

“Space for Earth”: the case of Space & Migration

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The analysis:

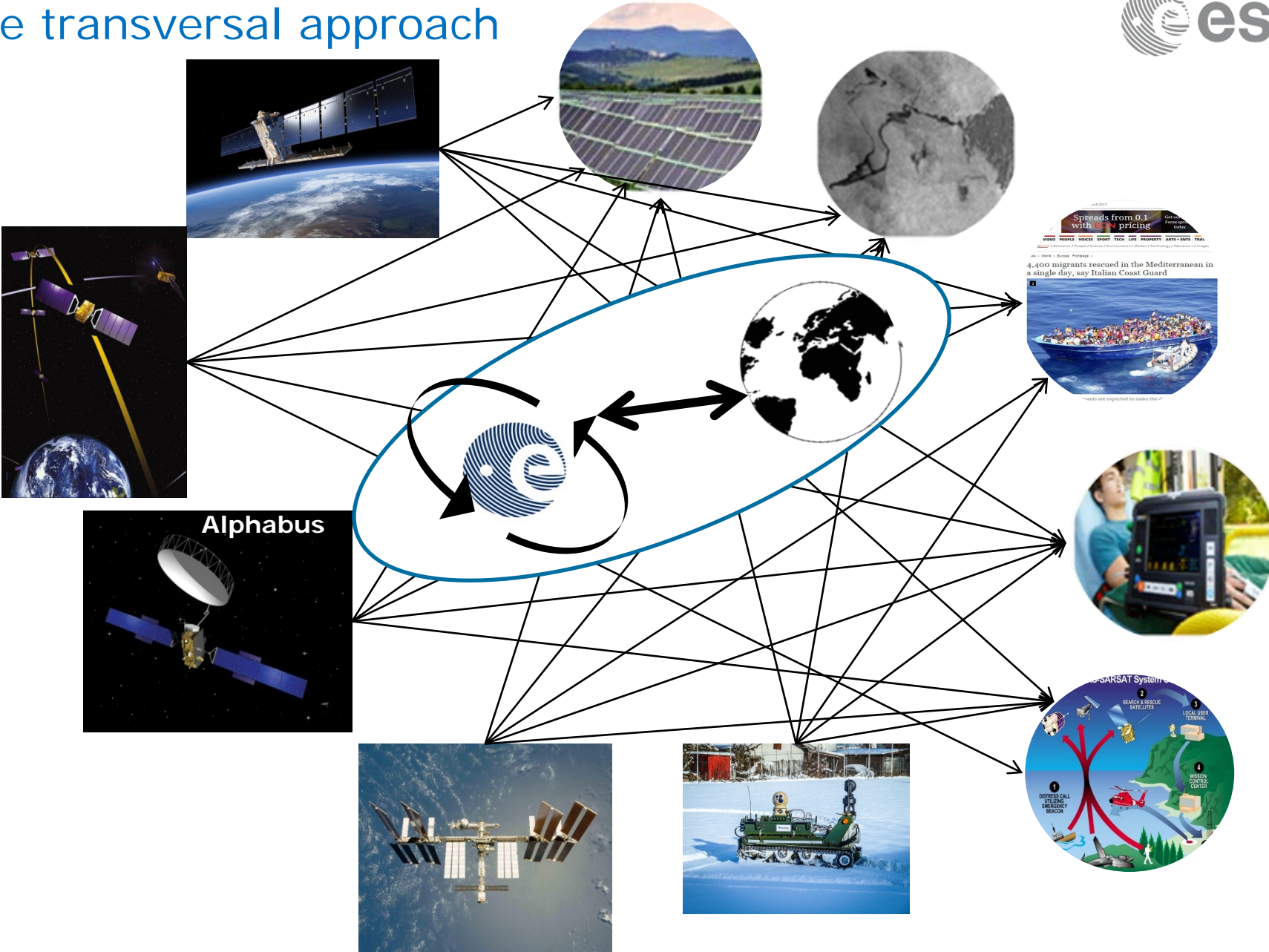
- Many Earth global challenges / concerns
- Space can often be an enabler tool
- "Users" often not familiar with space actors or what space might offer

The offer:

- Approach by those challenges / concerns
- Gathering needs
- Providing global information
- Making the link

Energy
Oceans
Arctic
Antarctic
Migration
Health
Transport
Security
Agriculture
Education...

The transversal approach



- climate change
- migration
- mobility
- communication
- energy
- shortage of resources
- demographic development
- conflicts and disasters
- health
- ...curiosity



→ **Space:**

information, communication, science, technology, education, inspiration...

#1: Migration and Climate Change

- Flow of refugees
- Camps
- Distress at sea
- Borders
- Peace safeguard
- Agriculture
- Water supply
- Waste management
- Energy
- Technology
- Education
- Tele-medicine
- Communication
- Inspiration

Charter Space and Migration





SUSTAINABLE DEVELOPMENT GOALS



Supporting our Member States and stakeholders to address:

- **migration flows** to alleviate human suffering and avoid loss of life
- in the long-term, to support the **economic development** and stability of the countries from which they originate (supporting the UN Resolution on the 2030 Agenda for Sustainable Development)

By:

- Using better our own assets
- Identifying the potential users

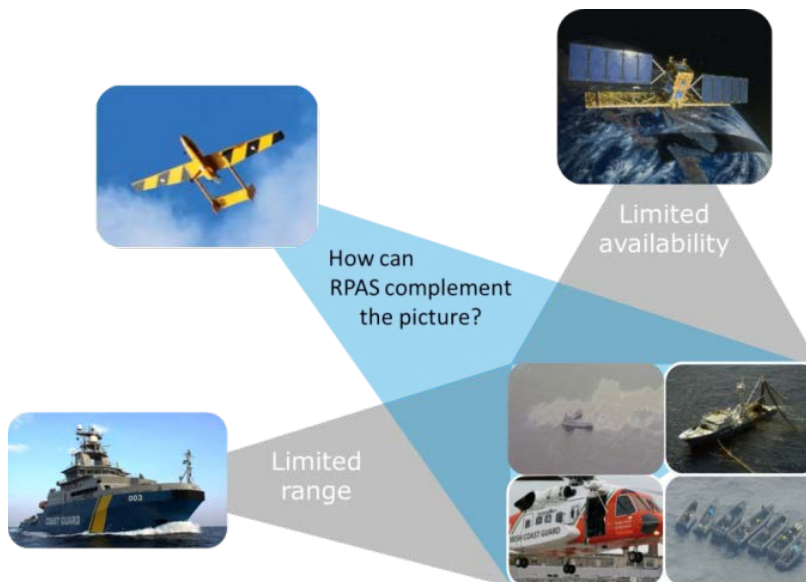
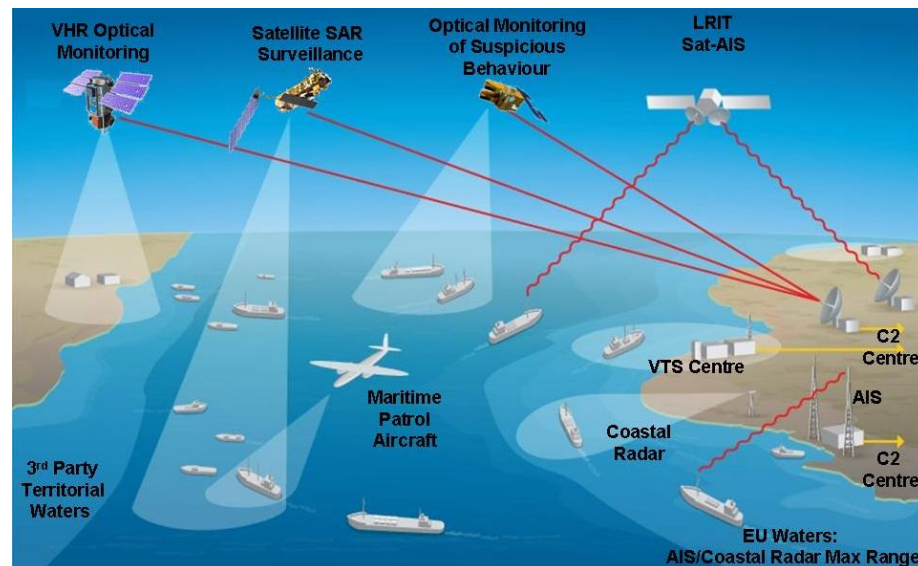
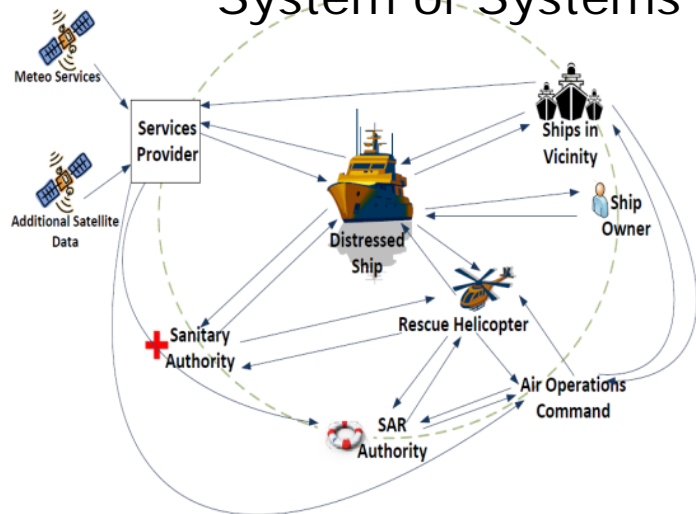
In view of

- Better promoting our assets
- Identifying new lines of action to be proposed to Member States, e.g. at CM16



Existing ESA assets: Managing the migration crisis

System of Systems analysis



Existing ESA assets: Supporting refugees in camps

Health status



Installing telecoms



Contamination levels

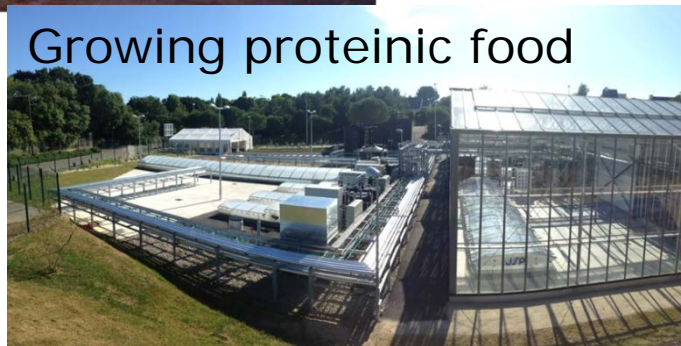


*MIDASS prototype,
Phase B, successful
PDR in 2014,
bioMérieux*



Grey water treatment

Growing proteinic food

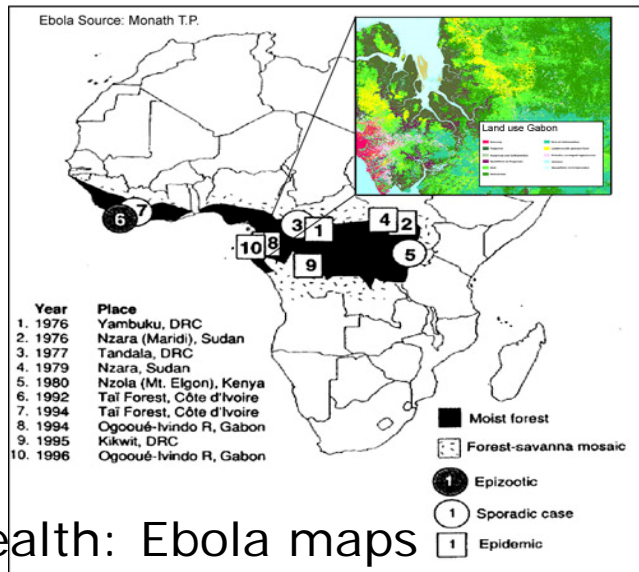
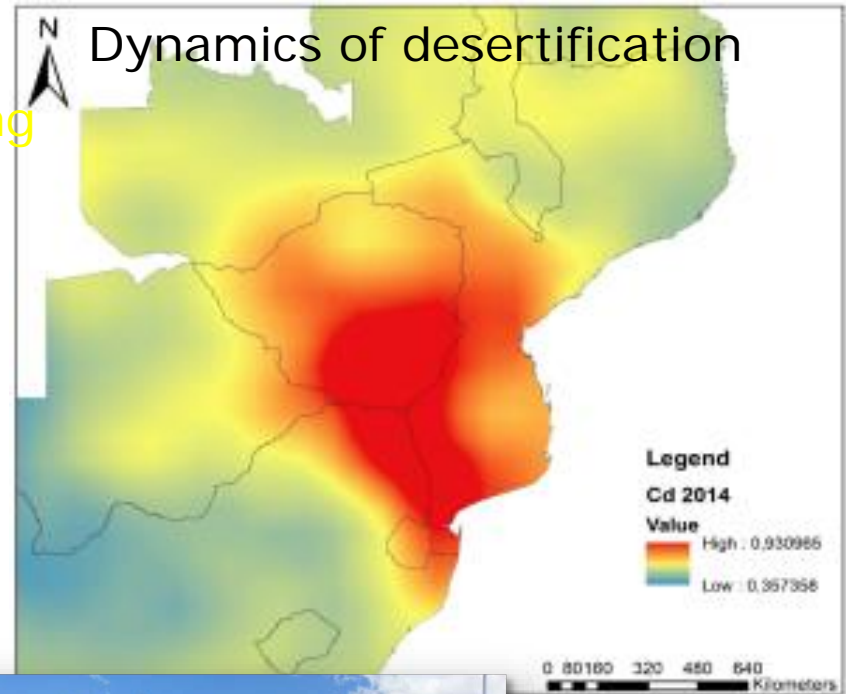


AlgoSolis
AlgoSolis©P-JAOUEN-GEPEA-CNRS_France

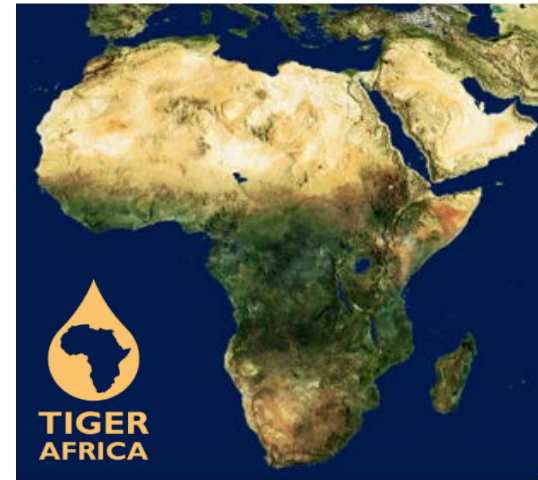
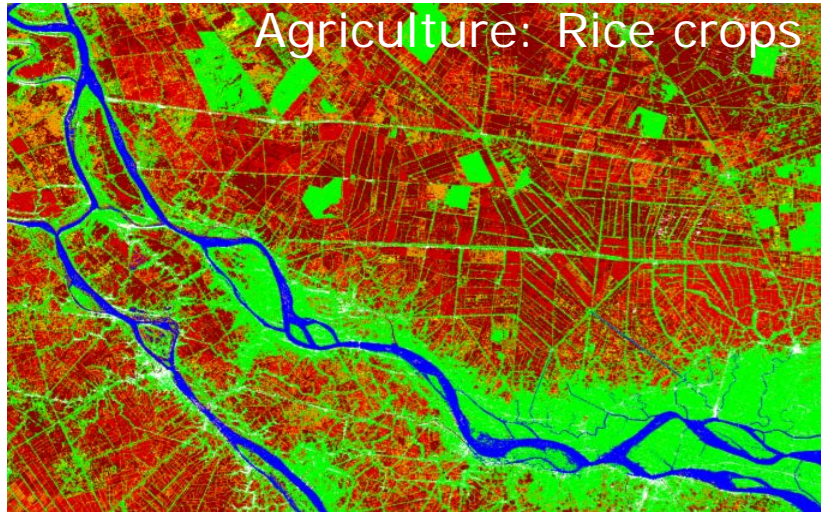
E-education



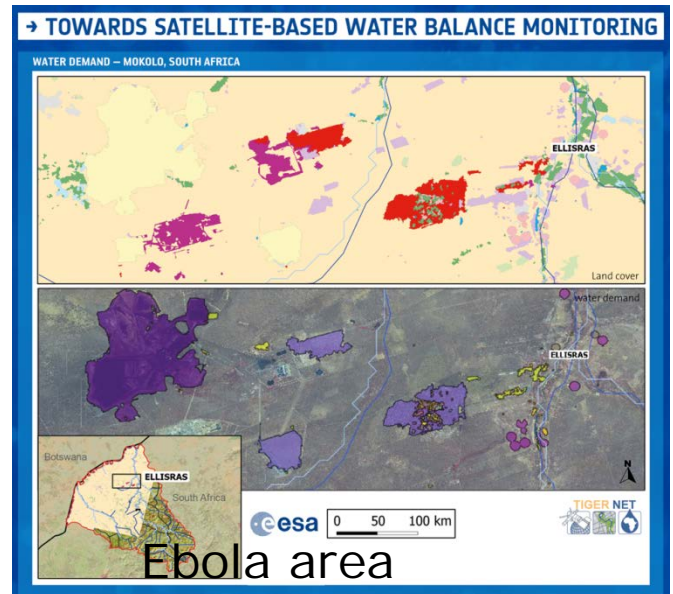
Illegal mining



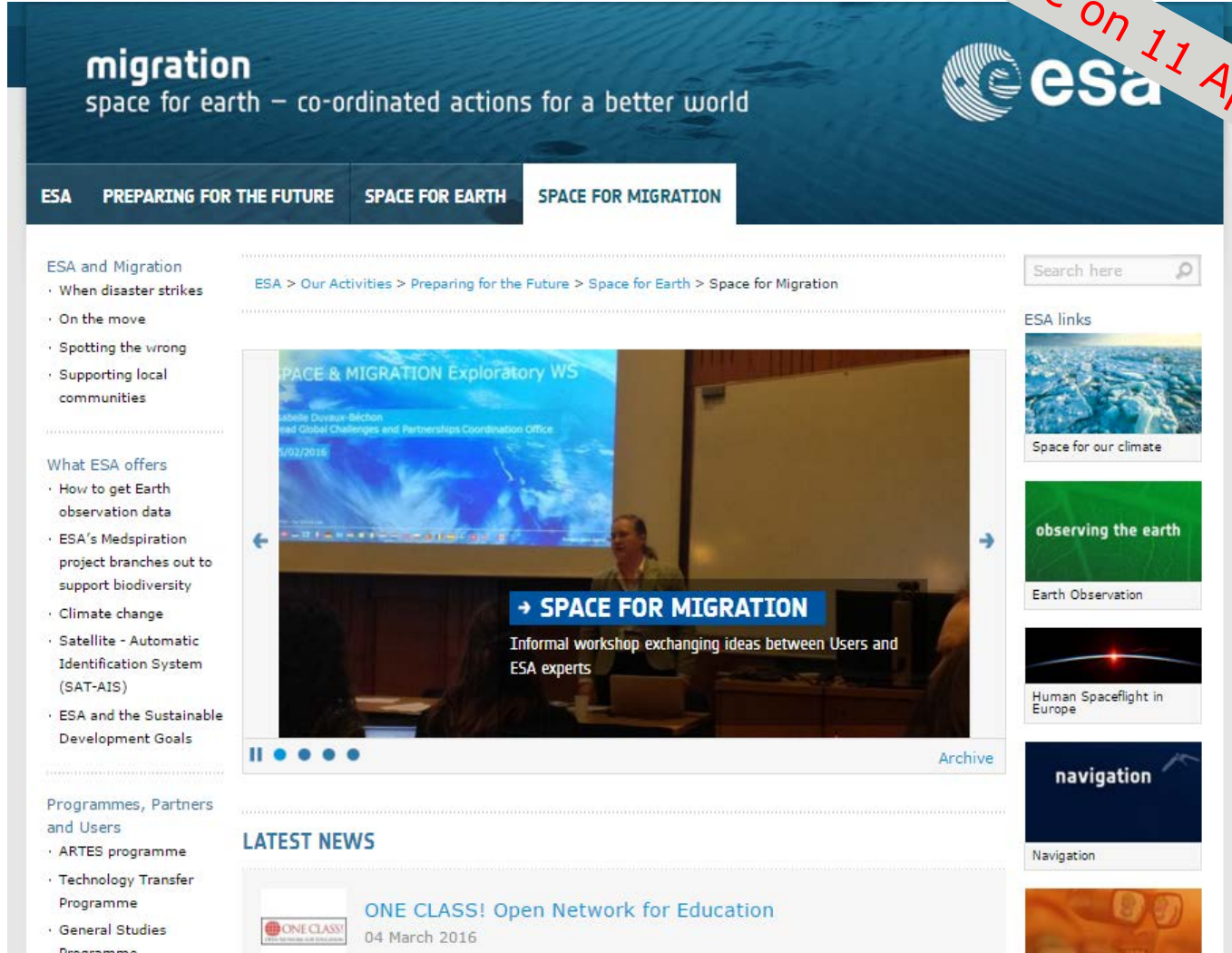
Water management



Telemedicine



Went live on 11 April 2016



The screenshot shows the ESA website's 'Space for Migration' section. The header features the ESA logo and the text 'migration space for earth – co-ordinated actions for a better world'. A navigation bar includes links for 'ESA', 'PREPARING FOR THE FUTURE', 'SPACE FOR EARTH', and 'SPACE FOR MIGRATION'. The main content area is titled 'ESA and Migration' and lists several topics: 'When disaster strikes', 'On the move', 'Spotting the wrong', 'Supporting local communities', 'What ESA offers' (including Earth observation data, Medspiration project, climate change, satellite identification, and sustainable development goals), and 'Programmes, Partners and Users' (including ARTES, Technology Transfer, and General Studies). A central video player shows a presentation titled 'SPACE & MIGRATION Exploratory WS' by Isabelle Duvaux-Béchon, dated 05/02/2016. The video content includes a slide titled '→ SPACE FOR MIGRATION' with the subtitle 'Informal workshop exchanging ideas between Users and ESA experts'. To the right of the video is a search bar and a sidebar with 'ESA links' (Space for our climate, observing the earth, Earth Observation, Human Spaceflight in Europe, navigation, Navigation) and a 'Technology' link. Below the video is a 'LATEST NEWS' section featuring 'ONE CLASS! Open Network for Education' dated 04 March 2016.

http://www.esa.int/Our_Activities/Preparing_for_the_Future/Space_for_Earth/Space_for_Migration

An active twitter account: @spaceforearth



The screenshot shows the Twitter profile of 'Space for Earth' (@spaceforearth). The profile picture is the ESA logo. The header image is a view of Earth from space. The bio states: 'Bringing you collated news about Space for Earth @ESA'. The location is 'Earth :-)' and the website is 'esa.int/Our_Activities...'. It was joined in October 2012. There are 2,329 tweets, 97 following, 540 followers, 264 likes, and 1 list. The 'Tweets' tab is selected, showing two tweets. The first tweet, from 16 hours ago, asks if the user has seen videos related to #space for #migration and links to esa.int/Our_Activities... The second tweet, from 18 hours ago, asks for more information on how space tech can help tackle migration issues and also links to esa.int/Our_Activities... Below the tweets, there is a section for '18 Followers you know' showing logos for EARS, ESA, and others, and a section for '315 Photos and videos'.

Space for Earth
@spaceforearth

Bringing you collated news about Space for Earth @ESA

Earth :-)
esa.int/Our_Activities...
Joined October 2012

Tweet to Message

18 Followers you know

315 Photos and videos

Tweets Tweets & replies Media

Space for Earth @spaceforearth · 16h
Have you seen the videos related to #space for #migration: esa.int/Our_Activities...

Space for Earth @spaceforearth · 18h
More information on how space tech can help tackle migration issues? Check out esa.int/Our_Activities...

Eurisy @Eurisy1

- **“Users”** on the ground are often **unaware** of what space can offer, or of the applications available.
 - Many **activities and services already available** in existing approved programmes, at ESA and outside ESA
 - Proposing a “window” to **facilitate the identification** of what may be offered and **promote collaboration** between space agencies, operators and service providers
- **ESA is taking the initiative to propose a “Charter for the Use of Space Technologies for Migration and Sustainable Development Goals”**
- Each Signatory Member will be **free to define its activities** in the framework of the Charter – provided for free or on cost-reimbursement basis

Space & Migration buzz words



Find out more:

www.esa.int -



@spaceforearth

http://www.esa.int/Our_Activities/Preparing_for_the_Future/Space_for_Earth/Space_for_Migration

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