

Observation Summary Table

A) Spectroscopic Mapping (CII, OI63, NII122, OIII88)

Target ID	Target RA(2000)	Position Dec(2000)	Observing mode	Total AOR duration	comments
M82-outflow south	9h55m56.00s	+69d40m04.0s	Pointed with chop/nod, line spectroscopy	2450	SB
M82-outflow north	9h55m48.80s	+69d41m27.0s	Pointed with chop/nod, line spectroscopy	1970	SB
M82-disk east	9h56m00.00s	+69d41m11.4s	Pointed with chop/nod, line spectroscopy	3410	SB
M82-disk west	9h55m44.90s	69d40m31.8s	Pointed with chop/nod, line spectroscopy	1730	SB
M82-central	See Table C)		Pointed with chop/nod, line spectroscopy		SB
M83-central	See Table C)		Pointed with chop/nod, line spectroscopy		SB
M83-eastern arm	13h37m07.20s	-29d52m46.1s	Pointed with chop/nod, line spectroscopy	6233	SB
M83-bar-arm transition	13h36m54.20s	-29d53m01.5s	Pointed with chop/nod, line spectroscopy	4826	SB
NGC4038	See Table C)		Pointed with chop/nod, line spectroscopy		SB
NGC4039	12h01m54.30s	-18d53m02.0s	Pointed with chop/nod, line spectroscopy	15098	SB
NGC4038/39 overlap	12h01m55.20s	-18d52m29.0s	Pointed with chop/nod, line spectroscopy	10883	SB

B) Complete (nuclear) spectra from PACS and SPIRE

Target ID	Target RA(2000)	Position Dec(2000)	Observing mode	Total AOR duration	comments
PACS spectroscopy					
M82	9h55m52.22s	+69d40m46.9s	PACS SED (Nyquist)	8242	SB
NGC1068	2h42m40.71s	-0d00m47.8s	PACS SED (Nyquist)	12165	Sy2
NGC4418	12h26m54.62s	-0d52m39.2s	PACS SED (Nyquist)	12129	Elusive LIRG
NGC4945	13h05m27.48s	-49d28m05.6s	PACS SED (Nyquist)	11132	SB (elusive)
Arp220	15h34m57.12s	+23d30m11.5s	PACS SED (high sampling)	50000	ULIRG
SPIRE spectroscopy					
ngc4945	13h05m27.48s	-49d28m05.6s	FTS hi res intermediate sampling	9000	2' x 2'
ngc4418	12h26m54.62s	-0d52m39.2s	FTS hi res intermediate sampling	9000	2' x 2'

C) Line survey

Target ID	Target RA(2000)	Position Dec(2000)	Observing mode	Total AOR duration	comments
M82	9h55m52.22s	+69d40m46.9s	Pointed with chop/nod; line	2256	SB
M83	13h37m00.92s	-29d51m56.7s	Pointed with chop/nod; line	2482	SB
NGC253	0h47m33.12s	-25d17m17.6s	Pointed with chop/nod; line	2258	SB
NGC1808	22h51m49.26s	-17d52m23.4s	Pointed with chop/nod; line	14593	SB
NGC3256	10h27m51.27s	-43d54m13.8s	Pointed with chop/nod; line	3334	SB
NGC3690	11h28m32.20s	+58d33m44.0s	Pointed with chop/nod; line	6285	SB
NGC4038	12h01m52.98s	-18d52m09.9s	Pointed with chop/nod; line	9946	SB
NGC4945	13h05m27.48s	-49d28m05.6s	Pointed with chop/nod; line	3098	SB (elusive)
NGC7552	23h16m10.77s	-42d35m05.4s	Pointed with chop/nod; line	4068	SB
NGC1365	3h33m36.37s	-36d08m25.4s	Pointed with chop/nod; line/range	9126	Sy1.8
NGC3783	11h39m01.72s	-37d44m18.9s	Pointed with chop/nod; line/range	13779	Sy1
NGC4051	12h03m09.6s	+44d31m53s	Pointed with chop/nod;	12391	Sy1.5

			line/range		
NGC4151	12h10m32.58s	+39d24m20.6s	Pointed with chop/nod; line/range	14063	Sy1.5
NGC4593	12h39m39.42s	-5d20m39.3s	Pointed with chop/nod; line/range	12393	Sy1
NGC5033	13h13m27.53s	+36d35m38.1s	Pointed with chop/nod; line/range	14892	Sy1.9
NGC5506	14h13m14.87s	-3d12m27.0s	Pointed with chop/nod; line/range	16266	Sy1.9
NGC7469	23h03m15.62s	+8d52m26.4s	Pointed with chop/nod; line/range	5210	Sy1.2
IC4329A	13h49m19.26s	-30d18m34.0s	Pointed with chop/nod; line/range	13379	Sy1.2
CenA	13h25m27.61s	-43d01m08.8s	Pointed with chop/nod; line/range	4244	Sy2
Circinus	14h13m09.91s	-65d20m20.5s	Pointed with chop/nod; line/range	3574	Sy2
NGC1068	2h42m40.71s	-0d00m47.8s	Pointed with chop/nod; line/range	8036	Sy2 (incl. CO)
NGC1275	3h19m48.16s	+41d30m42.1s	Pointed with chop/nod; line/range	7631	Sy2
NGC1386	3h36m46.22s	-35d59m57.3s	Pointed with chop/nod; line/range	4004	Sy2
NGC7314	22h35m46.23s	-26d03m00.9s	Pointed with chop/nod; line/range	14886	Sy2
NGC7582	23h18m23.50s	-42d22m14.0s	Pointed with chop/nod; line/range	5455	Sy2
Mkn3	6h15m36.36s	+71d02m15.1s	Pointed with chop/nod; line/range	17050	Sy2
F18325-5926	18h36m58.29s	-59d24m08.6s	Pointed with chop/nod; line/range	5212	Sy2
F00183-7111	0h20m34.69s	-70d55m26.7s	Pointed with chop/nod; line/range	15179	Elusive
NGC4418	12h26m54.62s	-0d52m39.2s	Pointed with chop/nod; line/range	6248	Elusive
arp 299	11h28m30.40s	+58d34m10.0s	PACS chop/nod	3960	Interacting
ngc118	0h27m16.22s	-1d46m48.5s	PACS chop/nod	3960	
ngc520	1h24m35.07s	+3d47m32.7s	PACS chop/nod	3960	Interacting
Arp220	15h34m57.12s	+23d30m11.5s		See B)	ULIRG
Mkn231	12h56m14.23s	+56d52m25.2s	Pointed with chop/nod; range	6192	ULIRG
Mkn273	13h44m42.11s	+55d53m12.7s	Pointed with chop/nod; range	4676	ULIRG
NGC6240	16h52m58.89s	+2d24m03.4s	Pointed with chop/nod; range	6418	ULIRG (elusive)
UGC5101	9h35m51.65s	+61d21m11.3s	Pointed with chop/nod; range	5300	ULIRG
IRAS 17208-0014	17h23m21.96s	-0d17m00.9s	Pointed with chop/nod; range	4742	ULIRG
IRAS 20551-4250	20h58m26.79s	-42d39m00.3s	Pointed with chop/nod; range	14149	ULIRG
IRAS 23128-5919	23h15m46.78s	-59d03m15.6s	Pointed with chop/nod; range	4436	ULIRG
IRAS 23365+3604	23h39m01.27s	+36d21m08.7s	Pointed with chop/nod; range	8469	ULIRG
IRAS 15250+3609	15h26m59.40s	+35d58m37.5s	Pointed with chop/nod; range	10629	ULIRG
IRAS 19542+1110	19h56m35.44s	+11d19m02.6s	Pointed with chop/nod; range	13622	ULIRG
IRAS 22491-1808	22h51m49.26s	-17d52m23.4s	Pointed with chop/nod; range	14593	ULIRG
IRAS F05189-2524	5h21m01.47s	-25d21m45.4s	Pointed with chop/nod; range	8889	ULIRG

IRAS 07251-0248	7h27m37.55s	-2d54m54.1s	Pointed with chop/nod; range	15919	ULIRG
IRAS F08572+3915	9h00m25.39s	+39d03m54.4s	Pointed with chop/nod; range	12850	ULIRG (elusive)
IRAS 09022-3615	9h04m12.70s	-36d27m01.1s	Pointed with chop/nod; range	9551	ULIRG
IRAS F09111-1007	9h13m38.80s	-10d19m20.2s	Pointed with chop/nod; range	13675	ULIRG
IRAS F10565+2488	10h59m18.14s	+24d32m34.3s	Pointed with chop/nod; range	9519	ULIRG
IRAS F12112+0305	12h13m46.00s	+2d48m38.0s	Pointed with chop/nod; range	8967	ULIRG
IRAS 13120-5453	13h15m06.35s	-55d09m22.7s	Pointed with chop/nod; range	5494	ULIRG
IRAS F14348-1447	14h37m38.37s	-15d00m22.8s	Pointed with chop/nod; range	17786	ULIRG
IRAS F14378-3651	14h40m59.01s	-37d04m32.0s	Pointed with chop/nod; range	13526	ULIRG
IRAS F19297-0406	19h32m21.25s	-3d59m56.3s	Pointed with chop/nod; range	7773	ULIRG
MIPSJ142824.0+352619	14h28m24.07s	+35d26m19.4s	Pointed with chop/nod; range	28392	ULIRG (z=1.32)
SMMJ02396-0134	2h39m56.51s	-1d34m25.7s	Pointed with chop/nod; range	21250	ULIRG (z=1.06)
ELAISC15_J164010.1+410521	16h40m10.17s	+41d05m21.5s	Pointed with chop/nod; range	11825	ULIRG (z=1.09)
ISO_A370-11-	2h39m53.00s	-1d34m59.0s	Pointed with chop/nod; range	17612	ULIRG (z=0.72)
FLSJ172228.04+601526.0	17h22m28.04s	+60d15m26.0s	Pointed with chop/nod; range	23510	ULIRG (z=0.75)
IC 10	00h20m17.34s	+59d18m13.6s	PACS chop.nod 6' x 2'	18000	low metallicity *
NGC625	01h35m04.63s	-41d26m10.3s	PACS chop.nod 2' x 2'	6120	low metallicity
NGC1569	04h30m46.06s	+64d50m52.61s	PACS chop.nod 2' x 4'	3.3	low metallicity
NGC1705	04h54m13.5s	-53d21m39.8s	PACS chop.nod 2' x 2'	6120	low metallicity
NGC2366	07h28m54.66s	+69d12m56.8s	PACS chop.nod 2' x 2'	6120	low metallicity
NGC4214	12h15m39.17s	+36d19m36.8s	PACS chop.nod 2' x 2'	6120	low metallicity
NGC5253	13h39m55.96s	31d38m24.44s	PACS chop.nod 2' x 2'	6120	low metallicity
NGC4449	12h28m11.12s	+44d05m36.8s	PACS chop.nod 2' x 2'	6120	low metallicity
NGC4861	12h59m02.34s	+34d51m34.0s	PACS chop.nod 2' x 2'	6120	low metallicity
NGC6822s	19h44m59.19s	-14d47m40.7s	PACS Freq switch 48''	2520	low metallicity *
NGC6822n	19h44m52.90s	-14d43m01.9s	PACS Freq switch 48''	2520	low metallicity
NGC6822C	19h45m05.50s	-14d43m17.2s	PACS Freq switch 48''	2520	low metallicity
NGC1140	02h54m33.58s	-10d01m39.90s	PACS chop.nod 2' x 2'	6120	low metallicity
He2-10	08h36m15.18s	-26d24m33.9s	PACS chop.nod 2' x 2'	6120	low metallicity
SBS0335-052	3h37m44.06s	-5d02m40.2s	PACS dither chop 48''	6120	low metallicity *
IIZw40	05d02m36.00s	+03d23m31.00s	PACS chop.nod 2' x 2'	6120	low metallicity
IZw18	09h34m02.03s	+55d14m28.10s	PACS dither chop 48''	6120	low metallicity
Haro 2	10h32m31.93s	+54d24m03.5s	PACS chop.nod 48''	2520	low metallicity
30 Dor-lmc N	5h38m49.80s	-69d04m30.0s	PACS FS 48''	2520	low metallicity
30 Dor-lmc S	5h38m29.00s	-69d08m22.0s	PACS FS	2520	low metallicity

			48"		
N11A-lmc	4h57m16.00s	-66d23m21.0s	PACS FS mapping 1.5' x 1.5'	9360	low metallicity *
N11B-lmc	4h56m54.44s	-66d24m22.9s	PACS FS mapping 1.5' x 1.5'	9360	low metallicity
N11C-lmc	4h57m40.20s	-66d27m13.0s	PACS FS mapping 1.5' x 1.5'	9360	low metallicity
N11D-lmc	4h56m29.40s	-66d31m59.2s	PACS FS mapping 1.5' x 1.5'	9360	low metallicity
N11I-lmc	4h55m45.6s	-66d2826.7"	PACS FS mapping 1.5' x 1.5'	9360	low metallicity
N158 lmc	5h39m17.30s	-69d30m11.2s	PACS FS mapping 1.5' x 1.5'	9360	low metallicity
N159 lmc	5h39m50.27s	-69d45m22.9	PACS FS mapping 1.5' x 1.5'	9360	low metallicity
N160 lmc	5h39m45.90s	-69d38m41.2s	PACS FS mapping 1.5' x 1.5'	9360	low metallicity
N180 lmc	5h48m49.52s	-70d03m17.9s	PACS FS mapping 48"	2520	low metallicity
N66-smc	0h59m25.40s	-72d10m10.0s	PACS FS mapping 48"	2520	low metallicity

*) objects marked with an asterisk are used as representative objects for the example AORs

D) Photometric mapping

Target ID	Target RA(2000)	Position Dec(2000)	Observing mode	Total duration	AOR
Interacting Galaxies					
Priority 1					
KPG603	00h01m40.2s	+23d29m23s	2.5' x 2.5' PACS raster mapping mode	blue 1097s *	
				green 1097s *	
KPG019	00h57m39.7s	+43d47m47s	1.5' x 1.5' PACS small source photometry	blue 993s *	
				green 993s *	
ARP157	01h24m35.1s	+03d47m33s	3.0' x 3.0' PACS raster mapping mode	blue 1097s	
				green 1097s	
KPG082	02h54m01.8s	+14d58m25s	1.0' x 1.0' PACS small source photometry	blue 993s	
				green 993s	
AM0707-273	07h09m47.9s	-27d34m21s	2.0' x 2.0' PACS raster mapping mode	blue 1097s	
				green 1097s	
ARP283	09h17m26.9s	+41d59m48s	3.0' x 3.0' PACS raster mapping mode	blue 1097s	
				green 1097s	
ARP270	10h49m52.6s	+32d59m13s	4.0' x 2.0' PACS scan map mode	45deg blue 1386s *	
			7' length, 3 or 4 legs	135deg blue 1087s *	
			70" leg separation	45deg green 1386s *	
				135deg green 1087s *	
ARP299	11h28m30.4s	+58d34m10s	2.5' x 2.5' PACS raster mapping mode	blue 1097s	
				green 1097s	
ARP313	11h57m40.4s	+32d17m08s	5.0' x 5.0' PACS scan map mode	45deg blue 1386s *	
			7' length, 4 legs	135deg blue 1386s *	
			70" leg separation	45deg green 1386s *	
				135deg green 1386s *	
ARP244	12h01m52.3s	-18d51m57s	4.0' x 5.0' PACS scan map mode	45deg blue 1386s *	
			7' length, 4 legs	135deg blue 1386s *	
			70" leg separation	45deg green 1386s *	
				135deg green 1386s *	
KPG347	12h36m33.5s	+11d14m53s	3.0' x 4.0' PACS scan map mode	45deg blue 1386s *	
			7' length, 4 legs	135deg blue 1386s *	
			70" leg separation	45deg green 1386s *	
				135deg green 1386s *	
ARP240	13h39m55.2s	+00d50m13s	3.0' x 2.5' PACS raster mapping mode	blue 1097s	
				green 1097s	
ARP084	13h58m35.8s	+37d26m20s	3.0' x 5.0' PACS scan map mode	45deg blue 1087s *	
			7' length, 3 or 4 legs	135deg blue 1386s *	
			70" leg separation	45deg green 1087s *	
				135deg green 1386s *	

ARP271	14h03m25.5s	-06d03m00s	3.0' x 5.0' PACS scan map mode 45deg blue	1087s *
			7' length, 3 or 4 legs 135deg blue	1386s *
			70" leg separation 45deg green	1087s *
			135deg green	1386s *
ARP091	15h34m33.7s	+15d11m49s	2.0' x 2.0' PACS raster mapping mode blue	1097s
			green	1097s
ARP293	16h58m27.8s	+58d56m48s	2.5' x 2.5' PACS raster mapping mode blue	1097s
			green	1097s
ARP081	18h12m57.6s	+68d21m32s	1.5' x 2.0' PACS raster mapping mode blue	1097s
			green	1097s
AM1809-574	18h13m35.5s	-57d43m46s	2.0' x 3.0' PACS raster mapping mode blue	1097s
			green	1097s
ARP278	22h19m28.6s	+29d23m32s	2.0' x 2.0' PACS raster mapping mode blue	1097s
			green	1097s
ARP298	23h03m16.9s	+08d53m01s	2.0' x 2.5' PACS raster mapping mode blue	1097s
			green	1097s
Total Priority 1				17.16h = 61770s
Priority 2:				
ARP256	00h18m50.4s	-10d22m08s	2.5' x 2.0' PACS raster mapping mode blue	1097s
			green	1097s
ARP140	00h51m03.0s	-07d03m42s	2.0' x 2.0' PACS raster mapping mode blue	1097s
			green	1097s
AM0134-373	01h36m23.4s	-37d19m18s	2.5' x 2.5' PACS raster mapping mode blue	1097s
			green	1097s
KPG067	02h23m20.4s	+32d11m34s	1.5' x 1.5' PACS small source photometry blue	993s
			green	993s
ARP276	02h28m11.9s	+19d35m28s	2.0' x 3.0' PACS raster mapping mode blue	1097s
			green	1097s
ARP118	02h55m11.0s	-00d10m51s	1.5' x 1.5' PACS small source photometry blue	993s
			green	993s
ARP304	03h11m17.0s	-08d54m42s	3.0' x 3.0' PACS raster mapping mode blue	1097s
			green	1097s
KPG088	03h17m02.8s	+31d34m30s	3.0' x 2.5' PACS raster mapping mode blue	1097s
			green	1097s
VV528	07h23m44.1s	+33d26m41s	1.5' x 1.5' PACS small source photometry blue	993s
			green	993s
ARP303	09h46m20.6s	+03d03m30s	2.0' x 2.5' PACS raster mapping mode blue	1097s
			green	1097s
ARP083	11h40m11.4s	+15d20m05s	2.5' x 2.0' PACS raster mapping mode blue	1097s
			green	1097s
ARP238	13h15m32.8s	+62d07m37s	1.5' x 1.5' PACS small source photometry blue	993s
			green	993s
KPG401	13h52m16.2s	+02d06m16s	1.5' x 1.5' PACS small source photometry blue	993s
			green	993s
VV706	17h19m53.0s	+86d44m15s	1.5' x 1.5' PACS small source photometry blue	993s
			green	993s
KPG538	19h10m59.1s	+73d25m06s	2.0' x 2.0' PACS raster mapping mode blue	1097s
			green	1097s
AM1907-504	19h11m25.7s	-50d38m31s	3.0' x 2.0' PACS raster mapping mode blue	1097s
			green	1097s
ARP284	23h36m18.1s	+02d09m21s	2.0' x 5.0' PACS scan map mode 45deg blue	1087s *
			7' length, 3 or 4 legs 135deg blue	1386s *
			70" leg separation 45deg green	1087s *
			135deg green	1386s *
Total Priority 2				10.78h = 38802s
Priority 3:				
VV769	01h16m18.5s	+46d44m38s	2.0' x 1.5' PACS raster mapping mode blue	1097s
			green	1097s
AM0135-650	01h37m25.5s	-64d53m47s	2.5' x 2.0' PACS raster mapping mode blue	1097s
			green	1097s
AM0136-301	01h39m06.3s	-29d54m54s	3.0' x 2.5' PACS raster mapping mode blue	1097s
			green	1097s
VV777	04h04m10.3s	+22d07m47s	1.5' x 1.5' PACS small source photometry blue	993s
			green	993s
ARP082	08h11m14.7s	+25d11m36s	2.0' x 3.0' PACS raster mapping mode blue	1097s

				green	1097s
ARP300	09h27m56.3s	+68d24m27s	2.5' x 2.0' PACS raster mapping mode	blue	1097s
				green	1097s
CGCG239-011	09h36m33.9s	+48d28m19s	2.0' x 1.0' PACS raster mapping mode	blue	1097s
				green	1097s
VV741	09h53m35.5s	-12d28m50s	2.0' x 1.5' PACS raster mapping mode	blue	1097s
				green	1097s
ARP105	11h11m13.1s	+28d41m57s	1.0' x 3.0' PACS raster mapping mode	blue	1097s
				green	1097s
UGC6316	11h18m23.3s	+65d01m50s	2.0' x 1.5' PACS raster mapping mode	blue	1097s
				green	1097s
ARP155	11h23m38.8s	+53d50m10s	2.0' x 2.0' PACS raster mapping mode	blue	1097s
				green	1097s
ARP087	11h40m44.4s	+22d26m16s	1.5' x 2.0' PACS raster mapping mode	blue	1097s
				green	1097s
VV333	12h16m58.0s	-26d12m37s	1.5' x 1.0' PACS small source photometry	blue	993s
				green	993s
UGC8561	13h34m57.2s	+34d02m39s	2.5' x 2.0' PACS raster mapping mode	blue	1097s
				green	1097s
KPG437	14h50m51.0s	+05d07m01s	1.5' x 1.5' PACS small source photometry	blue	993s
				green	993s
ARP072	15h46m56.0s	+17d52m43s	3.0' x 2.5' PACS raster mapping mode	blue	1097s
				green	1097s
VV812	22h00m41.4s	+10d33m09s	1.0' x 1.5' PACS small source photometry	blue	993s
				green	993s
Total Priority 3					10.13h = 36466s

*) objects marked with an asterisk are used as representative objects for the example AORs
 sizes in the observing mode column are object sizes, not map sizes

					Total AOR time in [hrs]	
PACS + SPIRE photometry						
ngc253	0h47m33.12s	-25d17m17.6s	PACS scan	SPIRE large	1.3+ 0.4	18' x 6'
ngc1808	5h07m42.34s	-37d30m47.0s	PACS scan	SPIRE large	2.4+ 0.28	5' x 3.7'
ngc3256	10h27m51.27s	-43d54m13.8s	PACS chop raster	SPIRE small	0.7 + 0.3	3.5' x 2.7'
circinus	14h13m09.91s	-65d20m20.5s	PACS chop raster	SPIRE small	0.6+ 0.3	4.2' x 3.5'
ngc6240	16h52m58.89s	+2d24m03.4s	PACS small-source	SPIRE small	0.6 + 0.3	3.5' x 1.8'
mkn231	12h56m14.23s	+56d52m25.2s	PACS small-source	SPIRE small	0.6 + 0.3	3.5' x 1.8'
mkn273	13h44m42.11s	+55d53m12.7s	PACS small-source	SPIRE small	0.6+ 0.3	3.5' x 1.8'
ngc3690	11h28m32.20s	+58d33m44.0s	PACS small-source	SPIRE small	0.6+ 0.3	3.5' x 1.8'
ngc520	1h24m35.07s	+3d47m32.7s	PACS scan	SPIRE small	1.0 + 0.3	6' x 6'
arp236	1h07m47.18s	-17d30m25.3s	PACS small-source	SPIRE small	0.6 + 0.3	3.5' x 1.8'
iras23128-5919	23h15m46.78s	-59d03m15.6s	PACS small-source	SPIRE small	0.5 + 0.3	3.5' x 1.8'
ngc7552	23h16m10.77s	-42d35m05.4s	PACS chop raster	SPIRE small	0.7 + 0.3	3.5' x 2.7'
ngc1275	3h19m48.16s	+41d30m42.1s	PACS chop raster	SPIRE small	0.7 + 0.3	3.5' x 2.7'
ngc4945	13h05m27.48s	-49d28m05.6s	PACS scan	SPIRE large	1.1 + 0.3	12' x 4.1'
arp 299	11h28m30.40s	+58d34m10.0s		SPIRE small	0.3	4' x 4'
arp 118	2h55m11.02s	-0d10m50.7s		SPIRE small	0.3	4' x 4'