

*1 前回集計順位

月間最高アクセス

先月2000以上アクセス

最新ではなくて12ヵ月計で1万を超えるもの、ロングセラー

セッション	所属	名前	12ヵ月合計 *1	2017年												web page			
				1月	2月	3月	4月	5月	6月	7月	8月	9月	10月	11月	12月				
			2,424,521	127,385	139,232	225,848	153,992	158,298	680,161	209,365	120,114	117,618	183,484	122,447	186,577				
UAV15	国際	村木U15	1	424,898	1	30,508	55,818	56,611	57,174	39,729	43,338	20,092	21,329	18,507	23,972	29,695	http://www.sparj.com/UAVapp/UAVapp2015/speakers/MurakiUAVapp2015.pdf		
2017J UAV1	コイシ	こいし小町	2	316,982	2						279,042	8,808	3,632	12,688	2,009	8,298	2,505	http://www.sparj.com/SparJ/Spar2017J/speaker/koishi.pdf	
2017J UAV1	コイシ2	こいし小町	3	179,227	3						138,757	20,957	3,606	3,865	5,826	442	5,774	http://www.sparj.com/SparJ/Spar2017J/speaker/koishi2.pdf	
2015J	リーグル		4	164,454	4	15,637	12,987	22,914	15,435	29,270	12,582	12,591	13,664	8,801	4,197	6,323	10,053	http://www.sparj.com/SPAR2015J/speaker/TsRiegl.pdf	
2017J フラント	旭化成	藤澤	5	79,897	5						57,897	14,526	1,661	1,010	2,041	900	1,862	http://www.sparj.com/SparJ/Spar2017J/speaker/fujisawa2.pdf	
2017J 新技術	WoodInfo	中村	6	70,072	7					2,849	12,441	7,778	7,193	8,311	10,753	10,317	10,430	http://www.sparj.com/SparJ/Spar2017J/speaker/nakamura.pdf	
2013J 基調	奈良科技大	横矢	7	62,287	42	140	86	321	412	2,458	1,584	167	24	552	216	28	56,299	http://www.sparj.com/SparJ/Spar2013J/speaker_pdf/yokoya.pdf	
2014J 移動	パスコ	坂下	8	60,809	6	7,033	4,804	5,921	5,837	6,016	6,040	6,216	4,469	5,081	3,264	3,688	2,440	http://www.sparj.com/SparJ/Spar2014J/speaker2014J/Sakashita4.pdf	
2017コイシ	未来土木	穴井	9	40,034	8		35,954	3,304	504	265					1		6	http://www.sparj.com/report/Koishi/20170207_Anai.pdf	
2017JUIDA	伊那ドローン		10	38,377	9						12,034	24,680	419	765	325	19	135	http://www.sparj.com/report/InaDrone1.pdf	
2009J 建設	八千代E	島田	11	35,204	11	3023	1648	3003	3204	2932	3906	5863	2656	3207	1919	2481	1362	http://www.sparj.com/SparJ/Spar2009J/Shimada.pdf	
2015J UAV	ルーチェ	渡辺U15	12	33455	10	3719	460	9243	993	2121	4427	2923	1979	3992	2565	972	61	http://www.sparj.com/SPAR2015J/speaker/A6watanabe.pdf	
SPARJ hp	ルート		13	32,603	12	2,047	1,836	2,275	2,608	4,342	4,971	2,144	2,555	2,449	2,209	2,579	2,588	http://www.sparj.com/	
2017J	FTR		14	30,563	14									182	26,665	1,544	2,172	http://www.sparj.com/SparJ/Spar2017J/sponsor/FTR.pdf	
2008J	シスプロ		15	28,803	13	3,950	868	7,805	2,797	1,292	2,990	451	1,962	2,399	1,159	1,960	1,170	http://www.sparj.com/SparJ/Spar2008J/TechnicalSession/Syspro1.pdf	
UAV16	建技研	荒牧	16	26,840	15	2,904	588	1,484	3,593	638	3,758	3,161	1,305	1,173	3,003	2,125	3,108	http://www.sparj.com/UAVapp/UAV2016/speakers/AramakiUAV2016.pdf	
2016J 建築	大成建設	田中	17	25,029	16	2,100	3,541	4,483	2,522	2,368	1,784	2,315	2,113	933	1,000	1,198	672	http://www.sparj.com/SparJ/Spar2016J/speakers/tanaka.pdf	
2010J基調	北大	金井	18	23,995	18	2,383	2,343	2,429	1,890	1,577	1,611	3,893	2,554	1,588	1,181	959	1,587	http://www.sparj.com/SparJ/Spar2010J/speakerDoc/KanaiDoc1.pdf	
2017J	Gexcel		19	22,088	20							13,286	93	409	7,754	198	348	http://www.sparj.com/SparJ/Spar2017J/sponsor/Gexcel.pdf	
2017J	Riegl		20	21,456	22										20,749	537	170	http://www.sparj.com/SparJ/Spar2017J/sponsor/Riegl.pdf	
2013J 展示			21	21,096	21	2,138	2,869	2,696	1,806	1,706	2,176	1,850	2,320	931	984	779	841	http://www.sparj.com/SparJ/Spar2013J/exhibit.pdf	
2017J 基調	青山学院	古橋	22	20,663	23					3,124	13,140	2,767	590	646	11	13	372	http://www.sparj.com/SparJ/Spar2017J/speaker/furuhashi.pdf	
2016P	高橋システム	高橋	23	20,438	19	1,326	2,250	2,684	1,229	1,095	2,330	1,836	1,783	1,195	1,370	2,025	1,315	http://www.sparj.com/SPARP/SPAR2016P/presen/k4Takahashi.pdf	
UAV16	国際	村木U16	24	18,866	25	507	494	906	1,509	1,951	2,273	1,792	1,998	2,065	1,931	1,898	1,542	http://www.sparj.com/UAVapp/UAV2016/speakers/MurakiUAV2016.pdf	
UAV16	ルーチェサーチ	渡辺U16	25	18,058	17	1,123	2,599	6,347	474	2,666	1,192	2,459	88	52	54	497	507	http://www.sparj.com/UAVapp/UAV2016/speakers/WatanabeUAV2016.pdf	
2011J 移動	アスコ	番匠	26	16,298	26	1891	2486	2806	1243	2359	1124	406	921	658	1614	300	490	http://www.sparj.com/SparJ/Spar2011J/speaker/banio.pdf	
2011J 建築	前田建	南	27	14,907	27	1,147	1,409	2,148	1,394	956	1,191	666	1,370	834	1,681	1,240	871	http://www.sparj.com/SparJ/Spar2011J/speaker/minami.pdf	
2013J 建築	新菱	酒本	28	11,812	29	1,069	1,280	885	1,511	1,769	776	1,070	430	1,346	638	712	326	http://www.sparj.com/SparJ/Spar2013J/speaker_pdf/sakamoto.p	
2016P	新興プランテック	齋藤	29	9,779	24	2,166	912	2,539	482	405	987	554	170	191	196	447	730	http://www.sparj.com/SPARP/SPAR2016P/presen/k1Saitou.pdf	
SV15(22)AI CAD			30	9,694	31						9,020	108	61	89	182	168	66	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(22)AI.CAD.pdf	
2017J	OPT		31	9,542	32									229	7,603	874	836	http://www.sparj.com/SparJ/Spar2017J/sponsor/OPT.pdf	
2014J 基調	千葉大	野波	32	9,321	28	2,666	1,358	1,074	906	78	275	102	1,012	879	60	427	484	http://www.sparj.com/SparJ/Spar2014J/speaker2014J/Nonami6.pdf	
2012J 建築	鹿島	矢島	33	9,246	30	497	1,104	1,363	1,476	1,136	1,110	481	356	617	747	306	53	http://www.sparj.com/SparJ/Spar2012J/speakerPDF/Yajima.pdf	
2009J 移動	三菱電機	瀧口	34	8,900	33	1189	463	605	366	247	1471	984	2319	398	269	264	325	http://www.sparj.com/SparJ/Spar2009J/Takiguchi.pdf	
2015J 土木	ハヤテ	北条	35	7,693	34	1,135	246	2,915	135	1,138	274	111	1,136	154	78	317	54	http://www.sparj.com/SPAR2015J/speaker/A5hojo.pdf	
			36	7,513	35		15	964	1,882	2,884	449	209	231	388	289	202		http://www.sparj.com/SparJ/Spar2017J/program.pdf	
2015J	AVEVA		37	6,950	40	32	489	348	312	362	381	1,274	577	36	1,465	876	798	http://www.sparj.com/SPAR2015J/speaker/TsAVEVA.pdf	
UAV15	大阪経大	中村	38	6,531	38	450	1,491	1,075	768	799	98	248	231	425	44	661	241	http://www.sparj.com/UAVapp/UAVapp2015/speakers/NakamuraUAVapp2015	
2017J UAV1	建設システム	鈴木	39	6,243	43				470	3,433	676	463	642	5	284	270		http://www.sparj.com/SparJ/Spar2017J/speaker/suzukiJ.pdf	
2017P	東洋熱工業	渡邊	40	6,167	64											3,392	2,775	http://www.sparj.com/SPARP/SPAR2017P/speakers/SPAR2017Pwatanabe.pdf	
			41	6,066	45												5831	235	http://www.sparj.com/event/ARIDASympo20171122.pdf
2013J			42	5,866	39	1,200	1,234	803	35	312	470	454	827	12	201	19	299	http://www.sparj.com/SparJ/Spar2013J/speaker_pdf/speakers.pdf	
2015J 建築	竹中	染谷	43	5,574	46	366	412	435	533	510	686	469	457	516	543	321	326	http://www.sparj.com/SPAR2015J/speaker/A2someya.pdf	
			44	5,448	44	154	192	212	566	1,229	1,921	255	179	153	302	125	160	http://www.sparj.com/SparJ/Spar2017J/chirasi1.pdf	

2015J 文化財アイテック	田子	94	1,991	92	142	104	122	234	230	85	177	184	194	188	196	135	http://www.sparj.com/SPAR2015J/speaker/A3tago.pdf
SV15(37)OrigamiDrone		95	1,957	96									1,728	149	47	33	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(37)OrigamiDrone.pdf
SV15(14)PriceDown		96	1,949	97				1,661	167	36	12	10	8	17	11	27	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(14)PriceDown.pdf
SV15(39)CropDisease		97	1,931	100									61	1,813	35	22	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(39)CropDisease.pdf
SV15(16)HoverCamera		98	1,926	98				1,551	190	82	55	3	2	16	18	9	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(16)HoverCamera.pdf
		99	1,919	99							1,837	21	25	30	3	3	http://www.sparj.com/WebAccess/WebPageAccessRank201707.pdf
UAV15 RESTEC	門崎	100	1,914	91	194	311	118	128	230	257	383	146	101	16	11	19	http://www.sparj.com/UAVapp/UAVapp2015/speakers/KadosakiUAVapp2015.pdf
SV15(03)UseWhat		101	1,906	101	1,785	63	16	14	11	3	1				3	8	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(03)UseWhat.pdf
SV15(34)GPR&EML		102	1,851	105								1,543	222	39	35	12	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(34)GPR&EML.pdf
		103	1,850	106					589	1,037	62	33	27	32	38	32	http://www.sparj.com/SparJ/Spar2017J/FloorPlan.pdf
		104	1,842	104	274	227	269	273	16	92	69	197	146	126	6	147	http://www.sparj.com/SparJ/Spar2010J/speakerDoc/OuraDoc1.pdf
SV15(31)PointCloudCAD		105	1,836	108								1,721	52	17	27	19	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(31)PointCloudCAD.pdf
SV15(27)LowCostLidar		106	1,831	107							1,663	55	23	17	59	14	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(27)LowCostLidar.pdf
SV15(43)RealReality		107	1,821	109										1,542	247	32	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(43)RealReality.pdf
SV15(45)reconstruct		108	1,815	112											1,746	69	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(45)reconstruct.pdf
2016P ヘステラ	多田	109	1,787	55	482	95	399	184	169	88	88	33	13	53	109	74	http://www.sparj.com/SPARP/SPAR2016P/presen/k2Tada.pdf
SV15(28)EdgeComputing		110	1,783	110							1,606	83	31	15	30	18	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(28)EdgeComputing.pdf
		111	1,779	111	149	117	93	143	188	142	123	144	147	197	199	137	http://www.sparj.com/SparJ/Spar2016J/speakers/maruta.pdf
SV15(49)TerraDrone		112	1,779													1,779	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(49)TerraDrone.pdf
SV15(02)3Ddemocratise		113	1,763	113	1,586	72	17	10	17	1	2	6	7	15	10	20	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(02)3Ddemocratise.pdf
UAV15 基調千葉大	本多	114	1,763	95	198	249	245	30	15	161	509	78	19	206	33	20	http://www.sparj.com/UAVapp/UAVapp2015/speakers/HondaUAVapp2015.pdf
SV15(42)Hybrid		115	1,753	116										1,608	112	33	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(42)Hybrid.pdf
SV15(44)gyroplane		116	1,744	122											1,648	96	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(44)gyroplane.pdf
		117	1,742	120	100	124	138	91	110	116	161	209	244	157	138	154	http://www.sparj.com/SVJabst/SVJIndex2.xlsx
2008J 最新 アプライト	高橋	118	1,739	102	26	134	235	285	15	96	619	134	125	32	25	13	http://www.sparj.com/SparJ/Spar2008J/SpeakerPresenPDF/Takahashi1.pdf
SV15(06)ARboiling		119	1,731	115		1,475	155	56	31	1	2	5		3	1	2	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(06)ARboiling.pdf
2015J 土木 京都府	春田	120	1,725	103	271	11	130	437	27	63	396	196	50	42	71	31	http://www.sparj.com/SPAR2015J/speaker/A5haruta.pdf
		121	1,694	118							1,542	120	29	2	1		http://www.sparj.com/report/InaDroneCompeNews.pdf
SV15(04)VrArMr		122	1,693	121	1,364	183	13	15	13	7	8	6	7	20	35	22	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(04)VrArMr.pdf
SV15(11)DroneID		123	1,646	124		1,414	109	42	8	7	8	12	13	19	14	14	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(11)DroneID.pdf
SV15(12)DroneDown		124	1,612	126		1,309	165	61	25	3	9	7	11	10	12	12	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(12)DroneDown.pdf
		125	1,608	125	163	194	150	94	41	124	112	104	154	204	100	168	http://www.sparj.com/UAVapp/UAV2016/Chirasi.pdf
SV14(06)CloudSeeding		126	1,573	138	193	99	38	224	278	62	182	38	140	119	53	147	http://www.sparj.com/SVJabst/SVabst(14)/SparViewVol14(06)CloudSeeding.pdf
SV15(23)UTM		127	1,569	128						1,463	29	14	12	14	25	12	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(23)UTM.pdf
2016J 建築 東洋熱工業	三浦	128	1,565	129	394	20	43	195	8	359	106	147	95	103	62	33	http://www.sparj.com/SparJ/Spar2016J/presen/A2miura.pdf
SV15(35)LIDARcommodity		129	1,549	131								1,459	44	36	10	10	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(35)LIDARcommodity.pdf
SV15(09)SLAMplusAI		130	1,524	132		1,385	31	26	10	22	11	5	11	4	19	19	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(09)SLAMplusAI.pdf
2011J 土木 コイシ	深田	131	1,516	123	159	119	248	21	44	116	156	55	105	280	110	103	http://www.sparj.com/SparJ/Spar2011J/speaker/fukada.pdf
		132	1,515	135									571	891	33	20	http://www.sparj.com/event/JTC2017A.pdf
SV15(05)AmazonPatent		133	1,511	133		1,394	13	20	32	2	2	8	7	12	12	9	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(05)AmazonPatent.pdf
SV15(07)DroneTaxi		134	1,498	134		1,371	51	17	45	2	1	3		3	3	2	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(07)DroneTaxi.pdf
SV15(36)AmazonPatent		135	1,491	140									1,381	41	43	26	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(36)AmazonPatent.pdf
		136	1,490													1,490	http://www.sparj.com/event/SekimotoOpenBigData20171214.pdf
2009J フラント ENN	丸田	137	1,455	127	125	120	71	14	118	182	157	217	68	89	187	107	http://www.sparj.com/SparJ/Spar2009J/Maruta.pdf
2012J 新技術エリジオン	相馬	138	1,447	148	270	251	234	94	15	124	9	82	166	109	24	69	http://www.sparj.com/SparJ/Spar2012J/speakerPDF/Souma.pdf
SV15(40)EagleAttack		139	1,445	146										1,373	52	20	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(40)EagleAttack.pdf
		140	1,437	150	105	93	141	115	175	145	102	108	97	93	110	153	http://www.sparj.com/SparJ/SubHeadSparJ.htm
SV15(25)MachineLearning		141	1,436	145						1,194	162	18	14	13	25	10	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(25)MachineLearning.pdf
		142	1,428	171										366	822	240	http://www.sparj.com/SparJ/Spar2017J/sponsor/Myrtos.pdf

UAV15	All		143	1,418	143	504	308	142	69	146	17	51	31	19	21	20	90	http://www.sparj.com/UAVapp/UAVapp2015/UAVappAll.pdf		
			144	1,416	149			1186	43	22	30	20	47	19	14	21	14	http://www.sparj.com/kojimemo/KojiMemo(31)BousaiJapan.pdf		
SV15(20)UAVphotoAccuracy			145	1,403	147					1,294	91	7	5	1	4	1		http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(20)UAVphotoAccur		
			146	1,394	154						879	79	70	50	133	141	42	http://www.sparj.com/SparJ/Spar2017J/speaker/morimoto2.pdf		
			147	1,383	151	102	104	171	100	125	204	111	111	130	81	56	88	http://www.sparj.com/WebAccess/SubHeadWebAccess.htm		
2016J 文化財明大工業	田原		148	1,383	130	5	5	552	328	275	2	16	7	6	13	165	9	http://www.sparj.com/SparJ/Spar2016J/presen/A3tahara.pdf		
SV15(50)FixedWing			149	1,383													1383	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(50)Fi		
2013J 学会 電通大	増田		150	1,379	162	23	39	60	161	33	111	152	27	306	19	62	386	http://www.sparj.com/SparJ/Spar2013J/speaker_pdf/masuda.pdf		
SV15(29)AppleAR			151	1,377	152							1,224	86	19	11	28	9	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(29)AppleAR.pdf		
			152	1,370	153							1,326	17	9	7	7	4	http://www.sparj.com/report/ARIDA&SPARJ_UAV20170714.pdf		
SV15(41)EventCamera			153	1,365	156										1,289	55	21	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(41)EventCamera.pd		
			154	1,356	155							1,287	31	14	8	6	10	http://www.sparj.com/report/DoPhotoGram.pdf		
SV15(38)Matterport			155	1,345	157									1,149	115	52	29	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(38)Matterport.pdf		
SV15(24)PacificDroneRace			156	1,313	159						1186	57	26	11	9	17	7	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(24)P		
SV15(10)defense			157	1,310	160			1183	71	30	4	2	3		5	7	5	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(10)de		
SV14(27)DroneWar			158	1,298	161	97	175	94	91	106	123	110	112	84	99	112	95	http://www.sparj.com/SVJabst/SVabst(14)/SparViewVol14(27)DroneWar.pdf		
			159	1,288	158	114	96	133	147	113	122	115	118	104	84	66	76	http://www.sparj.com/kojmemo/kojmemo1.htm		
			160	1,279	163			9	182	265	340	108	70	67	196	31	11	http://www.sparj.com/SparJ/Spar2017J/SpeakerAbst/speakerKeynote.pdf		
2008J 土木 東名開発	伊藤		161	1,268	169	6		966	69	81	11	5	11	13	18	14	74	http://www.sparj.com/SparJ/Spar2008J/SpeakerPresenPDF/Itoh1.pdf		
SV15(46)ChinaDroneUp			162	1,258	172												1,183	75	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(46)ChinaDroneUp.p	
SV15(13)UTM			163	1,256	165				1,137	63	8	4	12	9	7	8	8	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(13)UTM.pdf		
			164	1,256	168						911	218	14	15	31	33	34	http://www.sparj.com/SparJ/Spar2017J/speaker/takahashi2.pdf		
2009J speakers			165	1,234	141	13	20	191	337	400	26	162	12	17	26	15	15	http://www.sparj.com/SparJ/Spar2009J/Speakers090506.pdf		
			166	1,234	167									1,172	39	18	5	http://www.sparj.com/event/PointCloudSeminar2017.pdf		
			167	1,226	166	109	99	118	94	102	99	110	122	104	104	70	95	http://www.sparj.com/SVJabst/SubHeadSVJabst.htm		
SV14(01)CES			168	1,208	175	58	49	50	79	131	106	143	99	147	102	131	113	http://www.sparj.com/SVJabst/SVabst(14)/SparViewVol14(01)CES.pdf		
			169	1,191	170			1142	18	30	1							http://www.sparj.com/EnDIF/BMMC/BLCguide2016article.pdf		
2016J TS VisioTech			170	1,188	198	3	10	33	1	25	352	13	245	8	141	17	340	http://www.sparj.com/SparJ/Spar2016J/presen/TS02VisioTech		
2015J 基調3 JR東日本	横山		171	1,179	164	86	80	72	118	103	105	144	107	74	64	143	83	http://www.sparj.com/SPAR2015J/speaker/M3yokoyama.pdf		
SV14(53)Big10News			172	1,175	139	1,063	38	5	19	13	1	1	3	10	8	7	7	http://www.sparj.com/SVJabst/SVabst(14)/SparViewVol14(53)Big10News.pdf		
UAV15 大林	杉浦		173	1,173	142	179	38	343	197	143	239	12	5	5	2	6	4	http://www.sparj.com/UAVapp/UAVapp2015/speakers/SugiuraU		
2016J 基調 アジア航測	小川		174	1,170	173	353	269	312	126	1	61	38		7	2		1	http://www.sparj.com/SparJ/Spar2016J/presen/M2ogawa.pdf		
2009J 土木 サンキ	横山		175	1,165	180	83	131	23	113	223	126	197	7	11	28	41	182	http://www.sparj.com/SparJ/Spar2009J/Yokoyama.pdf		
SV15(48)directory			176	1,143														1143	http://www.sparj.com/SVJabst/SVabst(15)/SparViewVol15(48)di	
			177	1,140															1140	http://www.sparj.com/SPARP/SPAR2017P/SPAR2017PenquetP
			178	1,123	179									984	55	44	40	http://www.sparj.com/event/AirPhotoSeminarTopcon.pdf		
SV13(50)LidarChip			179	1,111	174	113	112	121	98	153	128	82	111	85	55	32	21	http://www.sparj.com/SVJabst/SVabst(13)/SparViewVol13(50)LidarChip.pdf		