



# “NATIONAL SPACE SYSTEM (SNSAT)”: Platform for Promotion of Human Talent, Pilot School Program 2021.

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# NATIONAL SPACE PROGRAM (SNSAT)

Launch Ceremony  
May 26th 2021





**Space:**

**The dimension to build a culture based  
on technology innovation**

# AGENDA



- I. National Satellite System (SNSAT)
- II. Education and Talent Promotion in SNSAT
- III. “Columbia Space Lab” Program
- IV. School Program - Pilot Program 2021
- V. Conclusion





# NATIONAL SATELLITE SYSTEM

HONOR - LEALTAD - CUMPLIMIENTO DEL DEBER - EXCELENCIA EN EL SERVICIO

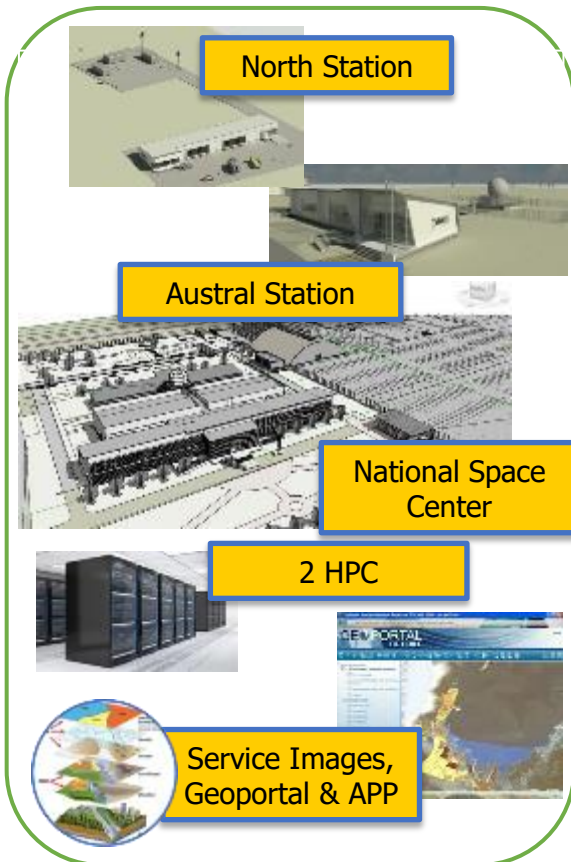
# I. National Satellite System

## SUB-SYSTEMS OF THE NATIONAL SATELLITE SYSTEM (SNSAT)

### NATIONAL SATELLITE SYSTEM (SNSAT)

#### SUBSYSTEM 1

Geospatial Information



North Station

Austral Station

National Space Center

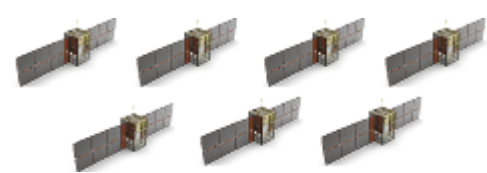
2 HPC

Service Images, Geoportal & APP

#### SUBSYSTEM 2

National Space Development

- AIT and local manufacturing of 7 satellites and payloads:



- Design and Develop a National Satellite Payload



#### SUBSYSTEM 3

National Satellites

- 3 Remote Sensing Satellite.



#### SUBSYSTEM 4


SATCOM Service

- Dedicated SATCOM Service



#### Educational and Talent Promotion

- Doctor and Master Degrees
- Diplomats in Space Formation
- CAN Sat Education Program
- School Program “Columbia Space Lab”







# EDUCATION AND TALENT PROMOTION

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# II. EDUCATION AND TALENT PROMOTION (SNSat)



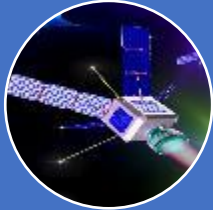
SISTEMA NACIONAL SATELITAL

Reducing Digital Gap

Reducing Technological Gap



PHD & MASTER DEGREE



DIPLOMAT & SPACE COURSES



SCHOOL PROGRAM  
COLUMBIA SPACE LAB



SEMINARS & CONFERENCES

PAYLOAD & CANSAT PROGRAMS

DEVELOPS AXIS

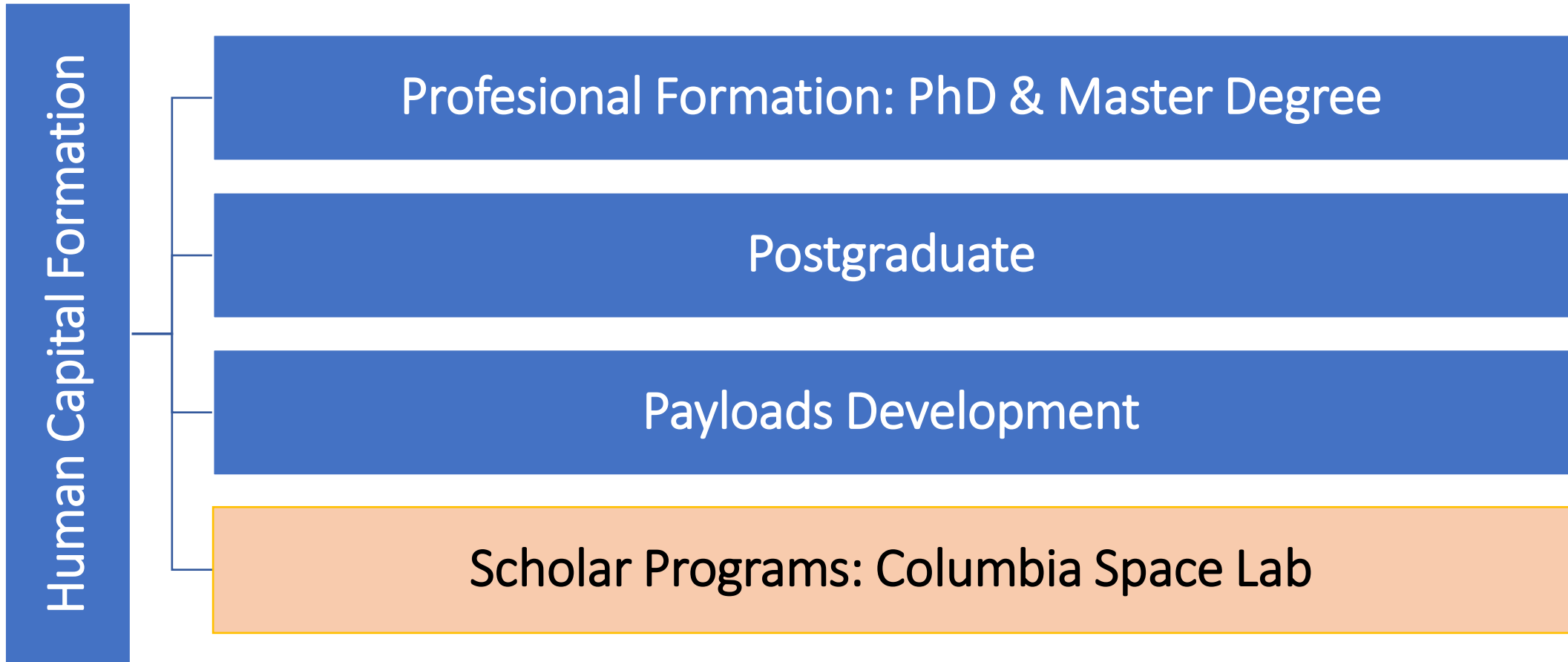




## II. TALENT PROMOTION (SNSat)



### TALENT PROMOTION & EDUCATION: Development Model





# School Program

## “Columbia Space Lab”

HONOR - LEALTAD - CUMPLIMIENTO DEL DEBER - EXCELENCIA EN EL SERVICIO



# Scholar Programs: Columbia Space Lab



## PURPOSE:

- Inspire and encourage children to learn science and explore space through practice
- Encourage soft skills and teamwork.
- Expand their knowledge and critical analysis to complete all the challenges required by mission.



Previous Experiences of Columbia Space Lab



**2022:**  
Full Program  
April - December



**2021:** Pilot Program  
October - December



**COL ILAN RAMON**  
**First Israeli Astronaut**

# Scholar Programs: Columbia Space Lab



## School Program 2022

- 9 months (01 scholar year).
- 08 missions, (3 to 6 session by mission).
- 01 weekly **online** session.
- 05 students' team (up to 25 by school)
- 3 cities: Antofagasta, Santiago and Punta Arenas
- 15 schools



SISTEMA NACIONAL SATELITAL

#	MISIONES	temática
1	“Lying the foundation”	Standarization
2	“Husband” mission	Mars Challenge
3	“McCool” mission	Rob Goldberg Machine
4	“Anderson” mission	Rockets.
5	“Brown” mission	Setting mars
6	“Chawla” mission	Microgravity environment.
7	“Ramon” mission	Own mission
8	“Clark” mission	Saving the planet
9	Final mission	Colony outer the space
10	Final	Presentation





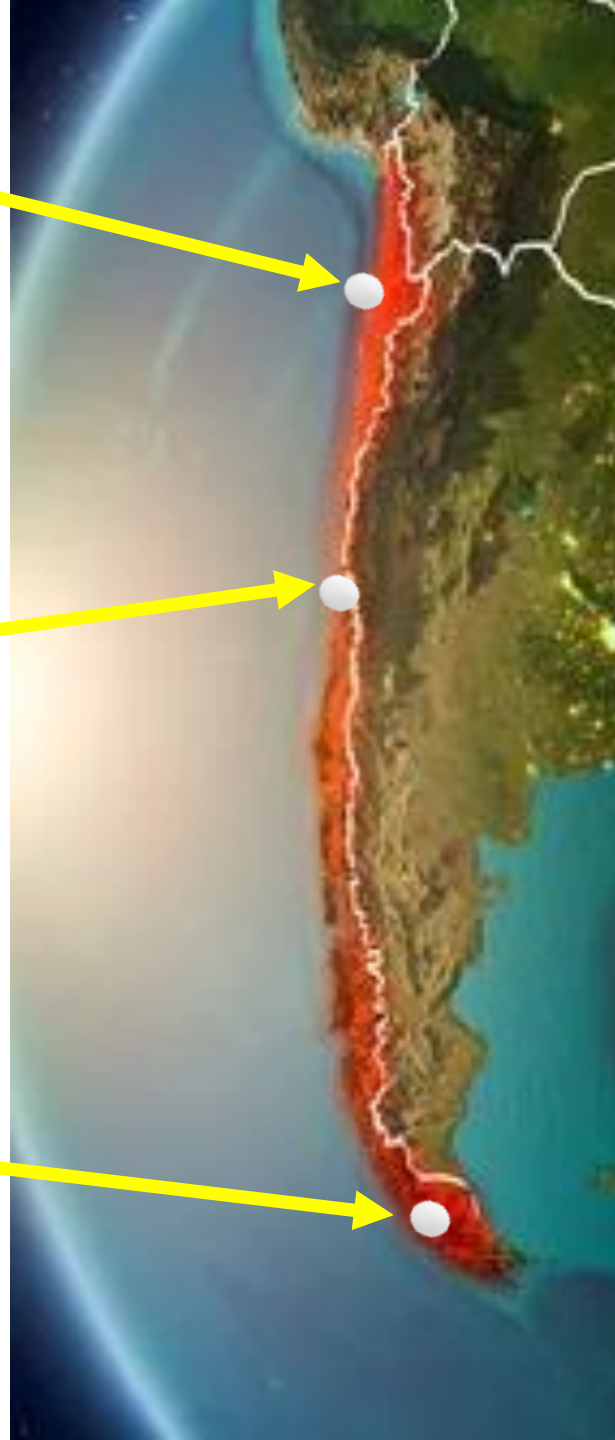
# School Program

## “Pilot Program 2021”

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# School Pilot Program 2021

Pilot Program implemented between October to December 2021



*Minister of Science and Technology with students*

**Who is it for...?**

- High Schools Students, 12 – 16 years old (8º Básico a 3º medio; Chilean grades)

**Challenge or Mission:**

- Develop a Water Rocket



# School Pilot Program 2021



How did it develop...?

- Via Teleconference, 2 times per week, with full support of Chilean Air Force in the School

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# School Pilot Program 2021



Soft Skill	Start	Finish
	1 – 5 scale	
Critical thinking	4,0	4,6
Teamwork	3,5	4,5
Personal motivation	3,8	4,4
Curiosity	4,0	4,5
Challenge facing	4,5	4,9
Presentation skills	3,0	4,5
Oral, verbal, rhetorical skills	3,6	4,4





# Conclusion



The Scientific and academic sector has a key role for national spatial development.



A new national capability requires a new concept for human capital formation and talent promotion, especially for future generations.



This program aims to lay the foundations for similar programs in other establishments in the country, in order to bring the space closer to any area of knowledge and guide an efficient use of the space.



The program allowed to improve not only scientific skills, but also soft skills such as teamwork and leadership.



Increase the areas of defense cooperation with civil society and increase civic-military relations from education and training of talent



**THANK YOU VERY MUCH**

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