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THE SLIT SPECTRA OF GALAXIES OF THE SECOND BYURAKAN SKY SURVEY. V

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ABSTRACT. *The results of follow-up spectroscopy of 74 galaxies from the Second Byurakan Survey are presented. The observations have been carried out on the 6 m telescope of SAO RAS and on the 2.6 m telescope of Byurakan Astrophysical Observatory of Armenian AS. The redshifts and luminosities of all the galaxies are determined. It is shown, that SBS 0755+509, SBS 0933+511, SBS 0956+510, SBS 1016+592, SBS 1150+583 are Seyfert type galaxies, and SBS 0915+556, SBS 1003+583 B, SBS 1047+598 are possible Seyfert type ones. Three physical pairs of galaxies are found as well.*

OBSERVATIONS

The results of studying of slit spectra of 189 galaxies from the Second Byurakan Sky Survey (SBS) have been presented in the previous papers (Markarian et al., 1984; Lipovetsky et al., 1988; Stepanian et al., 1991) of this series. In this paper we continue to present the results giving the slit spectra of 74 galaxies. They locate in the sky region $\alpha=07^h00^m-13^h00^m$, $\delta=+49^\circ-+61^\circ$. 25 of these objects are in the SBS field with coordinates $\alpha=09^h47^m$, $\delta=+51^\circ00'$, some part of them is situated in the other earlier published fields of SBS Survey (Markarian and Stepanian, 1983, 1984; Markarian et al., 1985) and the remainder objects are out of the investigated fields.

Spectral observations have been carried out with the 1000-channel TV scanner

placed in the Nasmyth focus of the 6 m telescope (Drabek et al., 1986). Two diffraction gratings were used giving the linear dispersions of about 100 Å/mm or 200 Å/mm and spectral resolutions 1.9 and 3.5 Å per channel.

Earlier the spectral observations of some objects were made in the prime focus of the 6 m telescope with UAGS spectrograph connected with the UM-92 and UMK-91B image tubes. As a rule, the unwidened spectra in the red or/and blue spectral ranges on the photographic films A-500 and A-600N have been received with a dispersion of about 90 Å/mm and a spectral resolution of about 5 Å.

For some objects additional spectra for more correct determination of their spectral types have been obtained.

Table 1 presents the data of the investigated objects: 1 - SBS designation in accordance with (Markarian and Stepanian, 1984; Markarian et al., 1985), 2 - date of observations, 3 - observed spectral region in Å, 4 - exposure time in seconds, 5 - redshifts determined from the most certain emission or absorption lines, corrected for the motion of the Sun, $\Delta z = 0.001 \sin l^{II} \cos b^{II}$, 6 - apparent magnitude in the blue spectral region according to (Markarian and Stepanian, 1984; Markarian et al., 1985), 7 - luminosities corrected for extinction in our Galaxy for H=75 km $s^{-1}Mpc^{-1}$, 8 - Survey type (Markarian and Stepanian, 1984; Markarian et al., 1985).

Coordinates and the finding charts for the objects, located out of SBS fields, will be published later.

The results of investigation of the slit spectra, morphology of some objects, observed emission and absorption lines, the ratios of spectral line intensities and spectral type of some galaxies are given in descriptions.

Some spectra have been obtained in Cassegrain focus of the 2.6 m telescope of Armenia with UMK-91B image tube with a dispersion of about 100 Å/mm. They are marked by asterisk in Table 1.

Table 1.

Designation SBS	Date of observations	Spectral range Å	Exposure time(s)	z_0	m_B	M_B	Survey type
1	2	3	4	5	6	7	8
0749+568 B	04.11.89	3700-5600	2238	0.0185	18^m	$-16^m.8$	sd1e
0751+570	04.11.89	3700-5600	889	0.0269	17.5	-18.1	s3e
0755+509	05.11.89	3700-5600	1915	0.0546	17	-20.2	dse
	05.11.89	5290-7260	1443				
0810+585	28.11.81	5500-7700	480	0.0243:	17	-18.4	sde:
	12.02.86	3500-5300	849				
0813+522	22.01.90	3520-5440	2334	0.0243	17	-18.4	ds2e
0813+582	17.12.88	3680-5550	1190	0.0263	16.5	-18.0	s3e
0827+584	09.10.88	3550-7060	826	0.3103:	18.5	-22.4	s1
0829+577 A	17.12.88	3680-5540	1527	0.1032:	15.5	-23.0	de
0907+543	04.11.89	3700-5600	1764	0.0276	17	-18.6	s1e
0915+556	24.01.90	3640-5460	1554	0.0493	17.5	-19.3	sd1e
0923+581	09.11.79	5500-7700	720	0.0502	18	-18.9	sd2e
0926+606	09.11.79	5500-7700	360	0.0140	17	-17.1	ds1e
	02.03.89	3700-5500	491	0.0136	17	-17.0	ds1e
	02.03.89	5200-7100	1457				
0926+607	09.11.79	5500-7700	660	0.0143	18	-16.1	d2e
	02.03.89	3700-5500	1483				
0933+511	02.02.86	3500-5400	1712	0.0553	17	-20.0	sd2e
	02.10.88	5320-7200	2187				
0933+508	10.02.86	3620-5430	600	0.0246	17.5	-17.8	s1e
0935+585	28.01.85	3700-5700	900	0.0243	18	-17.3	s2e
0936+523	13.02.86	3430-5330	883	0.0493	17.5	-19.3	ds2e
0938+525	08.02.88	3270-6820	1706	0.0516	17.5	-19.4	sde
0939+527	12.02.86	3510-5280	1213	0.0566	17.5	-19.6	s1e
0940+508	10.02.86	5320-7220	591	0.0653	18	-19.4	s1e
0940+510	08.02.88	3270-6830	485	0.0381	17.5	-18.7	sd1e
0940+512	16.12.88	3680-5540	1242	0.0477	17	-19.7	de
0940+522	16.12.88	3680-5500	1121	0.0321	17.5	-18.4	de
0940+544	05.11.89	3700-5610	3054	0.0059	19.5	-12.7	dse
0941+516	08.02.88	3270-6840	1013	0.0328:	16.5	-19.4	se
0942+587 A	28.01.85	3700-5700	1020	0.0308	16.5	-19.3	d2
0942+587 B	28.01.85	3700-5700	720	0.0310	16.5	-19.3	ds2
0943+566	03.01.84	3900-6200	1080	0.0814:	18	-19.9	ds2
0943+553	30.12.83	3900-6400	900	0.0461	16	-20.7	sde:
0943+506	08.02.88	3720-5560	992	0.0509	18	-18.9	sde
0943+581	01.01.85	4900-7300	900	0.0429	17	-19.5	d2e
0943+496	08.02.88	3720-5560	1733	0.0874	18	-20.0	sd2
0943+521	11.02.86	3550-5310	990	0.0670	17.5	-20.0	sd2
	11.02.86	4700-6500	1123				
0944+526	10.02.86	3540-5320	2256	0.0485	17.5	-19.3	sd1e
0944+503	08.02.88	3720-5570	1111	0.0386	17.5	-18.8	sd2
0944+579	31.12.84	4900-7300	720	0.0299	16.5	-19.2	sd2e
0948+507 B	06.01.89	3250-6860	2880	0.0526:	17.5	-18.5	dse
0950+527	12.02.86	3510-5300	620	0.0345	17.5	-18.5	sd2
	13.02.86	3440-5230	814				
0950+514	10.02.86	3540-5330	729	0.0374	16.5	-19.7	sd2e
0951+510	08.02.88	3720-5570	3178	0.0747	18	-19.7	sd1e
	08.02.88	5400-7310	1723				
0951+518	10.11.85	3320-5120	649	0.1296	18	-20.9	BSO
	10.11.85	4820-6620	684				
0951+504	09.02.88	3530-7080	1300	0.0529	17.5	-19.4	sd2e
0956+510	10.02.86	3630-5480	1164	0.1432	17	-22.1	BSO

Table 1 (continued).

1	2	3	4	5	6	7	8
0957+518	25.02.88	3490-7090	1859	0.0967	18	-20.2	ds2e:
	07.03.88	3540-7100	3067				
1003+583 A	31.12.84	4900-7300	900	0.0299	17.5	-18.2	d3
1003+583 B	31.12.84	4900-7300	720	0.0818	17.5	-20.4	sd3
1005+589 B	01.01.85	4900-7300	900	0.0308	16.5	-19.3	d3
1006+578	01.01.85	4900-7300	720	0.0054	17	-15.0	d3
1006+604	30.01.85	4900-7300	1020	0.0861	17.5	-20.5	sd2e
1011+600 A	05.03.89	3400-6900	1992	0.0081	17.5	-15.4	sd2e
1011+600 B	05.03.89	3410-6910	1402	0.0076	17.5	-15.2	sd2e
1016+592	30.01.85	4900-7300	720	0.0422	17.5	-18.9	sd1e:
	16.02.86	3790-5640	2820				
	16.02.86	5260-7230	3614				
1017+542	05.11.89	3700-5580	1853	0.0305	18.5	-17.2	s1e
1021+579	09.11.79	5500-7700	600	0.0709	18	-19.6	sd1e
1033+531	30.01.90	3630-5550	2314	0.0040	17	-14.3	sd1e
1035+610	31.12.84	4900-7300	900	0.0313	17	-18.8	sd2
1037+494	23.01.90	3630-5470	2439	0.0054	18	-14.0	dse
1039+591	31.12.84	4900-7300	900	0.0664	17	-20.4	sd1
1042+604	30.01.85	4900-7300	900	0.0518	17.5	-19.4	sd1e
1047+598	29.04.89	3510-7020	1910	0.0856	17.5	-20.5	d2e
1055+597	29.04.89	3500-7000	1059	0.0238	17.5	-17.7	d2e
1106+500	24.11.89	3700-5700	988	0.0482	17	-19.7	BS0
	22.01.90	3530-5450	1083				
	14.04.91	3700-5700	438				
1116+583 B	25.01.89*	3640-5470	4943	0.0350	19.5	-16.5	dse
1125+562	03.03.87*	3500-5400	3600	0.0190	16	-18.7	sd2e
	11.02.91	3520-5560	180				
1147+520	30.01.90	3630-5550	1212	0.0039	17	-14.2	ds2e
1149+579	25.01.90	3640-5470	912	0.0323	17.5	-18.3	ds1e
	25.01.90	5340-7230	939				
1150+596	23.01.90	3630-5480	1449	0.0116	18	-15.6	sd2e
1150+583	09.03.87	3600-5590	1000	0.0655	17.5	-19.9	sd2e
	09.03.87	5160-7220	668				
	09.03.87	5400-7450	1155				
1159+545	27.01.90	3700-5500	2953	0.0125	18	-15.8	sde
	14.04.91	3700-5700	479				
1206+557	24.01.90	3630-5460	2148	0.0066	17	-15.4	sd2e
	24.01.90	5300-7200	972				
1211+540	26.01.90	3640-5440	3146	0.0035	18	-13.0	d2e
1222+588	23.01.90	3630-5480	759	0.0161	17.5	-16.8	d1e
1249+493	25.01.90*	3640-5460	3406	0.0258	18	-17.3	dse
1258+552	27.04.87*	3500-5400	2400	0.0865	17	-21.0	sd2e

* These spectra are obtained on the 2.6 m telescope of Byurakan Observatory.

DESCRIPTION

0749+568 B- N_1, N_2, H_β, H_γ, [OIII] λ4363, H_δ, [NeIII] λ3968+H_ε, H_8, [NeIII] λ3869 and [OII] λ3727 emission lines are present in the blue region of the spectrum. The ratio $N_1/H_\beta > 3$.

0751+570 - N_1, N_2, H_β, H_γ, [OII] λ3727 emission lines are observed in the spectrum.

N_1, H_β, [OII] λ3727 have approximately equal intensity.

0755+509 - Broad emission lines H_α, [NII] λλ6548-84, [SII] λλ6717-31, [OI] λ6300, [OI] λ6364, N_1, N_2, H_β, HeII λ4686, [OIII] λ4363, H_γ, H_δ, [NeIII] λ3968, [NeIII] λ3869 and [OII] λ3727 are seen in the spectra. $N_1/H_\beta > 10$. It is a Seyfert 2 type galaxy.

0810+585 - These spectra show broad low-contrast lines of Balmer series in absorption H_β-H_ε(~100 Å), as well as H and K CaII, G-band. H_β has narrow central emission component. [OII] λ3727 is suspected in emission as well.

0813+522 - The following emission lines N_1, N_2, H_β, H_γ, H_δ, [NeIII]+H_ε λ3968, H_8, [NeIII] λ3869 and [OII] λ3727 are present. $N_1/H_\beta \sim 3$, [OII]λ3727/$H_\beta \sim 2$.

0813+582 - H and K Ca II, G-band and Balmer lines H_β-H_8 are observed in absorption, and [OII] λ3727 is suspected in emision.

0827+584 - H and K CaII, G-band, the lines of Balmer series H_β-H_{10} are revealed in absorption. The other versions of identification are possible.

0829+577 A- Broad lines of Balmer series H_β and H_γ (~100 Å), H_ε in absorption and weak [OII] λ3727 in emission are observed. This identification is not certain.

0907+543 - N_1, N_2, H_β, HeII λ4686, [OIII] λ4363, H_γ, H_δ, [NeIII] λ3968+H_ε, H_8, [NIII] λ3869 and [OIII] λ4363, weak [OII] λ3727 emission lines are seen in the blue region of the spectrum. $N_1/H_\beta > 5$.

0915+556 - N_1, N_2, H_β, HeII λ4686, [OIII] λ4363, H_γ, H_δ, [NeIII] λ3968+H_ε, [NeIII] λ3869 and [OII] λ3727 are present in emission. $N_1/H_\beta \sim 9$, [OII] λ3727/$H_\beta \sim 2$. It is apparently a Seyfert type galaxy.

0923+581 - The moderate intensity H_α and weak low-contrast [NII] λ6584 are observed in this spectrum. [SII] λλ6717/31 are suspested.

0926+606 - This object consists of two components with approximate equal redshifts. The spectra of both components show N_1, N_2, H_β, [OIII] λ4363, H_γ, H_δ, [NeIII] λ3968+H_ε, [NeIII] λ3869 and [OII] λ3727 emission lines with the comparable intensity ratios. $N_1/H_\beta > 3$, [OII] λ3727 ~ H_β.

0926+607 - N_1, N_2, H_β and [OII] λ3727 emission lines are seen. $N_1/H_\beta \sim 3$ and [OII] λ3727 ~ H_β. This galaxy is placed at ρ~84″ from SBS 0926+606. Apparently it is a physical pair with SBS 0926+606.

0933+511 - H_α, [NII] λλ6548-84, [SII] λλ6717-31, N_1, N_2, H_β emission and H_γ - H_{12}, H and K CaII, and G-band absorption lines are observed. $N_1/H_\beta < 0.5$. It is a Seyfert 1 type galaxy.

0933+508 - There are emission lines N_1, N_2, H_β, [OII] λ3727 in the blue part of the spectrum. $N_1/H_\beta \sim 1$, [OII]/$H_\beta > 2.5$. H_β has a broad absorption component. The Balmer series lines H_γ-H_{10} are in absorption. It is probably LINER.

0935+585 - The strong emission lines N_1, N_2, H_β, [OII] λ3727 and weak H_γ are identified in this spectrum. $N_1/H_\beta \geq 3$.

0936+523 - [OII] λ3727 in emission and H_γ - H_{10}, H and K CaII, and G-band in absorp-

tion are observed.

0938+525 - H, K CaII and G-band absorption lines are present.

0939+527 - There are lines of Balmer series H_β-H_{11}, H and K CaII, G-band in absorption. H_β and H_γ have emission cores on the broader absorption component.

0940+508 - The strong emission H_α, H_β, N_1, N_2, [OII] λ3727, and moderate intensity lines [SII] λλ6717-31, H_γ, H_δ, [NeIII] λ3869 are observed. $N_1/H_\beta > 3$, [OII] λ3727/$H_\beta \sim 2$.

0940+510 - The spectrum shows strong emission lines H_α, H_β, N_1, N_2, [OII] λ3727, and moderate intensity [OI] λ6300, H_γ, H_δ. $N_1/H_\beta > 3$, [OII] λ3727/[OIII] λ5007 ~ 1, $H_\alpha/H_\beta \sim 5$. Probably it is LINER.

0940+512 - In the spectrum the following emission lines N_1, N_2, H_β, [OII] λ3727 are identified. $N_1/H_\beta \sim 1$, [OII] λ3727/$H_\beta \sim 2$.

0940+522 - H, K CaII and G-band are observed in absorption. In emission [OII] λ3727 may also be present.

0940+544 - There are strong emission lines N_1, N_2, H_β and H_γ, [OIII] λ4363, H_δ, [NeIII] λ3968+H_ε, H_8, [OII] λ3727. $N_1/H_\beta > 3$, [OII] λ3727 < H_β.

0941+516 - H_α is seen in emission. The other lines of Balmer series H_β-H_{11} are observed in absorption. The absorption lines H,K CaII and G-band are very strong.

0942+587 A- The extended low-contrast N_1, H_β and [OII] λ3727 are present in emission.

0942+587 B- This spectrum shows strong N_1, N_2, H_β, [OII] λ3727, and weak H_γ in emission. $N_1/H_\beta > 2$, [OII]/H_β ~1. Probably it is a physical pair with SBS 0942+587 A.

0943+566 - The weak H_β, H_γ, H_δ are seen in emission. This identification is not sure.

0943+553 - Only H and K CaII in absorption are detected.

0943+506 - H_β and [OII] λ3727 emission lines are observed. The lines of Balmer series H_δ-H_8 are seen in absorption.

0943+581 - The moderate intensity H_α and [NII]λ6584 are present in emission. H_α/[NII] ~ 1.5.

0943+496 - There are emission lines N_1, N_2, H_β, [OIII] λ4363, H_γ, and [OII] λ3727 in the spectrum. $N_1/H_\beta \sim 2$, [OII]/$H_\beta > 1$ and [OII]/[OIII] λ5007 ~ 1.

0943+521 - N_1, N_2, H_β, H_γ and [OII] λ3727 emission, and Balmer series H_δ-H_9 absorption lines are seen. $N_1/H_\beta \sim 1$, [OII]/$H_\beta > 5$.

0944+526 - The weak emission lines H_β, [OII]λ3727 and [NeIII] λ3869 are present in this spectrum. The lines of Balmer series H_γ-H_{11} and very strong H, K CaII, G-band are seen in absorption.

0944+503 - N_1, N_2, H_β and [OII] λ3727 are observed in emission. $N_1/H_\beta \sim 0.7$, [OII]/$H_\beta \sim 2$. The Balmer series lines H_γ-H_9 are in absorption, as well very strong G-band, H, K CaII.

0944+579 - The moderate intensity H_α, [NII] λ6584 and weak [SII] are observed.

0948+507 B- This spectrum has H and K CaII in absorption.

0950+527 - The strong H, K CaII, G-band are observed in absorption.

0950+514 - H_β, H_γ and [OII] λ3727 are seen in emission. H_β is in the center of the broad absorption component. [OII]/H_β > 1. H_γ-H_9, H and K CaII, G-band are observed in absorption.

0951+510 - The following emission lines: H_α, [NII] λλ6548-84, N_1, N_2, H_β, H_γ and [OII]λ3727 are observed. [OII] λ3727/[OIII] λ5007 > 3.

0951+518 - N_1, N_2, H_β, H_γ and [OII] λ3727 are in emission. [OII] λ3727/H_β ~ 2.5. The Balmer lines H_γ-H_9 are seen in absorption.

0951+504 - N_1, N_2, H_β and [OII] λ3727 emission lines are observed. N_1/H_β > 3.

0956+510 - Narrow N_1, and broad H_β, H_γ, H_δ (~100Å), [NeIII] λ3968+H_ε, [NeIII] λ3869, [NeV] λ3425, [NeV]λ3346 are present in emission. It is a Seyfert 1 type galaxy.

0957+518 - Only one sure emission line, probably N_1, is observed.

1003+583 A- The weak extended emission lines H_α and N_1 are observed.

1003+583 B- N_1, N_2, H_β are present in emission. N_1/H_β > 10. It is probably a Seyfert type galaxy.

1005+589 B- Moderate intensity extended H_α and weak [NII] λ6584 are seen in emission.

1006+578 - Only one line, extended H_α, is seen in emission.

1006+604 - The weak extended H_α and N_1 are observed in emission.

1011+600 A- The spectrum shows the following emission lines H_α, H_β, N_1, N_2, [OII] λ3727. N_1/H_β ~ 5, [OII] λ3727/H_β ~ 4.

1011+600 B- H_α, H_β, N_1, N_2, [OII] λ3727 emission lines are observed. N_1/H_β ~ 4, [OII] λ3727/H_β ~ 3.

1016+592 - The following broad emission lines H_α, [NII] λλ6548-84, [SII] λλ6717-31, [OI] λ6300, [OI] λ6364, N_1, and [OII] λ3727 are present. The absorption line H_β has emission core, H_γ-H_9, G-band and NaI D are seen in absorption.

1017+542 - In the blue region of the spectrum the following emission lines N_1, N_2, H_β, H_γ, H_δ and [OII] λ3727 are observed. N_1/H_β ~ 3, [OII] λ3727/H_β ~ 2.

1021+579 - The extended slightly declined strong H_α and weak [NII] λ6584 are observed in emission.

1033+531 - There are strong emission lines N_1, N_2, H_β and [OII] λ3727, and moderate ones HeI λ4471, [OIII] λ4363, H_γ, H_δ, [NeIII] λ3968+H_ε, HeI+H_8, [NeIII] λ3869.

1035+610 - The moderate intensity extended emission lines H_α and [NII] λ6584 are observed. [SII] λλ6717/31 can be suspected. N_1 is also seen in the spectrum.

1037+494 - This spectrum shows the following emission lines: strong N_1, N_2, H_β and weak [OIII] λ4363, H_γ, H_δ, [NeIII] λ3968+H_ε, HeI+H_8, [NeIII] λ3869 and [OII] λ3727. N_1/H_β > 3, [OII] λ3727 ~ H_β.

1039+591 - There are strong H_α and may be weak [NII] λ6584 in emission. In the blue region of the spectrum the emission lines of moderate intensity N_1, N_2, H_β are observed. $N_1/H_\beta > 1$.

1042+604 - Declined strong H_α and moderate intensity [NII] λ6584 are observed in emission. [SII] λλ6717/31 is suspected.

1047+598 - In the blue region of the spectrum N_1, N_2, H_β and [OII] λ3727 are seen in emission. $N_1/H_\beta >> 3$, [OII] $\lambda 3727/H_\beta \sim 1$. It is probably a Seyfert type galaxy.

1055+597 - The weak [OII] λ3727 in emission, G-band and H and K CaII in absorption are observed.

1106+500 - In the blue region of the spectra the emission lines N_1, N_2, H_β and [OII]λ3727 are present. $N_1/H_\beta \sim 3$, [OII] $\lambda 3727 \sim H_\beta$.

1116+583 - Strong contrast emission lines N_1, N_2, H_β are observed. The emission lines [OIII] λ4363, H_γ, H_δ, [NeIII] $\lambda 3968+H_\varepsilon$, $HeI+H_8$, [NeIII] λ3869, [OII] λ3727 are seen as well. $N_1/H_\beta \sim 5$.

1125+562 - The spectrum shows the following emission lines N_1, N_2, H_β, H_γ and [OII] λ3727. $N_1/H_\beta \sim 2.5$.

1147+520 - N_1, N_2, H_β, H_γ, [OII] λ3727 emission and H_γ-H_8 absorption lines are observed. $N_1/H_\beta \sim 5$, [OII] $\lambda 3727 \sim H_\beta$.

1149+579 - N_1, N_2, H_β and [OII] λ3727 are seen in emission. $H_\beta < N_1$, [OII] $\lambda 3727 \sim H_\beta$.

1150+596 - The strong lines N_1, N_2, H_β and [OII] λ3727, weak H_γ and [NeIII] λ3869 are observed in emission. $N_1/H_\beta > 3$, [OII] $\lambda 3727 > H_\beta$.

1150+583 - The emission lines H_α, [NII] λλ6548-84, [OI] λ6300, N_1, N_2, H_β, HeII λ4686, [OIII] λ4363, H_γ, [NIII] λ3869 and [OII] λ3727 are present. It is a Seyfert 2 type galaxy.

1159+545 - The emission lines N_1, N_2, H_β, [OIII] λ4363, H_γ, H_δ, [NeIII] $\lambda 3968+H_\varepsilon$, [NeIII] λ3869 and [OII] λ3727 are seen on weak continuum. $N_1/H_\beta > 3$, [OII] $\lambda 3727 < H_\beta$.

1206+557 - Emission-line galaxy. N_1, N_2, H_β, H_γ, H_δ, [NIII] $\lambda 3968+H_\varepsilon$, [NeIII] λ3869 and [OII] λ3727 are present in the spectrum. $N_1/H_\beta > 3$, [OII] $\lambda 3727 > H_\beta$.

1211+540 - The strong emission lines N_1, N_2, H_β, moderate intensity [OIII] λ4363, H_γ, H_δ, [NIII] $\lambda 3968+H_\varepsilon$, [NeIII] λ3869 and [OII] λ3727 are observed. $N_1/H_\beta > 3$, [OII] $\lambda 3727 < H_\beta$.

1222+588 - The strong emission lines N_1, N_2, H_β, [OII] λ3727 as well as H_γ, H_δ, [NeIII] $\lambda 3968+H_\varepsilon$, [NeIII] λ3869 are present. $N_1/H_\beta \sim 3$, [OII] $\lambda 3727/H_\beta \sim 3$.

1249+493 - The following emission lines N_1, N_2, H_β, [OIII] λ4363, H_γ, H_δ, [NeIII] $\lambda 3968+H_\varepsilon$, [NeIII] λ3869 and [OII] λ3727 are observed. $N_1/H_\beta > 3$, H_β/[OII] λ3727 ~ 3.

1258+582 - HeII λ4686, [OIII] λ4363, H_γ, H_δ, [NeIII] $\lambda 3968+H_\varepsilon$, [NeIII] λ3869 and [OII] λ3727 in emission are seen in the spectrum of this object.

RESULTS

The objects in the range $08^h10^m < \alpha < 08^h30^m$ have the redshifts either $z<0.03$ or $z>0.1$. Probably this result is in agreement with existence of the void found by one of the authors (Stepanian, 1985) some years ago, boundaries of which are not yet determined correctly. Probably SBS 0829+577 A lies on the back wall of this void. Apparently the void size is about 150 Mpc.

Eight galaxies turned out to be Seyfert type ones. SBS 0933+511, SBS 0956+510 are Sy1 type galaxies, SBS 0755+509, SBS 1016+592, SBS 1150+583 are Sy2 type galaxies and SBS 0915+556, SBS 1003+583 B and SBS 1047+598 are probably Seyfert type galaxies. More detailed data will be published later.

Three objects do not differ from stars on the Palomar charts and on our low dispersion survey plates and have survey type as blue stellar objects (BSO). One of them, SBS 0951+518, is a distant galaxy, the other, SBS 0956+510, is a Seyfert type galaxy, and SBS 1106+500 is a galaxy of moderate luminosity.

Three probable physical pairs of galaxies have been found: SBS 0926+606 and SBS 0926+607; SBS 0942+587 A and B; SBS 1011+600 A and B. On the other hand the same SBS 0926+606 is a double system which forms with SBS 0926+607 a multiple system.

Five galaxies are absorption line ones.

Two objects, SBS 0944+527 and SBS 0956+519, turned out to be projections of a star on a galaxy.

So, spectral observations of 263 galaxies from SBS Survey have been carried out at present, 74 objects from which are considered in this paper.

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