

# ADVANCED OBSERVING: RINGS OVER T.S.P. 2000

*(Observe at least 25 objects – Your Choice)*

## NEBULA:

<u>Name</u>	<u>Location 2000</u>	<u>Const.</u>	<u>*Class</u>	<u>Size</u>	<u>Mag.</u>	<u>Cent Star</u>	<u>Uran.</u>	
NGC2610	Pk239+13.1	08 33 23 - 16 08 57	Hya	4 + 2	58.0"	13.6(p)	15.9	U276
Shapley I	Pk329+2.1	15 51 41 - 51 31 23	Nor	4	72.0"	13.6(p)	14.0	U432
NGC6337	The "Cheerio"	17 22 17 - 38 29 01	Sco	4	51.0"	11.9(p)	14.9	U376
NGC6369	He 2-232	17 29 20 - 23 45 35	Oph	4 + 2	38.0"	12.9(p)	15.6	U388
Minkowski 1-64	PK64+15.1	18 50 02 + 35 14 37	Lyr	4	36.2"	12.8(p)		U117
M57 – Central Star		18 53 56 + 33 01 48	Lyr	4	71.0"	9.7(p)	14.7	U117
Abell 50	NGC6742	18 59 29 + 48 27 57	Dra	2c	36"	15.0(p)	20.0	U83
Abell 53	Pk40-0.1	19 06 46 + 06 23 53	Aql	4	31.0"	16.9(p)	20.9	U206
MCG-2-50-3	In NGC6822	19 44 34 - 14 42 21	Sgr		1.1 x 1.0"	14.2		U297
Abell 69	Pk76+1.1	20 19 57 + 38 24 06	Cyg	4	42.0"	20.1(p)?	21.0	U119
Abell 70	Pk38-25.1	20 31 33 - 07 05 16	Aql	4	43.0"	14.3(p)	18.4	U299

\*Class: 2 = Smooth Disk, 3 = Irregular disk/traces of ring structure, 4 = Ring Structure

## RING GALAXIES:

<u>Name</u>	<u>Location 2000</u>	<u>Const.</u>	<u>Class</u>	<u>Size</u>	<u>Mag.</u>	<u>R.V.</u>	<u>*Dist.</u>	<u>Uran.</u>	
II Hz 4		08 58 34 + 37 05 10	Lyn	Ring	0.6 x 0.5'	15.8	+12878	599.7	U103
NGC2793	UGC4894	09 16 46 + 34 25 54	Lyn	Sb	1.2 x 1.1'	13.6(p)	+1677	78.1	U103
"Vela Ring"	AM1006-380	10 09 05 - 38 24 34	Ant	Rop	1.2 x 1.1'	13.4(p)	+4845	69.2	U365
MCG-6-23-8	ESO 316-44	10 11 02 - 39 41 37	Ant	Rop	1.2 x 0.8'	14.0(p)			U365
VV 330A	UGC5609	10 24 25 + 78 36 36	Dra	S?	1.2x 0.7'	14.4(p)	+2729	127.1	U8
MAC 1135-3302		11 35 21 - 33 02 04	Hya	Ring	0.9 x 0.5'	15.0			U367
AM 1135-284		11 37 42 - 29 05 01	Hya	Ring	0.5 x 0.4'	16.5(p)			U367
VII Zw 466		12 32 05 + 66 24 14	Lyn	Ring	0.5 x 0.4'	15.8(p)	+14490	674.8	U25
Double	AM1358-221	14 01 08 - 22 33 34	Vir	Ring	1.1 x 0.8'	15.8	+10940	509.5	U331
	MCG-4-33-27	14 01 26 - 22 34 19	Vir	Ring	0.8 x 0.4'	15.2(p)			U331

## POLAR RING GALAXIES:

<u>Name:</u>	<u>Location 2000</u>	<u>Const.</u>	<u>Class</u>	<u>Size</u>	<u>Mag.</u>	<u>R.V.</u>	<u>*Dist.</u>	<u>Uran.</u>	
"Helix Galaxy" NGC2685	08 55 35 + 58 44 02	Uma	Pec.	4.5 x 2.4'	11.4(v)	+869	40.5	U44	
ESO 500 - 41	10 26 56 - 24 05 20	Hya	RSAR	1.0 x 0.6'	14.3(p)			U325	
Arp 87	NGC3808	10 40 45 + 22 26 48	Leo	Dbl	0.9 x 0.6'	12.5	+7189	334.8	U147
Mayall's Object	Arp 148	11 03 54 + 40 51 00	Uma	Ring	0.8 x 0.4'	15.4(p)	+10357	482.3	U73
NGC3861	in Abell 1367	11 45 04 + 19 58 26	Leo	Sb	2.4 x 1.2'	13.5(b)	+5068	236.0	U147
NGC4650A		12 44 49 - 40 42 52	Cen	S.OP	2.0 x 0.7'	13.9(b)	+2837	132.1	U402
Arp 193	IC883	13 20 36 + 34 08 10	Cvn	Pec.	1.6 x 1.6'	14.4(p)	+6892	321.0	U109
NGC5122		13 24 15 - 10 39 15	Vir	S	2.4 x 0.8'	14.6	+2939	136.9	U285
NGC5544 / NGC5545		14 17 03 + 36 35 17	Boo	Sa/Sbc	1.0 x 1.0'	14.2	+3121	145.3	U110
"Hoag's Object	A1515+2146	15 17 14 + 21 35 08	Ser		1.0 x 0.9'	15.0(b)	+12740	593.3	U154
I Zw 133	NGC6028	16 01 29 + 19 21 34	Her	SO	1.3 x 1.1'	14.4(b)	+448	20.9	U155

\*Distance:  $H_0 = 70 \text{ Km s}^{-1} \text{ Mpc}$  / Listed  $10^6$  light years

**Good Luck !**



**Larry Mitchell – H.A.S. , F.B.A.C.**

