



Alba & Co supported a key space and defence investment, the CNES signed a cooperation agreement with the French Secretary for the Sea on space inputs for sea protection, and we went to discover what downstream space companies had to propose for sustainability at ChangeNow 2023.

The coming months promise to be highly exciting for the French and European space ecosystems, with the last flight of Ariane 5, the Bourget Paris Air Show and many more. Let's dive into last month's updates, and the perspective for the summer coming ahead.

## Alba is visiting Le Bourget

This 54th edition will take place from the 19th to the 25th of June and Alba and Co's team will be joining this important business occasion.

We will monitor several intelligence activities during Le Bourget: space innovations, aerial mobilities, sustainable aviation, H2, and other subjects of interest for our clients.

Do not hesitate to contact us if you wish to discuss any specific subject!

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## Space Industry and Space startups

### French investments in critical defence and space technologies: Weinberg Capital Partners invests in SEMIP-Codechamp

On the 30<sup>th</sup> of May, it was announced that Weinberg Capital Partners invested in SEMIP-Codechamp, which develops and produces high precision encoders and potentiometers for high technology strategic applications in defence, space, civil nuclear and automotive.

Created by Serge Finkelstein in 1959, the company which he still controls is a key element of the French BITD (Industrial and Technological Defence Base).

Alba & Co is happy to share that we assisted SEMIP-Codechamp and their M&A advisor Aurignac Finance in their vendor strategic due diligence.

This investment by Weinberg Capital Partner, which is the first investment by their Eiréné fund, will allow SEMIP-Codechamp to accelerate its commercial development, structure the group and initiate an external growth strategy, to reaffirm SEMIP-Codechamp's position as the European leader in its domain.

### Happy birthday to Maiaspace: looking back on a successful first year

Maiaspace, the startup style ArianeGroup subsidiary designing a reusable mini launcher, has celebrated its 1 year anniversary a few weeks ago. In a year, they have completed their design phase, implemented a factory in Vernon, grew their team to 70 employees, and delivered a full-scale stage prototype. These milestones give high hopes for the years ahead.

Maiaspace aims at an operational rollout in 2026. To do so, they are scaling up their activities, with their new factory in Vernon and a strong recruitment campaign. In 2023, they aim at cryo-testing the upper stage, ground testing the Colibri Kick-stage, and preparing their launch site activities for the following milestones.

They are also relocating their headquarters to La Défense, to accommodate the growing team. The company received a €6M investment from ArianeGroup, bringing the total funding to €10,9M.



## Sustainable space downstream applications: a look at our trip to

The Alba & Co team attended the Change Now Forum three weeks ago, and had the opportunity to meet many downstream space actors, who take advantage of the high quality European geospatial resources to gather data on agricultural resources, water levels, carbon capture, and more. Data gathering is a key tool for environmental protection and adaptation/mitigation of climate change.

We spoke with MEOSS, which uses satellite imagery to monitor water resources and develops territorial optimisation tools; with Space4Good, which develops hands-on solutions channelling satellite imagery and remote sensors to analyse climate change effects throughout the globe; and Kermap, who's Nimbo solution allows users to monitor closely the evolution of agricultural land and exploitation for more sustainable agricultural activities in Europe.

Space activity has taken an increasingly big place in Earth's day-to-day life, from telecommunications to defence and science. The industry's emulation for climate mitigation and monitoring applications is yet another proof of space's powerful impact on human wellbeing.

## Space Institutions

### JUICE: some updates from 8 million km away

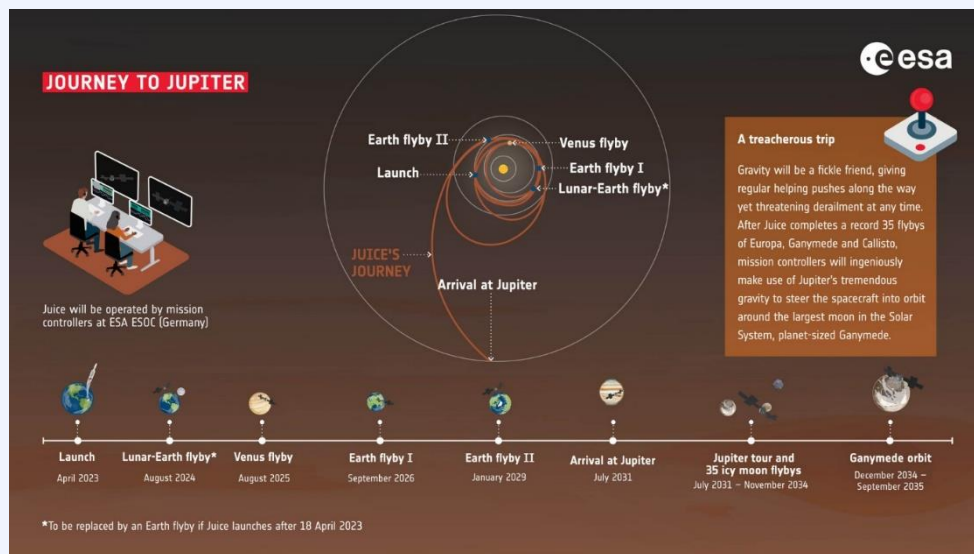
After launching from the second to last Ariane 5 rocket six weeks ago, the Juice probe started its eight years long journey towards Jupiter and its icy moons. In the last 6 weeks, the ESA ESOC (Germany) based Flight Control Team deployed all solar panels, antennas, probes and booms that will help us gather critical data throughout Juice's journey.

The Flight Control Team displayed high creativity and reactivity when just a few days after launch the RIME (Radar for Icy Moon Exploration) antenna, a key element to the scientific mission, stayed stick in place instead of unfolding as planned. A small pin had jammed the moving segments of the antenna. To release the element, the JUICE operators tried many ingenious and surprising solutions, like shaking the probe thanks to its thrusters, or heating the jammed part using sunlight. Finally, they remotely fired a small mechanical device inside the bracket, which shook the pin just enough to release the antenna fully, three weeks later than its planned release.

Such resourcefulness from the operating team is promising for the years ahead, as throughout such a long mission JUICE will surely face other shortcomings.

All 10 key instruments of the probe will be remotely checked in the coming weeks, to ensure perfect functioning as it cruises towards Jupiter. The probe will perform two Earth flybys and one Venus flyby before reaching Jupiter.

This ESA-made graphic depicts the trajectory of the Juice probe throughout its flight.



## When the ocean and stars collide: a cooperation agreement between the CNES and the French secretary for the Sea

On the 4<sup>th</sup> of May, the French State Secretary for the Sea was in French Guiana, and signed an agreement on sea protection with the head of the Centre Spatial Guyanais, Marie Anne Clair. This agreement affirms clearly the key role that space activities can have in ocean monitoring.

Four main avenues of input were identified:

- The protection of oceans and their biodiversity
- The fight against illegal fishing
- The support to maritime planification
- Rescue missions and the gestion of maritime signalling

Europe, and most notably France, is a breeding ground for innovation in the use of satellite imagery, and multiple companies such as Unseenlabs are channelling European satellite capabilities to support the protection of environments, including maritime.

Alba & Co had the privilege to meet Unseenlabs a few months ago, at the Euronaval forum in Paris, and we will see them again on the stand of the Ministry of Defence during the Paris Air Show at Le Bourget.

Unseenlabs aims at providing exhaustive maritime situational awareness to both civilian and military. The main existing tool to identify ships' positions, the AIS ( Automatic Identification System) can very easily be tampered with or even turned off by ships with illegal intents. Unseenlabs uses the ships' electromagnetic signature to locate ships that may have turned off their AIS. The possible applications are maritime traffic, security and defence, and environment protection.

The company, based in Rennes, was founded in 2015 by Clement and Jonathan Galic. The company relies on 9 satellites dedicated to vessel geolocation, the last of which (BRO-9) was launched in April 2023.

## The months ahead

### A last Hurrah for Ariane 5

A few days ago, Ariane 5 was meant to take off for its last journey, its 117<sup>th</sup> flight. After 27 years, the launcher has successfully launched a total mass of 945 tons, placing 239 satellites into orbit.

The last Ariane 5 was meant to launch on the 16<sup>th</sup> of June 2023 from Kourou, French Guiana, and release the geostationary military telecommunications satellites Syracuse 4B, and the German Heinrich Hertz satellite. However, the flight was cancelled for technical reasons, and should be rescheduled in the coming weeks.

To watch the launch live, follow this link:

<https://www.youtube.com/channel/UCiBaDdAbGIFDeS33shmlD0A>

## PLD Space could launch soon, and change the European space paradigm

The Spanish launcher startup is ready to launch its MIURA 1 SN 1 Test Flight Mission, a suborbital flight to validate the design of the 12,7m rocket, with PLD Aerospace's MIURIA 5 orbital rocket.

They have attempted to launch it twice. The test was first meant to be conducted on the 31<sup>st</sup> of May, but was cancelled for meteorological reasons. As stated by the company, the launch is highly dependent on the weather, and can thus

only be announced a few hours before it takes place. On Friday the 16<sup>th</sup>, during a conference we attended at the Paris Air Forum, Raul Torres, CEO, announced that Miura 1 had a window of opportunity to launch that same evening. Regrettably, the launch was yet again cancelled last minute due to technical shortcomings.

Regardless of these delays, the company might still be the first European company to launch a reusable launcher, on mainland European ground.

