

## Coma Berenices - Berenice's Hair

<b>NGC 4032</b> Feb 27 1982 12.5" 16mm	<b>H404-2 Galaxy Im</b> VDIF,MF,MS,OVAL-PATCHY,SBM,F*W OF GAL	<b>PF,PL,R,GBM,*12NF</b>	
<b>NGC 4042</b> Aug 25 1982 12.5" 16mm	<b>Galaxy C</b> VDIF,MF,MS,FNUC,2F*S E,1*N A ND W,OVAL,R,SBM	<b>VF,VS</b>	
<b>NGC 4064</b> Feb 27 1982 12.5" 16mm	<b>Galaxy SBa</b> MF,MS,ELONG,F*S,F* FARTHER N,MOD HISB,EQ REGION SUSP	<b>B,E,GBM</b>	
<b>NGC 4136</b> Feb 27 1982 12.5" 16mm Jan 26 1982 12.5" 16mm	<b>H321-2 Galaxy SBc</b> DIF,MF,PL,PATCHY,FACE ON,ARMS SUSP,UB,OVAL MB,ML,FNUC,CLOSE TO B*,STELL NUC,HISB,OVAL	<b>F,VL,VGMBM</b>	
<b>NGC 4147</b> Feb 12 1983 12.5" 12mm Jun 10 1980 6" 24mm	<b>H19-1 Globular VI</b> MB,PL,RESOLVED TO CORE,OUTER *S CLOSELY GROUPED,BM VF,LOOKS LIKE FAINT GAL	<b>GCL,VB,PL,R,GBM,RRR</b>	<b>NGC 4153</b>
<b>NGC 4150</b> Feb 27 1982 12.5" 16mm	<b>H73-1 Galaxy S0</b> MF,MS,BNUC,GMBM,R	<b>B,S,R,PGMBM</b>	
<b>NGC 4152</b> Feb 27 1982 12.5" 16mm	<b>H83-2 Galaxy SBc</b> VDIF,VF,VS,PATCHY,OVAL,SBM	<b>PB,PL,R,PGMBM,R</b>	
<b>NGC 4155</b> Feb 27 1982 12.5" 16mm	<b>Galaxy E</b> EDIF,EF,ES,SMALL PATCH,STELL NUC SUSP	<b>EF,VS</b>	
<b>NGC 4158</b> Feb 27 1982 12.5" 16mm	<b>H405-2 Galaxy Sb</b> MF,PS,BNUC,HISB,GMBM,*W 1 GAL DIA	<b>F,PS,LE,BM,PB*SF</b>	
<b>NGC 4162</b> Feb 27 1982 12.5" 16mm	<b>H353-2 Galaxy Sbc</b> DIF,MF,PS,B*S,F*N,MOD HISB,NNS,R	<b>B,L,IE,BM</b>	
<b>NGC 4166</b> Feb 27 1982 12.5" 16mm	<b>Galaxy SB0</b> MF,PS,FNUC,R,F*N,SBM	<b>VF,S</b>	
<b>NGC 4169</b> Feb 27 1982 12.5" 16mm	<b>H358-3 Galaxy S0</b> PF,VS,BNUC,F*S 1 GAL DIA,SBM,R,CLOSE PAIR/4170/4175 IN TRI SHAPE	<b>F,S,1ST OF 4</b>	<b>Box - Hickson 61a</b>
<b>NGC 4170</b> Feb 27 1982 12.5" 16mm	<b>Non-Existent</b> EDIF,VF,VS,ELONG,PAIR/4175/4169,NND,UB,COMP FORM TRI	<b>EF,VNR4169,73,74,75</b>	<b>Hickson 61b</b>
<b>NGC 4175</b> Feb 27 1982 12.5" 16mm	<b>H360-3 Galaxy Sbc</b> VF,VS,ELONG,FNUC,F*S,UB,SBM,COMP FORM TRI	<b>F,ES,4TH OF 4</b>	<b>Hickson 61c</b>
<b>NGC 4185</b> Feb 27 1982 12.5" 16mm	<b>H373-2 Galaxy Sbc</b> VDIF,VF,ML,F*SW EDGE,NND,UB,R,FACE ON	<b>CF,L,R,GBM</b>	

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<b>NGC 4189</b> Apr 25 1981 12.5" 24mm	<b>H106-2 Galaxy SBc</b> PB,PS,DNUC,2F*S TO W	<b>F,L,LE,VGLBM,R</b>	<b>IC 3050</b>
<b>NGC 4192</b> Mar 19 2004 12.5" 12mmT4 Mar 02 1984 10" 20mm Feb 27 1982 12.5" 16mm Mar 27 1981 12.5" 24mm Jun 10 1980 6" 24mm	<b>M98 Galaxy SBb</b> MESSIER MARATHON 2004 SAME MB,PL,EDGE ON,BNUC,F*N OF NUC,CENTRAL BULGE,TAPPED ENDS,BRT H2 REGIONS IN EQ MESSIER MARATHON 1981	<b>B,VL,VME152,VSMBM</b>	<b>M 98</b>
<b>NGC 4196</b> Feb 27 1982 12.5" 16mm	<b>H374-2 Galaxy S0</b> EDIF,VF,ML,F*W SIDE,OVAL,NND	<b>PB,S,R,VSMBM*</b>	
<b>NGC 4203</b> Feb 27 1982 12.5" 16mm	<b>H175-1 Galaxy E/SB0</b> MB,PS,BNUC,R,GBM	<b>VB,S,R,PSMBM</b>	
<b>NGC 4212</b> Feb 27 1982 12.5" 16mm	<b>H108-2 Non-Existent</b> DIF,MF,PL,B*S,PATCH-OVAL,NND,UB	<b>B,L,E107,G,SBM,R</b>	<b>NGC 4208</b>
<b>NGC 4213</b> Feb 27 1982 12.5" 16mm	<b>H354-2 Galaxy E</b> VDIF,VF,ES,FNUC,STELL NUC,B* IN FIELD	<b>CF,VS,R</b>	
<b>NGC 4237</b> Mar 22 2004 12.5" 12mmT4	<b>H11-2 Galaxy SBbc</b> MF,PL,OVAL,LARGE FNUC,SHISB,LOC IN BARRON FOV,R=G	<b>PB,PL,LE,VGBM,R</b>	
<b>NGC 4239</b> Feb 27 1982 12.5" 16mm	<b>Galaxy E</b> DIF,MF,PS,FNUC,BETWEEN B*S,SBM	<b>F,PL,R</b>	
<b>NGC 4245</b> Feb 27 1982 12.5" 16mm	<b>H74-1 Galaxy SB0-a</b> MB,ML,BNUC,R,SMALL NUC	<b>CB,PL,VLE,SMBM,R</b>	
<b>NGC 4251</b> Feb 27 1982 12.5" 16mm	<b>H89-1 Galaxy SB0</b> ELONG,BNUC,GMBM	<b>VB,S,E,VSMBMN,*F90S</b>	
<b>NGC 4254</b> Mar 19 2004 12.5" 12mmT4 Mar 02 1984 10" 20mm Mar 27 1981 12.5" 24mm Jun 10 1980 6" 24mm	<b>M99 Galaxy Sc</b> MESSIER MARATHON 2004 MB,ML,ELONG,PATCHY,SBM,MOD HISB MESSIER MARATHON 1981	<b>B,L,R,GBM,R,3BRSPIRA</b>	<b>Pin-wheel Nebula</b>
<b>NGC 4274</b> Feb 12 1983 12.5" 24mm Feb 27 1982 12.5" 16mm	<b>H75-1 Galaxy SBab</b> MB,PL,ELONG,BNUC,TAPPED ENDS,PAIR/4278/4283 MB,VL,ELONG,BNUC,FAINT HALO,SMALL NUC,DIF HALO AROUND NUC	<b>VB,VL,E90,MBMN</b>	
<b>NGC 4278</b> Feb 12 1983 12.5" 16mm	<b>H90-1 Galaxy E1</b> MB,ML,BNUC,R,VMBM,COMP TO E = 4283	<b>VB,PL,R,MBM,R,1STOF3</b>	

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<b>NGC 4283</b>		<b>H323-2 Galaxy E</b>	<b>B,S,R,BM,2ND OF 3</b>	
Feb 12 1983	12.5" 16mm	VDIF,VF,VS,R,NND,UB,COMP TO W = 4278		
<b>NGC 4293</b>		<b>H5-5 Galaxy SB0-a</b>	<b>F,VL,E,LBM,R</b>	
Feb 12 1983	12.5" 16mm	DIF,PF,ML,F*E TIP,NND,KNTS SUSP,UB,SEVERAL *S OFF ONE SIDE		
Jun 10 1980	6" 24mm			
<b>NGC 4298</b>		<b>H111-2 Galaxy Sc</b>	<b>F,L,E,VGBM,P OF 2</b>	
Apr 26 2003	12.5" 9mmT6	VB,VL,R,UB,NND,MOD HISB,BRT * ON EDGE,PAIR=4302,R=E		
<b>NGC 4302</b>		<b>H112-2 Galaxy Sc</b>	<b>L,VME177,F OF 2</b>	
Apr 26 2003	12.5" 9mmT6	PB,PL,EDGE ON,PATCH,UB,NND,SOMEWHAT HISB,PAIR=4298,R=E		
<b>NGC 4310</b>		<b>H378-2 Galaxy SB0</b>	<b>F,CL,LE,N OF 2</b>	<b>NGC 4338</b>
Apr 26 2003	12.5" 9mmT6	MB,ML,OVAL,PATCH,UB,SOMEWHAT HISB,R=G		
<b>NGC 4312</b>		<b>H628-2 Galaxy Sab</b>	<b>PB,CL,E,GBM</b>	
Apr 26 2003	12.5" 9mmT6	MB,PL,EDGE ON,UB,SOMEWHAT HISB,CENTRAL PART OF GAL HISB,TIPS FAINTER,R=G		
<b>NGC 4314</b>		<b>H76-1 Galaxy SBa</b>	<b>CB,L,E150,SBM,*NP</b>	
Feb 12 1983	12.5" 24mm	PB,ML,EDGE ON,BNUC,F*N TIP,BM,TAPPERED		
<b>NGC 4321</b>	<b>M100</b>	<b>Galaxy SBbc</b>	<b>PF,VL,R,VG,PSBMRN</b>	<b>M 100</b>
Mar 19 2004	12.5" 12mmT4	MESSIER MARATHON 2004		
Mar 02 1984	10" 20mm	MB,VL,BNUC,FACE ON,R-OVAL,SMALL BRT NUC,F*NW OUTER EDGE		
Mar 27 1981	12.5" 24mm	MESSIER MARATHON 1981		
Jun 10 1980	6" 24mm			
<b>NGC 4336</b>		<b>H406-2 Galaxy SB0-a</b>	<b>VF,PL,IR,(BIN)</b>	<b>IC 3254</b>
Apr 26 2003	12.5" 9mmT6	VB,PL,OVAL,UB,VERY HISB,R=E		
<b>NGC 4340</b>		<b>H85-2 Galaxy SB0-a</b>	<b>PB,S,R,PSBM</b>	
Feb 12 1983	12.5" 24mm	MB,PS,DNUC,SBM,OVAL,PAIR/4350		
<b>NGC 4350</b>		<b>H86-2 Galaxy S0</b>	<b>CB,VS,ME,VSBM</b>	
Feb 12 1983	12.5" 24mm	MB,PS,BNUC,SBM,OVAL,CLOSE PAIR/4340		
Mar 27 1981	12.5" 24mm			
<b>NGC 4359</b>		<b>H648-3 Galaxy SBc</b>	<b>CF,PME90,VLBM</b>	
Mar 22 2004	12.5" 12mmT4	PF,ML,ELONG,SMALL BNUC,SHISB,HISB MIDDLE,GMBM,R=E		
<b>NGC 4379</b>		<b>H87-2 Galaxy E-S0</b>	<b>PS,R,PSBMN</b>	
Mar 22 2004	12.5" 12mmT4	PF,MS,R,LARGE BNUC,SHISB,HISB MIDDLE,GMBM,R=G		
<b>NGC 4382</b>	<b>M85</b>	<b>Galaxy S0-a</b>	<b>VB,PL,R,BM,*NP</b>	<b>M 85</b>
Mar 19 2004	12.5" 12mmT4	MESSIER MARATHON 2004		
Mar 02 1984	10" 20mm	SAME		

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<b>NGC 4382</b>	<b>M85</b>	<b>Galaxy S0-a</b>	<b>VB,PL,R,BM,*NP</b>	<b>M 85</b>
Feb 12 1983	12.5" 16mm	VB,ML,BNUC,F* IN N SIDE,R,BM,PAIR/4394		
Mar 27 1981	12.5" 24mm	MESSIER MARATHON 1981		
Jun 10 1980	6" 24mm			
<b>NGC 4394</b>		<b>H55-2 Galaxy SBb</b>	<b>PB,LE,BM</b>	
Feb 12 1983	12.5" 16mm	MF,MS,DNUC,R,SBM,PAIR/4382		
Mar 27 1981	12.5" 24mm			
<b>NGC 4414</b>		<b>H77-1 Galaxy Sc</b>	<b>VB,L,E,G,VSMBM*</b>	
Feb 12 1983	12.5" 16mm	VB,ML,BNUC,BM,DIF HALO,SLIGHTLY ELONG,NO *S ON EDGE LIKE PHOTO		
<b>NGC 4419</b>		<b>H113-2 Galaxy SBa</b>	<b>B,PME135,SBM</b>	
Feb 12 1983	12.5" 16mm	MB,PS,EDGE ON,FNUC,SBM,TAPPERED		
Mar 27 1981	12.5" 24mm			
<b>NGC 4448</b>		<b>H91-1 Galaxy SBab</b>	<b>B,L,E90,SBM</b>	
Feb 12 1983	12.5" 16mm	MF,MS,FNUC,SLIGHTLY ELONG,MOD HISB,SBM		
<b>NGC 4450</b>		<b>H56-2 Galaxy Sab</b>	<b>B,L,R,GVMBM*,R,B*SP</b>	
Feb 12 1983	12.5" 16mm	MB,ML,FNUC,R,LARGE NUC,HALO DET		
Jun 10 1980	6" 24mm			
<b>NGC 4459</b>		<b>H161-1 Galaxy S0-a</b>	<b>PB,PL,IR,BM,R,*8SF2'</b>	
Feb 12 1983	12.5" 16mm	MB,PS,BNUC,SMBM,STELL NUC,CLOSE TO B*		
Mar 27 1981	12.5" 24mm			
Jun 10 1980	6" 24mm			
<b>NGC 4473</b>		<b>H114-2 Galaxy E5</b>	<b>PB</b>	
Feb 12 1983	12.5" 16mm	MF,PS,DNUC,R,BM,PAIR/4477		
May 01 1981	12.5" 24mm	PB,PL,BNUC,FARM,PAIR/4461		
Mar 27 1981	12.5" 24mm			
Jun 10 1980	6" 24mm			
<b>NGC 4477</b>		<b>H115-2 Galaxy SB0</b>	<b>PB,CL</b>	
Feb 12 1983	12.5" 16mm	MF,PS,BNUC,R,BM,CLOSE COMP 4479,PAIR/4473		
Mar 27 1981	12.5" 24mm			
Jun 10 1980	6" 24mm			
<b>NGC 4479</b>		<b>H116-2 Galaxy SB0</b>	<b>PB,PL</b>	
Feb 12 1983	12.5" 16mm	VDIF,VF,MS,ELONG,UB,NND,CLOSE COMP 4477		
<b>NGC 4494</b>		<b>H83-1 Galaxy E1</b>	<b>VB,PL,R,VSMBMN</b>	
Feb 12 1983	12.5" 16mm	VB,VL,BNUC,R,BM		
<b>NGC 4501</b>	<b>M88</b>	<b>Galaxy Sb</b>	<b>B,VL,VME</b>	<b>M 88</b>
Mar 19 2004	12.5" 12mmT4	MESSIER MARATHON 2004		

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<b>NGC 4501</b>	<b>M88</b>	<b>Galaxy Sb</b>	<b>B,VL,VME</b>	<b>M 88</b>
Mar 02 1984 10"	20mm	SAME,2F*S ONE SIDE,ANOTHER F* OPPOSITE SIDE		
Feb 12 1983 12.5"	16mm	VB,VL,BNUC,BRT H2 REGION AND ARMS,DIF ARMS,SLIGHTLY ELONG		
Mar 27 1981 12.5"	24mm	MESSIER MARATHON 1981		
Jun 10 1980 6"	24mm			
<b>NGC 4548</b>	<b>M91</b>	<b>H120-2 Galaxy SBb</b>	<b>B,L,LE,LBM</b>	<b>M 91</b>
Mar 19 2004 12.5"	12mmT4	MESSIER MARATHON 2004		
Mar 02 1984 10"	20mm	SAME		
Feb 12 1983 12.5"	24mm	MB,PL,BNUC,R,LARGE NUC,DIF HALO		
Mar 27 1981 12.5"	24mm	MESSIER MARATHON 1981		
Jun 10 1980 6"	24mm			
<b>NGC 4559</b>		<b>H92-1 Galaxy SBc</b>	<b>VB,VL,ME150,GBM,3*F</b>	
Feb 12 1983 12.5"	24mm	VB,VL,3F*S IN S EDGE,SLIGHTLY ELONG,HISB,NND		
<b>NGC 4565</b>		<b>H24-5 Galaxy Sb</b>	<b>B,EL,EE135,VSBMN=*10</b>	
Feb 05 2005 31"	17mmT4	EB,EEL,EDGE ON,LARGE BNUC,HISB,FILLS FOV,2 HALVES,GMBM,TAPPERED ENDS,R=E		
Feb 05 2005 31"	31mmT5	EB,EL,EDGE ON,BNUC,BETTER THAN 17MM,JUST FITS IN FOV,DUST LANE,BEST TO DATE,R=E		
Feb 27 1982 12.5"	16mm	MB,PL,VERY EDGE ON,BNUC,DIM HALO,F*N OF NUC,DUST LANES,CENTRAL BULGE,!!!		
Mar 27 1981 12.5"	24mm			
<b>NGC 4571</b>		<b>H602-3 Galaxy Sc</b>	<b>VF,L,E,VGBM,*9NF NR</b>	<b>IC 3588</b>
Mar 22 2004 12.5"	12mmT4	DIF,VF,VL,OVAL,PATCH,UB,NND,SOMEWHAT BM,R=F		
<b>NGC 4689</b>		<b>H128-2 Galaxy Sbc</b>	<b>PB,VL,E,VGLBM,R</b>	
Mar 27 1982 12.5"	12mm	EDIF,MF,PL,R,2F*S N,NND,UB,SOME STR SUSP		
<b>NGC 4725</b>		<b>H611-3 Galaxy SBab/</b>	<b>VB,VL,E,VG,VSVMBMEBN</b>	
Feb 12 1983 12.5"	24mm	VB,EL,BNUC,LARGE BRT NUC,OVAL,SLIGHTLY ELONG		
<b>NGC 4826</b>	<b>M64</b>	<b>Galaxy Sab</b>	<b>VB,VL,VME120,BMSBN</b>	<b>Black-eye Galaxy</b>
Mar 19 2004 12.5"	12mmT4	MESSIER MARATHON 2004		
Mar 02 1984 10"	20mm	VB,VL,OVAL,SMALL BNUC,SBM		
Mar 27 1981 12.5"	24mm	MESSIER MARATHON 1981		
<b>NGC 5012</b>		<b>H85-1 Galaxy SBc</b>	<b>PF,CL,E17,BIN,*9F</b>	
Mar 22 2004 12.5"	12mmT4	MF,MS,ELONG,PATCH,UB,SHISB,R=F		
<b>NGC 5024</b>	<b>M53</b>	<b>Globular V</b>	<b>GCL,B,VC,IR,VVMBM,</b>	<b>M 53</b>
Mar 19 2004 12.5"	12mmT4	MESSIER MARATHON 2004		
Mar 02 1984 10"	20mm	VB,VL,BNUC,R,OUTTER *S RESOLVED,LARGE BRT NUC		
Mar 27 1981 12.5"	24mm	MESSIER MARATHON 1981		
<b>NGC 5053</b>		<b>H7-6 Globular XI</b>	<b>CL,VF,PL,IR,VGBM,*15</b>	
Mar 22 2004 12.5"	12mmT4	VDIF,EF,VL,OVAL,FAINT PATCHY AREAS DETECTED,MORE WITH AV,R=P		
Mar 27 1981 12.5"	24mm			

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<b>NGC 5056</b>	<b>H306-3</b>	<b>Galaxy Sc</b>	<b>CF,CS,R,SP OF 2</b>
Mar 22 2004 12.5" 12mmT4	VF,MS,PATCH,UB,NND,PAIR=5057,R=P		
<b>NGC 5057</b>	<b>H307-3</b>	<b>Galaxy S0</b>	<b>CF,CS,R,NF OF 2</b>
Mar 22 2004 12.5" 12mmT4	VF,MS,PATCH,UB,NND,PAIR=5056,R=P		
<b>NGC 5065</b>	<b>H308-3</b>	<b>Galaxy SBcd</b>	<b>VF,CS</b>
Mar 22 2004 12.5" 12mmT4	VF,PS,PATCH,NND,R=P		
<b>NGC 5089</b>	<b>H327-2</b>	<b>Galaxy SBc</b>	<b>PF,PL,GBM</b>
Jan 28 1982 12.5" 16mm	EEDIF,EF,ES,JUST VISIBLE		
Jan 28 1982 12.5" 24mm	MUCH EASIER TO IDENTIFY THAN IN 16MM		