### **GOSAT** Research Announcement

**GOSAT RA Office** 

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### Schedule

1st Announcement Release of RA April 7, 2008
 Deadline for submission of proposals July 7, 2008
 Notification of the selection results August 29, 2008
 Sign up of the agreement Autumn, 2008 or later
 PI meeting/workshop, November.5,6,7 2008
 Launch of GOSAT Scheduled for early 2009 Submission of interim reports September 30, 2009

#### • 2nd Announcement

Release of RA Scheduled for February 2009
Deadline for submission of proposals Scheduled for May 2009
Notification of the selection result Scheduled for June 2009
Contract Scheduled for July 2009 or later

### **Research Topics**

- 1) Calibration
- 2) Data Processing Algorithm
- 3) Carbon Balance Estimation, Atmospheric Transport Models
- 4) Validation
- 5) Data application

## Reporting

#### Interim reporting

The PI shall report on the progress of his/her research in the way designated by the Three Parties(JAXA / NIES / MOE) at GOSAT-related workshops as well as interim report meetings.

In addition, if the Committee deems the research purpose or data application of the RA Investigators as deviant from the initial research plan or in breach of the joint research contract, as a result of the examination of the progress reported, the Three Parties may terminate the said agreement.

#### Final reporting

All PI's are required to submit the final reports to the Three Parties, in accordance with the instructions provided in the contract, generally in one year from the last interim report meeting. The reports shall be prepared in English.

Moreover, the PI's must present their research results in whole or in part at conferences, symposiums, and workshops to be held by the Three Parties.

### Pl's Rights

The PI shall be entitled to the following rights:

- 1. Submitting requests for new data acquisition necessary for the implementation of the research on the selected theme.
- 2. Requesting a delivery of standard products, free of charge, before the release to the public.
- 3. Requesting a delivery of research products free of charge.
- (Note that the number of such requests will be determined in consideration of the conformity to the research purpose.)
- (\*) The research products will be made available to RA Investigators, to an extent necessary for their respective researches, at suitable timing. The Three Parties do not guarantee product quality.

### List of GOSAT/TANSO Products

Processing level	Sensor /band	Product Name	Category	Unit	Format	
1.14	FTS	FTS L1A data	Internal	FTS scene		
L1A	CAI	CAI L1A data	Internal	CAI scene		
L1B	FTS	FTS L1B data	Standard	FTS scene		
LID	CAI	CAI L1B data	Standard	CAI frame		
L1B+	CAI	CAI L1B+ data	OAI Iraille			
		L2 CO2 column amount (SWIR) Standard				
	FTS SWIR	L2 CH4 column amount (SWIR)	Standard			
		L2 H2O column amount (SWIR) Research				
		L2 CO2 profile (TIR) Standard				
		L2 CH4 profie (TIR)  Standard  Any  (an demand)		Any (on-demand)		
L2		L2 CO2 column amount (TIR)	Research	(on-demand)		
LZ	FTS TIR	L2 CH4 column amount (TIR)	Research	search		
		L2 temperature profile (TIR) Research				
		L2 H2O profile (TIR)	Research	Research		
		L2 H2O column amount (TIR)	Research			
	CAI	L2 cloud flag Standard		CAI frame	HDF5	
		L2 cloud property Research				
		L2 aerosol property	Research			
	FTS SWIR	L3 global CO2 distribution (SWIR)	Standard			
		L3 global CH4 distribution (SWIR)	Standard	Global		
	FTS TIR	L3 global CO2 distribution (TIR)	Standard	(monthly average)		
		L3 global CH4 distribution (TIR)	Standard			
L3	CAI	L3 global radiance distribution (all pixels)	Standard Global			
		L3 global reflectance distribution (clear sky)	Standard	(every 3 days)		
				Global		
				(monthly average)		
		L3 global NDVI	Standard Lat. 30° × Lon. 60° (every 15 days)			
1.44		L4A global CO2 flux	Standard	64 locations across		
L4A	_	L4A global CH4 flux Rese		the globe (annually)	text	
		L4B global CO2 distribution	Standard	Global 2.5° mesh	NetCDF	
L4B	_	L4B global CH4 distribution	Research	(monthly)		
		Research		,,		

☆Gray marked products are delayed to distribute as compared with the other Level 2, 3 products

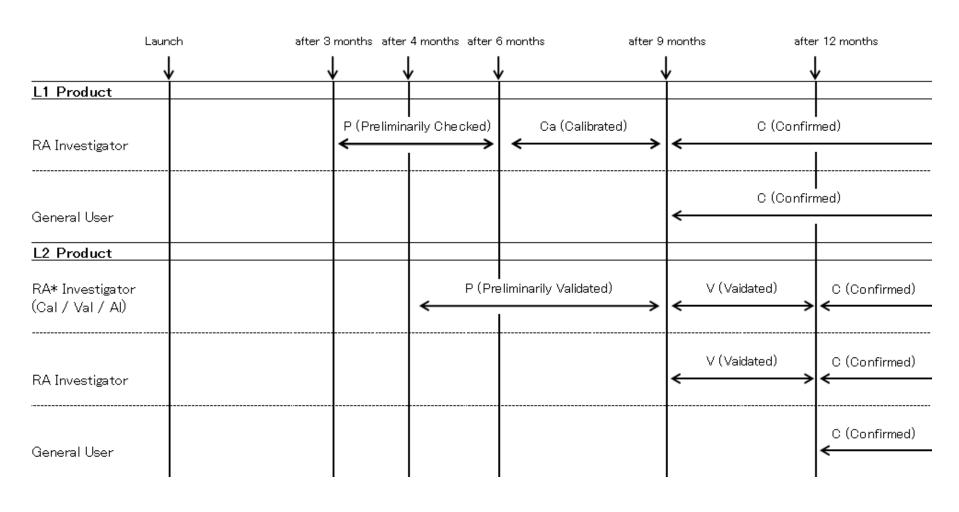
#### Definitions of the calibration stages for L1 standard products

Calibration stage	Definition	Schedule (months after the launch)	
Unchecked(U)	Products are generated by simply processing the observation data.		
Preliminarily checked(P)	Products visually checked and found as reliable.	3	
Calibrated(Ca)	Products provided after calibrating the sensors and verifying the appropriateness.	6	
Confirmed(C)	Calibrated products for which no problem is reported after being used for a certain period of time by a limited community of users.	9	

### Definitions of the calibration stages for L2 and L3 standard products

Validation stage	Definition	Schedule (months after the launch)	
Unchecked(U)	Observation data simply processed.		
Preliminarily Validated(P)	The processed observation data that seem reliable by visual checking.	4	
Validated(V)	The data compared with other products acquired by higher-accuracy methods (e.g., ground-based observation) and deemed as sufficiently accurate accordingly.	10	
Confirmed(C)	The data presenting no problem after being used for a certain period of time by a limited community of users.	12	

# Data Distribution Conditions for L1 / L2 Products



# Accepted Researches (1st RA)

Country	PI	Ca	Al	Мо	Va	Ар
US	7	2			3	2
UK	2			2		
Netherlands	3		1	1		1
Canada	3			1	1	1
China	1					1
Germany	6		2	1	3	
Japan	23	2	4		7	10
New Zealand	1				1	
France	2		1		1	
Russia	4		3	1		
Total	52	4	11	6	16	15