e-Callisto Instrument status

Version 8.8, 2023-11-14

Country	Location	Latitude N>0	Longitude E>0	Institution/University RA = radio amateur	Contact email	ITU Region	CRAF Member	Instruments delivered	Sent data a few files	Send data regularly	Instrument ID	Antenna	Frequency coverage
Algeria	?			Martin Cherub	snaitamor(at)yahoo.com	1	0	1	0	0	NA038	?	
Algeria	Boumerdes	36.75	3.04	CRAAG Algiers	snaitamor(at)yahoo.com	1	0	1	1	1	NA107, FC=59	LPDA CLP-5130	45-870 MHz
Australia	Blair/Gray	-34.665	139.639	ASSA	Blair Lade, Peter Gray ASSA	3	0	1	1	1	eC24, FC=59	?	
Australia	Victoria	-36.80400085	144.6750031	LMRO/Jeff	clinton.jeffrey(at)bigpond.com	3	0	1	1	1	eC23, NA005, FC=59	LPDA	45-870 MHz
Australia	Blair Athol/Adelaide			Blair Lade	blairl(at)bettanet.net.au	3	0	1	1	1	eC82, FC=60	LPDA+tracker	100-850 MHz
Australia	Peter Gray	-34.665	139.639	ASSA	weaksignals(at)iinet.net.au	3	0	1	1	0	eC26x, FC=02	LWA	10-90 MHz
Australia	Blair Lade	-34.665	139.639	ASSA	blairl(at)bettanet.net.au	3	0	1	1	0	eC01, FC=01	LWA	10-90 MHz
Austria	Michelbach	48	15.39999962	RA Fritz Lensch	oe3flb(at)gmx.at	1	0	1	1	2	One self built, eC51 from Karl-Heinz, FC=55/57	LPDA, 3-band dipole	20-80 MHz, 510-785 MHz
Austria	Michelbach	48	15.39999962	RA ANTARES	oe3flb(at)gmx.at	1	0	1	1	1	Reeve kit NA024	LPDA	
Austria	Graz	47.09999847	15.5	University	manuela.temmer(at)uni-graz.at	1	0	2	0	1	cC93, eC94, FC=01	crossed LPDA	45-81 MHz, 45-870 MHz
Austria	Krumbach	47.29000092	9.550000191	RA Paul Baumgartner	pbaumg(at)gmail.com	1	0	1	1	1	Kit provided by OE3FLB, FC=10	in testing phase	45-870 MHz
Austria	Krumbach	47.29000092	9.550000191	RA Paul Baumgartner	pbaumg(at)gmail.com	1	0	1	0	0	eC146	?	?
Belgium	Humain	50.1918602	5.255388737	ROB	christophe.marque(at)oma.be	1	1	2	1	1	eC09, eC14	Dish 6m	45-435 MHz
Brazil	Cachoeira Paulista	-22.69	-45	INPE	khristhiano.souza(at)inpe.br	2	0	2	2	2	eC20, eC28	LPDA linear polarization V, H	45-870 MHz
Bulgaria	Rozhen	41.533	23.4333	NAOB	kamen.kozarev(at)gmail.com	1	0	1	0	0	eC83	LPDA	
China		25.105497	121.597366	SDScience	yaochen(at)sdu.edu.cn	3	0	4	0	0	NA020, NA021, NA022, NA023	?	
Costa Rica	San Jose	10	-84	CINESPA	frutos(at)fisica.ucr.ac.cr	2	0	1	1	0	eC02	Dish ?	
Croatia	Višnjan	?	?	Znanstveno edukacijski centar Višnjan	danko(at)astro.hr	1	0	1	0	0	eC18x (refurbished)	?	?
Czech Republic	Ondrejov	49.7	14.5	OSRA	karel.jiricka(at)asu.cas.cz	1	1	1	1	0	eC13	Dish 7m	
Denmark	Copenhagen	55.8	12.5	DTU	anna(at)space.dtu.dk	1	0	1	1	1	NA028	LWA	10-105 MHz
Denmark	Copenhagen	55.8	12.5	DTU/NSIE	anna(at)space.dtu.dk	1	0	1	1	1	NA039	LWA	10-105 MHz
Denmark	Greenland	66.97000122	-50.95000076	DTU/NSIE	cscgreenland(at)gmail.com	1	0	1	0	1	eC88	LWA	10-105 MHz LHCP
Denmark	Greenland	66.97000122	-50.95000076	DTU/NSIE	cscgreenland(at)gmail.com	1	0	1	0	1	eC89	LWA	10-105 MHz RHCP
Egypt	Cairo	29.9	31.3	SWMC	HassanNour-Eldien(at)science.helwan.edu.eg	1	0	1	1	0	eC31, FC=01	LPDA	
Egypt	Alexandria	30.8	29.5	Egypt-Japan University of Science and T	ayman.mahrous(at)ejust.edu.eg	1	0	2	1	1	eC125, eC126	LWA	10-80 MHz LHCP, RHCP
Egypt	Cairo	30.0333	31.233	Egypt Space Agency	amira.salloumah(at)EGSA.GOV.EG	1	0	1	1	1	eC142 + LNA2000-4	LPDA	45-870 MHz
Ethiopia	Addis Ababa	9.005401	38.763611	AU	remudin.mekuria(at)gmail.com	1	0	1	0	0	eC03	LPDA	
Ethiopia	Mekelle	12.56000042	39.5	MU	tesfayphysics(at)gmail.com	1	0	1	1	0	CR-RBT (NA-version) + LNA21	LPDA	45-870 MHz
Finland	Metsähovi	60.2	24.4	MRO	sun-metsahovi@aalto.fi	1	1	2	2	2	eC34, eC35	LPDA	45-870 MHz
Finland	Metsähovi	60.2	24.4	MRO	sun-metsahovi@aalto.fi	1	0	3	0	2	eC97, eC98, eC115	LWA linear N/S, E/W	5-120 MHz
Finland	Siuntio observatory	60.1	24.2	Juha Kallunki	juha.m.kallunki(at)gmail.com	1	1	1	1	1	eC???	Discone	10-80 MHz
France				LPCE/CNRS	nil	1	0	1	0	0	NA035	?	
Germany	Essen	51.39379883	6.979000092	RA JochenPlessmann	do1jpa(at)gmx.de	1	0	1	1	0	FA	BICONE	20-80 MHz
Germany	Neustrelitz	53.36	13.07	DLR	Lutz.Heinrich(at)dlr.de	1	0	1	1	1	eC124, FC=01	LPDA	1000-1600 MHz
Germany	Neustrelitz	53.36	13.07	DLR	Lutz.Heinrich(at)dlr.de	1	0	14	1	1	eC151 - eC164	?	10 - 1600 MHz in dif. Bands
Germany	Hildesheim	52.15000153	9.960000038	RA Fred Espey	Fml.espey(at)kabelmail.de	1	0	1	0	0	eC98	?	
India	Gauribidanur	13.6	77.5	IIA	ramesh(at)iiap.res.in	3	0	1	1	1	eC16, FC=59	LPDA	45-410 MHz
India	Nashik	20.00774956	73.77884674	KTHM	pswamane(at)yahoo.com	3	0	1	0	1	eC67, FC=59	LPDA	45-150 MHz
India	Ooty	11.38222218	76.66722107	NCRA-TIFR	mano.rac(at)gmail.com	3	0	2	2	2	eC10, eC11, FC=58/59	LPDA	45-445 MHz, 45-870 MHz
India	Pune IISERP	18.5	73.90000153	NCRA	sasikumarraja(at)gmail.com	3	0	1	1	1	eC47, FC=01	LPDA	
India	Ahmedabad/Gujara	23.239	72.638	Rajmal Jain	rajmal_9(at)yahoo.com	3	0	1	1	0	eC91	?	
India	Sangli/Maharashtra	16.8	74.12	KWC	shettidj2002(at)yahoo.co.in	3	0	1	1	0	eC46	?	
India	Udaipur	24.59000015	73.70999908	PRL	bhuwan(at)prl.res.in	3	0	1	0	1	eC104 + e-LNA04, FC=01	LPDA	45-870 MHz
India	Kodaikanal Solar Observatory	10.22	77.45	IIA, KSO	kathir(at)iiap.res.in	3	0	2	2	0	eC100, eC101	LPDA-array LHCP, RHCP	45-172 MHz
Indonesia	Tomohon	-6.911600113	107.8376999	LAPAN	timbul.manik(at)lapan.go.id	3	0	1	1	0	eC59, FC=61	LPDA	45-405 MHz
Indonesia	Sumedang	-1.175799966	136.1011047	LAPAN	timbul.manik(at)lapan.go.id	3	0	1	1	1	FC=59	LPDA	45-82 MHz
Indonesia	Biak	1.54598999	124.9227753	LAPAN	timbul.manik(at)lapan.go.id	3	0	1	1	0	FC=60	LPDA	
Indonesia	Bandung			TelkomUniversity	radialanwar(at)tass.telkomuniversity.ac.id	3	0	1	0	0	eC99	?	?
Indonesia	Boscha Observatory	?	?	ITB	?	3	0	2	0	0	eC137, eC138	?	
Ireland	Bir	53.09	-7.92	TCD	PMCCULEY(at)tcd.ie	1	1	5	5	1	eC63, eC64, eC32, eC36	LPDA, Bicone, Inverted-V	15-105 MHz
Italy	Turin	44.4	8.439999	RA Fabrizio Francione	francione27(at)hotmail.it	1	0	1	0	0	eC53	LPDA	
Italy	Trieste	45.63000107	13.875	INAF	marassi(at)oats.inaf.it	1	0	3	2	3	eC52, eC58, eC60, FC=57/59/??	LPDA	45-81 MHz. 220-425 MHz
Japan	Ibaraki Prefecture	36.40000153	140.3999939	Ibaraki University	satoshi.nozawa.i(at)vc.ibaraki.ac.jp	3	0	1	0	1	eC78	LPDA	100-870 MHz
Japan				ATI, Hosei U	nil	3	0	4	0	0	NA010, NA011, NA036, NA037	?	
Japan	Ibaraki Prefecture	36.40000153	140.3999939	Ibaraki University	satoshi.nozawa.i(at)vc.ibaraki.ac.jp	3	0	1	0	0	eC119	?	?
Kazakhstan	Almaty	43.02999878	76.58000183	TSAO	artyak40(at)mail.ru	1	0	2	2	2	eC38, eC77, FC=58/59	LPDA	45-165 MHz, 175-870 MHz
Kenya	Nairobi	1.2	36.8	UON	kaduki(at)uonbi.ac.ke	1	0	1	1	0	eC49	LPDA	
Malaysia	Banting	2.78399992	101.5080032	ANGKASA	asnor23(at)gmail.com	3	0	9	1	0	eC54, eC55, eC72, eC73, eC30, eC42, eC43, eC79, eC80	LPDA	45-870 MHz
Malaysia	Angkasa Selangor	?	?	ANGKASA	?	3	0	1	0	0	eC136	?	?
Malaysia	?	?	?	?	?	3	0	2	0	0	eC147, eC148	?	?
Mauritius	Poste de Flacq	-20.14389038	57.72082901	MRT	gkb(at)uom.ac.mu	1	0	3	3	3	eC15, eC39, eC40, FC=01/02	LPDA	45-455MHz, 45-870 MHz
Mexico	Mexico	19.1234	-99.1234	UNAM	alara(at)geofisica.unam.mx	2	0	2	1	1	eC06, NA110	LPDA	45-870 MHz
Mexico	Mexico	19.47999954	-101.4100037	MEXART	vdelaluz(at)geofisica.unam.mx	2	0	2	0	1	NA019, NA034, FC=59	LPDA	45-225 MHz
Mexico	Mexico	19.47999954	-101.4100037	MEXART	ernesto(at)igeofisica.unam.mx	2	0	2	0	0	NA108 as of 2020-01-16, NA-115	LWA	?
Mexico	Mexico	19.47999954	-101.4100037	LANCE	ernesto(at)igeofisica.unam.mx	2	0	1	0	0	NA-118 as of 2022-06-24	LWA	?
Mexico	Mexico	19.47999954	-101.4100037	Instituto de Geofísica	ernesto(at)igeofisica.unam.mx	2	0	3	0	0	NA129, NA130 and NA131	?	?
Mexico	Tlapiani	25.45	-100.28	MEXICO-FCFM-UANL	esmeralda.romerohdz(at)uanl.edu.mx	2	0	1	1	1	NA044 (31-AUG-2016) 29.06.2023	LPDA	45-225 MHz
Nepal	Pokhara	28.29999924	83.90000153	Prithvi Narayan Campus	sumang(at)pncampus.edu.np	3	0	1	0	0	eC105 + e-LNA06	LPDA	45-870 MHz
Mongolia	Ulaan Baatar	47.85	107.05	RCAG	d.munkhmanlai(at)yahoo.com	1	0	1	1	1	eC17, FC=01	LPDA	45-870 MHz
Mongolia	Gobi Desert	43.57	104.43	RCAG	d.munkhmanlai(at)yahoo.com	1	0	1	1	0	eC41	LPDA	45-870 MHz
New Zealand	Auckland	-36.43500137	174.6629944	WARKWRTH	tim.natusch(at)aut.ac.nz	3	0	1	0	0	eC95, FC=59	LPDA	100-870 MHz
Norway	Randaberg	58.84999847	5.599999905	Norwegian Space Centre	Knut.Stanley.Jacobsen(at)kartverket.no	1	0	1	1	1	eC96 (bw=2.4 MHz), FC=01	LPDA 8 dB	1000-1600 MHz
Norway	Aalesund	78.93000031	11.86999989	Norwegian Space Centre	Knut.Stanley.Jacobsen(at)kartverket.no	1	0	1	1	1	eC97 (bw=2.4 MHz), FC=01	LPDA 8 dB	1000-1600 MHz
Norway	Egersund	58.41999	5.9699	LA3EQ	i-lustru(at)online.no	1	0	1	1	1	eC04x	T2FD, inverted V, BowTie	16-86 MHz
Pakistan	Karachi	25	67	SUPARCO	muneezamali(at)gmail.com	3	0	2	1	0	NA030, NA031	LPDA	
Paraguay	Ascunsión	-25.295	-57.49	UNAM	dstalder(at)ing.una.py	2	0	1	1	1	eC12x	LPDA	45-165 MHz
Peru	Lima	-12.51	-76.798	CONIDA	jabarg1(at)gmail.com	2	0	2	2	0	NA006, Na018	LPDA	
Poland	Grotniki	51.8882	19.3116	RA Alex Myczko	myczko(at)phys.ethz.ch	1	0	1	1	0	eC22	G5RV: 20-10m, 7.8m	5-53 MHz
Puerto Rico	Arecibo	18.3	-66.75	AO	Alessandra.AbePacini(at)ucf.edu	2	0	2	2	0	eC110, eC111 + 2 x up-converter, LO=750 MHZ	LWA	5-125 MHz
Romania	Bucharest			AIRA	oblagoi@aira.astro.ro	1	0	1	0	0	eC114	?	?
Russian Federation	Badary/Siberia	51.75	102.2166977	SSRT	svlesovoi(at)gmail.com	1	0	1	1	0	eC45	LPDA	45-440 MHz
Rwanda	Kigali	-2	30	UOR	mahorojpacis(at)gmail.com	1	0	1	1	0	eC74	LPDA + e-LNA08	45-450 MHz
Slovakia	Hurbanovo	47.90000153	18.20000076	SCO	ivand96(at)gmail.com	1	0	1	1	1	eC50, FC=59	LPDA	45-200 MHz
Slovakia	Roztoky	49.5	21.5	RA Daniel Baludansky	bdaniel(at)post.sk	1	0	1	1	0	eC66	LPDA	
South Africa	Sutherland	-32.36999893	20.79999924	SANSA	jward(at)sansa.org.za	1	0	1	1	1	eC75, FC=01	LPDA	45-870 MHz
South Africa				DUT	nil	1	0	1	0	0	NA026	LPDA	
South Africa	Potchefstroom			NWU	dutoit.strauss(at)gmail.com	1	0	3	0	0	eC121, eC122, eC123	?	?
South Korea	Daejeon	36.40000153	127.4000015	KASI	kscho(at)kasi.re.kr	3	0	2	1	1	eC07, eC08, FC=59	LPDA tracking Sun but no LNA!!!	45-448.3 MHz
Spain	Cartagena	37.61	-0.99	UOC	josel.gomez(at)upct.es	1	0	2	0	0	eC86, eC87	?	
Spain	Peralejos	40.58	-1.9199	UAH	Prieto Mateo Manuel <manuel.prieto(at)uah.es>	1	0	2	2	2	eC57, NA032, FC=01/03	LWA	15-90 MHz
Spain	Alcalá de Henares	40.51	-3.34	UAH	Prieto Mateo Manuel <manuel.prieto(at)uah.es>	1	0	1	1	1	eC68, FC=01	M2 Yagi 436CP42UG, 2MCP22	45-870 MHz
Spain	Sigüenza	41.066	-2.541	UMU/UAH	bussons(at)umu.es	1	0	1	1	1	eC70, FC=01	LPDA	45-870 MHz
Spain	?	?	?	Alcalá	manuel.prieto(at)uah.es	1	0	1	0	0	eC149	?	?
Sri Lanka	Katubedda, Moratuw	7.9	80.5	Arthur C Clarke Institute	adassuriya(at)gmail.com	3	0	3	1	1	eC48, eC112, eC113	LPAD	45-450 MHz
Switzerland	Bleien	47.33990097	8.111599922	ETHZ	monstein(at)astro.phys.ethz.ch	1	1	4	2	0	eC05, eC21, FC=01/02, eC134, eC135 FC=03/04	Dish 5m, Dish 7m	470-770 MHz, HIRAX
Switzerland	Landschlacht	47.63000107	9.239999771	RA HB9SCT	monstein(at)astro.phys.ethz.ch	1	0	2	2	2	eC21, eC26,FC=01/02	LWA	10-80 MHz
Switzerland	Freienbach	47.20330048	8.75590992	RA HB9SCT	monstein(at)astro.phys.ethz.ch	1	0	3	2	2	eC04, eC56, eC18, FC=01/02	BICONE, LPDA	900-1450 MHz, 150-870 MHz
Switzerland	Muhen	47.32833099	8.059169769	RA Peter Hirt	prometheus21(at)bluewin.ch	1	0	3	2	2	eC102, eC103, eC85	LWA LHCP and RHCP	15-90 MHz
Switzerland	Zurich	47.2	8.5	ETHZ	monstein(at)astro.phys.ethz.ch	1	0	1	1	0	eC37	Dish 5m	1415-1430 MHz
Switzerland	Heiterswil	47.29999924	9.130000114	Kanti Wattwil	Christian.Bircher(at)kantiwattwil.ch	1	0	1	0	1	eC71	LWA	15-83 MHz
Switzerland	Locarno Monti	46.1770134	8.788687706	IRSOL	bianda(at)irsol.ch	1	0	1	1	1	eC76, FC=01	LPDA	45-80 MHz
Switzerland	Locarno Monti	46	8.7	Swiss Meteo	Marco.Gabella(at)meteoswiss.ch	1	0	1	0	0	eC166, FC=01	65 cm dish	10.6 - 11.2 GHz
Switzerland	U. Grob	?	?	Jugendarbeit	grobu(at)phys.ethz.ch	1	0	1	0	0	eC135	EE04	
Taiwan		25.105497	121.597366	Huang, NCU-ISS	d949001(at)gm.astro.ncu.edu.tw	3	0	1	1	0	NA016	?	?
Taiwan		25.105497	121.597366	Wave Fidelity		3	0	2	1	0	NA105, NA106	?	?
Taiwan	Taoyuan City 320	25.105497	121.597366	National Central University	yhyang(at)jupiter.ss.ncu.edu.tw	3	0	1	0	0	NA109, TMA015	?	?
Thailand				Ubon-U	nil	3	0	1	0	0	NA025	?	
Thailand	Bangkok	13.736717	100.523186	Rajamangala university	preeyaporn.m(at)mail.rmutk.ac.th	3	0	2	1	0	eC62, eC55 both refurbished	TBD	TBD
Thailand	Bangkok	13.736717	100.523186	Rajamangala university	preeyaporn.m(at)mail.rmutk.ac.th	3	0	2	0	0	eC116, eC117	TBD	TBD
Thailand	Chiang Mai			National Astronomical Research Institu	nphyiii(at)gmail.com	3	0	1	0	0	NA045	?	
Turkey				Ounal	OUNAL(at)aci.k12.tr	1	0	1	0	0	NA015	?	
Turkey	Erzurum	39.78	41.226	Istanbul University Observatory instead	gozlemevi(at)istanbul.edu.tr ,	1	0	1	1	1	NA119	CLP5130-1N	45-165 MHz
Ukraine	Simpheropol	44.40000153	34	KRIM	a.volvach(at)gmail.com	1	0	1	1	1	eC44	16 Yagi-Array	250-350 MHz
United Kingdom	Glasgow	55.90000153	-4.300000191	UOG	a.mackinnon(at)educ.gla.ac.uk	1	0	1	1	1	eC61, FC=59	LPDA	45-81 MHz
United Kingdom				RA Paul Hyde	g4csd(at)yahoo.co.uk	1	0	1	0	0	NA003	?	
United Kingdom				RA David James	nil	1	0	1	0	0	NA017	?	
United Kingdom	Cambridge	52.2053	0.1218	RA Harry Smith	H.Smith(at)skatelescope.org	1	1	1	0	0	cC90	?	
Uruguay	Montevideo	-34.90000153	-56.20000076	OALM	andrea(at)oalm.gub.uy	2	0	1	0	1	eC81	LPDA	45-870 MHz
Uruguay	Minas de Corrales			BINGO team	manuelcaldas(at)hotmail.com	2	0	1	0	0	eC92	LPDA	
USA	Anchorage	61.19929886	-149.9564972	RA Whitham Reeve	whitreeve(at)gmail.com	2	0	3	1	1	NA001, NA002, NA008, FC=59	LPDA, LWA	215-420 MHz
USA	Arizona	34.62	-112.45	Ramon Fobes ERAU	FOBESR(at)erau.edu	2	0	1	0	0	NA029	Steller Labs 30-2476 9-element VHF yagi	150-443 MHz
USA	Hawaii	21.28	-157.9	WH6DNU	nil	2	0	3	1	0	eC29	?	
USA	Hawaii	21.28	-157.9	University	jdorough(at)hawaii.edu	2	0	1	0	0	NA009	?	
USA	Maryland	39.045753	-76.641273	Don Williams, OSI	nil	2	0	1	0	0	NA004	?	
USA	Geenbelt	TBD	TBD	NASA GSFC	natchimuthuk.gopalswamy-1(at)nasa.gov	2	0	1	0	0	NA128	64 cm dish X-/Ku-band	10.6 GHz -11.2 GHz
USA	Rochester	42.93	-77.5	Martin Pepe KROC	mxpddm(at)rit.edu, mjpastro(at)gmail.com	2	0	2	0	0	NA012, NA013	?	
USA	New York	40.785091	-73.968285	David Fediaczko	sdcddm(at)rit.edu	2	0	2	0	0	NA103, NA104	?	
USA	Roswell/NM	33.44385	-104.51528	RA Stan Nelson	stannelson80(at)gmail.com	2	0	3	3	3	NA014, NA027, NA033	LPDA vertical+sun track, LWA: RHCP, Yagi vertical po	20-90 MHz, 90-305 MHz
USA	Texas	31.968599	-112.45	RA Martin Cherub	proc.pmm(at)gmail.com	2	0	1	0	0	NA040	?	
USA	Tennessee			RA Chuck Higgins	Chuck.Higgins(at)mtsu.edu	2	0	2	2	0	NA041, NA042	?	
USA	Cohoe	60.36999893	-151.3200073	RA Whitham Reeve	whitreeve(at)gmail.com	2	0	2	2	2	NA043, NA044, FC=00/01	LWA circular polarization	45-93 MHz
USA	HAARP	62.40000153	-145.1699982	RA Whitham Reeve	whitreeve(at)gmail.com	2	0	2	1	0	NA111, NA112	LWA	10-82 MHz, BW=80 KHz
USA	Michigan			University of Michigan	Alex Hegedus	2	0	2	0	0	NA116, NA117	LWA	
USA	Michigan			University of Michigan	?	2	0	6	0	0	NA122, NA123, NA124, NA125, NA126, NA127	LWA	
USA	Flagstaff, Arizona			US Naval Research Lab (NRL)	?	2	0	2	0	0	NA132, NA133	LWA + UPC-590L-M + LWAPC-Q	
USA	Solar eclipse locations	transportable	transportable	NASA GSFC	natchimuthuk.gopalswamy-1(at)nasa.gov	2	0	1	0	0	NA128	65 cm dish	10.6 - 11.2 GHz
Totals:							7	227	102	76			

Red highlighted text: Observation stopped or interrupted or not yet started

Green highlighted text: provide currently data to the e-Callisto archive. Update rate ~1 month.