

JASON ZHOU

CEO & FOUNDER

CHINA HEAD AEROSPACE

18 JUNE 2018, UNISPACE+50, VIENNA

# About China HEAD Aerospace



## HEAD Aerospace Netherlands

Downstream Applications & Services



## HEAD Aerospace France

International Business Development

## Space Micro System Innovation Center (Italy)

30-300 Kg  
Micro/Small  
Satellite R&D

## Headquarter (Beijing)

Space international cooperation  
Constellation deployment and building  
Industry solutions  
Downstream Applications & Services



- Founded in 2007
- Privately owned company
- We are transforming from our core space engineering activity to be a New Space smallsat operator



**KSAT**  
KONGSBERG  
KONGSBERG SATELLITE SERVICES



**CEC** 中国电子科技集团公司  
CHINA ELECTRONICS TECHNOLOGY GROUP CORPORATION



中国航天科工集团公司  
CHINA AEROSPACE SCIENCE & INDUSTRY CORP.

**PICC**



China Academy of Space Technology



EIE GROUP



**GOMSPACE**

**KUKA**



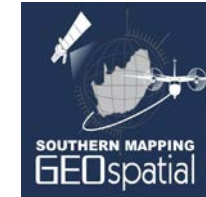
上海航天技术研究院  
Shanghai Academy of Spaceflight Technology

**SpaceNed**

中国航天

**NEWSPACE**  
SYSTEMS

**SOLAR MEMS**  
TECHNOLOGIES



**microsat** 上海微小卫星工程中心  
Shanghai Engineering Center For Microsatellites



**招商局集团**  
CHINA MERCHANTS GROUP



**THERMOCOAX**  
AERONAUTIC DEFENCE SPACE

**中国运载火箭技术研究院**  
China Academy of Launch Vehicle Technology

INTERNATIONAL COLLABORATION : 300 + GLOBAL PARTNER & CUSTOMER







# OUR VISION: NEW SPACE

INNOVATION

COLLABORATION

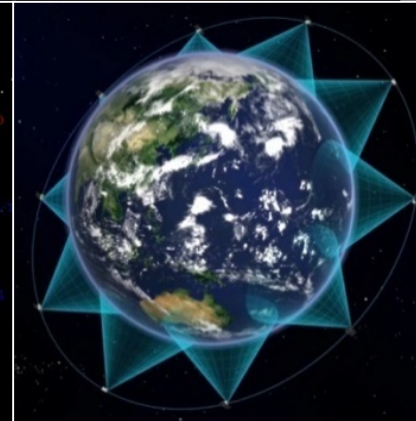
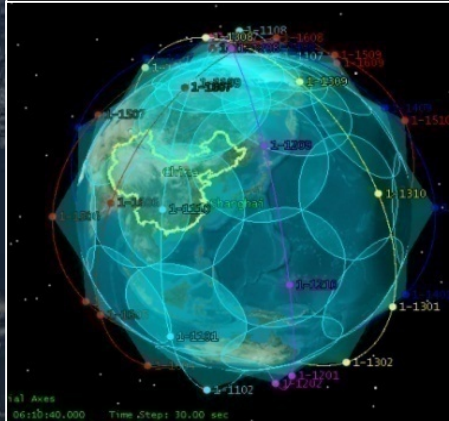
TRANSFORMATION

TO SUPPORT  
SUSTAINABLE  
DEVELOPMENT

TO PROVIDE SOCIAL  
ECONOMIC BENEFITS







# SKYWALKER CONSTELLATION

24 SMALLSATS

50 – 150 KG CLASS

AIS + IOT

NARROWBAND COMS

HOSTED EO PAYLOADS

EU PAYLOADS

HEAD-1 LAUNCHED 2017

PHOTO LAUNCHED OF HEAD-1 SATELLITE ON 15 NOV 2017 , SKYWALKER CONSTELLATION

# BIG DATA & ARTIFICIAL INTELLIGENCE

We invest in:

BIG DATA MANAGEMENT

to offer data collected from 17 Chinese civil Earth observation satellites

ARTIFICIAL INTELLIGENCE

to let APPLICATION go beyond from data to information



SATELLITES:

SKYWALKER CONSTELLATION (AIS, IOT)

SUPERVIEW CONSTELLATION (50CM, DAILY REVISIT), ZY, HY, HJ,

GF CONSTELLATION (OPTIC, RADAR, HYPERSPECTRAL)

**1** NO  
POVERTY



**2** ZERO  
HUNGER



**3** GOOD HEALTH  
AND WELL-BEING



**4** QUALITY  
EDUCATION



**5** GENDER  
EQUALITY



**6** CLEAN WATER  
AND SANITATION



**7** AFFORDABLE AND  
CLEAN ENERGY



**8** DECENT WORK AND  
ECONOMIC GROWTH



**9** INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



**10** REDUCED  
INEQUALITIES



**11** SUSTAINABLE CITIES  
AND COMMUNITIES



**12** RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION



**13** CLIMATE  
ACTION



**14** LIFE  
BELOW WATER



**15** LIFE  
ON LAND



**16** PEACE, JUSTICE  
AND STRONG  
INSTITUTIONS

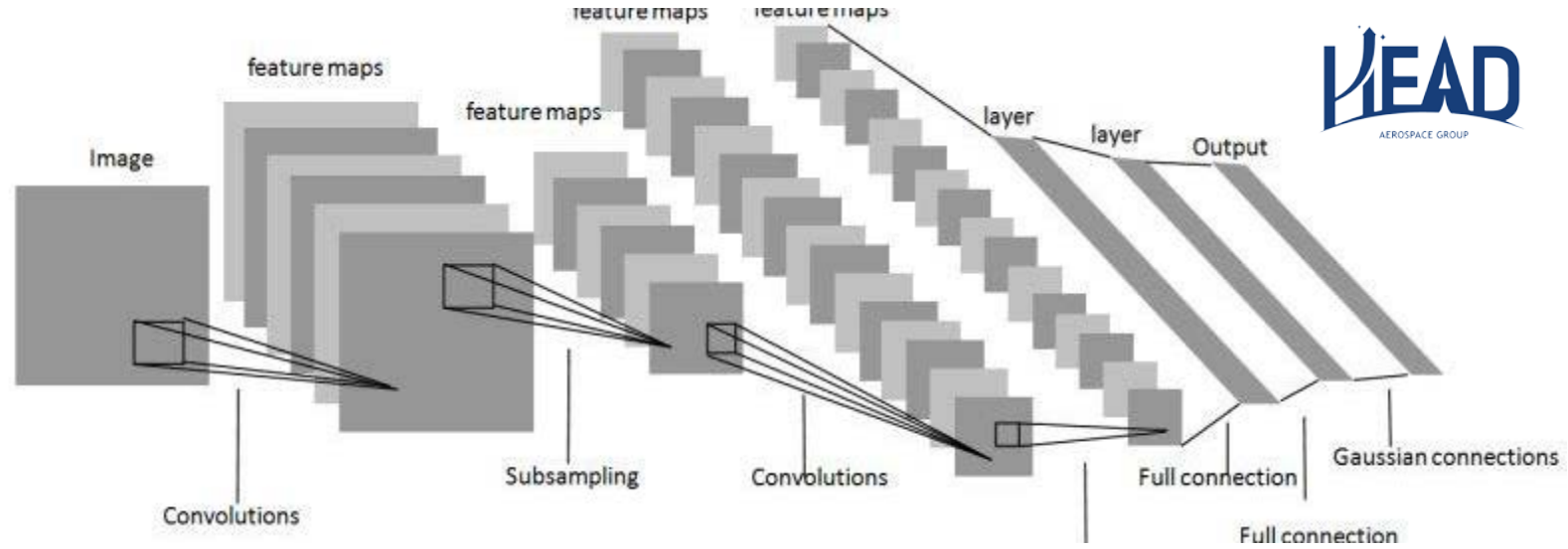


**17** PARTNERSHIPS  
FOR THE GOALS



**SUSTAINABLE  
DEVELOPMENT  
GOALS**





# SOYBEAN YIELD PREDICTION

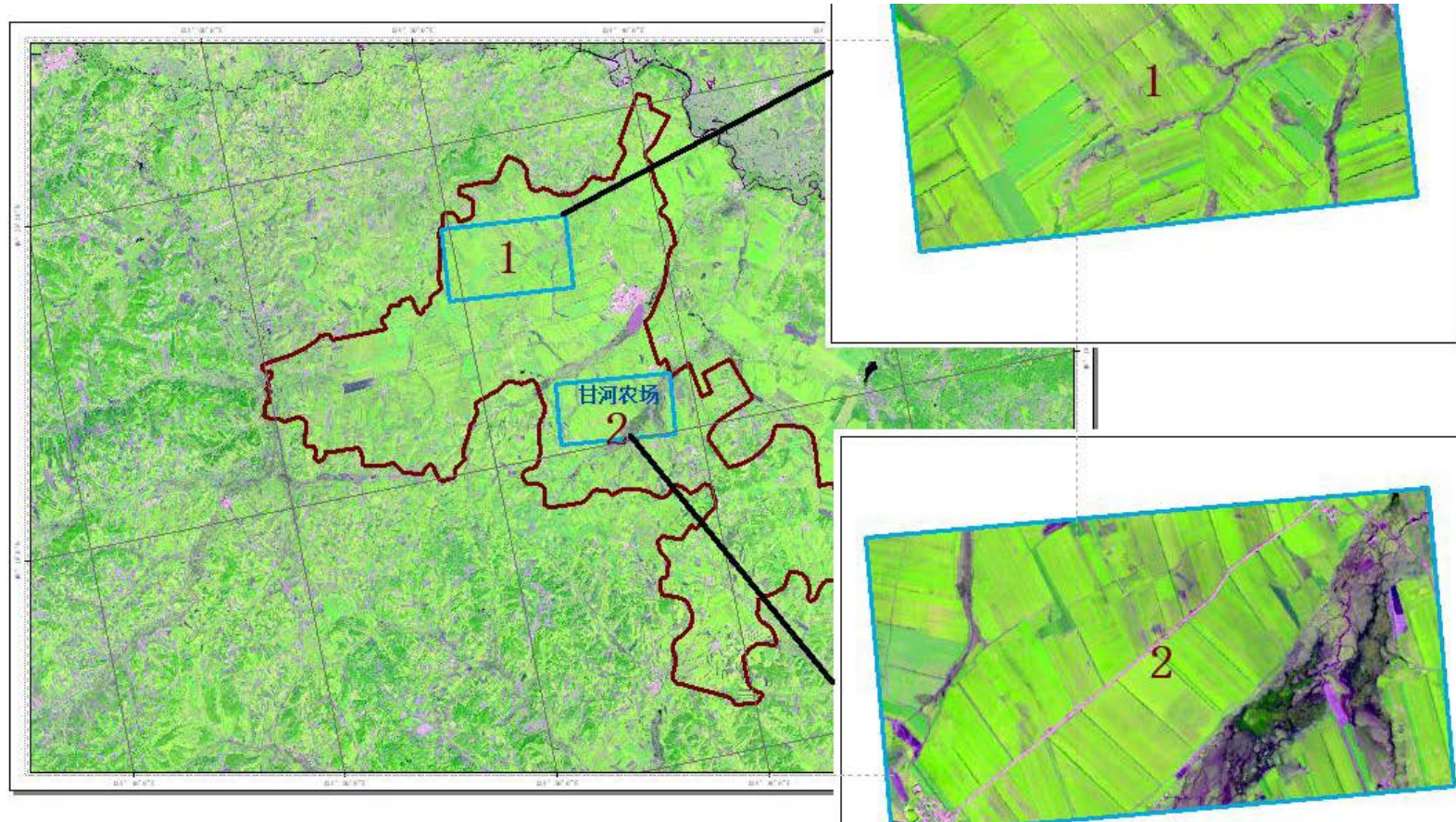
Sustainable development case 1

User

Using satellite imagery + in-situ + Machine learning

Classification, Crop Plans, Feature classification, Vegetation indices for remote area in Inner Mongolia

Increase end-user awareness on space technology in China







End-user:  
National State  
Grid,  
Sichuan - Tibet,  
China

# POWER LINE INSPECTION, EMERGENCY MAPPING & COMMUNICATION



Sustainable development  
User case 2:

Ultra high voltage power line  
: 6500+ km

RMB 30 billion investment in  
power line network  
Sichuan/Tibet

Using satellite image +  
helicopter emergency  
communication by satellite



WE INVITE YOU,  
AS A PARTNER, AS A USER.  
JOIN US TO BUILD A SUSTAINABLE  
ECOSYSTEM TOGETHER.

Jason ZHOU, CEO, [jason@head-aerospace.com](mailto:jason@head-aerospace.com) ; Kammy BRUN, Head of Business Development, [kammybrun@head-aerospace.fr](mailto:kammybrun@head-aerospace.fr)





спасибо



Danke

谢谢

MERCI

Дякую

Շնորհակալություն

GRAZIE

THANK YOU

Shukran

Muchas Gracias

PHOTO SUPERVIEW - I SATELLITE, 50 CM, 2017, VIENNA