



Preparation for JWST Science Operations in Europe

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Contents



1. European contributions to JWST operations
2. ESA SOT team
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Support of Operations is one of ESA's contribution to JWST



Launch Segment



Ariane Launcher

Launch Vehicle

Payload Adapter

Launch Site Services

Observatory Segment



The JWST observatory

Optical Telescope Element

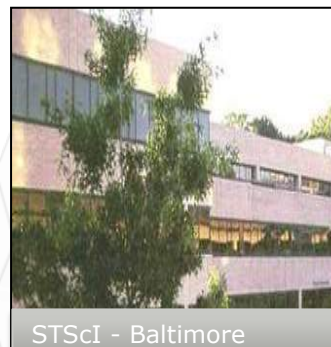
Spacecraft Element (SE)

Spacecraft Bus

Sunshield

Integrated Science
Instrument Module

Ground Segment



STScI - Baltimore



Deep Space Network

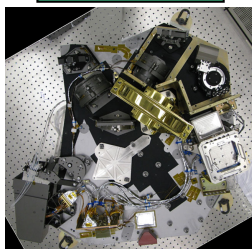
Science and Operations Center (S&OC)

ESA staff to support the operation
of NIRSpec and MIRI at S&OC

Common Systems

- Provided by NASA
- Provided by ESA/Europe
- Provided by CSA

NIRCam



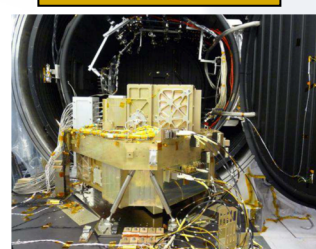
NIRSpec



MIRI

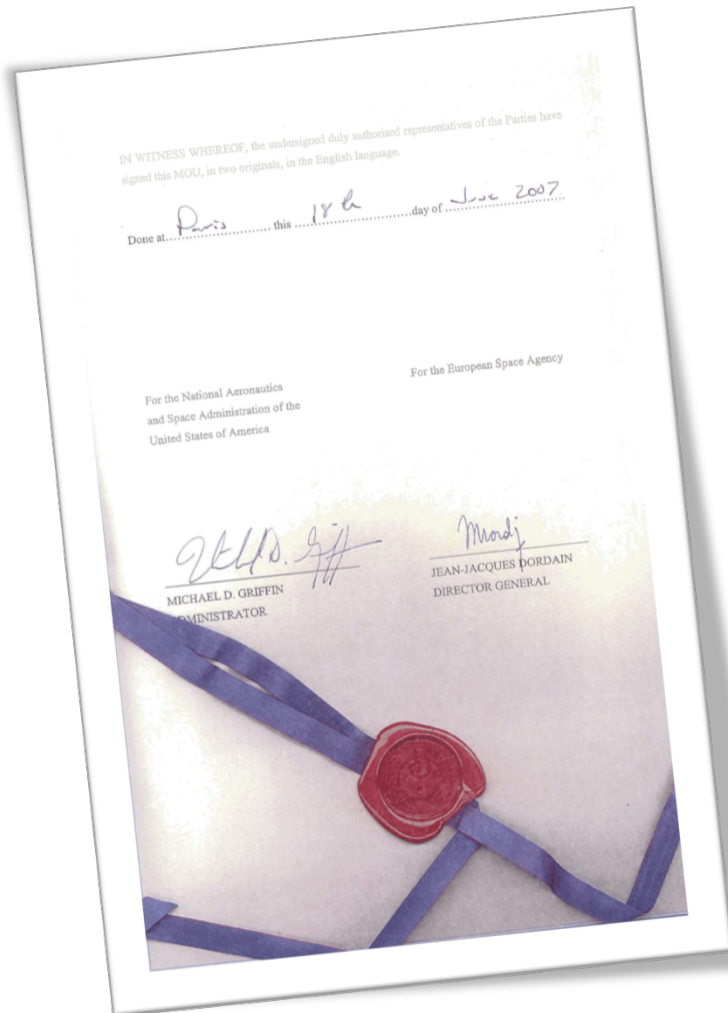


FGS/NIRISS





ESA support to operations

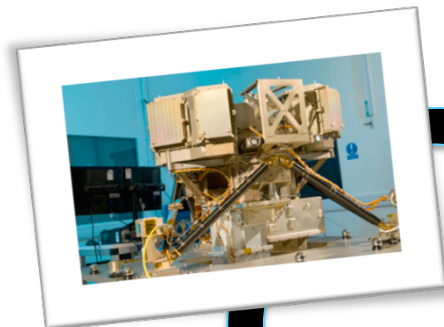


ESA and NASA signed
Memorandum of Understanding
in 2007

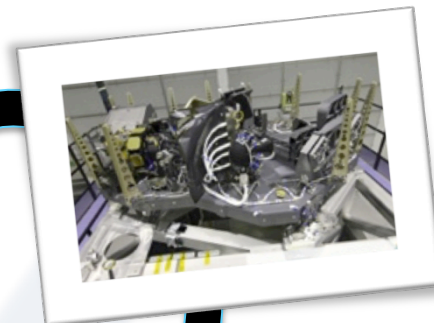
Details defined in lower level
documents



European Preparation to Operations after SI delivery



MIRI EC



NIRSpec Team

Reference Files
Algorithms
Ops concepts

**S&OC
@STScI**

Data
Pipeline

Proposal
Planning
Tools

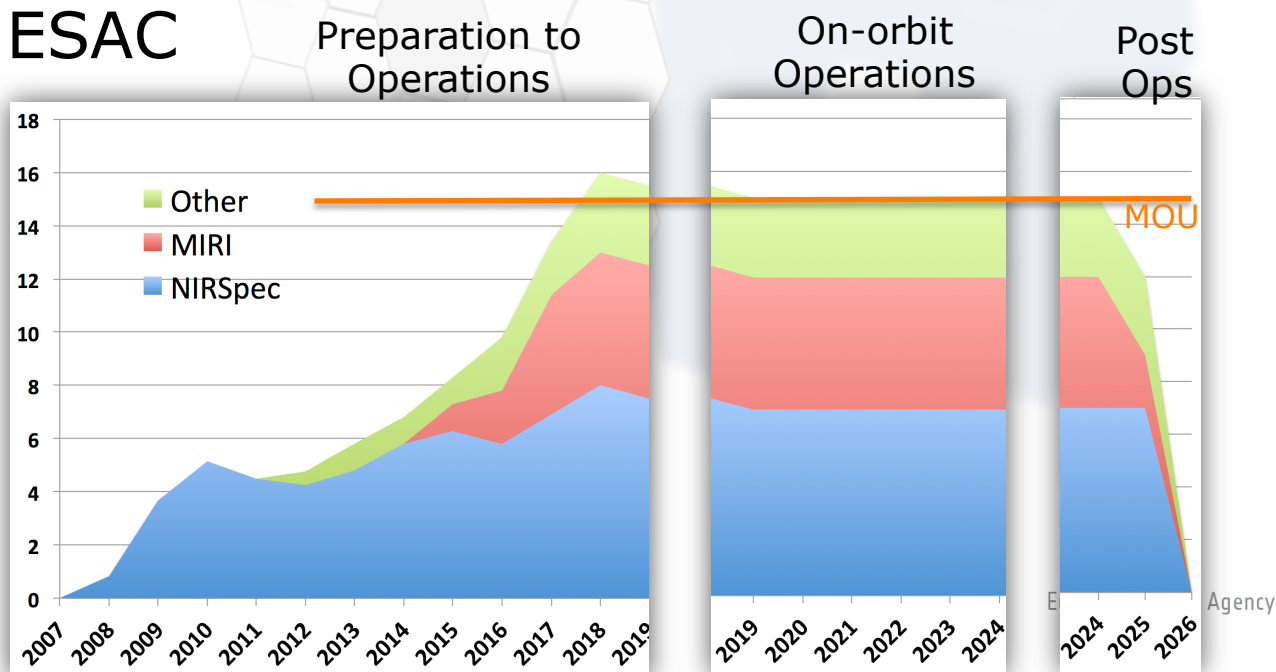
On Board
Software



ESA is building up the ESA JWST SOT:



- Started in 2008 for NIRSpec support
- Nine position already filled, 6 already at STScI
- Ramping up to 15 ESA staff by Mid 2017
- Bringing direct expertise on NIRSpec and MIRI
- Strong link to ESAC





- The primary archive of JWST will be at the JWST S&OC at STScI
 - CADC, ESA and STScI have been collaborating on the HST archive for the past 25 years.
 - CADC and ESAC are working on a proposal to each agency for funding a JWST mirror archive at CADC and ESAC
-
- Integration with Multi Mission Archive structures
 - Interface with local community
 - Contributed high level data products
 - Faster data access
 - Redundancy for STScI archive

SEE **ESA SKY**
DEMO





Hot July 2016 for JWST fans



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Call for Papers

**Submit Abstracts by
14 December 2015**
www.spie.org/ast16call

Edinburgh International
Conference Centre
Edinburgh, Scotland,
United Kingdom

Conferences
26 June-1 July 2016

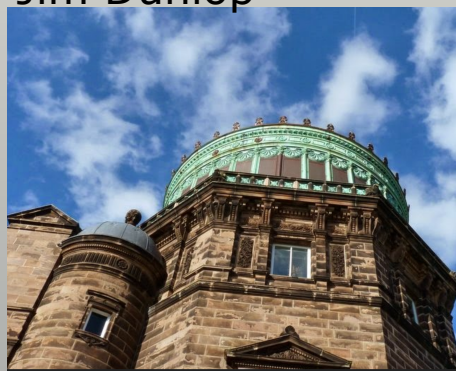
Exhibition
28-29 June 2016

C Call for Papers

26-Jun/1-Jul

JWST Meeting @ROE

Gillian Wright &
Jim Dunlop



4-7 -Jul

BILBAO

JWST session in Spanish Astronomical Meeting

Santiago Arribas



18-22 -Jul



JWST Workshops & community engagement



- STScI has already started series of annual workshops and hands-on demo sessions:
 1. Winter @ AAS meetings: “getting science out of JWST workshop”
 2. Spring @ JWST Data Analysis Python Tools development (WEBEX)
 3. launching a colloquium initiative to visit and directly engage with the US astronomical community in the next two years
- In Europe
 - a. Beside the current conference, the community is becoming very active:
 - Several request to present JWST capabilities at conferences
 - Organization of series of science conference in 2016 and 2017
- ESA is kicking off a series of JWST workshops at ESAC



JWST Workshops at ESAC



1	26-28 Sep 2016	JWST capabilities
2	Summer 2017 (pre CP)	Hands on on Proposal tools* -
3	Spring 2018	Hand on on Data Analysis Tools
4	Late 2019	Science Data Workshop
5	Late 2020	Science Data Workshop
6	Late 2022	Science Data Workshop
7	Late 2023	Science Data Workshop

* a similar workshop is Planned by STScI – we will look in doing it simultaneously in both sites

All workshops can be attended on site and on line

All talks will be recorded and all presentations and material will be made available in a dedicate web site

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European Space Agency



Focus on

JWST Capabilities (after ISIM Testing)

- Observing modes
- Expected performance
- Overlaps, trade-off, efficiency
- Operational constraints
- preview on tools for proposal preparation

Conference room fixed this morning – Announcements will start within a couple of weeks

QUESTIONS: **JWST@cosmos.esa.int**



Readiness Roadmap (workshops only)



START YOUR ENGINES



ESAC-3



ESAC-2



ESAC-1



2019



STScI

2018



STScI

2017



2016



CONTACTS



For organizing additional meetings, focused workshops, talks:



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