)] [Type: http client]
- [Host: 172.20.203.254] [IP: 172.20.203.254] [User: jaragon] [Mountpoint /GGUA-v3.0] [Id: 241404] [Connected for: 36 minutes and 13 seconds] [Bytes written: 2245059] [Errors: 0] [User agent: NTRIP BNC/2.12.3 (LINUX)] [Type: http client]



Observamos los accesos de los mounts, son los que se comunican con el caster.

[home](#) | [statistics](#) | [sourcetable](#) | [listeners](#) | [sources](#) | [admins](#) | [settings](#)

## Listing sources

Mountpoint	Id	Host	Source Agent	Time of connect	IP	Clients	KBytes read	KBytes written	Client connections	Connected for
/IGM1-v2.3	0	10.20.200.33	NTRIP Caster/2.0.14 (direct access)	17/Nov/2017:14:24:57	10.20.200.33	0	184818	601	4	4 days, 3 hours, 16 minutes and 12 seconds
/IGM1-v3.0	1	10.20.200.33	NTRIP Caster/2.0.14 (direct access)	17/Nov/2017:14:24:57	10.20.200.33	2	99793	200791	112	4 days, 3 hours, 16 minutes and 12 seconds
/MZAC-v2.3	2	168.96.255.77	NTRIP Caster/2.0.14 (direct access)	17/Nov/2017:14:24:57	168.96.255.77	0	628557	6458	9	4 days, 3 hours, 16 minutes and 12 seconds
/MZAC-v3.0	3	168.96.255.77	NTRIP Caster/2.0.14 (direct access)	17/Nov/2017:14:24:57	168.96.255.77	3	96515	287051	160	4 days, 3 hours, 16 minutes and 12 seconds
/NGAQ-v2.3	22	201.217.244.143	NTRIP Caster/2.0.14 (direct access)	17/Nov/2017:14:24:57	201.217.244.143	0	204568	0	0	4 days, 3 hours, 16 minutes and 12 seconds
/CHOY-v2.3	27	172.20.203.254	NTRIP Leica System 1300/1.0	17/Nov/2017:14:24:57	172.20.203.254	0	325896	0	0	4 days, 3 hours, 16 minutes and 12 seconds
/VIMA-v3.0	30	172.20.203.254	NTRIP Leica System 1300/1.0	17/Nov/2017:14:24:57	172.20.203.254	1	105683	105503	100	4 days, 3 hours, 16 minutes and 12 seconds
/CHOY-v3.0	31	172.20.203.254	NTRIP Leica System 1300/1.0	17/Nov/2017:14:24:57	172.20.203.254	1	113290	113262	100	4 days, 3 hours, 16 minutes and 12 seconds
/SMAN-v3.0	34	172.20.203.254	NTRIP Leica System 1300/1.0	17/Nov/2017:14:24:57	172.20.203.254	0	111105	0	0	4 days, 3 hours, 16 minutes and 12 seconds
/SMAN-v2.3	35	172.20.203.254	NTRIP Leica System 1300/1.0	17/Nov/2017:14:24:57	172.20.203.254	0	319888	0	0	4 days, 3 hours, 16 minutes and 12 seconds
/DORE-v2.3	36	172.20.203.254	NTRIP Leica System 1300/1.0	17/Nov/2017:14:24:57	172.20.203.254	0	333458	0	0	4 days, 3 hours, 16 minutes and 12 seconds
/DORE-v3.0	37	172.20.203.254	NTRIP Leica System 1300/1.0	17/Nov/2017:14:24:57	172.20.203.254	1	114422	114381	100	4 days, 3 hours, 16 minutes and 12 seconds
/MZRF	39	190.15.219.118	NTRIP Caster/2.0.14 (direct access)	17/Nov/2017:14:24:57	190.15.219.118	0	197754	0	0	4 days, 3 hours, 16 minutes and 12 seconds
/UNRO-v3.0	49	172.20.203.254	NTRIP trimble .1	17/Nov/2017:14:24:58	172.20.203.254	1	108176	108007	100	4 days, 3 hours, 16 minutes and 11 seconds
/UNRO-v2.3	50	172.20.203.254	NTRIP trimble .1	17/Nov/2017:14:24:58	172.20.203.254	0	190173	0	0	4 days, 3 hours, 16 minutes and 11 seconds
/TUC1-v2.3	54	172.20.203.254	NTRIP trimble 2.0	17/Nov/2017:14:24:58	172.20.203.254	0	206511	0	0	4 days, 3 hours, 16 minutes and 11 seconds
/TUC1-v3.0	77	172.20.203.254	NTRIP trimble 2.0	17/Nov/2017:14:24:59	172.20.203.254	1	114760	114586	100	4 days, 3 hours, 16 minutes and 10 seconds
/GUAY-v3.0	126	172.20.203.254	NTRIP Leica System 1300/1.0	17/Nov/2017:14:25:02	172.20.203.254	2	114756	229480	107	4 days, 3 hours, 16 minutes and 7 seconds
/CSJ1-v2.3	220	172.20.203.254	NTRIP trimble 1.100.2.5	17/Nov/2017:14:25:30	172.20.203.254	0	200071	0	0	4 days, 3 hours, 15 minutes and 39 seconds
/CSJ1-v3.0	6985	172.20.203.254	NTRIP trimble 1.100.2.5	17/Nov/2017:17:06:25	172.20.203.254	0	105502	0	0	4 days, 0 hours, 34 minutes and 44 seconds
/MPL2	14443	172.20.203.254	NTRIP trimble 1.41.2.19	17/Nov/2017:20:09:35	172.20.203.254	2	110295	217839	106	3 days, 21 hours, 31 minutes and 34 seconds
/CAEP-v3.0	32817	172.20.203.254	NTRIP trimble 2.0	18/Nov/2017:03:41:12	172.20.203.254	1	324797	324537	87	3 days, 13 hours, 59 minutes and 57 seconds
/CAEP-v2.3	32818	172.20.203.254	NTRIP trimble 2.0	18/Nov/2017:03:41:22	172.20.203.254	0	239815	0	0	3 days, 13 hours, 59 minutes and 47 seconds
/SUAR-v3.0	41596	172.20.203.254	NTRIP Leica System 1300/1.0	18/Nov/2017:07:16:59	172.20.203.254	2	92613	184956	94	3 days, 10 hours, 24 minutes and 10 seconds
/SUAR-v2.3	41597	172.20.203.254	NTRIP Leica System 1300/1.0	18/Nov/2017:07:16:59	172.20.203.254	0	265106	0	0	3 days, 10 hours, 24 minutes and 10 seconds
/25MA-v3.0	56264	172.20.203.254	NTRIP trimble .1	18/Nov/2017:13:18:03	172.20.203.254	1	403313	403353	77	3 days, 4 hours, 23 minutes and 6 seconds

Observamos un resumen de la versión del soft, tiempo que está en funcionamiento, cant. de sources conectados, cant. de clients, etc.

[home](#) | [statistics](#) | [sourcetable](#) | [listeners](#) | [sources](#) | [admins](#) | [settings](#)

## Statistics

Following info is server total:

NtripCaster 2.0.14 server running on 186.33.227.175 default port 2101, uptime: 4 days, 3 hours, 18 minutes and 2 seconds

Admins (0):

Sources (102):

Listeners (62):

Displaying server statistics since last resync at: 17/Nov/2017:14:24:57

Total KBytes read: 21836083

Total KBytes written: 9298979

Number of source connects: 3388

Number of client connects: 6878

Average listener time: 53 minutes

Average listener transfer: 1351 KBytes

Average source connect time: 2 hours, 56 minutes

Average source transfer: 6445 KBytes

End of statistics

- La carga de nuevos mounts se realiza ingresando al sistema operativo donde se encuentra el soft y modificando uno de sus archivos, el **sourcetable.dat**
- Si no están cargados en este listado, el programa no los puede identificar para replicar las correcciones

## Carga de datos en sourcetable, información sobre las estaciones

```
 /usr/local/ntripcaster/conf/sourcetable.dat - NTRIP
CAS;rtcm-ntrip.org;2101;NtripInfoCaster;BKG;0;DEU;50.12;8.69;http://www.rtcn-ntrip.org/home
CAS;ntrip.ign.gov.ar;2101;RAMSAC-NTRIP;IGN;0;ARG;-34.57;-58.44;http://www.ign.gov.ar/
NE;RAMSAC;2301;N;http://ign.gov.ar/NuestrasActividades/Geodesia/Ramsac;http://ign.gov.ar/NuestrasActividades/Geodesia/RamsacNtrip;none
STR;25MA-v2.3;25 de Mayo, La Pampa (25MA-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-37.77;-67.70;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
STR;25MA-v3.0;25 de Mayo, La Pampa (25MA-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-37.77;-67.70;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
STR;3ARO-v2.3;Tres Arroyos, Buenos Aires (3ARO-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-38.37;-60.27;0;0;LEICA GR10;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
STR;3ARO-v3.0;Tres Arroyos, Buenos Aires (3ARO-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10),1033(10);2;GPS+GLO;RAMSAC;ARG;-38.37;-60.27;0;0;LEICA GR10;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
STR;ABRA-v2.3;Abra Pampa, Jujuy (ABRA-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-22.72;-65.68;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
STR;ABRA-v3.0;Abra Pampa, Jujuy (ABRA-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-22.72;-65.68;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
STR;AUTF-v2.3;Ushuaia, Tierra del Fuego (AUTF-v2.3);RTCM 2.3;1(1),3(10),18(1),19(1),22(10);2;GPS+GLO;RAMSAC;ARG;-54.83;-68.30;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
STR;AUTF-v3.0;Ushuaia, Tierra del Fuego (AUTF-v3.0);RTCM 3.0;1004(1),1006(10),1008(10),1012(1),1013(10);2;GPS+GLO;RAMSAC;ARG;-54.83;-68.30;0;0;TRIMBLE NETR9;none;B;N;1500;Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
```

**MountPoint**

```
; 25MA-v2.3;
; 25MA-v3.0;
```

**Ubicación**

Tres Arroyos, Buenos Aires  
Tres Arroyos, Buenos Aires

**Formato de datos**

```
; RTCM 2.3;
; RTCM 3.0;
```

**Tipos de mensajes**

```
1(1),3(10),18(1),19(1),22(10)
1004(1),1006(10),1008(10),1012(1),1013(10)
```

**Red y País al que pertenece**

```
RAMSAC;ARG
```

**Coord. Aprox. (grado dec)**

```
-37.77;-67.70;
```

**Marco de referencia en que envía las correcciones**

```
Marco POSGAR07-ITRF2005(2006.632)-SIRGAS
```

## NTRIP Client

- **Son los que reciben las correcciones**
- **Puede ubicarse en el receptor GNSS o bien fuera de él, mediante una computadora, celular, notebook o PDA.**
- **Funciona con conexión a Internet**

## NTRIP Client

- Para ingresar al NTRIP Caster IGN deberá ingresar a la dirección **ntrip.ign.gob.ar** mediante el puerto **2101**
- Previo registro en la pagina
- Limitaciones: **8hs continuadas de uso**

## NTRIP Client

### Pantalla de manejo de usuarios



#### LISTADO DE USUARIO NTRIP

RAMSAC

- Alta Estación
- Listado Estaciones
- Datos Web
- Headers
- Manual de Operación
- Estadísticas Descargas
  - Gráficos
  - Por Estación

NTRIP

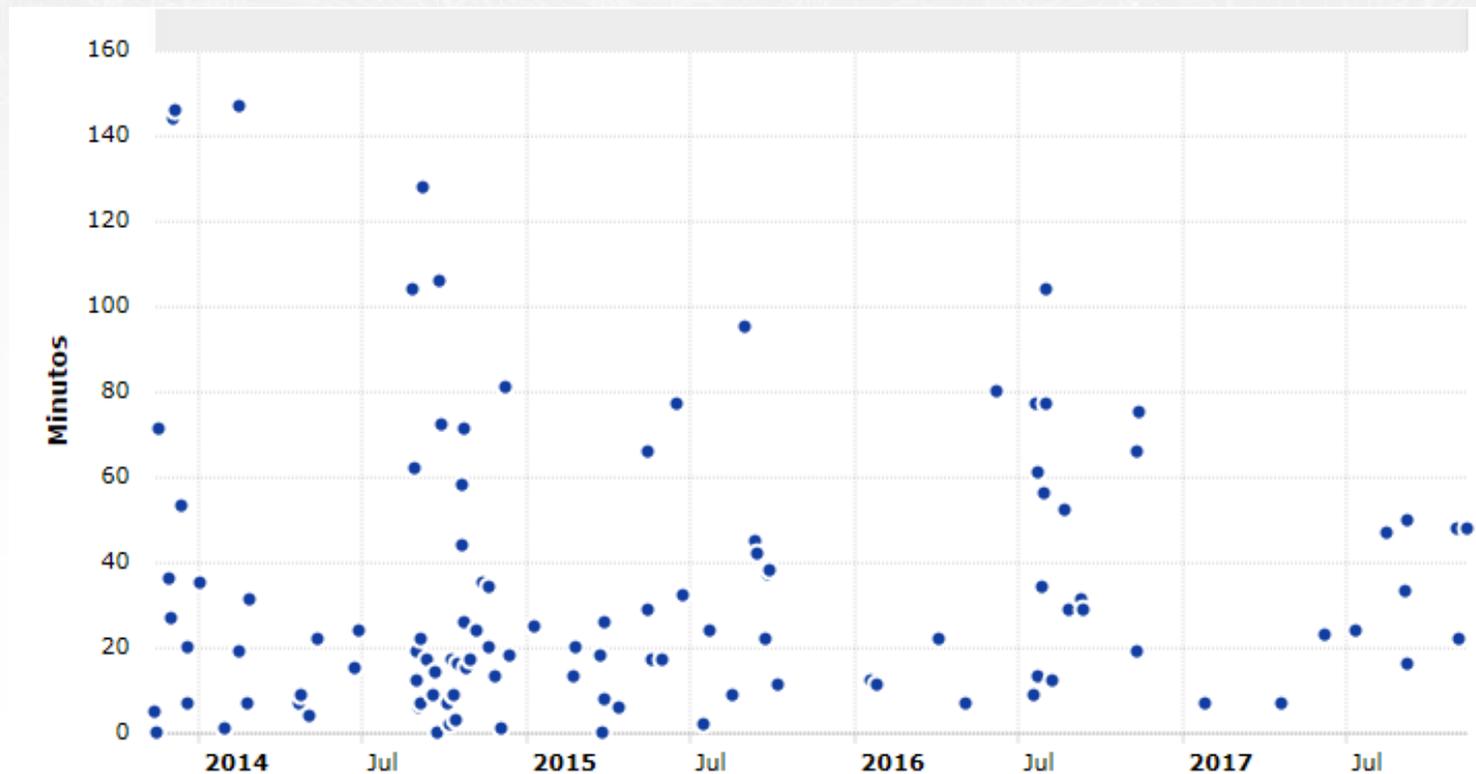
- Alta Usuario
- Listado Usuarios
- Estadísticas de Uso
- Manual de Operación

Alta Usuario NTRIP

Fecha Alta	Usuario	Nombre	Email	Habilitado	Cant. Horas	Est.	Kicks	Uso Actual	Modif.	Baja
13/11/2013 15:45:55	1403	Raúl Leonardo Lobos	agrimensorlobos@yahoo.com.ar	Si	8 horas					
11/07/2016 18:43:21	2304SJ	Jorge G. De Luca	jorgedeluca@yahoo.com	Si	8 horas					
22/02/2017 10:33:20	2310aldo	aldo taricco	aldotaricco@hotmail.com	Si	8 horas					
31/01/2014 17:04:03	4327	FEDERICO LUIS	fe_de_garcia@hotmail.com	Si	8 horas					
24/11/2013 17:07:59	aackermann	Alejandro Ackermann	aackermann@gmail.com	Si	8 horas					
08/12/2015 10:14:39	abebefi	abebefi	uwecufnow@rtotlmail.com	Si	8 horas					
27/04/2015 14:46:37	Aberbari	Ariel barberi	aberbari@gruposit.com.ar	Si	8 horas					
27/10/2017 05:04:08	acavifuped	acavifuped	adoyuybi@we.domailnew.com	Si	8 horas					
03/07/2017 17:07:29	acevallos	Alfredo Cevallos	alfredo.cevallos@gmail.com	Si	8 horas					
18/01/2017 15:11:25	Acueductosur	Emiilo Nardelli	emilio@mega.com.ar	Si	8 horas					

## NTRIP Client

### Estadística de usuarios



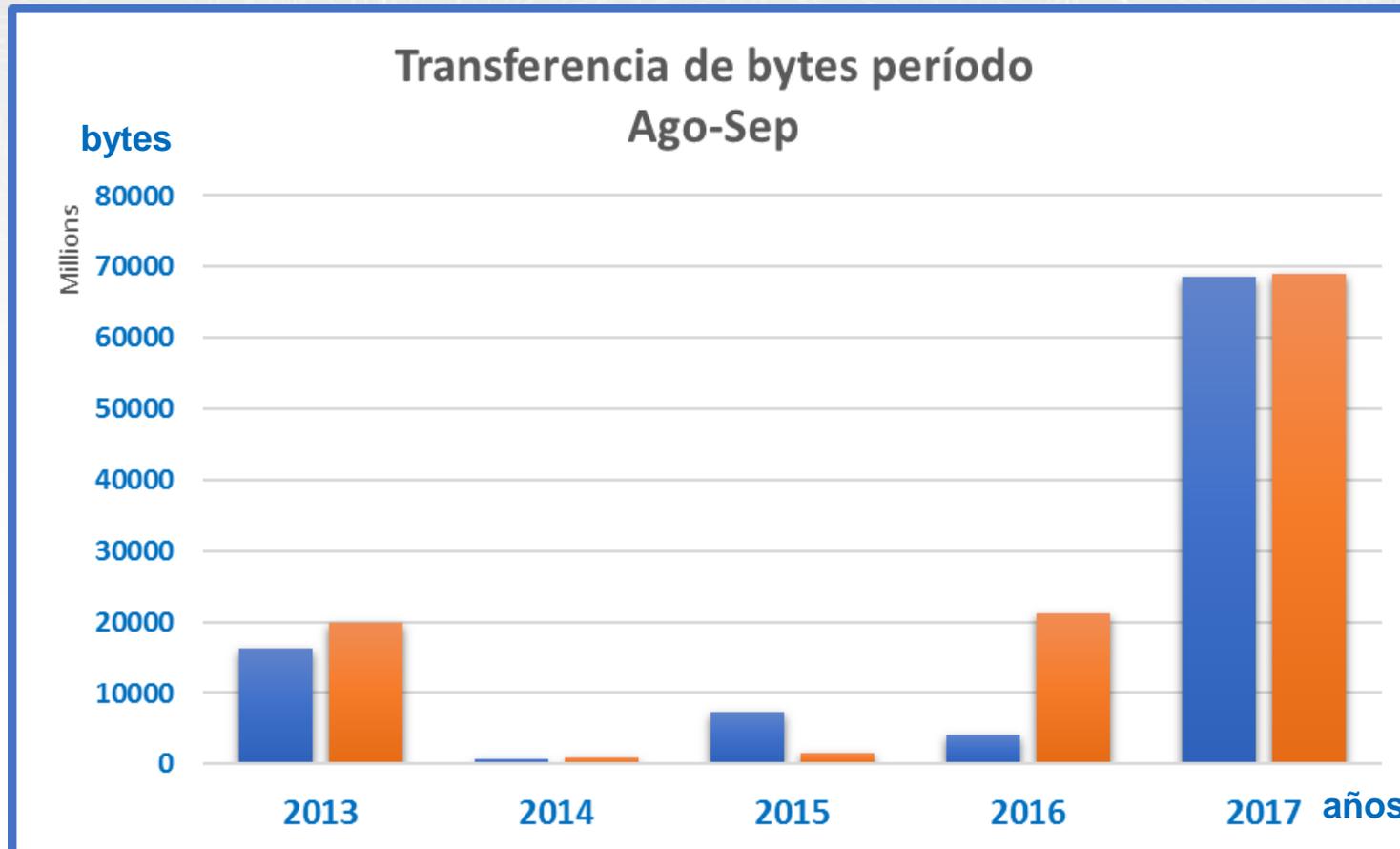
## NTRIP Client

### Top 5 de clients que utilizan el servicio





# ESTADÍSTICAS DE USO



## Promedio por día

**Clients**

**747**

**Segundos**

**5094364**

**Bytes**

**2009371602**

**¡¡¡MUCHAS GRACIAS!!!**

**Ing. Agrim. Cristian Frediani**  
**[cfrediani@ign.gov.ar](mailto:cfrediani@ign.gov.ar)**