

Tesi doctoral presentada per En/Na

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amb el títol

"Dynamics and structural evolution of collapse calderas: A comparison between field evidence, analogue and mathematical models"

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ANNEXES

A.I ANNEX I

CCBD CONTENT

In this appendix, we offer a simplified version of the CCBD. For compactness, this version excludes the *FIELDS*: “AgeCLAS”, “D_max (km)”, “D_min (km)”, “Area_ref (km²)”, “Area_cal (km²)”, “AreaCLAS”, “Subsidence (km)”, “Vol_ref (km³)”, “CollapseCLAS”, “Incremental”, “Thick_dep (km)”, “VoldepCLAS”, “VolmagmaCLAS”, “R”, “EdificeCLAS”, “PrecursorCLAS”, “Tectoni_setting_des”, “Comments” and “Photograph”. The meaning of the codes for information included in the different *FIELDS* is explained in Appendix II. In the heading of the table the abbreviations stay for the following *FIELDS*:

- **ID:** Caldera identification number (“IDCaldera”)
- **Lat and Long:** “Latitude” and “Longitude”, respectively
- **W and WS:** “World_region” and “Subregion”, respectively
- **Dim (km):** Caldera dimensions (“Dimensions (km)”)
- **CT:** “Collapse_type”
- **VD (km³):** Volume of extruded deposits in km³ (“Vol_dep (km³)”)
- **VM (km³):** Volume of extruded magma in km³ (“Vol_magma (km³)”)
- **Comp:** Composition of the extruded magma (“Composition”)
- **RS:** Rock suite classification of the magma composition (“CompositionCLAS”)
- **P (km):** “Chamber_depth (km)”
- **PD:** “Precaldera_doming”
- **PCE:** “Precaldera_edifice”
- **CPR:** “Collapse_precursor”
- **RE:** Possible post-caldera resurgence (“Resurgence”)
- **PVA:** Post-caldera volcanic activity (“Postcaldera_activity”)
- **C:** Crustal type (“Crust”)
- **TS:** “Tectonic_setting”
- **Local tec:** Local tectonic setting, condition of the local structures (“Local_tectonics”)
- **RF:** Existence of relevant regional faults (“Regional_faults”)

ID	CALDERA	Deposit	Lat	Long	W	SW	Age	Dim (km)	CT	VD (km ³)	VM (km ³)	Comp	RS	P (km)	PD	PCE	CPR	RE	PVA	C	TS	Local tect	RF
0101-003	Latera	various	42.58	11.92	1	101	0.27-0.16 Ma	7 x 9	P _a FC 16			?	?	x	L	PV	x	RS	Cd	?	?	EXT	✓
0101-003B	Bolsena	Basal and Oviato Ignimbrite	42.58	11.93	1	101	300 ka	16	T _D 7			TP	ALCAI	3?	✓	L	PV _a F	x	RS	Cd	?	EXT	✓
0101-004A	Roccamonfina		41.30	13.98	1	101	385 ka	5 x 7	?			?	?	x	STR	?	x	?	Cd	?	EXT	✓	
0101-004I	Alban Hills I		41.75	12.75	1	101	60 ka	?	?			?	?	x	?	?	x	?	Cd	?	EXT	x	
0101-004II	Alban Hills II		41.75	12.75	1	101	37 ka	11	?			?	?	x	STR	?	x	?	Cd	?	EXT	x	
0101-01I	Phlegrean Fields I	Campanian Ignimbrite	40.83	14.14	1	101	36 ka	12 x 15	PC 500	80	TaTP	ALCAIf	2-3	x	LFD	PV	✓	S	Cd	?	EXT	✓	
0101-01II	Phlegrean Fields II	Neapolitan Yellow Tuff	40.83	14.14	1	101	12 ka	?	?	10-20	T	ALCAF		x	NPE?	PV	✓	S	Cd	?	EXT	✓	
0101-01III	Phlegrean Fields III	Agnano Ignimbrite	40.83	14.14	1	101	4.3 ka	12 x 15	?			?	?	x	NPE?	?	✓	S	Cd	?	EXT	✓	
0101-02I	Vesuvius I	Pomici di Base	40.82	14.43	1	101	18 ka	5	CA 4.4			L _T	ALCAF		x	?	PV	x	?	Cd	?	EXT	✓
0101-02II	Vesuvius II	Mercato Pomici	40.82	14.43	1	101	8 ka	5	CA 2-3			?	?	x	?	?	PV	x	?	Cd	?	EXT	✓
0101-02III	Vesuvius III	Avellino Pomici	40.82	14.43	1	101	3.4 ka	5	CA 15			TEP	ALCAI	3-6	x	?	PV	x	?	Cd	?	EXT	✓
0101-02IV	Vesuvius IV	Pompeii Pomici	40.82	14.43	1	101	79 A.D.	5	CA 2-3			?	?	x	?	PV	x	?	Cd	?	EXT	✓	
0101-03	Ischia	Monte Pomeo Green Tuff	40.73	13.90	1	101	53 ka	10 x 7	?			T	ALCAF		x	STR	?	✓	?	Cd	?	EXT	x
0101-07IA	La Vecchia		36.78	12.00	1	101	114 ka	6	?			D	CALCOF		x	?	?	x	?	Cd	CR	EXT	x
0101-07IB	Cinque Denti	Green Tuff	36.78	12.00	1	101	55 ka	6	P?	3		P _T	CALCOF		x	STR	?	✓	CaR	Cd	CR	EXT	x
0101-A	Montefiascone	Basal Montefiascone Ignimbrite	42.55	12.00	1	101		3	PC 0.7			?	?	x	?	?	HYaF	x	CaR	Cd	?	IF	✓
0101-B	Vepe	Poggio Pinzo Tufts	42.58	11.78	1	101		3 x 5.5	P			TEP	ALCAI		x	?	?	x	R	Cd	?	?	x
0102-04	Santorini	Minoan Ignimbrite	36.40	25.40	1	102	3.6 ka	7 x 10	C 60-70	30		RD	CALCOF	2-4	x	VC	HY	x	L	Cd	BAR	EXT	✓
0102-05	Nisyros	Kos Plateau Tuff	36.59	27.17	1	102	161 ka?	between 6-11 and 20	?	60		R	CALCOF		x	STR	PSV	x	S	Cd	BAR	IF	✓
0106-1	Scottish Hebrides						60.5-18 Ma		PO			?	?	x	?	?	?	?	?	?	?	?	x
0106-2	Glencoe	Glencoe Ignimbrite	56.63	-4.93	1	106			PC	30		R	CALCOF		x	VE	PV	x	?	?	?	?	x
0106-3	Scafell	Whornesider and Ainy's Brides Formation	54.45	3.20	1	106	439 - 500 Ma		PC 400			R _A	CALCOIF		x	SV	PV?	x	?	?	?	?	x
0106-4	Snowdon	Lower Rhyolitic Tuff Formation			1	106	439 - 500 Ma	ca 11 x 14	T 54			R	CALCOF		x	LFD	PV _a F	✓	?	?	?	?	x
0106-5I	Rum I				1	106	60.5 Ma		PC			F	CALCOF		✓	NFE	NEE	x	CC	?	?	EXT	x
0106-5II	Rum II				1	106			PO >10			RD	CALCOF		✓	CC	PV	x	?	?	?	?	x
0107-1	Ramat Yotam	Yotam Caldera Formation			1	107	548 Ma		PLD?			RaD	CALCOF		x	?	?	x	R	?	?	?	x

ID	CALDERA	Deposit	Lat	Long	W	SW	Age	Dim (km)	CT	VD (km3)	VM (km3)	Comp	RS	P (km)	PD	PCE	CPR	RE	PVA	C	TS	Local tect	RF	
0108-1	Nahe	Nahe Caldera Tuff	49.67	7.67	1	108	256 - 290 Ma	14 x 14	?	100		B_R	CALCOmf	?	?	LFD	RF?	?	R	?	?	?	EXT	*
0201-19	Fantale	Fantale Tuff	8.98	39.91	2	201		3 x 4	?	>2	>15	P_T	CALCOF	*	*	VE	?	*	?	?	Cd	CR	EXT	✓
0201-20	K'One		8.84	39.69	2	201		5	?			S	CALCOF	*	*	?	?	*	?	Cd	CR	EXT	✓	
0201-29	Awasa		7.18	38.48	2	201	<1Ma?	30 x 40	?			R	CALCOF	*	*	?	?	*	CC	Cd	CR	EXT	✓	
0201-29B	Corbetti		7.18	38.43	2	201	<1Ma?	12 x 15	?			R	CALCOF	*	*	?	?	*	Ms	Cd	CR	EXT	✓	
0202-03	The Barrier		2.32	36.59	2	202	Late Quaternary	6 x 5	P2p			TaP	ALCAI	*	*	SV	PV	*	?	Cd	CR	EXT	✓	
0202-051	Emuruangogolak		1.50	36.33	2	202	Late Quaternary	9 x 7	P2p			T	ALCAF	*	*	SV	PV	*	?	Cd	CR	EXT	✓	
0202-052	Silali		1.15	36.23	2	202	Late Quaternary	7.5 x 5	P			TaB	ALCAmf	*	*	SV	BE	*	?	Cd	CR	EXT	✓	
0202-053	Paka		-0.92	36.19	2	202	Late Quaternary	15	P			TaB	ALCAmf	*	*	SV	PV	*	?	Cd	CR	EXT	✓	
0202-06	Menengai		-0.20	36.07	2	202	Late Quaternary	12 x 18	PC2p	52	30	T	ALCAF	*	*	SV	PV	*	?	Cd	CR	EXT	✓	
0202-10	Longonot		-0.92	36.46	2	202	Late Quaternary	18	KT	20-50		T	ALCAF	*	*	STR	PV	*	?	Cd	CR	EXT	✓	
0202-11	Suswa		-1.15	36.35	2	202	2.4 Ma	12 x 8	KT			TaP	ALCAI	*	*	STR	PV	*	?	Cd	CR	EXT	✓	
0205-03	Deriba		12.95	24.27	2	205	4 ka?	5	?			I	CALCOI	*	*	STR	?	*	?	C	H	IF	✓	
0303-02	Piton de la Fournaise		-21.23	55.71	3	303	2 ka	0.2	?	0.001		B	ALCAm	*	*	STR	FV	*	?	Cd	HOC	EXT	*	
0401-05	Haroharo, Okataina	Roloti Breccia/Rotoeshu Ash	-38.09	176.51	4	401	50 ka	16 x 28	?	>100	>50	R	CALCOF	*	*	CC	PV	*	L	Cd	BAR	EXT	✓	
0401-06	Reporoa	Kaingaroa Ignimbrite	-38.42	176.33	4	401	245-235 ka	15 x 10	P	100		A	CALCOI	*	*	AV	PV	*	?	Cd	BAR	EXT	✓	
0401-07	Taupo	Oruarua Ignimbrite	-38.77	176.12	4	401	26.5 ka	35 x 35	PLD?	1170	530	R	CALCOF	5-6	*	RCC	PV	*	?	Cd	BAR	EXT	✓	
0401-16	Rotorua	Mamaku Ignimbrite	-38.08	176.25	4	401	140-225 ka	21 x 22	PC	283	146	R	CALCOF	5-6	*	?	PV	*	R	Cd	BAR	EXT	✓	
0401-A	Kapenga	Waioapu Ignimbrite?	-38.21	176.27	4	401	560-330 ka		?			?	?	*	*	?	?	*	?	Cd	BAR	EXT	✓	
0401-B	Mangakino	Waipari and Orngaiti Ignimbrite	-38.42	175.70	4	401	750 ka	20	?	>300		?	?	*	*	?	?	*	?	Cd	BAR	EXT	✓	
0401-C	Maroa	VARIOUS	-38.44	175.99	4	401	230-50 ka?	45 x 45	?	<250	100	R	CALCOF	*	*	?	?	*	R	Cd	BAR	EXT	✓	
0403-06	Tofua		-19.75	-175.07	4	403		5	?			D	CALCOF	*	*	STR	PV	*	M	O	SM	Scomp	*	
0403-11	Niuafu'ou		-15.60	-175.65	4	403		5	?			?	?	*	*	SV	?	*	CaR	O	SM	Scomp	*	
0405-1	Tavua		-17.54	177.86	4	405	5 Ma	7 x 5.5	PC			SH	ALCAm	*	*	SV	PVaf	*	S	Td	T	SHEAR	✓	
0500-01	St. Andrew Strait, Tuluman		-2.38	147.35	5	500		16	?			S	?	*	*	?	PV	*	R	Od	H	?	*	
0501-03	Karkar		-4.65	145.96	5	501	9.1 ka	5.5, 3.2	?			?	?	*	*	STR	PV	*	L	T	IAC	?	*	
0501-05	Long Island, Lake Wadsw		-5.36	147.12	5	501	16 ka	10 x 12.5	?			D	CALCOF	*	*	LPSTR	?	*	CC	T	IAC	?	*	
0502-04	Dakalaua		-5.06	150.11	5	502	1.15 ka	10 x 13	?			D	CALCOF	*	*	STR	RF	*	CaR	T	SM	?	*	
0502-08	Witori		-5.58	150.53	5	502	2.6 ka	7.5 x 5.5	?			D	CALCOF	*	*	LPSTR	?	*	C	T	SM	?	*	
0502-13	Lolobau Island		-4.92	151.16	5	502		5.5	?			S	CALCOF	*	*	STR	?	*	?	T	SM	?	*	
0502-14 I	Rabaui I	various	-4.27	152.20	5	502	3.5 ka	10 x 4	PO	24	11	B_R	CALCOmf	4	*	BV	PV	*	R	T	T	SHEAR	*	
0502-14 II	Rabaui II	various	-4.27	152.20	5	502	1.4 ka	10 x 4	PO	24	11	B_R	CALCOmf	4	*	BV	PV	*	S	T	T	SHEAR	*	

ID	CALDERA	Deposit	Lat	Long	W	SW	Age	Dim (km)	CT	VD (km ³)	VM (km ³)	Comp	RS	P (km)	PD	PCE	CPR	RE	PVA	C	TS	Local tect	RF	
0803-191	Hijiori, Gassan		38.60	140.18	8	803	Early Holocene	2.5 x 2.5	?	0.7		D	CALCOF	x	?	?	?	x	?	T	SC	COMPR	x	
0803-20	Narugo		38.73	140.73	8	803	837 A.C.	5.5 x 7	?			R	CALCOF	x	?	?	?	x	?	T	SC	COMPR	x	
0803-20A	Dnikobe		38.80	140.63	8	803	2.3 Ma	10	?			D	CALCOF	x	?	?	?	?	?	T	SC	COMPR	x	
0803-2711	Towada I		40.50	140.92	8	803	12 ka	11	F	25-45	12.5-22.5	D	CALCOF	x	STR	?	?	x	?	T	SC	COMPR	x	
0803-2711I	Towada II		40.50	140.90	8	805	5.4 ka	3.5 x 3	F	10		D	CALCOF	x	?	?	?	?	?	T	SC	COMPR	x	
0803-A	Doruboo Ash-flow	Tuff A	36.89	139.61	8	803	5.99-1.79 ka	13 x 6	PC	38		D	CALCOF	x	?	HYaf	x	?	?	T	SC	COMPR	x	
0803-B1	Kumano I		33.50	135.83	8	803	Miocene	26 x 23	T			?	?	x	?	?	?	x	CC	T	SC	Scomp	x	
0803-BII	Kumano II		33.75	135.92	8	803	Miocene	21 x 15	T			?	?	x	?	?	?	x	?	T	SC	Scomp	x	
0804-01	Izu-Oshima	Kum	34.73	139.38	8	804	0.3-0.8 ka	4	?			B	CALCOm	x	LLSTR	?	?	x	C	T	TJ	Scomp	✓	
0804-07	Bayonnaise		31.88	139.92	8	804	1970 A.C.	10	?			S	CALCOF	x	STR	?	?	x	C	Td	SM	?	x	
0804-12	Iwo-Jima		24.30	141.50	8	804	>2.6 ka	9	?			?	?	x	STR	?	?	x	?	Td	SM	EXT	✓	
0804-17	North Pagan		18.13	145.80	8	804		5 x 6	?			M	CALCOm	x	STR	?	?	x	RS	Td	SM	COMPR	✓	
0804-A	Heichodaira		34.09	139.53	8	804	2.5 ka	15	?	0.4		?	?	x	STR	PV	?	?	?	Td	TJ	Scomp	x	
0804-B	Unnamed (Miyakejima)	unnamed	34.09	139.53	8	804	0.005 ka	16	P	1e-006		?	?	x	STR	PV	?	?	?	Td	TJ	Scomp	x	
0805-03	Usu	Zenkoji Tuff	42.54	140.84	8	805		?	?	0.2-0.47		D	CALCOF	x	?	?	?	x	R	T	SC	Scomp	x	
0805-03A	Toya	Ono Tuff	42.50	140.80	8	805	110 ka	10	?	8		R	CALCOF	x	?	?	?	x	?	T	SC	Scomp	x	
0805-04 I	Shikotsu I		42.68	141.38	8	805	32 ka	17 x 15	F	125	68-80	D	CALCOF	x	?	?	?	x	CC	T	SC	COMPR	✓	
0805-04 II	Shikotsu II		42.68	141.38	8	805	30 ka	13 x 15	?			D	CALCOF	x	CA?	?	?	x	?	T	SC	COMPR	✓	
0805-05	Tokachi Graben		43.42	142.68	8	805		?	?			?	?	x	PP	?	?	x	RS	T	SC	EXT	✓	
0805-06	Daisetsu		43.68	142.88	8	805		20 x 30	?			R	CALCOF	x	PP	?	?	x	RS	T	SC	EXT	✓	
0805-07	Akan		43.38	144.02	8	805	> 315 ka	24 x 13	?	100		D	CALCOF	x	CA?	?	?	x	RS	T	SC	EXT	✓	
0805-08	Kutcharo		43.60	144.40	8	805	30 ka	20 x 26	F	90		RaA	CALCOIF	x	?	?	?	x	RS	T	SC	SHEAR	✓	
0805-081	Mashu		43.58	144.54	8	805	10-7 ka	7.5 x 5.5	F	11	52	A	CALCOI	x	?	?	?	x	RS	T	SC	SHEAR	✓	
0805-A	Nigorikawa		42.12	140.45	8	805	12 ka	3	F	7		61%	CALCOIF	x	?	?	?	x	?	T	SC	?	x	
0806-11	Takeya I		35.00	132.67	8	806	23.8 - 16.4 Ma	11	P?			A_D	CALCOIF	✓	STR	PV	✓	?	M	T	SC	?	x	
0806-11I	Takeya II		35.00	132.67	8	806		11	P?			A	CALCOI	x	STR	PV	✓	?	?	T	SC	?	x	
08-B	Sakugi				8	?			T			?	?	x	?	?	?	?	?	T	?	?	?	x
08-C	Joko				8	?			P			?	?	x	?	?	?	?	?	T	?	?	?	x
08-D	Yamakawa				8	?			?		0.225	A	CALCOI	x	?	?	?	?	?	T	?	?	?	x
0900-01	Golovin		43.84	145.51	9	900		7	?			R	CALCOF	x	STR	?	?	?	S	T	SC	?	x	
0900-02	Mendeleev		43.97	145.73	9	900		6	?			D	CALCOF	x	STR	?	?	x	CaR	T	SC	COMPR	x	
0900-10	Medvezhii		45.38	148.80	9	900	Pre-glacial	8	?			D	CALCOF	x	STR	?	?	x	RS	T	SC	?	✓	
0900-15	Chirpoi		46.53	150.88	9	900		8	?			D	CALCOF	x	SUB	?	?	x	?	T	SC	?	✓	
0900-18	Zavaritsky		46.92	151.95	9	900	Inter-glacial	10 (outer) 3 (inner)	?			RaD	CALCOF	x	STR	?	?	x	CC	T	SC	Scomp	✓	
0900-20	Keloi		47.33	152.46	9	900	Pre-glacial	5 (outer) 15 (inner)	?			S	CALCOF	x	SV	?	?	x	M	T	SC	?	x	
0900-22	Rasshua		47.79	152.98	9	900	Pre-latest glaciation	6	?			?	?	x	STR	?	?	x	C	T	SC	?	x	
0900-31	Tao-Rusyr		49.35	154.70	9	900	7.04 ka	7.5	?			D	CALCOF	x	LLSTR	?	?	x	C	T	SC	IF	✓	
0900-32	Nemo Peak		49.57	154.81	9	900	Inter-glacial	11	?			D	CALCOF	x	LLSTR	?	?	x	C	T	SC	IF	✓	

ID	CALDERA	Deposit	Lat	Long	W	SW	Age	Dim (km)	CT	VD (km3)	VM (km3)	Comp	RS	P (km)	PD	PCE	CPR	RE	PVA	C	TS	Local tect	RF	
1000-03	Kurile Lake, Pauzhetka		51.45	157.08	10	1000	8 ka	20 x 25	?			S	CALCOF		x	?	?	x	M	Cd	SC	Stens	✓	
1000-05	Ksudach		51.80	157.53	10	1000	40 ka	7 x 13	?			D	CALCOF		x	SV	?	x	CC	Cd	SC	Stens	✓	
1000-07	Gorely Khrebet		52.56	158.03	10	1000	Upper pleistocene	10 x 13	?	>120		D	CALCOF		x	LLSTR	?	x	C	Cd	SC	Stens	✓	
1000-08	Opala		52.54	157.34	10	1000	22 ka	10 x 12	?	>90		A	CALCOI		x	SV	?	x	R	Cd	SC	Stens	✓	
1000-13	Karymsky		54.05	159.43	10	1000	8.4-7.4 ka	5 x 5	?			D	CALCOF		x	SV	?	x	C	Cd	SC	SHEAR	✓	
1000-14	Maly Semichik		54.13	159.67	10	1000	10 ka	6 x 7	?			D	CALCOF		x	LLSTR	?	x	C	Cd	SC	SHEAR	✓	
1000-161	Uzon-Geyzernaya		54.49	159.97	10	1000	11.2 - 16.4 Ma	7 x 8	?			D	CALCOF		x	LLSTR	?	x	?	Cd	SC	Stens	✓	
1000-19	Krasnimirnikov		54.59	160.27	10	1000	39.6 ka	9 x 11	?			D	CALCOF		x	SV	?	x	C	Cd	SC	Stens	✓	
1003-02	Tien-Chi		41.98	128.08	10	1000	0.8-0.9 ka	5	?			R	CALCOF		x	?	?	x	?	Cd	BAR	?	x	
11	Knebel				11	?			?	15-2		R	CALCOF		x	?	?	x	?	?	?	?	x	
1101-05	Little Sitkin caldera		51.95	178.53	11	1101		5 (outer) 3 (inner)	?			D	CALCOF		x	STR	?	x	?	O	?	?	x	
1101-06	Semisopochnoi		51.93	179.60	11	1101	Postglacial	8	?			D	CALCOF		x	STR	?	x	C	O	?	?	x	
1101-08	Tanaga		51.88	-178.13	11	1101		11	?			?	?		x	STR	?	x	C	O	?	?	x	
1101-11	Kanaton		51.93	-177.15	11	1101		5.5	?			D	CALCOF		x	STR	?	x	C	O	?	Scomp	x	
1101-29	Okmok		53.42	-168.13	11	1101	8.25 ka	10	?			D	CALCOF		x	LLSTR	PV	x	S	T	SC	?	x	
1101-35	Fisher		54.67	-164.35	11	1101	9.1 ka	11 x 18	?			D	CALCOF		x	STR	?	x	?	Cd	SC	?	x	
1102-03	Emmons Lake		55.33	-162.07	11	1102	> 10 ka	19 x 10	?			R	CALCOF		x	STR	?	x	?	Cd	SC	?	✓	
1102-07	Veniaminof		56.17	-159.38	11	1102	3.7 ka	10	?			D	CALCOF		x	STR	?	x	RS	Cd	SC	?	x	
1102-09	Aniakchak		56.88	-168.17	11	1102	3.4 ka	9.5	?	67		D	CALCOF		x	STR	?	x	S	Cd	SC	Scomp	x	
1102-13	Ugashik		57.75	-156.37	11	1102	40 ka	5 x 6	?			?	?		x	STR	?	x	M	Cd	SC	IF	✓	
1102-16	Novarupta		58.27	-155.16	11	1102	A.D. 1912	2 x 3	?			?	?		x	?	?	x	?	Cd	SC	?	✓	
1102-19	Katmai		58.26	-154.97	11	1102	A.D. 1912	3 x 4	?	28-31		D	CALCOF 4.5		x	STR	FV	x	C	Cd	SC	?	x	
1105-02	Wrangell		62.00	-144.02	11	1105	Lake Quaternary	4 x 6	?			?	?		x	SV	?	x	CaR	Cd	SC	SHEAR	x	
1105-1	Sixymile Butte		63.67	-143.00	11	1105	92.1 Ma	?	?			R	CALCOF		x	?	?	x	?	Cd	BAR	?	x	
1105-3	Dennison Fork		63.67	-142.00	11	1105		?	?			?	?		x	?	?	x	?	Cd	BAR	?	x	
1105-4	West Fork		63.75	-142.25	11	1105	93.6 Ma	C	?			?	?		x	?	?	x	?	Cd	BAR	?	x	
1201-A	Kulshan	Swift Creek Ignimbrite	48.83	-121.70	12	1201	1.15 Ma	4.5 x 8	PI	> 30		R,D	CALCOF		x	?	PV	x	?	Cd	SC	?	x	
1202-16	Crater Lake		42.93	-122.12	12	1202	7.7 ka	8-10	P&PC	42		RD	CALCOF	5-8	x	STR	PV	x	?	Cd	SC	?	x	
1203-14	Long Valley	Bishop Tuff	37.70	-118.87	12	1203	700 ka	32 x 17	PI	750		R	CALCOF	4-7	x	?	PV	✓	S	Cd	CR	EXT	✓	
1203-A	Vandever Mountain	Vandever Mountain ash-flow tuff			12	1203	Lower Triassic	6	P	25		R	CALCOF		x	?	PV&F	x	?	C	?	?	x	
1204-A	Blacktail	Blacktail Tuff	44.00	-112.00	12	1204	6.5 Ma	100 x 60	?	1500		R	CALCOF		x	?	?	x	?	C	CR	EXT	✓	
1204-B	Blue Creek	Blue Creek Tuff	44.00	-112.50	12	1204	5.6 Ma	30 x 35	?	500		R	CALCOF		x	?	?	x	?	C	CR	EXT	x	
1204-C	Kilgore	Kilgore Tuff	44.00	-111.75	12	1204	4.3 Ma	60 x 80	?	800		R	CALCOF		x	?	?	x	?	C	CR	EXT	x	
1205-011	Yellowstone I	Huckleberry Ridge Tuff	44.43	-110.67	12	1205	2 Ma	100 x 50	?	2500		R	CALCOF		✓	?	?	x	R	C	H	EXT	x	
1205-0111	Yellowstone II	Lava Creek Tuff	44.43	-110.67	12	1205	600 ka	85 x 45	?	1000		R	CALCOF		x	?	?	x	R	C	H	EXT	x	
1206-A	Clair Canyon	Topopah Spring, Pah Canyon	36.83	-116.50	12	1206	13.2 Ma	?	?	270		R	CALCOF		x	?	?	x	?	?	Cd	CR	EXT	x

ID	CALDERA	Deposit	Lat	Long	W	SW	Age	Dim (km)	CT	VD (km ³)	VM (km ³)	Comp	RS	P (km)	PD	PCE	CPR	RE	PVA	C	TS	Local tect	RF		
1206-B	Elevenmile Canyon		39.58	-118.27	12	1206	24-25 Ma	20	P			61-74%	CALCOIF	x	?	?	?	x	?	Cd	CR	CR	EXT	x	
1206-C	Job Canyon		39.75	-118.15	12	1206	29-28 Ma		P			57-77%	CALCOIF	x	?	?	?	?	?	?	Cd	CR	CR	EXT	x
1206-D	Kane Wash				12	1206			?	834 ?		TaC	CALCOF	x	?	?	?	?	?	?	Cd	CR	CR	EXT	x
1206-E	Lunar Lake	Tuff of Lunar Cuesta			12	1206			?	375	281.25	QL	CALCOF	x	?	?	?	?	?	?	Cd	CR	CR	EXT	x
1206-F	Northumberland				12	1206			?	63	47.25	R	CALCOF	x	?	?	?	?	?	?	Cd	CR	CR	EXT	x
1206-G	Oasis Valley	Yucca Flat, Tiva Canyon Member	37.09	-116.69	12	1206	24-25 Ma		?	1008	756	QL_R	CALCOF	x	?	?	?	?	?	?	Cd	CR	CR	EXT	x
1206-H	Poco Canyon		39.58	-118.23	12	1206	24-25 Ma		P			77-78%	CALCOF	x	?	?	?	?	?	?	Cd	CR	CR	EXT	x
1206-I	Silent Canyon	Belted Range Tuff	37.39	-116.39	12	1206	13.7-12.9 Ma	16 x 20	PI	220-240	137.5-150	70-74%	CALCOF	x	?	?	?	?	?	?	Cd	CR	CR	EXT	x
1206-J	Timber Mountain	Timber Mountain Tuff - Prairie Mesa Member	37.07	-116.48	12	1206	11.6 Ma	25 x 30	?	1200	900	R	CALCOF	x	?	?	?	?	?	?	Cd	CR	CR	EXT	x
1206-K	Mc Dermitt caldera complex	Longridge Tuff Members' Doublet Tuff	41.94	-118.02	12	1206	15.7 Ma	45 x 35	?	1100	150	R	CALCOF	x	?	?	?	?	?	?	Cd	CR	CR	EXT	x
1207-A	Big John	Deleano Peak Tuff	38.42	-112.50	12	1207	23 Ma	6 x 10	T	100		L	CALCOF	x	?	?	?	?	?	?	Cd	CR	CR	EXT	x
1207-B	Monroe Peak	Osiris Tuff	38.50	-112.05	12	1207	23 Ma	17 x 26	PI	200		D	CALCOF	4-5	x	NPE	?	?	?	?	Cd	CR	CR	EXT	x
1207-C	Three Creeks	Three Creek Tuff Member	38.58	-112.42	12	1207	27 Ma	6 x 10	T	> 200		L	CALCOF		x	NPE	?	?	?	?	Cd	CR	CR	EXT	x
1207-D	Red Hills	Red Hills Tuff Member	38.50	-112.22	12	1207	19 Ma	12	F			R	CALCOF		x	NPE	?	?	?	?	Cd	CR	CR	EXT	x
1207-E	Mount Belknap	Joe Lot Tuff Member	38.42	-112.45	12	1202	19 Ma	13 x 17	T	300		R	CALCOF	3-4	x	NPE	PV	x	?	?	Cd	CR	CR	EXT	✓
1208-A	Bonanza	Bonanza Tuff	38.22	-106.18	12	1208	36 Ma	12	T			D	CALCOF		x	STR	?	?	?	?	C	CR	CR	EXT	x
1208-B	Creede	Snowshoe Mountain Tuff	37.75	-107.00	12	1208	27 Ma	24	P	330-500	248-375	D	CALCOF		x	?	?	?	?	?	C	CR	CR	EXT	x
1208-C	Grizzly Peak	Grizzly Peak Tuff	39.00	-106.67	12	1208	34 Ma	17 x 23	PI			R	CALCOF	10	x	?	?	?	?	?	C	CR	CR	EXT	x
1208-D	La Garita	Fish Canyon Tuff	38.00	-106.75	12	1208	27.8 Ma	35 x 75	P		2250	66-70%	CALCOF		x	?	PV	x	?	?	C	CR	CR	EXT	x
1208-F	Lake City	Sunshine Peak Tuff	37.96	-107.38	12	1208	23 Ma	> 20	P	100-500	75-375	R_D	CALCOF		x	?	?	?	?	?	C	CR	CR	EXT	x
1208-G	Lost Lake	Blue Mesa Tuff			12	1208	28.5 Ma	10	?	100-500	75-375	R	CALCOF		x	?	?	?	?	?	C	CR	CR	EXT	x
1208-H	Mount Hope	Masonic Park tuff	37.58	-106.75	12	1208	29 Ma	15	?	500	>375	D	CALCOF		x	?	?	?	?	?	C	CR	CR	EXT	x
1208-I	Platoro	La Jara Canyon Member	37.25	-106.33	12	1208	29-30 Ma	20	P	592	435-750	A	CALCOF		x	?	PV	x	?	?	C	CR	CR	EXT	x
1208-J	San Juan	Sapinero Mesa Tuff	37.89	-107.54	12	1208	28.5 Ma	22 x 24	?		>625	R	CALCOF		x	?	?	?	?	?	C	CR	CR	EXT	x

ID	CALDERA	Deposit	Lat	Long	W	SW	Age	Dim (km)	CT	VD (km3)	VM (km3)	Comp	RS	P (km)	PD	PCE	CPR	RE	PVA	C	TS	Local tect	RF	
1208-K	San Luis	Nelson Mountain Tuff	38.20	-106.73	12	1208	27 Ma	18	?	700-800	525-600	QLR	CALCOF	x	?	?	?	x	?	C	CR	CR	EXT	x
1208-L	Silverton	Crystal Lake Tuff	37.87	-107.63	12	1208	27.5 Ma	> 20	T	25-100	12.5-50	72-74%	CALCOF	x	?	?	?	x	?	C	CR	CR	EXT	x
1208-M	Summitville	Uitto Creek La Jadero Member	37.25	-106.50	12	1208	29.5 Ma	8 x 12	P2p	150-225	113-169	68-70%	CALCOF	x	?	PF	x	?	C	CR	CR	EXT	x	
1208-N	Uncompahgre	Dillon Mesa	38.10	-107.31	12	1208	28.5 Ma	20 x 23	?	> 1000	> 625	70-74%	CALCOF	x	?	?	?	x	?	C	CR	CR	EXT	x
1208-O	Ute Creek	Ute Ridge Tuff	37.90	-107.20	12	1208	29 Ma	29	T	> 500	66-68%	CALCOF	?	?	?	?	x	?	C	CR	CR	EXT	x	
1208-P	Bachelor	Carpenter Ridge Tuff	37.90	-106.98	12	1208	27.5 Ma	20 x 28	?	1200-1500	900-1126	R_D	CALCOF	x	?	?	?	x	?	C	CR	CR	EXT	x
1209-A	Turkey Creek	Phylolite Canyon Tuff	31.83	-109.33	12	1208	26.9 Ma	20	?	500-1000	R_D	CALCOF	?	?	LFD	RF	?	?	Cd	CR	CR	EXT	✓	
1209-B	Haunted Canyon	Upper Bandelier Tuff	35.87	-106.57	12	1209	11200 ka	16	T_PC	200-300	100-200/300	R	CALCOF	4.5	✓	VC	PV	✓	R	Cd	CR	CR	EXT	✓
1210-13	Valles Caldera	Apache Spring Tuff	33.50	-108.67	12	1210	29-28 Ma	30 x 40	PI	1400	1050	R_D	CALCOF	8	x	?	RF?	?	?	Cd	CR	CR	EXT	✓
1210-A	Bursum	Apache Spring Tuff	33.50	-108.67	12	1210	29-28 Ma	30 x 40	PI	1400	1050	R_D	CALCOF	8	x	?	RF?	?	?	Cd	CR	CR	EXT	✓
1210-B	Emory	Kneeling Nunn Tuff	33.00	-107.50	12	1210	33 Ma	25 x 55	PI	1450-2050	1088-1538	R	CALCOF	<3.6 km	x	?	RF	✓	?	Cd	CR	CR	EXT	✓
1210-C	Gila Cliff Dwellings	Bloodgood Canyon Phylolite	33.25	-108.33	12	1210	30-29 Ma	20	?	1000	750	R_D	CALCOF	x	?	?	?	x	?	Cd	CR	CR	EXT	✓
1210-D	Mogollon	Cooney Tuff	33.50	-109.00	12	1210	34 Ma?	15?	?	?	?	?	?	x	?	?	?	x	?	Cd	CR	CR	EXT	✓
1210-E	Mt. Withington	Potato Canyon	33.75	-107.50	12	1210	30 Ma	?	?	1250?	R	CALCOF	?	x	?	?	?	?	?	Cd	CR	CR	EXT	✓
1210-F	Mule Creek	Dripping Spring Phylolite	33.83	-109.00	12	1210	25-28.8 Ma	10	?	10	5	QLaR	CALCOF	x	?	?	?	x	?	Cd	CR	CR	EXT	✓
1210-G	Organ	Cueva Tuff Soledad Phylolite Tuff	32.50	-106.50	12	1210	33 Ma	16	PoT	?	R	CALCOF	?	x	?	?	RF	x	?	Cd	CR	CR	EXT	✓
1210-H	Toledo	Olowi Member	?	?	12	1210	?	?	?	200-300	100-150	R	CALCOF	x	?	?	?	x	?	Cd	CR	CR	EXT	✓
1211-01	Buckhorn	Gomez Tuff	30.93	-105.10	12	1211	38 Ma	18 x 28	T	220	?	?	?	x	?	?	?	x	?	C	SC	SC	EXT	x
1211-02	Chinai Mountains Caldera	Mitchell Mesa Phylolite	29.92	-104.22	12	1211	32-33 Ma	30 x 20	?	1000	RaT	CALCOF	?	x	LFD	RF	✓	?	C	SC	SC	EXT	x	
1211-03	Eagle Mountains	various	30.93	-105.10	12	1211	37-36 Ma	10	T	?	RaT	CALCOF	?	x	?	?	?	x	?	C	SC	SC	EXT	x
1211-04	First caldera	Buckshot	29.44	-103.46	12	1211	42 Ma	1-1.5	LC	?	?	?	?	x	LD	?	?	x	?	C	BAR	BAR	EXT	x
1211-05	Infiernito	Ignimbrite	30.03	-104.35	12	1211	37 Ma	> 12	T	30-40	R	CALCOF	?	x	LFD	RF	✓	?	C	SC	SC	EXT	x	
1211-06	Main Eastern caldera		29.43	-103.44	12	1211	42 Ma	15	LC	?	?	?	?	x	LD	?	?	x	?	C	BAR	BAR	EXT	x

ID	CALDERA	Deposit	Lat	Long	W	SW	Age	Dim (km)	CT	VD (km3)	VM (km3)	Comp	RS	P (km)	PD	PCE	CPR	RE	PVA	C	TS	Local tect	RF	
1211-07	Main Western caldera		29.44	-103.46	12	1211	42 Ma	1 x 15	LC			?	?	x	LD	?	x	?	?	C	BAR	EXT	x	
1211-08	Paisano Pass	South Rim Formation	30.28	-103.81	12	1211	36 Ma	5	T			?	?	x	SV	?	x	?	?	C	SC	EXT	x	
1211-09	Pine Canyon	Pine Canyon Rhyolite	29.51	-103.23	12	1211	33 Ma	6-7	?			R	CALCOF	x	?	?	x	?	?	C	SC	EXT	x	
1211-10	Second caldera		29.44	-103.46	12	1211	42 Ma		LC			?	?	x	LD	?	x	?	?	C	BAR	EXT	x	
1211-11	Sierra Quemada	Mule Ear Springs Tuff	29.27	-103.26	12	1211	34 Ma	6	?			?	?	x	?	?	x	?	?	C	SC	EXT	x	
1211-12	Van Horn Mountains		30.84	-104.88	12	1211	<37 Ma	4	?	<30		?	?	x	?	?	x	?	?	C	SC	EXT	✓	
1302-01	Kilauea		19.43	-155.29	13	1302	15 ka	5 x 3.1	F			B	ALCAm	x	SV	?	x	?	L	Od	H	EXT	x	
1302-02	Mauna Loa		19.48	-155.61	13	1302	> 590 ka	4.5 x 2.7	F			B	ALCAm	x	SV	?	x	?	?	Od	H	EXT	x	
1401-03	Ceboruco	La Jala Pumice	21.13	-104.51	14	1401	1 ka	3.7	?	3-4		RD	CALCOF	x	STRC	PSV	x	?	?	C	CR	EXT	x	
1401-A	Amealco		20.13	-100.17	14	1401	4.7 Ma	11	?	500		TA _A TD	CALCOF-ALCA	x	?	PV?	✓	?	?	C	CR	EXT	✓	
1401-B	La Primavera	La Tala Tuff	20.75	-103.50	14	1401	95 ka	11	P	32-40		Co	CALCOF	x	VC	?	?	?	?	?	Od	TJ	EXT	✓
1401-C	Santana	Santana Tuff	29.07	-104.05	14	1401	29-28 Ma	25 x 32	T			?	?	x	?	?	x	?	?	C	CR	EXT	x	
1401-D	San Carlos	San Carlos Tuff	29.24	-104.10	14	1401	30 Ma	25 x 32	?			?	?	x	?	?	x	?	?	C	CR	EXT	x	
1401-E	Los Azufres		20.00	-100.00	14	1401	Late Miocene-Early Pliocene	?	?			?	?	x	?	?	?	?	?	?	Od	SC	EXT	✓
1401-F	San Marcos	Victorino Iamimbrite	28.75	-106.25	14	1401	Eocene ?	?	?			RD	CALCOF	x	VE?	PV?	✓	?	?	C	SC	?	x	
1402-06	Aitilan	Los Chokoyos	14.58	-91.19	14	1402	84 ka	17 x 20	?	150		R	CALCOF	x	STR	?	x	Ms	T	SC	Stens	✓		
1402-11	Amatitlan		14.38	-90.60	14	1402	240 ka	14 x 16	?	17		D	CALCOF	x	VE	?	✓	S	T	SC	Stens	✓		
1403-02	Coatepeque		13.87	-89.55	14	1403	10 ka	7 x 10	?	50		D	CALCOF	x	STR	?	x	?	T	SC	Scomp	x		
1403-06	Ilopango		13.67	-89.05	14	1403	A.D. 260	8 x 11	?			D	CALCOF	x	?	?	x	?	?	T	SC	EXT	✓	
1404-10	Masaya		11.99	-86.16	14	1404	1550-160 Ma		F			?	?	x	C	?	x	R	T	SC	SHEAR	✓		
1404-101	Apoyo		11.92	-86.03	14	1404	23 ka	6.5	?			D	CALCOF	x	SV	?	x	?	?	T	SC	EXT	✓	
1404-A	Old Masaya		11.99	-86.14	14	1404	2.5 Ma		?	8		B	CALCOm	x	SV	?	x	R	T	SC	SHEAR	x		
1404-B	Nindirí		11.99	-86.17	14	1404		15	P			B	CALCOm	x	C	PV	x	?	T	SC	SHEAR	x		
1404-C	Santiago		11.98	-86.17	14	1404	1858-1959 d.C	0.6	PO			B	CALCOm	x	C	PV	x	?	T	SC	SHEAR	x		
1405-02	Rincon de la Vieja		10.83	-85.33	14	1405		15-20 (outer) 5 (inner)	?			?	?	x	STR	?	x	?	?	T	SC	Scomp	x	
1405-03	Miravalles		10.75	-85.15	14	1405	500 ka	7 x 10 (outer) 3 (inner)	?			R	CALCOF	x	STR	?	x	?	?	T	SC	EXT	x	
1405-04	Poas		10.20	-84.22	14	1405	<40 ka		?			B	CALCOm	x	STR	?	x	?	?	T	SC	?	x	
1405-A	Guayabo		10.67	-85.25	14	1405		11	F _P			A	CALCOi	x	STR	PV?	x	?	?	T	SC	EXT	x	
1503-01	Volcan Fernandina		-0.37	-91.55	15	1503	1968 A.C.	6.5 x 4.6	F _T 1-2			TB	THOLE	x	SV	FV?	x	M	Od	HOC	EXT	✓		
1503-02	Volcan Wolf		0.02	-91.35	15	1503		6.4 x 5.1	F			TB	THOLE	x	SV	?	x	?	?	Od	HOC	EXT	✓	
1503-03	Volcan Darwin		-0.18	-91.28	15	1503		5.6 x 5.5	?			TB	THOLE	x	SV	?	x	?	?	Od	HOC	EXT	✓	
1503-04	Volcan Alcedo		-0.43	-91.12	15	1503		7.4 x 6.1	?			TB	THOLE	x	SV	?	x	?	?	Od	HOC	EXT	✓	
1503-05	Sierra Negra		-0.83	-91.17	15	1503		9.3 x 7.4	PC			TB	THOLE	x	SV	?	x	?	?	Od	HOC	EXT	✓	
1503-06	Cerro Azul		-0.90	-91.42	15	1503		4.3 x 3.2	F			TB	THOLE	x	SV	?	x	?	?	Od	HOC	EXT	✓	
1505-A	Soledad	Soledad Tuff	-17.67	-68.00	15	1505	54000	22 x 14	?			D	CALCOF	x	VC	PV	x	?	?	C	SC	EXT	x	

ID	CALDERA	Deposit	Lat	Long	W	SW	Age	Dim (km)	CT	VD (km3)	VM (km3)	Comp	RS	P (km)	PD	PCE	CPR	RE	PVA	C	TS	Local tect	RF
1505-B	La Pacana	Atana Ignimbrite Toconao	-23.17	-67.42	15	1505	4 Ma	60 x 35	T	2700	1600	R_D	CALCOF	6	x	?	RF	✓	S	C	SC	Stens	✓
1507-021	Diamante		-34.20	-69.80	15	1507	450 ka	15 x 20	?			R	CALCOF		x	?	?	?	?	C	SC	EXT	x
1507-07	Nevados de Chillan		-36.87	-71.38	15	1507		7 x 4.5	?			?	?		x	?	?	?	C	SC	EXT	x	
1507-09	Copahue		-37.85	-71.17	15	1507	Pleistocene	10	?			S	CALCOF		x	STR	?	?	C	SC	IF	✓	
1507-111	Sollipulli		-38.97	-71.52	15	1507	> 2.8 ka	4	P?			?	?		x	?	NEE	x	?	C	SC	EXT	x
1507-12	Villarrica		-39.42	-71.95	15	1507		9 x 6 (outer) 2.2 (inner)	?			D	CALCOF		x	STR	?	?	M	C	SC	IF	✓
1507-141	Cordillera Nevada		-40.46	-72.25	15	1507	100-200 ka	9	?			D	CALCOF		x	STR	?	?	?	C	SC	Stens	✓
1507-A	Cerro Galán	Cerro Galán Ignimbrite	-26.00	-67.00	15	1507	2.2 Ma	20 x 35	T	> 1000		D	CALCOF	3.5-5	x	VC	?	?	RS	C	SC	?	✓
1507-B	Aguas Calientes	various	-24.25	-66.50	15	1507	10-10.5 Ma		T	200-250		?	?		x	?	?	?	?	C	SC	Scomp	✓
1507-C	Cerro Panizos		-22.19	-66.68	15	1507			?			?	?		x	?	?	?	?	C	SC	?	x
1508-057	MT. Hudson		-45.91	-72.92	15	1508	Pre-glacial	9	?			?	?		x	STR	?	?	?	C	SC	IF	✓
1600-10	Unnamed		15.30	-61.30	16	1600	30 ka	10	?			S	CALCOF		x	STR	?	?	Ms	O	SM	Scomp	x
1600-14	Qualibou		13.83	-61.05	16	1600	39 ka	5 x 7	?			S	CALCOF		x	STR	?	?	S	O	SM	IF	✓
1702-03	Kalla		63.63	-19.05	17	1702		11 x 14	?			?	?		x	LLSTR	?	?	?	O	HOC	EXT	x
1702-05	Torfajökull		63.93	-19.15	17	1702		13 x 18	?			S	CALCOF		x	STR	?	?	?	O	HOC	EXT	x
1702-21	Öraefajökull		64.00	-16.65	17	1702	<700 ka	5 x 4	?			D	CALCOF		x	STR	?	?	?	O	HOC	EXT	x
1702-22	Grimsvotn		64.42	-17.33	17	1702			?			?	?		x	LLSTR	?	?	?	O	HOC	EXT	✓
1702-23	Kverkfjöll		64.65	-16.70	17	1702		7.5 x 5.5	?			?	?		x	LLSTR	?	?	?	O	HOC	EXT	✓
1703-03	Barðarbunga		64.62	-17.50	17	1703		7 x 11	?			B	THOLE		x	LLSTR	?	?	?	O	HOC	EXT	✓
1703-03B I	Askja		65.05	-16.80	17	1703	5 ka	9	P-D			RaD	CALCOF		x	LLSTR	?	?	?	O	HOC	EXT	✓
1703-03B II	Oskjuvatn		65.33	-16.75	17	1703	A.D. 1875	4.5	?			R	CALCOF	1	x	RCC	?	?	?	O	HOC	EXT	✓
1703-11	Krafla		65.73	-16.78	17	1703	<70 ka	10.8	?			?	?		x	SV	?	?	?	O	HOC	EXT	✓
1802-08	Sete Cidades		37.87	-25.78	18	1802	22 ka	5	?			D	CALCOF		x	STR	?	?	R	Od	HOC	EXT	✓
1802-09	Agua de Pau		37.77	-25.47	18	1802	15.2 ka	4 x 7 (outer) 2.5 x 3 (inner)	?			D	CALCOF		x	STR	?	?	?	Od	HOC	EXT	✓
1802-10	Furnas		37.77	-25.32	18	1802	12 ka	6	?			D	CALCOF		x	LPSTR	?	?	?	Od	HOC	EXT	✓
1803-03	Las Canadas		28.25	-16.60	18	1803	150 ka	10 x 17	?	72		D	CALCOF		x	LLSTR	PV	?	?	Od	H	EXT	✓
1804-01	Cha		14.95	-24.35	18	1804		8	?			M	ALCAm		x	SV	?	?	?	Od	H	?	x
1900-02	Erebus		-77.58	167.17	19	1900		6	?			?	?		x	STR	?	?	?	Cd	?	EXT	x
1900-03	Deception Island		-62.93	-60.57	19	1900		7	?			B	CALCO-ALCA		x	STR	?	?	R	Cd	BAR	EXT	✓

A.II ANNEX II

CCBD STRUCTURE

In this Appendix II, we include a short description of all the fields included in the CCDB. If necessary, we also provide the code for the different possibilities of the field.

- **“IDCaldera”**: Identification number of the collapse caldera following the rules commented in section II.5.3.2 and represented in figure 2.26.
- **“Caldera”**: Caldera name
- **“Deposit_name”**: Name of the deposit associated with the caldera-forming eruption
- **“Latitude” and “Longitude”**: Geographical coordinates of the caldera. Negative sign indicates in latitude and longitude, East and South, respectively.
- **“World_region” and “Subregion”**: Region of the world where the collapse caldera is located. Outlines of the 19 regions of the world defined by Simkin et al. (1981) and modified by Newhall and Dzurisin (1988) are represented in figure 2.27. An enlarged image of this map is compiled in Appendix III.

List of World regions and their corresponding code in the database:

ID	World region
1	Mediterranean
2	Africa
3	Indean Ocean
4	Tonga Trench
5	Melanesia
6	Indonesia
7	Philippines
8	Mariana Trench
9	Kurile Islands
10	Kamchatka and Mainland Asia
11	Alaska

ID	World region
12	North America
13	Hawaii
14	Central America
15	South America
16	Caribbean
17	Iceland
18	Atlantic Islands
19	Antartica
20	Arctic
9999999	Unknown

List of World subregions and their corresponding code in the database:

ID	Subregion_name
101	Italy
102	Greece
103	Turkey
104	Iran
105	USSR-W
106	UK
107	Israel
108	Germany
201	Red Sea &
202	Africa-E
203	Africa-C
204	Africa-W
205	Africa-N
301	Arabia-W
302	Arabia-S
303	Indian O-W
304	Indian O-S
401	New Zealand
402	Kermadec Islands
403	Tonga
404	Samoa
405	Fiji
500	Papua/New Guinea- New Zealand
501	Papua/New Guinea- New Zealand
502	Papua/New Guinea- New Zealand
503	Papua/New Guinea- New Zealand
504	Papua/New Guinea- New Zealand
505	Solomon Islands
506	
507	New Hebrides
508	
509	Australia
601	Sumatra
602	
603	Java

ID	Subregion_name
604	Lesser Sunda Island
605	Banda Sea
606	
607	
608	
701	
702	
703	
704	
705	SE Asia
801	Taiwan
802	Ryuku Islands and
803	Honshu-Japan
804	Izu- Mariana Island
805	Hokkaido-Japan
806	Southwest Japan
900	Kurile Islands
1000	Kamchatka
1001	USSR-
1002	
1003	Manchuria
1004	Tibet
1005	USSR-SE
1006	Mongolia
1007	
1008	Korea
1101	Aleutian Islands
1102	Alaska Pennynsula
1103	Alaska-SW
1104	Alaska -W
1105	Alaska-E and SE
1200	Canada
1201	US-Washington
1202	US-Oregon
1203	US-California
1204	US-Idaho
1205	US-Wyoming
1206	US-Utah
1207	US-Nevada
1208	US-Colorado
1209	JS-Arizona

ID	Subregion_name
1210	US-New Mexico
1211	Texas
1302	Hawaiian Islands
1303	Pacific-C
1401	Mexico
1402	Guatemala
1403	El Salvador
1404	Nicaragua
1405	Costa Rica
1501	Colombia
1502	Ecuador
1503	Galapagos Islands
1504	Peru
1505	Bolivia and Chile-N
1506	Chile Island
1507	Chile-C and
1508	Chile-S
1600	West Indies
1700	Iceland-W
1701	Iceland-SW
1702	Iceland-S
1703	Iceland-N
1704	Jan Mayen
1801	Atlantic-N
1802	Azores
1803	Canary Islands
1804	Cape Verde Islands
1805	Atlantic-C
1806	Atlantic-S
1900	Antartica
2001	Artic Ocean
9999911 or ?	Unknown subregion of Alaska
9999998 or ?	Unknown subregion of Japan
9999999 or ?	Unknown word region and subregion

- **“Age” and “AgeCLAS”:** Age of the caldera samples and classification of the calderas in different categories according to their age (see sections II.5.3.2 and II.5.4 for more details).

List of the CATEGORIES associated with the CHARACTERISTIC “Age” and their corresponding code in the database:

IDAgeCLAS	Age_interval
?	?
1	< 5 ka
2	5-50 ka
3	50-100 ka
4	100 ka -1 Ma

IDAgeCLAS	Age_interval
5	1 - 10 Ma
6	10 - 25 Ma
7	25 - 50 Ma
8	> 50 Ma

- “Dimensions”, “Dim_max (km)” and “Dim_min (km)”: Dimensions of the caldera structure at surface: approximate interval, and maximum and minimum diameter of the caldera depression at surface.
- “Area_ref (km²)”, Area_cal (km²) and AreaCLAS: Area of the caldera depression provided by the consulted references, area of the caldera calculated using the information contained in the *FIELDS* “D_{max}” and “D_{min}”, and classification of the calderas according to their dimensions in km² (see sections II.5.3.2 and II.5.4 for more details).

List of the CATEGORIES associated with the CHARACTERISTIC “Dimension” and their corresponding code in the database:

IDAreaCLAS	Area interval
?	Unknown
1	< 5 km equivalent diameter
2	5-10 km equivalent diameter

IDAreaCLAS	Area interval
3	10-25 km equivalent diameter
4	25-50 km equivalent diameter
5	> 50 km equivalent diameter

- “Subsidence (km)”: Amount of caldera subsidence during the collapse process.
- “Vol_cal (km³)”: Volume of the caldera depression provided by the consulted references.
- “Incremental”: The *FIELD* records those calderas with evidences of an incremental collapse process, i.e. caldera subsidence took place in different pulses.
- “Thick_dep (km)”: Thickness of the deposits in km (intra- and, in some cases also, extracaldera).
- “Chamber_depth (km)”: Depth of the magma chamber during the caldera-forming event.
- “Collapse_type” and “Collapse CLAS”: Type of collapse according to the morphological classification proposed by Lipman in 1997 (see section II.3.4.3) and reorganization of the calderas according to a simple 6 end-members classification.

List of Collapse types and their corresponding code in the database:

IDCollapse_Type	Collapse_Type
?	Unkown
C	Composite
CA	Chaotic
F	Funnel
F/P	Funnel/plate
F?	Funnel?
F_P	Funnel-plate
F_T	Funnel-trapdoor
KT	Krakatau type
LC	Laccocaldera
P	Plate
P?	Plate?

IDCollapse_Type	Collapse_Type
P2p	Plate 2 phases
PaPC	Plate and piecemeal
PC	Piecemeal
PC?	Piecemeal?
PC2p	Piecemeal 2 phases
P-D	Plate-downsag?
PI	Plate (inward)
PI_D?	Plate (inward)-downsag?
PO	Plate (outward)
T	Trapdoor
T_D	Funnel-downsag
T_PC	Trapdoor-piecemeal

List of the CATEGORIES associated with the CHARACTERISTIC “Collapse_type” and their corresponding code in the database:

IDCollapse	Description
?	Unknown
CA	Chaotic subsidence
F	Funnel calderas
o	Combination of various collapse types: funnel-plate, funnel-trapdoor
P	Plate/piston subsidence
PC	Piecemeal disruption
T	Trap-door subsidence

- **“R”**: Roof aspect ratio of the magma chamber, i.e. the quotient between the magma chamber depth or thickness of the overlying roof and the magma chamber width (see section II.5.3.2 for more details).
- **“Vol_dep (km³)” and “VoldepCLAS”**: Volume in km³ of the extruded deposits during the caldera-forming event and classification of the calderas according to the volume of the extruded deposits (see sections II.5.3.2 and II.5.4 for more details).

List of the CATEGORIES associated with the CHARACTERISTIC “Volume of extruded deposits” and their corresponding code in the database:

ID	Deposits volume
?	Unkonwn
A	<10 km ³
B	10-50 km ³

ID	Deposits volume
C	50-100 km ³
D	100-500 km ³
E	500-1000 km ³

ID	Deposits volume
F	1000-2000 km ³
G	> 2000 km ³

- **“Vol_magma (km³)” and “VolmagmaCLAS”:** Volume in km³ of magma extruded during the eruptive event and classification of the calderas according to the volume of the extruded magma (see sections II.5.3.2 and II.5.4 for more details).

List of the **CATEGORIES** associated with the **CHARACTERISTIC “Volume of extruded magma”** and their corresponding code in the database:

ID	Magma volume
?	Unkonwn
A	<10 km ³
B	10-50 km ³

ID	Magma volume
C	50-100 km ³
D	100-500 km ³
E	500-1000 km ³

ID	Magma volume
F	1000-2000 km ³
G	> 2000 km ³

- **“Composition” and “CompositionCLAS”:** Composition of the extruded deposits during the caldera-forming event and classification of the calderas according to the composition of the extruded materials (see sections II.5.3.2 and II.5.4 for more details).

List of **Compositions** and their corresponding code in the database:

ID	Composition
?	Unkown
57-77%	
61%	
61-74%	
66-68%	
66-70%	
68-70%	
70-74%	
72-74%	
77-78%	
A	Andesitie
A_D	Andesite-dacite
AaD	Andesite and lacite
B	Basalt
B_R	Basalt-rhyolite
BA	Basaltic andesites

ID	Composition
D	Dacitie
F	Felsic
I	Intermediate
L	Latite
L_T	Latite-trachyte
M	Mafic
P_T	Pantellerite-trachyte
QL	Quartz latite
QL_R	Quartz latite-rhyolite
QLaR	Quartz latite and rhyolite
R	Rhyolite
R_A	Rhyolite-andesite
R_D	Rhyolite-dacite
RaA	Rhyolite and andesite

ID	Composition
RaD	Rhyolite and dacite
RaT	Rhyolite and trachyte
RD	Rhyodacite
S	Silicic
SH	Shoshonitic
T	Trachyte
TaB	Trachyte and basalt
TaP	Trachyte and phonolite
TaTP	Trachyte and trachyphonolite
TB	Tholeiite basalt
TEP	Tephriphonolite
TP	Trachyphonolite

List of the CATEGORIES associated with the CHARACTERISTIC “Composition of the extruded magma” and their corresponding code in the database:

IDCompositionCLAS	Compositional_classification
?	Unkonwn
ALCAf	Alkaline felsic: TaP, T, I
ALCAi	Alkaline intermediate: TEP, TP
ALCAif	Alkaline intermediate-felsic: TaTP
ALCAm	Alkaline mafic: SH, B
ALCAmf	Alkaline mafic-felsic: TaB, TaP
CALCO-ALCA	Calcoalkaline-alkaline: B
CALCOf	Calcoalkaline felsic: 72-74%, 68-70%, 70-74%, 77-78%, D,F, QL, QL_R, QLaR, L, R, R_D, RaD, RD, S
CALCOi	Calcoalkaline intermediate: 66-68%, 66-70%, A
CALCOi_ALCAf	Calcoalkaline intermediate- Alcaline felsic: RaT, 61%
CALCOif	Calcoalkaline intermediate-felsic: 61-74%, A_D, AaD, R_A, RaA
CALCOm	Calcoalkaline mafic : B, BA, M
CALCOmf	Calcoalkaline mafic-felsic: 57-77%, B_R
THOLE	Tholeiite: B, TB

- **“Precaldera_doming”**: This field records information about tectonic or magmatic tumescence or doming periods prior to the caldera-forming eruption (see section II.5.3.2 for more details).
- **“Precaldera_edifice” and “EdificeCLAS”**: Type of volcanic edifice) existing prior to the caldera-forming event or in some cases, also its absence and simplified classification of the caldera samples according to the type of pre-caldera edifice (see sections II.5.3.2 and II.5.4 for more details).

List of Types of pre-caldera edifices and their corresponding code in the database:

IDPrecaldera_edifice	Precaldera_edifice
?	Unknown
AV	Andesite volcano
BV	Basalt volcano
C	Cone
CA	Caldera
CA?	Caldera
CC	Caldera cluster
L	Lavas
LD	Laccolithic dome
LFD	Lava flows and domes
LLSTR	Low, lava-dominated stratovolcano
LPSTR	Low, pyroclastic-dominated straovolcano

IDPrecaldera_edifice	Precaldera_edifice
M	Maars
NPE	No previous edifice
NPE?	No previous edifice?
PP	Pyroclastic plateau
RCC	Rift/Caldera cluster
STR	Stratovolcano
STRC	Stratocone
SUB	Submarine
SV	Shield volcano
VC	Volcano cluster
VE	Volcanic edifice
VE?	Volcanic edifice

List of the CATEGORIES associated with the CHARACTERISTIC “Type of pre-caldera edifice” and their corresponding code in the database:

IDEdifice	Description
?	Unknown
1	Volcanic edifice (various): AV, BV, VE, C,VE, VE?
2	Stratovolcanoes and stratocones: LLSTR, LPSTR, STR, STRC
3	Shield volcanoes:SV
4	Lava flows and domes: L, LFD, LD
5	No eruption or calderas: CA, CA?, CC, NPE, NPE?, RCC
o	Others: M, PP, SUB, VC

- **“Resurgence”**: The *FIELD* marks those samples in which there exist evidences of further resurgence or intracaldera doming.
- **“Collapse_precursor” and “PrecursorCLAS”**: Possible information about the triggers or precursors of the caldera-forming event and simplified classification of the caldera samples according to the type of triggers or precursors (see sections II.5.3.2 and II.5.4 for more details).

List of Types of collapse precursors and their corresponding code in the database:

IDCollapse_precursor	Collapse_precursor
?	Unknown
BE	Basaltic eruption
FV	Flank vent
FV?	Flank vent?
HY	Hydromagmatic
HYaF	Hydromagmatic and fracture
NEE	No explosive eruption

IDCollapse_precursor	Collapse_precursor
PSV	Previous single vent
PV	Previous vent
PV?	Previous vent?
PVaF	Previous vent and fracture
PVaF?	Previous vent and fracture
RF	Ring-fractures
RF?	Ring-fractures?

List of the CATEGORIES associated with the CHARACTERISTIC “Type collapse precursor” and their corresponding code in the database:

IDPrecursor	Precursor_classification
?	Unkonwn
NERF	No eruption or ring-fractures: NEE, NEE?, RF, RF?
o	Others: HY, HYaF
PV	Previous vent: BE, FV, FV?, PSV, PV,PV?. PVaF. Pva

- **“Postcaldera_activity”**: Type of activity according to the classification performed by Walker (1984) (see sections II.5.3.2 and II.5.4 for more details).

List of the CATEGORIES associated with the CHARACTERISTIC “Type of post-caldera volcanic activity” and their corresponding code in the database:

IDPostcaldera_activity	Postcaldera_activity
?	Unknown
C	Central or near-central vent
CaR	Central vent and multiple vents located at the caldera margins
CC	Caldera collapse
L	Straight line or linear zone distributed vents
M	Single vent at o near the caldera margins
Ms	Multiple vents at o near the caldera margins
R	Vents located along an arcuate line parallel to the caldera margin
RS	Vents controlled by regional structures
S	Vents scattered within the caldera

- “Crust”: This field records the composition of the crust, as well as, its thickness at the area where the collapse caldera is located (see sections II.5.3.2 and II.5.4 for more details).

List of the CATEGORIES associated with the CHARACTERISTIC “Crustal type” and their corresponding code in the database:

IDCrust	Crustal type
?	Unknown
C	Continental silicic thick crust
Cd	Continental silicic thin crust
O	Oceanic basaltic thick crust

IDCrust	Crustal type
Od	Oceanic basaltic thin crust
T	Transitional thick crust
Td	Transitional thin crust

- “Tectonic_setting_des” and “Tectonic_setting”: Short description of the tectonic context in which each collapse calderas is located and reclassification of the calderas included in the CCDB according to the new-defined tectonic settings (see sections II.5.3.2 and II.5.4 for more details).

List of the CATEGORIES associated with the CHARACTERISTIC “Tectonic setting” and their corresponding code in the database:

IDTectonic_setting	Tectonic_setting
?	Unknown
BAR	Back-arc rifting
CR	Continental rift
H	Hotspot
HOC	Hotspot near or over an ocean
IAC	Island arc collision

IDTectonic_setting	Tectonic_setting
OC	Ocean ridge
SC	Chilean-type subduction
SM	Mariana-type subduction
T	Transform boundary
TJ	Triple plate junction

- **“Local_tectonics”**: Condition or nature of the structures affecting the caldera or the magmatic system responsible of the caldera-forming eruption (see sections II.5.3.2 and II.5.4 for more details).

List of the CATEGORIES associated with the CHARACTERISTIC “Condition of the local structures” and their corresponding code in the database:

IDLocal_tectonic	Local_tectonics
?	Unknown
COMPR	Compressional local structures
EXT	Extensional local structures
IF	Intersection of faults

IDLocal_tectonic	Local_tectonics
Scomp	Shear and compressional local
SHEAR	Shear local structures
Stens	Shear and tensional local

- **“Regional_faults”**: The *FIELD* records the existence of regional faults that may affect the magmatic system or the caldera structure before or after the collapse.
- **“References”**: This *FIELD* lists for each caldera all the consulted references. Those articles with a “c” in their identification numbers are references about plate tectonics of the area where the caldera is located; this works are not necessarily directly related to the caldera (see sections II.5.3.2 and VII.2 for more details).

List of all consulted references

ID	Reference
A6	Aguirre-Díaz (1996): Revista Mexicana de Ciencias Geológicas 13, 10-51
A7	Alatorre-Zamora and Campos-Enriquez (1991): Geophysics 56, 992-1002
A5	Allen (2001): JVGR 105, 141-162
A1	Aramaki (1984): JGR 89, 8485-8501
A3	Aramaki and Ui (1966): BV 29, 29-47
A4	Aramaki and Yamasaki (1963): BV 26, 89-99
A2	Armienti et al. (1984): BV 47-2, 349-358
Ac8	Avdeiko et al. (1991): Tectonophysics 199, 271-287
B1	Bacon (1983): JVGR 18, 57-115
B13	Bacon et al. (1990): JGR 95, 21451-21461
B11	Bacon et al. (2002): GSAB 114, 675-692
B2	Bailey et al. (1976): JGR 81, 725-744
B20	Baker et al. (1975): BASSR 78, 81 pp.
Bc14	Baranov et al. (2002): Tectonophysics 350, 63-97
B3	Barberi et al. (1991): JVGR 48, 33-49
Bc16	Barton et al. (1983): EPSL 63, 273-291
Bc15	Bellier and Sébrier (1994): Tectonophysics 233, 215-231
B4	Beresford and Cole (2000): NZJGG 43, 471-481
Bc17	Birkenmajer (1992): Evolution of the Bransfield Basin and rift,
Bc18	Birkenmajer (1992): Evolution of the Branfield Basin and rift,...
B19	Birkenmajer (1995): TerraAntarctica 2, 33-40
B8	Branney and Kokelaar (1994): GSAB 106, 507-530

ID	Reference
B9	Branney et al. (1992): BV 54, 187-199
B10	Brown et al. (1991): Geology 19, 352-355
B12	Browne and Gardner (2004): JVGR 130, 93-105
B21	Broxton et al. (1989): JGR 94, 5961-5985
Bc22	Bruno et al. (2003): Tectonophysics 372, 193-213
B7	Bullard (1976): Volcanoes of the Earth
B5	Busy-Spera (1984): JGR 89, 8417-8427
B6	Byers et al. (1989): JGR 94, 5908-5924
C13	Campos-Enriquez and Garduño-Monroy (1995): JVGR 67, 123-152
C11	Carey and Sigurdsson (1987): GSAB 99, 303-314
C18	Carle (1988): JGR 93, 13237-13250
C1	Carter et al. (1986): Geology 14, 380-383
Cc16	Case et al. (1984): GSAM 162, 1-30
C17	Chadwick and Howard (1991): BV 53, 259-275
C2	Chesner (1998): JP 39, 397-435
C14	Chesner et al. (1991): Geology 19, 200-203
C6	Christiansen (1979): GSASP 180, 29-42
C3	Christiansen et al. (1977): GSAB 88, 943-959
C4	Cioni et al. (1999a): BV 61, 207-222
C12	Cioni et al. (1999b): Geology 27, 443-336
C8	Civetta et al. (1988): BV 50, 47-57
C10	Civetta et al. (2004): JVGR 133, 1-12
C9	Cole (1990): BV 52, 445-459
C7	Como and Lembo (1992): Volcanic seismology, 547-567
Cc19	Condie (1993): Plate tectonics and crustal evolution

ID	Reference
C5	Cotton (1944): Volcanoes and Landscape forms
Cc15	Cunningham and Steven (1979): GSB 1468, 1-34
D6	Dartevelle et al. (2002): Geology 30, 663-666
D1	Davy et al. (1998): JVGR 81, 69-89
D8	De Natale et al. (2006): ESR 74, 73-111
D3	Di Vito et al. (1999):JVGR 91, 221-246
D5	Dominey-Howes (2004): JVGR 130, 107-132
D4	Dominey-Howes and Minos-Minopoulos (2004): JVGR 137, 285-310
D7	Druitt and Bacon (1986): JVGR 29, 1-32
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E2	Elrich (1972): BV 36, 222-237
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F9	Francis et al. (1983): Nature 301, 51-53
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G2	Geshi et al. (2002): Bv 64, 55-68
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G3	Gilbert et al. (1996): BV 58: 67-83
Gc6	Gonzalez-Casado et al. (2000): Geology 28, 1043-1046
H9	Hahn et al. (1979): GSASP 180, 101-112
Hc18	Hall (1996): GSSP 106, 153-184
H1	Hallinan (1993): Geology 21, 367-370
H17	Hallinan and Brown (1995): JVGR 67, 101-122
Hc19	Hasegawa et al. (2005): Tectonophysics 403, 59-75
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H7	Hirn et al. (1991): JVGR 47, 89-104
H13	Houghton et al. (1995): Geology 23, 13-16
H8	Howells et al, (1986): JGSL 143 411-423
H12	Huijsmans et al. (1988): JVGR 34, 283-306
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J1	John (1995): GSAB 107, 180-200

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Kc9	Kamimura et al. (2002): PEPI 132, 105-129
Kc8	Katili (1975): Tectonophysics 26, 165-168
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K3	Krupp (1984): Geologisch Rundschau 73, 3, 981-1005
K2	Kuno (1953): TAGU 34, 267-280
K4	Kuno et al. (1970) BV 34, 713-725
L1	Leat (1984): JGSL 141, 1057-1069
L2	Lindsay et. al. (2001): JVGR 106, 145-173
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L5	Lipman (1984):JGR 89,8801-8841
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L7	Lipman (2000): Encyclopedia of Volcanoes
L8	Lipman et al. (1996): GSAB, 108 1039-1055
L11	Lipman et al.(1973): USGSJR 1, 627-642
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L12	Lirer et al. (1987): EOS 68, 226-234
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L9	Luongo et al. (1991):JVGR 45, 161-172
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L14	Luongo et al. (2003): JVGR 126, 201-223
M12	Mahood (1981): JGR 77, 129-449
M1	Mahood and Hildreth (1983): Geology 11, 722-726
Mc21	Malod and Kemal (1996): GSSP 106, 19-28
Mc22	Mandeville et al. (1996): JVGR 74, 243-274
M26	Marti et al. (1996): GSSP 110, 253-265
M9	Matumoto(1963): BV 26, 401-413
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M19	Miller (1985): Geology 13, 14-17
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Mc23	Mitropoulos and Tarney (1992): JVGR 51, 283-303
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M10	Monzier et al. (1994): JVGR 59, 207-218
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ID	Reference
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M8	Murakami and Kuno (1993) JGSJ 99 243-254
N10	Nairn et al. (1994): BV 56, 529-537
N1	Nairn et al. (1995): JVGR 69, 255-284
N2	Nakada et al. (2005): BV 67, 205-218
N3	Nappi et al. (1991): JVGR 47, 13-31
N9	Nelson (1980): GSAB 91, 639-643
N7	Nelson et al. (1994): GSAB 106, 684-704
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N6	Newman et al. (2006): JVGR 150, 244-269
Nc11	Noguera and Rea (2000): Tectonophysics 324, 239-265
N8	Nunziata et al. (2006): EPSL 242, 51-57
O2	Orsi et al. (1991): JVGR 47, 1-11
O1	Orsi et al. (1992): JVGR 53, 275-287
O3	Ort (1993): JVGR 56, 221-252
Pc5	Pelletier et al. (1998): EPSL 164, 263-276
P3	Perissoratis (1995): Marine Geology 128, 37-58
P2	Pfeiffer (2001): JVGR 106, 229-242
Pc4	Pubellier et al. (1996): GSSP 106, 511-523
R12	Ratté and Steven (1967): USGSPP 524-H, 103-112
R1	Ratté et al. (1984): JGR 89, 8713-8732
R2	Redwood (1987): GSAB 99, 395-404
R15	Reneau et al. (1996): Geology 24, 7-10
Rc17	Reubi and Nicholls (2004): JVGR 138, 345-369
R11	Rhodes and Smith (1973): BV 36, 401-411
R16	Ritchey (1980): JVGR 7, 373-386
R9	Rittman (1962): Volcanoes and their activity
R14	Robin et al. (1993): JVGR 55, 225-238
R4	Robin et al. (1994): BV 54, 170-183
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R18	Rose et al. (1987): JVGR 33, 57-80
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S1	Sander et al. (1995): JGR 100, 8311-8326
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S15	Schmitt et al. (2002): JVGR 120, 43-53
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Sc9	Smith and Braile (1994): JVGR 61, 121-187
S16	Smith et al. (2005): JVGR 148, 372-406

ID	Reference
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S4	Spera and Crisp (1981): JVGR 11, 169-187
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S10	Steven and Lipman (1976): USGSPP 958: 35pp.
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S7	Sugimura (1953): JGSJ 59, 89-91
S6	Suzuki-Kamata et al. (1993): JGR 98, 14059-14074
T4	Taddeucci and Wohltez (2001): JVGR 109, 299-317
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T1	Tibaldi and Vezzoli (2004): GRL 31, L14605
T3	Troll et al. (2000): BV 62, 301-317
Tc5	Tsvetkov (1991): Tectonophysics 199, 289-317
Tc6	Turcotte and Schubert (2002): Geodynamics, 456 pp.
?	Unknown
V2	van Bemmelen (1949): The geology of Indonesia
V3	van Bemmelen and Rutten (1955): Table Mountains of Northern Island
Vc4	van Bergen et al., (1993): Tectonophysics 223, 97-116
V1	Varga and Smith (1984): JGR 89 8679-8694
W1	Walker (1984): JGR 89, 8407-8416
W12	Walker (1988): JGR 93, 14773-14784
W7	Wallmann et al (1990): Geology 18, 1240-1243
W8	Westrich and Gerlach (1992): Geology 20, 867-870
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W2	Williams et al. (1984) : JGR 89, 8553-8570
W3	Wilson (2001): JVGR 112, 133-174
W4	Wilson et al. (1984): JGR 89, 8463-8484
W5	Wilson et al. (1995): JVGR 68, 1-28
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W11	Wunderman and Rose (1984): JGR 89, 8525-8539
Y4	Yamamoto (1994): BGSJ 45, 135 - 155
Y2	Yokoyama (1963): BV 26, 67-72
Y3	Yokoyama and Ohkawa (1986): JVGR 130, 253-282
Y1	Yoshida (1984): JGR 89, 8502-8510
Zc1	Zlobin, T.K. (1987): Structure of the Earth's crust and mantle of the Kurile island arc.

List of the consulted references for each individual caldera sample

CALDERA	ID
Agua de Pau	Kc11,N4, Tc6
Aira	A1,A3,A4,N4, L7, M9, S4, W1, Y3
Akademii Nauk	N4
Akan	Mc24,N4
Amatitlan	Cc16,N4,W11
Ambrym	M15, Mc25,N4, Pc5,R14
Amealco	A6, S4, S8
Aniakchak	C5, Fe8,Kc7,M13, M20,N4,S4, Sc21
Aoba	Mc25,N4, Pc5
Apoyo	Cc16, N4
Artemisio (Alban Hills) I	N4 Nc11,Sc20
Artemisio (Alban Hills) II	N4, Nc11, Sc20
Askja	B10, N4
Aso	A1, A3, N4, S4,W1,W6
Asono	M9, S4
Ata	A1,M9,N4, S4
Atitlan	H9,N4,R10, R18, S4
Atitlan	Cc16,R18
Awasa	N4
Bachelor	L5,L10,S4, S10
Bachelor	Cc19
Banda Api	Ec4,N4
Bardarbunga	N4
Batur	Ec4,Kc8, Kc11,N4
Bayonnaise	Kc9,N4
Big John	Cc19 ,L5, L6,S5
Blacktail	Cc19,M5
Blue Creek	Cc19,M5
Blue Creek	
Bolsena	L6, N3, Nc11, Sc20
Bonanza	cc19, H2,L5, L6V1
Buckhorn	Cc19,H16
Bulusan	N4 , Pc4
Bursum	Cc19,E1,L5,R1 , S4
Ceboruco	B12, F5,G4,L13, N5,N9,S4
Cerro Azul	C17,M7,N4
Cerro Galán	F2, F9,H2, Kc11,L7 ,S14
Cerro Panizos	O3

CALDERA	ID
Cha	N4
Chinati Mountains Caldera	Cc19 H16,L5
Chirpoi	Ac8, Bc14,N4, S c21, Zc1
Cinque Denti	C8,M1,O2
Claim Canyon	B6, C3, Cc19,L5
Coatepeque	Cc16,N4, S4
Coombadjha	M27
Copahue	N4
Corbetti	N4
Cordillera Nevada	N4
Crater Lake	B1,B11,C6 , Cc19,D7 L5,L7, N7, R16,S4,S6
Creede	L5,L7,R12, S4,S1
Creede	Cc19
Daisetsu	Mc24
Dakataua	N4
Deception Island	B19, B20, Bc18
Dennison Fork	B13
Deriba	N4
Diamante	Kc11,N4
Dorobu	He19,M3
Eagle Mountains	Cc19, H4,L6
Elevenmile Canyon	J1
Elevenmile Canyon	Cc19
Emmons Lake	Fc8,Kc7,M20, N4, Sc21
Emory	Cc19,E1, L5 ,S4
Emuruangogolak	N4,W2
Erebus	N4
Fantale	N4, S4
First caldera	Cc19,H4
Fisher	Fe8,M20,N4, Sc21Tc5
Furnas	Kc11,N4,Tc6
Gassan	HC19,S4, S7
Gaua Island	Mc25,N4, Pc5
Geger Halang	Ec4,He18,Kc8, N4
Gila Cliff Dwellings	Cc19,E1,L5,S4 , R1
Glencoe	Ac8,Bc14,M4, M11, N4, Sc21
Gorely Khrebet	Ac8,Bc14,E2, N4,S4, Sc21
Grimsvotn	N4
Grizzly Peak	F3,L5
Grizzly Peak	Cc19
Guayabo	Cc16,H1 ,H17

CALDERA	ID
Hakone I	A1, He19, N4,W1
Hakone II	A1, He19,K2, K4,S4,W1
Haroharo, Okataina	C9,S17,S16, W4,W5
Hatchodaira	?
Haunted Canyon	Cc19,S4
Ijen	Ec4,Kc8,Kc11, N4
Ikeda	M9, S4
Ilopango	Cc16,N4
Infiernito	Cc19,H16 ,L5
Ischia	N4,O2, T1
Ishizuki	Y1
Iwo-Jima	Kc9,N5
Izu-Oshima	A1, Kc9
Job Canyon	Cc19,J1
Joko	L6, Y4
K'One	N4
Takeya I	S2
Takeya II	S2
Kakuto	A1, N4
Kanaton	Fc8, Kc11,N4 Sc21,Tc5
Kane Wash	Cc19,S4
Kapenga	C9,W4
Karkar	N4
Karymsky	Ac8, Bc14,N4, Sc21
Katla	N4
Katmai	Fc8, H6,H10, H11,K5, Kc7, M20, N4, Sc21,W7
Ketoi	Ac8, Bc14,N4, Sc21,Zc1
Kikai	A1, M9, N4, S4, W6
Kilauea	Kc11,N4, Tc6,W1 ,W12
Kilgore	Cc19,M5
Knebel	N4, S4, V3
Krafla	N4
Krakatoa	Bc15, Ec4,He18, Kc8,L7, Mc21,Mc22, N4, S4
Krashennikov	Ac8, Bc14,N4, Sc21
Ksudach	Ac8,Bc14,N4, Sc21
Kulshan	Cc19, H10, H19
Kumano I	M14
Kumano II	M14

CALDERA	ID
Kurile Lake , Pauzhetka	N4
Kurile Lake , Pauzhetka	Ac8
Kurile Lake , Pauzhetka	Bc14, Sc21
Kutcharo	A1,N4,S4,W6,Y2
Kutcharo	Mc24
Kuwae	M10, R4
Kuwae	Mc25
Kuwae	Pc5
Kuzyu	Kc10,M9,S4
Kverkfjoll	N4
La Garita	Cc19,L4,L5,L6,S4, S5,S10
La Pacana	C1, G2, Kc11,L2,S15
La Primavera	A6, A7, F5,L7, M12, N4
La Vecchia	N4
Lake City	L5,L7 ,L10,S4, S10
Lake City	Cc19
Las Canadas	N4
Latera	N3, Ne11,Sc20
Little Sitkin caldera one and two	Fe8, Kc11,N4, Sc21,Tc5
Lobobuta, Badjawa	Ec4,Kc8, Kc11,N4
Lolobau Island	N4
Long Island , Lake Wisdow	N4
Long Valley	B2, C18, Cc19,H5,H15,J3, L5,L7, M18,M19, N4 N6 S4, S10
Longonot	N4, W2
Los Azufres	C13,F7
Lost Lake	Cc19,L5,S4,S10
Lunar Lake	Cc19,S4
Main Eastern caldera	Cc19,H4
Main Western caldera	Cc19H4
Maly Semiachik	Ac8,Bc14,N4, Sc21
Mangakino	C9,W4
Maninjau	Bc15, Ec4,Hc18,
Maroa	C9, W4
Masaya	Cc16,N4,R8
Mashu	A1, Mc24,S4
Mauna Loa	Kc11,N4 ,Tc6,W12
Mc Dermitt	Cc19,R13, S4
Medvezhii	Ac8, Bc14, N4, Sc21, Zc11

CALDERA	ID
Mendeleev	Ac8, Bc14,N4, Sc21,Zc11
Menengai	L1,N4, W2
Miravalles	Cc16,N4
Mogollon	Cc19,E1,R1
Monroe Peak	Cc19,L5, S5
Montefiascone	N3
Mount Belknap	Cc15,Cc19,L5, S5
Mount Hope	Cc19,L11,S4,S10
MT. Hudson	N4
Mt. Withington	Cc19,E5,S4
Mule Creek	Cc19,E5,R11,
Nahe	K3
Narugo	HC19,N4
Nemo Peak	Ac8,Bc14,N4, Sc21, Zc1
Nevados de Chillan	Kc11,N4
Nigokirawa	A1, Mc24
Nindiri	Cc16,R8
Nisyros	A5 ,Bc16, Mc23,N4
Niufo'ou	Kc11,N4, Pc5
North Pagan	Kc9,N6
Northumberland	Cc19,S4
Novarupta	Fe8,Kc7,H10, M20,N4, Sc21
Oasis Valley	B6, B21,C3, Cc19,L5
Odnoboky	N4
Okmok	Fe8,Kc7, Kc11, M20, N4, Sc21
Old Masaya	Cc16,R8
Onikobe	HC19,N4
On-Take	Hc19,N4
Opala	Ac8, Bc14,E2 ,N4,S4, Sc21
Orafajokull	N4
Organ	Cc19,E5, L5, L6, S18
Oskjuvatn	B10, N4
Paisano Pass	Cc19,H4
Paka	N4,W2
Phlegraean Fields I	A2,B3, C7,L7 L9, L12,N4, Ne11,R6 S12, Sc20,T2
Phlegraean Fields II	A2,B3,C7,L12, Ne11.O1. Sc20
Phlegraean Fields III	A2,B3, C7 ,D3,L12, Ne11,Sc20
Pinatubo	L7, Pc4
Pine Canyon	Cc19,H4

CALDERA	ID
Piton de la Fournaise	H7 ,Kc11 ,Tc6
Platoro	Cc19,L4, L5, L6, L10
Poas	Cc16,N4
Poco Canyon	Cc19,J1
Polovinka	N4
Prahu	Ec4,Kc8, Hc18,N4
Qualibou	Cc16,N4
Quitman Mountain	H16
Rabaul	H3, J2,L7, M6,N1,S4
Rabaul II	H3, J2, L7,M6, N1,S4
Ramat Yotam	E3
Ranau	Bc15,N4
Ranau	Mc21
Ranau	Hc18
Ranau	Ec4.Kc8
Rasshua	Ac8,Bc14, N4,Zc1
Red Hills	Cc15, Cc19,L5, S5
Reporoa	B4 ,C9,N1,R5, S16,S17, W5
Rincon de la Vieja	Cc16,N4
Roccamonfina	G5,N4, Ne11,Sc20
Rotorua	C9,M2, M17, N4,R5,S17, W4, W5
Rum I	T3
Rum II	T3
Sakugi	L6
San Carlos	H4, H16
San Juan	Cc19,L5
San Luis	Cc19,L5,L10,
San Marcos	F6
Santana	H4,H16
Santiago	Cc16,R8
Santorini	B7, Bc16,D4,D5,H12, L7,M16, Mc23,N4,P2,P3, S4,T4
Scaffell	B8, B9
Scottish Hebrides	R3
Second caldera	Cc19,H4
Segara Anak	Ec4,Kc8, Kc11,N4
Semisopochnoi	Fe8,Kc11,N4, Sc21,Tc5
Sete Cidades	Kc11, N4, Tc6
Shikotsu	N8
Shikotsu I	A1, Mc24
Shikotsu II	Mc24
Shishimuta	K1

CALDERA	ID
Sierra Negra	C17,J5,M7,N4
Sierra Quemada	Cc19,H4
Silali	N4,W2
Silent Canyon	Cc19,F1, L5, S4
Silverton	Cc19,L5, L6,L10, S4, S10
Sixtymile Butte	B13
Snowdon	H8, L6
Soledad	Jc4,R2
Solitario	H4
Sollipulli	G3, Kc11
Somma-Vesuvius I	C4, Nc11,Sc20
Somma-Vesuvius II	C4, Nc11,Sc20
Somma-Vesuvius III	C4, Nc11,Sc20
Somma-Vesuvius IV	C4,C10, C11, C12, D8,L14,L15, L16, N8, Nc11,Sc20
ST. Andrew Strait	N4
Stena-soboliny	N4
Sukaria	Ec4,Kc8, Kc11, N4
Summitville	Cc19,L4,L5, L6, L10,L11, ,S4,S10
Sunda	Ec4,Hc18, Kc8,N4
Suswa	N4, W2

CALDERA	ID
Suwoh	Bc15, Ec4,Hc18, Kc8,Mc21,N4
Taal	N4, Pc4
Tambora	Ec4,Kc8, Kc11,N4,
Tanaga	Fc8, Kc11,N4, Sc21, Tc5
Tao-Rusyr	Ac8, Bc14,N4, Sc21,Zc1
Taupo	C9, D1,H13, K6, L7,N4,R5,S16, S17, W3, W5,
Tavua	Pc5,S13
Tengger, Ngadisari	Ec4, Kc8,Hc18,N4
The Barrier	N4, W2
Three Creeks	Cc19,L5, L6,S5
Tien-Chi	N4
Timber Mountain	B6, B21,C3 , Cc19,L5
Toba	Bc15,C1, C2, C14, Ec4,Hc18,
Tofua	Kc11, N4,Pc5
Tokachi Graben	Mc24,N10
Toledo	C6, Cc19,S4, S9
Tondano	N4
Torfajokull	N4
Towada I	A1, Hc19
Towada II	A1, Hc19,N4
Toya	Mc24,N7
Turkey Creek	Cc19,D2, L5,S4
Ugashik	Fc8,Kc7,M20, N4

CALDERA	ID
Uncompahgre	Cc19,L5,L10,L11, S4,S10
Unnamed	Cc16
Unnamed (Miyakejima)	F4, G2 ,N2, N4
Unnamed (Miyakejima)	Kc9
Usu	Mc24,S1, W1
Ute Creek	Cc19,L5
Uzon-Geyzernaya	Ac8, Bc14,N4, Sc21
Valles Caldera	C6, Cc19,H2, L5,L7 R15, S4,S5, S9,W10
Van Horn Mountains	Cc19,H16
Vandever Mountain	B5, Cc19
Veniaminof	Fc8,Kc7,M20, N4, Sc21
Vepe	N3
Villarrica	N4
Volcan Alcedo	C17,M7,N4
Volcan Darwin	C17,M7,N4
Volcan Fernandina	C17,L7,M7,N4 , R7
Volcan Wolf	C17,M7,N4
Wakamiko	A1
West Fork	B13
Witori	N4
Wrangell	Fc8,Kc7,N4
Yamakawa	S4
Yellowstone I	Cc19,S4 ,Sc9
Yellowstone II	Cc19,S4
Zavaritsky	Ac8,Bc14,N4, Sc21 ,Zc1

A.III ANNEX III

WORLD REGIONS MAP



