

Iranian National Observatory

Habib Khosroshahi

Institute for Research in Fundamental Sciences (IPM) - Tehran

IRANIAN NATIONAL OBSERVATORY

A modern observatory in the land of ancient observatories



Project timeline

2001- Potential sites identified

2002- Seeing measurement began

2003- Project approved by the government

2006- Project delegated to IPM

2007- Site selection concluded

2008- Site monitoring began

2009- Primary mirror blank ordered

2010- INO340 design began

2011- Road construction began

2012- INO340 Concept frozen

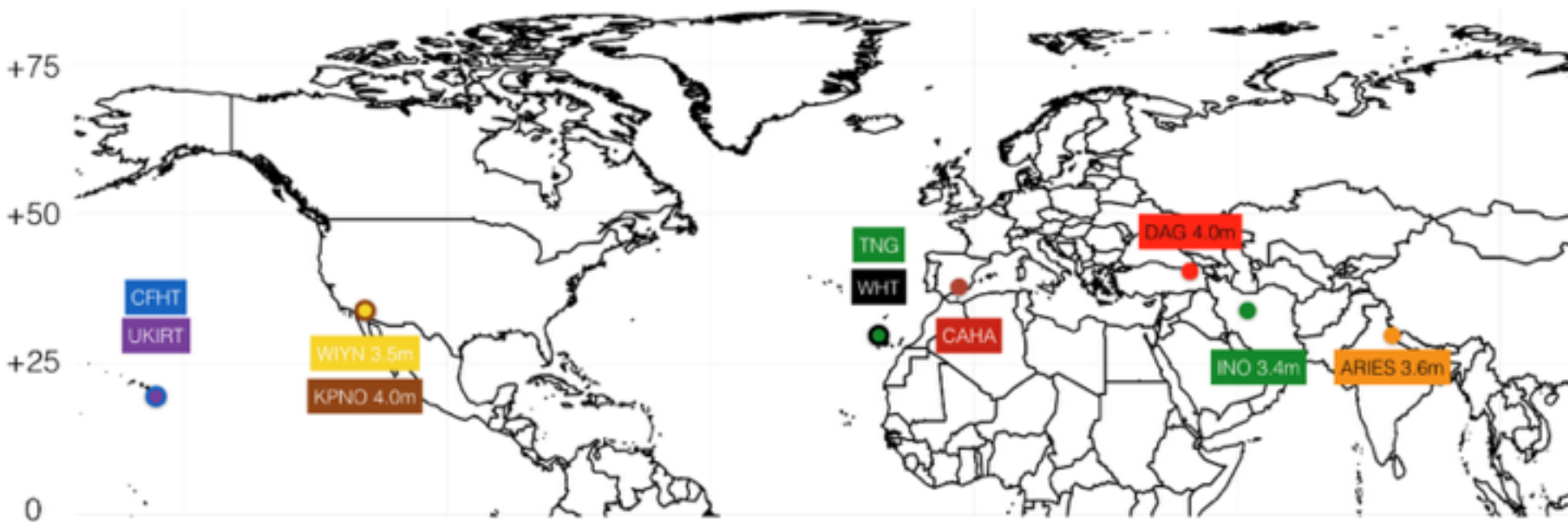
2014- Primary mirror polished and arrived

2016- Road ready, Secondary mirror ordered

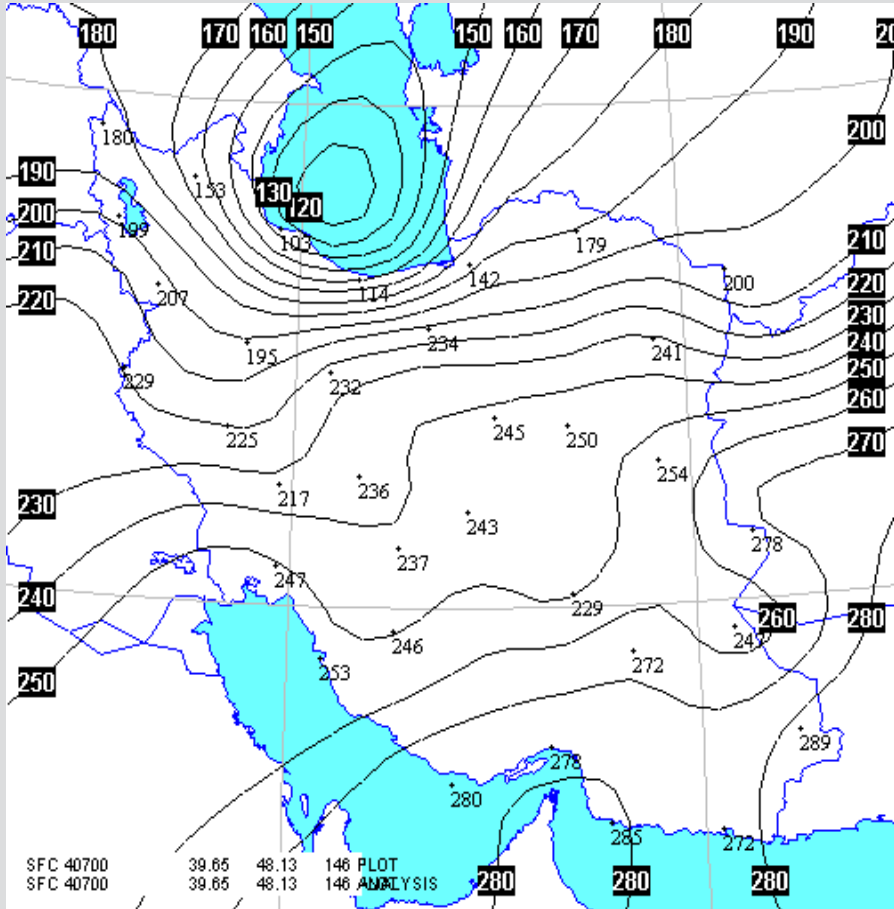
2017- Wide field lens system and 1m class telescope

2020- INO340 first light

Geographic location



Site Selection



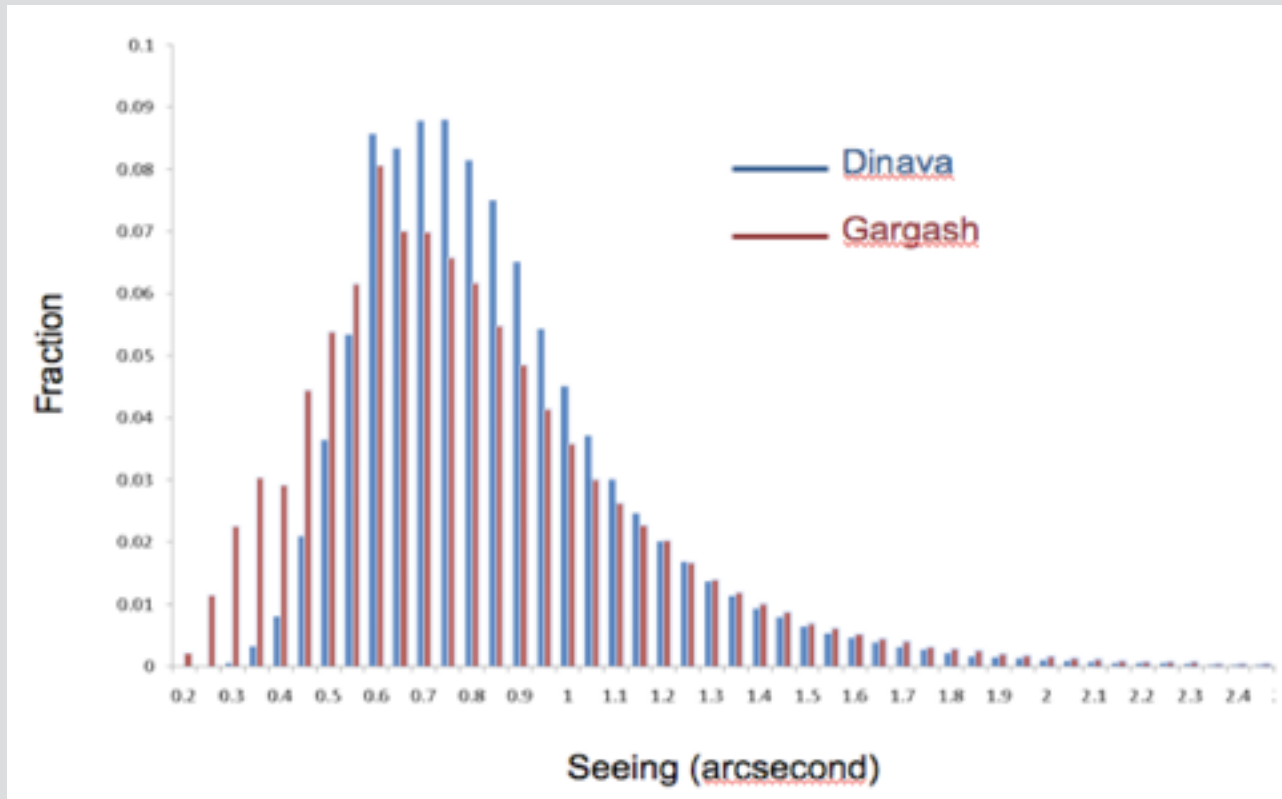
Team led by S. Nasiri - 2000 to 2007



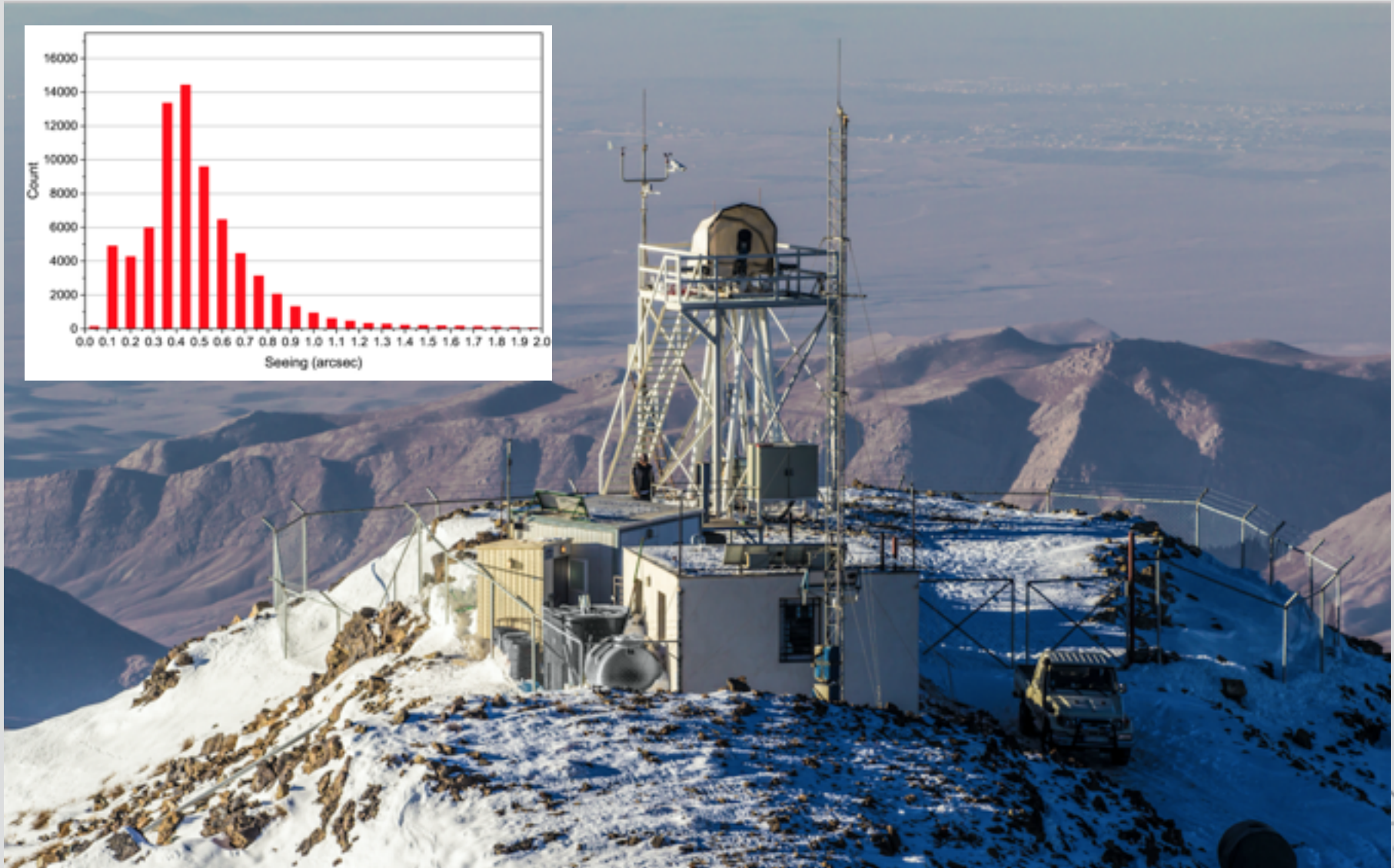
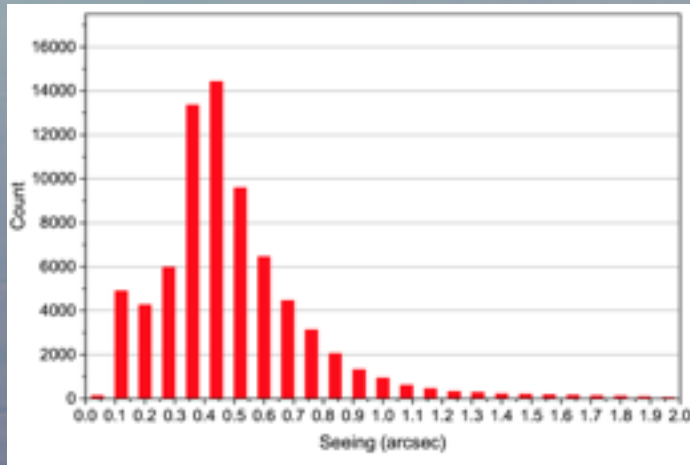


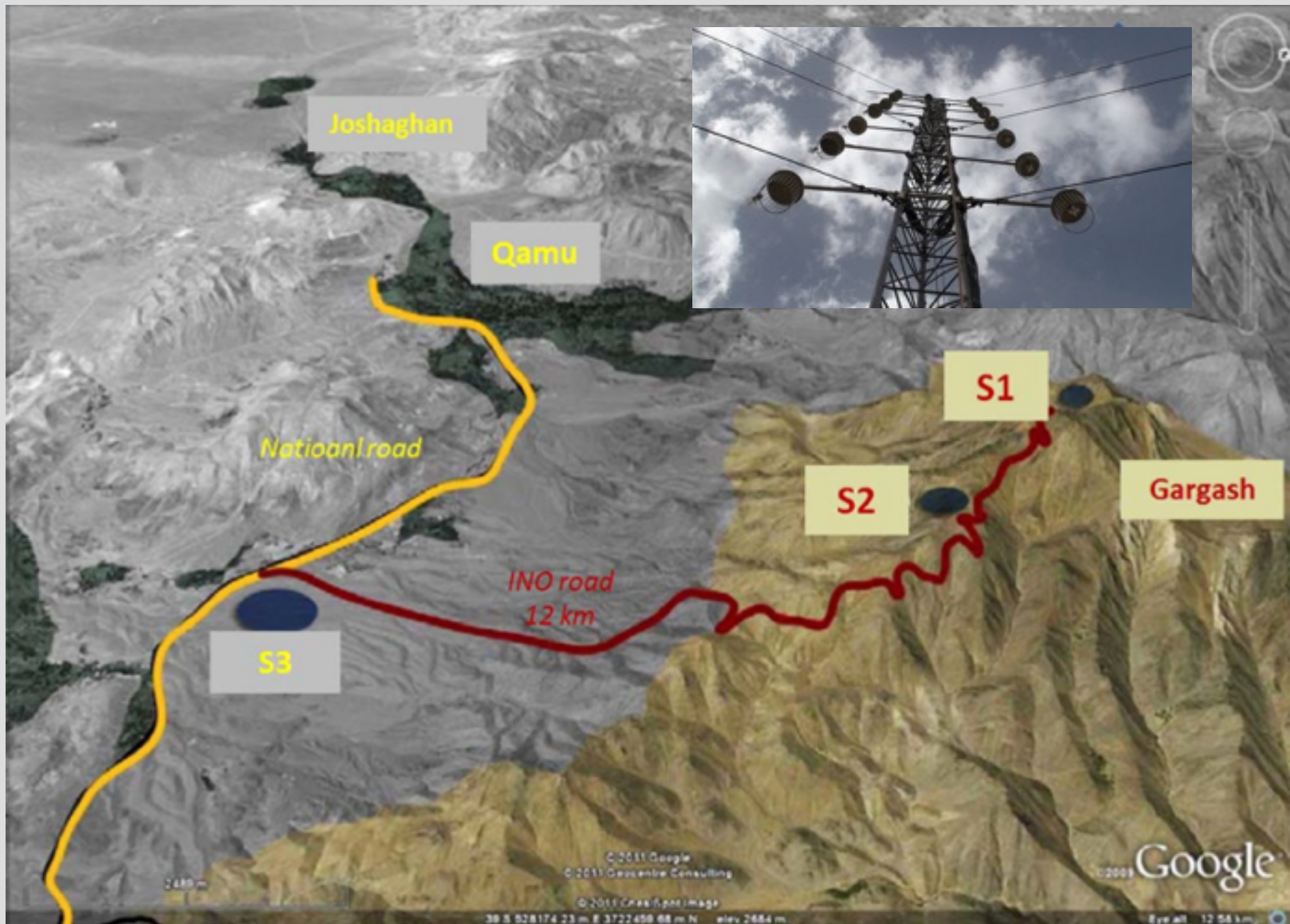
Gargash (3600m) vs Dinava (3000m)

Seeing	1st quartile	2nd quartile	3rd quartile	median
Dinava	0.60" (0.09)	0.74" (0.09)	0.91" (0.09)	0.73" (0.09)
Gargash	0.54" (0.04)	0.67" (0.04)	0.89" (0.04)	0.68" (0.04)



Site Monitoring station

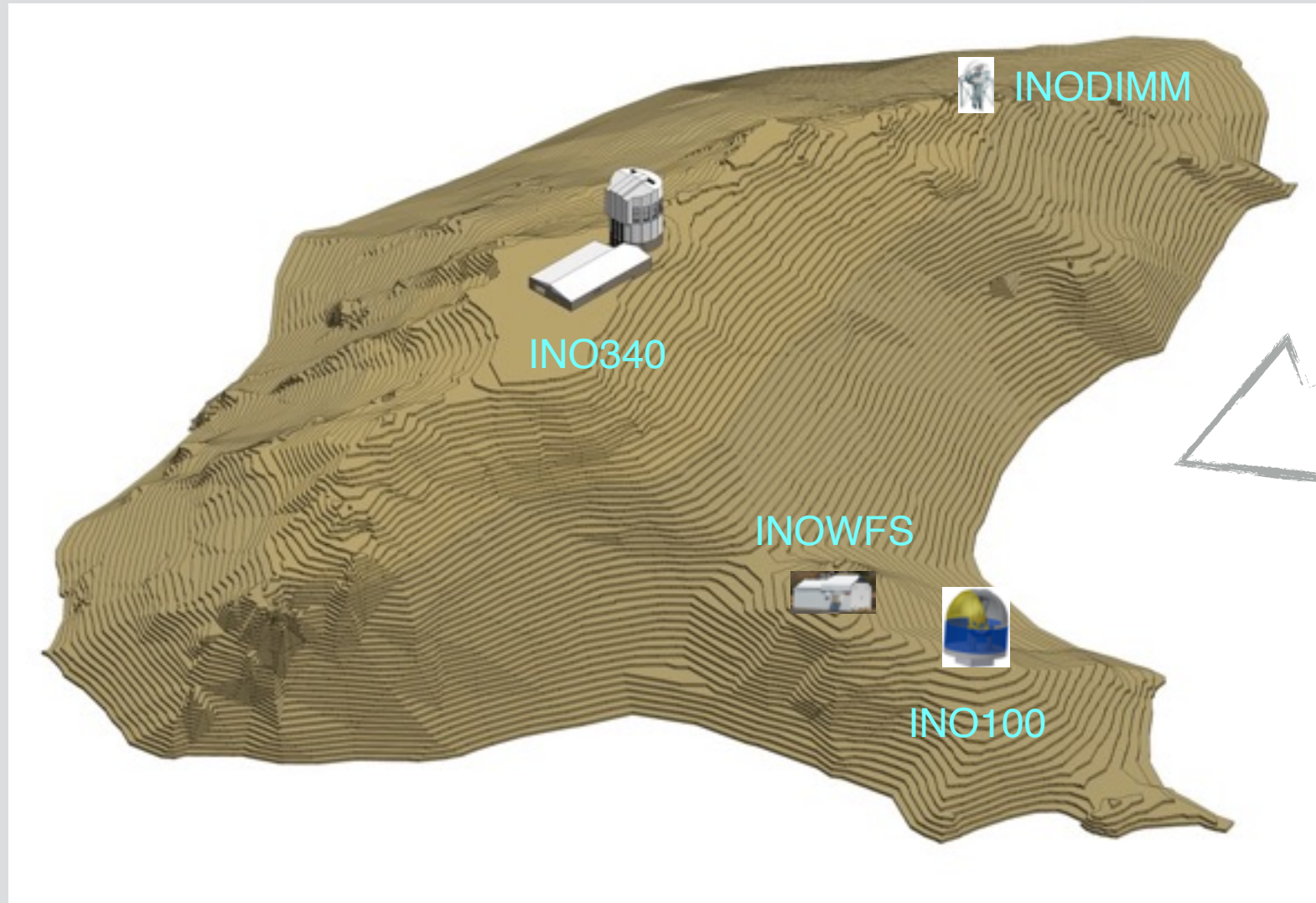




Road construction



Observing facilities





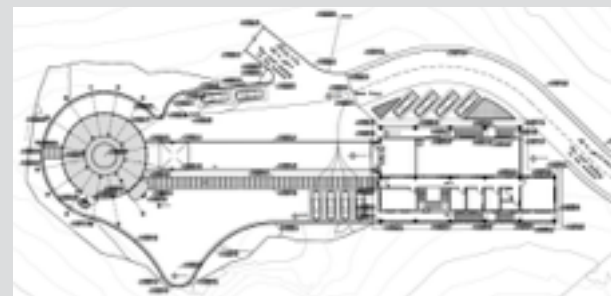
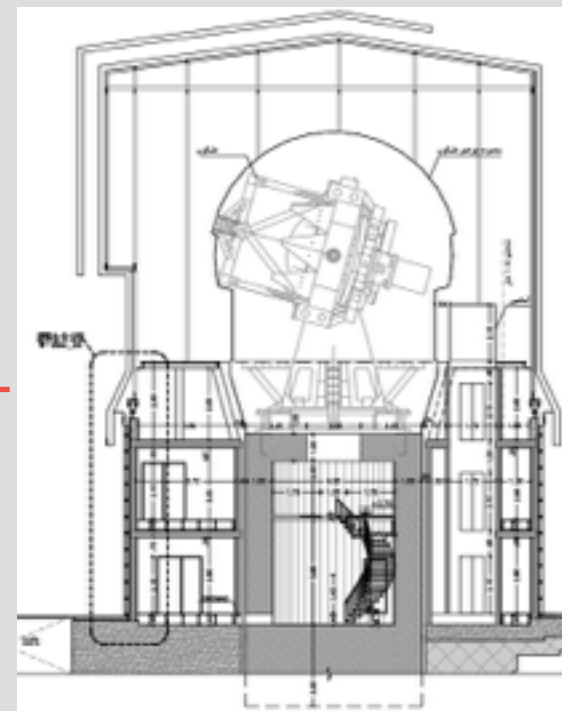
INOWFS

INO100

INO340

Site monitoring station

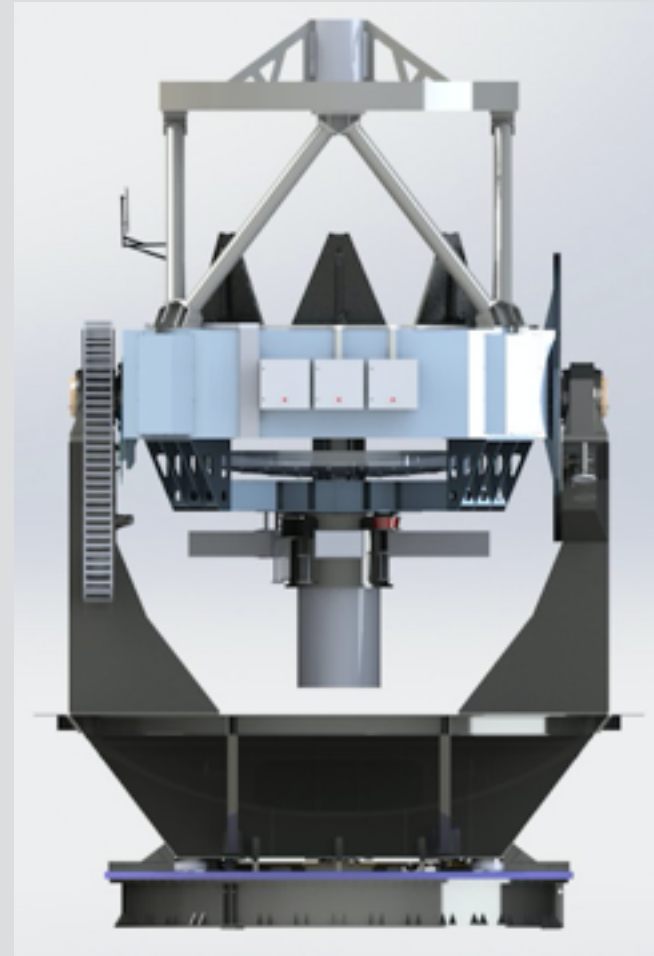
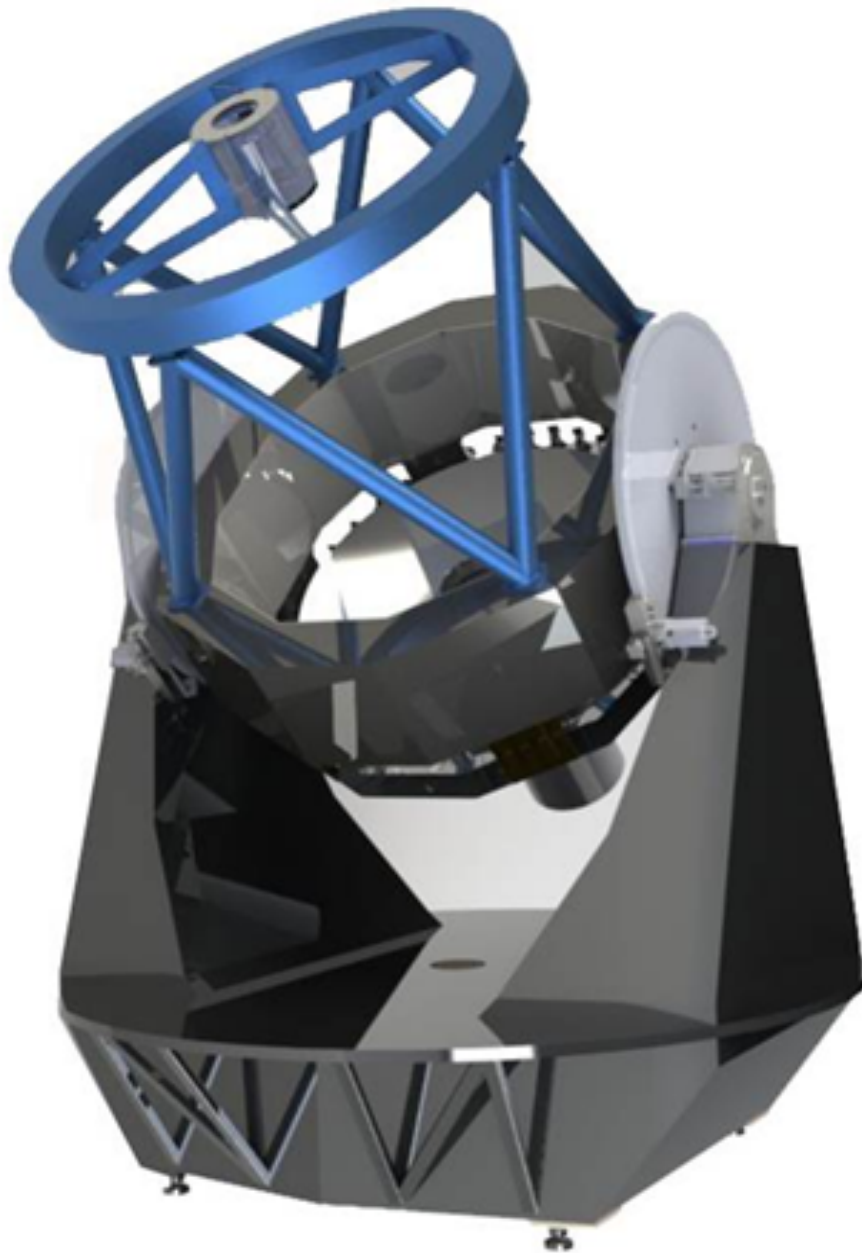
Site Plan - INO340



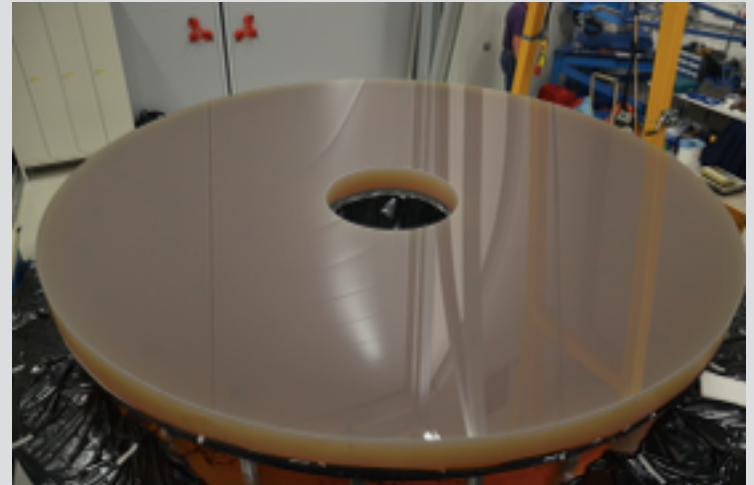
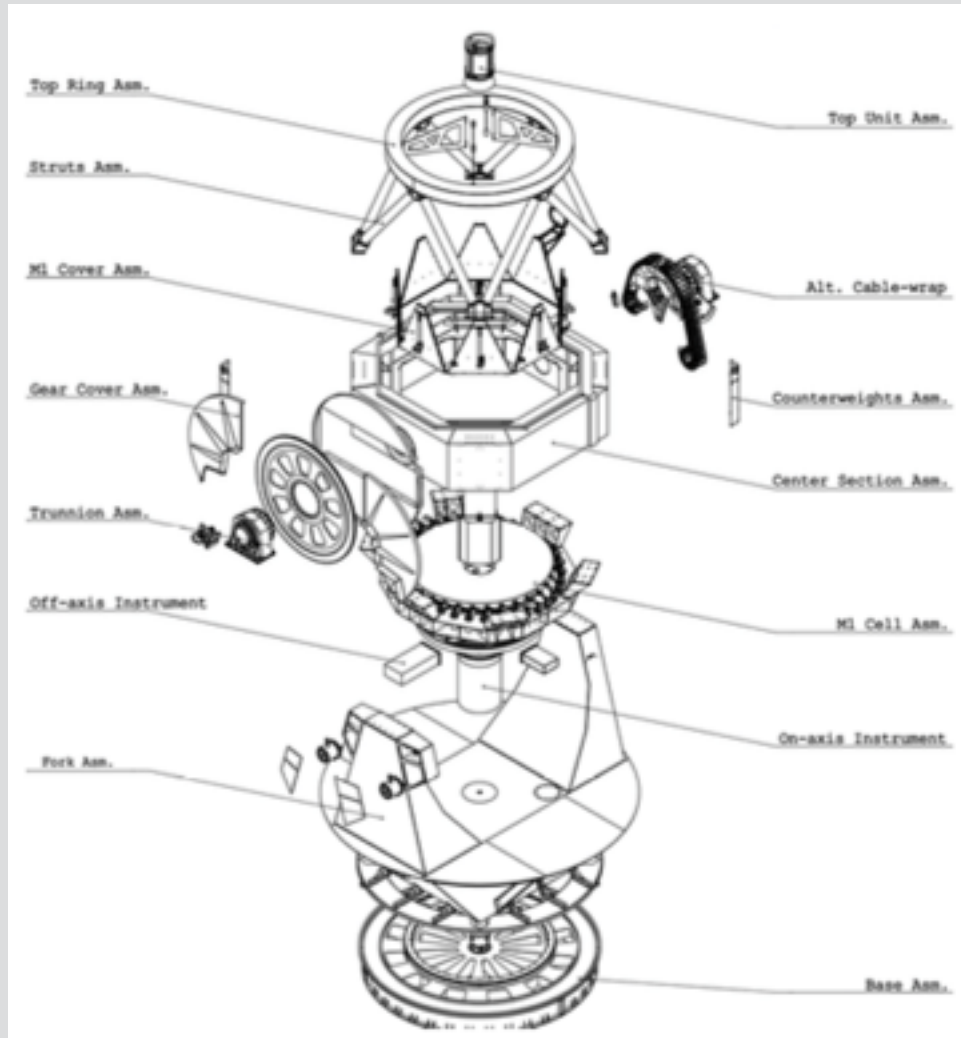
Site Plan - WFS



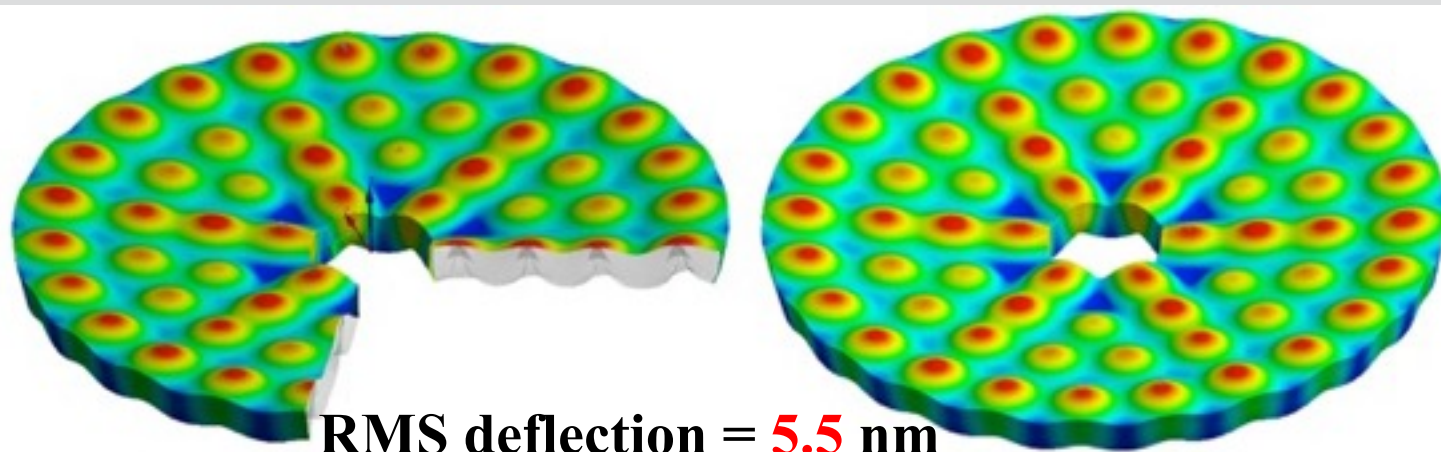
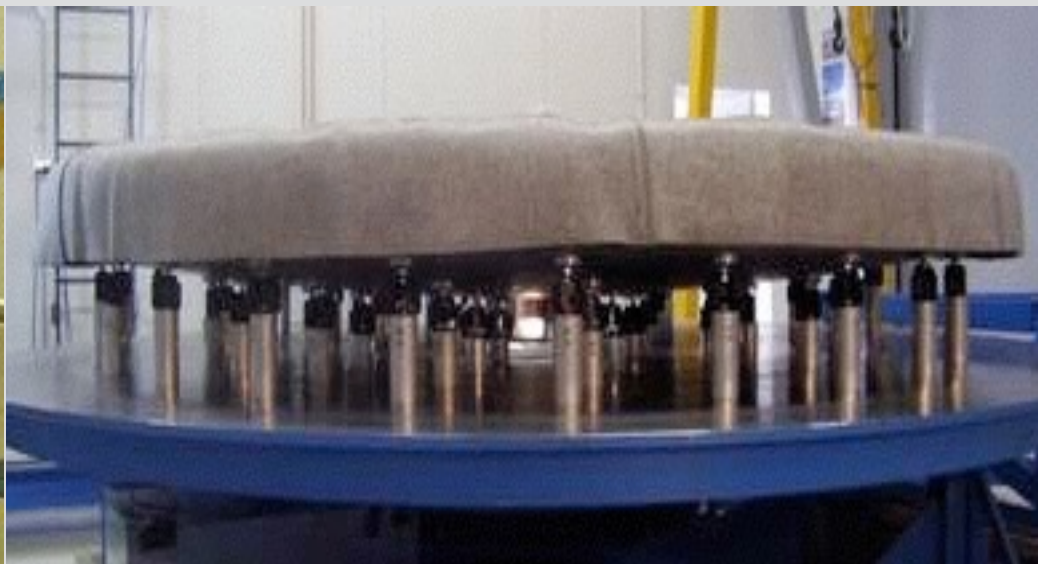
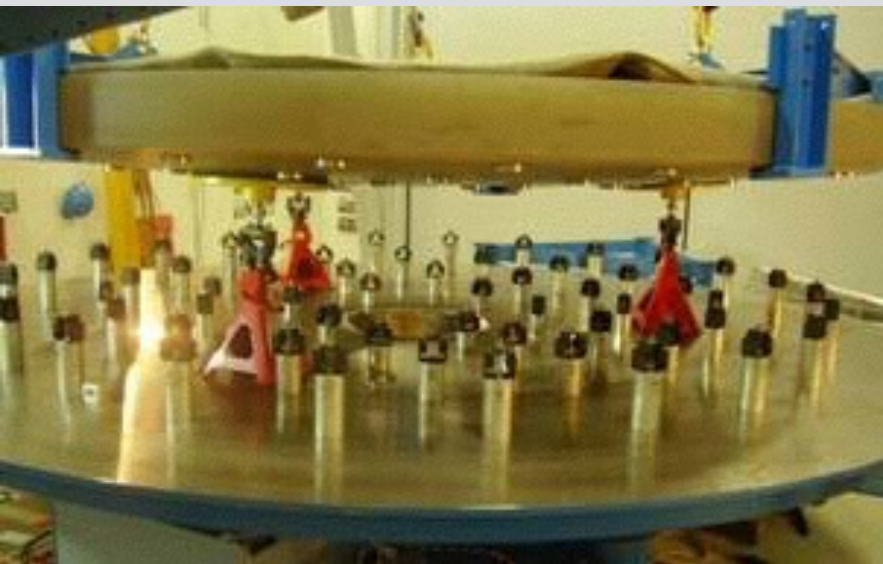
INO340



Telescope design



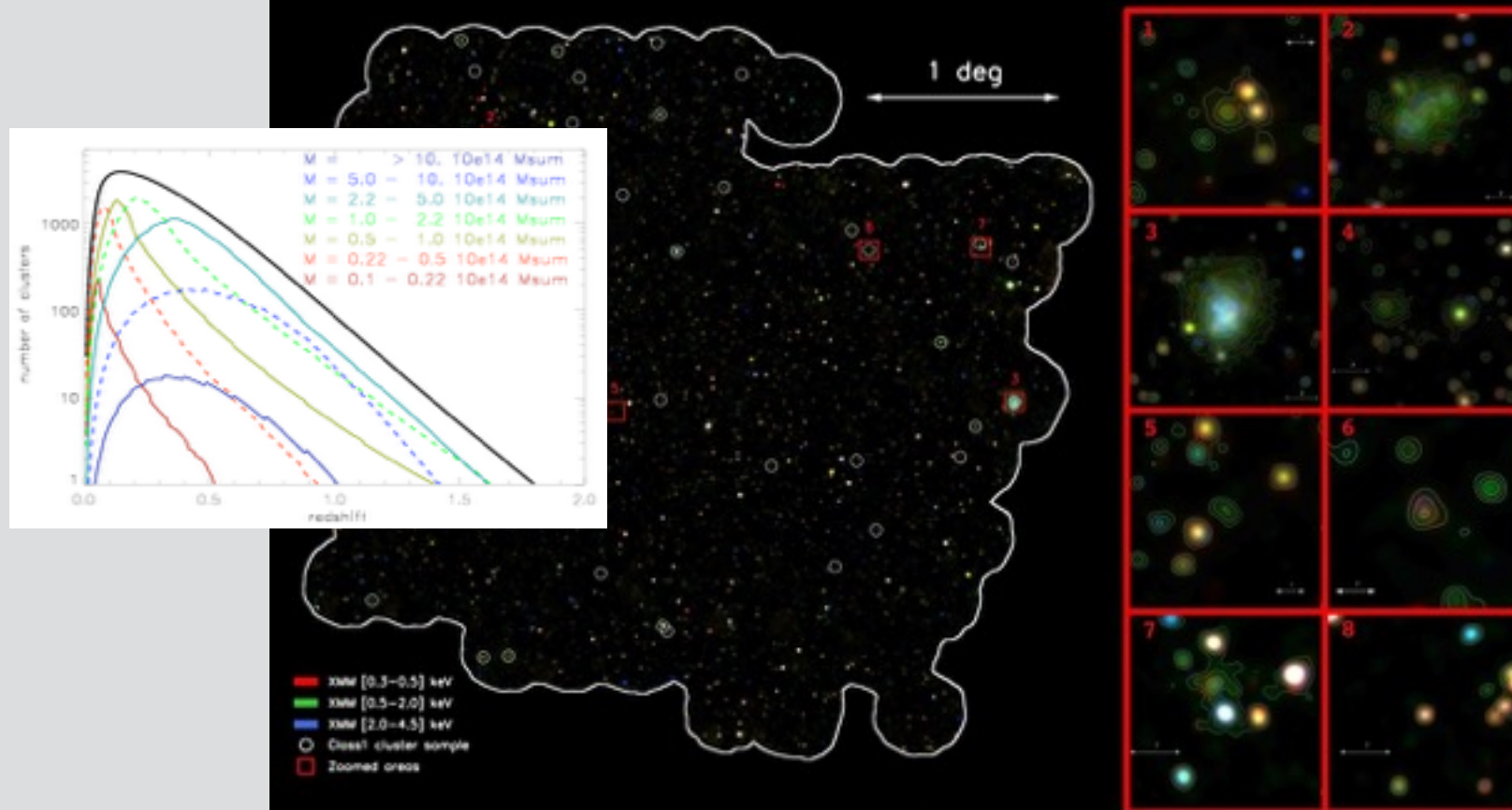
Primary mirror



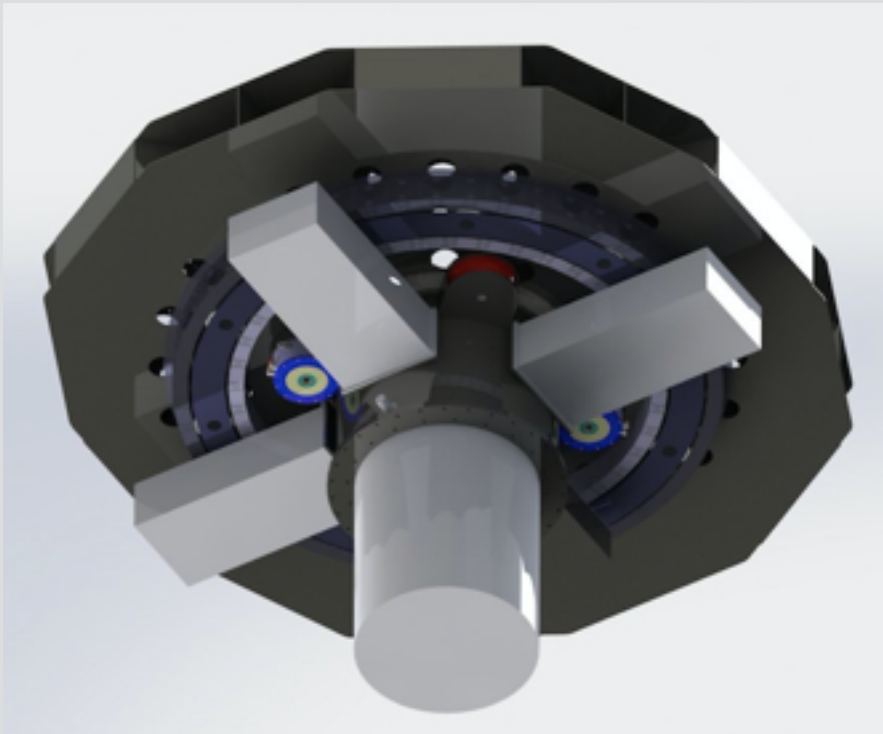
RMS deflection = 5.5 nm

An example of survey program

The XMM-LSS survey



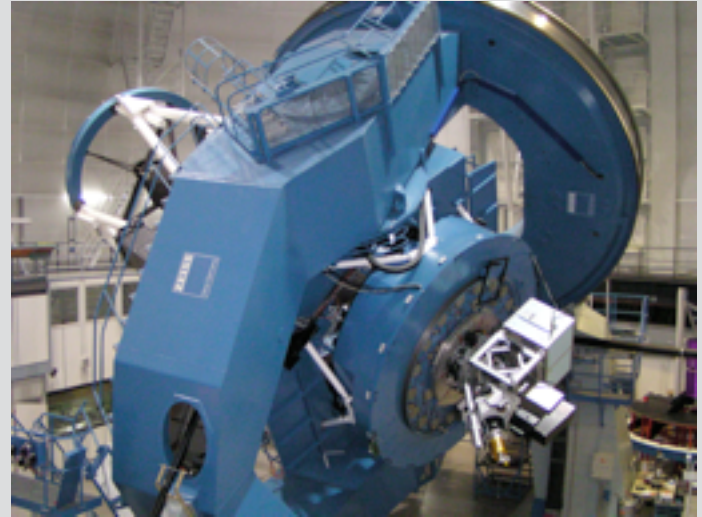
Instruments arrangement



High resolution imaging

Intermediate resolution spectroscopy

Low resolution spectroscopy



School of Astronomy @ IPM

