

Global Astronomy Survey : Principat d'Andorra

First Submission: Joan-Marc Miralles [see human resources section] 19 February 2009
SPoC Approved : Yes

1. Professional (Research) Astronomy:

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

None

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

None

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

1 - Dr. Joan-Marc Miralles, Ph.D. from the University of Toulouse (France) in 1998 with summa cum laude.

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

None

(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 3 - Though we have practically no community inside Andorra itself, we have access to the facilities of the neighboring countries (Spain and France in particular, Europe at large) for academic studies. In terms of research, we have started since last summer the astronomy department at the Institut d'Estudis Andorrans (www.iea.ad) that we hope to develop in the near future. We are not part of IAU as a country (though I am a member of IAU since 2002).

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)

We have several science programmes (not exclusively astronomy related) for the public which include a summer university, conferences all year long and several publications by the Institut d'Estudis Andorrans.

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

There is an Andorra Society for Sciences (www.sac.ad) which organizes regular conferences and publishes a journal. The Grup d'Amics de les Matemàtiques d'Andorra (GAMMA) organizes a mathematic week every year, which this year will be centered on the relations between astronomy and mathematics. Professional colleges (engineers, medical doctors, economists,...) also organize science outreach activities for the public

(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?

We have easy access to media from France and Spain, therefore we benefit from the presence of astronomy on their media. In Andorra astronomy is present in the media on occasion when there are agency news, events in Andorra (i.e. conferences or observation gatherings). We have no specific programme on astronomy neither on TV nor radio. Media are willing to publish news on astronomy, for instance I was asked this year to do a weekly astronomy contribution by one of the newspapers published in Andorra.

(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 are no specific challenges about science nor astronomy. Our society is largely educated and most of the people have a basic understanding of astronomy. Astronomy conferences are well attended.

(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.)

I would evaluate in a Phase 2. We lack of a specific astronomy outreach which is included only on occasion in larger outreach programmes.

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)

Education in Andorra is formed of several education systems: The Andorran Education System is the responsibility of the Andorran Government; The French Education System is responsibility of the French Government; The Spanish Education System is responsibility of the Spanish Government plus The Confesional Education System that is responsibility of the Bishop of la Seu d'Urgell and follows the programmes of the Spanish Education System.

The Andorran Government organizes a science day for all education system which include conferences by keynote speaker and science fair competitions. For IYA2009, the government has organized several astronomy conferences to be given by professional astronomers at classrooms of all education systems

(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)

None of my knowledge

(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?

The Andorran system represents about a bit more than 1/3 of the students in Andorra. Basic Astronomy knowledge is teached in primary school, 8-10 years old. More astronomy is teached as part of the physics lectures at the secondary school level, 13-18 years old. It is not a prominent part of the curriculums.

For the other education systems, as they follow the curriculums of either spanish or french education, the answers should come from the french and spanish survey.

(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?

There are no specific challenges nor setbacks. Maths and science are part of the general curriculum until the age of 16. The number of students specializing in maths and science for their graduation has been in slow increase in recent years since it leads to broader possibilities for university access. Interest in maths/science is high in all schools.

(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.)

I would rate in Phase2. We have a broad education community but since the astronomy community in the country is so small, there is no specific astronomy presence. IYA2009 has been an opportunity to bring astronomy closer to the schools and the response so far encourages us to continue these activities the next years.