	$M_L = 0.5 M_w = 0.5$ $f_c = 50.6 \text{ Hz}$		$M_L = 0.3 M_w = 0.5$ $f_c = 49.0 \text{ Hz}$	M_{L} =0.6 M_{w} =0.8 f_{c} =33.2 Hz	$M_{L}=0.7 M_{W}=0.7$ $f_{c}=47.0 Hz$	$M_L = 0.6 M_w = 0.6$ $f_c = 44.8 \text{ Hz}$	$M_{L}=1.1 M_{W}=1.0$ $f_{c}=37.5 Hz$	M_{L} =0.4 M_{w} =0.6 f_{c} =35.2 Hz
10 ¹¹							- COOL STATE OF THE STATE OF TH	
10	2018156105500	2018156132827	2018157010141	2018157013858	2018157121700	2018158072013	2018158204112	2018159000959
10 ¹¹	$f_{c}=50.2 \text{ Hz}$	M_{L} =0.8 M_{W} =0.8 f_{c} =48.9 Hz	$M_L = 0.8 M_W = 0.9$ $f_c = 37.2 \text{ Hz}$	M_{L} =0.5 M_{w} =0.5 f_{c} =48.3 Hz	$M_{\rm L}$ =0.6 $M_{\rm w}$ =0.5 $f_{\rm c}$ =56.8 Hz	$M_L = 0.5 M_w = 0.6$ $f_c = 46.2 \text{ Hz}$	$M_{L}=1.0 \ M_{W}=1.3$ $f_{c}=28.9 \ Hz$	$M_L = 0.9 M_W = 1.0$ $f_c = 32.9 Hz$
10 ⁹	2018159011231	2018159035257	2018159044000	2018159120046	2018159152310	2018160051518	2018160054115	2018160102510
10^{11}	$M_L=0.7 M_W=0.8$ $f_c=42.7 Hz$	M_{L} =0.4 M_{w} =0.3 f_{c} =61.5 Hz	$M_L = 0.3 M_w = 0.3$ $f_c = 50.9 \text{ Hz}$	$M_L=0.6 M_w=0.8$ $f_c=34.7 Hz$	M_{L} =0.6 M_{W} =0.6 f_{c} =52.9 Hz	$M_{L}=0.8 M_{W}=0.8$ $f_{c}=46.8 Hz$	$M_{L}=0.2 M_{W}=0.2$ $f_{c}=70.5 Hz$	$M_L = 1.4 M_w = 1.5$ 6 = 27.9 Hz
10 ⁹	-		-	-				
	2018160135358 	2018160181943 	2018160211026 M _L =0.7 M _w =0.6	2018161004449	2018161102425 	2018161172544 	2018162012825 M _L =0.9 M _w =1.0	2018162052548
10 ¹¹		f _c =50.5 Hz	f _c =51.1 Hz	-	f _c =32.6 Hz	f _c =45.7 Hz	f _c =32.9 Hz	f _c =41.4 Hz
10 ⁹	2018162102701	2018162103517	2018162124708	2018162134139	2018162195803	2018162224749	2018163001121	2018163031320
10 ¹¹	-	M_L =0.5 M_w =0.6 f_c =39.2 Hz	$M_L=1.1 M_W=1.3$ $f_c=27.7 Hz$	$M_L=1.0 M_w=1.2$ $f_c=26.4 Hz$	M_{L} =0.7 M_{w} =0.6 f_{c} =53.9 Hz	$M_L=0.5 M_w=0.5$ $f_c=43.8 \text{ Hz}$	$M_L = 0.2 M_w = 0.3$ $f_c = 52.5 \text{ Hz}$	$M_L=0.4 M_w=0.4$ $f_c=58.4 Hz$
10 ⁹	- 2018163115829	2018163132124	2018164031000	2018165002042	2018165152357	2018165200500	2018166021841	2018166111647
	M _L =1.0 M _w =1.0	M_{L} =0.4 M_{w} =0.4 f_{c} =43.7 Hz	$M_{L}=0.6 M_{W}=0.6$ $f_{c}=34.6 \text{ Hz}$	$M_{L}=0.4 M_{W}=0.5$ $f_{c}=54.4 \text{ Hz}$	$M_{L}=0.6 \ M_{W}=0.5 \ f_{c}=50.9 \ Hz$	$M_L=0.4 M_w=0.2$ $f_c=61.4 Hz$	$M_{L}=0.4 M_{W}=0.4 f_{c}=47.0 Hz$	$M_{L}=0.8 M_{W}=1.0$ $f_{c}=29.1 \text{ Hz}$
10 ¹¹								-
10	2018168094946	2018168112428	2018169024000	2018169033430	2018169042045	2018169213726	2018169230658	2018170012100
10 ¹¹	$M_{L}=0.6 M_{W}=0.6$ $f_{c}=47.4 Hz$	$M_L=0.4 M_w=0.6$ $f_c=32.3 Hz$	-	-	M_{L} =0.8 M_{W} =0.8 f_{c} =44.9 Hz	$M_{L}=0.7 M_{W}=0.7$ $f_{c}=34.7 \text{ Hz}$	M_{L} =0.7 M_{w} =0.6 f_{c} =36.6 Hz	$M_{L}=0.5 M_{W}=0.5$ $f_{c}=40.4 Hz$
10 ⁹	2018170013500	2018170022530	2018170070706	2018170141444	2018170145100	2018170191546	2018170200105	2018170210141
10^{11}	M _L =1.3 M _w =1.5	M_L =0.8 M_w =0.8 f_c =31.7 Hz	$M_L=0.8 M_w=0.9$ $f_c=29.9 \text{ Hz}$		M_{L} =0.7 M_{w} =0.6 f_{c} =48.9 Hz	$M_L = 0.8 M_w = 0.7$ $f_c = 39.2 \text{ Hz}$	$M_L = 0.6 M_w = 0.4$ $f_c = 56.2 \text{ Hz}$	$M_L = 0.6 M_w = 0.5$ $f_c = 54.7 \text{ Hz}$
10 ⁹		-	- Control of the cont	-	-	-		
	2018171001230	2018171003700 	2018171005900 	2018171034700 	2018171100309 	2018171100500 	2018171101020 	2018171113245
10 ¹¹		f _c =41.5 Hz	f _c =26.9 Hz	- 72,220.7 Hz	f _c =46.1 Hz	f _c =27.6 Hz	f _c =41.7 Hz	
10 ⁹	2018171120032	2018171170704	2018171173814	2018171232614	2018171233929	2018172001100	2018172010600	2018172041700
10 ¹¹	$M_{L}=0.6 M_{W}=0.5$ $f_{c}=48.1 \text{ Hz}$	M_L =0.8 M_w =0.8 f_c =45.7 Hz	$M_{L}=1.2 M_{W}=1.4$ $f_{L}=2.7 \Omega_{L}$	$M_{L}=0.8 M_{W}=0.9$ $f_{c}=30.7 Hz$	$M_{L}=0.8 M_{W}=0.8$ $f_{c}=38.0 \text{ Hz}$	$M_{L}=0.7 M_{W}=0.7$ $f_{c}=43.5 Hz$	$M_L = 0.4 M_W = 0.3$ $f_c = 53.4 \text{ Hz}$	$M_L=1.0 M_W=1.2$ $f_c=21.9 Hz$
10 ⁹	2018172070230	2018172090030	2018172175518	2018172180735	2018172183326	2018172230708	2018172234909	2018173042858
10^{11}	$M_{L}=0.9 M_{W}=0.9$ $f_{c}=35.9 Hz$	M_{L} =0.7 M_{w} =0.8 f_{c} =36.0 Hz	$M_{L}=0.9 M_{W}=0.9$ $f_{c}=41.9 \text{ Hz}$	$M_{L}=0.5 M_{W}=0.4$ $f_{c}=44.4 \text{ Hz}$	$M_{L}=1.0 M_{W}=1.1$ $f_{c}=31.0 Hz$	$M_{L}=1.1 M_{W}=1.3$ $f_{c}=24.7 Hz$	M_{L} =0.0 M_{W} =0.5 f_{c} =44.0 Hz	M_{L} =0.6 M_{w} =0.6 f_{c} =40.0 Hz
10 ⁹			- Control of the cont					-
	2018173043508 	2018173072237 	2018173130130 M _L =0.9 M _w =0.9	2018173142304 	2018173151655 	2018173181236 M _L =1.1 M _w =1.3	2018173191258 M _L =0.6 M _w =0.5	2018173214953
10 ¹¹		f _c =40.5 Hz	f _c =27.8 Hz	f _c =33.4 Hz	f _c =49.9 Hz	f _c =31.3 Hz	f _c =50.5 Hz	f _c =49.2 Hz
10 ⁹	2018173220003	2018174040400	2018174043300	2018174062000	2018174064100	2018174085934	2018174131934	2018174154112
10 ¹¹	$M_L=1.1 M_W=1.1$ $f_c=26.9 \text{ Hz}$	-	$M_L = 0.4 M_w = 0.4$ $f_c = 48.4 \text{ Hz}$	$M_L=0.8 M_W=1.0$ $f_c=25.7 Hz$	$M_L = 0.5 M_w = 0.4$ $f_c = 46.7 \text{ Hz}$	M_L =0.8 M_w =0.7 f_c =43.8 Hz	$M_{L}=0.5 M_{W}=0.6$ $f_{c}=48.1 \text{ Hz}$	$M_L=0.7 M_w=0.7$ $f_c=37.7 Hz$
ctrum ω M (Nm) 6 01	2018175062422	2018175071713	2018175132759	2018176001813	2018176155852	2018176170554	2018176210520	2018177104730
	$M_{L}=0.5 M_{W}=0.4$ $f_{c}=56.0 \text{ Hz}$	$M_{L}=0.9 M_{w}=1.1$ $f_{c}=31.4 \text{ Hz}$	$M_{L}=0.8 M_{W}=0.9$ $f_{c}=37.2 \text{ Hz}$	$M_{L}=1.2 M_{W}=1.4$ $f_{L}=28.5 Hz$	M_{L} =0.9 M_{w} =1.0 f_{c} =29.0 Hz	1.7-M _w =1.8- 7 ₆ -19.5 Hz	M _L =1.5 M _w =1.6	$M_{L}=0.6 M_{w}=0.7$ $f_{c}=29.2 \text{ Hz}$
ment sp							-	
source displacement spe 10^{11}	2018178152609 	2018178222942 	2018179053245 	2018179233042 	2018180013150 M _L =1.1 M _w =1.2	2018180040100 M _L =0.8 M _w =1.0	2018180094138 	2018181040940
90 NO 10 ¹¹	-30.2 Hz	f _c =29.5 Hz	$f_c = 38.1 \text{ Hz}$	$f_c = 29.4 \text{ Hz}$	$f_c = 25.0 \text{ Hz}$	$f_c = 28.9 \text{ Hz}$	f _c =37.4 Hz	$f_c = 31.5 \text{ Hz}$
10 ⁹	2018181065239	2018181192300	2018182124340	2018182203248	2018182212250	2018182233301	2018183155952	2018183202531
10 ¹¹	$M_L=1.0 M_w=1.1$ $f_c=24.8 \text{ Hz}$	M_L =0.6 M_w =0.6 f_c =37.2 Hz	$M_L=1.1 M_W=1.2$ $f_c=28.8 \text{ Hz}$	$M_L=1.2 M_W=1.3$ $f_c=23.7 Hz$	M_{L} =0.9 M_{w} =1.1 f_{c} =30.2 Hz	$M_L=1.1 M_w=1.1$ $f_c=28.8 \text{ Hz}$	$M_{L}=1.1 M_{W}=0.9$ $f_{c}=35.6 \text{ Hz}$	$M_L=0.7 M_w=0.8$ $f_c=37.6 Hz$
10 ⁹	2018183215029	2018184003003	2018184201046	2018184202906	2018185001326	2018185014623	2018185034551	2018185120950
10 ¹¹	$M_{L}=0.7 M_{W}=0.8$ $f_{c}=37.8 \text{ Hz}$	M_{L} =0.7 M_{W} =0.6 f_{c} =40.3 Hz	M _L =1.4 M _w =1.6 =2T.6 H2	<u></u>	M_{L} =0.8 M_{W} =0.8 f_{c} =39.6 Hz	$M_L = 0.9 M_w = 0.9$ $f_c = 34.8 \text{ Hz}$	$M_{L}=0.5 M_{W}=0.5 f_{c}=43.7 Hz$	$M_{L}=0.7 M_{W}=0.6$ $f_{c}=37.8 Hz$
10 ⁹			***************************************	•••				
	2018185145450 M _L =0.6 M _w =0.6	2018185155423 	2018186070100 	2018186092109 M _L =0.8 M _w =0.9	2018186115357	2018186131522	2018186202646	2018186215007
10 ¹¹	$f_c = 39.7 \text{ Hz}$	f _c =46.2 Hz	7/1-1.3 M _W -1.0	f _c =29.1 Hz	M_{L} =0.6 M_{w} =0.6 f_{c} =32.7 Hz	$M_{L}=1.4 M_{W}=1.5$	$M_{L}=1.0 \ M_{W}=1.1 \ f_{c}=30.7 \ Hz$	$f_{c}=43.0 \text{ Hz}$
10 ⁹	2018187034808	2018187062657	2018187084836	2018188142051	2018188161324	2018188173124	2018188175428	2018188193122
10 ¹¹	$M_L=0.7 M_w=0.7$ $f_c=36.4 Hz$	M_L =0.8 M_w =1.0 f_c =28.0 Hz	$M_L=0.7 M_w=0.8$ $f_c=28.5 \text{ Hz}$	M_{L} =0.6 M_{w} =0.7 f_{c} =45.9 Hz	$M_L = 0.7 M_w = 0.6$ $f_c = 44.3 \text{ Hz}$	M_L =0.6 M_w =0.6 f_c =40.8 Hz	$M_L = 0.4 M_w = 0.5$ $f_c = 46.3 \text{ Hz}$	$M_L=0.5 M_w=0.8$ $f_c=35.1 Hz$
10 ⁹	2018188202905	2018188214438	2018188214700	2018188214802	2018189060720	2018189070845	2018189095118	2018189132738
	$M_{L}=0.8 M_{W}=0.9$	$M_{L}=0.8 M_{W}=0.8$ $f_{c}=35.0 \text{ Hz}$	$M_{L}=0.6 M_{W}=0.7$ $f_{c}=34.9 \text{ Hz}$	$M_{L}=0.8 M_{W}=1.0$ $f_{c}=31.1 \text{ Hz}$	$M_{L}=0.6 \ M_{W}=0.7 \ f_{c}=43.1 \ Hz$	7.7 M _w =1.9	$M_{L}=0.5 M_{W}=0.4$ $f_{c}=45.4 \text{ Hz}$	$M_L=0.6 M_w=0.6$ $f_c=39.5 Hz$
10 ¹¹								
10	2018189132728	2018189142028 	2018189152317 M _L =0.8 M _w =0.8	2018189160854 	2018189163251 	2018189173537 	2018189195043 	2018190005253
10 ¹¹	$M_{L}=1.1 M_{W}=1.2$ $f_{c}=32.3 Hz$	M_L =0.3 M_w =0.4 f_c =43.5 Hz	$M_{L}=0.8 M_{W}=0.8$ $f_{c}=37.6 Hz$	M _L =1.3 M _w =1.6 □ T=2T.9 Hz	M_{L} =0.5 M_{w} =0.3 f_{c} =53.4 Hz	$M_L = 0.6 M_w = 0.6$ $f_c = 40.8 \text{ Hz}$	M _L =1.3 M _w =1.5 £ =2 0.4 Hz -	M_L =0.8 M_w =0.9 f_c =33.3 Hz
10 ⁹	2018190020811	2018190025747	2018190155046	2018193142500	2018193204529	2018194085018	2018194133411	2018195011432
10 ¹¹	$M_{L}=0.6 M_{W}=0.5$ $f_{c}=47.1 \text{ Hz}$	$M_L = 0.9 M_w = 1.1$ $f_c = 24.5 \text{ Hz}$	$M_{L}=0.5 M_{w}=0.4$ $f_{c}=54.1 \text{ Hz}$	$M_{L}=0.6 M_{W}=0.6$ $f_{c}=36.6 \text{ Hz}$	M_{L} =0.8 M_{w} =0.8 f_{c} =31.4 Hz	$M_L = 0.8 M_w = 0.9$ $f_c = 29.0 \text{ Hz}$	-	$M_{L}=0.7 M_{W}=0.8$ $f_{c}=41.9 \text{ Hz}$
10 ⁹	2018195074501	2018195123640	2018195172331	2018195195343	2018196003937	2018196010738	2018196071020	2018196133941
	$M_{L}=0.7 M_{W}=0.6$ $f_{c}=49.6 \text{ Hz}$	$M_L=0.7 M_w=0.8$ $f_c=37.8 \text{ Hz}$	$M_{L}=0.6 M_{W}=0.4$ $f_{c}=53.1 \text{ Hz}$	$M_{L}=0.6 M_{W}=0.6$ $f_{c}=41.3 \text{ Hz}$	2018190003937 	$M_L=0.9 M_w=1.1$ $f_c=32.8 Hz$	$M_{L}=0.6 M_{W}=0.6$ $f_{c}=47.2 \text{ Hz}$	M _L =1.3 M _w =1.6
10 ¹¹								
10,	2018196200450	2018197015541	2018197070436	2018197091659	2018197172535	2018197183626	2018199080816	2018199104200
10 ¹¹	$M_{L}=0.9 M_{W}=1.1$ $f_{c}=27.6 Hz$	M_{L} =0.7 M_{W} =0.6 f_{c} =54.1 Hz	$M_{L}=0.5 M_{W}=0.4$ $f_{c}=50.2 \text{ Hz}$	$M_{L}=0.5 M_{W}=0.4$ $f_{c}=51.7 Hz$	M _L =1.2 M _w =1.5 - f _z =19.9 H z -	$M_L = 0.5 M_w = 0.6$ $f_c = 46.4 \text{ Hz}$	M_{L} =0.5 M_{w} =0.5 f_{c} =57.5 Hz	
10 ⁹	2018199170820	2018199170914	2018199194117	2018199204703	2018199224500	2018200015608	2018200040208	2018200082657
10^{11}	$M_L=1.1 M_W=1.1$ $f_c=29.2 \text{ Hz}$		$M_L=0.9 M_w=0.9$ $f_c=35.2 \text{ Hz}$	M _L =1.2 M _W =1.4 £=28 1 Hz	M _L =1.5 M _w =1.6 =≥1.8 Hz	$M_L = 0.6 M_w = 0.5$ $f_c = 53.7 \text{ Hz}$	$M_L = 0.7 M_W = 0.9$ $f_c = 30.4 \text{ Hz}$	$M_{L}=0.6 M_{w}=0.5$ $f_{c}=48.8 \text{ Hz}$
10 ⁹		-	2010200102006	2010200105407	2010200105452	2010200105702	2010200124612	2010200142027
	2018200100833 M _L =0.4 M _w =0.5	2018200100919 M _L =0.8 M _W =0.8	2018200102006	2018200105407 M _L =0.6 M _w =0.5	M _L =0.7 M _w =0.7	2018200105703 M _L =1.2 M _w =1.1	2018200134612 	2018200143037
10 ¹¹		f _c =41.4 Hz	-	f _c =35.9 Hz	f _c =35.5 Hz	f _c =35.4 Hz	f _c =44.6 Hz	f _c =45.4 Hz
10 ⁹	2018200170651	2018200191849	2018201073346	2018201152715	2018202112855	2018202134535	2018202144515	2018202222748
10 ¹¹	$M_L=0.5 M_w=0.3$ $f_c=53.3 \text{ Hz}$	$M_L=0.5 M_w=0.5$ $f_c=51.4 Hz$		M_{L} =0.6 M_{w} =0.5 f_{c} =45.9 Hz	$M_{L}=0.7 M_{W}=0.8$ $f_{c}=40.1 Hz$	M_{L} =0.5 M_{w} =0.5 f_{c} =46.9 Hz	$M_{L}=0.7 M_{w}=0.5$ $f_{c}=51.1 Hz$	$M_L=1.0 M_w=1.1$ $f_c=34.0 Hz$
10 ⁹	2018202225701	2018202234429	2018203030928	2018203081713	2018203090059	2018203113243	2018203124722	2018203171420
10^{11}	$M_{L}=0.5 M_{W}=0.5$ $f_{c}=46.9 \text{ Hz}$	$M_{L}=1.1 M_{W}=1.1$ $f_{c}=31.5 \text{ Hz}$	$M_{L}=0.7 M_{W}=0.7$ $f_{c}=39.7 Hz$	$M_{L}=0.5 M_{W}=0.5$ $f_{c}=46.3 \text{ Hz}$	M _L =1.4 M _w =1.4 f ₌ =27.3.Hz	M_{L} =0.9 M_{w} =1.2 f_{c} =26.5 Hz	M_{L} =0.5 M_{W} =0.5 f_{c} =45.1 Hz	10 100 - 35 - 28 g
10 ⁹		and the same of th	-	-		-	-	- 28 such that s
10	2018203174444	2018203230921	2018203232316	2018204160756	2018204220258	2018204234743	2018205205035	"
10	10 100	10 100	10 100	frequency (Hz)			10 100	