

# BOLETIM SÍSMICO BRASILEIRO Nº17

## BRAZILIAN SEISMIC BULLETIN

EVENTOS REGISTRADOS OU SENTIDOS NO BRASIL E REGIÕES VIZINHAS EM 1994 E 1995.

YEAR	MMDD	HHMMSS	LAT.	LONG.	ERR	ST	DEPTH	MAG.	T	CAT	I <sub>0</sub>	LOCALITY	COMMENTS
1994	0115	214627	-23.84	-47.24	20	SP		2.2	I	I		Piaí	(IPT) Explosão?
1994	0120	062747	-15.87	-45.21	150	MG		2.7	I	I		SãoFrancisco	(UnB)
1994	0209	121538	-22.76	-56.71	40			3.0	I	I		Paraguai	(IPT UnB AGCOPEL)
1994	0218	015519	-05.65	-35.85	10	RN		2.0	5	I		João Câmara	(UFRN IAG)
1994	0220	045340	-05.65	-35.85	10	RN		2.0	5	I		João Câmara	(IAG)UFRN
1994	0220	060447	-05.65	-35.85	10	RN		2.0	5	I		João Câmara	(UFRN IAG)
1994	0220	122359	-05.65	-35.85	10	RN		2.0	5	I		João Câmara	(UFRN IAG)
1994	0221	231117	-04.41	-38.15	2	CE	4	2.0	5	I		Cascavel	(UFRN UnB IAG)
1994	0222	135348	-04.41	-38.15	2	CE	4	2.2	5	I		Cascavel	(UFRN IAG)
1994	0224	182259	-04.41	-38.15	2	CE	4	2.1	5	I		Cascavel	(UFRN IAG)
1994	0307	200015	-19.17	-47.61	20	MG		2.5	I	I		Sacramento	(UnB)
1994	0321	002531	-19.38	-47.65	10	MG		2.4	I	I		Nova Ponte	(UnB)
1994	0324	084018	-16.35	-50.49	30	GO		2.3	I	I		Sanclerland	(UnB)
1994	0406	121822	-09.75	-36.54	20	AL		2.8	I	I	IV	Junqueiro	(IAG UnB)
1994	0406	204117	-25.51	-56.10	50			2.1	I	I		Paraguai	(UnB) Explosão?
1994	0411	081533	-25.15	-45.89	50	SP		2.2	I	I		Margem Cont.	(IPT IAG)
1994	0411	180321	-19.89	-44.15	5	MG	I	2.6	I	I	III	Betim	(IAG UnB) varios
1994	0413	000742	-19.89	-44.15	5	MG	I	2.3	I	I	III	Betim	(IAG UnB) varios
1994	0419	150036	-25.60	-56.05	50			2.3	I	I		Paraguai	(UnB) Explosão?
1994	0421	100059	-18.46	-47.37	50	MG		2.1	I	I		A.Dourados	(UnB)
1994	0429	071130	-28.30	-63.25	20		562	6.3	0			Argentina	(GS) Parana IIMM
1994	0510	063628	-28.50	-63.10	5		600	6.4	0			Argentina	(GS) Campinas IIMM
1994	0519	194612	-20.33	-45.63	30	MG		2.1	I	I		Pains	(UnB)
1994	0525	233730	-25.09	-45.06	20	SP		2.1	I	I		Margem Cont.	(IPT IAG)
1994	0601	212207	-23.12	-40.97	20	RJ		3.3	I	I		Margem Cont.	(UnB IAG)
1994	0608	053233	-19.38	-47.65	5	MG		2.8	I	I		Nova Ponte	(UnB)
1994	0609	002640	-23.45	-45.51	2	SP	2	2.6	5	I		Paraibuna	(IPT IAG)
1994	0609	003316	-13.84	-67.55	20		631	7.0	0			Bolívia	(GS 8.3Mw Brasil IVMM)
1994	0613	160453	-04.41	-38.15	2	CE	4	2.1	5	I		Cascavel	(UFRN UnB IAG)
1994	0614	144441	-04.41	-38.15	2	CE	4	2.1	5	I		Cascavel	(UFRN UnB IAG)
1994	0614	184007	-04.41	-38.15	2	CE	4	2.1	5	I		Cascavel	(UFRN UnB IAG)
1994	0614	201808	-04.41	-38.15	2	CE	4	2.0	5	I		Cascavel	(UFRN UnB IAG)
1994	0615	140807	-04.41	-38.15	2	CE	4	2.2	5	I		Cascavel	(UFRN IAG)
1994	0616	115743	-04.41	-38.15	2	CE	4	2.1	5	I		Cascavel	(UFRN IAG)
1994	0618	210207	-04.41	-38.15	2	CE	4	2.9	I	I		Cascavel	(UFRN varios IAG)
1994	0619	023355	-04.41	-38.15	2	CE	4	2.2	5	I		Cascavel	(UFRN IAG)
1994	0619	193320	-04.41	-38.15	2	CE	4	2.4	5	I		Cascavel	(UFRN UnB IAG)
1994	0619	193503	-04.41	-38.15	2	CE	4	2.0	5	I		Cascavel	(UFRN IAG)
1994	0620	181544	-04.41	-38.15	2	CE	4	2.6	5	I		Cascavel	(UFRN UnB IAG)
1994	0621	020001	-04.41	-38.15	2	CE	4	2.6	5	I		Cascavel	(UFRN UnB IAG)
1994	0621	123124	-05.46	-35.69	10	RN		2.3	5	I		João Câmara	(UFRN IAG)
1994	0622	013047	-04.41	-38.15	2	CE	4	2.0	5	I		Cascavel	(UFRN IAG)
1994	0623	073237	-04.41	-38.15	2	CE	4	2.5	5	I		Cascavel	(UFRN IAG)
1994	0623	074431	-04.41	-38.15	2	CE	4	2.5	5	I		Cascavel	(UFRN UnB IAG)
1994	0623	074559	-04.41	-38.15	2	CE	4	2.5	5	I		Cascavel	(UFRN UnB IAG)
1994	0623	184534	-04.41	-38.15	2	CE	4	2.0	5	I		Cascavel	(UFRN UnB IAG)
1994	0623	231516	-04.41	-38.15	2	CE	4	2.2	5	I		Cascavel	(UFRN UnB IAG)
1994	0701	003124	-13.71	-37.59	200	BA	0	3.4	I	I		Margem Cont	(IAG)
1994	0703	100434	-04.41	-38.15	2	CE	4	2.3	5	I		Cascavel	(UFRN UnB IAG)
1994	0707	080945	-04.41	-38.15	2	CE	4	2.4	5	I		Cascavel	(UFRN UnB IAG)
1994	0707	212213	-19.86	-46.96	40	MG		2.5	I	I		Tapira	(UnB)
1994	0707	221559	-24.02	-49.73	20	PR		2.3	I	I		Calogeras	(IPT IAG)
1994	0713	025202	-21.85	-46.61	5	MG		2.2	I	I	IV	P. de Caldas	(IPT IAG UnAF=1.27)
1994	0715	043557	-04.41	-38.15	2	CE	4	2.1	5	I		Cascavel	(UFRN UnB IAG)
1994	0724	093211	-04.41	-38.15	2	CE	4	2.2	5	I		Cascavel	(UFRN UnB IAG)
1994	0724	112101	-04.41	-38.15	2	CE	4	2.5	I	I		Cascavel	(UFRN UnB IAG)
1994	0724	113053	-04.41	-38.15	2	CE	4	2.4	5	I		Cascavel	(UFRN UnB IAG)
1994	0724	121216	-04.41	-38.15	2	CE	4	2.7	5	I		Cascavel	(UFRN UnB IAG)
1994	0724	135602	-04.41	-38.15	2	CE	4	2.9	5	I		Cascavel	(UnB IAG)
1994	0725	190103	-04.41	-38.15	2	CE	4	2.2	5	I		Cascavel	(UFRN UnB IAG)

YEAR	MMDD	HHMMSS	LAT.	LONG.	ERR	ST	DEPTH	MAG.	T	CAT	I <sub>o</sub>	LOCALITY	COMMENTS
1994	0727	151722	-19.13	-47.68	5	MG		2.0	5	I		Nova Ponte	(UnB)
1994	0728	040802	-19.10	-47.65	5	MG		2.0	5	I		Nova Ponte	(UnB)
1994	0729	160316	-04.41	-38.15	2	CE	4	2.0	5	I		Cascavel	(UFRN UnB IAG)
1994	0730	001547	-04.41	-38.15	2	CE	4	2.0	5	I		Cascavel	(UFRN UnB IAG)
1994	0801	203804	-04.41	-38.15	2	CE	4	2.3	5	I		Cascavel	(UFRN UnB IAG)
1994	0803	153838	-04.41	-38.15	2	CE	4	2.0	5	I		Cascavel	(UFRN IAG)
1994	0805	105517	-04.41	-38.15	2	CE	4	2.0	5	I		Cascavel	(UFRN UnB IAG)
1994	0805	125603	-04.41	-38.15	2	CE	4	2.8	5	I		Cascavel	(UFRN UnB IAG)
1994	0805	184236	-04.41	-38.15	2	CE	4	2.0	5	I		Cascavel	(UFRN UnB IAG)
1994	0806	221931	-10.51	-37.34	50	SE		2.6	1	I		Gado Bravo	(IAG) Explosão?
1994	0808	025035	-04.41	-38.15	2	CE	4	2.2	5	I		Cascavel	(UFRN UnB IAG)
1994	0808	141422	-04.41	-38.15	2	CE	4	2.4	5	I		Cascavel	(UFRN UnB IAG)
1994	0808	150610	-04.41	-38.15	2	CE	4	2.4	5	I		Cascavel	(UFRN UnB IAG)
1994	0808	162005	-04.41	-38.15	2	CE	4	2.2	5	I		Cascavel	(UFRN UnB IAG)
1994	0810	024142	-04.41	-38.15	2	CE	4	2.2	5	I		Cascavel	(UFRN UnB IAG)
1994	0811	072334	-04.41	-38.15	2	CE	4	3.5	1	I		Cascavel	(UFRN IAG UnB)
1994	0811	072757	-04.41	-38.15	2	CE	4	2.4	1	I		Cascavel	(UFRN UnB IAG)
1994	0811	150101	-04.41	-38.15	2	CE	4	2.0	5	I		Cascavel	(UFRN UnB IAG)
1994	0812	062009	-03.70	-31.00	300	RN		3.5	1	I		F. Noronha?	(UFRN UnB IAG)
1994	0815	081228	-04.41	-38.15	2	CE	4	2.0	5	I		Cascavel	(UFRN UnB IAG)
1994	0815	103407	-04.41	-38.15	2	CE	4	2.1	5	I		Cascavel	(UFRN IAG)
1994	0819	100252	-26.64	-63.42	20		564	6.4	0			Argentina	(GS) São Paulo II MM
1994	0821	051223	-21.32	-46.16	2	MG	1	2.4	1	I	III	Arcado	(IAG IPT) varios
1994	0824	070114	-04.41	-38.15	2	CE	4	2.0	5	I		Cascavel	(UFRN UnB IAG)
1994	0826	013147	-05.49	-36.54	2	RN		3.0	1	I		N. S. Rafael	(UFRN UnB IAG) varios
1994	0826	075230	-05.49	-36.54	2	RN		2.6	1	I		N. S. Rafael	(UFRN UnB IAG)
1994	0911	014122	-05.46	-35.69	10	RN		3.5	1	I		João Câmara	(UFRN IAG UnB)
1994	0916	001036	-05.46	-35.69	10	RN		2.2	5	I		João Câmara	(UFRN)
1994	0920	070946	-04.41	-38.15	2	CE	4	2.8	1	I		Cascavel	(UFRN UnB IAG)
1994	0920	091753	-23.17	-46.11	2	SP	2	2.6	5	I		Igarata	(IPT IAG)
1994	0921	063117	-04.41	-38.15	2	CE	4	2.0	5	I		Cascavel	(UFRN UnB IAG)
1994	0922	002011	-04.41	-38.15	2	CE	4	2.3	5	I		Cascavel	(UFRN)
1994	0923	010517	-13.42	-39.66	40	BA		2.7	1	I	III-IV	Jaguaquara	(IAG)
1994	0929	181645	-04.41	-38.15	2	CE	4	2.3	5	I		Cascavel	(UFRN UnB IAG)
1994	1002	223848	-04.41	-38.15	2	CE	4	2.1	5	I		Cascavel	(UFRN UnB IAG)
1994	1002	231748	-04.41	-38.15	2	CE	4	2.1	5	I		Cascavel	(UFRN UnB IAG)
1994	1023	113933	-04.41	-38.15	2	CE	4	2.1	5	I		Cascavel	(UFRN UnB IAG)
1994	1027	002819	-04.41	-38.15	2	CE	4	2.0	5	I		Cascavel	(UFRN UnB IAG)
1994	1101	144241	-05.65	-35.85	10	RN		2.2	5	I		João Câmara	(UFRN IAG)
1994	1104	121947	-04.41	-38.15	2	CE	4	2.8	1	I		Cascavel	(UFRN UnB IAG)
1994	1113	044717	-20.20	-44.40	10	MG		3.0	1	I	IV-V	Brumadinho	(IAG UnB IPT) AF=1.65
1994	1115	031044	-04.41	-38.15	2	CE	4	2.5	1	I		Cascavel	(UFRN UnB IAG)
1994	1231	191751	-19.02	-43.75	10	MG		2.4	1	I	IV	Sant. Riacho	(UnB IAG) varios, AF=0.1
1995	0110	080013	-02.54	-32.98	50	RN		2.5	1	I		Plat. Cont.	(UFRN UnB)
1995	0111	173706	-17.22	-48.62	20	GO		2.5	1	I		Pires do Rio	(UnB)
1995	0113	001822	-04.41	-38.15	2	CE		2.2	5	I		Cascavel	(UFRN IAG)
1995	0113	002046	-04.41	-38.15	2	CE		2.6	5	I		Cascavel	(UFRN IAG)
1995	0115	214627	-23.84	-47.24	30	SP		2.2	1	I		Piraí	(IPT)
1995	0116	013743	-13.48	-50.88	50	GO		2.1	1	I		Bandeirantes	(UnB)
1995	0118	192108	-04.41	-38.15	2	CE		2.5	5	I		Cascavel	(UFRN UnB)
1995	0118	204507	-04.41	-38.15	2	CE		2.2	5	I		Cascavel	(UFRN UnB)
1995	0118	002145	-04.41	-38.15	2	CE		2.6	5	I		Cascavel	(UFRN)
1995	0120	142147	-04.41	-38.15	2	CE		2.1	5	I		Cascavel	(UFRN UnB)
1995	0128	032300	-23.99	-49.18	20	SP		2.5	1	I		Itararé	(IPT IAG)
1995	0209	033031	-24.63	-45.69	80	SP		2.2	1	I		Margem Cont.	(IPT IAG)
1995	0209	221722	-12.47	-54.20	80	MT		3.7	1	I		Consul	(UnB)
1995	0210	072719	-21.78	-46.51	30	MG		2.1	1	I		P. de Caldas	(IPT UnB IAG)
1995	0311	035206	-26.13	-48.39	30	SC		2.8	1	I		Plat. Cont.	(IPT IAG COPEL UFRS)
1995	0312	144208	-05.55	-35.88	30	RN		2.3	5	I		João Câmara	(UFRN)
1995	0314	204211	-13.75	-47.72	50	GO		2.4	1	I		Cavalcante	(UnB)
1995	0318	025931	-24.50	-49.87	10	PR		2.5	1	I	V	Piraí do Sul	(IAG IPT COPEL)
1995	0320	032638	-05.37	-35.94	30	RN		2.9	5	I		João Câmara	(UFRN UnB)
1995	0320	001100	-05.53	-35.75	30	RN		2.1	5	I		João Câmara	(UFRN)
1995	0320	121258	-12.27	-49.32	50	TO		2.6	1	I		Figueirópolis	(UnB)
1995	0327	023758	-13.43	-48.61	50	GO		2.0	1	I		S.T. de Goiás	(UnB)
1995	0329	004136	-07.11	-40.22	30	CE		2.6	1	I		Aiuaba	(UFRN IAG UnB)
1995	0329	210018	-12.51	-49.14	50	TO		2.2	1	I		Alvorada	(UnB)
1995	0402	111737	-24.98	-48.41	20	SP		2.5	1	I		Rio Vermelho	(IPT)
1995	0412	172801	-12.29	-40.38	50	BA		2.2	1	I		Itaberaba	(IAG) Explosão?
1995	0419	211123	-19.12	-47.57	10	MG		2.5	1	I		Nova Ponte	(UnB)

YEAR	MMDD	HHMMSS	LAT.	LONG.	ERR	ST	DEPTH	MAG.	T	CAT	I <sub>o</sub>	LOCALITY	COMMENTS
1995	0421	085127	-19.14	-47.67	5	MG		3.5	1	1	III	Nova Ponte	(UnB IPT IAG)
1995	0422	165050	-04.41	-38.15	2	CE		3.5	1	1		Cascavel	(UFRN UnB IAG)
1995	0423	013657	-04.67	-38.19	20	CE		2.7	1	1		Hidrolândia	(UFRN UnB IAG)
1995	0428	133308	-05.61	-35.61	10	RN		2.6	1	1		Taipu	(UFRN IAG UnB)
1995	0502	164926	-25.68	-48.31	50	SP		3.1	1	1		Margem Cont.	(IPT)
1995	0504	005051	-25.33	-43.98	50	SP		2.5	1	1		Margem Cont.	(IPT IAG)
1995	0507	175716	-13.37	-49.03	30	GO		2.0	1	1		Porangatu	(UnB)
1995	0510	013756	-03.91	-40.41	5	CE		3.4	1	1		Groairas	(UFRN IAG UnB)
1995	0522	005624	-23.17	-46.15	2	SP		2.0	1	1	IV	Igaratá	(IPT IAG) AF=0.015
1995	0526	194344	-20.20	-47.65	50	SP		2.9	1	1		Buritizal	(UnB)
1995	0527	231944	-20.01	-44.70	20	MG		3.1	1	1		Igaratinga	(UnB IPT IAG)
1995	0528	092259	-20.93	-47.65	50	SP		2.7	1	1		Batatais	(UnB)
1995	0529	115820	-19.46	-47.57	20	MG		2.5	1	1		Nova Ponte	(UnB)
1995	0529	185746	-18.77	-45.56	70	MG		2.5	1	1		Biquinhas	(UnB)
1995	0530	014113	-10.79	-38.19	50	SE		2.2	1	1		Poco Verde	(IAG)
1995	0530	130120	-20.92	-47.63	50	SP		2.6	1	1		Nuporanga	(UnB)
1995	0530	194308	-19.68	-47.50	30	MG		3.0	1	1		Nova Ponte	(UnB)
1995	0531	003647	-25.15	-44.60	50	SP		3.0	1	1		Margem Cont.	(IAG IPT)
1995	0602	093211	-20.54	-47.66	50	SP		2.9	1	1		São José	(UnB)
1995	0603	052631	-18.03	-46.74	50	GO		3.1	1	1		Vazante	(UnB IAG)
1995	0603	195003	-19.43	-47.81	30	MG		2.6	1	1		Nova Ponte	(UnB)
1995	0604	024924	-19.56	-45.66	60	MG		2.5	1	1		Dores Indaiá	(UnB) IAG)
1995	0604	031953	-20.00	-45.67	20	MG		2.5	1	1		Lagoa Prata	(UnB IAG IPT)
1995	0604	121920	-06.83	-39.06	20	CE		2.5	1	1		L. Mangabeira	(UFRN UnB)
1995	0605	065137	-19.38	-45.76	60	MG		2.4	1	1		Dores Indaiá	(UnB IAG)
1995	0606	003222	-20.32	-48.41	30	SP		2.8	1	1		Guaira	(UnB IPT IAG)
1995	0606	174204	-21.02	-47.55	40	SP		2.5	1	1		Altinópolis	(UnB)
1995	0606	174343	-21.03	-47.60	40	SP		2.7	1	1		Altinópolis	(UnB)
1995	0608	034811	-19.50	-45.74	60	MG		2.5	1	1		Dores Indaiá	(UnB IAG)
1995	0608	121837	-02.89	-41.80	100	PI		2.1	1	1		Parnaíba	(UnB)
1995	0608	200013	-20.86	-47.57	50	SP		2.5	1	1		Batatais	(UnB)
1995	0618	084444	-24.00	-49.51	10	PR		2.6	1	1		Reianópolis	(IPT IAG)
1995	0621	025743	-10.79	-48.34	20	TO		2.9	1	1		P. Nacional	(UnB IAG)
1995	0623	200107	-21.12	-44.41	60	MG		2.0	1	1		Cassiterita	(UnB)
1995	0625	001657	-23.45	-45.52	5	SP		2.0	1	1		Paraibuna	(IPT IAG)
1995	0627	001450	-05.53	-35.75	30	RN		2.0	1	1		João Câmara	(UFRN)
1995	0627	041353	-05.53	-35.75	30	RN		2.1	1	1		João Câmara	(UFRN)
1995	0627	000414	-05.53	-35.75	30	RN		2.0	1	1		João Câmara	(UFRN)
1995	0716	222206	-23.18	-51.19	200	SP		2.2	1	1		Bilac	(IAG)
1995	0718	094024	-05.53	-35.75	30	RN		2.0	1	1		João Câmara	(UFRN)
1995	0720	230749	-24.64	-46.55	50	SP		2.1	1	1		Margem Cont.	(IPT)
1995	0726	202738	-20.41	-45.49	10	MG		2.3	1	1		Formiga	(UnB IAG) Explosão?
1995	0806	070340	-22.69	-51.55	50	PR		2.7	1	1		Maira	(IPT IAG)
1995	0810	191632	-09.86	-50.54	70	MT		2.9	1	1		Vila Rica	(UnB)
1995	0824	032006	-19.17	-47.86	20	MG		3.0	1	1		Nova Ponte	(UnB)
1995	0824	051929	-12.22	-49.91	70	TO		2.5	1	1		Sandolândia	(UnB)
1995	0824	213110	-05.53	-35.75	30	RN		2.5	1	1		João Câmara	(UFRN)
1995	0827	001212	-16.67	-43.94	10	MG		2.6	1	1		Montes Claros	(IAG UnB IPT)
1995	0827	200835	-16.67	-43.94	10	MG		3.7	1	1	VI	Montes Claros	(IAG UnB IPT)
1995	0828	125958	-16.67	-43.94	10	MG		2.4	1	1		Montes Claros	(IAG UnB IPT)
1995	0921	001700	-11.93	-61.93	5	RO		2.6	4	C	III	Rolim de Moura	(IAG)
1995	1004	065553	-14.89	-48.78	40	GO		2.0	1	1		Dois Irmãos	(UnB)
1995	1012	001045	-04.41	-38.15	2	CE		2.5	5	1		Cascavel	(UFRN IAG)
1995	1028	000607	-23.73	-53.21	50	PR		2.8	1	1		Lovat	(IPT UnB)
1995	1030	023715	-05.53	-35.75	30	RN		2.3	1	1		João Câmara	(UFRN)
1995	1102	065551	-13.60	-48.95	30	GO		2.5	1	1		S.T. de Goiás	(UnB)
1995	1110	172742	-18.78	-44.70	50	MG		2.5	1	1		Formiga	(IAG) Explosão?
1995	1125	062203	-05.53	-35.75	30	RN		2.2	1	1		João Câmara	(UFRN)
1995	1125	191249	-05.53	-35.75	30	RN		2.5	1	1		João Câmara	(UFRN)
1995	1126	025203	-19.83	-46.24	30	MG		2.3	1	1		Campos Altos	(IPT UnB IAG)
1995	1211	204947	-13.81	-48.85	40	GO		2.7	1	1		Fomoso	(UnB)
1995	1227	095344	-05.53	-35.75	30	RN		2.4	1	1		João Câmara	(UFRN)
1995	1227	212914	-05.53	-35.75	30	RN		2.0	1	1		João Câmara	(UFRN)
1995	1229	135952	-13.82	-49.43	100	GO		2.4	1	1		Mutunópolis	(UnB)

**LEGEND:**

**DATA FORMAT IN THE LISTING:**

**YEAR MMDD** year month\_day  
**HHMMSS** origin time in UNIVERSAL TIME, even for historical Brazilian events. Subtract 3 hours to get Brasília official time local (eastern) time = UT-3 hours.  
**LAT.LONG** epicentral coordinates  
**ERR** estimate of epicentral uncertainty(km).  
**ST** state in Brazil where epicenter is located.  
**DEPTH** hypocentral depth (km).  
**MAG** magnitude  
**T** magnitude type as describe below.  
**CAT** event category as describe below.  
**I<sub>o</sub>** maximum observed intensity (Modified Mercalli)  
**COMMENTS** data source or reference in (). AI=total felt area (10<sup>4</sup> km<sup>2</sup>).

**EVENT CATEGORY:**

The events are classified in categories A to C, according to the quality of the information used to determine the epicenter:

**A** epicenter based on macroseismic information

allowing isoseismal contours, maximum intensity (I<sub>o</sub>), and felt area to be determined.

**B** epicenter based on macroseismic information with an approximate estimate of the felt area and some intensities.

**C** macroseismic information assuring the event did occur, but without reliable estimate of felt area or maximum intensity.

**E** effects of large earthquakes outside Brazil, special deep Andean events, felt mainly in tall buildings in São Paulo and other cities.

**I** epicenter with instrumental data.

**MAGNITUDE TYPE:**

0: Teleseismic body wave magnitude m<sub>b</sub>, usually given by ISC or USGS.

1: Brazilian regional magnitude (m<sub>R</sub>), equivalent to mb (Assumpção, 1983).

2: average of m<sub>R</sub> and m<sub>b</sub> determinations.

3: estimate of mb from the felt areas (Berrocal et al., 1984):

$$m_b = 1.63 + 0.60 \cdot \log(\text{Area II MM, km}^2)$$

$$m_b = 2.29 + 0.55 \cdot \log(\text{Area IV MM, Km}^2)$$

4: estimate of mb from maximum intensity (I<sub>o</sub>, in Modified Mercalli scale) assuming shallow depth of 2 km:

$$m_b = 1.21 + 0.45 \cdot I_o$$

5: magnitude estimated from other information such as number of recording stations (mainly events before 1985) or record duration in the seismogram

(for events after 1985).

-1: no magnitude estimate.

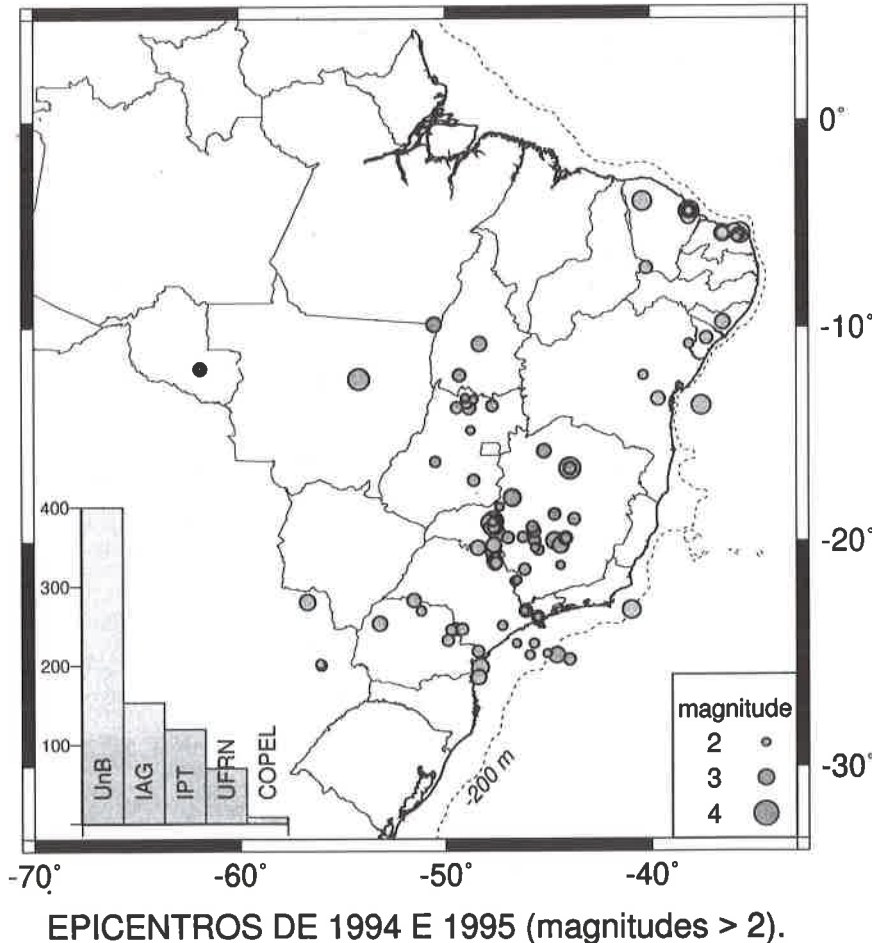
**Obs.:** Magnitude types 0, 1 and 2 are the most reliable (uncertainty about ± 0.3), and types 4 and 5 (before 1985) are the least reliable and can be in error by more than one magnitude unit.

**MAIN ABBREVIATIONS IN THE COMMENTS:**

- GS** United States Geological Survey
- IAG** Inst. Astronômico e Geofísico, Univ. de São Paulo.
- IPT** Instituto de Pesquisas Tecnológicas, Div. de Geologia, São Paulo.
- UFRN** Seismology group at Univ. Fed. do Rio Grande do Norte, Natal.
- UnB** Univ. de Brasília, Observatório Sismológico
- I.E.I.** Inferred epicentral intensity

**ADDITIONAL REFERENCES:**

- Assumpção, M., 1983. A regional magnitude scale for Brazil. Bull. Seism. Am., 73, 237-246
- Berrocal, J., M. Assumpção, R. Antezana, C. M. Dias Neto, R. Ortega, H. França & J. Veloso, 1984. Sismicidade do Brasil. Instituto Astronômico e Geofísico, Universidade de São Paulo, Brazil, 320pp.



**Figura 1** - O histograma mostra as leituras utilizadas conforme a fonte.

**Figure 1** - The inset in the left corner shows the frequency according to the data source.