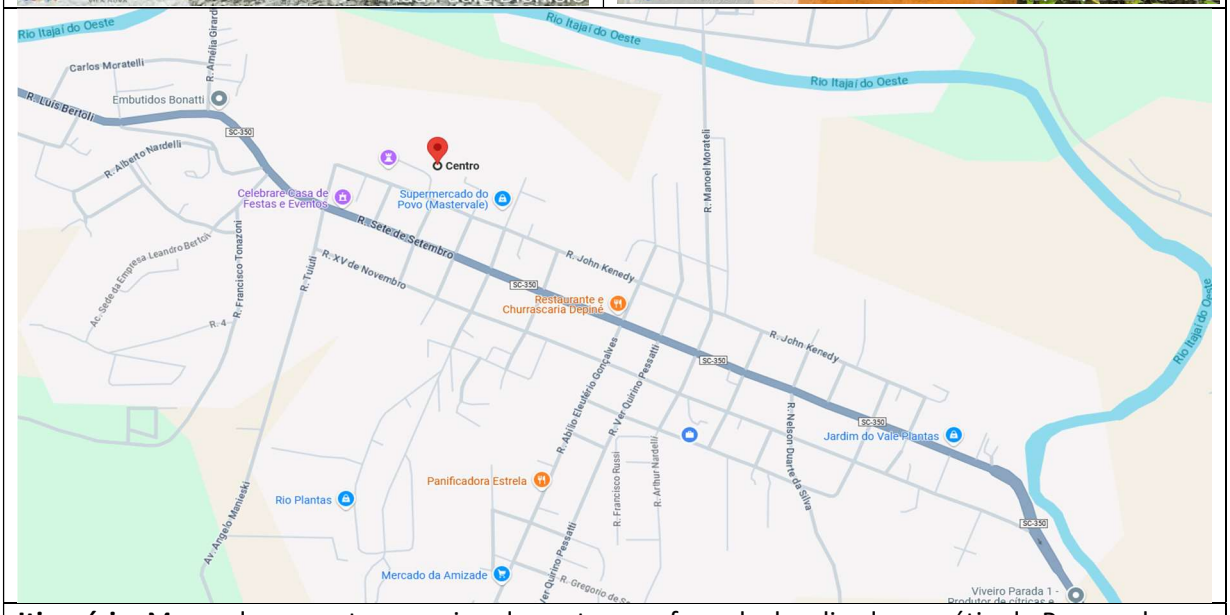
MONOGRAFIA DE MARCO GEODÉSICO

Data: **Outubro/2024**	Município: **Rio do Oeste / SC**	
Marco: **RRCM-1A**	Tipo	**Pino Aço**
Datum: **SIRGAS2000**	Longitude	**-49°48'05,78394"**
Elipsóide: **GRS 80**	Latitude	**-27°11'22,29592"**
Projeção: **UTM**	**E**(m)	**618703,919**
Fuso: **22 S**	**N**(m)	**6992005,362**
Meridiano Central: - **51°**	Altitude elipsoidal = h (m)	**344,120**
Modelo Geoidal: **hgeoHNOR2020**	Altitude ortométrica = H (m)	**340,440** (±0,07)







Itinerário: Marco de concreto com pino de centragem forçada, localizado no pátio do Parque de Exposições (FEPOL).

Executado por: Edmar Busana – Téc. Agrimensura/Especialização em Georreferenciamento - RNP 93674945991 – INCRA cód. LZLN

RELATÓRIO PROCESSAMENTO GNSS

Project name: RRCM-1A
Creation time: 03/12/2024 19:52:49
Projection: UTMSouth-Zone_22 : 54W to 48W
Datum: SIRGAS
Time Zone: (UTC-03:00) Brasilia

Ajustamento

Adjustment type: Plane + Height, Constraint
Confidence level: 68 %
Number of adjusted points: 4
Number of plane control points: 3
Number of plane weighted points: 3
Number of used GPS vectors: 3
A posteriori plane or 3D UWE: 0,813506 , Bounds: (0,5958188 , 1,282575)
Number of height control points: 3
Number of height weighted points: 3
A posteriori height UWE: 0,517819 , Bounds: (0,41833 , 1,354622)

Coordenadas

Name	Code	Longitude	Latitude	Grid Easting (m)	Grid Northing (m)	Elevation (m)
1	MC	49°48'05,78394"W	27°11'22,29592"S	618703,919	6992005,362	344,120
SCBL	RBMC	49°08'14,58373"W	26°52'54,58494"S	685011,937	7025293,106	47,228
SCCA	RBMC	51°02'21,52728"W	26°46'47,01998"S	496091,969	7037960,948	969,195
SCLA	RBMC	50°18'15,34069"W	27°47'34,20845"S	568538,121	6925551,901	940,722

Desvio Padrão

Name	Code	Std Dev e (m)	Std Dev n (m)	Std Dev Hz (m)	Std Dev u (m)
1	MC	0,007	0,007	0,010	0,012

Precisão dos pontos

Name	East RMS(m)	North RMS(m)	Vert RMS (m)	CorrXY	CorrXZ	CorrYZ	SigmaX (m)	SigmaY (m)	SigmaZ (m)
1-SCBL	0,012	0,013	0,037	-0,7715	-0,6182	0,6224	0,025	0,026	0,019
1-SCCA	0,028	0,015	0,044	-0,4002	-0,6131	0,5358	0,037	0,033	0,022
1-SCLA	0,014	0,014	0,038	-0,7363	-0,5944	0,6145	0,027	0,028	0,020

Duração, Solução, Orbitra e PDOP

Name	Duration	Solution Type	Orbit	PDOP	HDOP	VDOP
1-SCBL	06:22:40	Fixed,Wide Lane	Broadcast	1,717	0,804	1,517
1-SCCA	06:22:40	Fixed,Wide Lane	Broadcast	1,758	0,831	1,549
1-SCLA	06:22:40	Fixed,Wide Lane	Broadcast	1,771	0,829	1,566

Duração e Intervalo

Point Name	Duration	Method	Interval (msec)	Antenna Type	Antenna Height (m)
1	06:22:40	Static	5000	HiPer II	0,400
SCCA	24:00:00	Static	15000	TRM57971.00 NONE	0,000
SCLA	24:00:00	Static	15000	TRM115000.00 NONE(ANTEX absolute)	0,002
SCBL	24:00:00	Static	15000	TRM55971.00	0,008

Ponto de Controle

Name	Longitude	Latitude	Ell.Height (m)	Std Dev e (m)	Std Dev n (m)	Std Dev Hz (m)	Std Dev u (m)
SCBL	49°08'14,58373"W	26°52'54,58494"S	47,228	0,001	0,001	0,001	0,005
SCCA	51°02'21,52728"W	26°46'47,01998"S	969,195	0,001	0,001	0,001	0,004
SCLA	50°18'15,34069"W	27°47'34,20845"S	940,722	0,001	0,001	0,001	0,005

MONOGRAFIA DE MARCO GEODÉSICO

Data: **Junho/2023**	Município: **Rio do Oeste / SC**	
Marco: **RRCM-3A**	Tipo	**Chapa**
Datum: **SIRGAS2000**	Latitude	**-27°11'52,91643''**
Elipsóide: **GRS 80**	Longitude	**-49°47'12,84543''**
Projeção: **UTM** Fuso: **22 S** Meridiano Central: - **51°**	**N**(m)	**6991049,118**
	E(m)	**620151,510**
	Altitude elipsoidal = h (m)	**346,086**
Modelo Geoidal: **hgeoHNOR2020**	Altitude ortométrica = H (m)	**342,649** (±0,07)

Foto Localização:

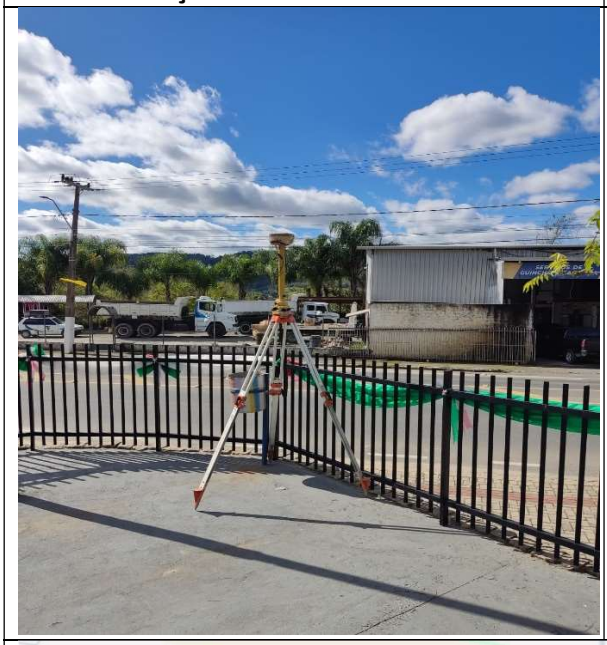
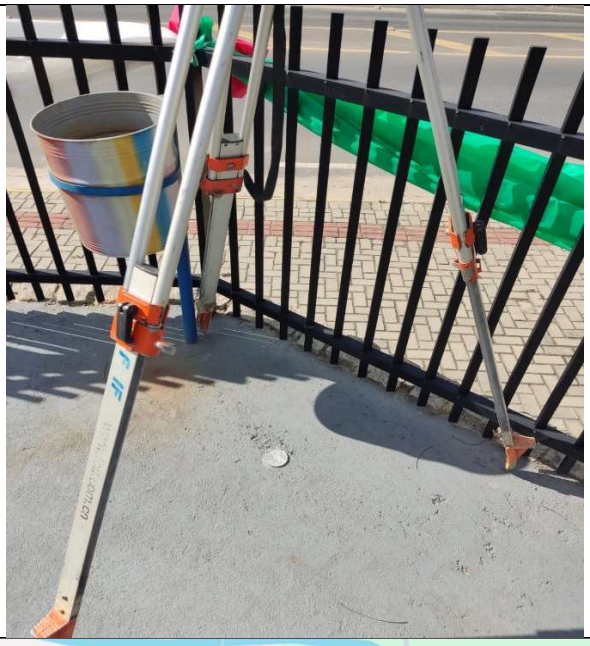
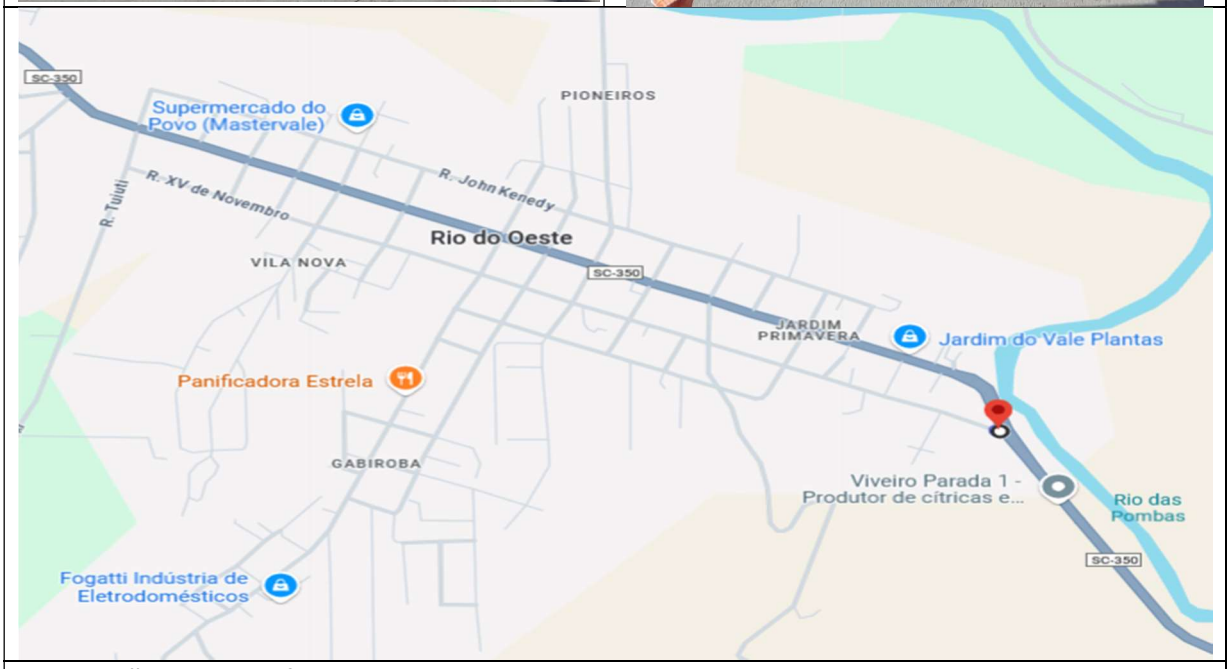


Foto Detalhe:





Localização: Plaqueta fixada no piso da praça Frei Stanislau.

Executado por: Edmar Busana – Téc. Agrimensura/Especialização em Georreferenciamento - RNP 93674945991 – INCRA cód. LZLN

RELATÓRIO DE PROCESSAMENTO

MONOGRAFIA DE MARCO GEODÉSICO

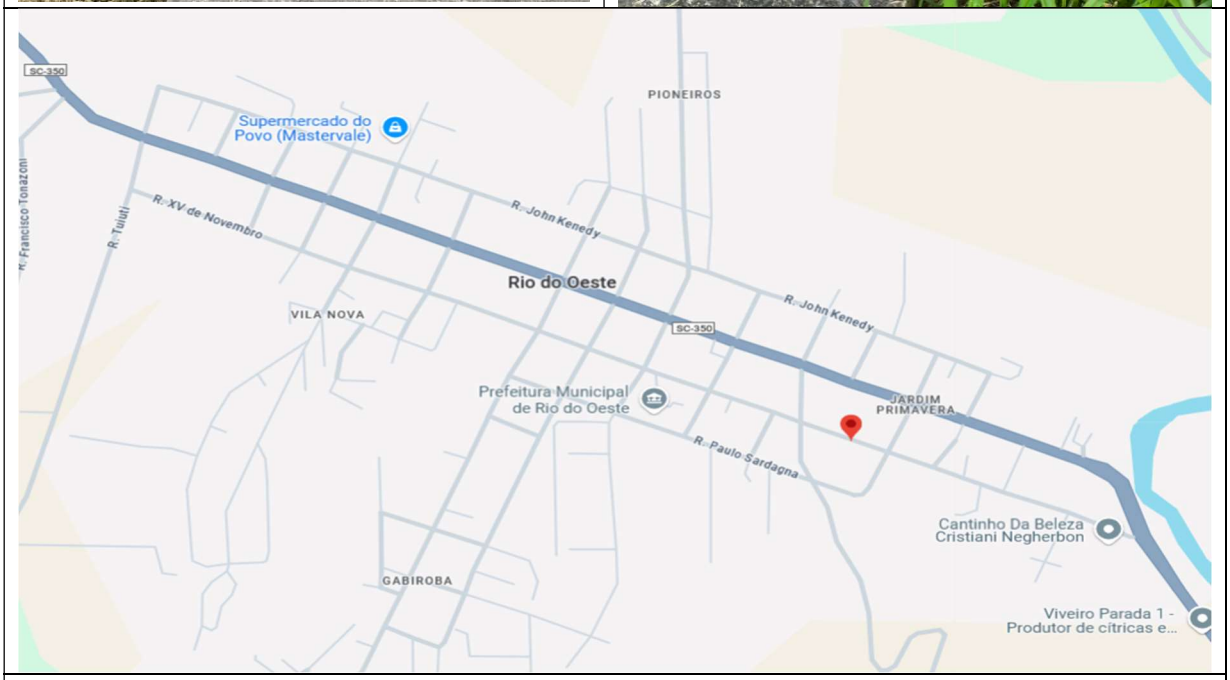
Data: **Janeiro/2025**	Município: **Rio do Oeste / SC**	
Marco: **RRCM-3B**	Tipo	**Chapa**
Datum: **SIRGAS2000**	Latitude	**-27°11'46,42847''**
Elipsóide: **GRS 80**	Longitude	**-49°47'31,46991''**
Projeção: **UTM** Fuso: **22 S** Meridiano Central: - **51°**	**N**(m)	**6991253,710**
	E(m)	**619640,982**
	Altitude elipsoidal = h (m)	**359,924**
Modelo Geoidal: **hgeoHNOR2020**	Altitude ortométrica = H (m)	**356,264** (±0,07)

Foto Localização:



Foto Detalhe:





Localização: Pino de aço fixado no passeio público da Rua XV de Novembro, próximo ao suporte fixo do radar móvel.

Executado por: Edmar Busana – Téc. Agrimensura/Especialização em Georreferenciamento - RNP 93674945991 – INCRA cód. LZLN

RELATÓRIO PROCESSAMENTO GNSS

Project name: Nardelli Participações
Creation time: 17/01/2025 10:11:32
Projection: UTMSouth-Zone_22 : 54W to 48W
Datum: SIRGAS
Time Zone: (UTC-03:00) Brasilia

Ajustamento

Adjustment type: Plane + Height, Constraint
Confidence level: 68 %
Number of adjusted points: 4
Number of plane control points: 3
Number of plane weighted points: 3
Number of used GPS vectors: 3
A posteriori plane or 3D UWE: 0,7411982 , Bounds: (0,5958188 , 1,282575)
Number of height control points: 3
Number of height weighted points: 3
A posteriori height UWE: 0,4163254 , Bounds: (0,41833 , 1,354622)

Coordenadas

Name	Code	Longitude	Latitude	Grid Easting (m)	Grid Northing (m)	Elevation (m)
RRCM-3B	MC	49°47'31,46991"W	27°11'46,42847"S	619640,982	6991253,710	359,924
SCBL		49°08'14,58373"W	26°52'54,58494"S	685011,937	7025293,106	47,228
SCCA		51°02'21,52728"W	26°46'47,01998"S	496091,969	7037960,948	969,195
SCLA		50°18'15,34069"W	27°47'34,20845"S	568538,121	6925551,901	940,722

Desvio Padrão

Name	Code	Std Dev e (m)	Std Dev n (m)	Std Dev Hz (m)	Std Dev u (m)
RRCM-3B	MC	0,007	0,007	0,009	0,010

Precisão dos pontos

Name	Horz RMS (m)	Vert RMS (m)	CorrXY	CorrXZ	CorrYZ	SigmaX (m)	SigmaY (m)	SigmaZ (m)
RRCM-3B-SCBL	0,020	0,036	-0,6920	-0,5496	0,6380	0,024	0,026	0,020
RRCM-3B-SCCA	0,025	0,048	-0,6880	-0,6516	0,6599	0,032	0,035	0,026
RRCM-3B-SCLA	0,021	0,038	-0,7039	-0,5461	0,6348	0,026	0,027	0,022

Duração, Solução, Orbitra e PDOP

Name	Duration	Solution Type	Orbit	PDOP	HDOP	VDOP
RRCM-3B-SCBL	04:43:10	Fixed,Wide Lane	Broadcast	1,705	0,828	1,490
RRCM-3B-SCCA	04:43:10	Fixed,Wide Lane	Broadcast	1,695	0,826	1,480
RRCM-3B-SCLA	04:43:10	Fixed,Wide Lane	Broadcast	1,694	0,825	1,480

Duração e Intervalo

Point Name	Duration	Method	Interval (msec)	Antenna Type	Antenna Height (m)
RRCM-3B	04:43:10	Static	5000	HiPer II	1,920
SCBL	06:00:00	Static	15000	TRM55971.00	0,008
SCLA	06:00:00	Static	15000	TRM115000.00 NONE(ANTEX absolute)	0,002
SCCA	06:00:00	Static	15000	TRM57971.00 NONE	0,000

Ponto de Controle

Name	Longitude	Latitude	Ell.Height (m)	Std Dev e (m)	Std Dev n (m)	Std Dev Hz (m)	Std Dev u (m)
SCBL	49°08'14,58373"W	26°52'54,58494"S	47,228	0,001	0,001	0,001	0,005
SCCA	51°02'21,52728"W	26°46'47,01998"S	969,195	0,001	0,001	0,001	0,004
SCLA	50°18'15,34069"W	27°47'34,20845"S	940,722	0,001	0,001	0,001	0,005

MONOGRAFIA DE MARCO GEODÉSICO

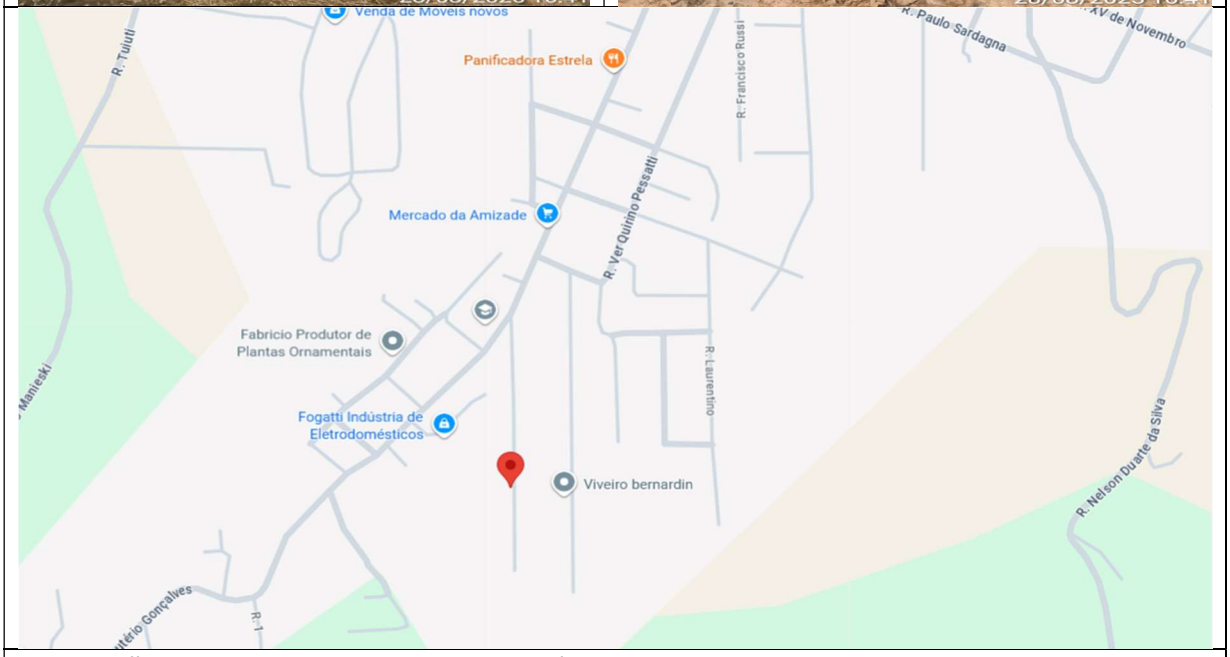
Data: **Janeiro/2025**	Município: **Rio do Oeste / SC**	
Marco: **RRCM-4A**	Tipo	**Pedra com chapa**
Datum: **SIRGAS2000**	Latitude	**-27°12'11,11707''**
Elipsóide: **GRS 80**	Longitude	**-49°48'02,20370''**
Projeção: **UTM** Fuso: **22 S** Meridiano Central: - **51°**	**N**(m)	**6990502,131**
	E(m)	**618788,062**
	Altitude elipsoidal = h (m)	**365,462**
Modelo Geoidal: **hgeoHNOR2020**	Altitude ortométrica = H (m)	**361,782** (±0,07)

Foto Localização:



Foto Detalhe:





Localização: Marco de pedra com chapa metálica no lado da Rua Matilde Wagner.

Executado por: Edmar Busana – Téc. Agrimensura/Especialização em Georreferenciamento - RNP 93674945991 – INCRA cód. LZLN

RELATÓRIO PROCESSAMENTO GNSS

Project name: RRCM-4A
Creation time: 01/09/2025 19:50:30
Projection: UTMSouth-Zone_22 : 54W to 48W
Datum: SIRGAS
Time Zone: (UTC-03:00) Brasilia

Ajustamento

Adjustment type: Plane + Height, Constraint
Confidence level: 68 %
Number of adjusted points: 4
Number of plane control points: 3
Number of plane weighted points: 3
Number of used GPS vectors: 3
A posteriori plane or 3D UWE: 0,4675488 , Bounds: (0,5958188 , 1,282575)
Number of height control points: 3
Number of height weighted points: 3
Number of rejected GPS vectors by height: 1
A posteriori height UWE: 0,2178349 , Bounds: (0,2024846 , 1,403567)

Coordenadas

Name	Code	Longitude	Latitude	Grid Easting (m)	Grid Northing (m)	Elevation (m)
1	MC	49°48'02,20370"W	27°12'11,11707"S	618788,062	6990502,131	365,462
SCBL		49°08'14,58373"W	26°52'54,58494"S	685011,937	7025293,106	47,228
SCCA		51°02'21,52728"W	26°46'47,01998"S	496091,969	7037960,948	969,195
SCLA		50°18'15,34069"W	27°47'34,20845"S	568538,121	6925551,901	940,722

Desvio Padrão

Name	Code	Std Dev e (m)	Std Dev n (m)	Std Dev Hz (m)	Std Dev u (m)
1	MC	0,004	0,004	0,006	0,006

Precisão dos pontos

Name	dE (m)	dN (m)	dZ (m)	CorrXY	CorrXZ	CorrYZ	SigmaX (m)	SigmaY (m)	SigmaZ (m)
1-SCBL	66223,881	34790,979	31850,704	-0,7021	-0,5609	0,6354	0,023	0,027	0,020
1-SCCA	-122696,096	47458,822	41530,424	-0,3451	-0,4598	0,5867	0,034	0,037	0,022
1-SCLA	-50249,946	-64950,240	-58239,224	-0,6785	-0,5578	0,6206	0,023	0,029	0,021

Distancia, Solução, Orbitra e PDOP

Name	Distance (m)	Solution Type	Orbit	PDOP	HDOP	VDOP
1-SCBL	74817,462	Fixed,Wide Lane	Broadcast	1,664	0,817	1,450
1-SCCA	131612,884	Fixed,Wide Lane	Broadcast	1,759	0,859	1,536
1-SCLA	82152,994	Fixed,Wide Lane	Broadcast	1,751	0,857	1,527

Duração e Intervalo

Point Name	Duration	Method	Interval (msec)	Antenna Type	Antenna Height (m)
1	05:25:00	Static	5000	HiPer II	1,600
SCLA	24:00:00	Static	15000	TRM115000.00 NONE(ANTEX absolute)	0,002
SCCA	24:00:00	Static	15000	TRM57971.00 NONE	0,000
SCBL	24:00:00	Static	15000	TRM55971.00	0,008

Ponto de Controle

Name	Longitude	Latitude	Ell.Height (m)	Std Dev e (m)	Std Dev n (m)	Std Dev Hz (m)	Std Dev u (m)
SCBL	49°08'14,58373"W	26°52'54,58494"S	47,228	0,001	0,001	0,001	0,005
SCCA	51°02'21,52728"W	26°46'47,01998"S	969,195	0,001	0,001	0,001	0,004
SCLA	50°18'15,34069"W	27°47'34,20845"S	940,722	0,001	0,001	0,001	0,005

MONOGRAFIA DE MARCO GEODÉSICO

Data: **Junho/2023**	Município: **Rio do Oeste / SC**	
Marco: **RRCM-5A**	Tipo	**Chapa**
Datum: **SIRGAS2000**	Latitude	**-27°11'47,84227''**
Elipsóide: **GRS 80**	Longitude	**-49°48'08,83153''**
Projeção: **UTM**	**N**(m)	**6991220,070**
Fuso: **22 S**	**E**(m)	**618612,549**
Meridiano Central: - **51°**	Altitude elipsoidal = h (m)	**379,482**
Modelo Geoidal: **hgeoHNOR2020**	Altitude ortométrica = H (m)	**375,802** (±0,07)

Foto Localização:

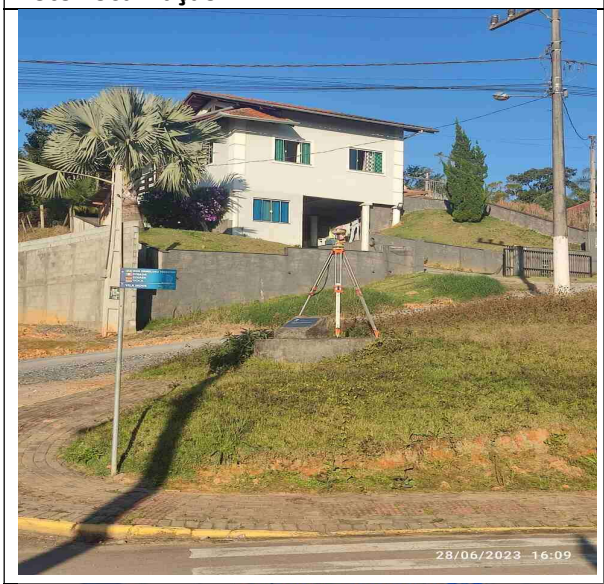
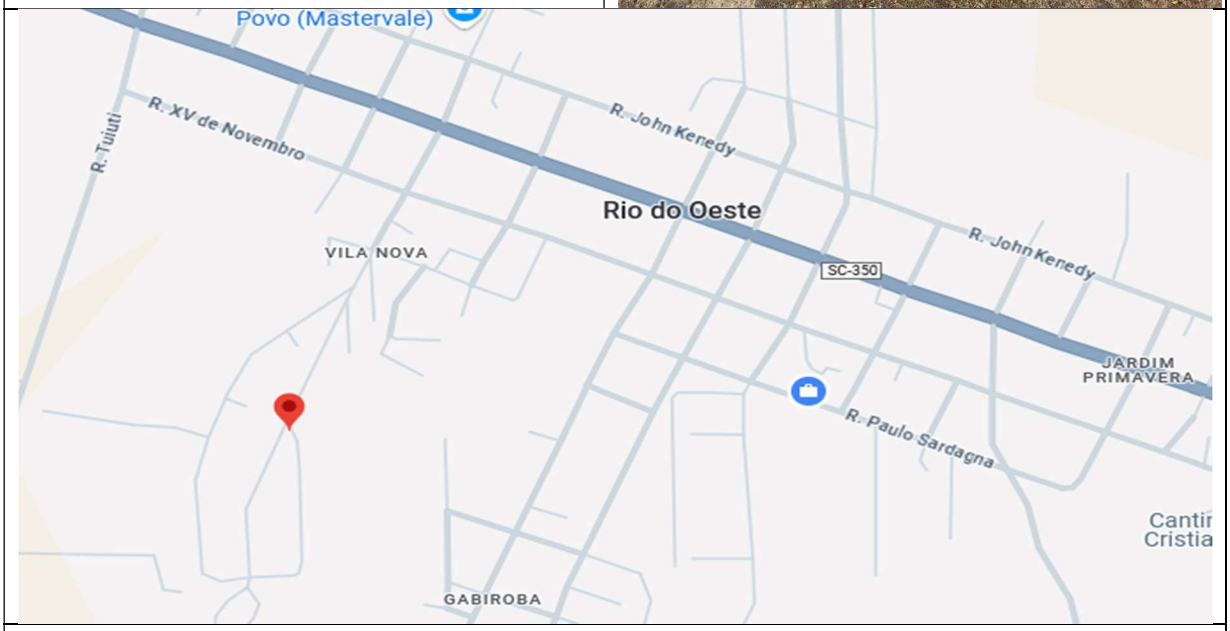


Foto Detalhe:





Localização: Plaqueta fixada no monumento do conjunto habitacional, na esquina da Rua Ermelino Trentini com a Rua Ignez Depiné Bertoli.

Executado por: Edmar Busana – Téc. Agrimensura/Especialização em Georreferenciamento - RNP 93674945991 – INCRA cód. LZLN

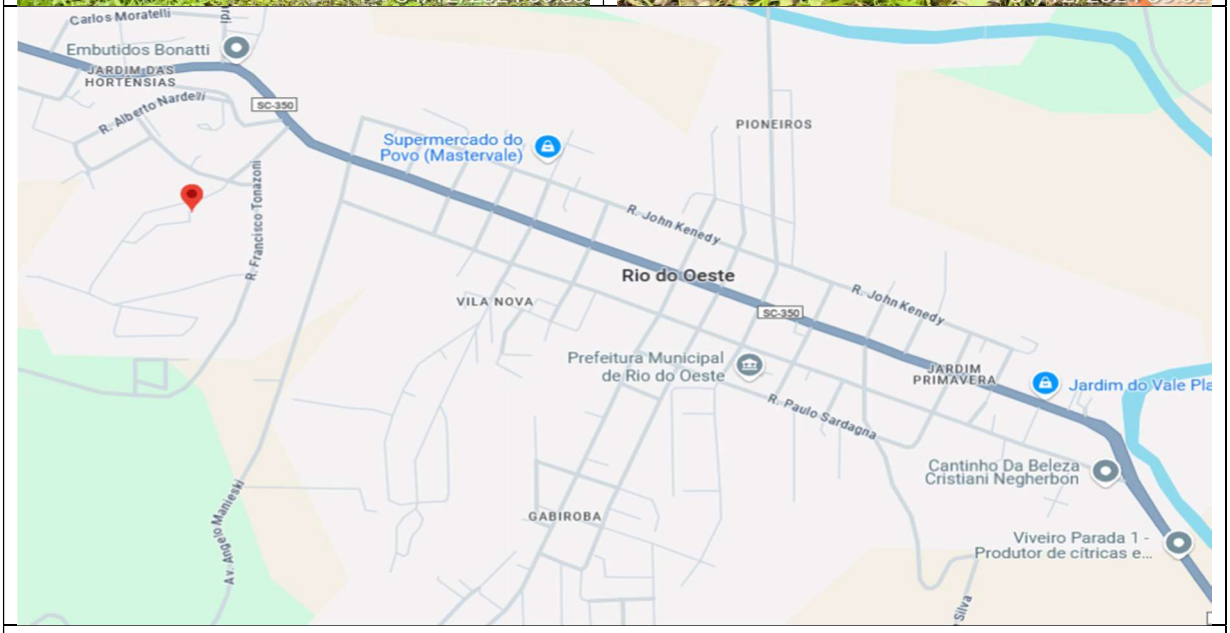
RELATÓRIO DE PROCESSAMENTO

MONOGRAFIA DE MARCO GEODÉSICO

Data: **Dezembro/2024**	Município: **Rio do Oeste / SC**	
Marco: **RRCM-6A**	Tipo	**Tubo Galvanizado**
Datum: **SIRGAS2000**	Latitude	**-27°11'30,98016"**
Elipsóide: **GRS 80**	Longitude	**-49°48'29,11642"**
Projeção: **UTM**	**N**(m)	**6991744,258**
Fuso: **22 S**	**E**(m)	**618059,340**
Meridiano Central: - **51°**	Altitude elipsoidal = h (m)	**370,644**
Modelo Geoidal: **hgeoHNOR2020**	Altitude ortométrica = H (m)	**366,944** (±0,07)







Itinerário: Tubo galvanizado encravado no passeio público, localizado no balão de retorno do Beco Vereador Adolfo Depiné.

Executado por: Edmar Busana – Téc. Agrimensura/Especialização em Georreferenciamento - RNP 93674945991 – INCRA cód. LZLN

RELATÓRIO PROCESSAMENTO GNSS

Project name: RRCM-6A
Creation time: 07/12/2024 07:53:06
Projection: UTMSouth-Zone_22 : 54W to 48W
Datum: SIRGAS
Time Zone: (UTC-03:00) Brasilia

Ajustamento

Adjustment type: Plane + Height, Constraint
Confidence level: 68 %
Number of adjusted points: 4
Number of plane control points: 3
Number of plane weighted points: 3
Number of used GPS vectors: 3
A posteriori plane or 3D UWE: 0,4991147 , Bounds: (0,5958188 , 1,282575)
Number of height control points: 3
Number of height weighted points: 3
Number of rejected GPS vectors by height: 1
A posteriori height UWE: 0,8670825 , Bounds: (0,2024846 , 1,403567)

Coordenadas

Name	Code	Longitude	Latitude	Grid Easting (m)	Grid Northing (m)	Elevation (m)
1	MC	49°48'29,11642"W	27°11'30,98016"S	618059,340	6991744,258	370,644
SCBL	RBMC	49°08'14,58373"W	26°52'54,58494"S	685011,937	7025293,106	47,228
SCCA	RBMC	51°02'21,52728"W	26°46'47,01998"S	496091,969	7037960,948	969,195
SCLA	RBMC	50°18'15,34069"W	27°47'34,20845"S	568538,121	6925551,901	940,722

Desvio Padrão

Name	Code	Std Dev e (m)	Std Dev n (m)	Std Dev Hz (m)	Std Dev u (m)
1	MC	0,005	0,004	0,006	0,024

Precisão dos pontos

Name	East RMS(m)	North RMS(m)	Vert RMS (m)	CorrXY	CorrXZ	CorrYZ	SigmaX (m)	SigmaY (m)	SigmaZ (m)
1-SCBL	0,014	0,013	0,037	-0,7225	-0,5944	0,6867	0,025	0,026	0,020
1-SCCA	0,030	0,015	0,043	-0,3264	-0,6109	0,4570	0,039	0,032	0,021
1-SCLA	0,014	0,014	0,039	-0,7276	-0,5986	0,6997	0,026	0,028	0,021

Duração, Solução, Orbitra e PDOP

Name	Duration	Solution Type	Orbit	PDOP	HDOP	VDOP
1-SCBL	06:36:30	Fixed,Wide Lane	Broadcast	1,699	0,820	1,487
1-SCCA	06:36:30	Fixed,Wide Lane	Broadcast	1,708	0,825	1,495
1-SCLA	06:36:30	Fixed,Wide Lane	Broadcast	1,701	0,822	1,489

Duração e Intervalo

Point Name	Duration	Method	Interval (msec)	Antenna Type	Antenna Height (m)
1	06:36:30	Static	5000	HiPer II	1,955
SCCA	07:00:00	Static	15000	TRM57971.00 NONE	0,000
SCBL	07:00:00	Static	15000	TRM55971.00	0,008
SCLA	07:00:00	Static	15000		0,002

Ponto de Controle

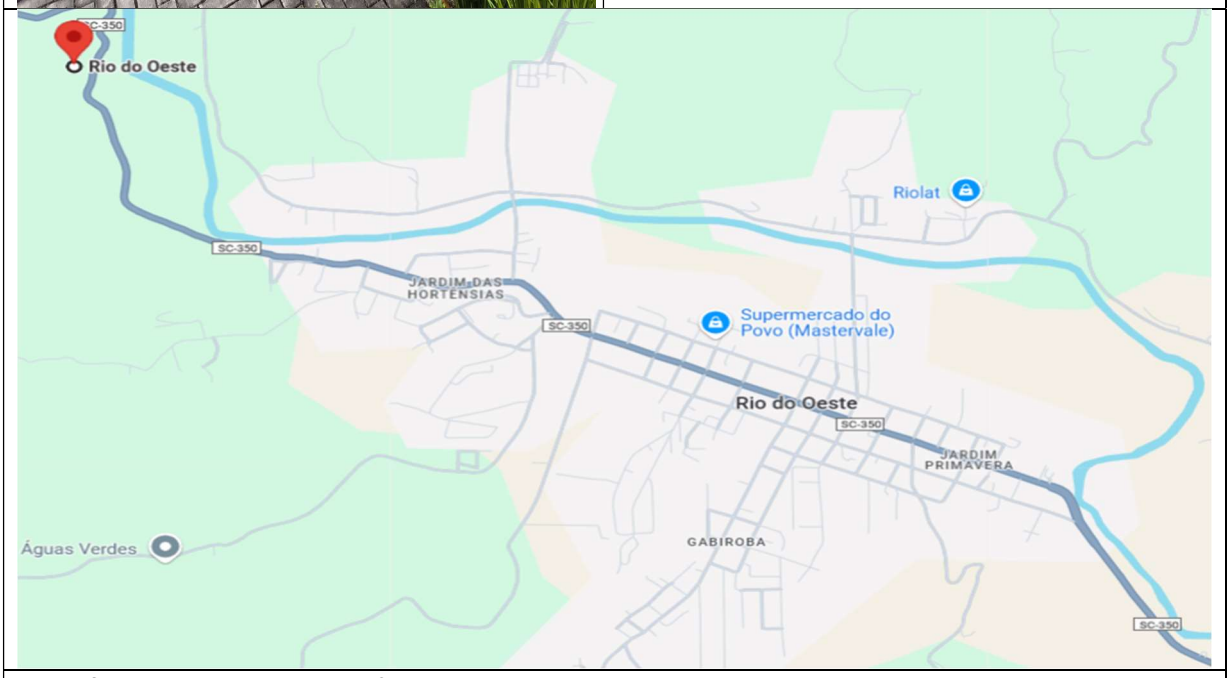
Name	Longitude	Latitude	Ell.Height (m)	Std Dev e (m)	Std Dev n (m)	Std Dev Hz (m)	Std Dev u (m)
SCBL	49°08'14,58373"W	26°52'54,58494"S	47,228	0,001	0,001	0,001	0,005
SCCA	51°02'21,52728"W	26°46'47,01998"S	969,195	0,001	0,001	0,001	0,004
SCLA	50°18'15,34069"W	27°47'34,20845"S	940,722	0,001	0,001	0,001	0,005

MONOGRAFIA DE MARCO GEODÉSICO

Data: **Novembro/2024**	Município: **Rio do Oeste / SC**	
Marco: **RRCM-6B**	Tipo	**Pino Aço**
Datum: **SIRGAS2000**	Latitude	**-27°10'46,00753"**
Elipsóide: **GRS 80**	Longitude	**-49°49'25,15218"**
Projeção: **UTM**	**N**(m)	**6993142,678**
Fuso: **22 S**	**E**(m)	**616530,428**
Meridiano Central: - **51°**	Altitude elipsoidal = h (m)	**382,883**
Modelo Geoidal: **hgeoHNOR2020**	Altitude ortométrica = H (m)	**379,153** (±0,07)







Itinerário: Pino de aço 55mm fixado no pavimento do estacionamento da empresa Oliveira Refinaria Ecológica de Carvão Ltda.

Executado por: Edmar Busana – Téc. Agrimensura/Especialização em Georreferenciamento - RNP 93674945991 – INCRA cód. LZLN

RELATÓRIO PROCESSAMENTO GNSS

Project name: Oliveira Carvao
Creation time: 25/11/2024 03:48:24
Projection: UTMSouth-Zone_22 : 54W to 48W
Datum: SIRGAS
Geoid:
Time Zone: (UTC-03:00) Brasília

Ajustamento

Adjustment type: Plane + Height, Constraint
Confidence level: 68 %
Number of adjusted points: 4
Number of plane control points: 3
Number of plane weighted points: 3
Number of used GPS vectors: 3
A posteriori plane or 3D UWE: 0,750847 , Bounds: (0,5958188 , 1,282575)
Number of height control points: 3
Number of height weighted points: 3
A posteriori height UWE: 1,075954 , Bounds: (0,41833 , 1,354622)

Coordenadas

Name	Longitude	Latitude	Grid Easting (m)	Grid Northing (m)	Elevation (m)
1	49°49'25,15218"W	27°10'46,00753"S	616530,428	6993142,678	382,883
SCBL	49°08'14,58373"W	26°52'54,58494"S	685011,937	7025293,106	47,228
SCCA	51°02'21,52728"W	26°46'47,01998"S	496091,969	7037960,948	969,195
SCLA	50°18'15,34069"W	27°47'34,20845"S	568538,121	6925551,901	940,722

Desvio Padrão

Name	Std Dev e (m)	Std Dev n (m)	Std Dev Hz (m)	Std Dev u (m)
1	0,007	0,007	0,009	0,025

Precisão dos pontos

Name	East RMS(m)	North RMS(m)	Vert RMS (m)	CorrXY	CorrXZ	CorrYZ	SigmaX (m)	SigmaY (m)	SigmaZ (m)
1-SCBL	0,013	0,014	0,037	-0,7466	-0,5442	0,5907	0,025	0,027	0,019
1-SCCA	0,022	0,017	0,046	-0,5943	-0,5365	0,5624	0,034	0,036	0,022
1-SCLA	0,013	0,014	0,039	-0,7642	-0,5896	0,6122	0,026	0,030	0,018

Duração, Solução, Orbitra e PDOP

Name	Duration	Solution Type	Orbit	PDOP	HDOP	VDOP
1-SCBL	03:31:50	Fixed,Wide Lane	Broadcast	1,615	0,777	1,416
1-SCCA	03:31:50	Fixed,Wide Lane	Broadcast	1,672	0,784	1,477
1-SCLA	03:31:50	Fixed,Wide Lane	Broadcast	1,670	0,785	1,474

Duração e Intervalo

Point Name	Duration	Method	Interval (msec)	Antenna Type	Antenna Height (m)
1	03:31:50	Static	5000	HiPer II	1,600
SCBL	24:00:00	Static	15000	TRM55971.00	0,008
SCCA	24:00:00	Static	15000	TRM57971.00 NONE	0,000
SCLA	24:00:00	Static	15000	TRM115000.00 NONE(ANTEX absolute)	0,002

Ponto de Controle

Name	Longitude	Latitude	Ell.Height (m)	Std Dev e (m)	Std Dev n (m)	Std Dev Hz (m)	Std Dev u (m)
SCBL	49°08'14,58373"W	26°52'54,58494"S	47,228	0,001	0,001	0,001	0,005
SCCA	51°02'21,52728"W	26°46'47,01998"S	969,195	0,001	0,001	0,001	0,004
SCLA	50°18'15,34069"W	27°47'34,20845"S	940,722	0,001	0,001	0,001	0,005

MONOGRAFIA DE MARCO GEODÉSICO

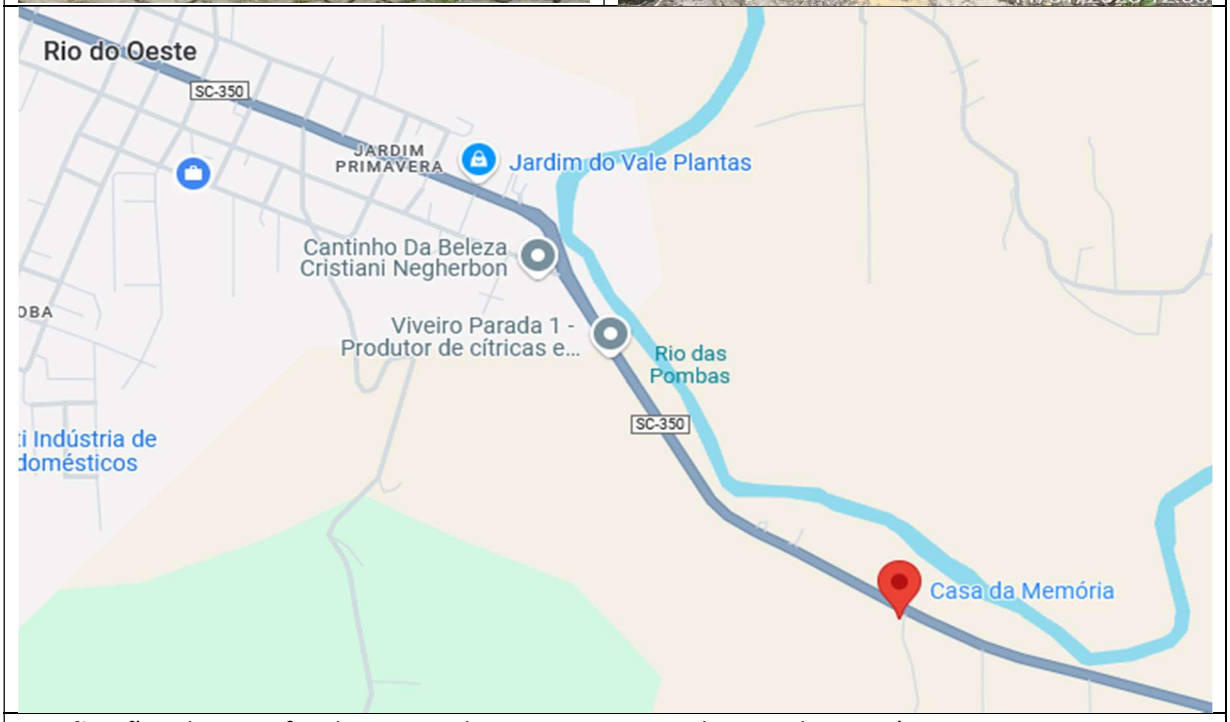
Data: **Janeiro/2025**	Município: **Rio do Oeste / SC**	
Marco: **RRCM-8A**	Tipo	**Chapa**
Datum: **SIRGAS2000**	Latitude	**-27°12'20,35692''**
Elipsóide: **GRS 80**	Longitude	**-49°46'44,30713''**
Projeção: **UTM**	**N**(m)	**6990197,110**
Fuso: **22 S**	**E**(m)	**620928,513**
Meridiano Central: - **51°**	Altitude elipsoidal = h (m)	**344,658**
Modelo Geoidal: **hgeoHNOR2020**	Altitude ortométrica = H (m)	**341,038** (±0,07)

Foto Localização:



Foto Detalhe:





Localização: Plaqueta fixada no piso do estacionamento da Casa da Memória.

Executado por: Edmar Busana – Téc. Agrimensura/Especialização em Georreferenciamento - RNP 93674945991 – INCRA cód. LZLN

RELATÓRIO PROCESSAMENTO GNSS

Project name: DoraciPacher
Creation time: 17/01/2025 07:11:14
Projection: UTMSouth-Zone_22 : 54W to 48W
Datum: SIRGAS
Time Zone: (UTC-03:00) Brasilia

Ajustamento

Adjustment type: Plane + Height, Constraint
Confidence level: 68 %
Number of adjusted points: 4
Number of plane control points: 3
Number of plane weighted points: 3
Number of used GPS vectors: 3
A posteriori plane or 3D UWE: 0,7678736 , Bounds: (0,5958188 , 1,282575)
Number of height control points: 3
Number of height weighted points: 3
A posteriori height UWE: 0,4778795 , Bounds: (0,41833 , 1,354622)

Coordenadas

Name	Code	Longitude	Latitude	Grid Easting (m)	Grid Northing (m)	Elevation (m)
RRCM-8A	MC	49°46'44,30713"W	27°12'20,35692"S	620928,513	6990197,110	344,658
SCBL		49°08'14,58373"W	26°52'54,58494"S	685011,937	7025293,106	47,228
SCCA		51°02'21,52728"W	26°46'47,01998"S	496091,969	7037960,948	969,195
SCLA		50°18'15,34069"W	27°47'34,20845"S	568538,121	6925551,901	940,722

Desvio Padrão

Name	Code	Std Dev e (m)	Std Dev n (m)	Std Dev Hz (m)	Std Dev u (m)
RRCM-8A	MC	0,007	0,006	0,009	0,011

Precisão dos pontos

Name	Horz RMS (m)	Vert RMS (m)	CorrXY	CorrXZ	CorrYZ	SigmaX (m)	SigmaY (m)	SigmaZ (m)
RRCM-8A-SCBL	0,019	0,036	-0,7767	-0,5618	0,6098	0,027	0,025	0,017
RRCM-8A-SCCA	0,032	0,045	-0,4564	-0,5254	0,5909	0,040	0,031	0,021
RRCM-8A-SCLA	0,020	0,039	-0,7763	-0,5487	0,6377	0,028	0,027	0,019

Duração, Solução, Orbitra e PDOP

Name	Duration	Solution Type	Orbit	PDOP	HDOP	VDOP
RRCM-8A-SCBL	04:20:45	Fixed,Wide Lane	Broadcast	1,895	0,864	1,687
RRCM-8A-SCCA	04:20:45	Fixed,Wide Lane	Broadcast	1,906	0,871	1,695
RRCM-8A-SCLA	04:20:45	Fixed,Wide Lane	Broadcast	1,973	0,913	1,750

Duração e Intervalo

Point Name	Duration	Method	Interval (msec)	Antenna Type	Antenna Height (m)
RRCM-8A	04:20:45	Static	5000	HiPer II	1,840
SCBL	06:00:00	Static	15000	TRM55971.00	0,008
SCLA	06:00:00	Static	15000	TRM115000.00 NONE(ANTEX absolute)	0,002
SCCA	06:00:00	Static	15000	TRM57971.00 NONE	0,000

Ponto de Controle

Name	Longitude	Latitude	Ell.Height (m)	Std Dev e (m)	Std Dev n (m)	Std Dev Hz (m)	Std Dev u (m)
SCBL	49°08'14,58373"W	26°52'54,58494"S	47,228	0,001	0,001	0,001	0,005
SCCA	51°02'21,52728"W	26°46'47,01998"S	969,195	0,001	0,001	0,001	0,004
SCLA	50°18'15,34069"W	27°47'34,20845"S	940,722	0,001	0,001	0,001	0,005

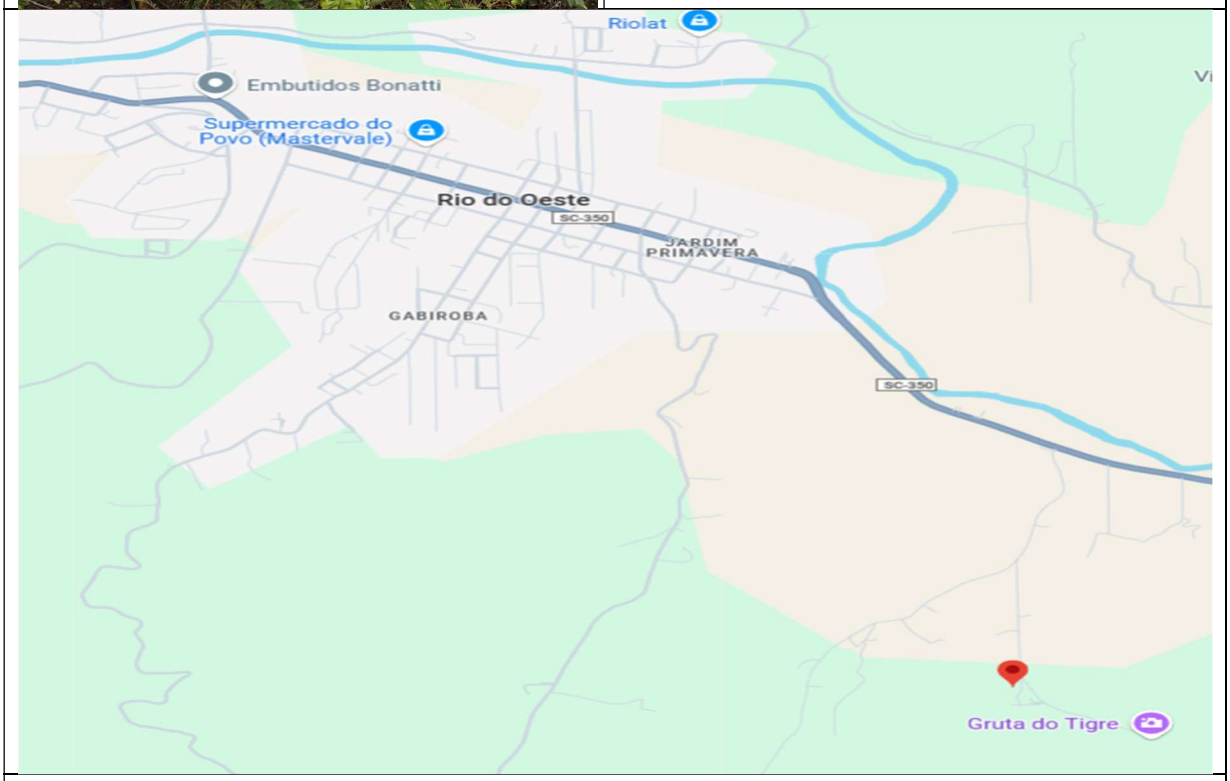
MONOGRAFIA DE MARCO GEODÉSICO

Data: **Junho/2023**	Município: **Rio do Oeste / SC**	
Marco: **RRCM-8B**	Tipo	**Chapa**
Datum: **SIRGAS2000**	Latitude	**-27°13'03,16551''**
Elipsóide: **GRS 80**	Longitude	**-49°46'51,16628''**
Projeção: **UTM** Fuso: **22 S** Meridiano Central: - **51°**	**N**(m)	**6988881,665**
	E(m)	**620726,978**
	Altitude elipsoidal = h (m)	**407,840**
Modelo Geoidal: **hgeoHNOR2020**	Altitude ortométrica = H (m)	**404,408** (±0,07)

Foto Localização:



Foto Detalhe:



Localização: Marco de pedra com plaqueta, localizado encravado no imóvel de Adelino Leite.

Executado por: Edmar Busana – Téc. Agrimensura/Especialização em Georreferenciamento - RNP 93674945991 – INCRA cód. LZLN

RELATÓRIO DE PROCESSAMENTO

MONOGRAFIA DE MARCO GEODÉSICO

Data: **Janeiro/2025**	Município: **Rio do Oeste / SC**	
Marco: **RRCM-9A**	Tipo	**Chapa**
Datum: **SIRGAS2000**	Latitude	**-27°16'00,12391''**
Elipsóide: **GRS 80**	Longitude	**-49°48'54,64339''**
Projeção: **UTM** Fuso: **22 S** Meridiano Central: - **51°**	**N**(m)	**6983469,013**
	E(m)	**617278,560**
	Altitude elipsoidal = h (m)	**497,280**
Modelo Geoidal: **hgeoHNOR2020**	Altitude ortométrica = H (m)	**493,470** (±0,07)

Foto Localização:

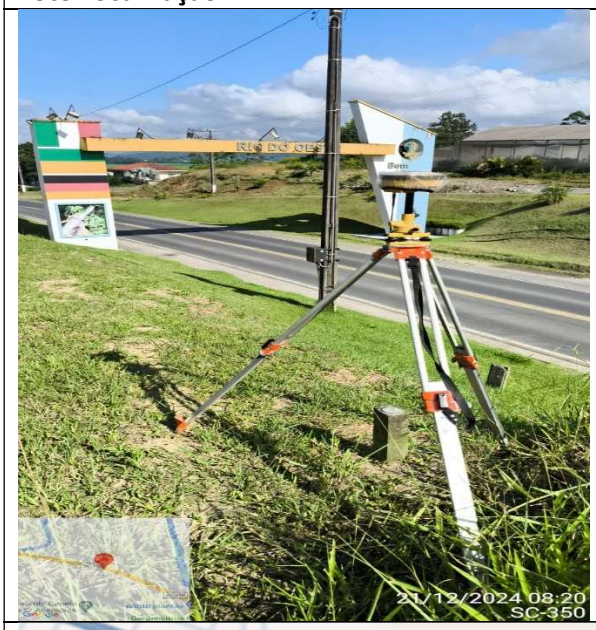
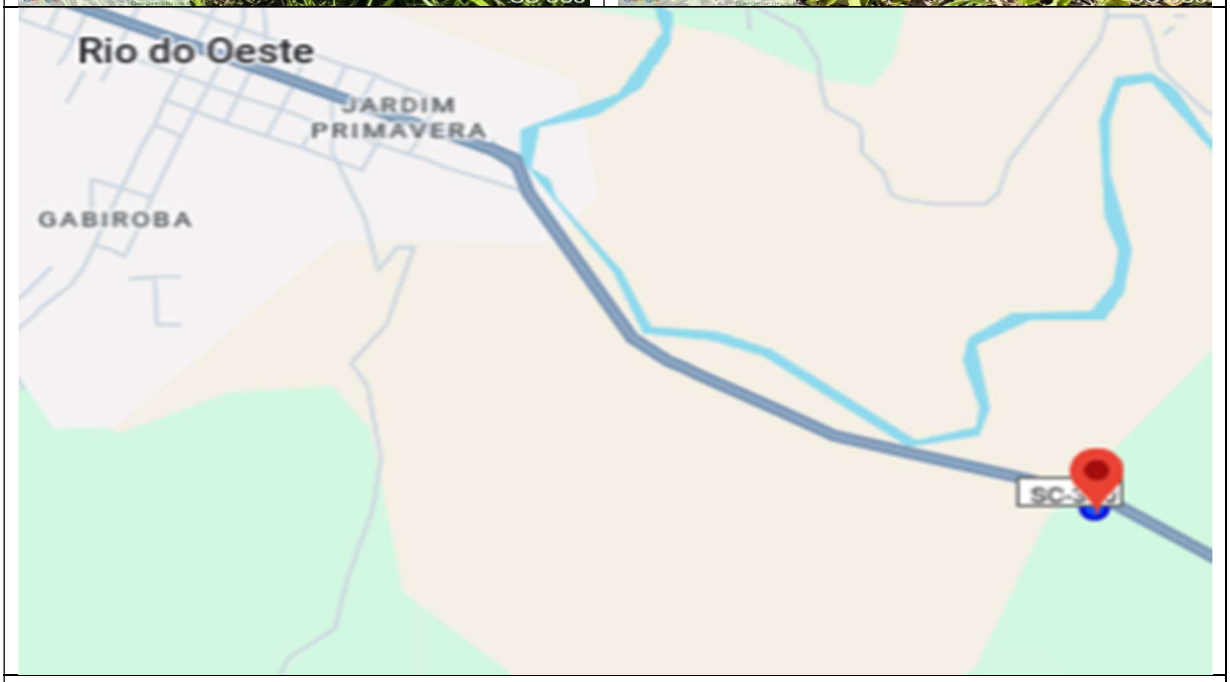


Foto Detalhe:





Localização: Marco de pedra com plaqueta, localizado ao lado da Rua Morumbi.

Executado por: Edmar Busana – Téc. Agrimensura/Especialização em Georreferenciamento - RNP 93674945991 – INCRA cód. LZLN

RELATÓRIO PROCESSAMENTO GNSS

Project name: DoraciPacher
Creation time: 17/01/2025 07:11:14
Projection: UTMSouth-Zone_22 : 54W to 48W
Datum: SIRGAS
Time Zone: (UTC-03:00) Brasilia

Ajustamento

Adjustment type: Plane + Height, Constraint
Confidence level: 68 %
Number of adjusted points: 4
Number of plane control points: 3
Number of plane weighted points: 3
Number of used GPS vectors: 3
A posteriori plane or 3D UWE: 0,6209013 , Bounds: (0,5958188 , 1,282575)
Number of height control points: 3
Number of height weighted points: 3
A posteriori height UWE: 1,213488 , Bounds: (0,41833 , 1,354622)

Coordenadas

Name	Code	Longitude	Latitude	Grid Easting (m)	Grid Northing (m)	Elevation (m)
RRCM-9A	MC	49°48'54,64339"W	27°16'00,12391"S	617278,560	6983469,013	497,280
SCBL		49°08'14,58373"W	26°52'54,58494"S	685011,937	7025293,106	47,228
SCCA		51°02'21,52728"W	26°46'47,01998"S	496091,969	7037960,948	969,195
SCLA		50°18'15,34069"W	27°47'34,20845"S	568538,121	6925551,901	940,722

Desvio Padrão

Name	Code	Std Dev e (m)	Std Dev n (m)	Std Dev Hz (m)	Std Dev u (m)
RRCM-9A	MC	0,006	0,005	0,008	0,028

Precisão dos pontos

Name	Horz RMS (m)	Vert RMS (m)	CorrXY	CorrXZ	CorrYZ	SigmaX (m)	SigmaY (m)	SigmaZ (m)
RRCM-9A-SCBL	0,019	0,038	-0,7493	-0,5887	0,6640	0,026	0,027	0,020
RRCM-9A-SCCA	0,032	0,044	-0,3771	-0,4608	0,6531	0,037	0,035	0,020
RRCM-9A-SCLA	0,019	0,037	-0,7413	-0,5943	0,6800	0,025	0,026	0,020

Duração, Solução, Orbitra e PDOP

Name	Duration	Solution Type	Orbit	PDOP	HDOP	VDOP
RRCM-9A-SCBL	03:14:35	Fixed,Wide Lane	Broadcast	1,797	0,783	1,617
RRCM-9A-SCCA	03:14:35	Fixed,Wide Lane	Broadcast	1,806	0,788	1,625
RRCM-9A-SCLA	03:14:35	Fixed,Wide Lane	Broadcast	1,804	0,788	1,623

Duração e Intervalo

Point Name	Duration	Method	Interval (msec)	Antenna Type	Antenna Height (m)
RRCM-9A	03:14:35	Static	5000	HiPer II	1,850
SCBL	05:00:00	Static	15000	TRM55971.00	0,008
SCLA	05:00:00	Static	15000	TRM115000.00 NONE(ANTEX absolute)	0,002
SCCA	05:00:00	Static	15000	TRM57971.00 NONE	0,000

Ponto de Controle

Name	Longitude	Latitude	Ell.Height (m)	Std Dev e (m)	Std Dev n (m)	Std Dev Hz (m)	Std Dev u (m)
SCBL	49°08'14,58373"W	26°52'54,58494"S	47,228	0,001	0,001	0,001	0,005
SCCA	51°02'21,52728"W	26°46'47,01998"S	969,195	0,001	0,001	0,001	0,004
SCLA	50°18'15,34069"W	27°47'34,20845"S	940,722	0,001	0,001	0,001	0,005