#### **COSPAR** and **ICG**



**Chair COSPAR Panel on Satellite Dynamics** 

ICG-3, NASA JPL, December 8-12, 2008





1

### **Committee on Space Research**

COSPAR's objectives are to promote on an international level scientific research in space, with emphasis on the exchange of results, information and opinions, and to provide a forum, open to all scientists, for the discussion of problems that may affect scientific space research. These objectives are achieved through the organization of Scientific Assemblies, publications and other means.

http://cosparhq.cnes.fr/





### **COSPAR** scientific structure and ICG

- Sub-Commission B2 on International Coordination of Space Techniques for Geodesy and Geodynamics (CSTG)
- Technical Panel on Satellite Dynamics (PSD)



IC-3, JPL, December 8-12, 2008: COSPAR and ICG



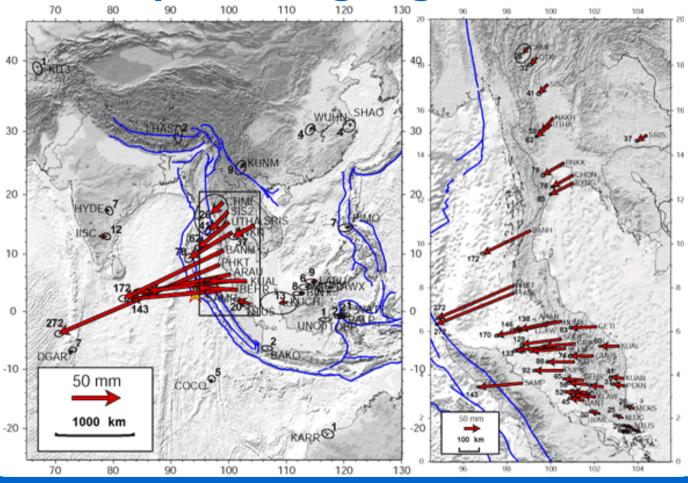
#### **Terms of reference**

- CSTG: To develop links between various groups engaged in the field of space geodesy and geodynamics by various techniques, coordinate work of these groups, elaborate and propose projects implying international cooperation, follow their progress and report on their advancement and results.
- PSD: The aim of the Panel is to support and coordinate all activities aimed at the detailed description of the motion of artificial celestial bodies. This should be achieved by improvement of the theories of motion and by more sophisticated evaluation of the determining forces. Detailed theoretical understanding of the dynamics of satellites should be matched with the results of precise tracking in order to obtain the most precise knowledge possible of the orbit itself and of individual positions within the orbit.





# **CSTG:** one of the central themes is reference frames and positioning of ground stations

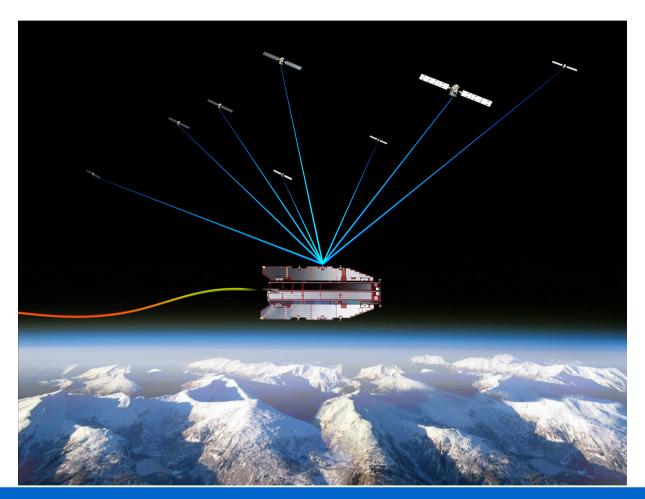


IC-3, JPL, December 8-12, 2008: COSPAR and ICG





# **PSD:** another central theme is positioning of LEOs



IC-3, JPL, December 8-12, 2008: COSPAR and ICG





6

### Relevant for many applications

- Oceanography: see level change (altimeter satellites)
- Glaciology: ice melt (gravity + altimeter satellites)
- Solid-earth: earthquakes, Glacial Isostatic Adjustment (geodetic + gravity satellites)
- Geodesy: reference frames, plate tectonics, navigation (geodetic satellites)

• ...





## Thank you for your attention



