	$M_L = 0.5 M_W = 0.7$ $f_c = 43.4 \text{ Hz}$		M_{L} =0.3 M_{W} =0.6 f_{c} =44.9 Hz	$M_L = 0.6 M_w = 0.9$ $f_c = 32.5 \text{ Hz}$	$M_{L}=0.7 M_{W}=0.8$ $f_{c}=41.3 Hz$	$M_L = 0.6 M_W = 0.7$ $f_c = 40.1 \text{ Hz}$	$M_{L}=1.1 M_{W}=1.0$ $f_{c}=36.6 Hz$	M_{L} =0.4 M_{w} =0.7 f_{c} =33.3 Hz
10 ¹¹ ·								
10	2018156105500	2018156132827	2018157010141	2018157013858	2018157121700	2018158072013	2018158204112	2018159000959
10 ¹¹ ·	M_{L} =0.3 M_{w} =0.5 f_{c} =44.8 Hz	$M_{\rm L}$ =0.8 $M_{\rm w}$ =0.9 $f_{\rm c}$ =44.7 Hz	$M_L = 0.8 M_w = 1.0$ $f_c = 34.5 \text{ Hz}$	M_{L} =0.5 M_{w} =0.7 f_{c} =43.1 Hz	M_{L} =0.6 M_{w} =0.7 f_{c} =49.6 Hz	$M_L = 0.5 M_w = 0.7$ $f_c = 42.4 \text{ Hz}$	$M_{L}=1.0 M_{W}=1.4$ $f_{c}=30.4 Hz$	$M_L=0.9 M_w=1.1$ $f_c=31.4 Hz$
10 ⁹ ·	2018159011231	2018159035257	2018159044000	2018159120046	2018159152310	2018160051518	2018160054115	2018160102510
10 ¹¹ ·	$M_{L}=0.7 M_{W}=0.9$ $f_{c}=40.3 Hz$	$M_L=0.4 M_w=0.4$ $f_c=53.2 Hz$	$M_L=0.3 M_w=0.5$ $f_c=43.8 \text{ Hz}$	$M_{L}=0.6 M_{W}=0.9$ $f_{c}=33.8 \text{ Hz}$	M_{L} =0.6 M_{W} =0.7 f_{c} =48.1 Hz	M_{L} =0.8 M_{w} =0.9 f_{c} =43.8 Hz	$M_{L}=0.2 M_{W}=0.3$ $f_{c}=61.0 \text{ Hz}$	$M_{L}=1.4 M_{w}=1.6$ =-29.1-112
10 ⁹ ·	- Constant	-			-			
	2018160135358 	2018160181943 M _L =0.6 M _w =0.6	2018160211026 M _L =0.7 M _w =0.7	2018161004449	2018161102425 M _L =0.9 M _w =1.1	2018161172544 M _L =0.7 M _w =0.8	2018162012825 M _L =0.9 M _w =1.1	2018162052548
10 ¹¹	f _c =52.2 Hz	f _c =43.5 Hz	f _c =45.9 Hz		f _c =33.3 Hz	f _c =42.8 Hz	f _c =33.5 Hz	f _c =38.3 Hz
10 ⁹	2018162102701	2018162103517	2018162124708	2018162134139	2018162195803	2018162224749	2018163001121	2018163031320
10 ¹¹ ·		$M_{L}=0.5 M_{W}=0.7$ $f_{c}=35.2 \text{ Hz}$	$M_{L}=1.1 M_{W}=1.3$ $f_{c}=28.5 Hz$	$M_L=1.0 M_W=1.3$ $f_c=27.3 Hz$	$M_{L}=0.7 \ M_{w}=0.7 \ f_{c}=46.5 \ Hz$	$M_L = 0.5 M_W = 0.6$ $f_c = 39.2 \text{ Hz}$	M_{L} =0.2 M_{W} =0.4 f_{c} =46.8 Hz	M_{L} =0.4 M_{w} =0.6 f_{c} =50.6 Hz
10 ⁹ ·		2010163123124	2010164021000	2010152002012	2010151112157	2010105200500	201015502101	2010166111647
	2018163115829 M _L =1.0 M _W =1.1	2018163132124 	2018164031000 	2018165002042 	2018165152357 	2018165200500 	2018166021841 	2018166111647
10 ¹¹	f _c =39.7 Hz	f _c =28.4 Hz	f _c =32.3 Hz	f _c =48.2 Hz	f _c =43.8 Hz	f _c =50.1 Hz	f _c =42.9 Hz	f _c =29.8 Hz
10 ⁹ ·	2018168094946	2018168112428	2018169024000	2018169033430	2018169042045	2018169213726	2018169230658	2018170012100
10 ¹¹ ·	M_{L} =0.6 M_{w} =0.7 f_{c} =44.2 Hz	$M_L=0.4 M_w=0.7$ $f_c=30.0 Hz$	-		M_{L} =0.8 M_{w} =0.9 f_{c} =40.5 Hz	M_L =0.7 M_w =0.8 f_c =32.4 Hz	$M_L=0.7 M_w=0.7$ $f_c=34.0 Hz$	M_L =0.5 M_w =0.6 f_c =37.5 Hz
10 ⁹	2018170013500	2018170022530	2018170070706	2018170141444	2018170145100	2018170191546	2018170200105	2018170210141
10 ¹¹ ·	M _L =1.3 M _w =1.6	$M_{L}=0.8 M_{W}=0.9$ $f_{c}=30.5 Hz$	M_{L} =0.8 M_{w} =0.9 f_{c} =29.5 Hz		$M_{L}=0.7 M_{W}=0.8$ $f_{c}=41.8 \text{ Hz}$	$M_{L}=0.8 M_{W}=0.9$ $f_{c}=35.1 Hz$	$M_{L}=0.6 M_{W}=0.6$ $f_{c}=44.4 Hz$	M_{L} =0.6 M_{w} =0.6 f_{c} =47.1 Hz
10 ²² ·								
	2018171001230	2018171003700	2018171005900	2018171034700	2018171100309	2018171100500	2018171101020	2018171113245
10 ¹¹		$M_{L}=0.8 M_{W}=0.9$ $f_{c}=38.8 Hz$	$M_{L}=1.1 M_{W}=1.3$ $f_{c}=27.6 Hz$	1-6 M _W −1-8 − 7-0-21.9 Hz	$M_{L}=0.4 M_{w}=0.6$ $f_{c}=42.3 \text{ Hz}$	$M_L = 0.8 M_W = 1.0$ $f_c = 27.3 \text{ Hz}$	M_L =0.5 M_W =0.6 f_c =38.5 Hz	-
10 ⁹ ·	2018171120032	2018171170704	2018171173814	2018171232614	2018171233929	2018172001100	2018172010600	2018172041700
10 ¹¹ ·	M_{L} =0.6 M_{W} =0.6 f_{c} =43.1 Hz	$M_{L}=0.8 M_{W}=0.9$ $f_{c}=42.2 \text{ Hz}$	M _L =1.2 M _w =1.5	$M_{L}=0.8 M_{W}=1.0$ $f_{c}=30.1 Hz$	M_{L} =0.8 M_{W} =0.9 f_{C} =36.2 Hz	$M_L=0.7 M_W=0.8$ $f_c=40.6 Hz$	$M_L=0.4 M_w=0.5$ $f_c=48.2 Hz$	$M_L=1.0 M_w=1.3$ $f_c=22.8 Hz$
10 ⁹ ·	2018172070230	2018172090030	2018172175518	2018172180735	2018172183326	2018172230708	2018172234909	2018173042858
	$M_{L}=0.9 M_{W}=1.0$	$M_{\rm L} = 0.7 \ M_{\rm w} = 0.9$	$M_{L}=0.9 M_{W}=1.0$	$M_{L}=0.5 M_{W}=0.6$	$M_{L}=1.0 \ M_{W}=1.2$	$M_{L}=1.1 M_{W}=1.3$	$M_{L}=0.0 M_{W}=0.6$	$M_{L}=0.6 M_{W}=0.7$
10 ¹¹	f _c =33.4 Hz	f _c =33.4 Hz	f _c =39.6 Hz	f _c =38.1 Hz	f _c =30.5 Hz	f _c =25.9 Hz	f _c =37.6 Hz	f _c =36.8 Hz
10 ⁹ ·	2018173043508	2018173072237	2018173130130	2018173142304	2018173151655	2018173181236	2018173191258	2018173214953
10 ¹¹ ·	$M_{L}=0.8 M_{W}=1.0$ $f_{c}=29.9 \text{ Hz}$	$M_L=0.7 M_w=0.8$ $f_c=38.3 Hz$	M _L =0.9 M _w =1.0 f _c =26.9 Hz	$M_{L}=1.0 M_{W}=1.2$ $f_{c}=32.7 Hz$	M_{L} =0.7 M_{w} =0.8 f_{c} =45.8 Hz	$M_{L}=1.1 M_{W}=1.3$ $f_{c}=32.5 Hz$	M_{L} =0.6 M_{W} =0.6 f_{c} =45.4 Hz	M_L =0.5 M_w =0.6 f_c =44.3 Hz
10 ⁹ ·	2018173220003	2018174040400	2018174043300	2018174062000	2018174064100	2018174085934	2018174131934	2018174154112
10 ¹¹ ·	$M_{L}=1.1 M_{W}=1.2$ $f_{c}=27.1 Hz$	<u></u>	$M_{\rm L} = 0.4 M_{\rm W} = 0.6$ $f_{\rm c} = 41.0 {\rm Hz}$	$M_{L}=0.8 M_{W}=1.0$ $f_{c}=26.5 \text{ Hz}$	$M_{L}=0.5 \ M_{W}=0.5 $ $f_{c}=40.1 \ Hz$	M_{L} =0.8 M_{w} =0.9 f_{c} =39.3 Hz	M_{L} =0.5 M_{w} =0.7 f_{c} =45.2 Hz	M_{L} =0.7 M_{w} =0.8 f_{c} =33.8 Hz
ctrum ω M (Nm) 10^{9}	2018175062422 	2018175071713 M _L =0.9 M _w =1.2	2018175132759 M _L =0.8 M _w =1.0	2018176001813 	2018176155852 M _L =0.9 M _w =1.0	2018176170554	2018176210520 	2018177104730
	f ₂ =43 3 Hz	f _c =32.7 Hz	f _c =34.5 Hz	£=29.7Hz	f _c =29.8 Hz	7 ₆ 170.9 Hz	=24.4HZ	f _c =27.4 Hz
source displacement spe 10^{11} .	2018178152609	2018178222942	2018179053245	2018179233042	2018180013150	2018180040100	2018180094138	2018181040940
ource dis	M _L =1.4 M _w =1.6	$M_L = 0.8 M_W = 1.1$ $f_c = 29.6 \text{ Hz}$	M_L =0.8 M_W =1.0 f_c =36.2 Hz	$M_L=1.0 M_W=1.2$ $f_c=30.6 Hz$	$M_{L}=1.1 M_{W}=1.3$ $f_{c}=26.3 \text{ Hz}$	M_L =0.8 M_W =1.0 f_c =29.6 Hz	$M_{L}=0.9 M_{W}=1.0$ $f_{c}=36.4 Hz$	$M_L = 0.7 M_w = 0.9$ $f_c = 31.0 \text{ Hz}$
ა 10 ⁹ -	2018181065239	2018181192300	2018182124340	2018182203248	2018182212250	2018182233301	2018183155952	2018183202531
	$M_{L}=1.0 \ M_{W}=1.2 \ f_{c}=25.6 \ Hz$	$M_{L}=0.6 M_{W}=0.7$ $f_{c}=38.2 \text{ Hz}$	$M_{L}=1.1 M_{W}=1.2$ $f_{c}=30.1 Hz$	$M_{L}=1.2 \ M_{w}=1.4$ $f_{c}=25.1 \ Hz$	$M_{L}=0.9~M_{W}=1.1$ $f_{c}=30.8~Hz$	$M_{L}=1.1 M_{W}=1.2$ $f_{c}=29.3 Hz$	$M_{L}=1.1 M_{W}=1.0$ $f_{c}=34.0 \text{ Hz}$	$M_{L}=0.7 M_{W}=0.9$ $f_{c}=34.9 Hz$
1011			7 351112		0000000		- 7510112	
10 ⁹ ·	2018183215029	2018184003003	2018184201046	2018184202906	2018185001326	2018185014623	2018185034551	2018185120950
10 ¹¹ ·	M_{L} =0.7 M_{w} =0.9 f_{c} =35.1 Hz	M_{L} =0.7 M_{w} =0.7 f_{c} =36.0 Hz	M _L =1.4 M _w =1.6	-	M_{L} =0.8 M_{W} =0.9 f_{c} =36.6 Hz	$M_L = 0.9 M_w = 1.0$ $f_c = 32.2 \text{ Hz}$	M_L =0.5 M_w =0.6 f_c =39.3 Hz	$M_L=0.7 M_w=0.7$ $f_c=35.3 Hz$
10 ⁹	2018185145450	2018185155423	2018186070100	2018186092109	2018186115357	2018186131522	2018186202646	2018186215007
10 ¹¹ ·	$M_L = 0.6 M_W = 0.7$ $f_c = 35.5 Hz$	$M_{L}=0.6 M_{W}=0.6$ $f_{c}=41.5 Hz$	M _L =1.3 M _w =1.6	$M_L = 0.8 M_W = 1.0$ $f_c = 28.0 \text{ Hz}$	$M_{L}=0.6 M_{W}=0.7$ $f_{c}=32.4 Hz$	$M_{L}=1.4 M_{W}=1.6$	$M_{L}=1.0 \ M_{W}=1.2$ $f_{c}=31.2 \ Hz$	$M_L = 0.7 M_w = 0.8$ $f_c = 39.9 \text{ Hz}$
10 ⁹ ·		-					_	-
	2018187034808 	2018187062657 	2018187084836 	2018188142051 	2018188161324 	2018188173124 	2018188175428 	2018188193122
10 ¹¹	f _c =35.2 Hz	f _c =28.6 Hz	f _c =27.9 Hz	f _c =43.2 Hz	f _c =40.9 Hz	f _c =37.6 Hz	f _c =41.4 Hz	f _c =32.3 Hz
10 ⁹	2018188202905	2018188214438	2018188214700	2018188214802	2018189060720	2018189070845	2018189095118	2018189132738
10 ¹¹ ·	$M_{L}=0.8 \ M_{W}=1.0 \ f_{c}=31.6 \ Hz$	$M_{L}=0.8 M_{W}=0.9$ $f_{c}=33.3 \text{ Hz}$	M_{L} =0.6 M_{W} =0.8 f_{c} =31.4 Hz	M_{L} =0.8 M_{W} =1.0 f_{c} =30.4 Hz	M_{L} =0.6 M_{w} =0.8 f_{c} =39.8 Hz	$f_c = 0.9 \text{ Hz}$	$M_L = 0.5 M_w = 0.5$ $f_c = 40.8 \text{ Hz}$	M_{L} =0.6 M_{W} =0.7 f_{c} =37.6 Hz
10 ⁹ ·	2018189132728	2018189142028	2018189152317	2018189160854	2018189163251	2018189173537	2018189195043	2018190005253
10^{11} .	$M_{L}=1.1 M_{W}=1.3$ $f_{c}=33.4 Hz$	$M_{L}=0.3 M_{W}=0.5$ $f_{c}=39.1 \text{ Hz}$	$M_{L}=0.8 M_{W}=0.9$ $f_{c}=35.0 \text{ Hz}$	M _L =1.3 M _w =1.6 =23.1 Hz	$M_{L}=0.5 M_{W}=0.5$ $f_{c}=46.1 \text{ Hz}$	$M_{L}=0.6 M_{W}=0.8$ $f_{c}=34.6 \text{ Hz}$	M _L =1.3 M _w =1.6	$M_{L}=0.8 M_{W}=0.9$ $f_{c}=33.9 \text{ Hz}$
10 .		-	-				-	
	2018190020811 M _L =0.6 M _w =0.6	2018190025747 M _L =0.9 M _w =1.2	2018190155046 	2018193142500 M _L =0.6 M _w =0.7	2018193204529 M _L =0.8 M _w =0.9	2018194085018 M _L =0.8 M _w =1.0	2018194133411	2018195011432
10 ¹¹	f _c =42.1 Hz	$f_c = 25.0 \text{ Hz}$	f _c =48.3 Hz	f _c =33.9 Hz	f _c =31.5 Hz	f _c =29.3 Hz	•	f _c =38.9 Hz
10 ⁹	2018195074501	2018195123640	2018195172331	2018195195343	2018196003937	2018196010738	2018196071020	2018196133941
10 ¹¹ ·	M_{L} =0.7 M_{W} =0.7 f_{c} =45.6 Hz	$M_{L}=0.7 M_{W}=0.9$ $f_{c}=36.7 Hz$	M_{L} =0.6 M_{W} =0.6 f_{c} =40.3 Hz	$M_L = 0.6 M_W = 0.8$ $f_c = 34.4 \text{ Hz}$	$f_c = 2.0 \text{ Hz}$	$M_L = 0.9 M_W = 1.1$ $f_c = 33.3 \text{ Hz}$	M_L =0.6 M_w =0.7 f_c =42.2 Hz	$M_{L}=1.3 M_{W}=1.6$
10 ⁹ ·	2018196200450	2018197015541	2018197070436	2018197091659	2018197172535	2018197183626	2018199080816	2018199104200
- 011	$M_{L}=0.9 M_{W}=1.2$ $f_{c}=28.4 \text{ Hz}$	$M_{L}=0.7 M_{W}=0.8$ $f_{c}=41.5 Hz$	M_{L} =0.5 M_{w} =0.6 f_{c} =42.8 Hz	$M_{L}=0.5 M_{W}=0.5$ $f_{c}=47.6 \text{ Hz}$	M _L =1.2 M _w =1.5 €=21.3 Hz	$M_{L}=0.5 M_{W}=0.7$ $f_{c}=42.6 Hz$	M_{L} =0.5 M_{W} =0.6 f_{c} =49.5 Hz	$M_{L}=1.0 \ M_{W}=1.2$ $f_{c}=30.4 \ Hz$
$10^{11} \cdot 10^{9} \cdot 10^{9} \cdot 10^{9} \cdot 10^{11} \cdot 10^{11}$								- Contract of the contract of
10	2018199170820	2018199170914	2018199194117	2018199204703	2018199224500	2018200015608	2018200040208	2018200082657
10 ¹¹	$M_{L}=1.1 M_{W}=1.2$ $f_{c}=28.2 \text{ Hz}$	-	$M_{L}=0.9 M_{W}=1.0$ $f_{c}=32.9 Hz$	M _L =1.2 M _w =1.5	M _L =1.5 M _w =1.6 -22.7 Hz	$M_L = 0.6 M_w = 0.6$ $f_c = 46.2 \text{ Hz}$	M_{L} =0.7 M_{W} =1.0 f_{c} =28.4 Hz	$M_L=0.6 M_w=0.7$ $f_c=43.6 Hz$
10 ⁹ ·	2018200100833	2018200100919	2018200102006	2018200105407	2018200105452	2018200105703	2018200134612	2018200143037
10 ¹¹ ·	$M_L = 0.4 M_W = 0.6$ $f_c = 34.6 \text{ Hz}$	$M_L=0.8 M_w=0.9$ $f_c=39.1 \text{ Hz}$		$M_L = 0.6 M_W = 0.7$ $f_c = 32.2 \text{ Hz}$	$M_{L}=0.7 M_{W}=0.8$ $f_{c}=33.1 Hz$	$M_L = 1.2 M_W = 1.2$ $f_c = 35.9 \text{ Hz}$	$M_L = 0.5 M_W = 0.6$ $f_c = 40.0 \text{ Hz}$	M_L =0.5 M_w =0.6 f_c =42.0 Hz
10 ⁹			•		-		-	
	2018200170651 M _L =0.5 M _w =0.4	2018200191849 	2018201073346	2018201152715 M _L =0.6 M _w =0.6	2018202112855 M _L =0.7 M _w =0.9	2018202134535 M _L =0.5 M _w =0.6	2018202144515 M _L =0.7 M _w =0.6	2018202222748
1011	$M_{L}=0.3 M_{W}=0.4$ $f_{c}=47.6 \text{ Hz}$	$f_c = 46.9 \text{ Hz}$	-	$M_{\rm L}$ =0.6 $M_{\rm W}$ =0.6 $f_{\rm c}$ =42.2 Hz	$f_{c}=38.0 \text{ Hz}$	$M_{\rm L}=0.5~M_{\rm W}=0.6$ $f_{\rm c}=42.0~{\rm Hz}$	$M_{c}=0.7 M_{W}=0.6$ $f_{c}=45.6 \text{ Hz}$	$m_L = 1.0 \text{ M}_W = 1.2$ $f_c = 34.6 \text{ Hz}$
10 ⁹	2018202225701	2018202234429	2018203030928	2018203081713	2018203090059	2018203113243	2018203124722	2018203171420
10 ¹¹ ·	M_{L} =0.5 M_{w} =0.6 f_{c} =42.1 Hz	$M_L=1.1 M_w=1.2$ $f_c=32.7 Hz$	M_{L} =0.7 M_{W} =0.8 f_{c} =37.7 Hz	$M_{L}=0.5 M_{W}=0.6$ $f_{c}=41.4 \text{ Hz}$	$M_{L}=1.4 M_{W}=1.5$ $f_{L}=28.6 Hz$	$M_L = 0.9 M_W = 1.3$ $f_c = 27.7 \text{ Hz}$	$M_L = 0.5 M_w = 0.6$ $f_c = 41.5 Hz$	10 100 - 35 - 28 su - 21 9
10 ⁹ ·	2018203174444	2018203230921	2018203232316	2018204160756	2018204220258	2018204234743	2018205205035	- 21 - 14 such that is the second of the sec
			10 100	10 100	10 100	2018204234743	10 100	U
	10 100	10 100	10 100	frequency (Hz)				