

$^{160}\text{Yb}$        $Z = 70$        $N = 90$       [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 1294.809 ( 0.007) MeV

Qbeta+ = 2.139 ( 0.035) MeV

	Energy T	J+	J-	J-other	T1/2
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S-alpha=	-3.624	( 0.026)	-----		
160YB 1	0.000	0+			1 4.8 M 2
160YB 2	0.243	2+			2 121 PS 7
160YB 3	0.638	4+			3 8.5 PS 6
160YB 4	0.820	2+			4
160YB 5				1.086 (0)+	5
160YB 6	1.113	3+			6
160YB 7	1.147	6+			7 1.9 PS 2
160YB 8				1.222	8
160YB 9			1.255 3-		9
160YB 10	1.293	2+			10
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160YB 11	1.358	2+			11
160YB 12				1.496 (1,2+)	12
160YB 13				1.525 1-,2-,3-	13
160YB 14				1.529 (2+,3,4+)	14
160YB 15				1.567 (4)-	15
160YB 16				1.676 (2+,3,4+)	16
160YB 17	1.736	8+			17 1.0 PS 2
160YB 18				1.811 (1,2+)	18
160YB 19				1.927 (7)-	19
160YB 20				2.051 (6)-	20
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160YB 21				2.363 (8)-	21
160YB 22				2.372 (9)-	22
160YB 23	2.373	10+			23 1.1 PS 3
160YB 24				2.481 (9)-	24
160YB 25				2.579 (10)-	25 90 PS 28
160YB 26				2.702 (8-,9+)	26
160YB 27				2.763 (11)-	27 46 PS 4
160YB 28				2.877 (11)-	28
160YB 29				2.959 (12+)	29 1.0 PS 4
160YB 30				2.978 (12)-	30
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160YB 31				3.023 (10-,11+)	31
160YB 32	3.137	12+			32 6 PS LT
160YB 33				3.195 (13)-	33 6 PS LT
160YB 34				3.363 (14+)	34 7.7 PS 8
160YB 35				3.421 (13)-	35 3 PS LT
160YB 36				3.456 (12-,13+)	36

160YB 37						3.519	(14)-	37	3.8 PS 12
160YB 38		3.746	14+					38	
160YB 39						3.757	(15)-	39	3 PS LT
160YB 40						3.847	(16+)	40	1.6 PS 3
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160YB 41						4.023	(14-,15+)	41	
160YB 42						4.028	(15)-	42	
160YB 43						4.173	(16)-	43	1.4 PS 7
160YB 44		4.376	16+					44	
160YB 45						4.425	(18+)	45	2.1 PS 3
160YB 46						4.429	(17)-	46	1.5 PS 6
160YB 47						4.682	(16-,17+)	47	
160YB 48						4.702	(17)-	48	7 PS LT
160YB 49						4.713		49	
S-p	=	4.881	( 0.029)	-----					
160YB 50						4.912	(18)-	50	5 PS LT
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160YB 51						5.089	(20+)	51	1.1 PS 3
160YB 52						5.091	(18+)	52	
160YB 53						5.177	(19)-	53	1.3 PS 8
160YB 54						5.330	(18-,19+)	54	
160YB 55						5.367		55	
160YB 56						5.405	(19)-	56	
160YB 57						5.693	(20)-	57	
160YB 58						5.825	(22+)	58	0.53 PS 9
160YB 59						5.948	(21)-	59	1.7 PS 6
160YB 60						6.122	(21)-	60	
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160YB 61						6.381	(22)-	61	
160YB 62						6.621	(24+)	62	0.15 PS 2
160YB 63						6.694	(23)-	63	2 PS LT
160YB 64						7.093	(24)-	64	
S-2p	=	7.437	( 0.026)	-----					
160YB 65						7.457	(26+)	65	0.18 PS +3-4
160YB 66						7.459	(25)-	66	
160YB 67						7.871	(26)-	67	
160YB 68						8.272	(27)-	68	
160YB 69						8.288	(28+)	69	0.19 PS 3
160YB 70						8.709	(28)-	70	
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160YB 71						9.125	(30+)	71	0.19 PS +3-5
160YB 72						9.132	(29)-	72	
160YB 73						9.556	(30)-	73	
160YB 74						10.002	(32+)	74	0.19 PS +6-3
160YB 75						10.010	(31)-	75	
S-n	=	10.395	( 0.019)	-----					
160YB 76						10.409	(32)-	76	
160YB 77						10.887	(33)-	77	
160YB 78						10.956	(34+)	78	0.18 PS 3
160YB 79						11.294	(34)-	79	

160YB 80				11.790	(35)-	80	
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160YB 81				11.963	(36+)	81	0.26 PS 3
160YB 82				12.229	(36)-	82	
160YB 83				12.740	(37)-	83	
160YB 84				13.041	(38+)	84	
160YB 85				13.229	(38)-	85	
160YB 86				13.740	(39)-	86	
160YB 87				14.199	(40+)	87	
160YB 88				14.290	(40-)	88	
160YB 89				15.403	(42-)	89	

S-p = 4.881 ( 0.029)-----  
S-n = 10.395 ( 0.019)-----  
S-2p = 7.437 ( 0.026)-----  
S-2n = 18.295 ( 0.011)-----  
S-alpha= -3.624 ( 0.026)-----

S+p = -1.689 ( 0.029)  
S+n = -7.748 ( 0.017)  
S+2p = -5.584 ( 0.011)  
S+2n = -17.806 ( 0.017)  
S+alpha = 3.919 ( 0.017)

gap p = 3.193 ( 0.041)  
gap n = 2.647 ( 0.026)  
gap 2p = 1.852 ( 0.029)  
gap 2n = 0.489 ( 0.020)  
gap alpha = 0.295 ( 0.031)