

First PICARD workshop

Objectives of the workshop
and related activities

Missing bridges

- 1) the understanding of the ORIGINS of the solar variability
- 2) the determination of the SOLAR INDICATORS that could influence the chemistry of the Earth atmosphere

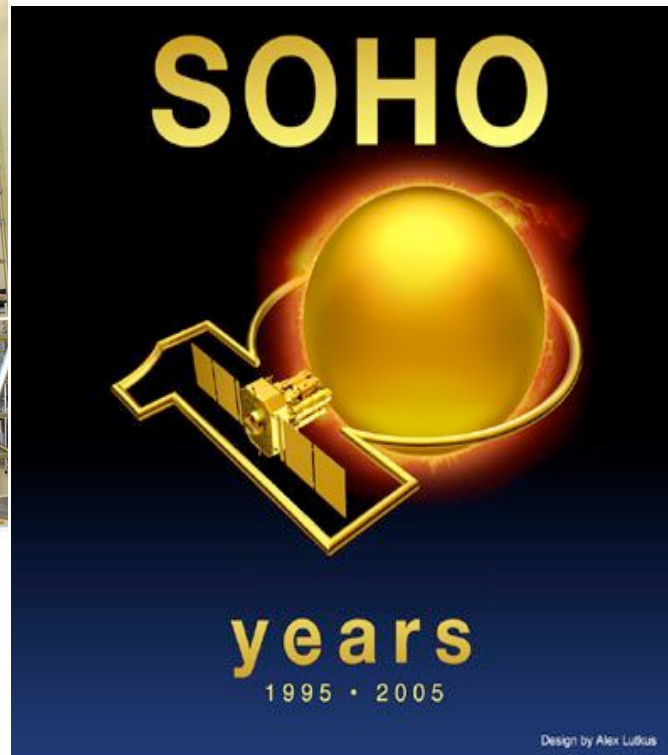
Global Warming

- Scientific studies
- New results
- New perspectives
- No a priori position, no polemics
- Complex situation we would like to better determine, if possible, the role of the Sun

SOHO, SDO and PICARD



NASA: SDO 2010-2015



SOHO: 1995 - 2012



**PICARD: Microsatellite CNES
Fr+Be+Ch 2010-2013**

Monday March 8th 2010

Presentation of the mission

10h15: G. Thuillier: The PICARD mission: its scientific objectives and status

10h50: S. Dewitte: Irradiance measurements and the Bruxelles Center

I: The solar radiative zone: dynamics and variability

11h20: S. Turck-Chièze: The solar energetic balance and the dynamics of the radiative zone

11h50: V. Duez: Surface impact of the radiative dynamics: a first step

12h10: S. Mathis: The internal waves

II: The tachocline & the convective zone: the dynamo action

12h30: P. Ventura and S. Sofia: Modelling of the solar interior variability by the Yale group

14h30: T. Corbard: Local helioseismology and sub layers activity

15h: L. Piau: Modelling the solar atmosphere from SSM and related observables

15h30: J.F. Cossette & P. Charbonneau: 3D simulations of the convective zone and tachocline

16h: L. Jouve: The cyclicity of the solar dynamo

16h30: UJ Sofia & K. Schatten: A Shallow Solar Dynamo and Solar Activity prediction

17h-17h30: Closed meeting for ISSI Proposal

Tuesday March 9th 2010

III: Coupling photosphere to corona

9h00: S. Sofia: SDS measurements: previous and latest results

9h30: S. Mello: Limb shape modelling

9h55: M. Haberreiter: Solar atmosphere structures and their relevance to solar limb modeling

10h20: G. Thuillier: Solar atmosphere study using PICARD limb and spectral measurements

10h45: JF Hochedez: LYRA early results

11h10: Coffee break

11h30: T. Dudok de Wit: Use of PICARD/PREMOS for the reconstruction of the UV spectrum

11h55: E. Quemerais: Forecasting of the solar UV Flux, using full disk images from PICARD

12h20: M. Kretzschmar: Effect of the flares on the TSI

12h45: I. Veselovsky: The solar wind problem in astrophysics and plasma physical aspects

13h: Lunch at the cafeteria

IV: Solar activity and impact on the Earth atmosphere : first tendencies

14h30: S. Shapiro: TSI and SSI reconstruction back to the Maunder minimum

15h: E. Bard: Solar record based on cosmogenic nuclides

15h30: S. Bekki: The LMDz reprobus Earth climatic code: First results on the solar variability impact on the Earth atmosphere

16h: S. Mello: First results from the Canadian climatic model

16h30: A. Shapiro: Response of the middle atmosphere to short-term solar irradiance variability during different Quasi-Biennial Oscillation phases

V: Complementary observations

17h: T. Corbard: The ground SODISM/PICARD instrument (10mn)

17h10: S. Turck-Chièze: GOLF/SoHO / GOLF-NG /SDO (10mn)

VI: Discussion and conclusion: end of the meeting 18h