



---

## **Information furnished in conformity with the Convention on Registration of Objects Launched into Outer Space**

### **Note verbale dated 21 June 2022 from the Permanent Mission of Chile to the United Nations (Vienna) addressed to the Secretary- General**

The Permanent Mission of Chile to the United Nations (Vienna), in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space (General Assembly resolution [3235 \(XXIX\)](#), annex), has the honour to transmit the following notification of registration of the launch of three nanosatellites, SUCHAI-2, SUCHAI-3 and PlantSat, from the Space Force Station on Cape Canaveral on 1 April 2022 (see annex).<sup>1</sup>

---

<sup>1</sup> The data on the space objects referenced in the annex were entered into the Register of Objects Launched into Outer Space on 11 July 2022.



## Annex

### Registration data on space objects launched by Chile\*

The Faculty of Physical and Mathematical Sciences of the University of Chile has launched the SUCHAI-2, SUCHAI-3 and PlantSat satellites, all three of which are CubeSat-standard nanosatellites (3U, 10 x 10 x 30 centimetres) forming part of the space programme conducted by the University.

The nanosatellite group comprising SUCHAI-2, SUCHAI-3 and PlantSat was part of the payload of satellite carrier ION-SCV-005, which belongs to the Italian company D-Orbit. Transported inside the carrier, the nanosatellites were launched on Friday, 1 April 2022, at 1624 hours 0 seconds UTC aboard a Falcon 9 rocket that was launched from Space Launch Complex 40 at the Space Force Station on Cape Canaveral, Florida, United States of America. Once in orbit, the ION carrier began to deploy the CubeSats, the first being PlantSat, which was released on 9 April 2022 at 1422 hours 31 seconds UTC. SUCHAI-3 was deployed on 13 April 2022 at 0803 hours 04 seconds UTC. Lastly, SUCHAI-2 was deployed on 14 April 2022 at 0745 hours 0 seconds UTC.

Chile is the launching State for the SUCHAI-2, SUCHAI-3 and PlantSat nanosatellites, whose international designators are 2022-033AM, 2022-033AL and 2022-033AH, respectively. The name of the SpaceX company mission was Transporter-4.

The orbital parameters of the nanosatellites are provided below.

The main function of the nanosatellites is educational and scientific. Their specific objectives include the creation of advanced human capital, the possibility of conducting scientific experiments relating to the study of the upper atmosphere and organisms in space, and the creation of a database with space information.

The space project of the Faculty's Space and Planetary Exploration Laboratory coordinated actively with the Office of the Undersecretary for Telecommunications of Chile, which in turn coordinated internally with the International Telecommunication Union (ITU) and the International Amateur Radio Union.

The current communications link of the SUCHAI-2, SUCHAI-3 and nanosatellites is in the UHF band, specifically at 437.23, 437.25 and 437.24 MHz, respectively. Further information is available from the ITU website: PlantSat,<sup>1</sup> SUCHAI-2<sup>2</sup> and SUCHAI-3.<sup>3</sup>

Further information on the Faculty's nanosatellite project is available at <https://spel.cl/>.

### SUCHAI-2

#### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2022-033AM
Name of space object	SUCHAI-2

\* The registration data are reproduced in the form in which they were received.

<sup>1</sup> [www.itu.int/net/ITU-R/space/snl/bresult/radvance.asp?q\\_sns\\_id=&sel\\_satname=PLANTSAT&\[texte=Plantsat&sel\\_esname=none&ktexte=&sel\\_adm=all&sel\\_org=all&sel\\_ific=&sel\\_year=&sel\\_date\\_from=&sel\\_date\\_to=&sel\\_rcpt\\_from=&sel\\_rcpt\\_to=&sel\\_gso=gso&sel\\_gso=ngso&sel\\_orbit\\_from=&sel\\_orbit\\_to.](http://www.itu.int/net/ITU-R/space/snl/bresult/radvance.asp?q_sns_id=&sel_satname=PLANTSAT&[texte=Plantsat&sel_esname=none&ktexte=&sel_adm=all&sel_org=all&sel_ific=&sel_year=&sel_date_from=&sel_date_to=&sel_rcpt_from=&sel_rcpt_to=&sel_gso=gso&sel_gso=ngso&sel_orbit_from=&sel_orbit_to.)

<sup>2</sup> [www.itu.int/net/ITU-R/space/snl/bresult/radvance.asp?sel\\_ific=2959&ie=y.](http://www.itu.int/net/ITU-R/space/snl/bresult/radvance.asp?sel_ific=2959&ie=y.)

<sup>3</sup> Ibid.

State of registry	Chile
Date and territory or location of launch	1 April 2022 at 1624 hours 0 seconds UTC; Space Launch Complex 40, Space Force Station, Cape Canaveral, Florida, United States
Basic orbital parameters <sup>a</sup>	
Nodal period	5,677.30 seconds
Inclination	97.3761 degrees
Apogee altitude	504.7 kilometres
Perigee altitude	489.7 kilometres
General function of space object	SUCHAI-2 is part of the constellation of the University of Chile for educational and scientific use

**Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator	University of Chile
Launch vehicle	Falcon 9 rocket; ION-SCV-005

**SUCHAI-3**

**Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space**

Committee on Space Research international designator	2022-033AL
Name of space object	SUCHAI-3
State of registry	Chile
Date and territory or location of launch	1 April 2022 at 1624 hours 0 seconds UTC; Space Launch Complex 40, Space Force Station, Cape Canaveral, Florida, United States
Basic orbital parameters <sup>a</sup>	
Nodal period	5,682.26 seconds
Inclination	97.3958 degrees
Apogee altitude	509.9 kilometres
Perigee altitude	492.6 kilometres
General function of space object	SUCHAI-3 is part of the constellation of the University of Chile for educational and scientific use

**Additional voluntary information for use in the Register of Objects Launched into Outer Space**

Space object owner or operator	University of Chile
Launch vehicle	Falcon 9 rocket; ION-SCV-005

## PlantSat

### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2022-033AH
Name of space object	PlantSat
State of registry	Chile
Date and territory or location of launch	1 April 2022 at 1624 hours 0 seconds UTC; Space Launch Complex 40, Space Force Station, Cape Canaveral, Florida, United States
Basic orbital parameters <sup>a</sup>	
Nodal period	5,674.84 seconds
Inclination	97.3854 degrees
Apogee altitude	499.7 kilometres
Perigee altitude	490.8 kilometres
General function of space object	PlantSat is part of the constellation of the University of Chile for educational and scientific use

### Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	University of Chile
Launch vehicle	Falcon 9 rocket; ION-SCV-005

<sup>a</sup> Obtained from information available on the CelesTrak website (<https://celestrak.com/NORAD/elements/gp.php?INTDES=2022-033>).

---