

Table 17.5 from (1982AJ01): Radiative transitions and lifetimes of ^{17}N states ^a

E_i (MeV)	E_f (MeV)	Mult.	Branch (%)	Γ_γ/Γ_W ^b (W.u.)	τ_m
1.37	0	M1	100	0.13 ± 0.05	93 ± 35 fsec
1.85	0	E1	86.5 ± 2.5		41_{-9}^{+20} psec
	1.37	E1	13.5 ± 2.5	$(3.2 \pm 1.5) \times 10^{-5}$	
1.91	0	E2	77.0 ± 2.5	0.9 ± 0.2	11 ± 2 psec
	1.37	M1	23.0 ± 2.5	$(5 \pm 1) \times 10^{-3}$ ^c	
2.53	0	M2	11 ± 1	0.22 ± 0.04	33 ± 3 psec
	1.37	E1	34 ± 3	$(1.0 \pm 0.2) \times 10^{-5}$	
	1.85	E2	12.0 ± 1.5	8.1 ± 1.6	
	1.91	E1	41.0 ± 2.5		
3.13 ^d	1.91	M1	100	0.06 ± 0.02	275 ± 80 fsec
3.20 ^e	0	M1	88 ± 4	> 0.025 ^f	< 30 fsec
	1.91	M1	12 ± 4	> 0.05	
3.63 ^g	1.91	E2	47 ± 10	0.8 ± 0.2	12 ± 2 psec
	3.13	M1	53 ± 10	0.010 ± 0.03	
3.66	1.85	E1	100	$> 7 \times 10^{-4}$	< 350 fsec
3.91	1.91	M1	100	$(8_{-3}^{+5}) \times 10^{-2}$ ^h	52 ± 22 fsec
4.01	1.85		$\leq 15 \pm 5$ ⁱ		
	2.53	(M1)	85 ± 5	0.55	< 15 fsec
4.21	1.37		100		< 70 fsec
4.42	1.91		100		(< 60) fsec
5.17	2.53	E2	37 ± 7	> 15	< 60 fsec
	3.13		63 ± 7		
5.20	1.85		≈ 42		< 95 fsec
	1.91		≈ 58		
5.52	0		≈ 50		< 100 fsec
	1.37		≈ 50		
5.77	1.37		≈ 25		< 120 fsec
	1.91		≈ 25		
	4.01		≈ 50 ⁱ		

- ^a See [Table 17.5 in \(1977AJ02\)](#) for references and additional detail.
- ^b Assuming pure multipole transitions and J^π from [Table 17.1](#): see also Table 2 in the Introduction here.
- ^c $\Gamma_\gamma/\Gamma_W = 0.4_{-0.4}^{+1.3}$ (E2) ([1976GU14](#)).
- ^d Branches to $^{17}\text{N}^*(0, 1.37, 1.85, 2.53)$ are, respectively, < 2 , < 5 , < 2 and $< 3\%$ ([1976GU14](#)).
- ^e Branches to $^{17}\text{N}^*(1.37, 1.85, 2.53)$ are, respectively, < 5 , < 6 and $< 3\%$ ([1976GU14](#)).
- ^f $\delta = -0.06 \pm 0.08$ or 2.1 ± 0.4 ([1976GU14](#)). All other δ reported by ([1976GU14](#)) are consistent with 0.
- ^g Branches to $^{17}\text{N}^*(0, 1.37, 1.85, 2.53, 3.20)$ are, respectively, < 10 , < 10 , < 7 , < 3 , $< 2\%$ ([1974RO28](#)).
- ^h This number appears to be in error: see Table 2 in the Introduction here.
- ⁱ This branch is uncertain.