



# Development of the Space Sector in Mexico

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Francisco Javier Mendieta-Jiménez

Mexican Space Agency





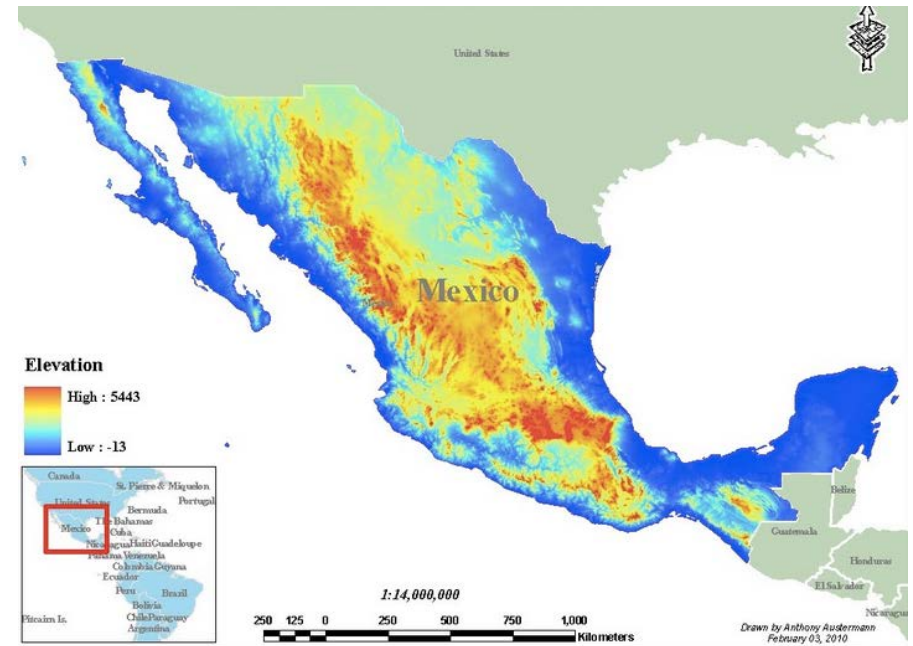
# Mexico in Numbers

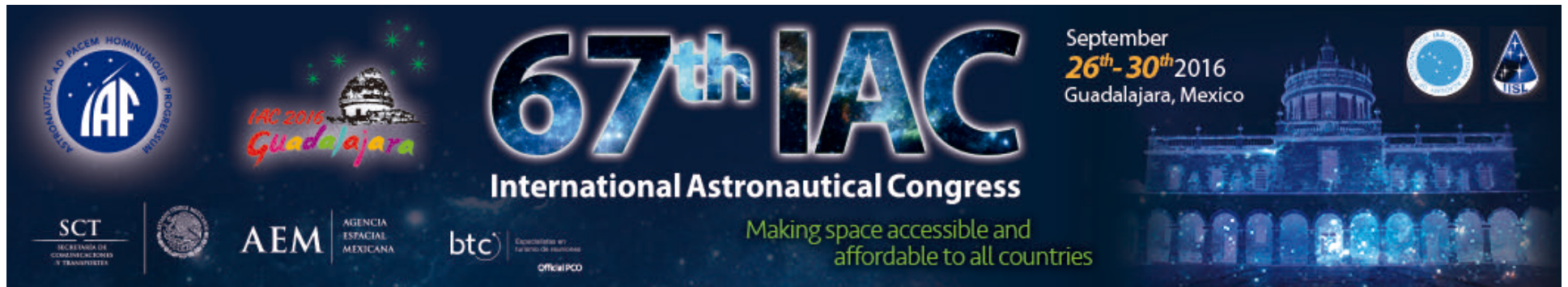
Population: 126 Millions  
Land area: 2.0 Million km<sup>2</sup>

Sea economic zone: 3.3 Million km<sup>2</sup>  
Coastline: 11,000 km

Mexico-US border: 3,200 km  
GDP: 1.6 Trillion USD  
Economy rank no. 15<sup>th</sup>

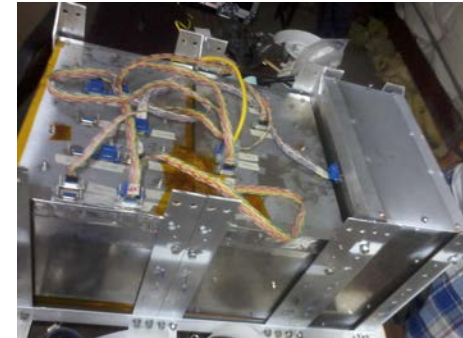
Happiness index rank no. 14<sup>th</sup>





# Mexican Space Sciences

- Astronomy, Astrophysics, Geophysics
- Space Communications
- Earth Observation
  - Ocean Sciences
  - Earth Sciences
  - Atmospheric Sciences
- Natural Disaster Management





September 26<sup>th</sup>-30<sup>th</sup> 2016  
Guadalajara, Mexico

**67<sup>th</sup> IAC**  
International Astronautical Congress

Making space accessible and affordable to all countries

Logos: IAF (Asociación Astronáutica Internacional), AEM (Agencia Espacial Mexicana), SCT (Secretaría de Comunicaciones y Transportes), btc (Comunicación en Tecnología de Información), IAA (International Astronautical Association), IST (International Space Technology Exposition & Competition).

## Mexican Space Technology




SCT SECRETARÍA DE COMUNICACIONES Y TRANSPORTES

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**67<sup>th</sup> IAC**  
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*Making space accessible and affordable to all countries*

**IAC 2016 Guadalajara**

**AF** ASOCIACION AMERICANA DE AERONAUTICA Y ESPACIAL

**SCT** SECRETARIA DE COMUNICACIONES Y TRANSPORTES

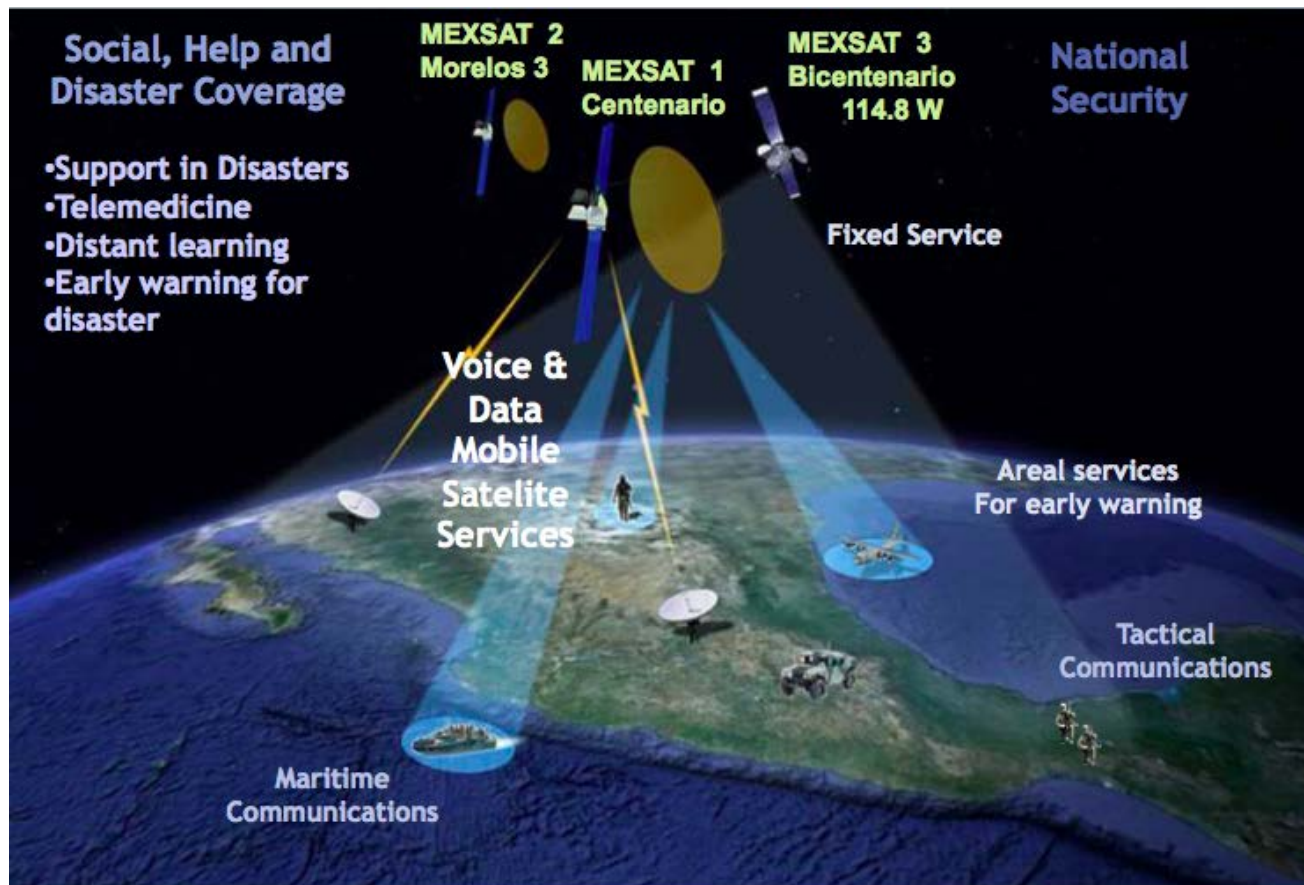
**AEM** AGENCIA ESPACIAL MEXICANA

**btc** Capacitación en Tecnología de Información OFICIAL PCO

**ISA** INTERNATIONAL SOCIETY OF SPACE AND AERONAUTICAL SCIENCES

**IST** INTERNATIONAL TELECOMMUNICATIONS SATELLITE ORGANIZATION

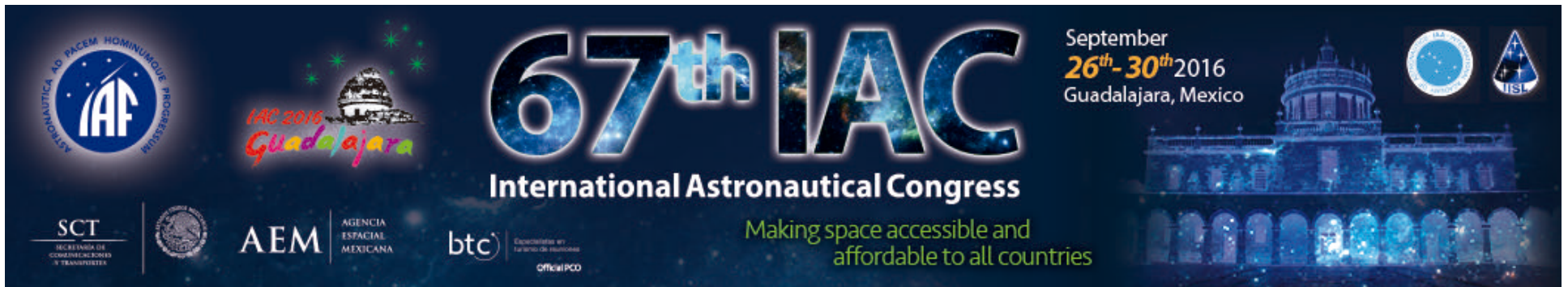
# MexSat Satellite System




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# MEXICAN SPACE PROGRAM

**1 SPACE  
INFRASTRUCTURE**

**2 SPACE SECTOR  
DEVELOPMENT**

**3 CAPACITY BUILDING**

**4 INTERNATIONAL  
POSITIONING**





# 67th IAC

## International Astronautical Congress

September  
26<sup>th</sup>-30<sup>th</sup> 2016  
Guadalajara, Mexico



AGENCIA  
ESPACIAL  
MEXICANA

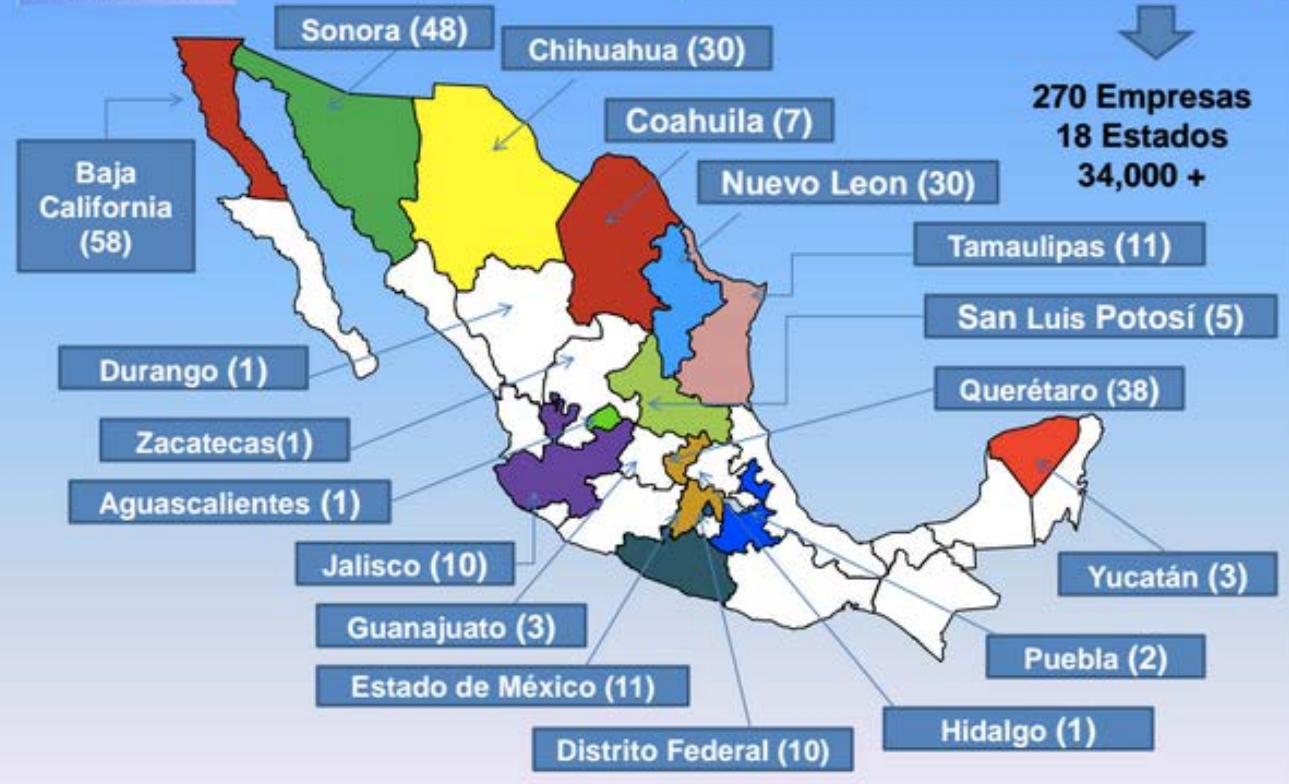


Cooperación en  
Tecnología de Espacio  
oficial IPOD

Making space accessible and  
affordable to all countries



### La Industria Aeroespacial en México Ubicación y Distribución Geográfica



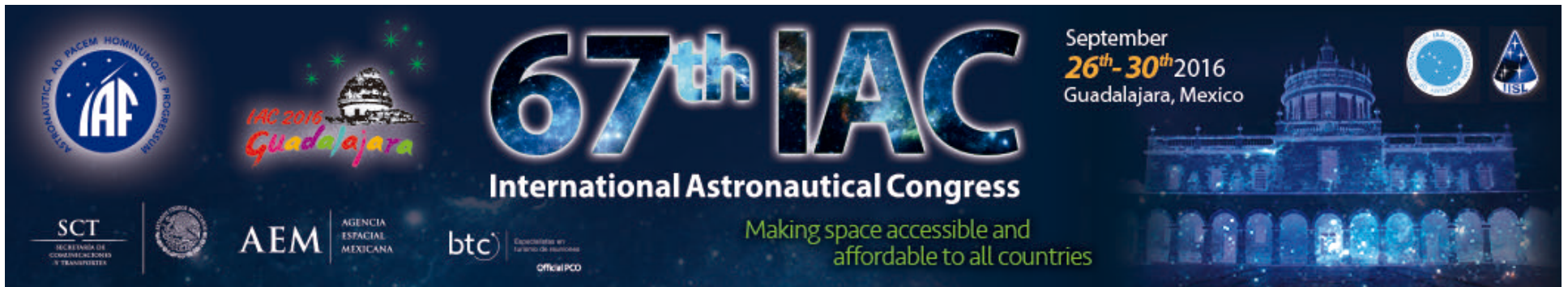
Fuente: Dirección General de Industrias Pesadas y de Alta Tecnología, (SE) ProMéxico y FEMIA



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## INTERNATIONAL COOPERATION

### International Astronautical Congress

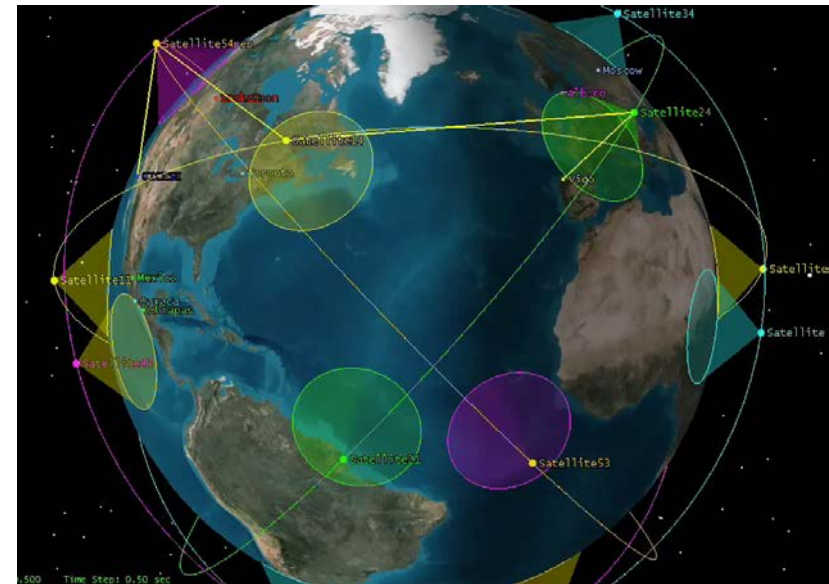
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# IAA BOGOTÁ DECLARATION



- ACADEMIC COOPERATION
- ACCESS TO SATELLITE DATA
- INFORMATION EXCHANGE ON NATIONAL PROGRAMS
- REGIONAL SPACE INFRASTRUCTURE (NICHES)
- CAPACITY BUILDING



UNIVERSIDAD SERGIO ARBOLEDA

TALLER PREPARATORIO CUMBRE IAA 2014  
OCTUBRE 29 - 30 DE 2013





# IAAHEADS OF AGENCY SUMMIT: DECLARATION OF MEXICO ON CLIMATE CHANGE

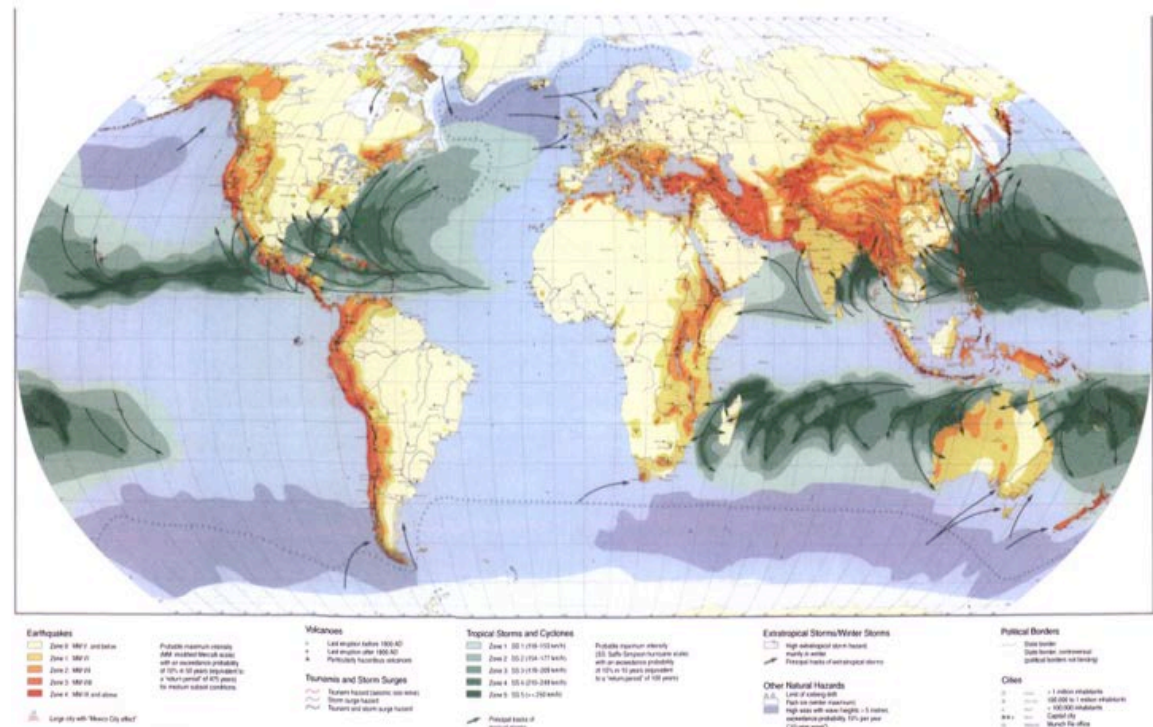
- ENORMOUS CONTRIBUTION OF SPACE OBSERVATIONS
- E.O. SATELLITES CONTRIBUTION TO UNDERSTANDING AND STRATEGIES
- E.O. FROM SPACE REDUCE VULNERABILITIES IN NATURAL DISASTERS
- E.O., SATCOM AND GNSS REDUCE CARBON FOOTPRINT
- INTERNATIONAL COORDINATION NECESSARY





# Global Challenges

- Environment
- Climate change
- Digital Divide
- Security
- Cybersecurity
- Disasters
- Space Weather
- Space Debris



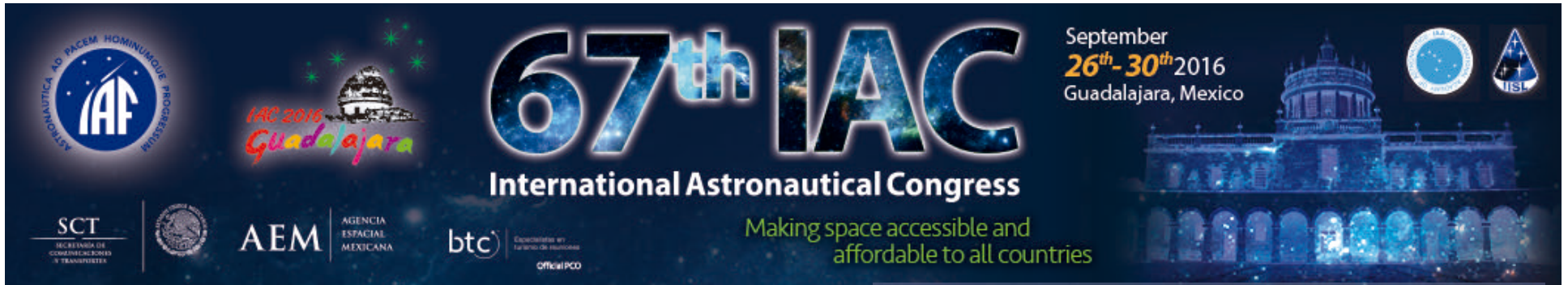


# Mexico's space vision

Mexico a significant international space player in international cooperation

- Space infrastructure with local participation
- Space industry, focused on niches
- Human capital
- Contribution to space exploration and research
- Space awareness of population





# Opportunities

- Latin American progress
- Growing need for space applications
- Growing aerospace industry
- Population bonus
- Scientific base
- Geopolitical location
- Free trade agreements





# SEE YOU IN GUADALAJARA!

