

## Global Astronomy Survey : Serbia

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SPoC Approved : Yes

### 1. Professional (Research) Astronomy:

(i) Number of universities offering Astronomy (and their names)

Five state universities in Serbia offer Astronomy:

1. University of Belgrade
2. University of Novi Sad
3. University of Kragujevac
4. University of Niš
5. University of Priština in Kosovska Mitrovica

Two universities in Serbia offer bachelor and master degree studies in Astronomy (from the first study year): University of Belgrade and University of Novi Sad. University of Belgrade offers PhD studies in Astronomy as well. At other three universities Astronomy is taught as a compulsory onesemester course for the students of Physics.

(ii) Number of universities offering Physics (and their names)

Six state universities in Serbia offer Physics:

1. University of Belgrade
2. University of Novi Sad
3. University of Kragujevac
4. University of Niš
5. University of Priština in Kosovska Mitrovica
6. University of Novi Pazar

(iii) Number of academics who have been trained in Astronomy (ideally with their names and levels of qualification)

- University of Belgrade: 242 students graduated in Astronomy/Astrophysics from the University of Belgrade (44% of all graduated students are women, whereas this share is almost 60% in the last 20 years), 67 students received MSc degree, 33 students received PhD degree and 3 students got master degree (300ECTS according to the new ECTS system).

Many of the students who graduated from the University of Belgrade enrolled at PhD studies in the USA, Canada and Australia, and as of recently in the EU countries as well. Most of them already completed their studies, continued their research and gained post-doctoral or permanent positions.

- University of Novi Sad: 6 students graduated in Physics and Astronomy from the University of Novi Sad (3 students with 180 ECTS, and 3 students

with 240 ECTS).

The names of students (year/academic year) who accomplished the corresponding level of qualification at the Universities in Serbia are enclosed at the end of the questionnaire (see the Appendix).

(iv) Number of astronomical facilities (observatories, telescopes, etc) and as much detail about each as possible (websites/contact details)

There is one professional observatory and several amateur observatories in Serbia.

- The Astronomical Observatory of Belgrade (<http://www.aob.bg.ac.yu>) is one of the oldest scientific institutions in Serbia. It was founded in 1887. Eight instruments procured from Germany, on account of the First World War reparations, were mounted in 1934 and constitute still the observational basis of the Observatory (<http://www.aob.bg.ac.yu/instruments/>):

1. Large Refractor - equatorial Zeiss 650/10550 mm
2. Solar Spectrograph (monochromator) Littrow type (Bausch and Lomb grating, 600 l/mm,  $R \sim 130000$  in the fourth order), collimator lens 200/9000 mm, attached to the Zeiss equatorial 200/3020 mm, two astro-cameras Tessar and Petzval 100/800 mm for guiding and projecting
3. Large Transit Instrument Askania 190/2578 mm equipped with two vacuum meridian marks and Opton collimator
4. Large Vertical Circle Askania 190/2578 mm
5. Zeiss Astrograph 160/800 mm
6. Photovisual Refractor Askania 135/1000 and 125/1000 mm
7. Transit Instrument Bamberg 100/1000 mm
8. Zenith - Telescope Askania 110/1287 mm

In addition, Meade reflector 400 mm was purchased in 2005.

Building of a new astronomical station of the Astronomical Observatory of Belgrade on the mountain Vidojevica near Prokuplje at an altitude of 1155 m is nearly completed. Initially, the station will be equipped with the Astro Optik (D=60 cm) reflector, and later hopefully with bigger, more powerful instrument.

There are also several small public and university observatories in Belgrade, Novi Sad, Kragujevac etc.

Here we list some of the most important instruments:

- Novi Sad: two reflectors (Meade 150 mm and 250 mm), and a Meade DeepSky CCD Imager
- Kragujevac: Zeiss Telescope 150/2250, 200/1000 Newton telescope and Newtonian reflector with a Dobson mount (250 mm, f/5)
- Niš: 60mm refractor and a Meade LX200 telescope.

Since 1936 the Belgrade Astronomical Observatory publishes Bulletin de l'Observatoire astronomique de Belgrade. After merging with Publications of Department of Astronomy (founded in 1969) in 1992 it was renamed Bulletin astronomique de Belgrade. In 1998 the name was again changed into Serbian Astronomical Journal (<http://saj.matf.bg.ac.yu>). Along with this main journal, from 1947 the Belgrade Observatory publishes Publications of the

Astronomical Observatory of Belgrade. All the publications are distributed to about 200 scientific institutions and libraries all over the world.

(v) Self evaluation (according to the different phases above, how would you rate your country in terms of Professional Astronomy? Please include any other relevant information to motivate your choice.)

"Phase 1" country.

The position and role of Serbia in the world astronomy corresponds to the size and economical power of the country, being even somewhat above it. In the region of South-Eastern Europe Serbia can be considered as astronomically middle developed country, while in the immediate neighbourhood it is by far the most developed one.

Serbia has been the member of the IAU since 1935. Presently 32 members of the IAU are from Serbia. Astronomy education, research and public outreach are well established. University education and research in astronomy in Serbia have a 125-year long tradition.

## 2. Public Understanding of Astronomy:

(i) What governmental astronomy/science outreach programmes for the public take place (co-ordinated either by government departments or national facilities)

Several public outreach programmes per year are supported by the Ministry of Science and Technological Development, e.g. publishing of two popular astronomical magazines in Serbia: "Vasiona" ("The Universe") and "Astronomija", various projects of the amateur astronomical societies aimed at popularization of astronomy, project of foundation of the Museum of Astronomy, programmes of IYA2009, astronomical summer schools and courses, etc.

(ii) What non-governmental astronomy/science outreach programmes for the public take place (NGO activities or international programmes that your country is involved in)

The activities of 17 amateur astronomical societies in Serbia are rather lively. These are:

- 1) AS "Rudjer Boškovi!" (1934), Belgrade, <http://www.adrb.org>
- 2) The Astronomical Group of the Organization of Young Researchers "Vladimir Mandić-Manda" (1973), Valjevo, <http://www.istrzivaci.org.yu>
- 3) AS "Novi Sad" - ADNOS (1974), Novi Sad, <http://www.adnos.org>
- 4) AS "Alfa" (1996), Niš, <http://www.alfa.org.yu/>
- 5) AS "Milutin Milanković!" (1996), Zrenjanin
- 6) AS "Lyra" (1998), Novi Sad, <http://www.astronomija.co.rs>
- 7) The Astronomical group of the Natural History Society "Gea" (1999), Vršac
- 8) The Society for Radio Astronomy Research "Aurora" (2000), Bor
- 9) AS "Magellanic Cloud" (2001), Prokuplje, <http://www.dorado.org.yu>
- 10) AS "Loznica" (2002), Loznica, <http://www.ad-loznica.org.yu>

11) AS "Andromeda" (2003) Knjaževac, <http://www.andromeda.rs>

12) AS "Novi Pazar" (2004), Novi Pazar

13) The Center for Radio Astronomy "Tesla" (2004), Belgrade

14) AS "Aristarh" (2005), Kragujevac

15) AS "Univerzum" (2006), Ba"ka Palanka

[www.ad-univerzum.org.yu](http://www.ad-univerzum.org.yu) (under construction)

16) AS "Orion" (2007), Ivanjica

17) AS "Milutin Milankovi!" (2007), Pan"evo,

<http://ljvazic.googlepages.com>

Almost all the societies offer educational and outreach programmes for the general public, ranging from star parties to classes on how to use a telescopes and public lectures. Most of them organize regular courses in astronomy, public observations of all major events, lectures, conferences, summer schools and camps (e.g. the AS "Rudjer Boškovi!" organizes "Astronomy courses for beginners" each autumn and spring, the Belgrade Astronomical Weekend (BAW) every June, a special topics meeting titled "Summer Astronomical Meetings" and Summer Schools of Astronomy, lasting 7 to 8 days; the AS "Lyra" organizes the Messier marathon as well as astronomical camps (on Fruška Gora mountain) lasting three days (participants are from Serbia, Macedonia, Bosnia and Herzegovina and Croatia); the Astronomical group within the Natural History Society "Gea" organizes the Vršac Astronomical Meetings every year, etc.).

More details about their activities can be found in the papers published in "Vasiona", "Astronomija", "Astronomical magazine", "Gea", etc.

"Vasiona" ("Universe") is the non-profit astronomical journal, having 56-year long tradition. It is published by the largest and the oldest society of amateur astronomers in Serbia, the AS "Rudjer Boškovi!" of Belgrade, founded in 1934.

Since 2003 a paper magazine "Astronomija" is being published by the AS "Lyra" of Novi Sad and Studio "Spremo". Also, since 1998 the largest astronomical web site in the country, Internet magazine "Astronomical magazine" ([www.astronomija.co.rs](http://www.astronomija.co.rs)) has been maintained by the AS "Lyra" of Novi Sad.

Astronomy has also been popularized by the "Mladi fizi"ar" ("Young Physicist"), a quarterly magazine for the elementary and secondary school students published by the Serbian Physical Society.

There are two planetariums in Serbia: the planetarium of the AS "Rudjer Boškovi!" in Belgrade (opened in 1970) and the planetarium of the AS "ADNOS" in Novi Sad (opened in 2001). Planetariums are visited mainly by the students of elementary and secondary schools. The number of visitors is fairly constant with roughly 30000 people per year.

The amateur astronomical societies have an important role in several projects related to the IYA2009.

Due attention should be paid to numerous lectures that are often given in "Kolarac" Foundation in Belgrade on the latest news in astronomy.

The project "First mobile planetarium in Serbia" (financially supported by

UNESCO) is to be realized as a part of activities in the frame of the IYA2009 in Serbia. The introduction of modern planetarium technology will have a significant impact in terms of education, culture and popularization of astronomy and science, in general, in Serbia.

(iii) Comment on the presence of astronomy in the media (TV, radio, newspapers). Is it very prominent? Are there specific programmes on astronomy? Is the media generally willing to publish news on astronomy?

It could be more prominent than presently is. Media are generally willing to publish news on astronomy, and one may say that astronomy is roughly equally present in daily newspapers, weekly magazines and in TV and radio programmes. There are no many programmes specifically on astronomy, however there are programmes devoted to general science where astronomical topics are frequently presented. Also, almost every major astronomical event is announced and described. In particular, this year the presence of astronomy in media is significantly increased.

(iv) Comment on the presence of astronomy/science in the general culture of the people. Are there any specific challenges or setbacks? Is astronomy a welcome subject of conversation?

There is an ever increasing interest in astronomy among the general public and astronomy topics are a welcome subject of conversation. Specific challenge for the astronomers is an everyday battle against widespread superstition and astrology.

(v) Self evaluation (according to the different phases above, how would you rate your country in terms of Public Understanding of Astronomy? Please include any other relevant information to motivate your choice.)

"Phase 1"/"Phase 2" country.

There is a steadily increasing interest in astronomy among the general public and the public outreach in Serbia has also a rather long tradition. Two planetariums in Serbia are not enough to satisfy the needs of many people interested in astronomy. In that respect, the purchase of the first mobile planetarium (thanks to UNESCO) is the first and very important step. However, a Museum of Science/Astronomy with a large Planetarium is necessary.

### 3. Astronomy in Schools:

(i) What governmental astronomy/science education and outreach programmes for schools take place (co-ordinated either by government departments or national facilities)

Several education and outreach programmes for schools per year are financed by the government, e.g. annual meetings of physics and astronomy teachers organized by the Serbian Physical Society, during which school teachers could learn about advances in astronomy and new ways of teaching astronomy. Also supported is production of popular scientific movies, video

presentations and books, as well as the participation of the Serbian team at the International Astronomical Olympiad (IAO) since 2002, etc.

A section dedicated to astronomy education makes part of the National Conferences of Astronomers held under the auspices of the Ministry of Sciences (organized by the Astronomical Observatory and the Department of Astronomy of the University of Belgrade).

(ii) What non-governmental astronomy/science education and outreach programmes for schools take place (NGO activities or international programmes that your country is involved in)

Special emphasis should here be put on the activities of the Petnica Science Center (PSC) near Valjevo for talented students interested in science (<http://www.psc.ac.yu>, <http://ispast.net>, <http://pi.petnica.rs>). This is the largest independent and non-profit organization (founded in 1982) for extramural scientific education in the South Eastern Europe. The majority of programs are dedicated to secondary school students, but there are the programs for elementary school pupils, undergraduate students and high school teachers as well. The PSC is also very active in the preparation of the Serbian team for the International Astronomy Olympiad, particularly in the practical training activities.

For the secondary school students the PSC organizes two cycles of seminars in astronomy. Each cycle consists of 4 seminars (winter, spring, summer and autumn), on the average lasting 7-8 days and having about 25 participants.

The first cycle is of an educational character. The students learn about various astronomy topics, observational techniques and methods of research, data analysis, the use of astronomical instruments and data presentation.

Participants of the second cycle complete their independent observational/research projects. The seminars within the second cycle are intended to support their work. Selected research projects are presented at the Conferences of the PSC participants "A step into science" each December and are published in "Petnica notebooks".

The participants and young collaborators of the PSC attend the International Meteor Conferences, Summer Schools of Astronomy in Višnja (Croatia), Summer Schools "X Lab" in Germany, Weizmann Institute in Israel, etc.

The participants of Petnica programmes come for the most part from Serbia, but also from all the neighbouring as well as many other countries.

Petnica Science Center has large network of associates (over 1500) and collaborates with about 70 scientific institutions in Serbia and over 100 worldwide, with 250 schools (Serbia, Montenegro, Bosnia and Herzegovina, Croatia, Macedonia...), etc.

Let us again mention here the project "First mobile planetarium in Serbia" (financially supported by UNESCO) that is to be realized as a part of activities in the frame of the IYA2009 in Serbia and its expected great importance for education at all levels in Serbia.

(iii) Comment on the presence of astronomy in the school curriculum. Is it part of the school curriculum? Is it very prominent? What age groups?

Astronomy is a part of the primary and secondary school curricula but neither as a separate nor as a compulsory subject.

Astronomy topics in primary schools are taught as topics in the courses of Natural History, Geography and Physics.

From 1969 to 1990 astronomy in secondary schools was taught as a fourth year one hour per week course. After 1990 astronomy topics became incorporated with topics of fourth year physics courses. Astronomy is being taught as a separate course only at the Belgrade Mathematical High School and at seven high schools throughout Serbia.

However, within the current reform of primary and secondary school education, two important changes have been made. First, two astronomy lectures have been introduced as extra topics in the 7th year physics course curriculum. Second, after 17 years, astronomy is expected to be reintroduced in the 4th year of secondary schools as a separate and compulsory one hour per week course.

Pupils in primary school and high-school students express great interest in astronomy. This has recently resulted in several remarkable achievements. So far Serbian team participated at six International Astronomy Olympiads (IAO) and in total won 4 gold, 5 silver and 13 bronze medals as well as 1 special prize.

(iv) Comment on the status of astronomy/science in schools. Are there any specific challenges or setbacks? Sufficient number of students studying maths and science? General interest in maths/science/astronomy in schools?

Within the current reform of secondary school education astronomy is expected to be reintroduced in the 4th year of secondary schools as a separate and compulsory one hour per week course. This is very important as the astronomy topics taught within physics courses are usually not well or enough covered. In the secondary schools of a gymnasium type students can choose between two groups: predominantly human or predominantly natural sciences. The interest of students for mathematics and natural sciences is, in general, comparable with the interest in human sciences.

The interest in astronomy among primary and secondary-school students is significant as witnessed by the number of participants in Petnica seminars, camps, membership of amateur societies, and several remarkable achievements at IAOs.

Although a general (worldwide) trend of a decreasing number of students which enroll university studies in mathematics and natural sciences is present in Serbia as well, there is still a considerable interest for the university studies in astronomy, so that the number of students in astronomy remains about constant.

In addition, as a nice example of the interest of the secondary and university students in astronomy, the participation of Serbia in International Astronomical Youth Camps on the maps of Europe and of the World can be seen from two pdf-files attached herewith.

(v) Self evaluation (according to the different phases above, how would

you rate your country in terms of Astronomy in Schools? Please include any other relevant information to motivate your choice.)

"Phase 1" country.

Astronomy is a part of the primary and secondary school curricula. Within the current reform of primary and secondary school education, two important changes have been made. First, two astronomy topics have been introduced as extra topics in the 7th year physics course curriculum. Second, after 17 years, astronomy is expected to be reintroduced in the 4th year of secondary schools as a separate and compulsory one hour per week course.

Here we should stress an extremely important role of the Petnica Science Center for talented students of all levels interested in science.

A high level of interest of elementary and secondary school students can be also illustrated by their participation at six International Astronomy Olympiads that resulted in 22 medals and one special prize.

## APPENDIX.

Graduated in Astronomy at the University of Belgrade:

1. Dimitrijević S. Slobodanka (1935/1936)
2. Randić J. Leo (1938/1939)
3. Rakoš M. Dragutin (1948/1949)
4. Oskanjan S. Vasilije (1948/1949)
5. Mitić A. Ljubiša (1950/1951)
6. Protić B. Milorad (1950/1951)
7. Arnautović M. Pavle (1951/1952)
8. Djordjević M. Radmilo (1951/1952)
9. Šepinac N. Zaslav (1951/1952)
10. Simovljević L. Jovan (1951/1952)
11. Teleki K. Djordje (1951/1952)
12. Jotić M. Miroslava (1952/1953)
13. Stanišić P. Ljubomir (1952/1953)
14. Dačić M. Ljubiša (1952/1953)
15. Djordjević Dj. Gordana (1952/1953)
16. Stefanović M. Dušan (1953/1954)
17. Herceg M. Janoš (1953/1954)
18. Popović A. Ivanka (1953/1954)
19. Jovanović D. Božidar (1953/1954)
20. Lazović P. Jovan (1953/1954)
21. Urbanec K. Vera (1954/1955)
22. Lučić S. Vojislav (1954/1955)
23. Grković M. Stanislava (1954/1955)
24. Simeunović M. Dragomir (1954/1955)
25. Kunjić B. Marija (1954/1955)
26. Sadžakov N. Sofija (1955/1956)
27. Matijašević Ž. Nadežda (1956/1957)



28. Stojadinovi! M. Ružica (1956/1957)
29. Gruji! A. Radomir (1956/1957)
30. Vukovi! B. Vera (1957/1958)
31. Arsenijevi! D. Jelisaveta (1957/1958)
32. Despotovi! M. Vidosava (1958/1959)
33. Hek A. Hedviga (1958/1959)
34. Pivac M. Dimitrije (1958/1959)
35. Milinski J. Nikola (1959/1960)
36. Popovi! M. Georgije (1960/1961)
37. Pakvor J. Ivan (1960/1961)
38. Ivani! M. Zoran (1961/1962)
39. Mijatov Ž. Milan (1961/1962)
40. Kubi"ela Dj. Aleksandar (1961/1962)
41. Olevi! M. Dragomir (1962/1963)
42. Djurovi! M. Dragutin (1962/1963)
43. Zulevi! J. Danilo (1962/1963)
44. Franuši! M. Boris (1962/1963)
45. Mali R. Snežana (1963/1964)
46. Radogosti! J. Verica (1963/1964)
47. Radovanovi! M. Radovan (1964/1965)
48. Blagojevi! D. Milutin (1967/1968)
49. Angelov D. Trajko (1968/1969)
50. Aksentijevi! D. Miloš (1968/1969)
51. Mari! M. Vera (1968/1969)
52. Da"i! D. Miodrag (1968/1969)
53. Vukovi! M. Slobodan (1968/1969)
54. Djokovi! M. Nikola (1969/1970)
55. Kuzmanoski S. Mike (1969/1970)
56. Naumoski R. Krste (1970/1971)
57. Vince I. Ištvan (1970/1971)
58. Proti! M. Vojislava (1971/1972)
59. Ivanovi! R. Zoran (1971/1972)
60. Miler Dj. Ratomirka (1971/1972)
61. Dimitrijevi! S. Milan (1971/1972)
62. Biliškov M. Vilenco (1972/1973)
63. Kneževi! I. Zoran (1972/1973)
64. Bavrli! S. Rodoljub (1972/1973)
65. Madi! B. Vesna (1972/1973)
66. Trailovi! R. Bata (1972/1973)
67. Petronijevi! R. Rajko (1972/1973)
68. Ninkovi! D. Slobodan (1973/1974)
69. Kruni! J. Dejan (1974/1975)
70. Boži"kovi! S. Djuro (1974/1975)
71. Keki! J. Ljiljana (1974/1975)
72. Tomi! S. Aleksandar (1974/1975)
73. Petrovi! V. Mihailo (1974/1975)

74. Rajkovi! M. Borivoj (1974/1975)
75. Popovi! S. Mihailo (1975/1976)
76. Šnebli! M. Ranko (1975/1976)
77. #abri! N. Ninoslav (1975/1976)
78. Jovanovi! A. Borivoje (1975/1976)
79. Biberovi! T. Djula (1975/1976)
80. Jovanovi! R. Biljana (1975/1976)
81. Trajkovska K. Veselka (1975/1976)
82. Karovska Dj. Margarita (1975/1976)
83. Radoji"i! M. Slavica (1976/1977)
84. Mator"evi! R. Nadežda (1976/1977)
85. Šegan D. Stevo (1976/1977)
86. Ramani A. Nuhi (1978/1979)
87. Kakaševski Dj. Vlatko (1978/1979)
88. Djorgovski B. Stanislav (1978/1979)
89. Miloševi! R. Radmila (1979/1980)
90. Djuraševi! R. Gojko (1979/1980)
91. Jankov S. Slobodan (1979/1980)
92. Konrad S. Vera (1979/1980)
93. Cari! S. Branka (1979/1980)
94. Nadj Dj. Geza (1980/1981)
95. Kati! I. Zoran (1980/1981)
96. Jovanovi! H. Bora (1980/1981)
97. Atanackovi! M. Olga (1981/1982)
98. Blagojevi! M. Slobodan (1981/1982)
99. Stan"i! D. Zorica (1981/1982)
100. Krga M. Radmila (1981/1982)
101. Marti! V. Milena (1982/1983)
102. Pavlovi! M. Rade (1982/1983)
103. Kršljanin M. Vladimir (1982/1983)
104. Klari! S. Mario (1982/1983)
105. Stankovi! D. Miroljub (1982/1983)
106. Radonji! D. Miloš (1983/1984)
107. Toplak I. Nenad (1983/1984)
108. Obradovi! D. Marjan (1983/1984)
109. Vranješ N. Jovo (1983/1984)
110. Doh"evi! D. Zorana (1984/1985)
111. Skuljan N. Jovan (1984/1985)
112. Avramovi! S. Dragoslava (1985/1986)
113. Djurdji! Lj. Ljiljana (1986/1987)
114. Luji! B. Violeta (1986/1987)
115. Erkapi! R. Sanja (1986/1987)
116. Toljaga D. Marinko (1986/1987)
117. Bleši! J. Branko (1986/1987)
118. \$atovi! V. Zlatko (1987/1988)
119. Todorovi! D. Neli Kristin (1987/1988)

120. Stepanovi! R. Momir (1987/1988)
121. Roter T. Svetlana (1987/1988)
122. Damljanovi! M. Goran (1987/1988)
123. Vuleti! S. Milan (1987/1988)
124. Markovi! V. Snežana (1987/1988)
125. Popovi! #. Luka (1987/1988)
126. Simi! D. Goran (1988/1989)
127. Vuli! S. Dobrila (1989/1990)
128. Doki! M. Ljiljana (1989/1990)
129. Radmilovi! D. Marija (1990/1991)
130. Rankovi! V. Vesna (1990/1991)
131. Petrovi! D. Jasmina (1990/1991)
132. Jevremovi! M. Darko (1991/1992)
133. Nikoli! M. Silvana (1991/1992)
134. Matijaš M. Nada (1991/1992)
135. Stankovi! N. Dejan (1991/1992)
136. Dugandžija B. Marija (1991/1992)
137. Samurovi! S. Srdjan (1992/1993)
138. Milovanov R. Tatjana (1992/1993)
139. Marjanovi! R. Petar (1992/1993)
140. Uroševi! V. Dejan (1993/1994)
141. Nagl G. Mirko (1994/1995)
142. Van"etovi! P. Marija (1994/1995)
143. Aleksi! V. Gordana (1994/1995)
144. #o"ovska R. Marika (1994/1995)
145. Punoševac D. Predrag (1994/1995)
146. Jovanovi! P. Predrag (1994/1995)
147. Jovanovi! Ž. Božidar (1995/1996)
148. Stanimirovi! Ž. Snežana (1995/1996)
149. Salim M. Samir (1995/1996)
150. Savkovi! N. Miroslava (1995/1996)
151. Djuriši! D. Ljubomir (1995/1996)
152. #ulji! M. Aleksandar (1995/1996)
153. Miloševi! M. Vesna (1995/1996)
154. Popovi! S. Nataša (1996/1997)
155. Bon A. Edi (1996/1997)
156. Kova"evi! B. Andjelka (1996/1997)
157. Trajkovi! M. Nataša (1996/1997)
158. Simi! J. Zoran (1997/1998)
159. Petrovi! I. Jelena (1997/1998)
160. Ze"evi! D. Tijana (1997/1998)
161. Milovanovi! D. Nenad (1997/1998)
162. Nedeljkovi! D. Saša (1997/1998)
163. Okoli! M. Dragana (1998/1999)
164. Jovanovi! Dj. Aleksandra (1998/1999)
165. Kuzmanovska T. Olgica (1998/1999)

166. Skoko R. Dunja (1998/1999)
167. Šuk M. Matija (1998/1999)
168. Vitas D. Nikola (1998/1999)
169. Vince I. Oliver (1999/2000)
170. Kereš D. Dušan (1999/2000)
171. Simi! S. Aleksandar (1999/2000)
172. Stojmirovi! D. Irena (1999/2000)
173. Dajkovi! B. Igor (1999/2000)
174. Otaševi! D. Aleksandar (1999/2000)
175. Širka M. Zlatko (1999/2000)
176. Bogdanovi! D. Tamara (1999/2000)
177. Miladinovi! N. Nataša (1999/2000)
178. Danilovi! S. Dušan (1999/2000)
179. Miovi! J. Vjera (1999/2000)
180. Kova" J. Katarina (1999/2000)
181. Mili! Z. Miroslav (2000/2001)
182. Bori! D. Nataša (2000/2001)
183. Vu"kovi! Z. Maja (2000/2001)
184. Prodanovi! S. Tijana (2000/2001)
185. Bogosavljevi! S. Milan (2000/2001)
186. Joji! D. Radica (2001/2002)
187. Danilovi! M. Sanja (2001/2002)
188. Mileti! M. Milka (2001/2002)
189. Todorovi! J. Nataša (2001/2002)
190. Ili! J. Dragana (2001/2002)
191. Raki! V. Milica (2001/2002)
192. Radujko K. Ranko (2001/2002)
193. Šurlan B. Brankica (2001/2002)
194. Borka V. Vesna (2001/2002)
195. Luki! Z. Zarija (2001/2002)
196. Teši! R. Gordana (2001/2002)
197. Jezdimirovi! R. Milenko (2001/2002)
198. Damjanov I. Ivana (2002/2003)
199. Simi! S. Vladan (2002/2003)
200. Pavlukovi! N. Alan (2002/2003)
201. Arbutina R. Bojan (2002/2003)
202. Stankovi! D. Marija (2002/2003)
203. Karapandža M. Raša (2002/2003)
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