

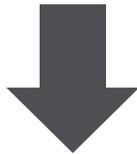


## ACIX - Atmospheric Correction Inter-comparison eXercise



## - What?

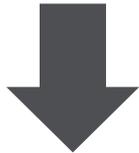
- International collaborative initiative to **inter-compare** a set of **atmospheric correction (AC) processors** for high-spatial resolution optical sensors
- Focus on **Landsat-8** and **Sentinel-2** imagery



- Better understanding of the different uncertainty contributors and help in improving the AC processors

## - Why?

- **Free** and **open** access policy to **Landsat-8** and **Sentinel-2** imagery has stimulated the development and operational use of AC processors for generating Bottom-of-Atmosphere (BOA) products



- ACIX results are expected to point out:
  - **strengths & weaknesses**
  - **commonalities & differences**of **AC processors** for their further improvement

## - How?

ACIX will be performed in **three** phases:

### 1. Definition of the inter-comparison protocol:

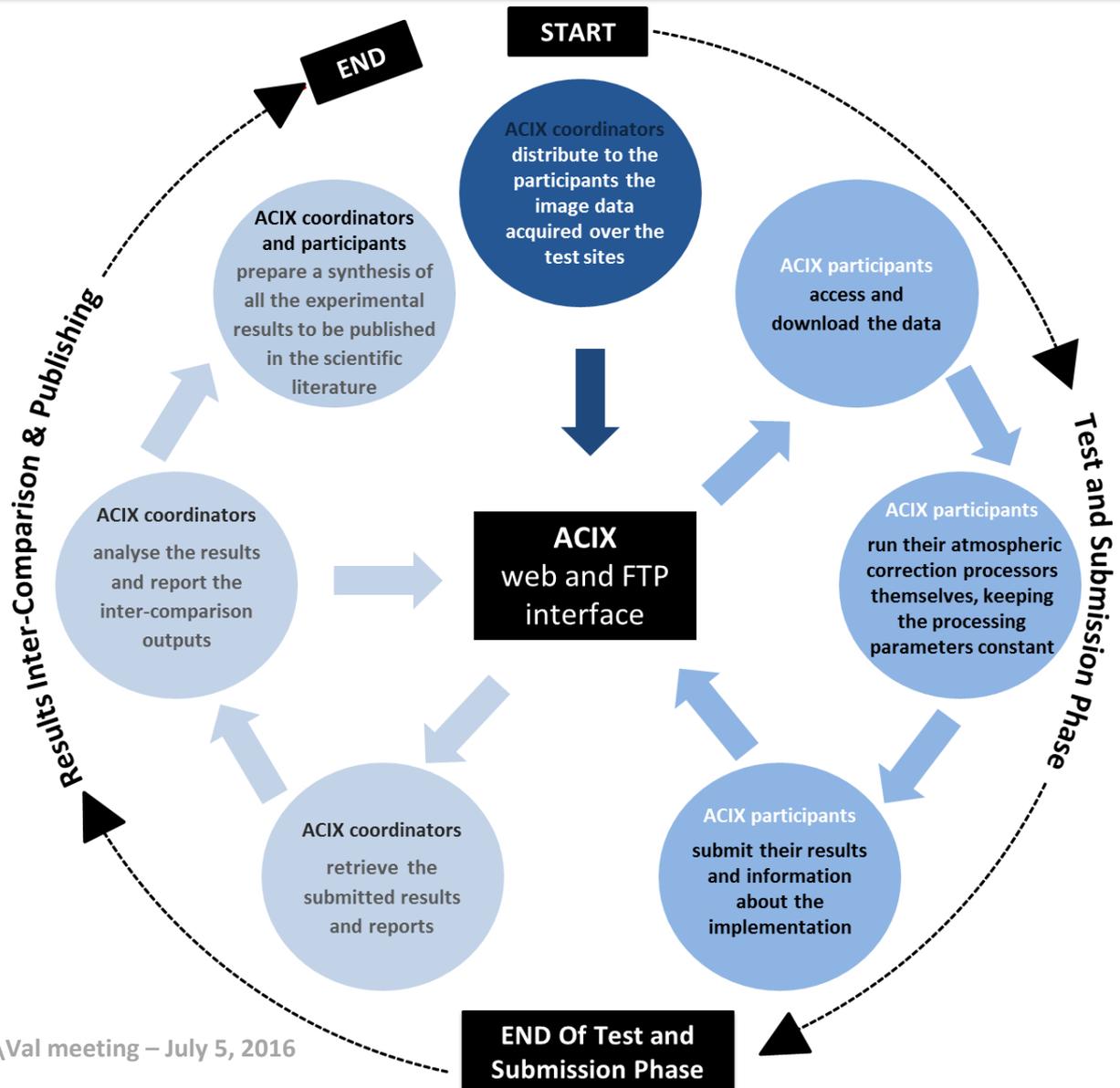
**Participants** are invited to propose a protocol for the AC processors inter-comparison. All the proposals will be discussed at the 1<sup>st</sup> workshop and the final inter-comparison procedure will be agreed by all participants.

### 2. Application of the AC processors:

**Participants** will apply their AC schemes for a set of test sites keeping the processing parameters constant. The results will be submitted for analysis to ACIX coordinators.

### 3. Analysis of the results:

**ACIX coordinators** will process the results submitted by all participants and will assess the inter-comparison outputs based on the agreed metrics. All the results will be presented and discussed during the 2<sup>nd</sup> ACIX workshop.

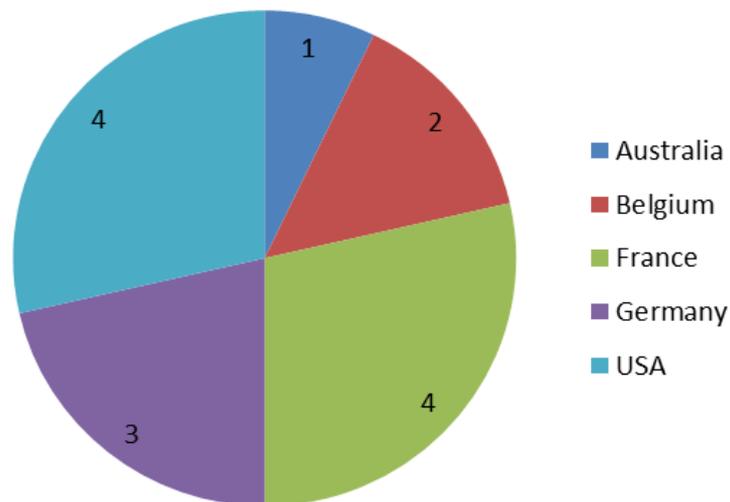


## - When?

IMPORTANT DATES	
<del>1st Workshop Announcement</del>	25 January 2016
<del>1st Workshop Registration Deadline</del>	15 March 2016
<del>1st Workshop Preliminary programme</del>	30 April 2016
<del>Proposals for AC inter-comparison protocol Deadline</del>	31 May 2016
<del>1st Workshop of CEOS-WGCV Atmospheric Correction Inter-comparison Exercise</del>	<del>21-22 June 2016</del>
Results Submission Deadline	15 October 2016
Results Analysis Report	15 December 2016
2nd Workshop of CEOS-WGCV Atmospheric Correction Inter-comparison Exercise	1 <sup>st</sup> quarter of 2017

## - Who?

- **14** atmospheric correction processors
- **15** organisations, institutes, universities, companies
- **5** countries: Australia, Belgium, France, Germany, USA



## Registered Participants

Name		Organization/ Company	AC Processor	Country	Input Data
1	Eric, VERMOTE	NASA, Maryland University	L8SR, name of S-2 TBD	USA	Landsat-8 & Sentinel-2
	Jean-Claude, ROGER				
2	Jerome, LOUIS	Telespazio France	Sen2Cor	France	Sentinel-2
3	Pflug, BRINGDRIED	DLR - German Aerospace Center	Sen2Cor, ATCOR	Germany	Landsat-8 & Sentinel-2
4	André, HOLLSTEIN	Helmholtz-Zentrum Potsdam Deutsches GeoForschungsZentrum GFZ	SCAPE-M	Germany	Sentinel-2
5	Oleg, DUBOVIK	LOA, University of Lille -1	GRASP	France	
6	Steven, ADLER-GOLDEN	Spectral Sciences, Inc.	FLAASH	USA	Landsat-8 & (probably) Sentinel-2
7	Larry, LEIGH	South Dakota State University	SMACAA	USA	Landsat-8 & (probably) Sentinel-2
8	Erwin, WOLTERS	VITO	<u>OPERA</u> (An Operational Atmospheric Correction for Land and Water)	Belgium	Landsat-8 & Sentinel-2
	Sterckx, SINDY				
9	Quinten, VANHELLMONT	Royal Belgian Institute for Natural Sciences	<u>ACOLITE</u>	Belgium	Landsat-8 & (most probably) Sentinel-2
	Kevin, RUDDICK				
10	Antoine, MANGIN	ACRI-HE	<u>LAC (for Land Atmospheric Correction)</u>	France	Landsat-8 & Sentinel-2
11	Olivier, HAGOLLE	CNES	MACCS	France	Landsat-8 & Sentinel-2
12	Fuqin, LI	Geoscience Australia	GA-PABT	Australia	
	Lan-Wei, WANG				
13	David, FRANTZ	Trier University	Ind-prepro	Germany	Landsat-8 & Sentinel-2
14	Grit, KIRCHES	Brockmann Consult	TBD	Germany	Landsat-8 & Sentinel-2

## - Where?

1st ACIX workshop (21-22 June 2016) venue:

College Park Marriott Hotel & Conference Center

2<sup>nd</sup> ACIX workshop venue:

Venue and dates to be defined

(Dates in 1st quarter of 2017)

## - Outcomes of the 1st workshop

- Definition of the protocol and procedures for inter-comparing and validating products
- Definition of key regions and key periods for validation and quality assessment
- Description of a coordinated plan for inter-comparison and validation activities

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**Thank you for your attention!**

Be informed about ACIX on:

<https://earth.esa.int/web/sppa/meetings-workshops/acix>