

## **Global Astronomy Survey: Uruguay**

First Submission: Tabare Gallardo (SpoC) [see human resources section] 19 Jan 2009

SpoC Approved : Yes

### **1. Professional (Research) Astronomy:**

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

1, Universidad de la Republica (<http://www.astronomia.edu.uy/depto/>)

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

1, Universidad de la Republica (<http://www.fisica.edu.uy/>)

(iii) Number of academics who have been trained in Astronomy:

3 PhD level (Julio Fernandez, Gonzalo Tancredi, Tabare Gallardo) + 4 MSc level (Andrea Sanchez, Andrea Sosa, Nancy Sosa, Eduardo Alvarez) and some others that emigrated.

(iv) Number of astronomical facilities (observatories, telescopes, etc):

Observatorio Astronomico Los Molinos (IAU Code 844) with 2 telescopes (35-45cm).

Contact: [gonzalo@fisica.edu.uy](mailto:gonzalo@fisica.edu.uy). Website: <http://oalm.astronomia.edu.uy/> .

Observatorio Los Algarrobos Salto Uruguay (IAU Code I38) with a 30cm telescope.

Contact: [olasu@adinet.com.uy](mailto:olasu@adinet.com.uy). Website: <http://www.olasu.com.uy/>

(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 : There is a well consolidated \*but small\* research group in the field of Planetary

Sciences, with some PhDs and MSc and some graduate and under-graduate students.

At present we have very few students.

## **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):

a) Espacio Ciencia ([http://latu21.latu.org.uy/espacio\\_ciencia/es/](http://latu21.latu.org.uy/espacio_ciencia/es/))

b) Planetario Municipal (<http://www.montevideo.gub.uy/planetario/>).

c) Outreach activities at Observatorio Astronomico Los Molinos

d) The Agencia Nacional de Investigacion e Innovacion (<http://www.anii.org.uy/>)

has a Program for outreach of Science and Technology (total amount of U\$S 400.000 approximately, beginning in 2008).

(ii) What non-governmental astronomy/science outreach programmes for the

public take place (NGO activities or international programmes that your

country is involved in):

a) Ciencia Viva (<http://cienciaviva.fcien.edu.uy/>)

b) Amateurs activities (<http://www.aaa.org.uy/>) like telescopic observations, telescope making courses and so ones.

c) Planetario Movil Kappa Crucis (<http://www.kappacrucis.com.uy/>)

d) Semana de la Ciencia y Tecnologia (<http://www.semanacyt.org.uy/>)

(iii) Comment on the presence of astronomy in the media (TV, radio, newspapers).

No science sections in TV nor radio but some newspapers have Science and Technology section.

Is it very prominent? No.

Are there specific programmes on astronomy? No.

Is the media generally willing to publish news on astronomy? Yes

(iv) Comment on the presence of astronomy/science in the general culture

of the people.

It is very marginal if compared with football and astrology for example.

Kids are more interested in science than adults (maybe due to internet, NatGeo and Discovery).

Are there any specific challenges or setbacks?

A challenge could be to promote the scientific journalism at the schools of journalism.

Is astronomy a welcome subject of conversation? Yes, but usually involved with UFOs and astrology.

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

you rate your country in terms of Public Understanding of Astronomy?

phase 2 : We need scientific journalists.

### **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)

a) Programa de Popularizacion de la Cultura Cientifica (Science Clubs)  
([http://www.dicyt.gub.uy/index.php?option=com\\_content&task=blogcategory&id=39&Itemid=93](http://www.dicyt.gub.uy/index.php?option=com_content&task=blogcategory&id=39&Itemid=93))

b) Astronomo Por un Fin de Semana: during 2009 a selection of students will spend a weekend with the staff of OALM

c) Sessions at Planetario Municipal with a Spitz B planetarium (from 1955).



(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)

a) Kappa Crucis (now digital) planetarium ([www.kappacrucis.com.uy](http://www.kappacrucis.com.uy))

b) Ciencia Viva (<http://cienciaviva.fcien.edu.uy/>)

(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 exists since 1889 at high school (age 16) as part of the curriculum, but

with a small amount of hours per week (since 2005 with 2 classes of 45 min each). So

it is not attractive for a teacher to become an Astronomy teacher.

See [http://www.ces.edu.uy/webastronomia/astro\\_ces/index.htm](http://www.ces.edu.uy/webastronomia/astro_ces/index.htm).

Starting in 2009 the new program for school at ages 3 to 12 incorporates

several topics on astronomy ([http://www.cep.edu.uy/programaescolar/Programa\\_Escolar.pdf](http://www.cep.edu.uy/programaescolar/Programa_Escolar.pdf)).

(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?

The point is the formation and salary of teachers. The formation of the teachers needs

a big change and low salaries make no attractive for students to become a teacher.

Bad prepared teachers with bad salaries and in schools with poor equipped laboratories, computers or multimedia

cannot succeed in stimulating science to kids or teenagers. Things are changing at least with respect to

computers: since 2009 all students al ages 6-12 will have a notebook (OLPC program).

(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 2 : Our education authorities (<http://www.ces.edu.uy/autoridades.htm>) need to realize the importance of science (and astronomy) and the relevance of good scientific formation for teachers and professors.