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# Project EVA

## The conversational AI platform for Space

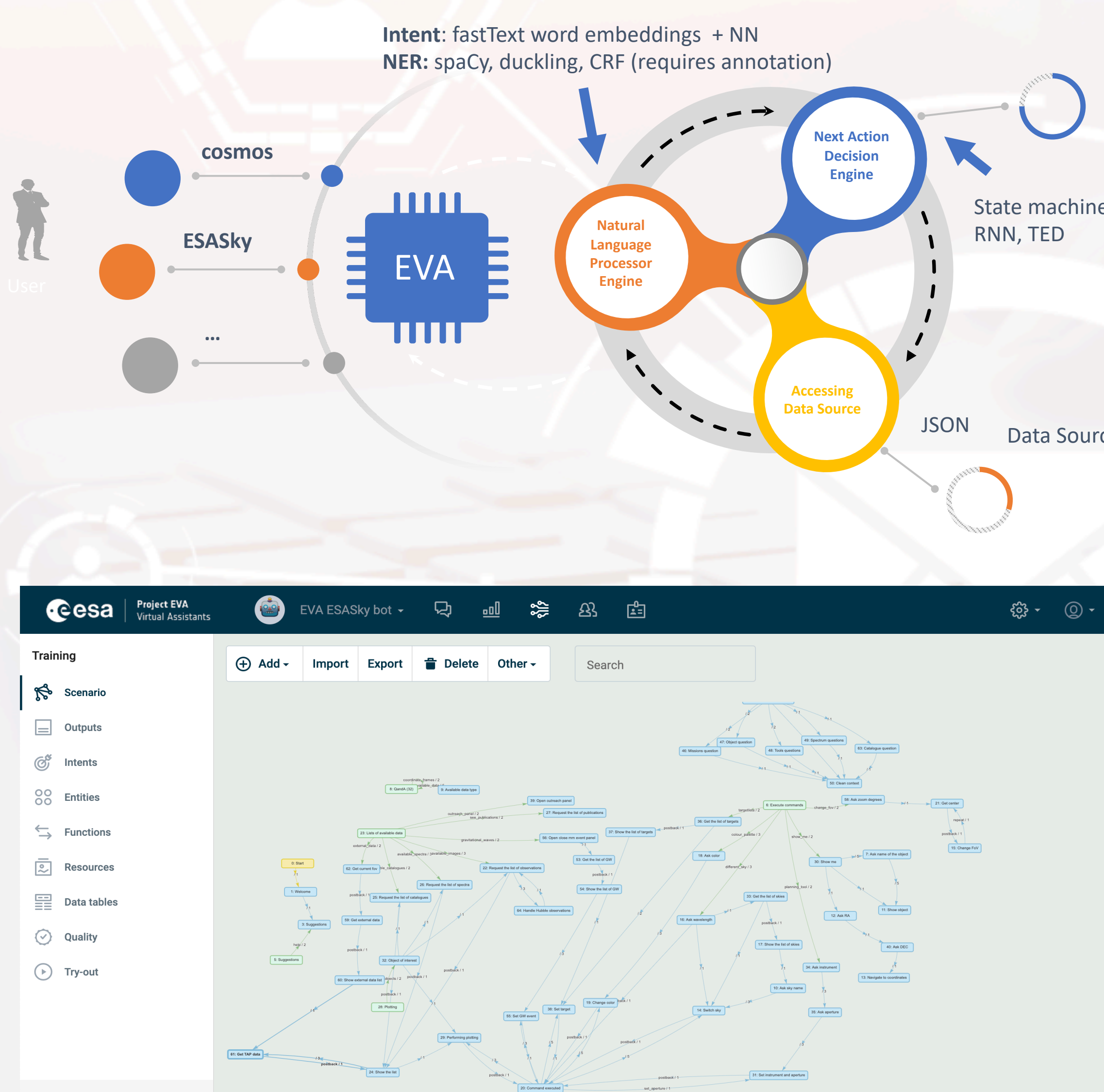
Offering new ways to interact with the space science portals

<https://eva.esa.int>

Machine Learning is a sub-field of the computer science and the Artificial Intelligence (AI) that provides systems with the ability to act and learn without being explicitly programmed. One of the fields where machine learning techniques have been applied with great results is the Natural Language Processing (NLP). Namely, conversational AI is a branch of NLP focused on giving computers the ability to understand and interact with text and spoken words in much the same way human beings can.

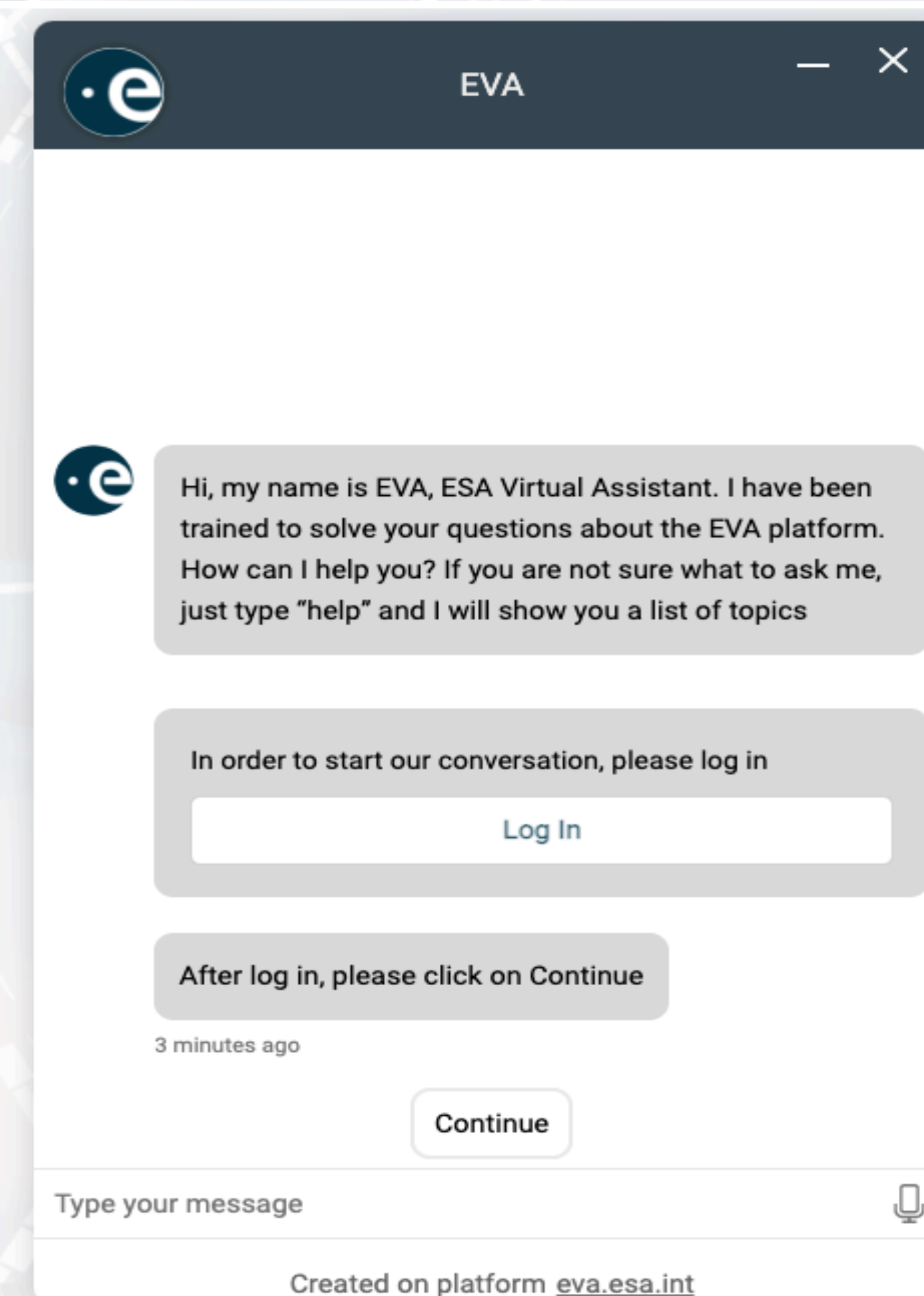
ESA Virtual Assistant (EVA) is a WEB platform capable of defining, building, training and deploying customized virtual assistants to power ESA services with conversational AI skills.

These virtual assistants can be defined as software agents that converse through a chat interface, so they are able to have a real conversation with the user in order to provide him/her with some kind of valuable action.



### KEY FEATURES

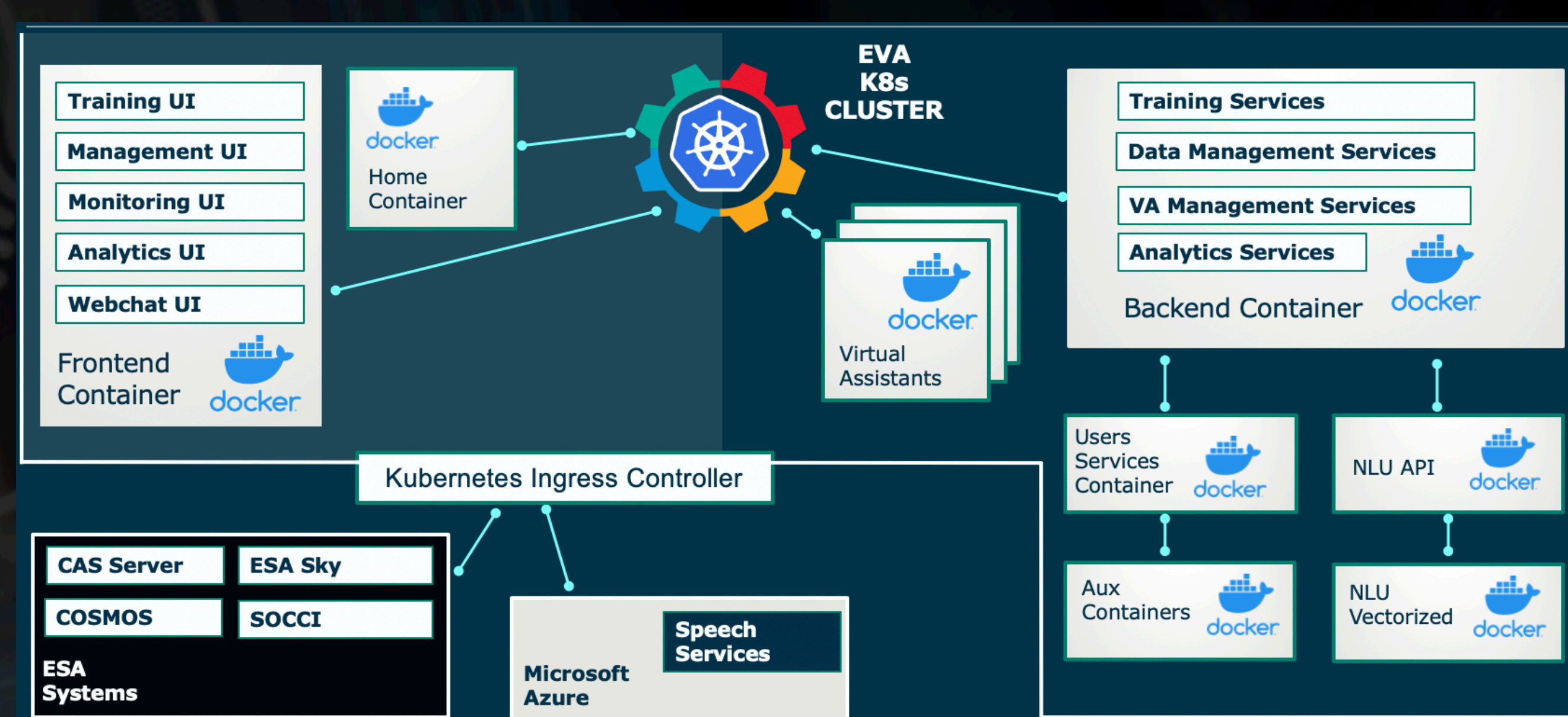
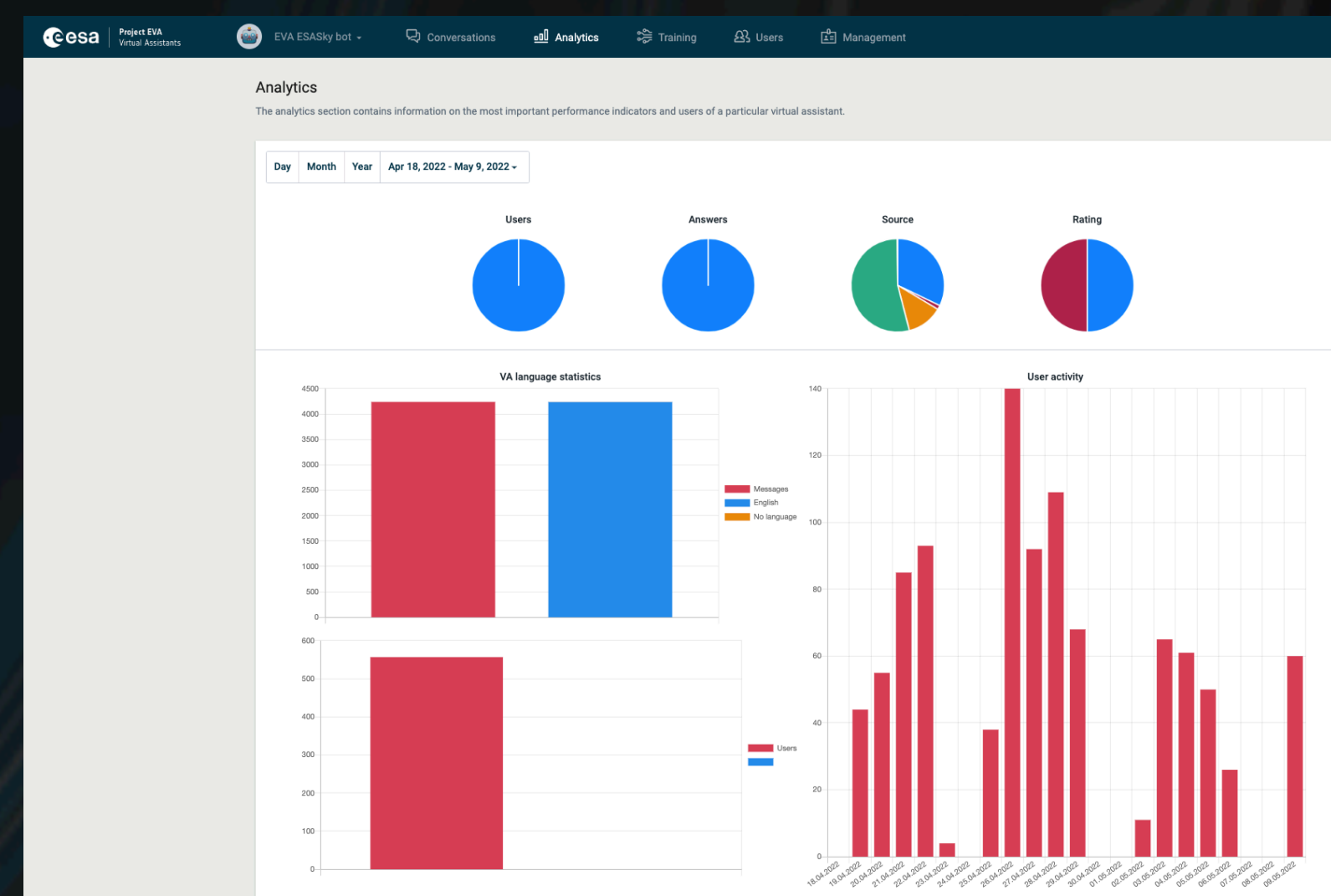
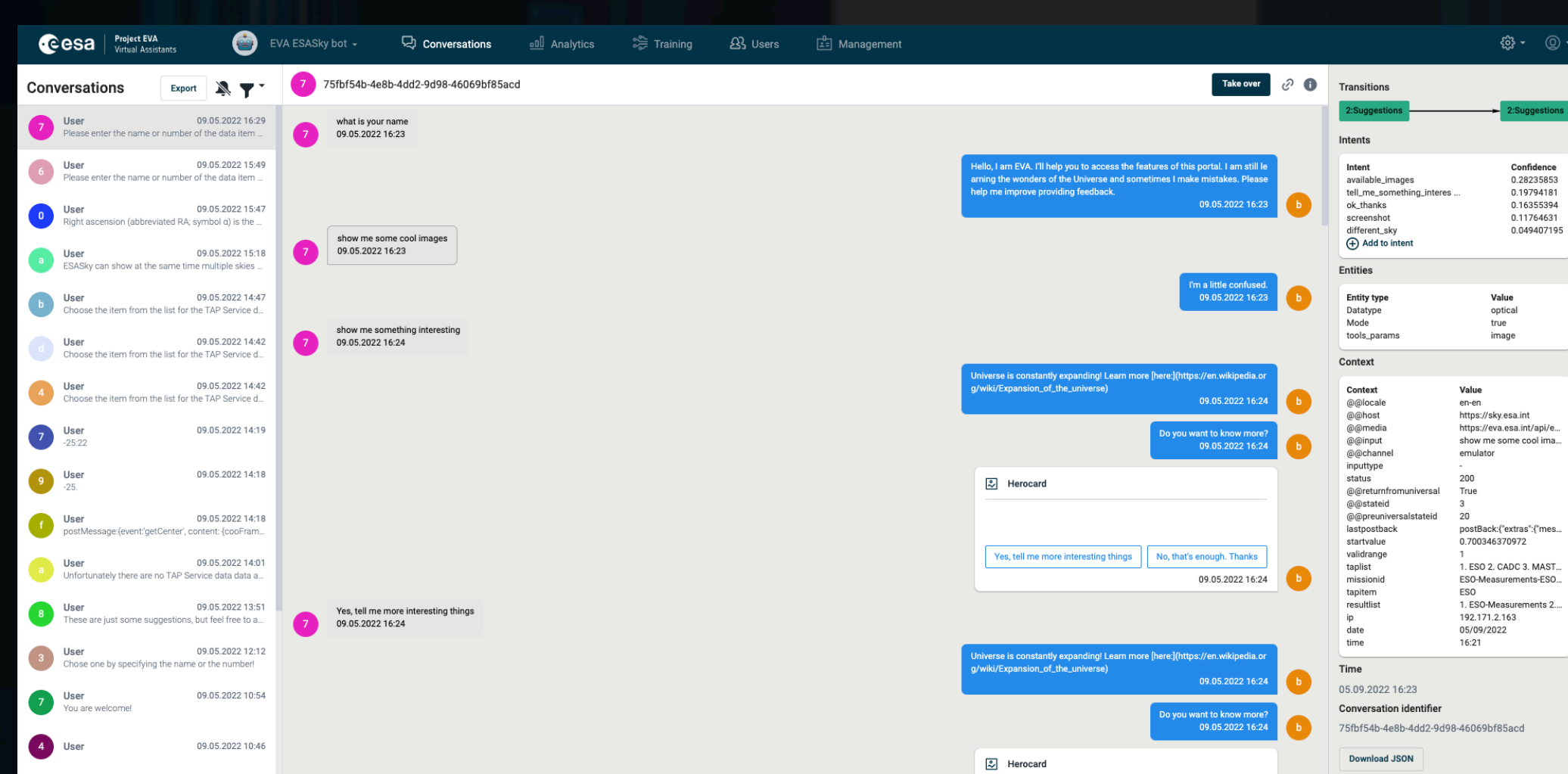
- **Visual flow designer:** EVA has been designed with ease of use in mind. Therefore you can use the EVA Visual designer to handle all aspects of your virtual assistant, which allows trainers to quickly see, understand and improve the behavior of the bot.
- **Omnichannel:** Build once and deploy everywhere. EVA platform offers a wide range of integration channels, so once your bot is finished you will be able to release it on your site, mobile application or twitter profile right away.
- **Advanced AI:** EVA is developed making use of the most recent advances in AI. Latest trends like transformers allows EVA bots to recognize **user intents and entities** evaluating the context and providing accurate and efficient responses in fairly complex use cases.
- **ESA Systems built-in integration:** EVA bots are able to communicate with several ESA systems providing advanced features (e.g. users authentication, common knowledge base, API's compatibility, human conversation takeover or domain specific skills).



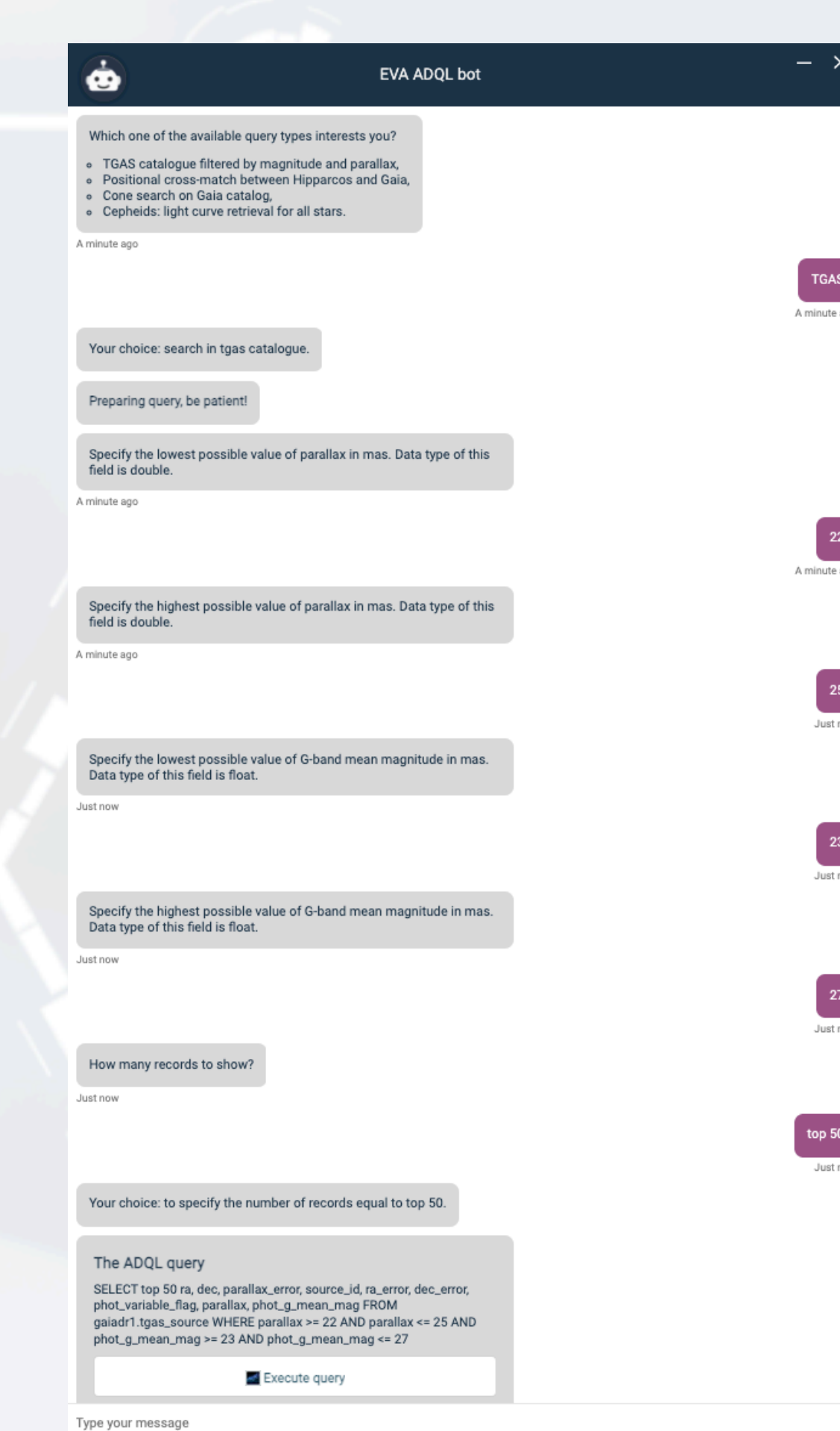
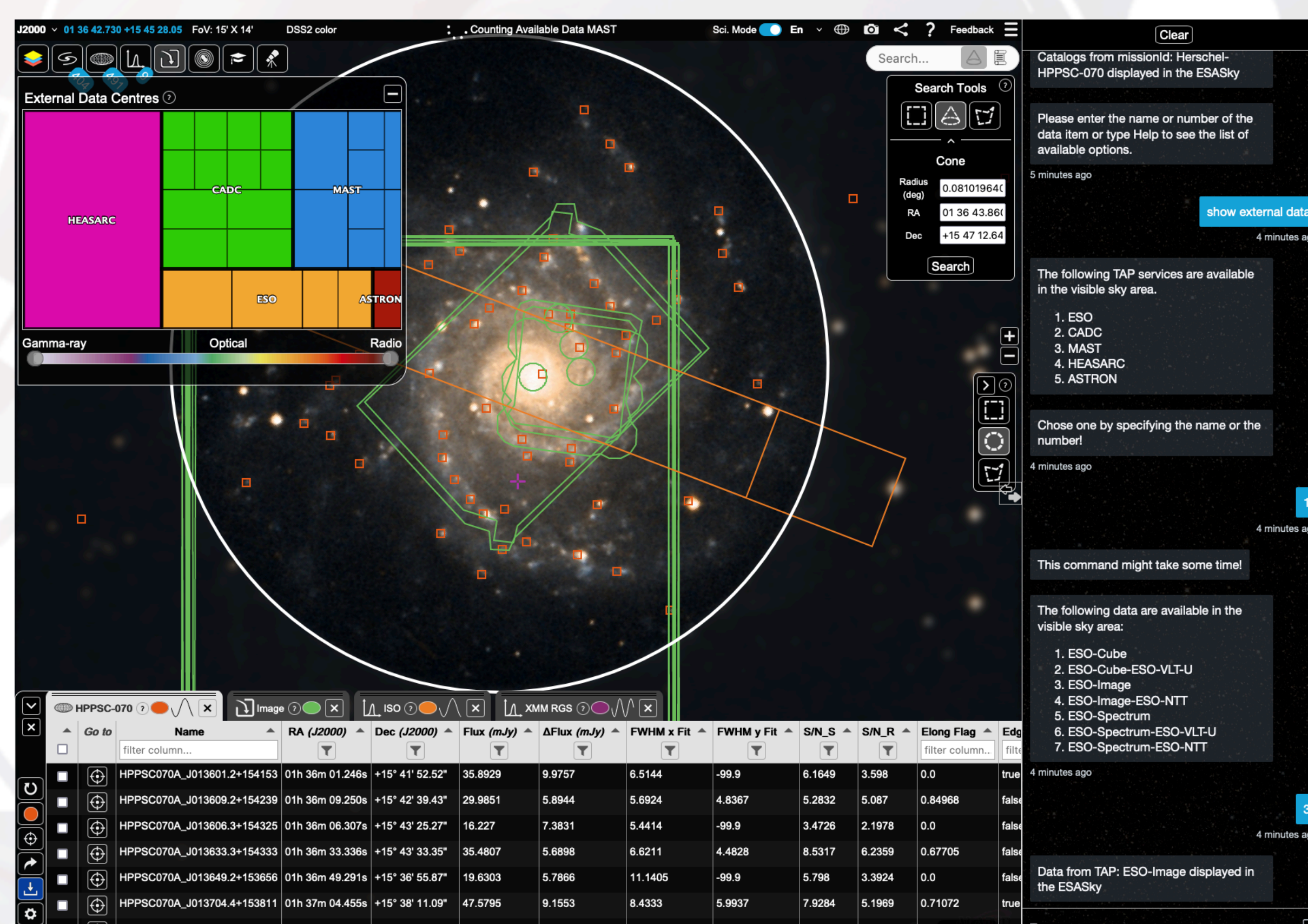
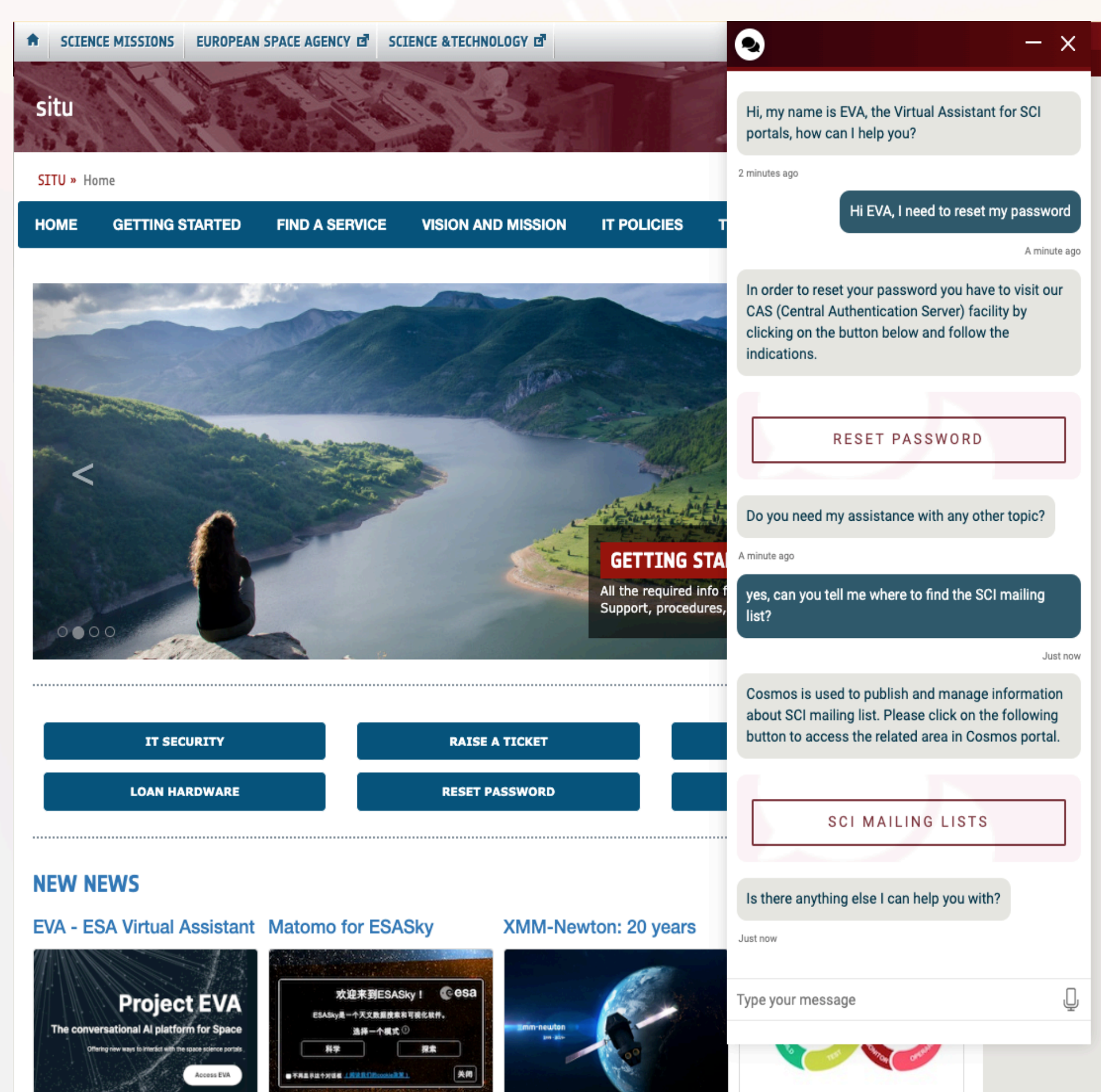
### END-TO-END VIRTUAL ASSISTANTS PLATFORM FOR SPACE AND SCIENCE OPERATIONS

- EVA platform covers all phases within the chatbot life-cycle. From design and implementation to deployment and integration without leaving analytics and monitoring capabilities behind.
- Import/Export a fully functional bot or just some features by using standard formats like JSON or CSV.

### MODULAR CLOUD BASED ARCHITECTURE



### EVA USE CASES, PROTOTYPES AND EXPERIMENTATION



Cosmos portal users support

ESASky explorer assistant

ADQL query generation