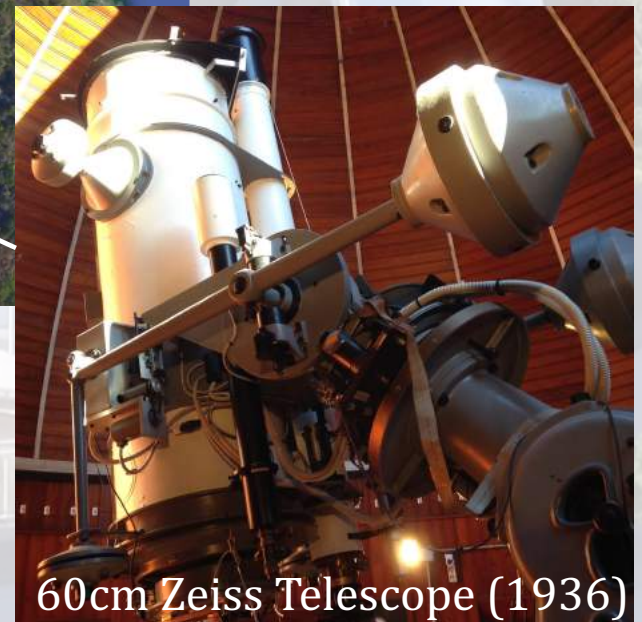
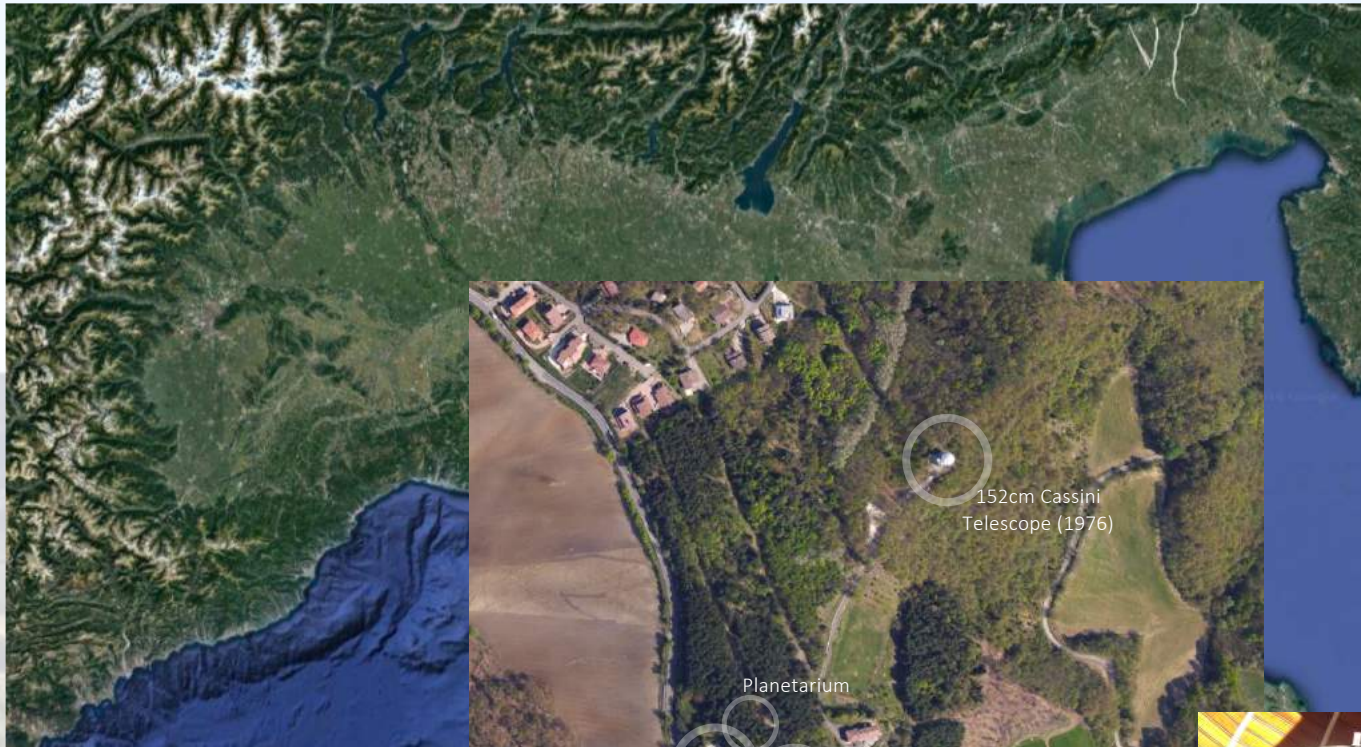




The observing station at Loiano

Giovanna M. Stirpe





60cm Zeiss Telescope (1936)



1.52m "Giandomenico Cassini" Telescope (1976)



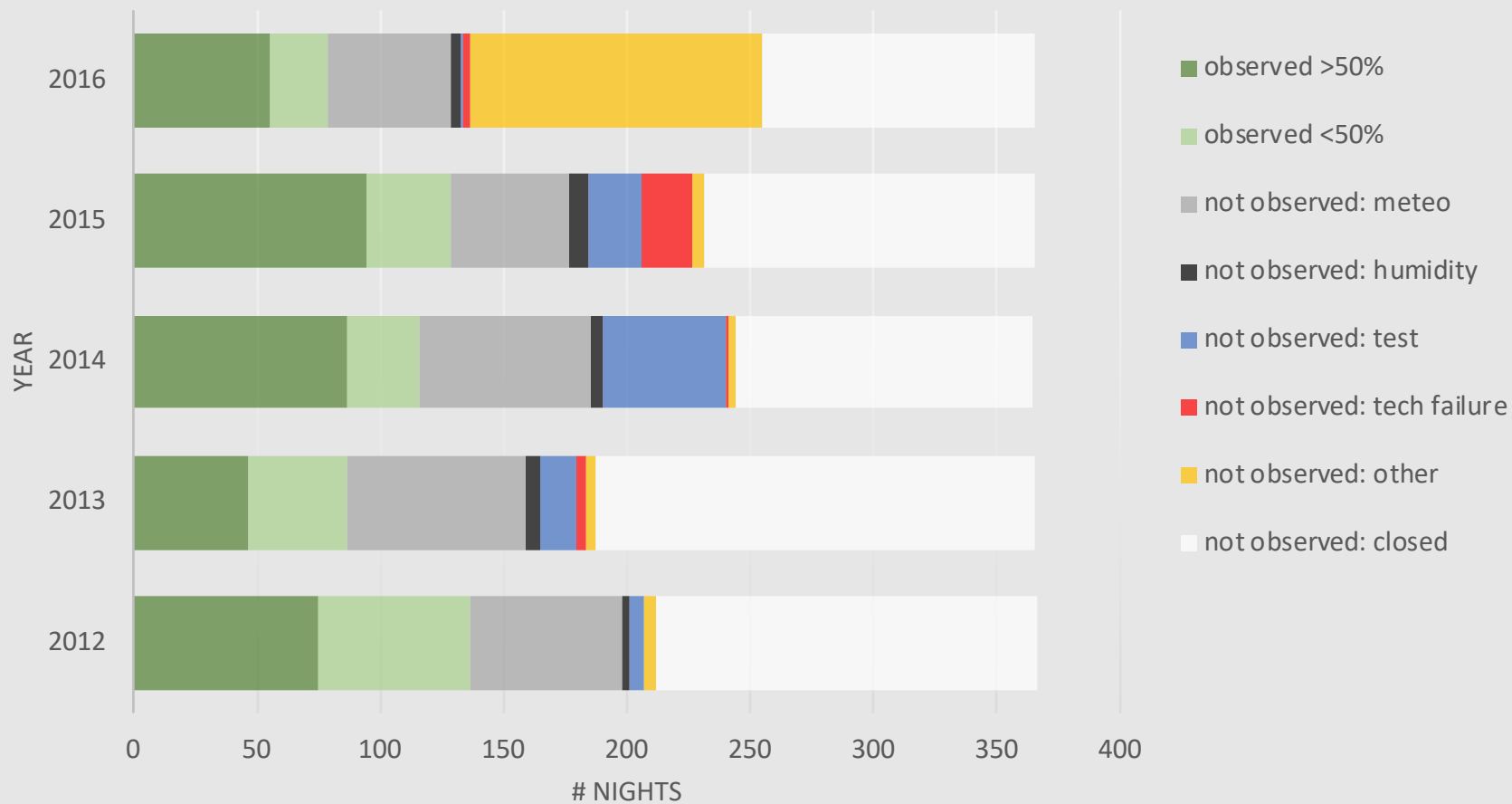
BFOSC

Status

- Grounds, buildings and telescopes owned by UniBo
- Management and ordinary maintenance of buildings and telescopes: INAF – OAS
- Cassini: science, teaching, SST (Space Surveillance and Tracking).
- Semester scheduling, OAS PI science programmes only
- Science: GAIA Science Alerts, extrasolar planets, X-ray binaries and CVs, AGN, GW follow-up, SST
- Staff
 - Telescope operators: Bruni, Deblasi, Gualandi
 - Resident astronomer: Galletti

Ivan, our man in the Antarctic





New guiding program

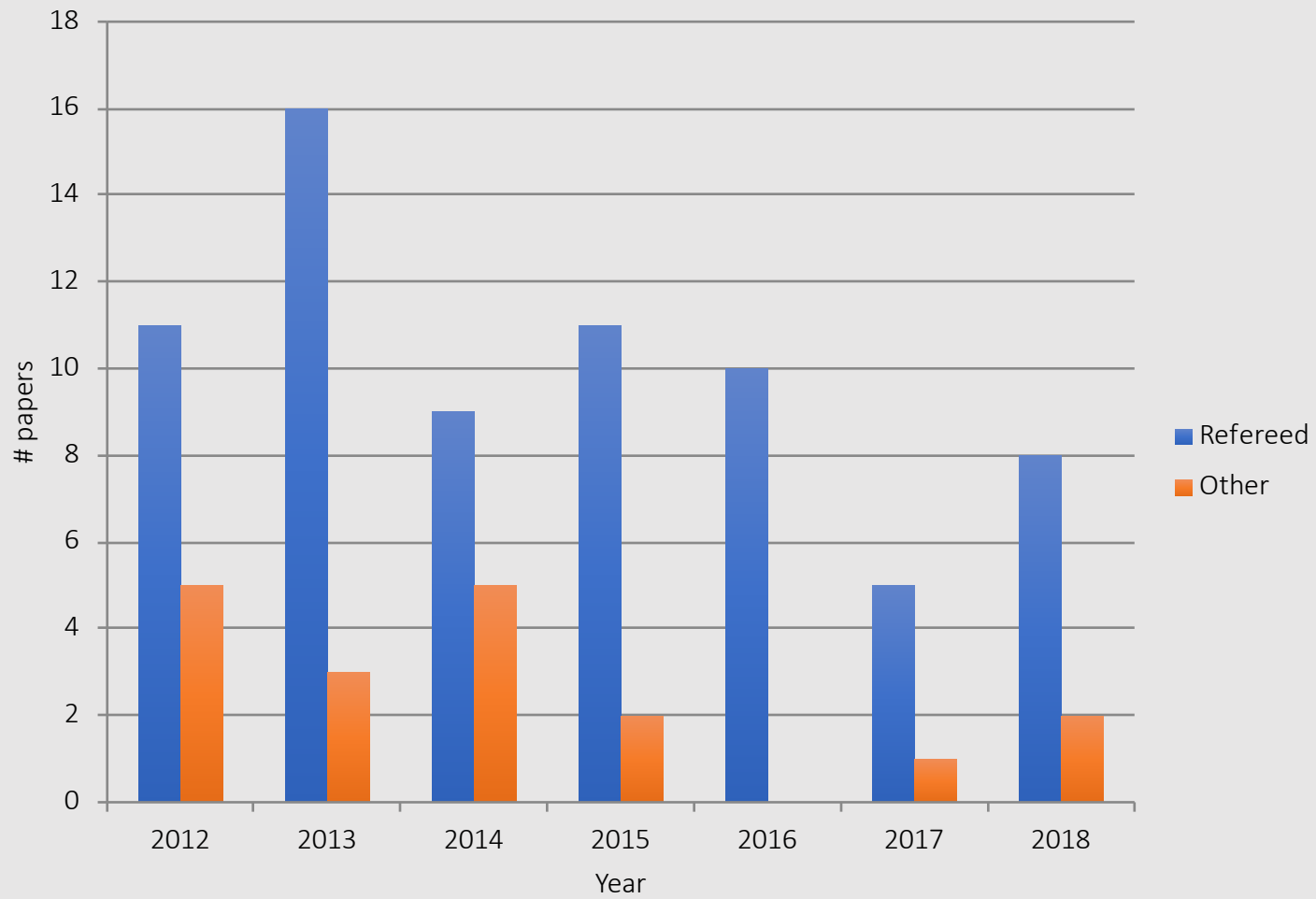
The screenshot displays the XY&Z_Bfosc_2017 software interface, which is divided into several functional panels for controlling a telescope's guiding system.

- Guide Camera Probe Control:** This panel includes buttons for 'Initialize X,Y Motors', 'Home X,Y Position', 'PARK X,Y', 'SCAN FoV', and 'STOP XY'. It also features a 'Limit Sw. X,Y' section with 'Ok' buttons and a 'MAN. MOVEMENT' checkbox. A directional pad (N, W, E, S) is present for manual movement. Input fields show 'Probe X: 99918', 'Probe Y: 99943', 'GoTo X: 700000', and 'GoTo Y: 1400000'. A 'Set Speed' button is set to 500000.
- Rotator BFOSC Control:** This panel has 'Initialize Z' and 'STOP Z' buttons. It includes a 'Set 0 Z' button and a 'Current Angle' field showing 270. A 'PARK Z to' button is also present. A 'MAN. ROTATION' checkbox is checked, with 'Slow' and 'Fast' options. A circular diagram shows the rotator's position with markers for 180, 270, and 360 degrees.
- Minor Planet Track:** This panel shows 'Speed rates' for 'dRA (arcs/hr*cosDEC): 0' and 'dDEC (arcs/hr): 0'. It includes 'Start Track' and 'STOP' buttons, and fields for 'Speed RA[Y]' and 'Speed DEC[X]'.
- Guide Star Finder Control:** This panel has a 'Set Manual Telescope Coord. (2000):' checkbox. It shows 'ARtel: 18 0 0' and 'DECtel: 44 0 0'. A 'Get Coord.' button is present. Below, it lists 'Tel. Coor (2000): 18 44', 'Home Prb (2000): 18:3:24 44:2:35', and 'Cent. Prb (2000): 25' X 9\".
- Gen Catalogue:** This panel has a 'View Catalogue' checkbox. It includes radio buttons for 'Star1', 'Star2', 'Star3', 'Star4', 'Star5', and 'Star6'. A 'Manual Set Star Guide Coord. (2000):' section shows 'AR*: 1 0 0' and 'DEC*: 1 0 0'. A 'Find Star' button is present. Below, it lists 'Star Coor (2000):', 'Prb Coor. (2000):', 'Star Coor (NDW):', and 'Prb Coor. (NDW):'.
- Main Display:** A large black area showing a star field. Above it are 'STOP X' and 'STOP Y' labels. Below the star field are coordinates: 'Xprb 411761', 'Yprb 2825618', 'Xm 22', and 'Ym 71'. There are also 'Offs. Y:', 'Offs. X:', 'Offs. HA(s)', and 'Offs. DE(*)' fields, all showing 0. A 'Set Probe Offs.' button is present. At the bottom, a green bar shows 'COM3 at 19200b' and 'Servo Motors checked: 3'. The text 'Bruni I. 2017' is displayed at the bottom.
- Focus GuideCam BFOSC:** This panel has a 'Guide Cam Focus Control' section. It includes a 'Com. Port:' field set to 3, 'Focus +' and 'Focus -' buttons, a 'Value:' field set to 69, and a 'Limit Sw. Foc.: OK' button. A 'Stop' button is present. Below, it lists 'COM3 at 19200b' and 'Servo Motors checked: 1'. The text 'Bruni I. 2017' is displayed at the bottom.

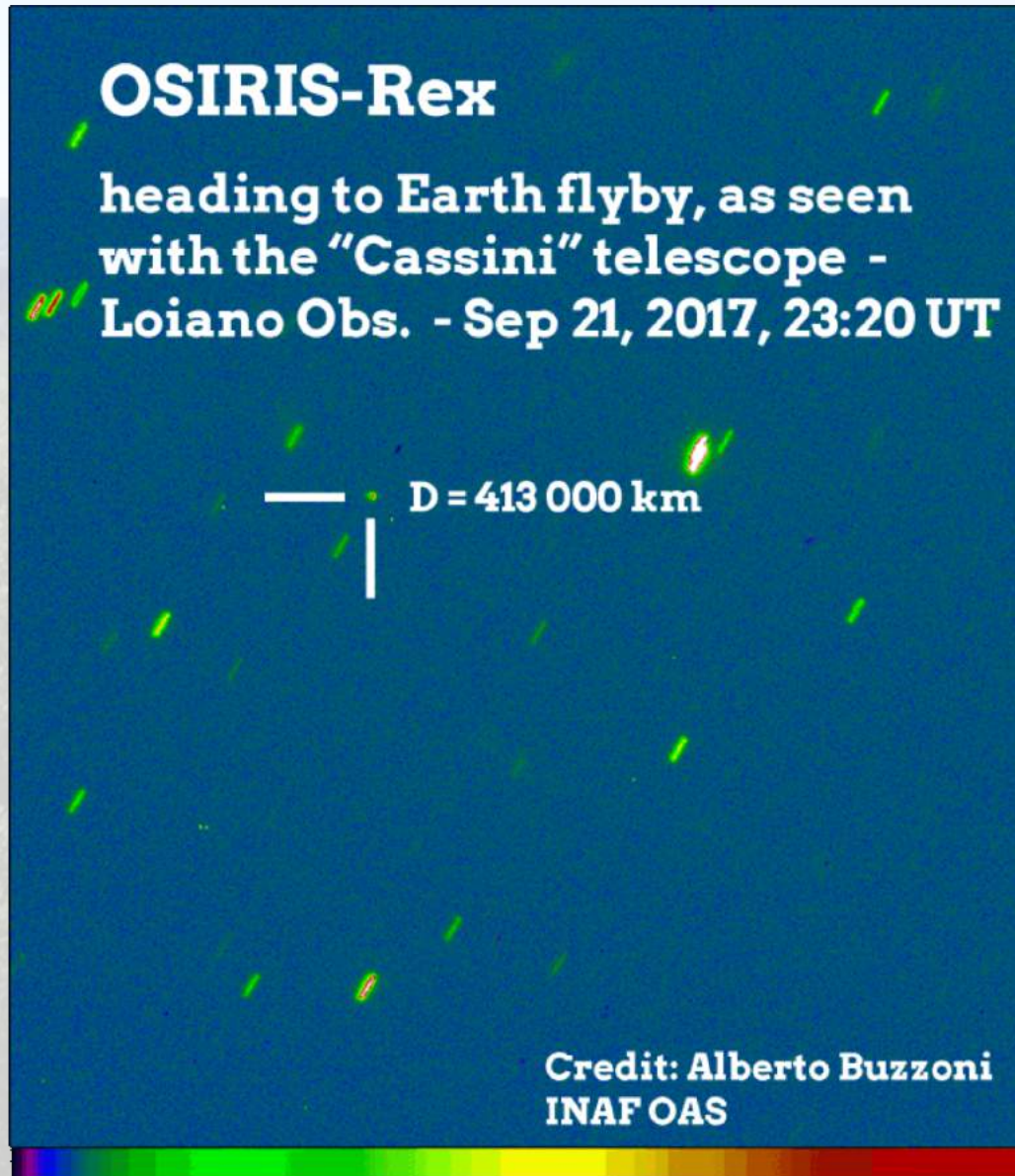
Dome automation



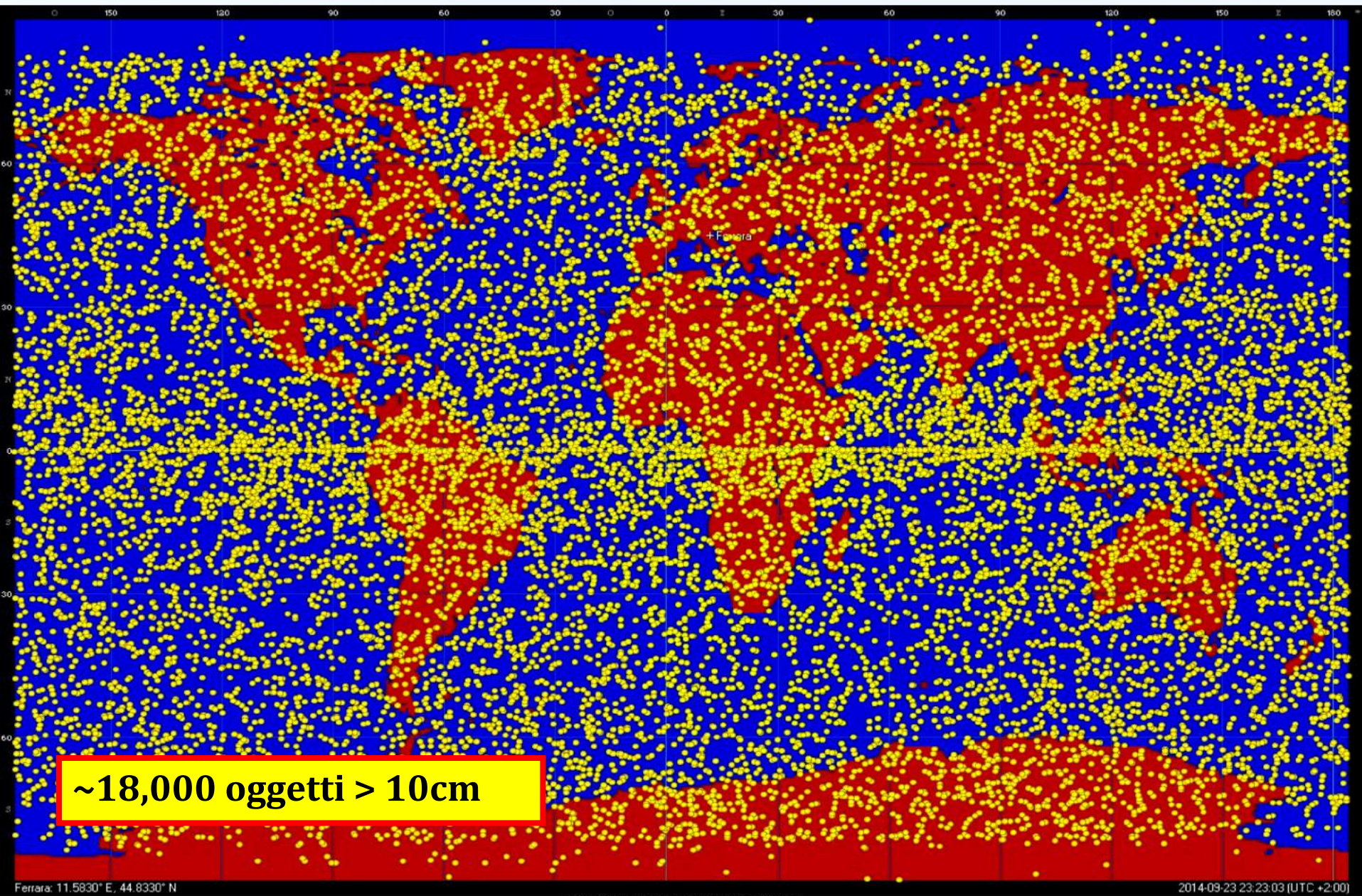
Papers



Space Surveillance and Tracking

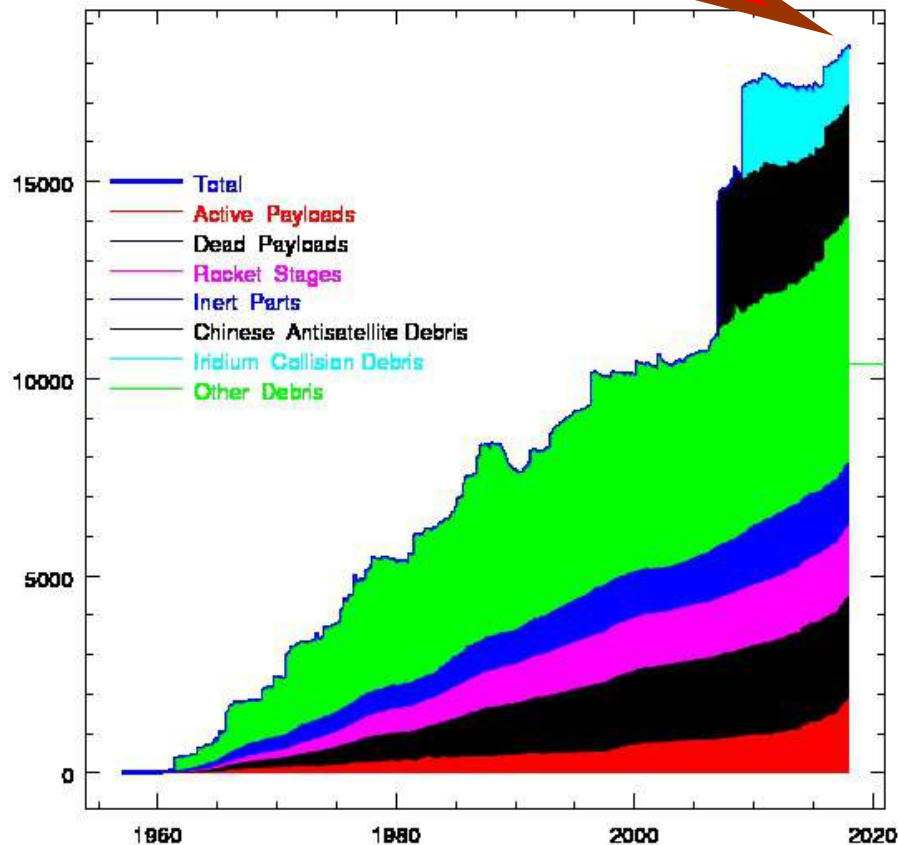


La situazione oggi

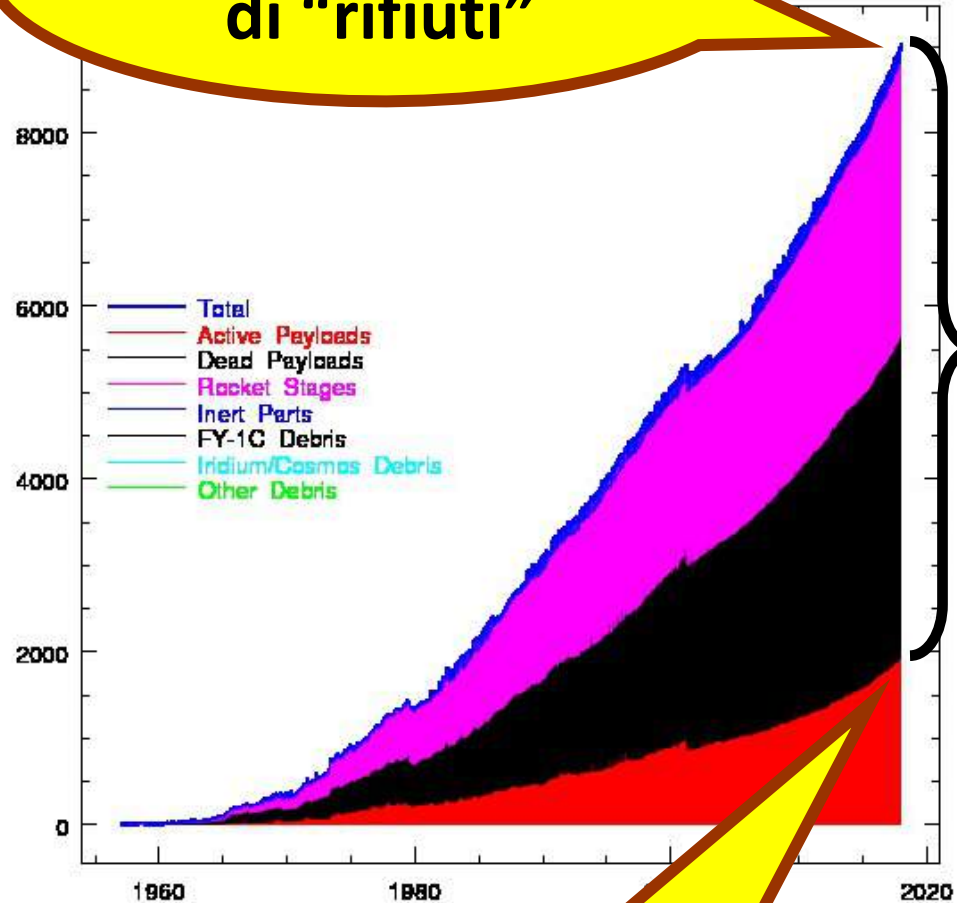


Traffico Spaziale

18,000 oggetti
>10cm

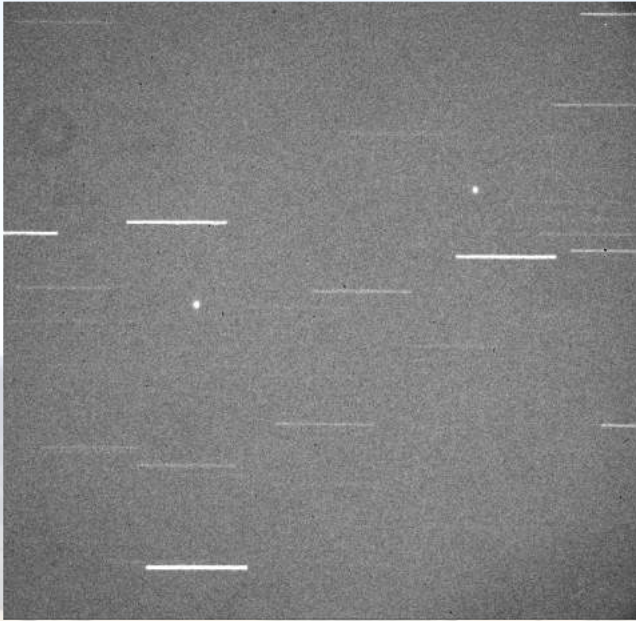


7,000 tonnellate
di "rifiuti"



2,000 tonnellate
"utili"

SST at Bologna/Loiano



- Buzzoni, Di Luca, Gualandi, Merighi, Stirpe + support from technological group
- Currently performing GEO and MEO tracking operations with BFOSC, in EU-SST context
- Working towards an upgrade of observing facilities in order to track on a wide field, and include NEO
- TD position to be assigned shortly

Critical points

- VERY critical: manpower
 - Technical
 - Technological
 - Administrative
 - Remote operations still not fully implemented
 - Logistics:
 - Asbestos removal is looming
 - Buildings old, need maintenance/repair
- just one more thing:

Grazie, Pigi!



Pierluigi Battistini
1939-2018

