

# J. Verron LGGE/CNRS Grenoble

SARAL/AltiKa Science Pl (French side)





## Happiness !

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Except for a small problem

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## Outline ...

- Great
- Easy
- Congratulations
- Science
- Next
- Thanks

## Great

- So far, meet expected performances or better
- A lot, including good science, to dig in (ice, hydrology, ...)
- Not unpleasant surprise (e.g. rain effects)
- Gap filler objective beyond Envisat OK
- Previous feebleness on Ka band proved wrong (important for SWOT)
- First science results of much interest (eddy monitoring, spectrum, EKE, ...)
- Reminder: SARAL/AltiKa supposed to be an « intermediate quality » satellite but actually behaves as well as the Jason « reference missions »

## Easy

- Quick availability of data
- Easy interaction between project, Cal/Val teams, expert scientists, ...
- Quick transfer/smooth integration to multimission database, SALP-DUACS-AVISO, ...
- Reactivity/adaptativity to algorithmitic necessary developments
- Easy adaptability to operational (e.g. SWH and assimilation into operational models)

# Bravo !

- To CNES and ISRO
- To the mission project

**Not totally fortuitous :** the heritage of the 20 year's old building of altimetry (especially through US-France cooperation but also Envisat)

• The scientific community is lucky !

## Science

#### • The SARAL/AltiKa science team

- 40 Indian teams
- 17 French teams
- 27 (non-F/non-I) International teams

# SARAL/AltiKa and OSTST

- SARAL/AltiKa in the OSTST (Ocean Surface Topography Science Team)
  - Space agencies  $\leftarrow \rightarrow$  Scientific teams
  - Overall scientific coordination
  - Multimission coordination and synergy
  - Links to related group/topics: Coastal Altimetry Groups, SWOT (CNES/NASA), ARGO, GODAE
- But beyond the OSTST, SARAL/AltiKa is not just an altimetry mission « like the others »
  - May be some specifics to preserve
  - Cooperation with India
  - Innovative measurement: Ka in the prospect of SWOT
  - Openings towards: coastal oceans, hydrology, ice, ...
  - Less problem than expected with rain: scientific/technical openings

## Key ingredients of a successful altimetry\* mission

#### General

- Strong scientific background/motivation/co mmunity/challenges
- Complete/efficient chain of data flow (satellite to users)
- Applications, societal dimension
- Technological innovation/competence
- International cooperation

#### SARAL/AltiKa

- HR ocean variability, mesoscales, data assimilation, climate, sea level, ...
- Heritage of altimetry, DUACS, AVISO, SALP, etc ...
- Operational oceanography, climate, hydrology, ...
- Ka, CNES/CLS
- India-France + OSTST

\*Perhaps any satellite mission for earth observation

## Next

### Conferences:

- Keynote talk, next Boulder OSTST (7-11 Oct 2013)
- Special symposium on SARAL/AltiKa in the 2014 OSTST meeting (Germany, Oct 2014 ?)
- Symposium to be organized with our Indian colleagues between 2013 and 2014 OSTSTs (April-May 2014 ?)

## Communication/Publications

- Aviso news letter (underway)
- Dedicated journal special issue (spring 2014 ?)

### Education

- An international school project (India ? Europe)
- A message to agencies
  - On the outcome of this workshop

# Thanks

- To Amandine, Nicolas, Pierre, ...
- All participants/contributors especially those coming from far away