1. Introduction

Dear colleagues,

It is a great pleasure to be here today at the 2nd International Space Forum - The African Chapter dedicated to Space Science and Academia for Sustainable Development in Africa.

I would like to thank for organizing this event the Kenyan Authorities, the ASI President, Prof. Roberto Battiston, and the IAF Team. It is also a great pleasure to be in Kenya, whose historic cooperation with Italy has enabled the establishment and development of the Malindi ground station, a strategic asset for Europe and its launchers.

There is of course another special reason I would like to congratulate the Kenyan Authorities for, as a little less than a year ago, thanks to the determination of Dr. Kimani, your country joined a very prestigious list of African countries in setting up the Kenya Space Agency!

2. An important step for Africa

This is the second International Space Forum and it is explicitly dedicated to Africa. This reveals Africa’s growing interest for space and the awareness that space science and academia can provide a consistent contribution to sustainable development for all.

I believe this will be an important step towards increasing the number of African professionals in the space sector, promoting sustainable environmental practices and enhancing space cooperation as a driver for capacity building in Africa, thus also contributing to UNISPACE+50, to the implementation of the UN Agenda 2030 and the African Union Agenda 2063.

3. Building on existing assets

Space has already demonstrated the benefits it can provide in a range of fields, such as agriculture, transport, bridging the digital divide, health, marine and costal protection, mapping, forest health monitoring and protection… But all of this cannot be effective without a clear
understanding of the potential of space assets, well expressed needs and, of course, the necessary infrastructures.

This is the goal behind the long history of space cooperation between France and many African countries and organizations. With ASECNA, for instance, the French space agency CNES has demonstrated the feasibility of a Satellite-Based Augmentation System (SBAS) for improved air traffic control, notably in tropical regions. This should lead to an operational system in the next few years (2022) based on the latest technologies.

But this is just one example of actions that have been carried out in this respect through French, EU and ESA programmes, by providing knowledge and tools to enable processing of space data. France supports the development of projects based on the exploitation of spatial data on the African continent, in particular the management of agricultural resources through high-resolution imagery; the use of data including altimetry for the management of water resources; the application of空间 services and facilities for tele-epidemiology and telemedicine; and the International Charter on Space and Major Disasters and the recovery observatory established by CNES and other space agencies...

4. The role of Academia

But none of this can be sustained without knowledge.

African universities have a major role to play in training future generations of scientists and engineers and in disseminating ‘good practices’. For instance, through the AMESD (African Monitoring of Environment for Sustainable Development) and MESA (Monitoring for Environment and Security in Africa) projects, organized by the European and African Unions, and other projects as well, GeonetCast receiving stations have been provided to a number of African universities to offer easy access to Earth-observation satellite data, and to start building value-added image products for environmental monitoring. This was done in particular for master's degrees dedicated to agriculture and water resource management.

The ActinSpace initiative is another excellent indication that space is driving innovation for employment and economic development in a sphere outside its usual ecosystem. This initiative created by CNES and ESA gives young people the chance to develop their entrepreneurial spirit and conceive concrete applications to found start-ups. It has already been successfully applied in some African countries, such as Morocco, Gabon, Senegal and Nigeria.

5. Space Climate Observatory

On the occasion of the One Planet Summit last December, 30 space agencies agreed to set up a Space Climate Observatory (SCO) based on observations from space of ECVs—the essential climate variables defined by the Global Climate Observing System, GCOS—data validation and intercalibration, data access based on a free and open data policy, and data expertise. The main objective is to provide users, especially those with no specific expertise in climate space data, with all the information needed for monitoring the health of our planet—thus promoting the spirit of space climate data democracy and agencies’ actions in support of climate science.

The French, European and global space sectors are resolutely committed to tackling climate change and to moving forward with the implementation of the Paris Agreement. This initiative is supported by European space agencies, as well as other nations including China, Russia, India, Mexico, Morocco and the United Arab Emirates. This powerful tool is open to international partnership and cooperation and can substantially contribute to African wealth and development.

6. Concluding remarks

Space science and academia are powerful means to achieve sustainable economic development. They can be effectively applied through African partnerships and provide concrete and useful services to fulfil the most important needs of countries. France and its space agency have already a number of partnership projects and initiatives with African countries that can be ramped up in the future. All the countries and agencies attending this conference can work together in a common effort to provide efficient synergies for the different initiatives that could go under the name of “Space for Africa”.
Thank you for your attention.