

# Inverted Barometer correction : NCEP (Reanalysis) versus ECMWF (Operational)

Study variable	<b>Inverted Barometer NCEP (reanalysis)</b>
Reference variable	<b>Inverted Barometer ECMWF (operational)</b>
Missions	Topex-Posedon ( <i>tp</i> ), Jason-1 ( <i>j1</i> ), Envisat ( <i>en</i> )
Period	[15705, 22280]

Creation date : 2011/06/30

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## Study overview

In this study, the NCEP (reanalysis) inverted barometer (IB) has been compared to the ECMWF IB (operational).

The impact of using these both inverted barometer corrections on the SSH calculation has been analyzed for Topex-Posedon, Jason-1 and Envisat missions :

- for Topex-Poseidon : from October 1992 (cycle 4) to October 2006 (Cycle 481)
- for Jason-1 : from January 2002 (cycle 1) to December 2010 (Cycle 331)
- for Envisat : from September 2002 (cycle 9) to December 2010 (Cycle 94)

The NCEP Reanalysis inverted barometer correction is computed from pressure fields provided by the NOAA-CIRES Climate Diagnostics Center, Boulder, Colorado, USA, from their Web site at <http://www.cdc.noaa.gov/>.

The reference inverted barometer correction is computed from the ECMWF operational model pressure fields as done in CNES/AVISO product.

All the validation diagnostics displayed in this report has been performed in agreement with the Sea-Level CCI Product Validation Plan (PVP).

Diagnostic A001 (mission en)	
Name : Temporal evolution of differences between both altimetric components	
Input data : Along-track altimetric components	
Description : The temporal evolution of global statistics (mean, variance, slope) of differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) . These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.	
<div><div><div>Mean of IB_NCEP_REA - IB_Ref</div><div>Mission en, cycles 10 to 93</div><div>2004200620082010</div><div>Mean = 0.07468Slope = 0.000972</div><div><div>Mean (cm)</div><div>0.150.100.050.00</div><div>20406080</div><div>Cycles</div></div></div><div><div>Standard deviation of IB_NCEP_REA - IB_Ref</div><div>Mission en, cycles 10 to 93</div><div>2004200620082010</div><div>Mean = 1.346</div><div><div>Standard deviation (cm)</div><div>1.71.61.51.41.31.2</div><div>20406080</div><div>Cycles</div></div></div></div>	

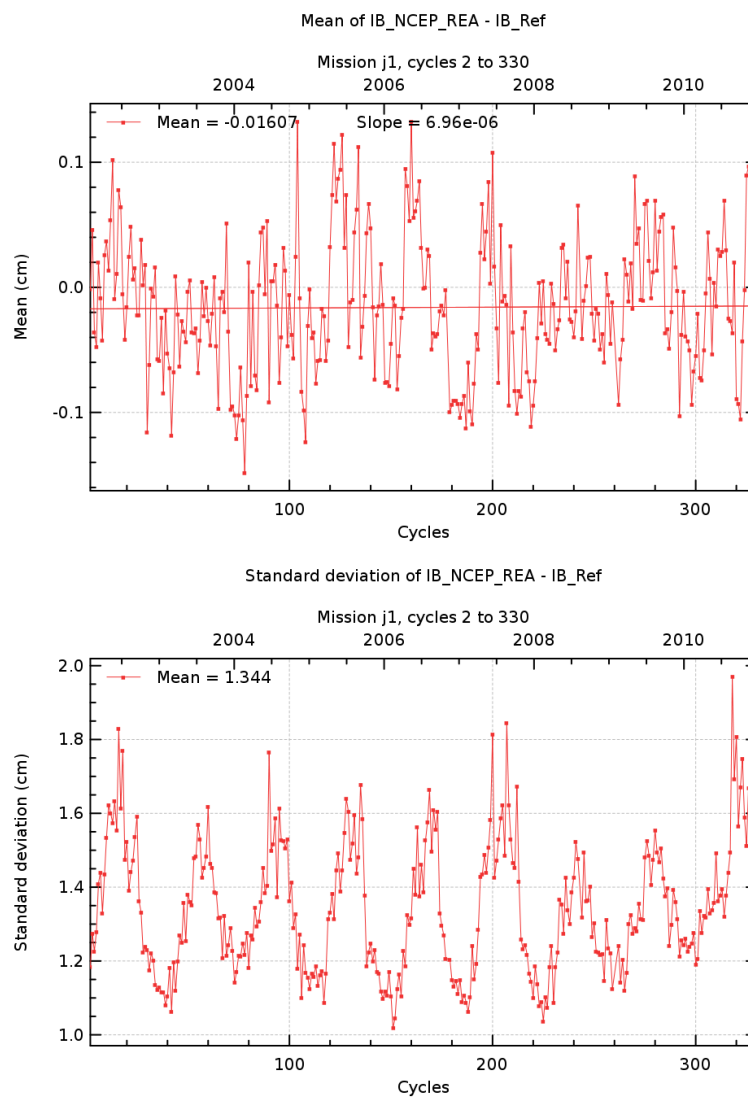
## Diagnostic A001 (mission j1)

**Name :** Temporal evolution of differences between both altimetric components

**Input data :** Along-track altimetric components

**Description :** The temporal evolution of global statistics (mean, variance, slope) of differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) . These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Global internal analyses





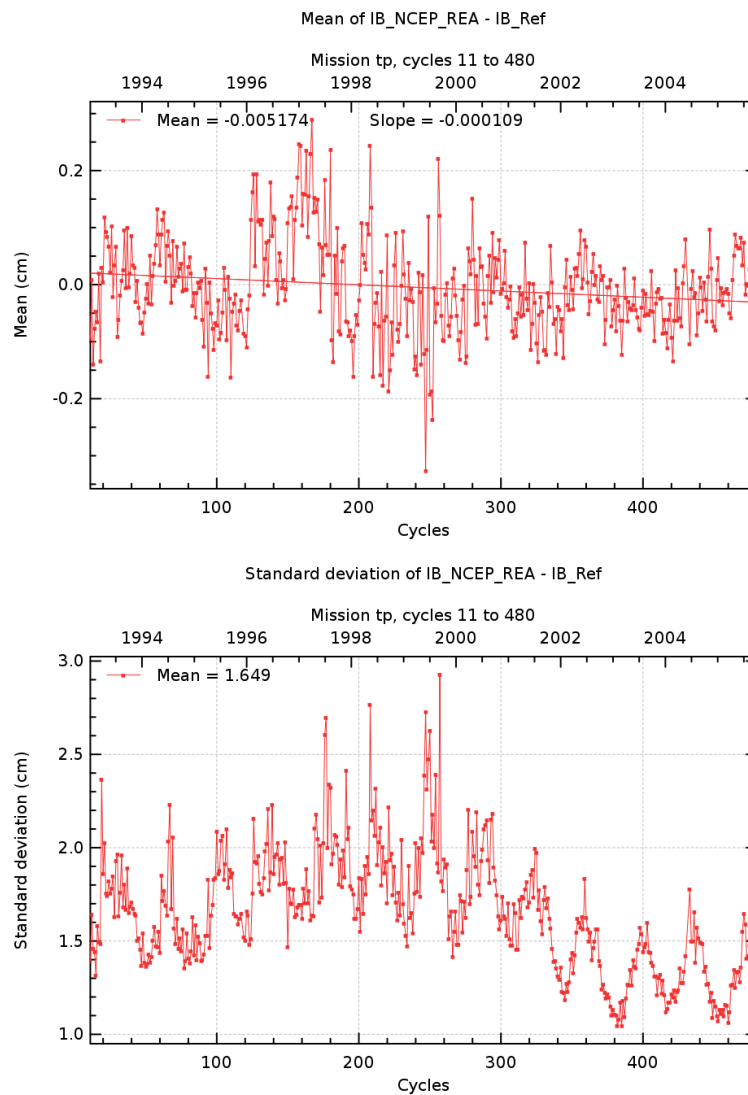
## Diagnostic A001 (mission tp)

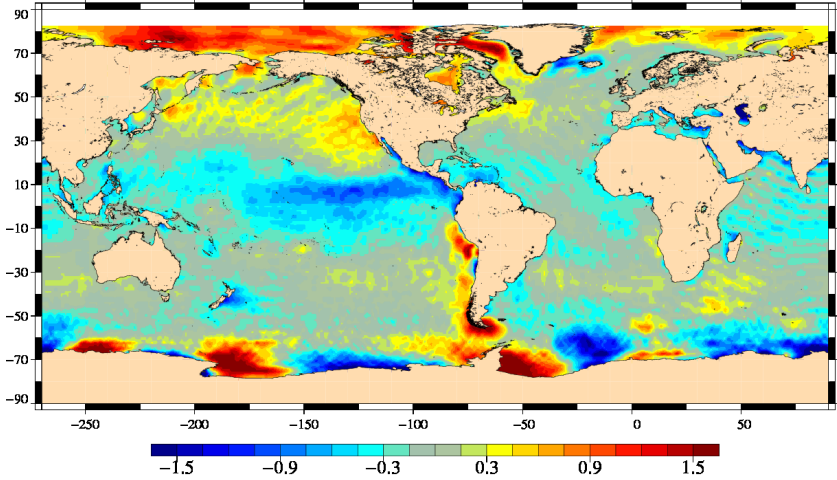
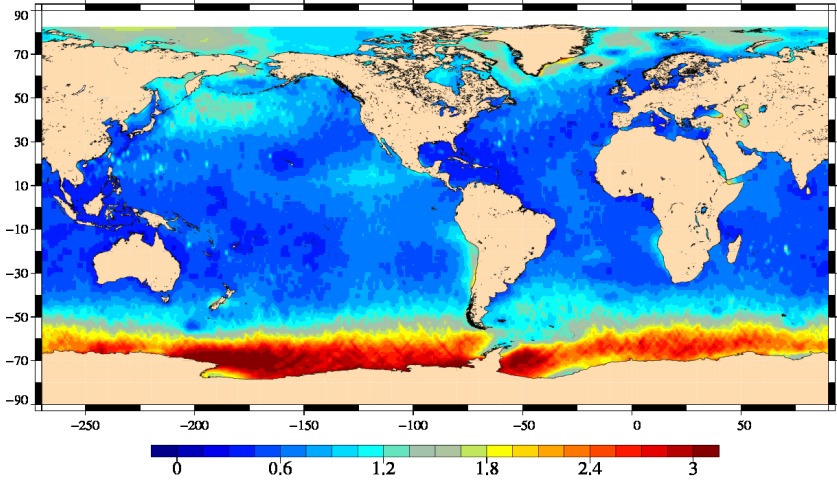
**Name :** Temporal evolution of differences between both altimetric components

**Input data :** Along-track altimetric components

**Description :** The temporal evolution of global statistics (mean, variance, slope) of differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) . These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Global internal analyses



Diagnostic A002 (mission en)	
Name : Map of differences between both altimetric components over all the period	
Input data : Along-track altimetric components	
Description : The map of global statistics (mean, standard deviation) of differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are calculated over a given period which is the longer as possible to have obtain reliable statically results. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.	
<div><div><div>Mean of IB_NCEP_REA – IB_Ref Mission en, cycles 10 to 93</div></div><div><div>Mean ( cm ) Standard deviation of IB_NCEP_REA – IB_Ref Mission en, cycles 10 to 93</div></div></div>	

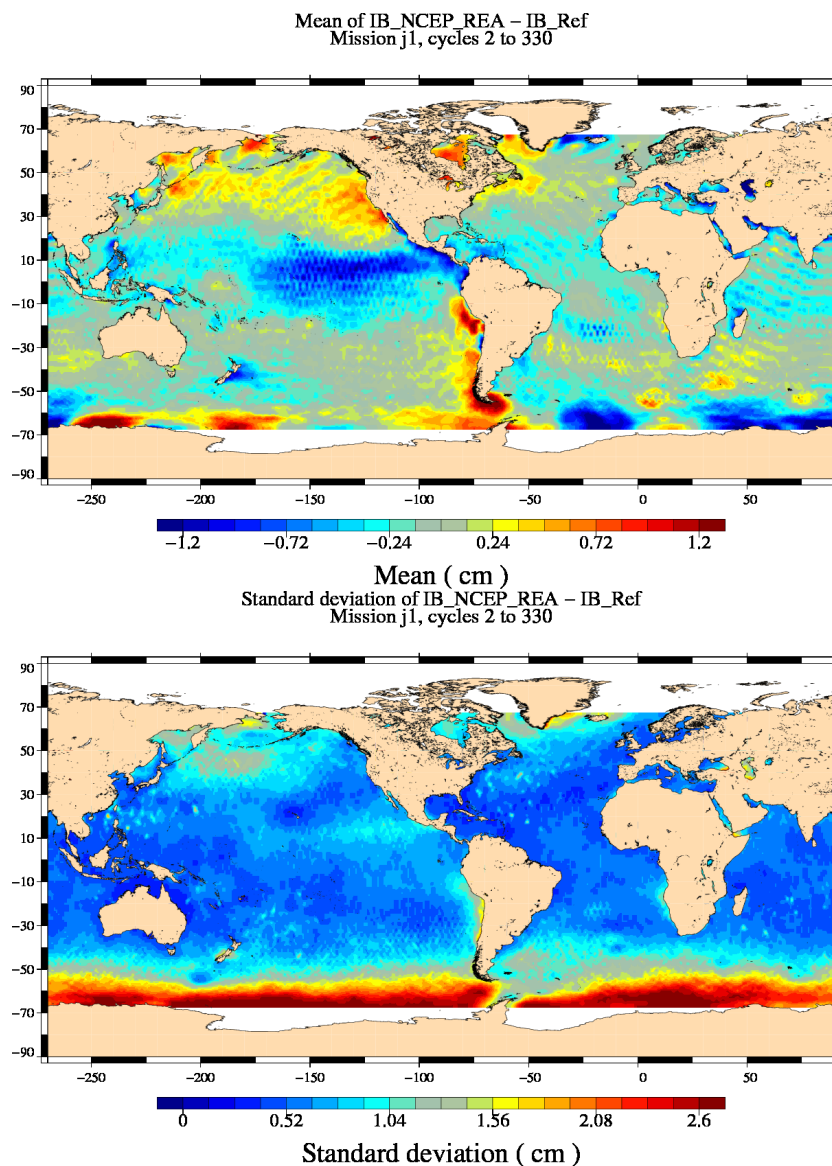
## Diagnostic A002 (mission j1)

**Name :** Map of differences between both altimetric components over all the period

**Input data :** Along-track altimetric components

**Description :** The map of global statistics (mean, standard deviation) of differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are calculated over a given period which is the longer as possible to have obtain reliable statically results. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Global internal analyses



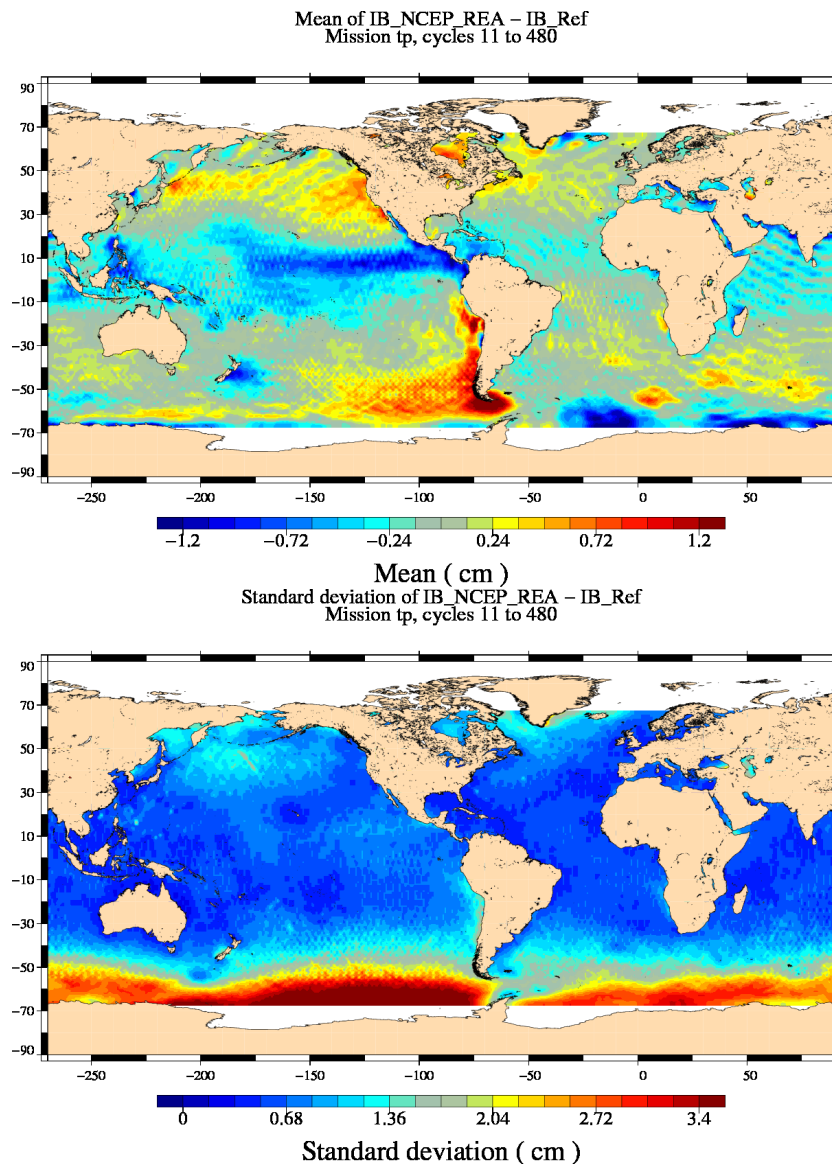
## Diagnostic A002 (mission tp)

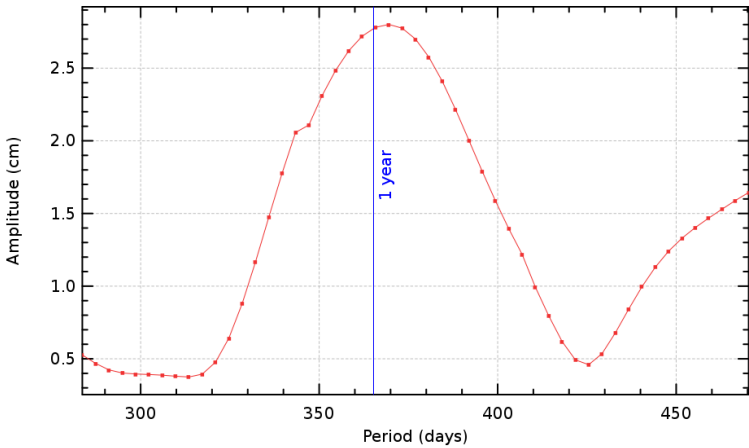
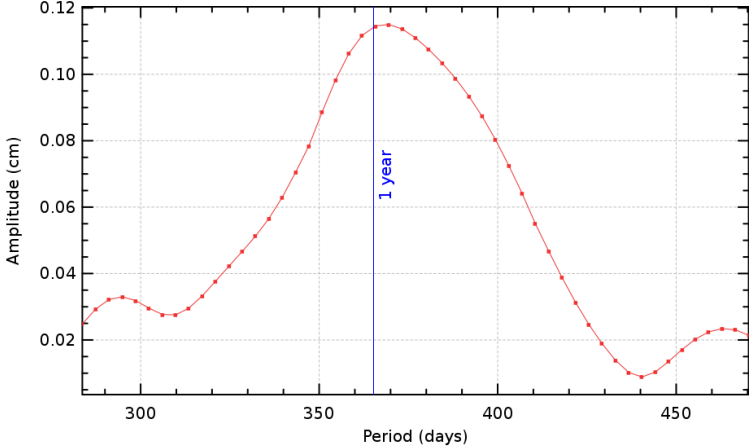
**Name :** Map of differences between both altimetric components over all the period

**Input data :** Along-track altimetric components

**Description :** The map of global statistics (mean, standard deviation) of differences between 2 different standards of a same altimetric component (sea surface height correction, altimeter parameter, orbit) are calculated over a given period which is the longer as possible to have obtain reliable statically results. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Global internal analyses



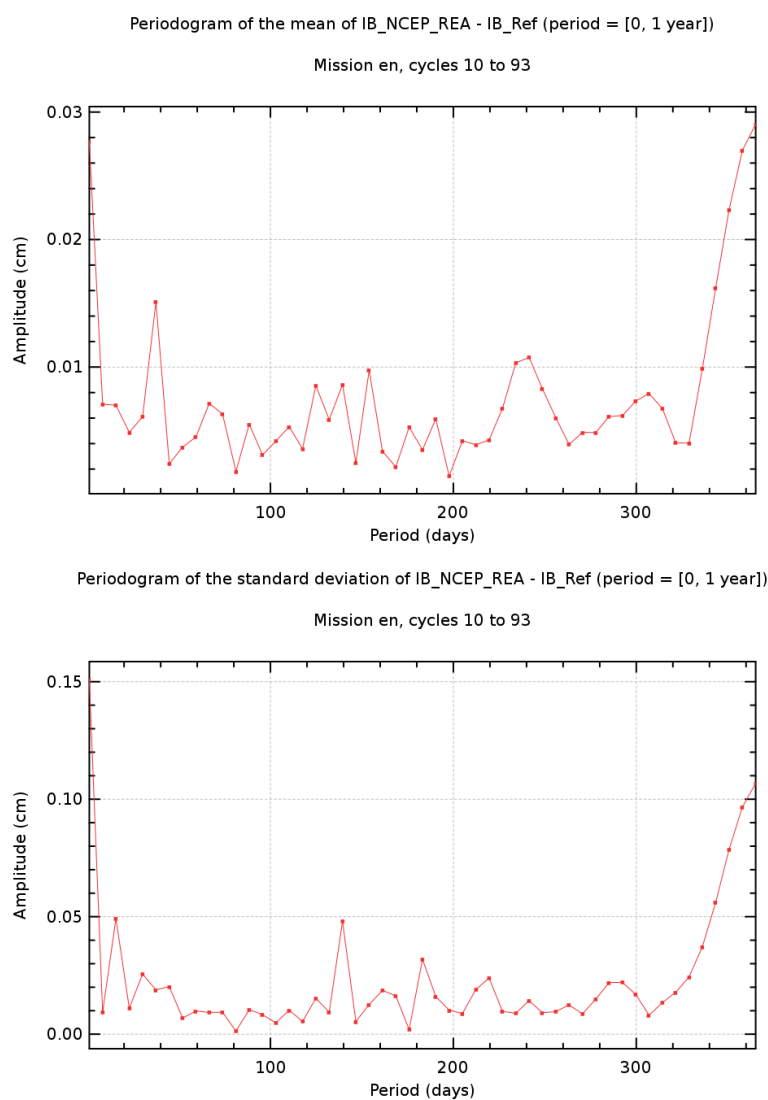
Diagnostic A003_a (mission en)	
Name : Periodogram derived from temporal evolution of altimetric component differences	
Input data : Along-track altimetric components	
<p><b>Description :</b> The periodogram derived from temporal and global altimetric component differences is calculated from cycle by cycle monitoring of altimetric component differences (derived from diagnostic A001). It is calculated from the mean or the variance differences. The Periodogram can be calculated for all the periods, but it can be focused on a dedicated period.</p>	
<div>Periodogram of the mean of IB_NCEP_REA - IB_Ref (reference period = 1 year)</div> <div>Mission en, cycles 10 to 93</div> <div>(x10<sup>-2</sup>)</div> <div></div> <div>Periodogram of the standard deviation of IB_NCEP_REA - IB_Ref (reference period = 1 year)</div> <div>Mission en, cycles 10 to 93</div> <div></div>	

## Diagnostic A003\_b (mission en)

**Name :** Periodogram derived from temporal evolution of altimetric component differences

**Input data :** Along-track altimetric components

**Description :** The periodogram derived from temporal and global altimetric component differences is calculated from cycle by cycle monitoring of altimetric component differences (derived from diagnostic A001). It is calculated from the mean or the variance differences. The Periodogram can be calculated for all the periods, but it can be focused on a dedicated period.



## Diagnostic A003\_a (mission j1)

**Name :** Periodogram derived from temporal evolution of altimetric component differences

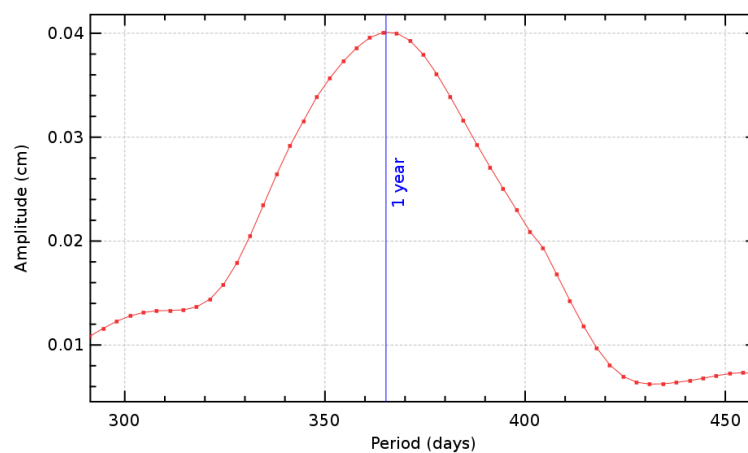
**Input data :** Along-track altimetric components

**Description :** The periodogram derived from temporal and global altimetric component differences is calculated from cycle by cycle monitoring of altimetric component differences (derived from diagnostic A001). It is calculated from the mean or the variance differences. The Periodogram can be calculated for all the periods, but it can be focused on a dedicated period.

Diagnostic type : Global internal analyses

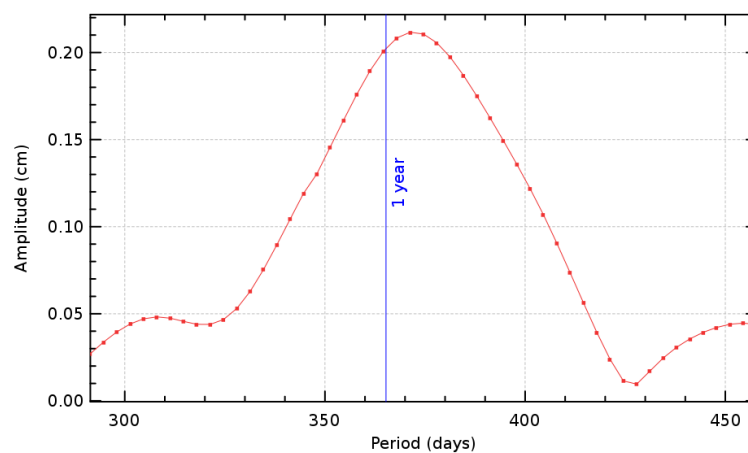
Periodogram of the mean of IB\_NCEP\_REA - IB\_Ref (reference period = 1 year)

Mission j1, cycles 2 to 330



Periodogram of the standard deviation of IB\_NCEP\_REA - IB\_Ref (reference period = 1 year)

Mission j1, cycles 2 to 330

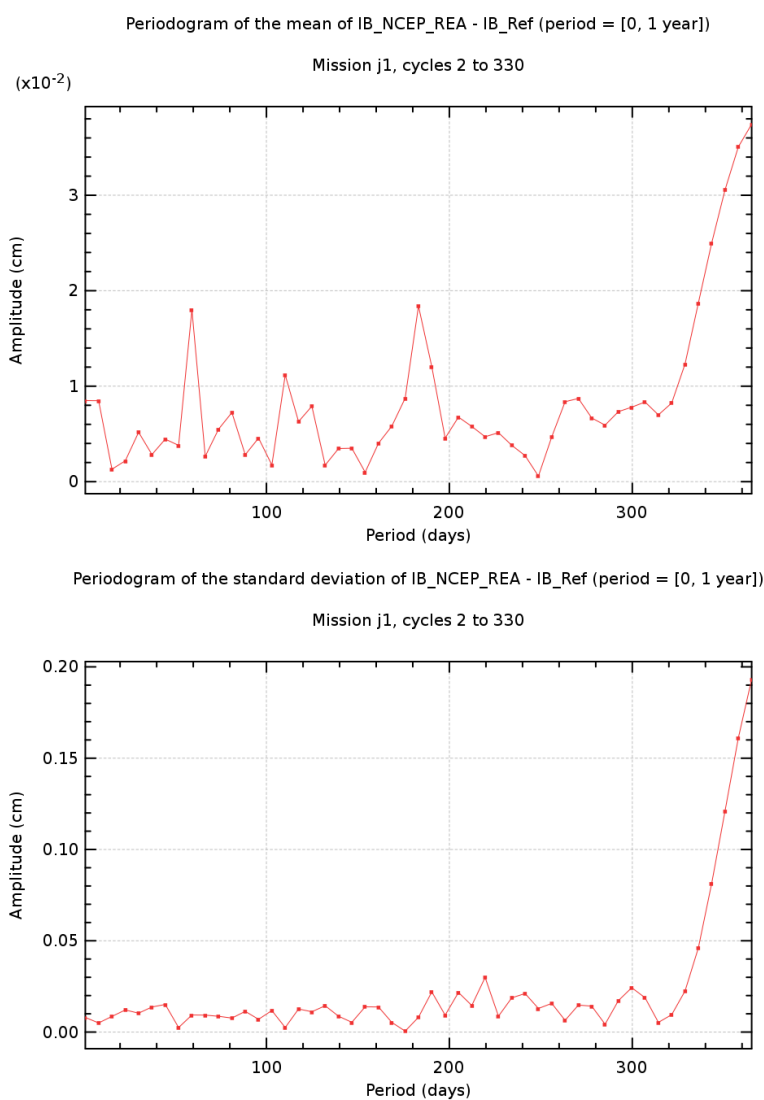


## Diagnostic A003\_b (mission j1)

**Name :** Periodogram derived from temporal evolution of altimetric component differences

**Input data :** Along-track altimetric components

**Description :** The periodogram derived from temporal and global altimetric component differences is calculated from cycle by cycle monitoring of altimetric component differences (derived from diagnostic A001). It is calculated from the mean or the variance differences. The Periodogram can be calculated for all the periods, but it can be focused on a dedicated period.



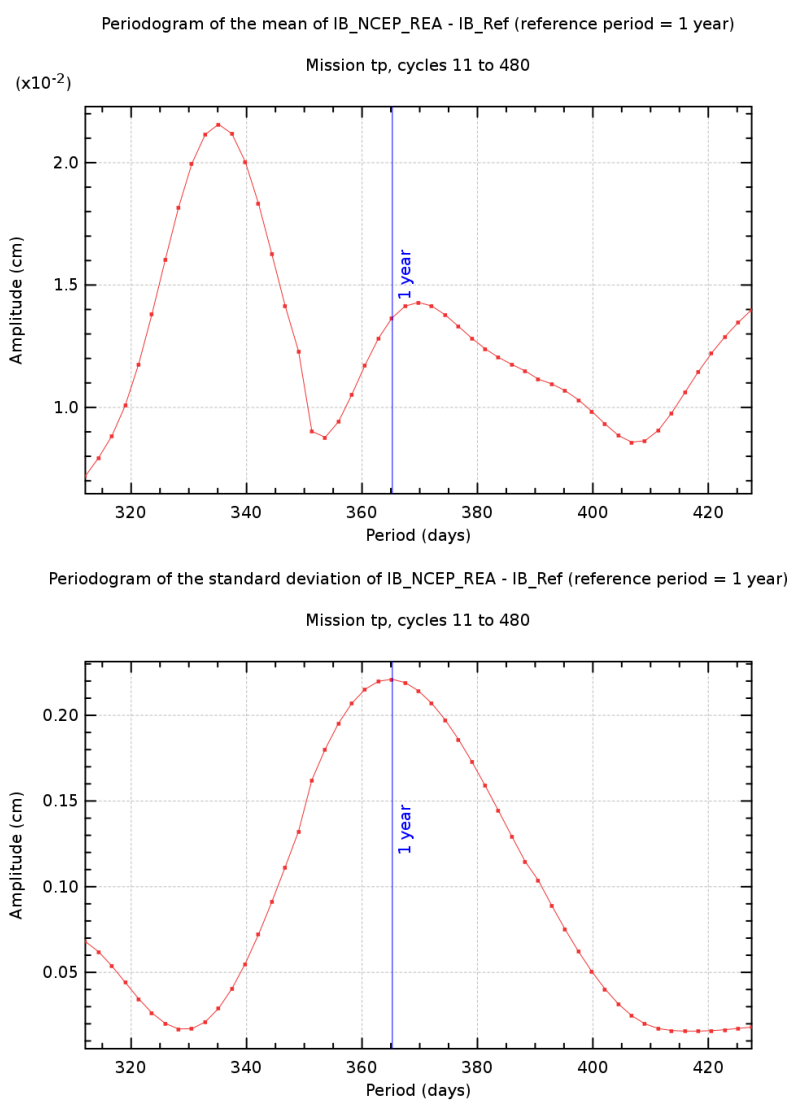


## Diagnostic A003\_a (mission tp)

**Name :** Periodogram derived from temporal evolution of altimetric component differences

**Input data :** Along-track altimetric components

**Description :** The periodogram derived from temporal and global altimetric component differences is calculated from cycle by cycle monitoring of altimetric component differences (derived from diagnostic A001). It is calculated from the mean or the variance differences. The Periodogram can be calculated for all the periods, but it can be focused on a dedicated period.

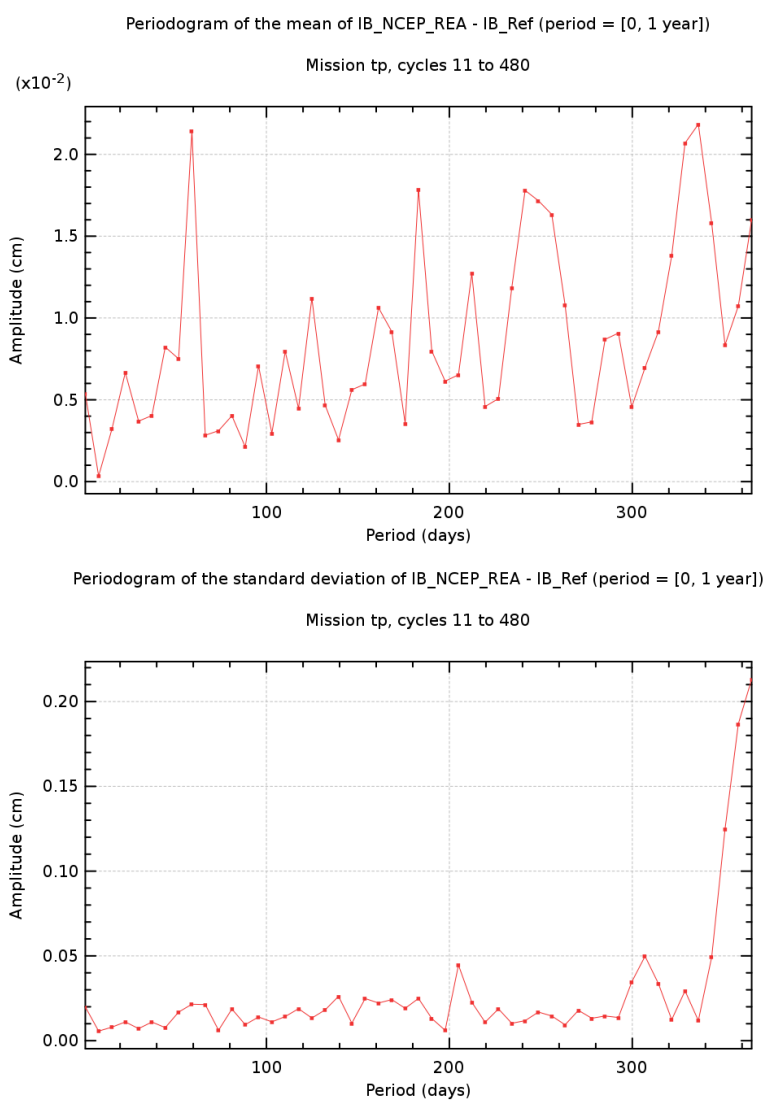


## Diagnostic A003\_b (mission tp)

**Name :** Periodogram derived from temporal evolution of altimetric component differences

**Input data :** Along-track altimetric components

**Description :** The periodogram derived from temporal and global altimetric component differences is calculated from cycle by cycle monitoring of altimetric component differences (derived from diagnostic A001). It is calculated from the mean or the variance differences. The Periodogram can be calculated for all the periods, but it can be focused on a dedicated period.



Diagnostic A101 (mission en)	
Name : Temporal evolution of SSH crossovers	
Input data : Sea Surface Height (SSH) crossovers	
<p><b>Description :</b> The temporal evolution of global statistics (mean, standard deviation) of SSH differences are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).</p>	
<div><div><div>Mean of SSH crossovers</div><div>Mission en, cycles 10 to 93</div><div>2004200620082010</div><div><div>SSH with IB_NCEP_REA</div><div>SSH with IB_Ref</div></div><div>Mean = -0.2305</div><div>Mean = -0.2342</div><div>Mean (cm)</div><div>0.5</div><div>0.0</div><div>-0.5</div><div>-1.0</div><div>20</div><div>40</div><div>60</div><div>80</div></div><div><div>Standard deviations of SSH crossovers</div><div>Mission en, cycles 10 to 93</div><div>2004200620082010</div><div><div>SSH with IB_NCEP_REA</div><div>SSH with IB_Ref</div></div><div>Mean = 8.266</div><div>Mean = 8.226</div><div>Standard deviation (cm)</div><div>11</div><div>10</div><div>9</div><div>8</div><div>7</div><div>20</div><div>40</div><div>60</div><div>80</div></div></div>	

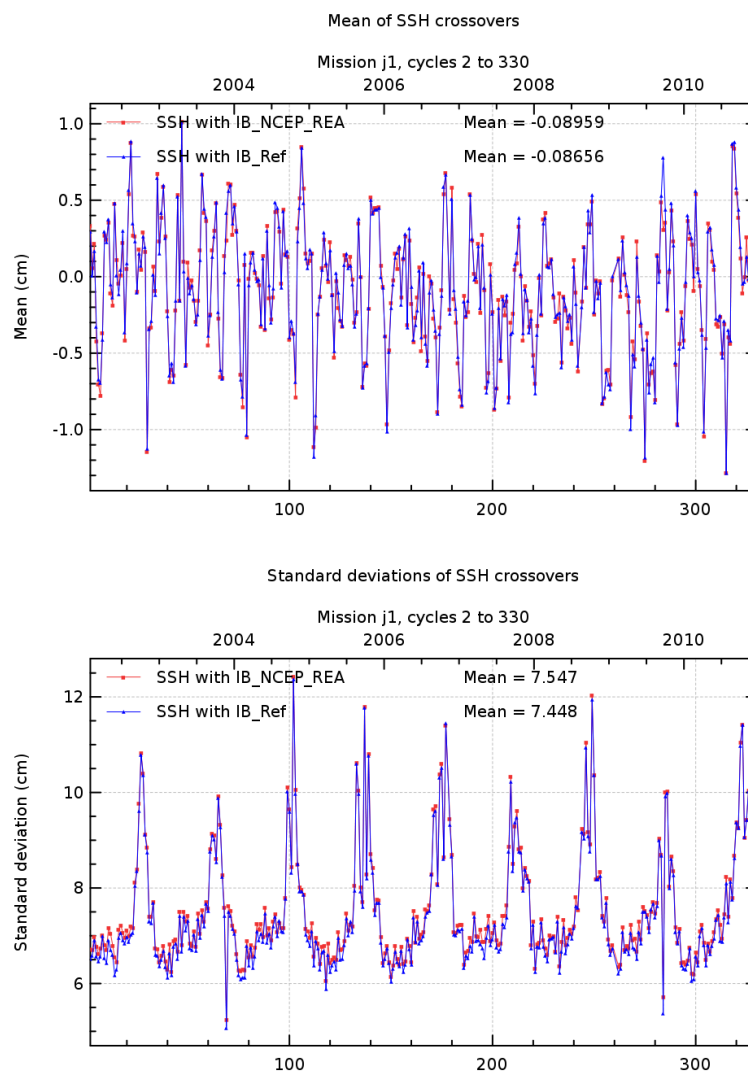
## Diagnostic A101 (mission j1)

**Name :** Temporal evolution of SSH crossovers

**Input data :** Sea Surface Height (SSH) crossovers

**Description :** The temporal evolution of global statistics (mean, standard deviation) of SSH differences are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

Diagnostic type : Global internal analyses



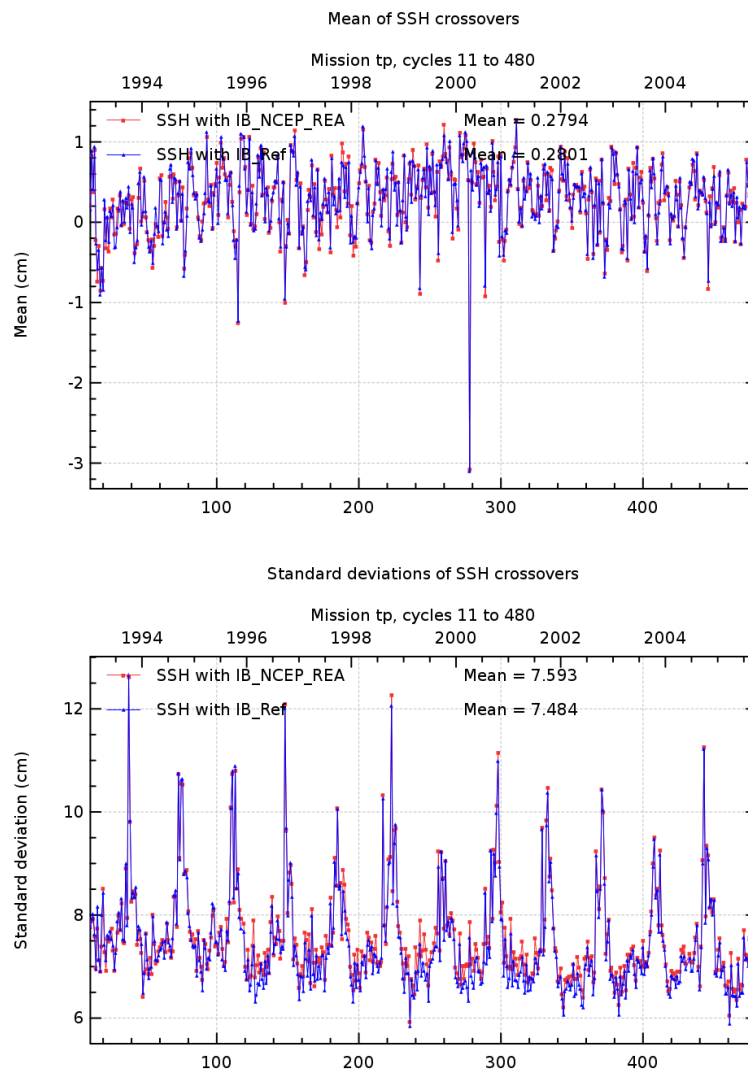
## Diagnostic A101 (mission tp)

**Name :** Temporal evolution of SSH crossovers

**Input data :** Sea Surface Height (SSH) crossovers

**Description :** The temporal evolution of global statistics (mean, standard deviation) of SSH differences are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

Diagnostic type : Global internal analyses



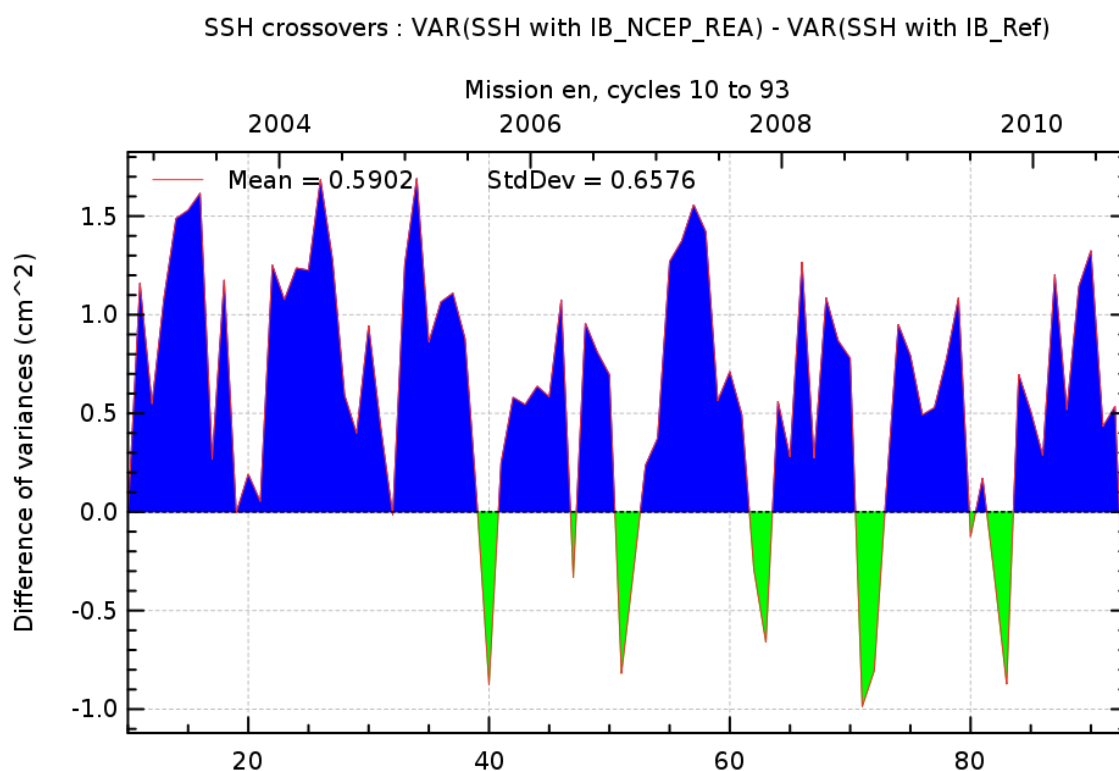
**Diagnostic A102 (mission en)**

**Name :** Differences between temporal evolution of SSH crossovers

**Input data :** Sea Surface Height (SSH) crossovers

**Description :** The difference of temporal evolution between the global statistics (mean, standard deviation) of SSH differences are calculated using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

Diagnostic type : Global internal analyses



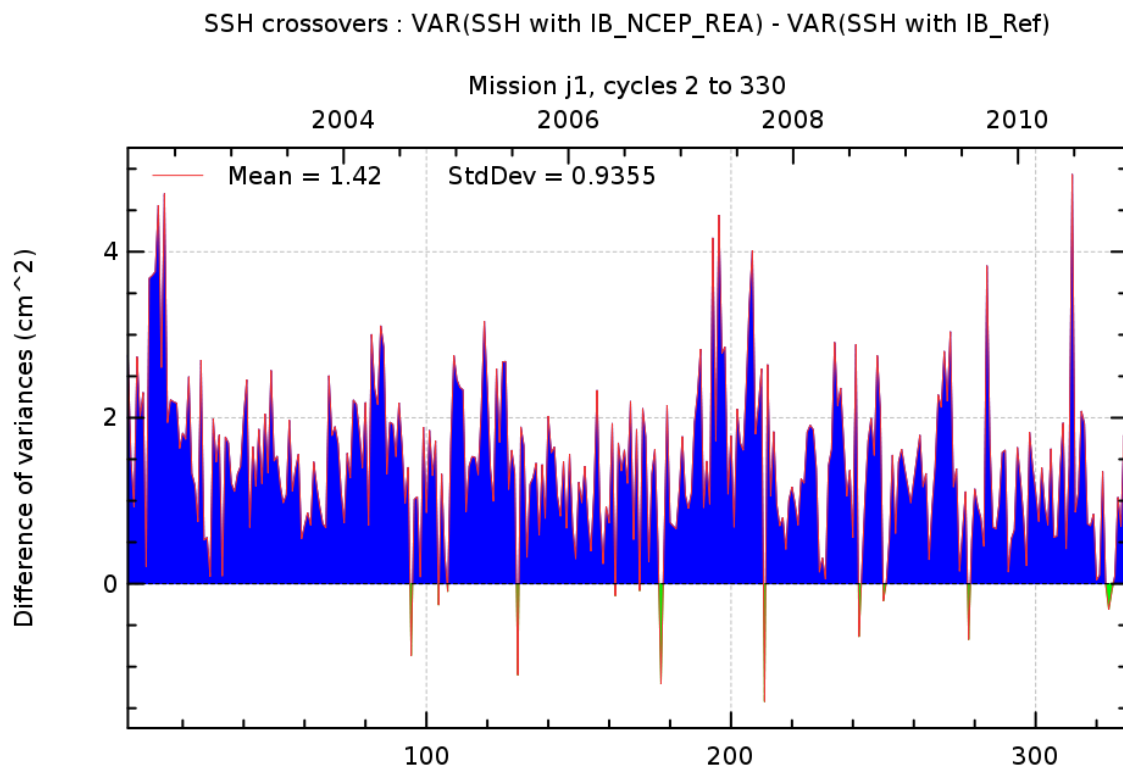
## Diagnostic A102 (mission j1)

**Name :** Differences between temporal evolution of SSH crossovers

**Input data :** Sea Surface Height (SSH) crossovers

**Description :** The difference of temporal evolution between the global statistics (mean, standard deviation) of SSH differences are calculated using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

Diagnostic type : Global internal analyses



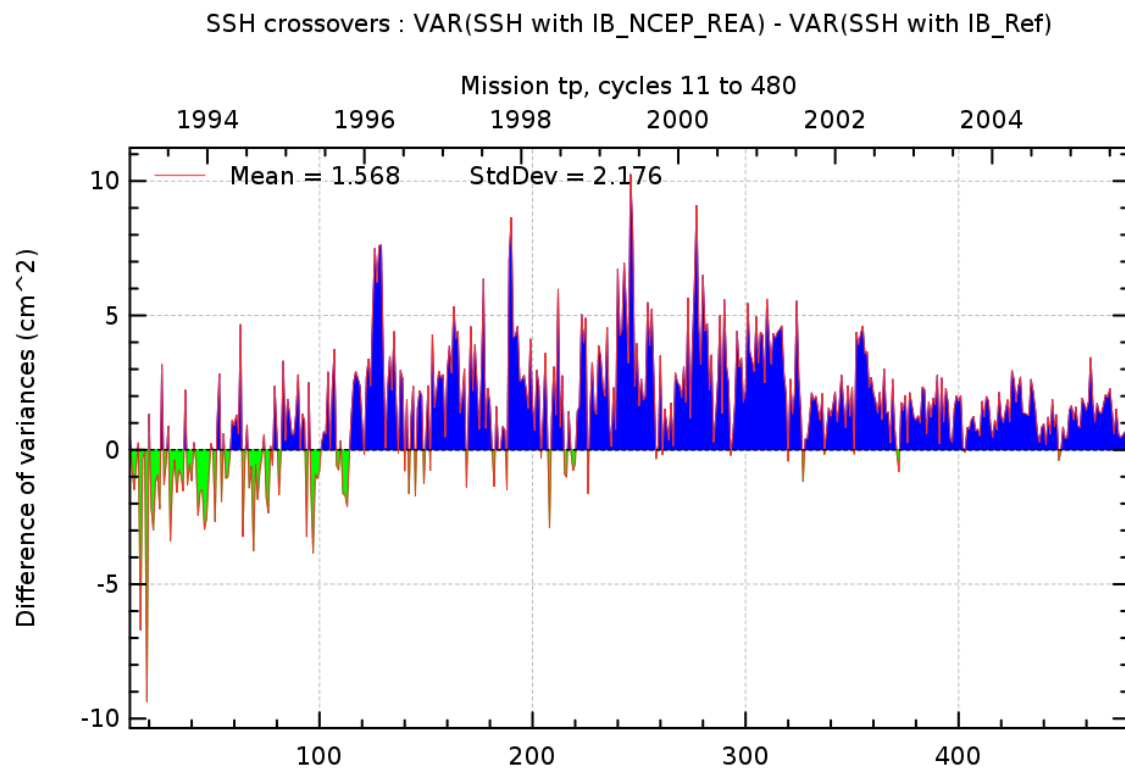
## Diagnostic A102 (mission tp)

**Name :** Differences between temporal evolution of SSH crossovers

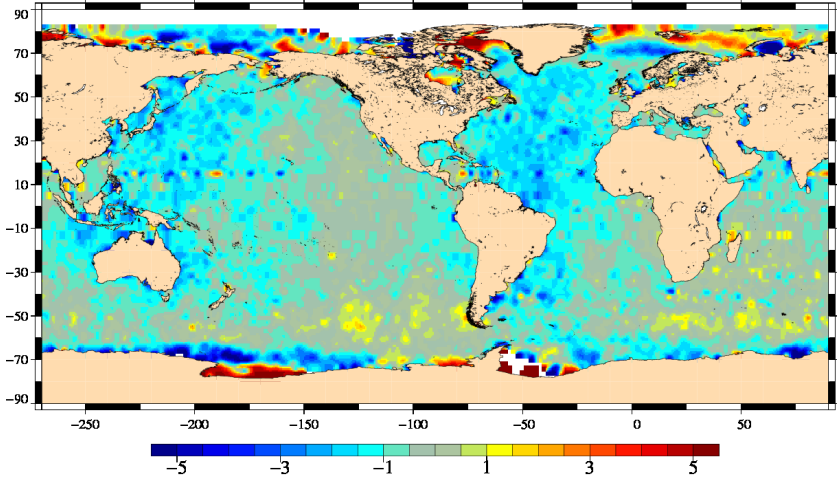
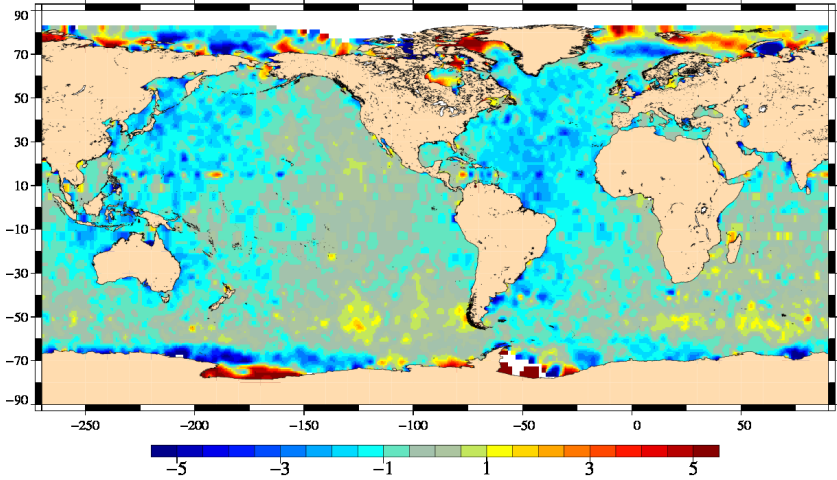
**Input data :** Sea Surface Height (SSH) crossovers

**Description :** The difference of temporal evolution between the global statistics (mean, standard deviation) of SSH differences are calculated using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

Diagnostic type : Global internal analyses





Diagnostic A103 (mission en)	
Name : Map of SSH crossovers	
Input data : Sea Surface Height (SSH) crossovers	
Description : The differences between maps of SSH crossovers differences (mean, variance) are calculated using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).	
<div>Mean of SSH with IB_NCEP_REA Mission en, cycles 10 to 93</div>  <div>Mean ( cm ) Mean of SSH with IB_Ref Mission en, cycles 10 to 93</div> 	

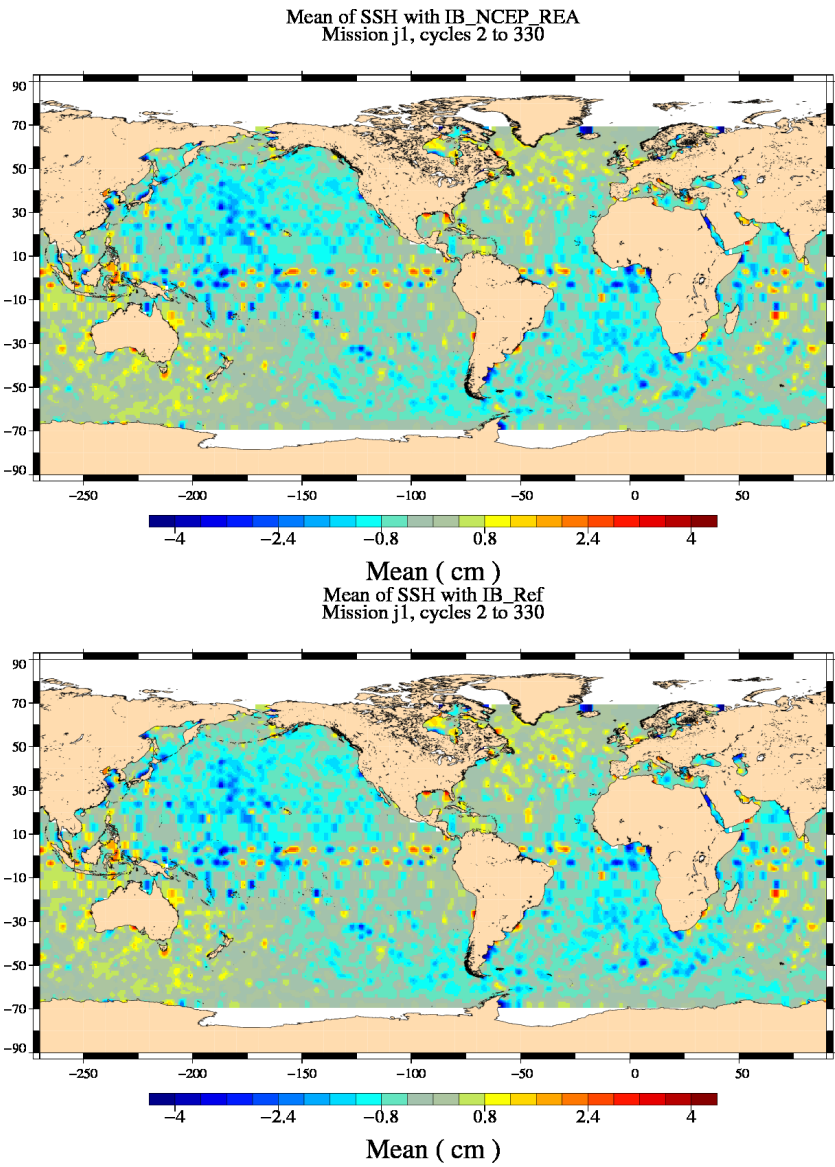
## Diagnostic A103 (mission j1)

**Name :** Map of SSH crossovers

**Input data :** Sea Surface Height (SSH) crossovers

**Description :** The differences between maps of SSH crossovers differences (mean, variance) are calculated using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

Diagnostic type : Global internal analyses



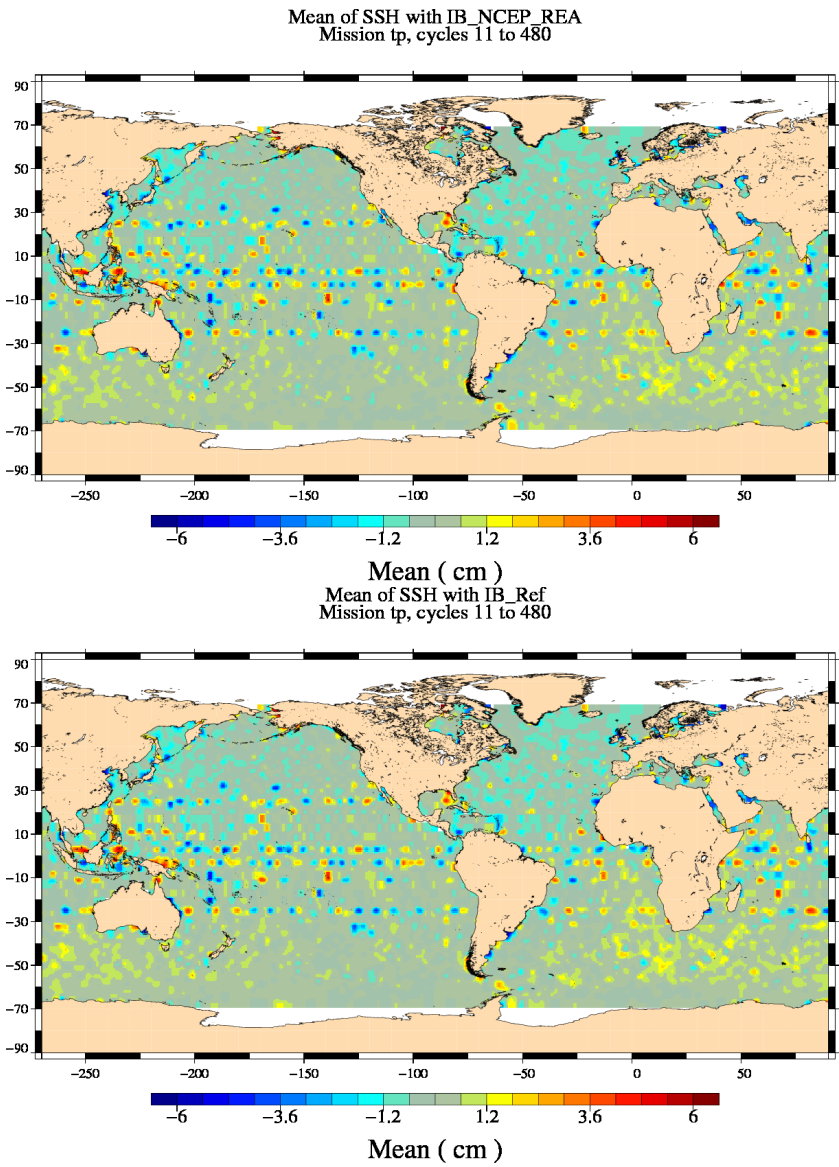
Diagnostic A103 (mission tp)

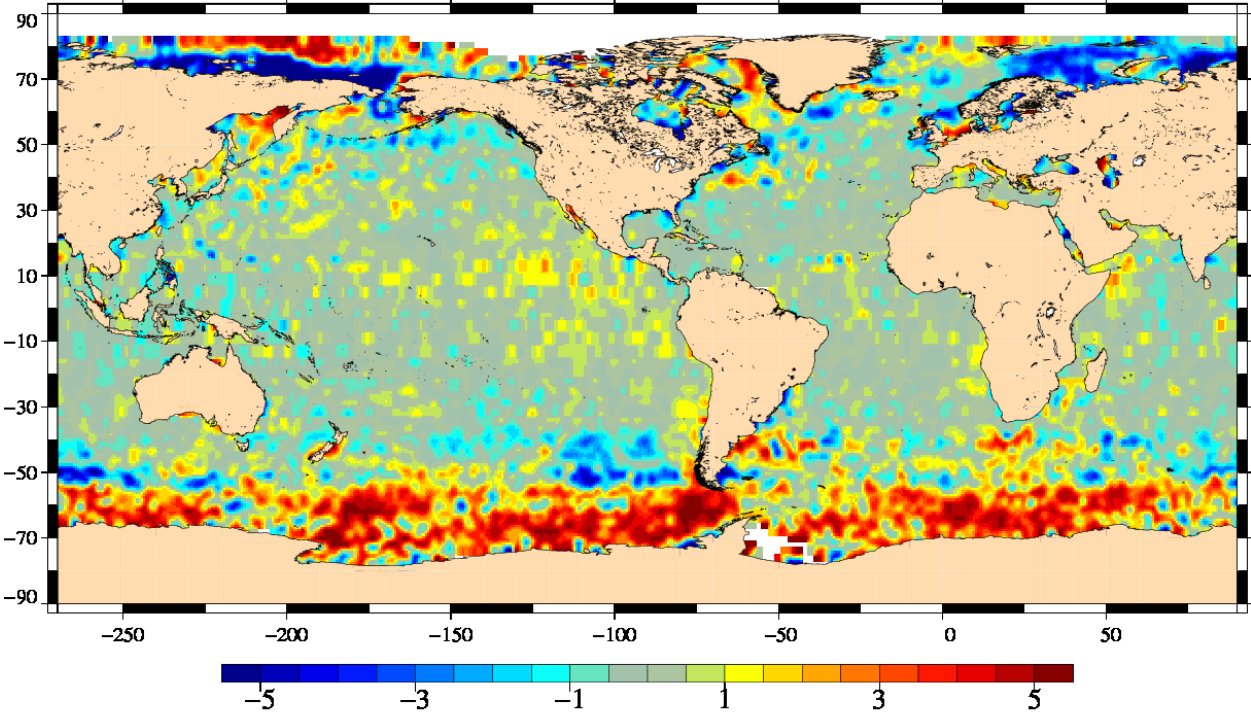
Name : Map of SSH crossovers

Input data : Sea Surface Height (SSH) crossovers

Description : The differences between maps of SSH crossovers differences (mean, variance) are calculated using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

Diagnostic type : Global internal analyses



Diagnostic type : Global internal analyses	<div>Diagnostic A104 (mission en)</div>
	<div>Name : Differences between maps of SSH crossovers</div>
	<div>Input data : Sea Surface Height (SSH) crossovers</div>
	<div>Description : The differences between maps of SSH crossovers (derived from diagnostic A103) are calculated from the SSH crossover differences (mean, standard deviation) using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).</div>
	<div><div>VAR(SSH with IB_NCEP_REA) – VAR(SSH with IB_Ref) Mission en, cycles 10 to 93</div></div>

## Diagnostic A104 (mission j1)

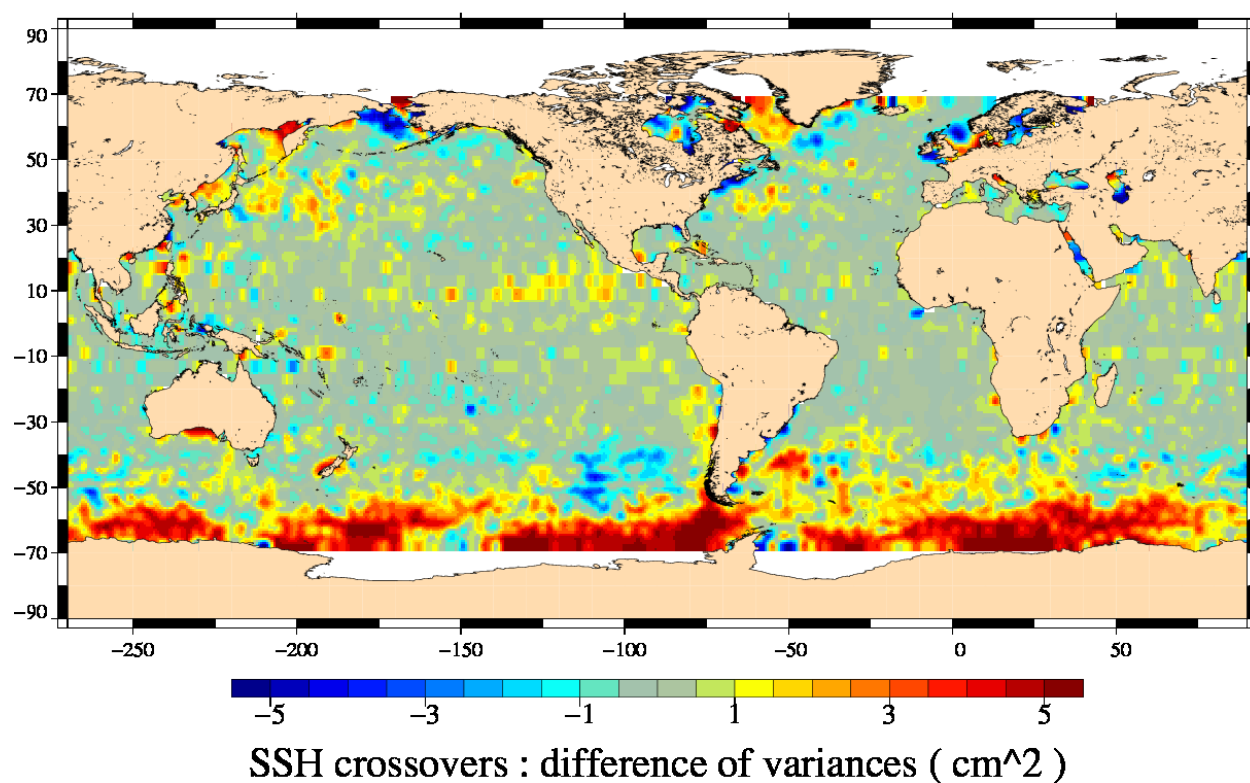
**Name :** Differences between maps of SSH crossovers

**Input data :** Sea Surface Height (SSH) crossovers

**Description :** The differences between maps of SSH crossovers (derived from diagnostic A103) are calculated from the SSH crossover differences (mean, standard deviation) using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

Diagnostic type : Global internal analyses

$\text{VAR}(\text{SSH with IB\_NCEP\_REA}) - \text{VAR}(\text{SSH with IB\_Ref})$   
Mission j1, cycles 2 to 330





## Diagnostic A104 (mission tp)

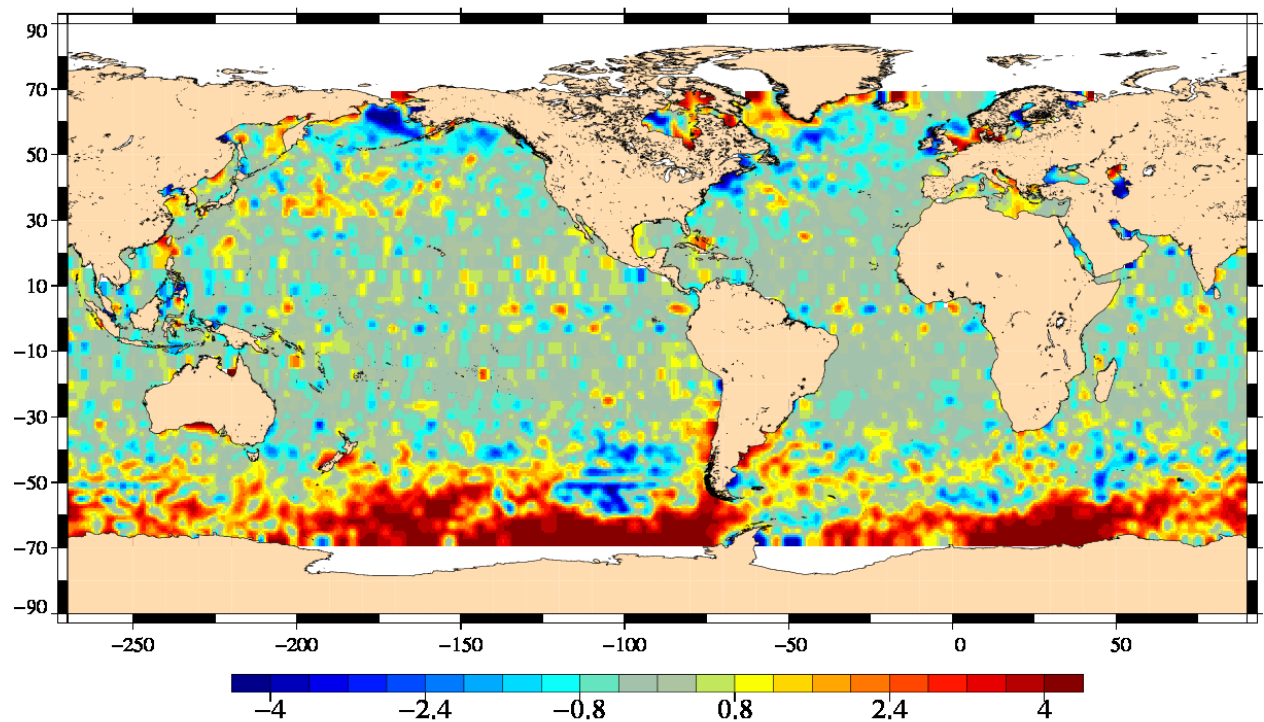
**Name :** Differences between maps of SSH crossovers

**Input data :** Sea Surface Height (SSH) crossovers

**Description :** The differences between maps of SSH crossovers (derived from diagnostic A103) are calculated from the SSH crossover differences (mean, standard deviation) using successively both altimetric components in the SSH calculation. SSH crossovers are the differences between ascending and descending passes for time differences between both passes lower than 10 days (in order to reduce the effect of the oceanic variability).

Diagnostic type : Global internal analyses

$\text{VAR}(\text{SSH with IB\_NCEP\_REA}) - \text{VAR}(\text{SSH with IB\_Ref})$   
Mission tp, cycles 11 to 480



Diagnostic type : Global internal analyses	Diagnostic A201 a (mission en)	
	Name : Temporal evolution of Sea Level Anomaly (SLA)	
	Input data : Along track SLA	
	<p>Description : The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes (except for SLA Grids) , or separating North and South hemispheres.</p>	
	<div>Global MSL</div> <div>Mission en, cycles 10 to 93</div> <div>20406080</div> <div>50.0</div> <div>49.5</div> <div>49.0</div> <div>48.5</div> <div>MSL (cm)</div> <div>SLA with IB_NCEP_REA</div> <div>SLA with IB_Ref</div> <div>Slope = 0.663 mm/yr [L.S.R. = 0.11]</div> <div>Slope = 0.615 mm/yr [L.S.R. = 0.11]</div> <div>2004200620082010</div>	

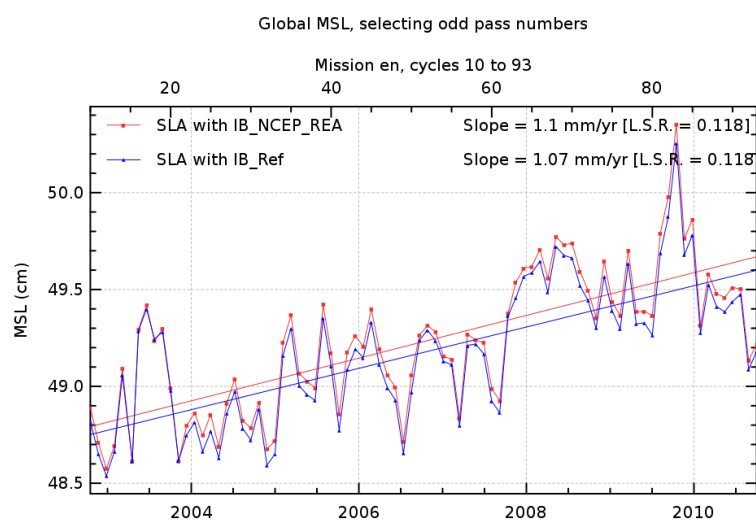
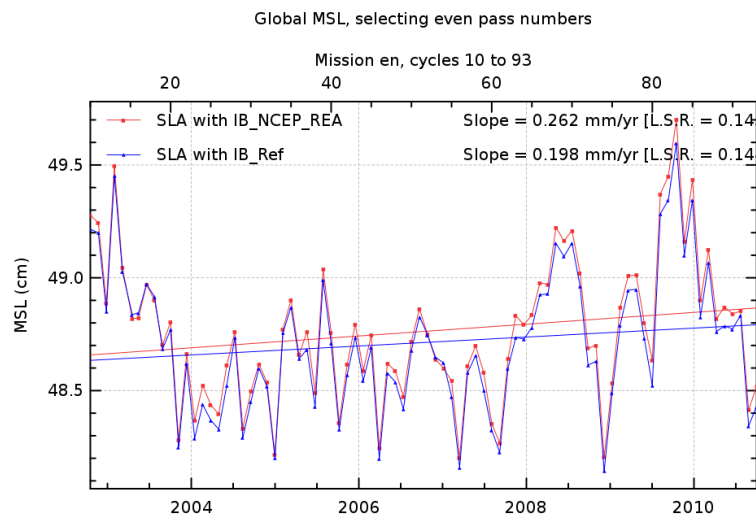
## Diagnostic A201\_b (mission en)

**Name :** Temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes (except for SLA Grids) , or separating North and South hemispheres.

Diagnostic type : Global internal analyses





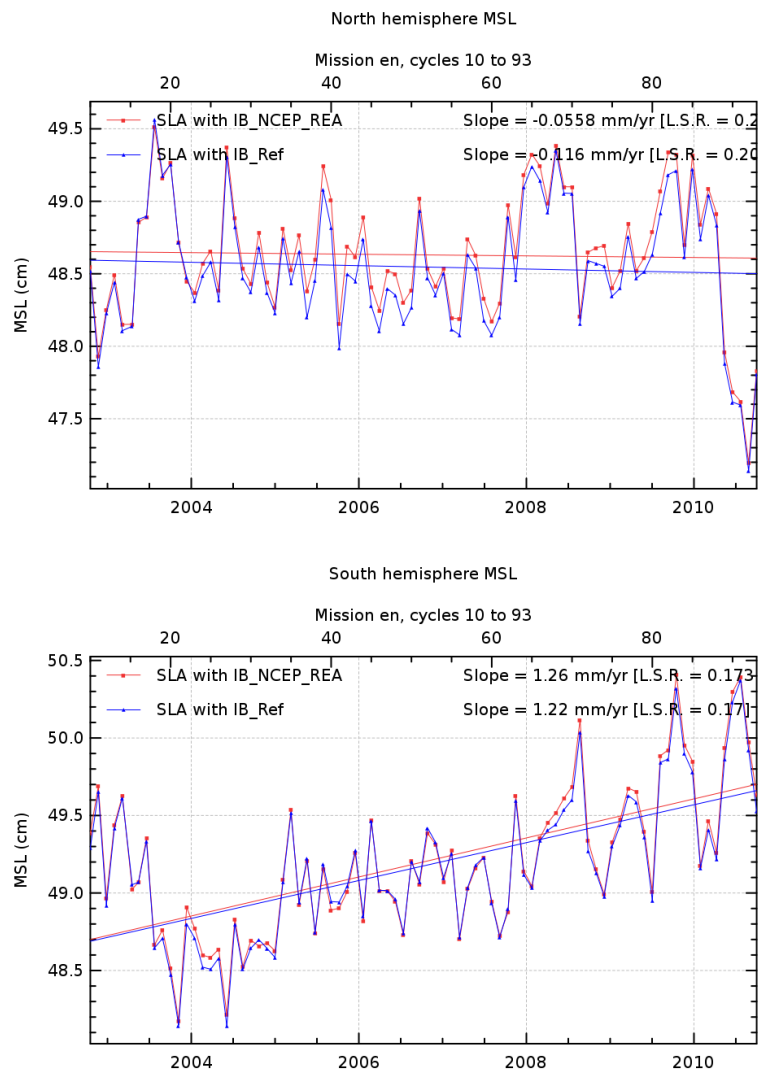
## Diagnostic A201\_c (mission en)

**Name :** Temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes (except for SLA Grids) , or separating North and South hemispheres.

Diagnostic type : Global internal analyses



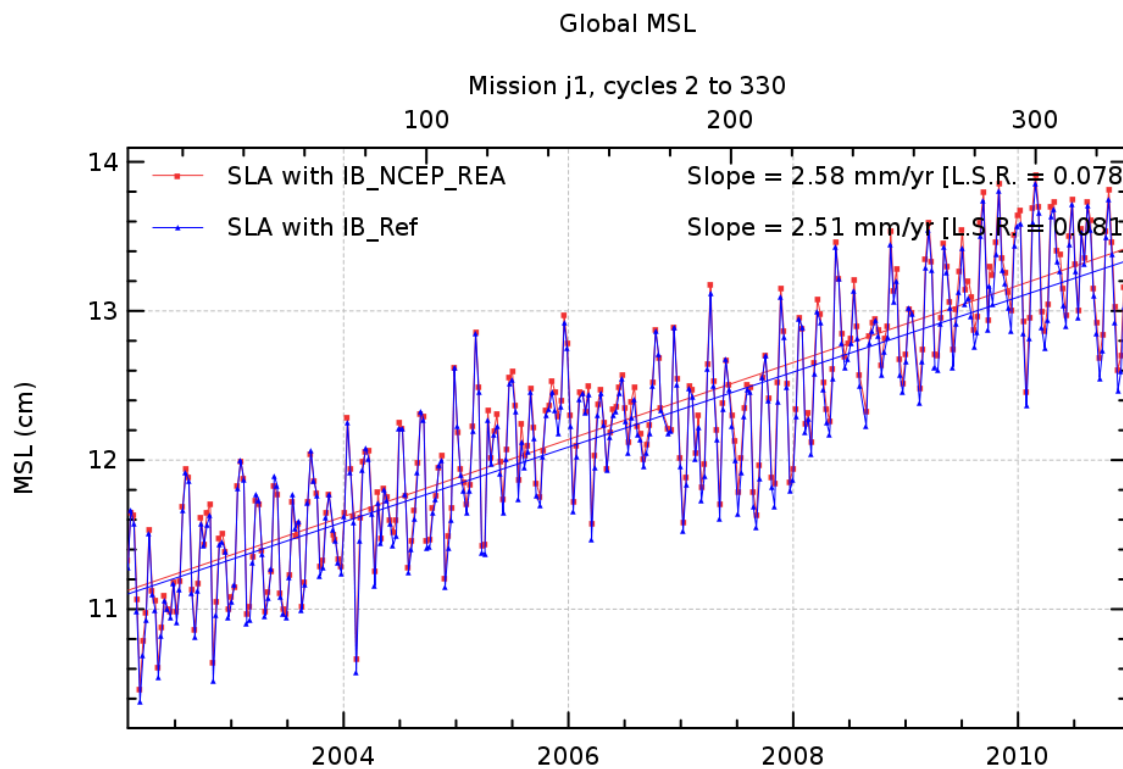
## Diagnostic A201\_a (mission j1)

**Name :** Temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes (except for SLA Grids) , or separating North and South hemispheres.

Diagnostic type : Global internal analyses



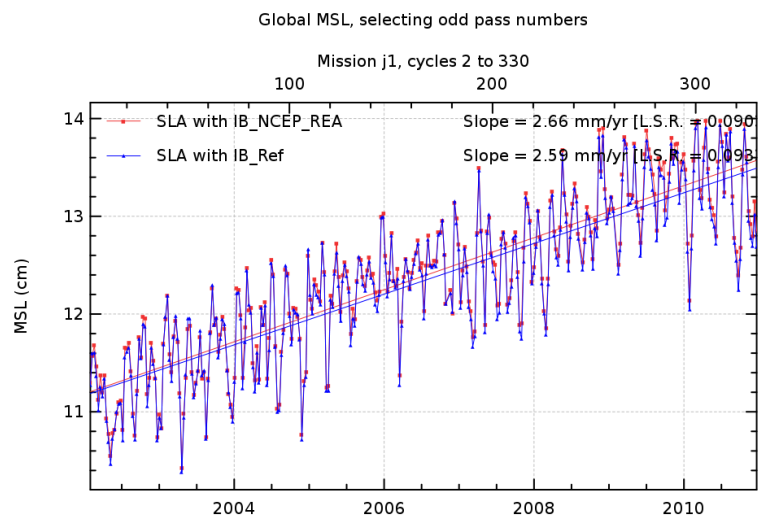
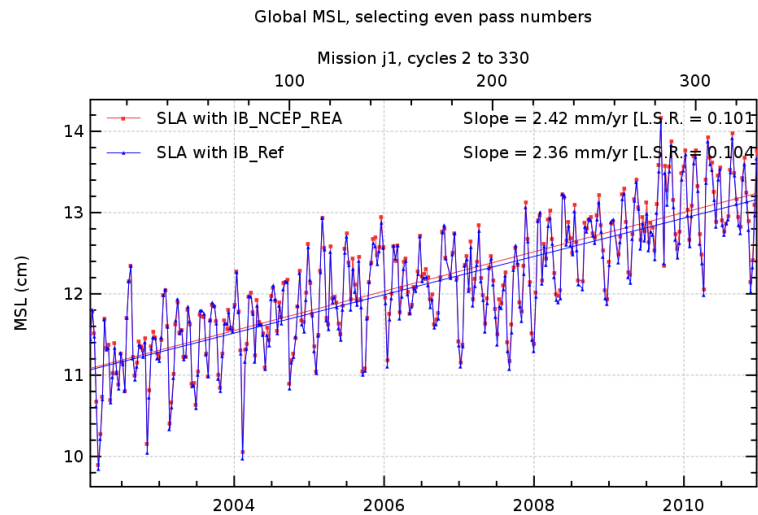
## Diagnostic A201\_b (mission j1)

**Name :** Temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes (except for SLA Grids) , or separating North and South hemispheres.

Diagnostic type : Global internal analyses



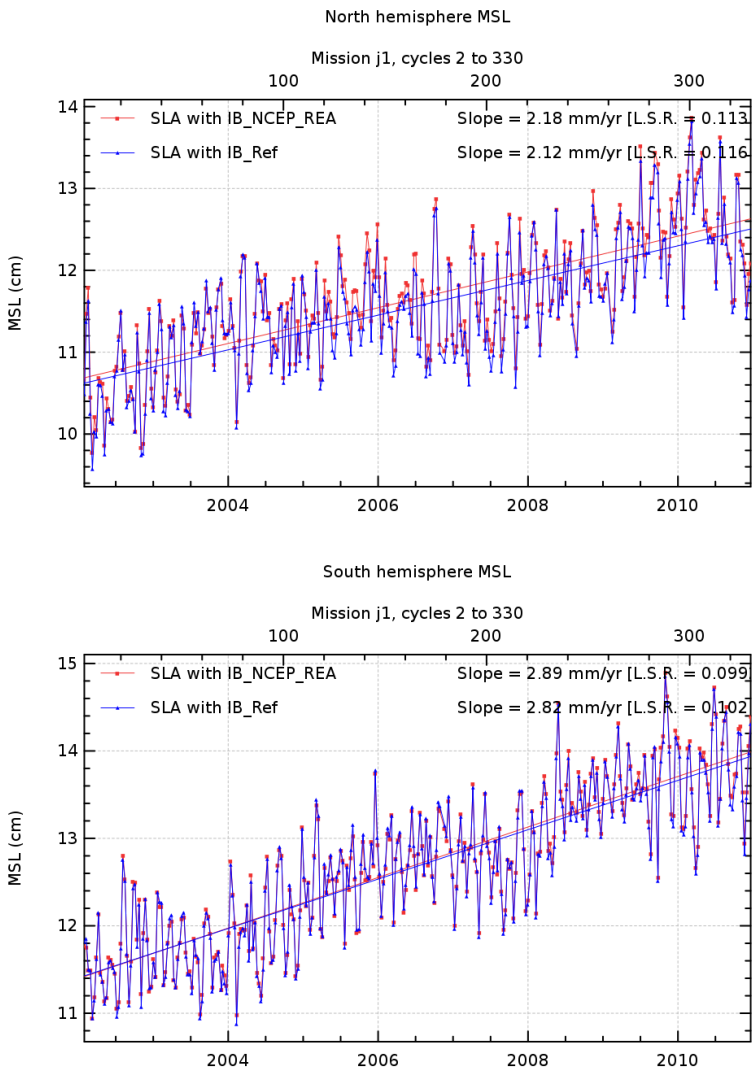
## Diagnostic A201\_c (mission j1)

**Name :** Temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes (except for SLA Grids) , or separating North and South hemispheres.

Diagnostic type : Global internal analyses



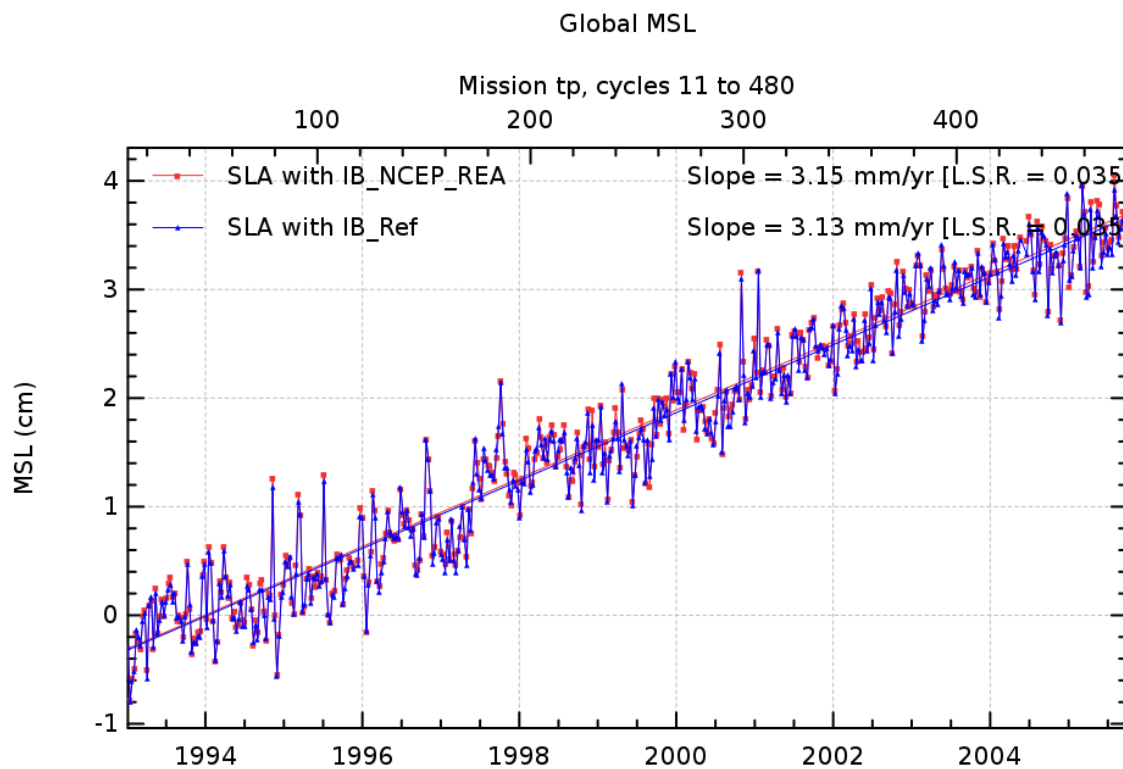
## Diagnostic A201\_a (mission tp)

**Name :** Temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes (except for SLA Grids) , or separating North and South hemispheres.

Diagnostic type : Global internal analyses



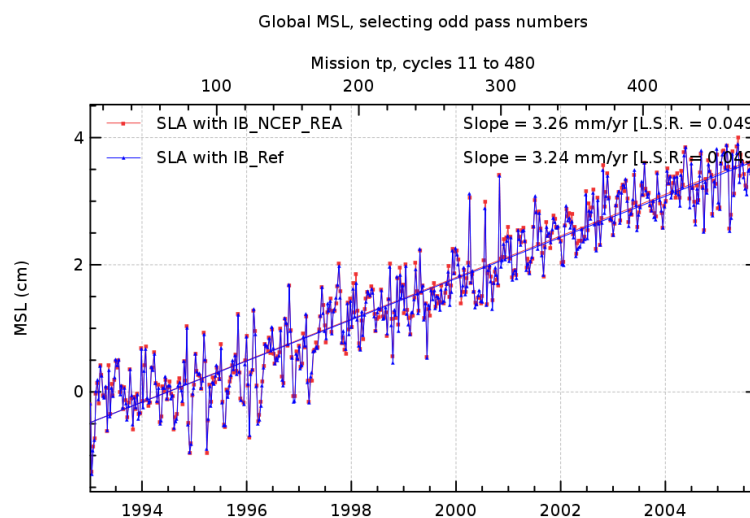
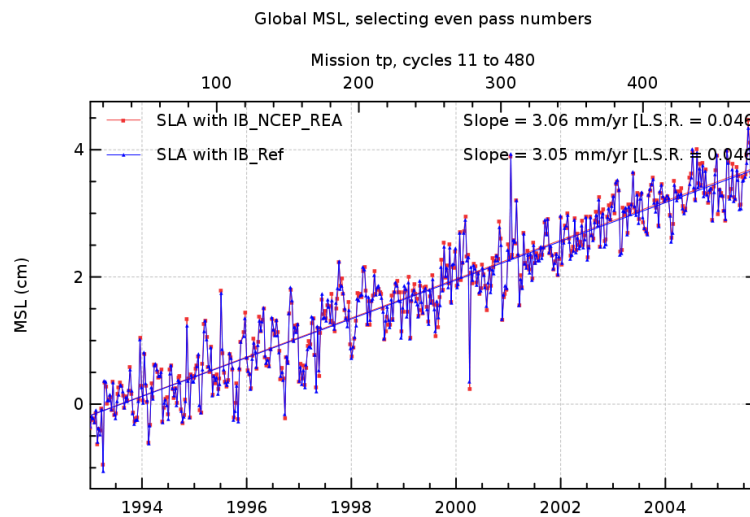
## Diagnostic A201\_b (mission tp)

**Name :** Temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes (except for SLA Grids) , or separating North and South hemispheres.

Diagnostic type : Global internal analyses



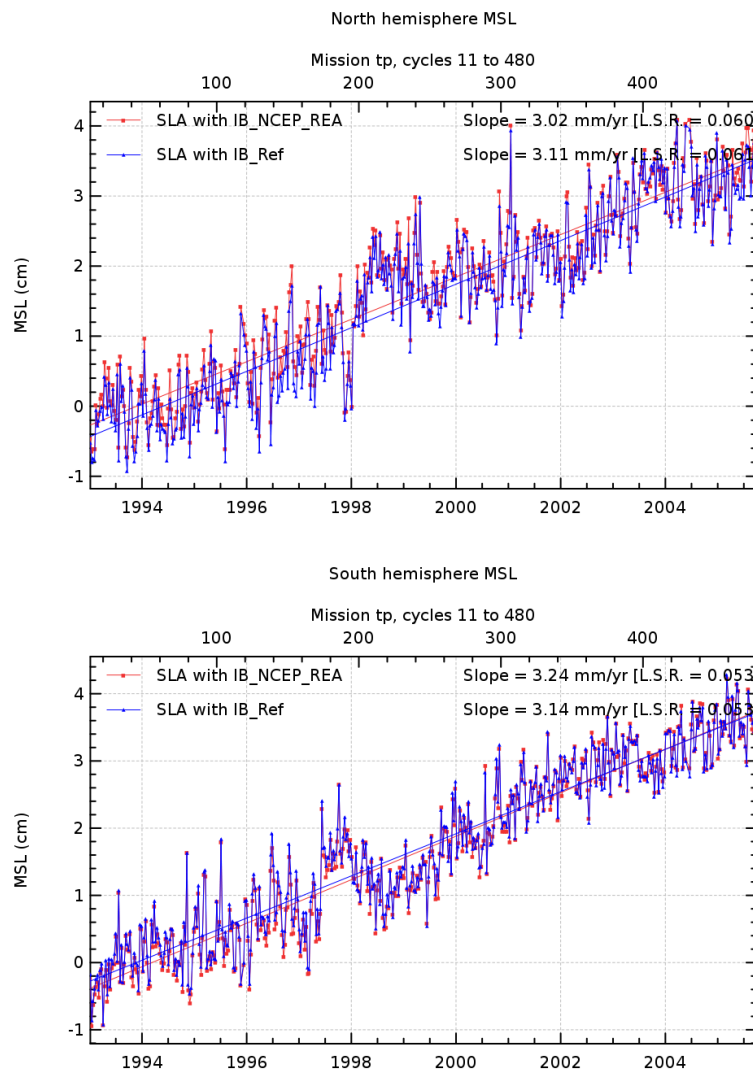
## Diagnostic A201\_c (mission tp)

**Name :** Temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The temporal evolution of SLA statistics (mean, standard deviation) are calculated from a cyclic way (altimeter repetivity, daily, weekly, monthly) using successively both altimetric components in the SLA calculation. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements. They are calculated globally, but also separating ascending and descending passes (except for SLA Grids) , or separating North and South hemispheres.

Diagnostic type : Global internal analyses



Diagnostic type : Global internal analyses	Diagnostic A202_a (mission en)	
	Name : Differences of temporal evolution of Sea Level Anomaly (SLA)	
	Input data : Along track SLA	
	Description : The differences between temporal evolution of SLA are calculated from statistics derived from diagnostic A201 (mean, variance) using 2 different components in the SLA calculation. They are calculated globally, but also separating ascending and descending passes (except for SLA Grids) or separating North and South hemispheres.	
	<div>VAR(SLA with IB_NCEP_REA) - VAR(SLA with IB_Ref)</div> <div>Mission en, cycles 10 to 93</div> <div>2004200620082010</div> <div>Mean = 0.8587</div> <div>2</div> <div>1</div> <div>0</div> <div>-1</div> <div>20406080</div> <div>Cycles</div> <div>Difference of variances (cm ^2)</div>	



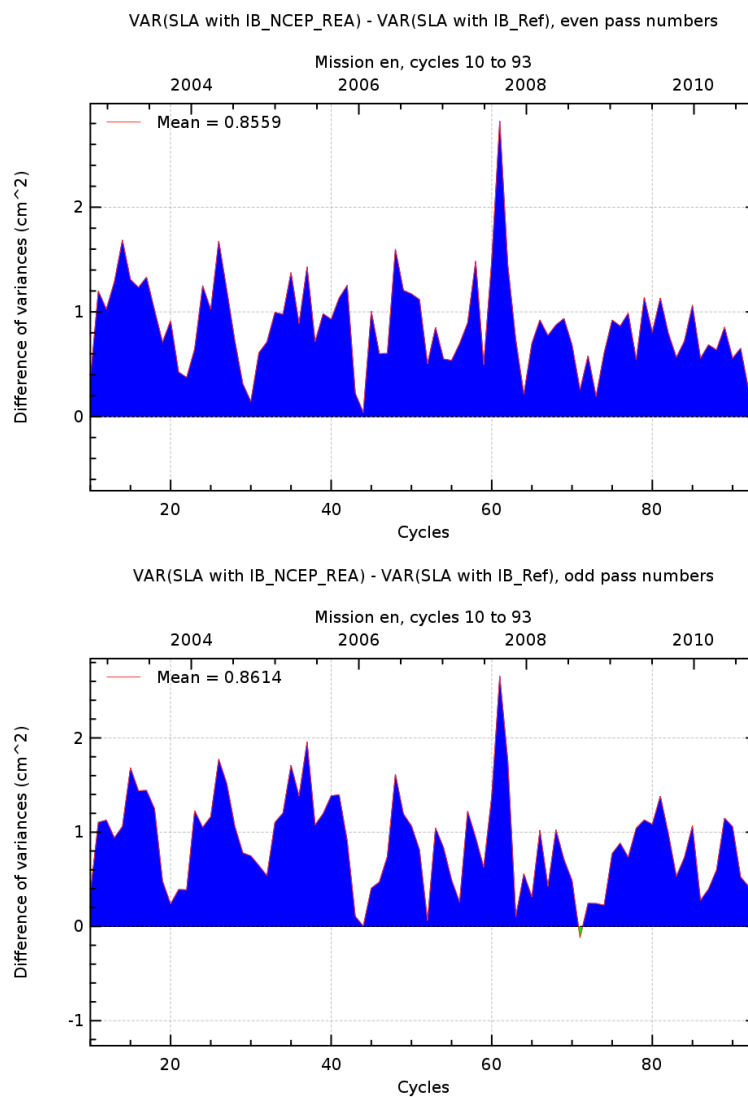
## Diagnostic A202\_b (mission en)

**Name :** Differences of temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The differences between temporal evolution of SLA are calculated from statistics derived from diagnostic A201 (mean, variance) using 2 different components in the SLA calculation. They are calculated globally, but also separating ascending and descending passes (except for SLA Grids) or separating North and South hemispheres.

Diagnostic type : Global internal analyses



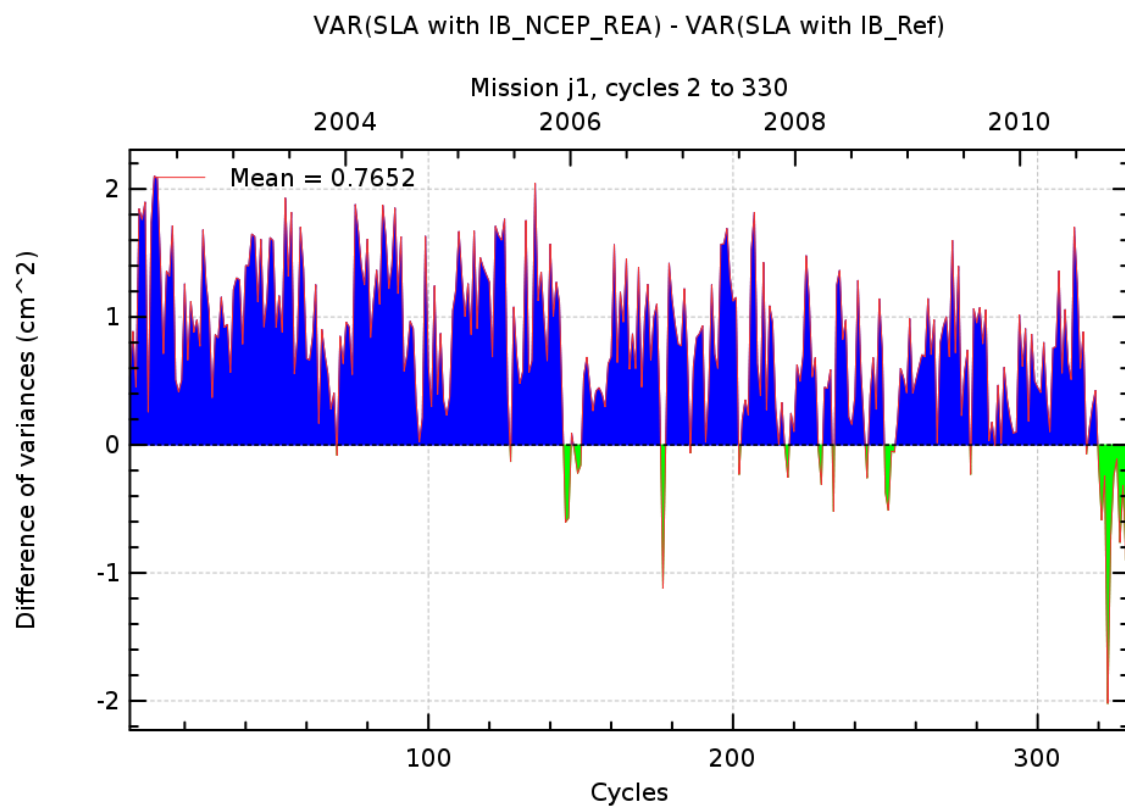
## Diagnostic A202\_a (mission j1)

**Name :** Differences of temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The differences between temporal evolution of SLA are calculated from statistics derived from diagnostic A201 (mean, variance) using 2 different components in the SLA calculation. They are calculated globally, but also separating ascending and descending passes (except for SLA Grids) or separating North and South hemispheres.

Diagnostic type : Global internal analyses



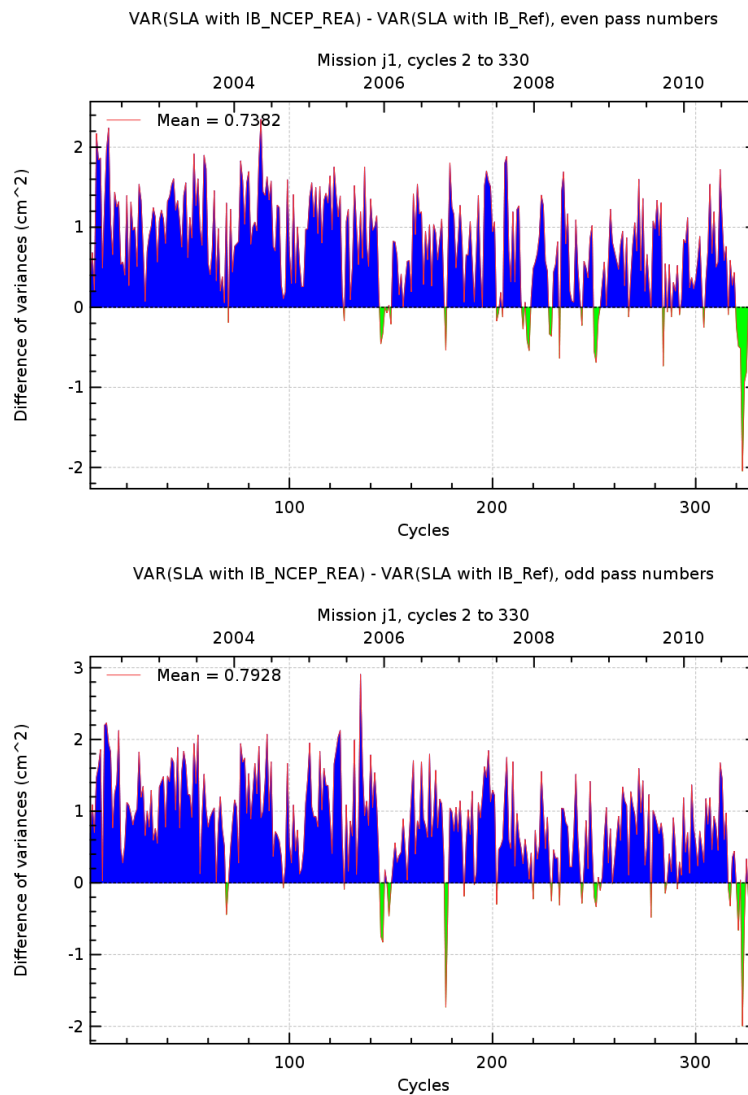
## Diagnostic A202\_b (mission j1)

**Name :** Differences of temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The differences between temporal evolution of SLA are calculated from statistics derived from diagnostic A201 (mean, variance) using 2 different components in the SLA calculation. They are calculated globally, but also separating ascending and descending passes (except for SLA Grids) or separating North and South hemispheres.

Diagnostic type : Global internal analyses



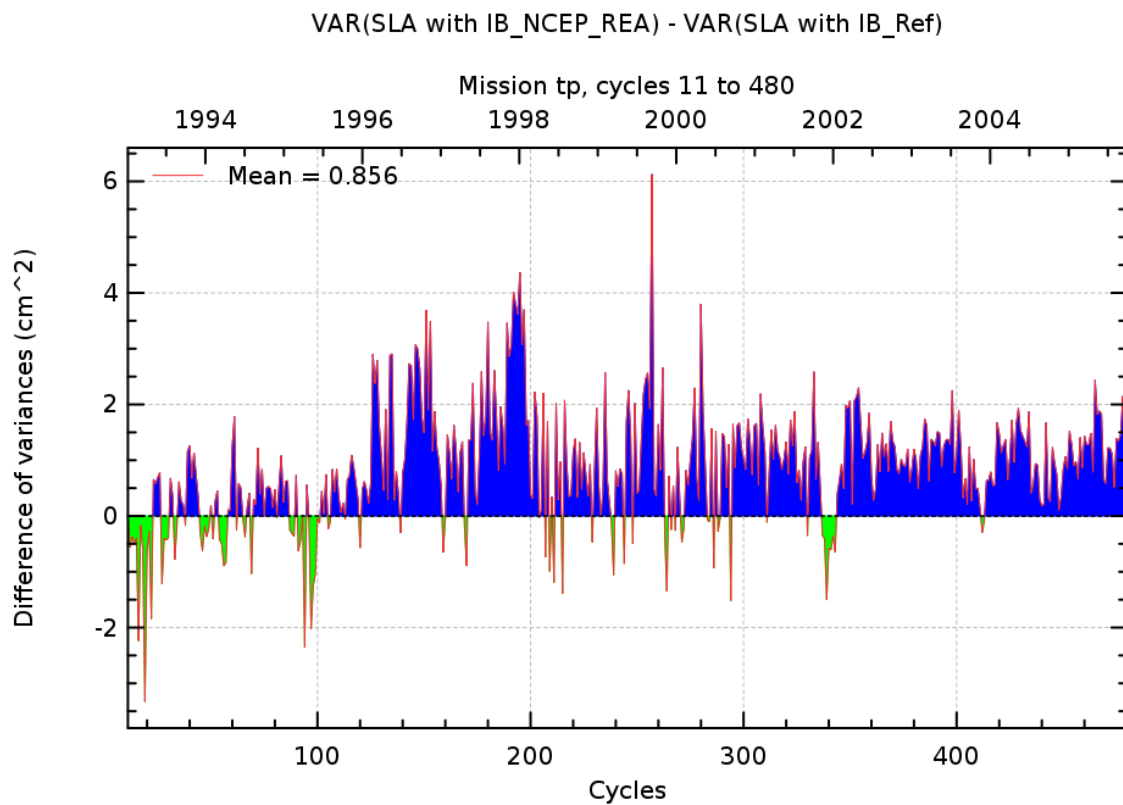
## Diagnostic A202\_a (mission tp)

**Name :** Differences of temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The differences between temporal evolution of SLA are calculated from statistics derived from diagnostic A201 (mean, variance) using 2 different components in the SLA calculation. They are calculated globally, but also separating ascending and descending passes (except for SLA Grids) or separating North and South hemispheres.

Diagnostic type : Global internal analyses



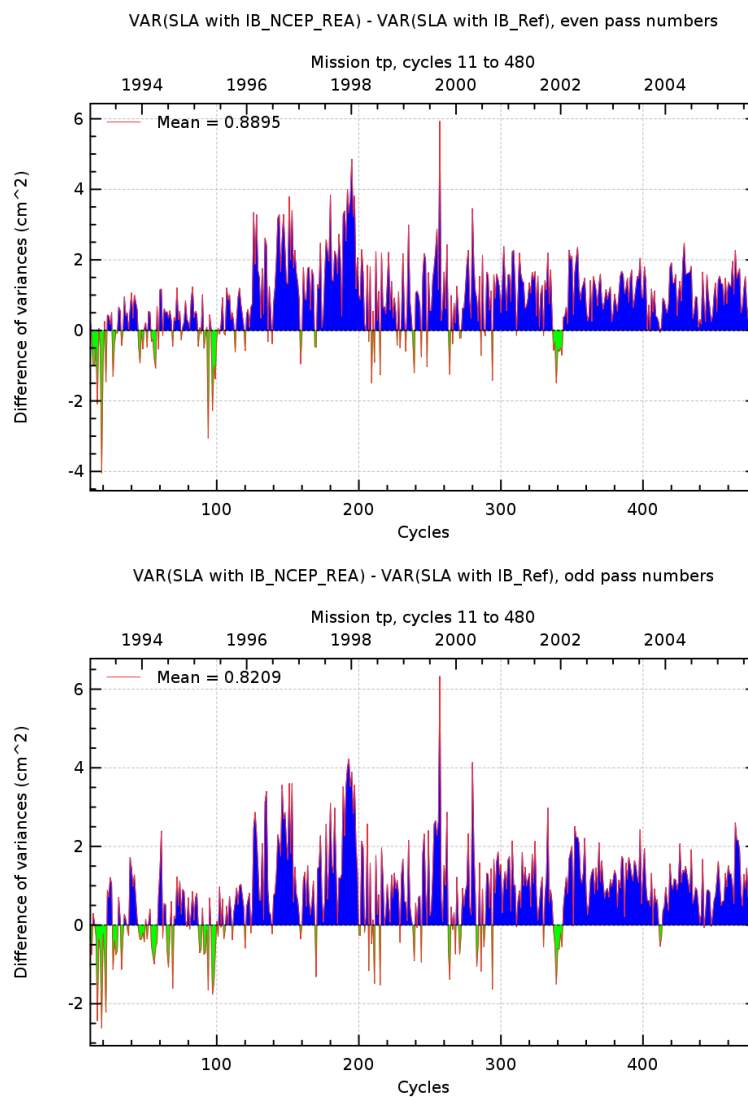
## Diagnostic A202\_b (mission tp)

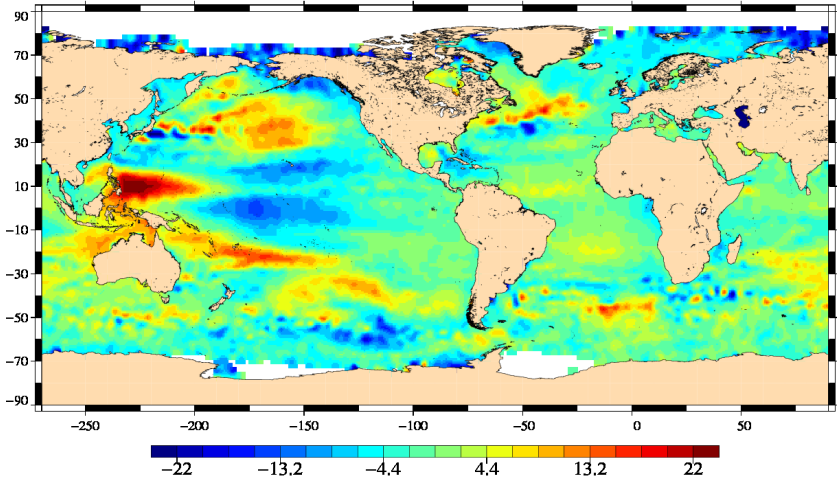
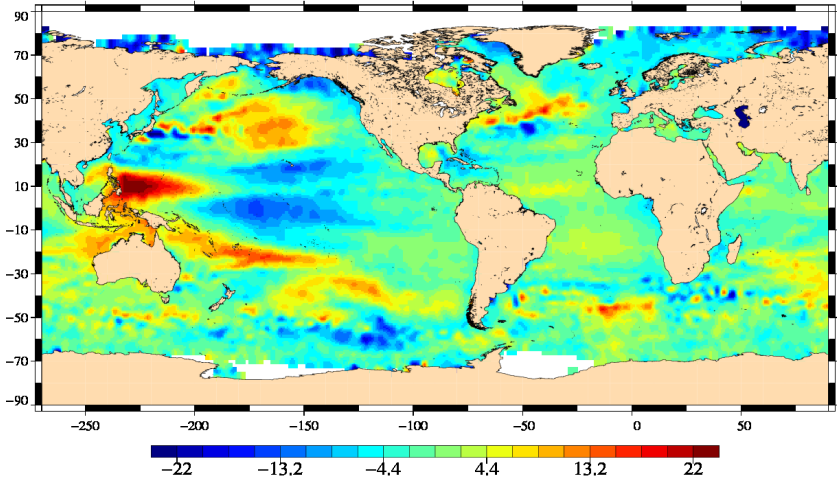
**Name :** Differences of temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The differences between temporal evolution of SLA are calculated from statistics derived from diagnostic A201 (mean, variance) using 2 different components in the SLA calculation. They are calculated globally, but also separating ascending and descending passes (except for SLA Grids) or separating North and South hemispheres.

Diagnostic type : Global internal analyses



Diagnostic type : Global internal analyses	Diagnostic A203_a (mission en)	
	Name : Map of Sea Level Anomaly (SLA) over all the period	
	Input data : Along track SLA	
	Description : The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.	
	<div>SLA with IB_NCEP_REA : trends Mission en, cycles 10 to 93</div>  <div>Trends (mm/yr)</div> <div>SLA with IB_Ref : trends Mission en, cycles 10 to 93</div>  <div>Trends (mm/yr)</div>	

## Diagnostic A203\_b (mission en)

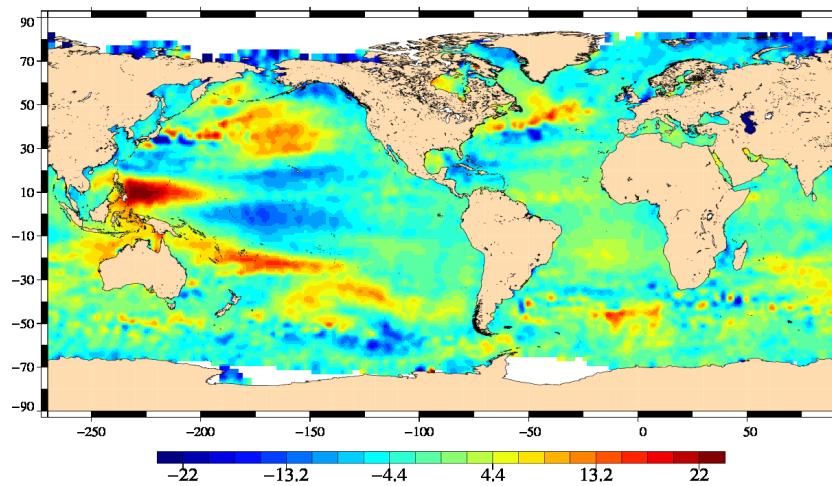
**Name :** Map of Sea Level Anomaly (SLA) over all the period

**Input data :** Along track SLA

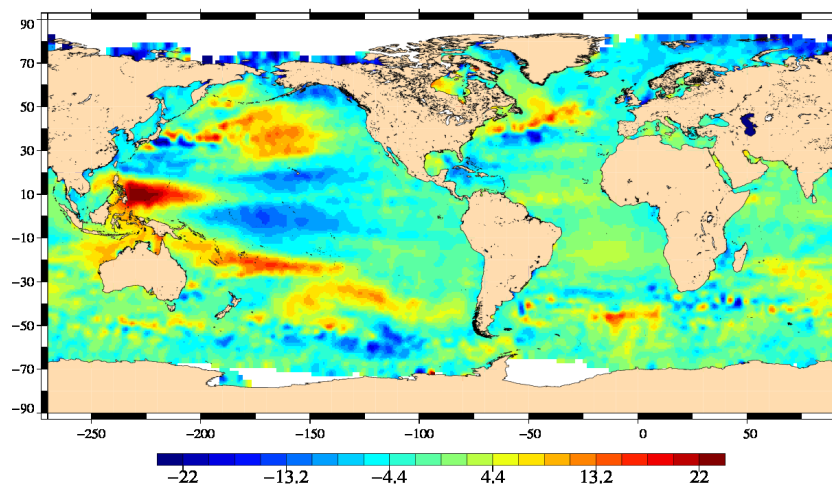
**Description :** The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Global internal analyses

SLA with IB\_NCEP\_REA : trends, even pass numbers  
Mission en, cycles 10 to 93



Trends (mm/yr)  
SLA with IB\_Ref : trends, even pass numbers  
Mission en, cycles 10 to 93



Trends (mm/yr)

## Diagnostic A203\_c (mission en)

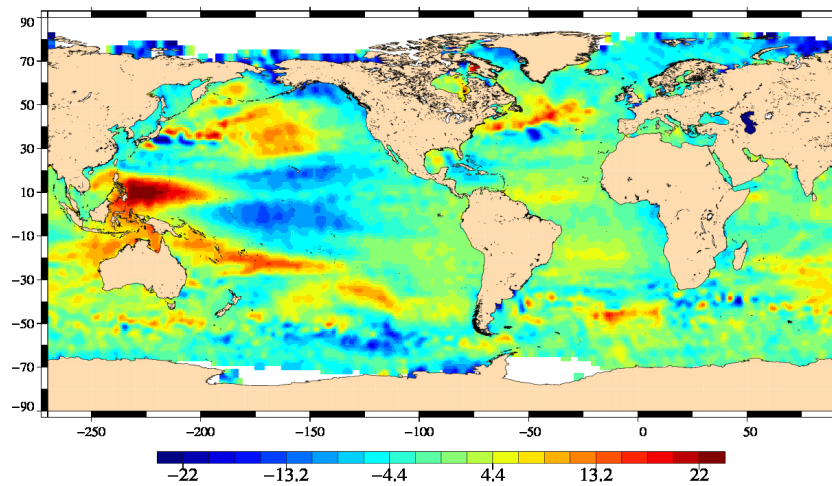
**Name :** Map of Sea Level Anomaly (SLA) over all the period

**Input data :** Along track SLA

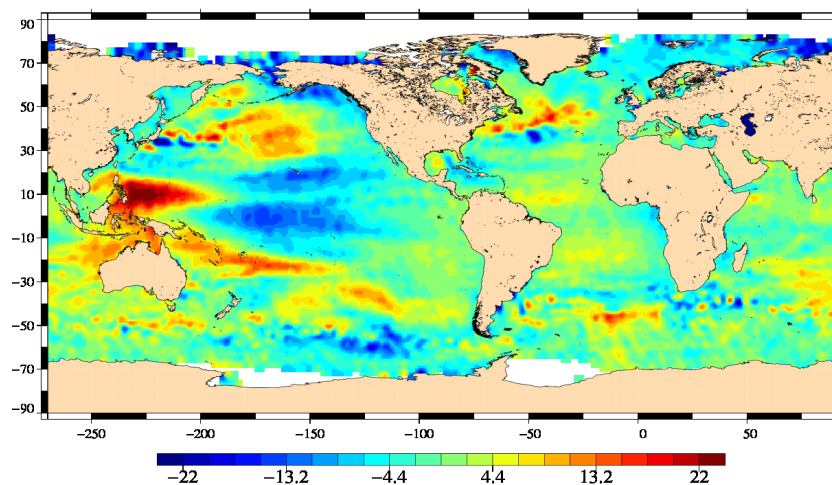
**Description :** The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Global internal analyses

SLA with IB\_NCEP\_REA : trends, odd pass numbers  
Mission en, cycles 10 to 93



Trends (mm/yr)  
SLA with IB\_Ref : trends, odd pass numbers  
Mission en, cycles 10 to 93



Trends (mm/yr)



## Diagnostic A203\_a (mission j1)

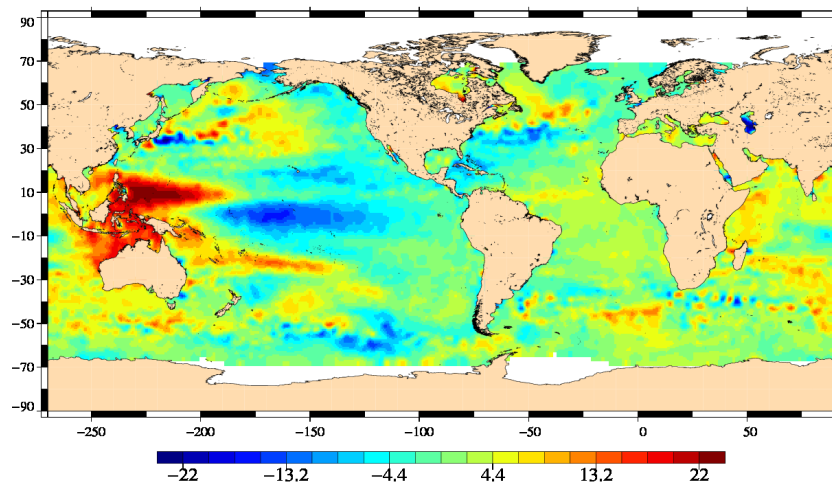
**Name :** Map of Sea Level Anomaly (SLA) over all the period

**Input data :** Along track SLA

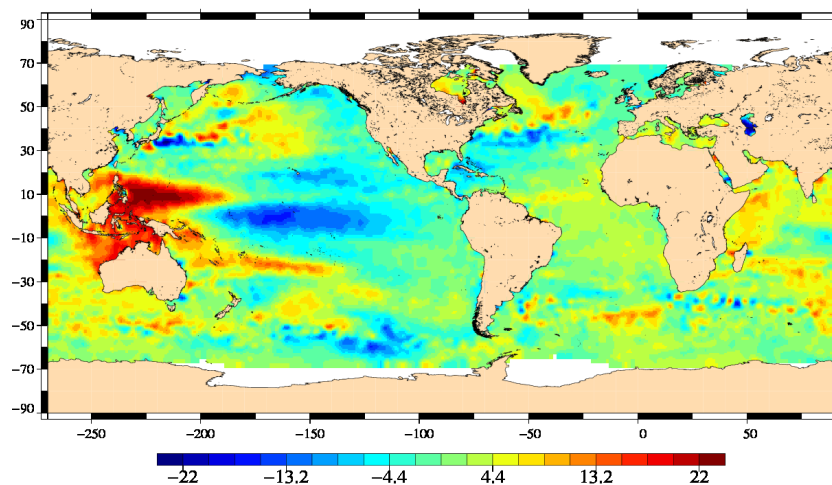
**Description :** The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Global internal analyses

SLA with IB\_NCEP\_REA : trends  
Mission j1, cycles 2 to 330



Trends (mm/yr)  
SLA with IB\_Ref : trends  
Mission j1, cycles 2 to 330



Trends (mm/yr)

## Diagnostic A203\_b (mission j1)

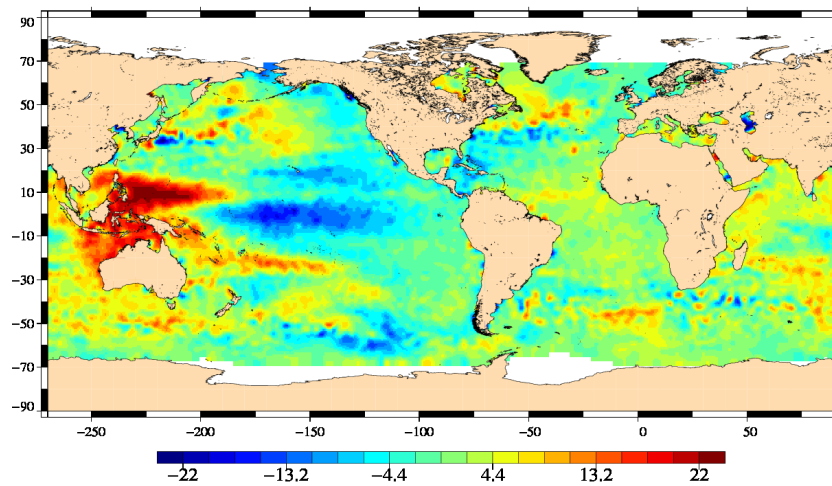
**Name :** Map of Sea Level Anomaly (SLA) over all the period

**Input data :** Along track SLA

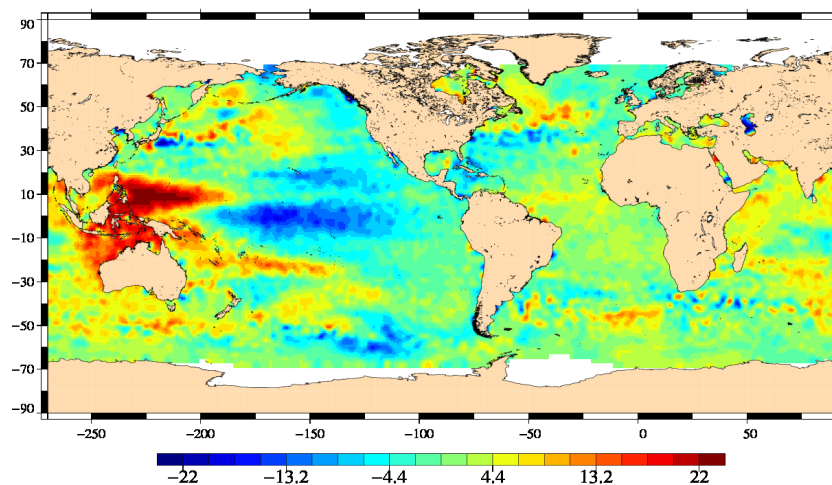
**Description :** The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Global internal analyses

SLA with IB\_NCEP\_REA : trends, even pass numbers  
Mission j1, cycles 2 to 330



Trends (mm/yr)  
SLA with IB\_Ref : trends, even pass numbers  
Mission j1, cycles 2 to 330



Trends (mm/yr)

## Diagnostic A203\_c (mission j1)

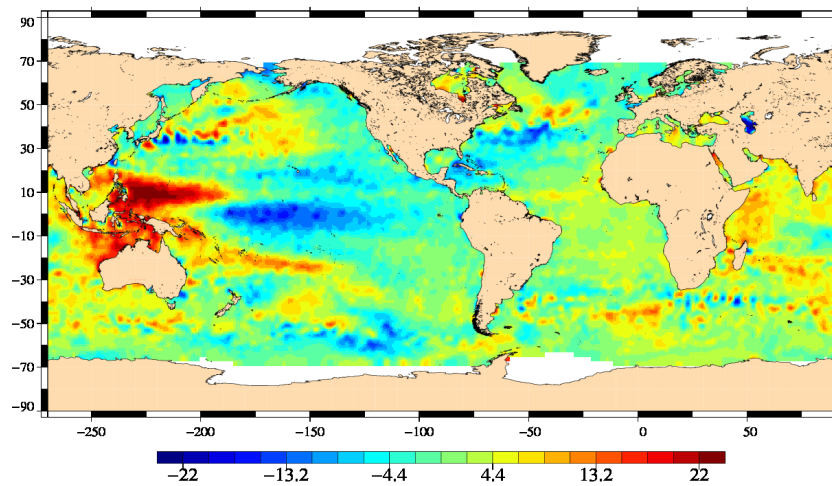
**Name :** Map of Sea Level Anomaly (SLA) over all the period

**Input data :** Along track SLA

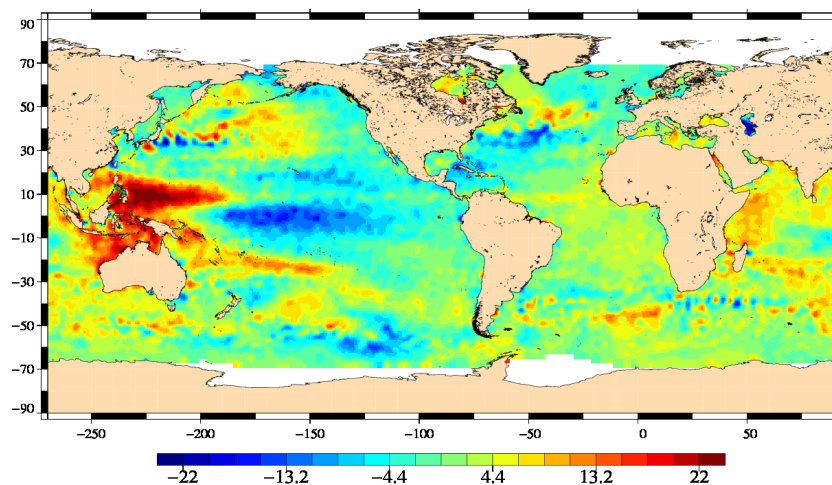
**Description :** The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Global internal analyses

SLA with IB\_NCEP\_REA : trends, odd pass numbers  
Mission j1, cycles 2 to 330



Trends (mm/yr)  
SLA with IB\_Ref : trends, odd pass numbers  
Mission j1, cycles 2 to 330



Trends (mm/yr)

## Diagnostic A203\_a (mission tp)

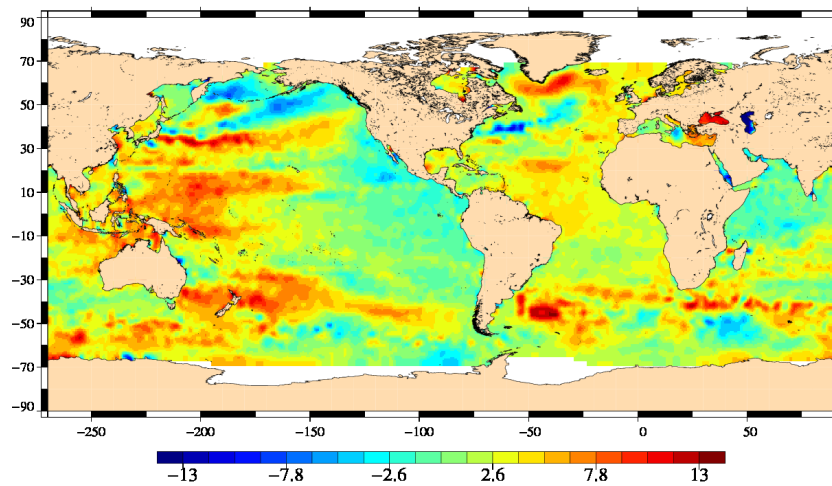
**Name :** Map of Sea Level Anomaly (SLA) over all the period

**Input data :** Along track SLA

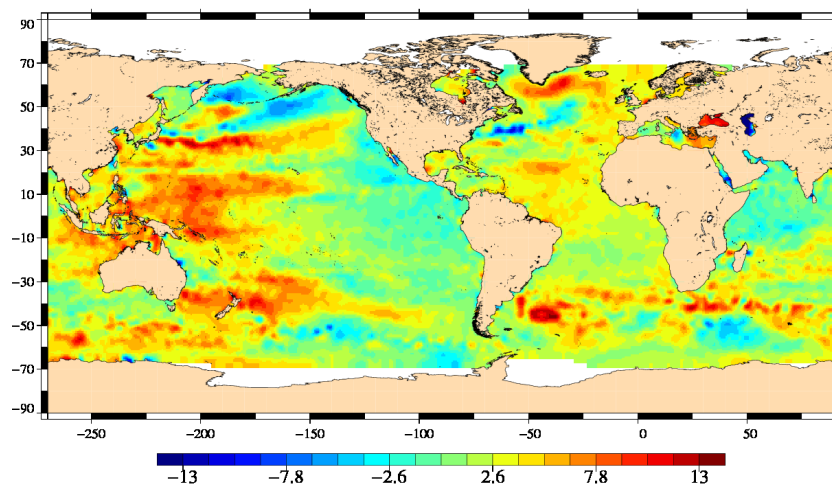
**Description :** The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Global internal analyses

SLA with IB\_NCEP\_REA : trends  
Mission tp, cycles 11 to 480



Trends (mm/yr)  
SLA with IB\_Ref : trends  
Mission tp, cycles 11 to 480



Trends (mm/yr)

## Diagnostic A203\_b (mission tp)

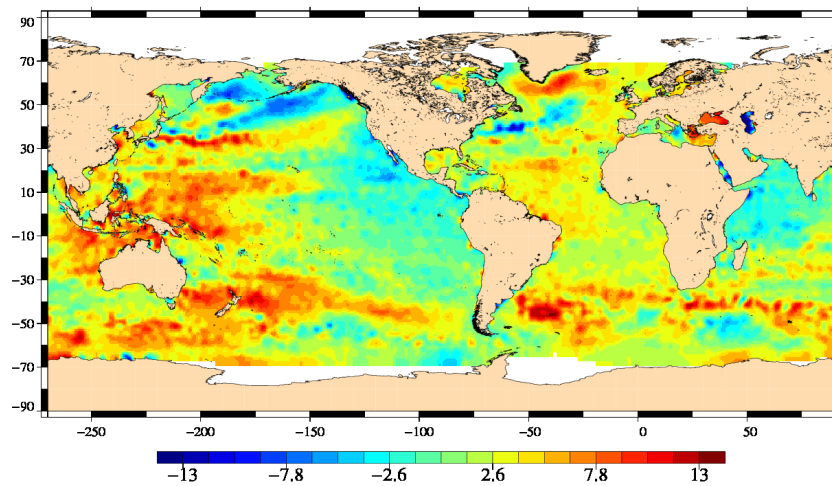
**Name :** Map of Sea Level Anomaly (SLA) over all the period

**Input data :** Along track SLA

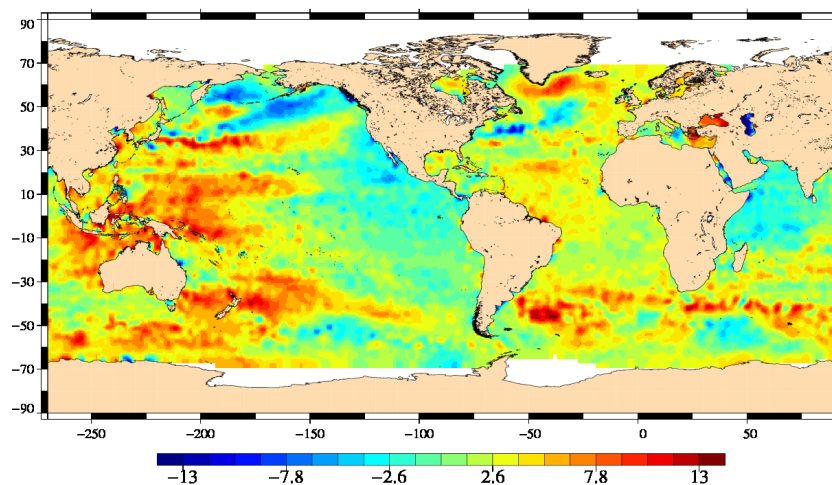
**Description :** The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Global internal analyses

SLA with IB\_NCEP\_REA : trends, even pass numbers  
Mission tp, cycles 11 to 480



Trends (mm/yr)  
SLA with IB\_Ref : trends, even pass numbers  
Mission tp, cycles 11 to 480



Trends (mm/yr)



## Diagnostic A203\_c (mission tp)

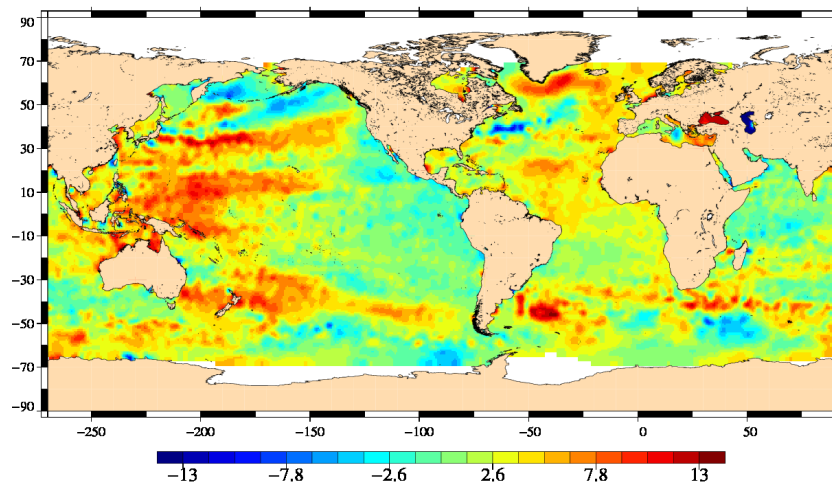
**Name :** Map of Sea Level Anomaly (SLA) over all the period

**Input data :** Along track SLA

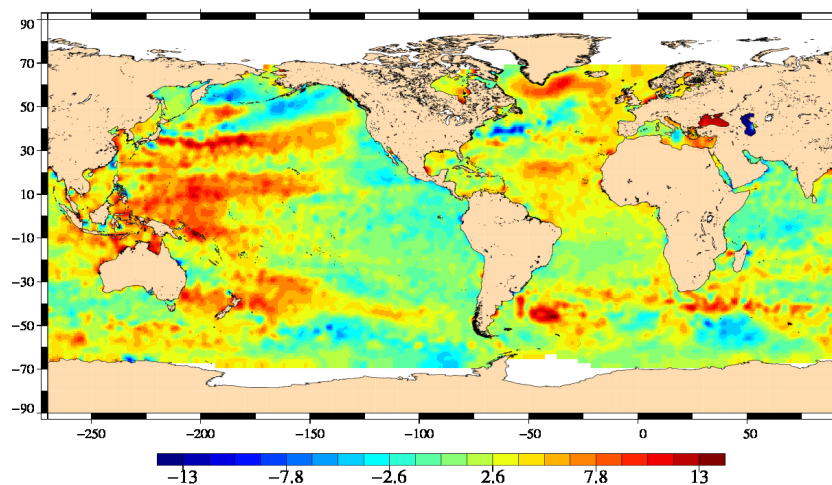
**Description :** The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Global internal analyses

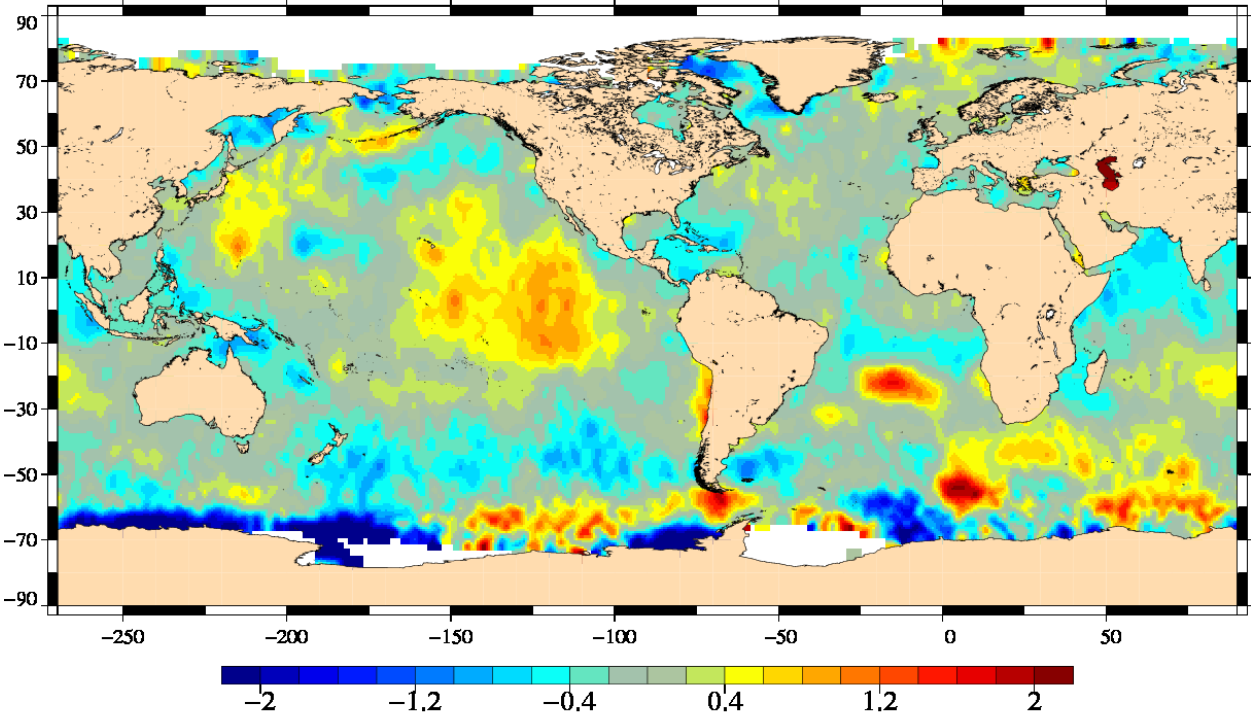
SLA with IB\_NCEP\_REA : trends, odd pass numbers  
Mission tp, cycles 11 to 480



Trends (mm/yr)  
SLA with IB\_Ref : trends, odd pass numbers  
Mission tp, cycles 11 to 480



Trends (mm/yr)

Diagnostic type : Global internal analyses	Diagnostic A204_a (mission en)
	Name : Differences between maps of SLA
	Input data : Along track SLA
	Description : The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).
	<div>SLA with IB_NCEP_REA – SLA with IB_Ref : trends Mission en, cycles 10 to 93</div> 

## Diagnostic A204\_b (mission en)

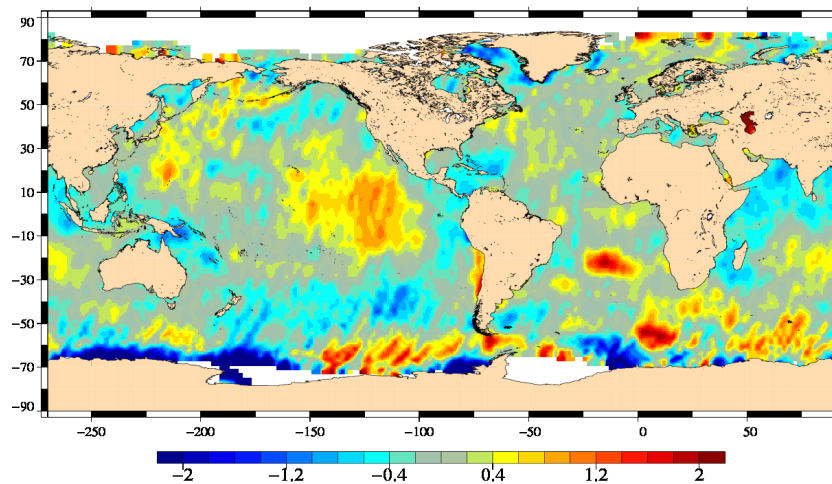
**Name :** Differences between maps of SLA

**Input data :** Along track SLA

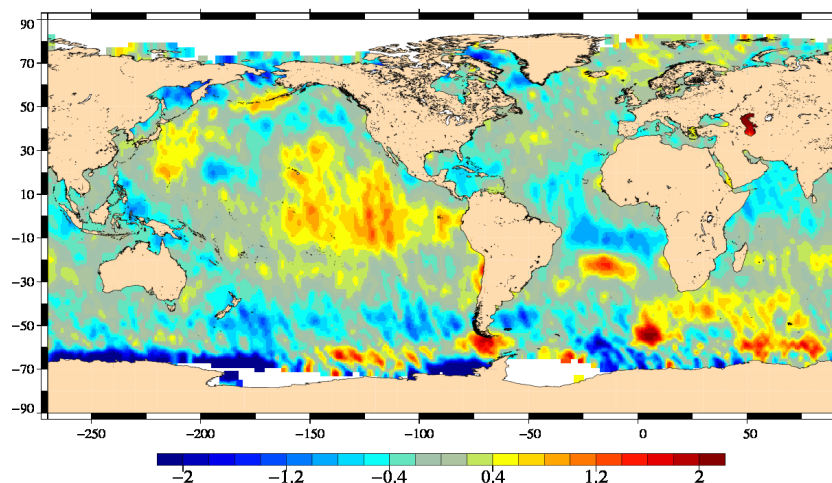
**Description :** The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).

Diagnostic type : Global internal analyses

SLA with IB\_NCEP\_REA – SLA with IB\_Ref : trends, even pass numbers  
Mission en, cycles 10 to 93



Trends (mm/yr)  
SLA with IB\_NCEP\_REA – SLA with IB\_Ref : trends, odd pass numbers  
Mission en, cycles 10 to 93



Trends (mm/yr)



## Diagnostic A204\_a (mission j1)

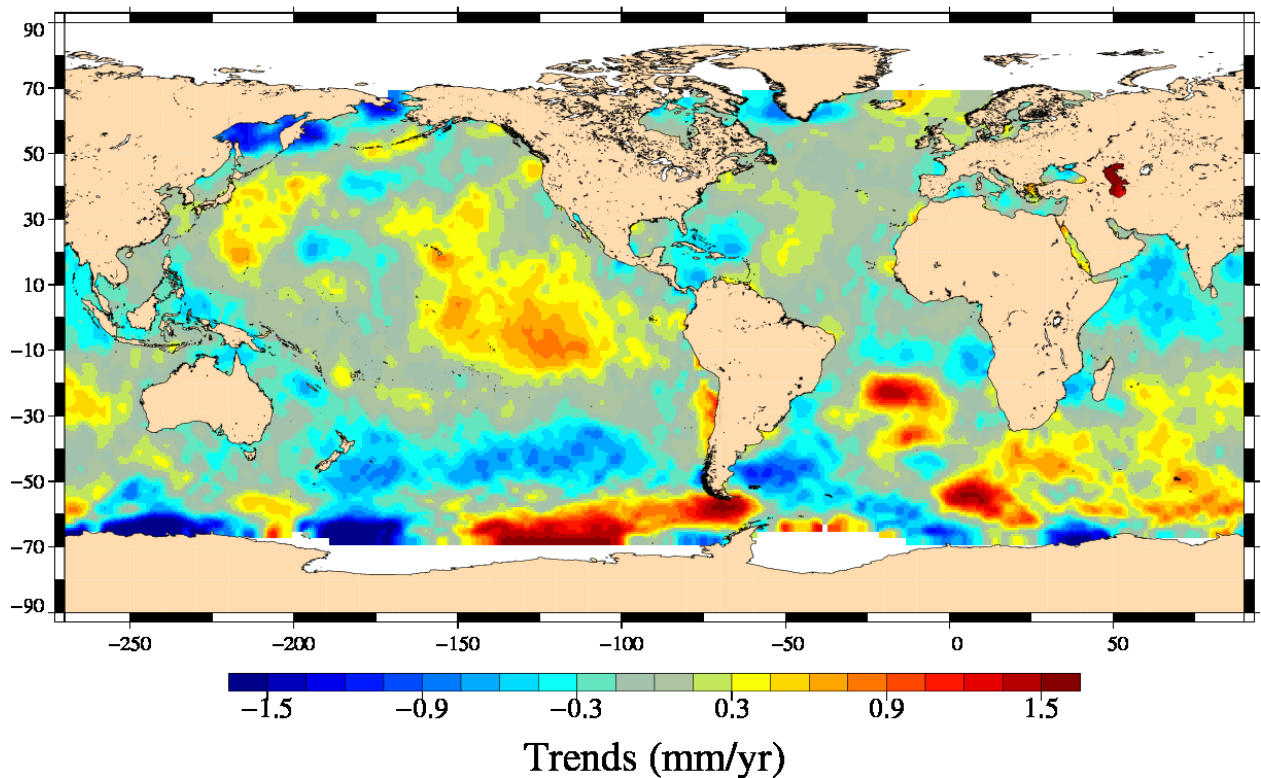
**Name :** Differences between maps of SLA

**Input data :** Along track SLA

**Description :** The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).

Diagnostic type : Global internal analyses

SLA with IB\_NCEP\_REA – SLA with IB\_Ref : trends  
Mission j1, cycles 2 to 330



## Diagnostic A204\_b (mission j1)

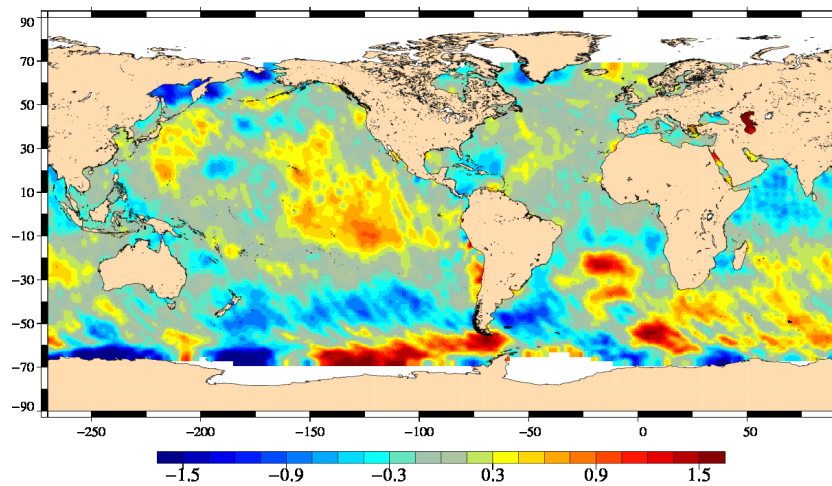
**Name :** Differences between maps of SLA

**Input data :** Along track SLA

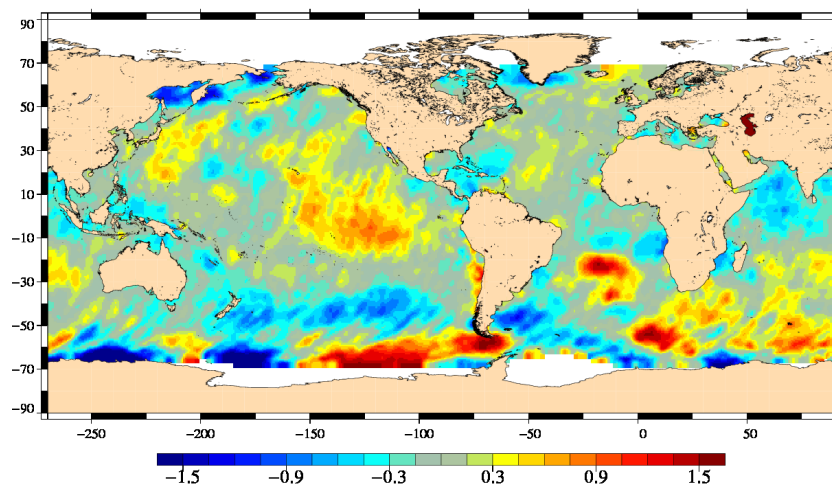
**Description :** The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).

Diagnostic type : Global internal analyses

SLA with IB\_NCEP\_REA – SLA with IB\_Ref : trends, even pass numbers  
Mission j1, cycles 2 to 330



Trends (mm/yr)  
SLA with IB\_NCEP\_REA – SLA with IB\_Ref : trends, odd pass numbers  
Mission j1, cycles 2 to 330



Trends (mm/yr)

## Diagnostic A204\_a (mission tp)

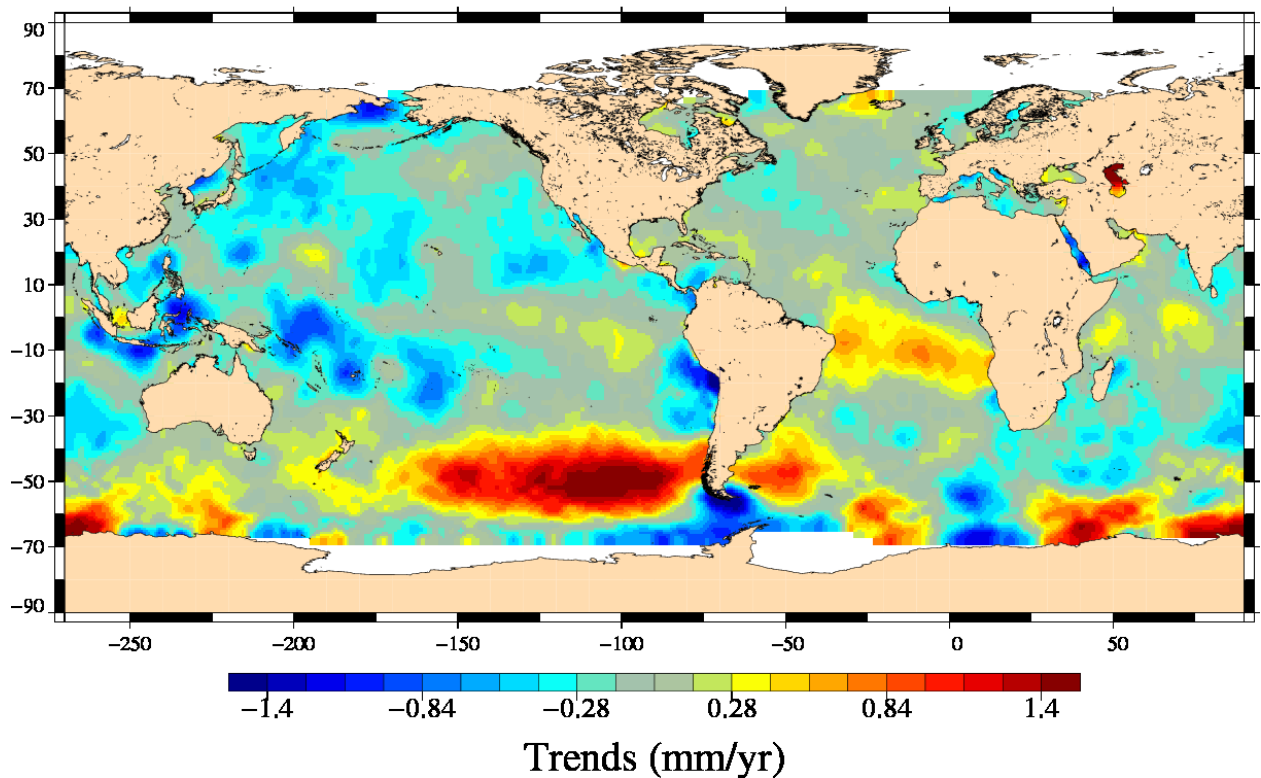
**Name :** Differences between maps of SLA

**Input data :** Along track SLA

**Description :** The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).

Diagnostic type : Global internal analyses

SLA with IB\_NCEP\_REA – SLA with IB\_Ref : trends  
Mission tp, cycles 11 to 480



## Diagnostic A204\_b (mission tp)

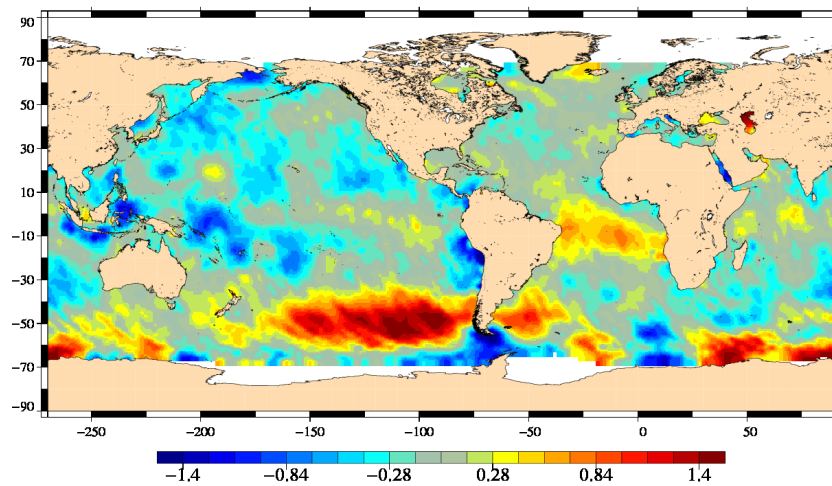
**Name :** Differences between maps of SLA

**Input data :** Along track SLA

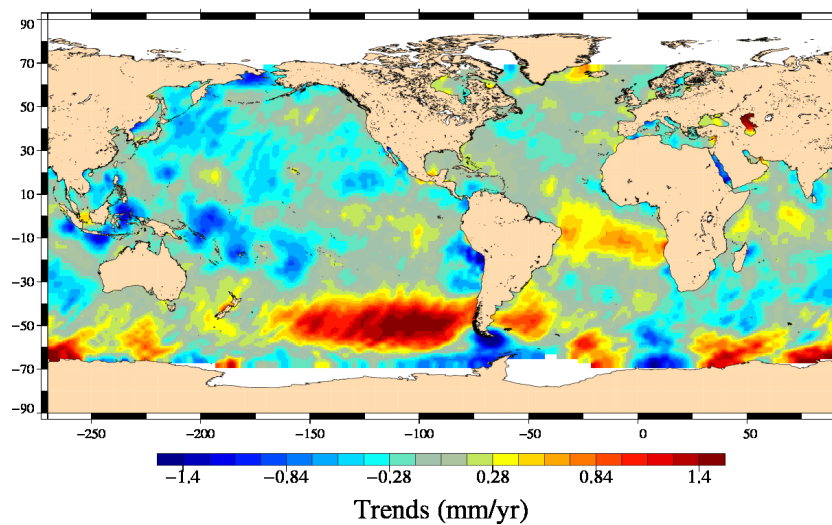
**Description :** The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except for SLA Grids).

Diagnostic type : Global internal analyses

SLA with IB\_NCEP\_REA – SLA with IB\_Ref : trends, even pass numbers  
Mission tp, cycles 11 to 480



Trends (mm/yr)  
SLA with IB\_NCEP\_REA – SLA with IB\_Ref : trends, odd pass numbers  
Mission tp, cycles 11 to 480

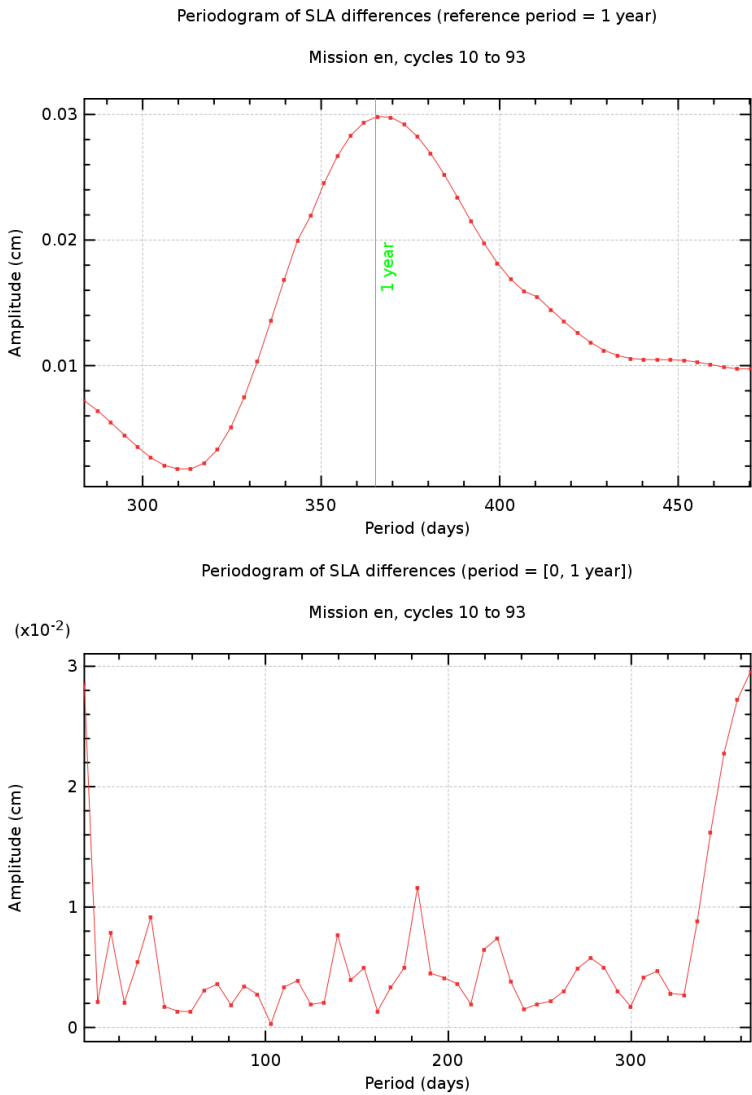


Diagnostic A206\_a (mission en)

Name : Periodogram derived from temporal evolution of Sea Level Anomaly (SLA)

Input data : Along track SLA

Description : The periodogram derived from temporal evolution of SLA (global, northern or southern hemisphere) can be done over all periods or focusing on particular periods, such as annual, semi annual or 60 day signal. Therefore mean of SLA differences are computed (every day or cycle), and time data series are plotted as a periodogram.



## Diagnostic A206\_b (mission en)

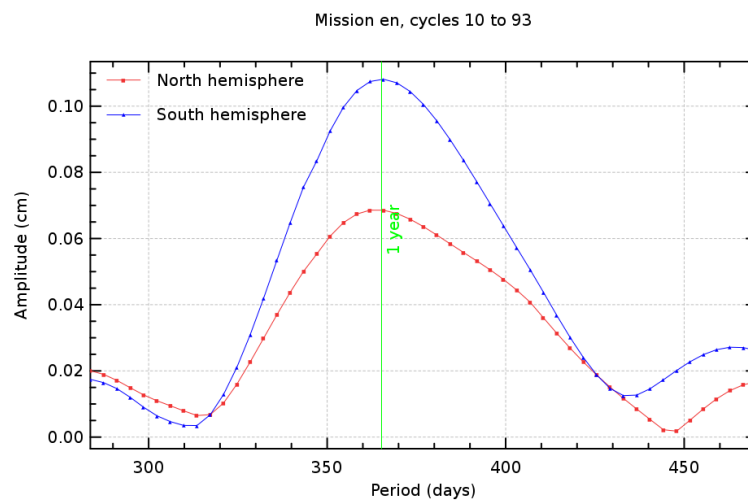
**Name :** Periodogram derived from temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

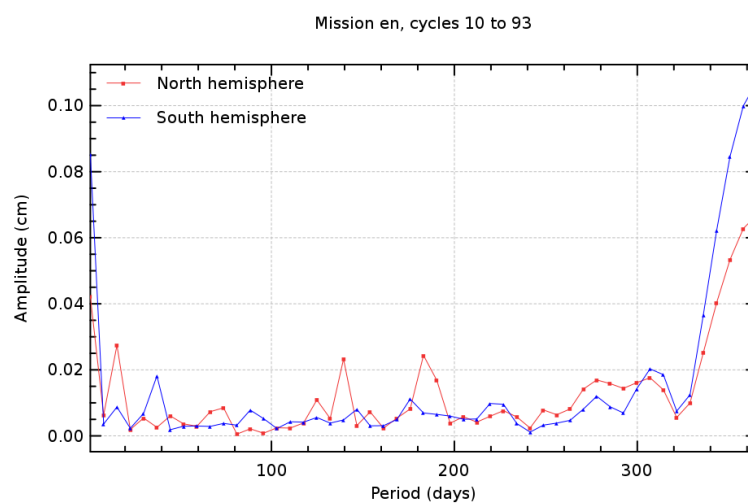
**Description :** The periodogram derived from temporal evolution of SLA (global, northern or southern hemisphere) can be done over all periods or focusing on particular periods, such as annual, semi annual or 60 day signal. Therefore mean of SLA differences are computed (every day or cycle), and time data series are plotted as a periodogram.

Diagnostic type : Global internal analyses

Periodogram of SLA differences, north and south hemispheres (reference period = 1 year)



Periodogram of SLA differences, north and south hemispheres (period = [0, 1 year])



## Diagnostic A206\_a (mission j1)

**Name :** Periodogram derived from temporal evolution of Sea Level Anomaly (SLA)

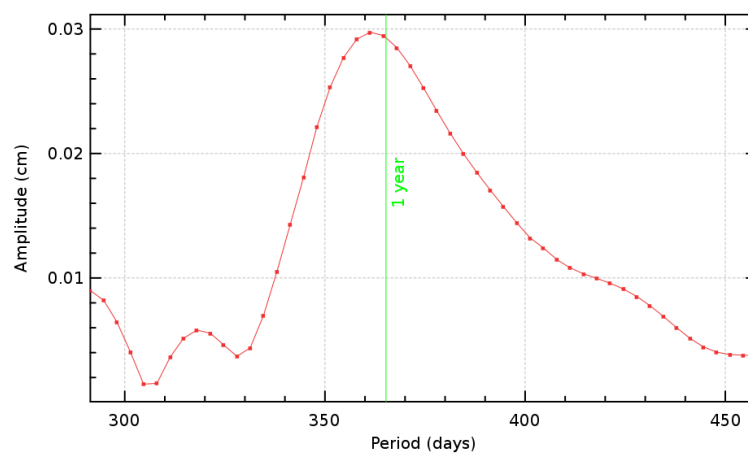
**Input data :** Along track SLA

**Description :** The periodogram derived from temporal evolution of SLA (global, northern or southern hemisphere) can be done over all periods or focusing on particular periods, such as annual, semi annual or 60 day signal. Therefore mean of SLA differences are computed (every day or cycle), and time data series are plotted as a periodogram.

Diagnostic type : Global internal analyses

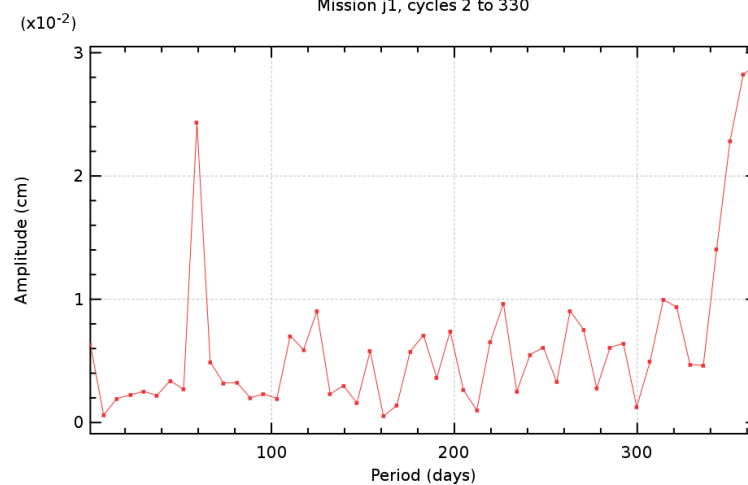
Periodogram of SLA differences (reference period = 1 year)

Mission j1, cycles 2 to 330



Periodogram of SLA differences (period = [0, 1 year])

Mission j1, cycles 2 to 330



## Diagnostic A206\_b (mission j1)

**Name :** Periodogram derived from temporal evolution of Sea Level Anomaly (SLA)

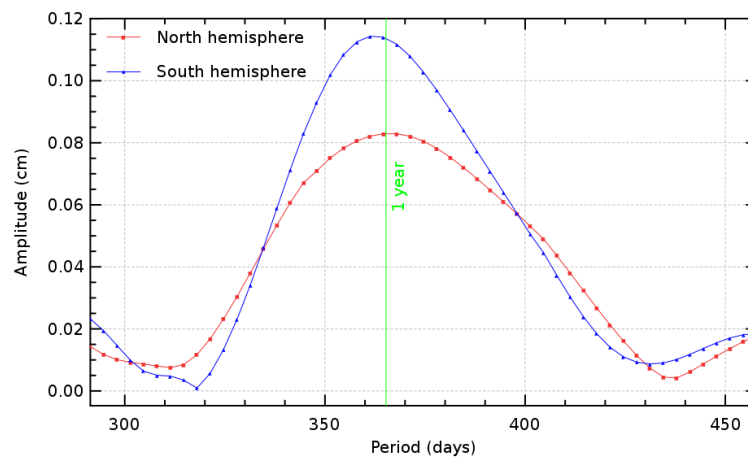
**Input data :** Along track SLA

**Description :** The periodogram derived from temporal evolution of SLA (global, northern or southern hemisphere) can be done over all periods or focusing on particular periods, such as annual, semi annual or 60 day signal. Therefore mean of SLA differences are computed (every day or cycle), and time data series are plotted as a periodogram.

Diagnostic type : Global internal analyses

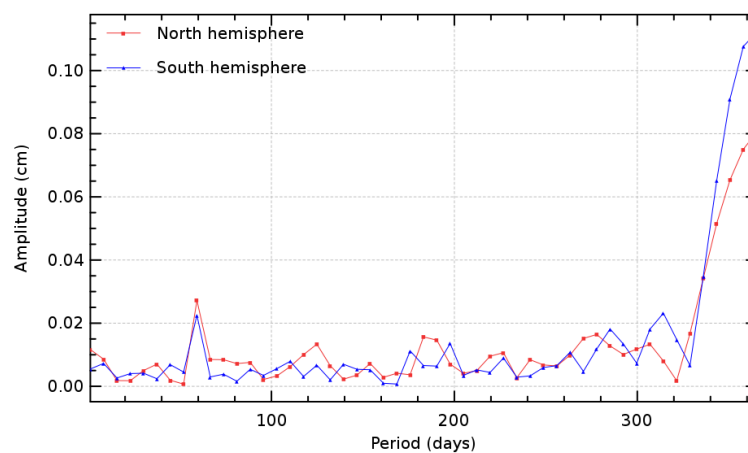
Periodogram of SLA differences, north and south hemispheres (reference period = 1 year)

Mission j1, cycles 2 to 330



Periodogram of SLA differences, north and south hemispheres (period = [0, 1 year])

Mission j1, cycles 2 to 330





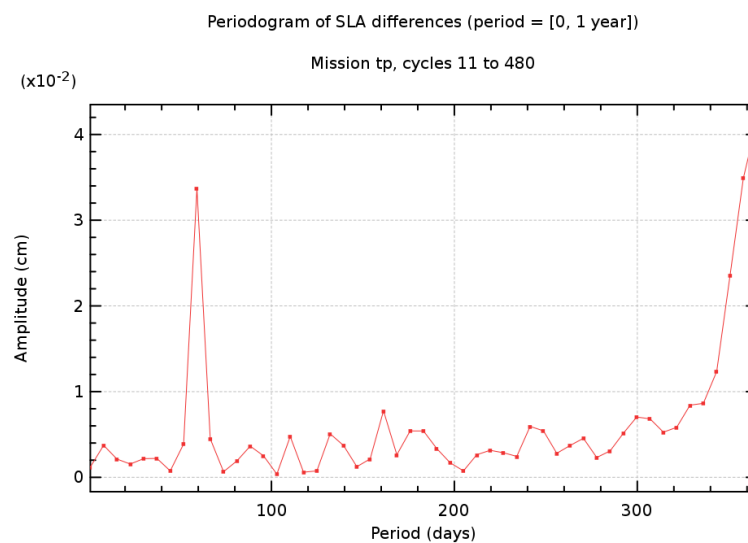
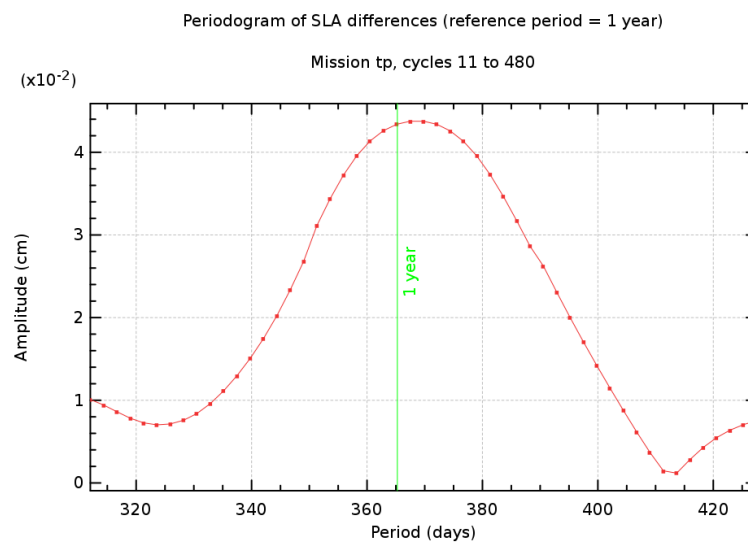
## Diagnostic A206\_a (mission tp)

**Name :** Periodogram derived from temporal evolution of Sea Level Anomaly (SLA)

**Input data :** Along track SLA

**Description :** The periodogram derived from temporal evolution of SLA (global, northern or southern hemisphere) can be done over all periods or focusing on particular periods, such as annual, semi annual or 60 day signal. Therefore mean of SLA differences are computed (every day or cycle), and time data series are plotted as a periodogram.

Diagnostic type : Global internal analyses



## Diagnostic A206\_b (mission tp)

**Name :** Periodogram derived from temporal evolution of Sea Level Anomaly (SLA)

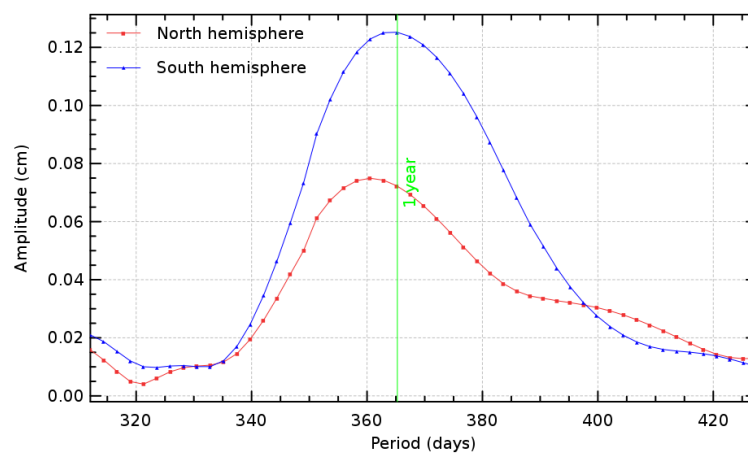
**Input data :** Along track SLA

**Description :** The periodogram derived from temporal evolution of SLA (global, northern or southern hemisphere) can be done over all periods or focusing on particular periods, such as annual, semi annual or 60 day signal. Therefore mean of SLA differences are computed (every day or cycle), and time data series are plotted as a periodogram.

Diagnostic type : Global internal analyses

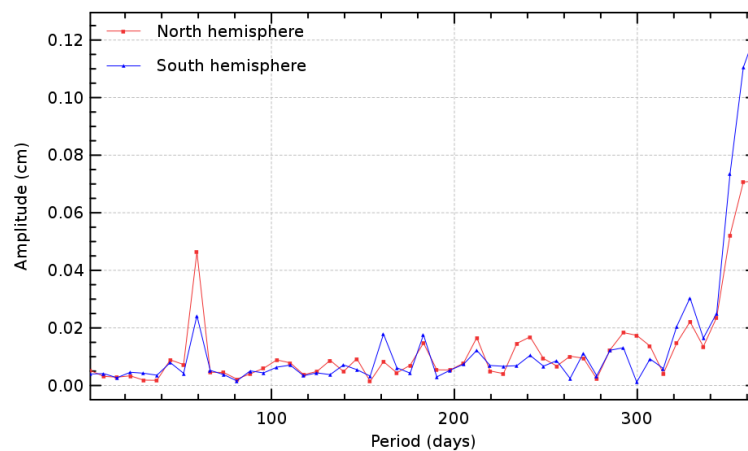
Periodogram of SLA differences, north and south hemispheres (reference period = 1 year)

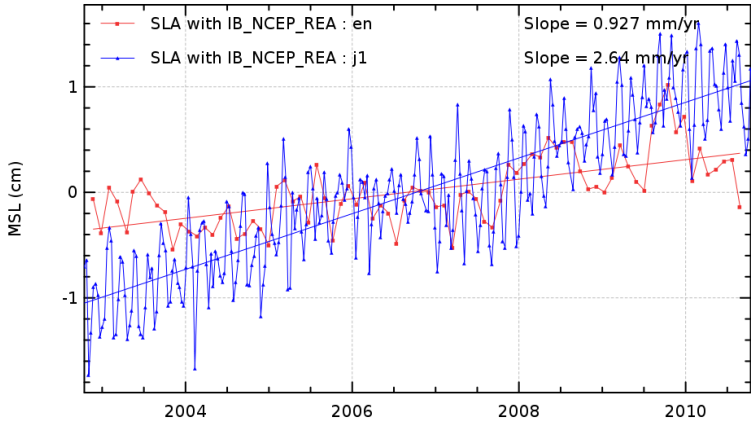
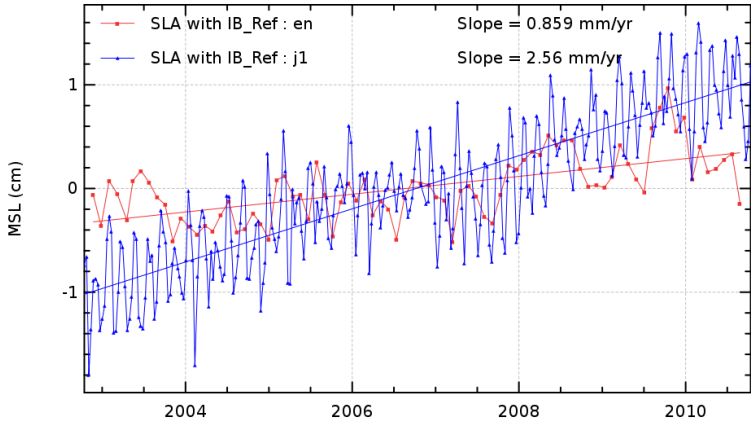
Mission tp, cycles 11 to 480



Periodogram of SLA differences, north and south hemispheres (period = [0, 1 year])

Mission tp, cycles 11 to 480



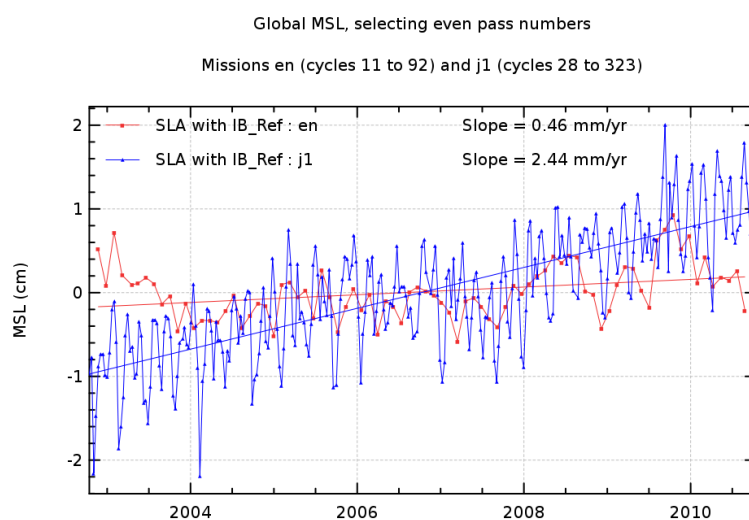
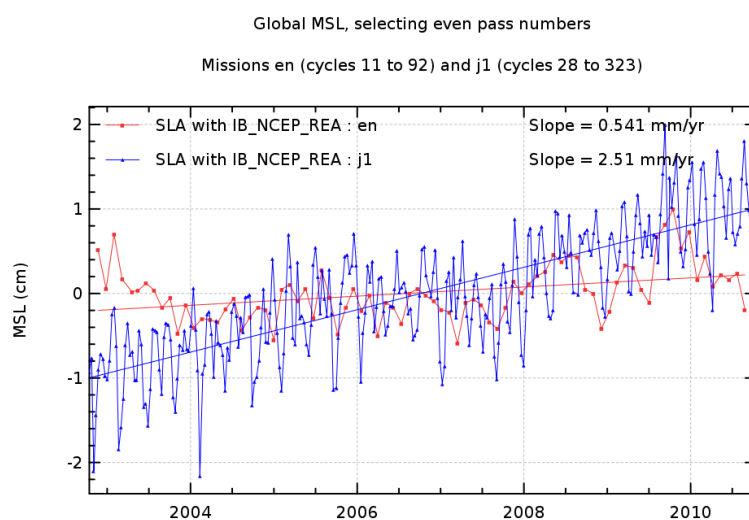
Diagnostic B001_a (mission )	
Name : Temporal evolution of Sea level Anomaly (SLA) for 2 missions over the same period	
Input data : Along track SLA	
<p>Description : Temporal evolution of SLA statistics (mean, standard deviation) of 2 or more missions are computed over the same period as longest as possible using successively both components in the SLA calculation. This can be done globally, or separating in ascending and descending or in northern and southern hemisphere. In order to assure comparability, statistics are computed using sea level standard calculation (mean per box of 2x2 and weighted by cosine of latitude for the global mean) limited to 66 latitude.</p>	
<div><div>Global MSL</div><div>Missions en (cycles 11 to 92) and j1 (cycles 28 to 323)</div><div></div></div> <div><div>Global MSL</div><div>Missions en (cycles 11 to 92) and j1 (cycles 28 to 323)</div><div></div></div>	

## Diagnostic B001\_b (mission )

**Name :** Temporal evolution of Sea level Anomaly (SLA) for 2 missions over the same period

**Input data :** Along track SLA

**Description :** Temporal evolution of SLA statistics (mean, standard deviation) of 2 or more missions are computed over the same period as longest as possible using successively both components in the SLA calculation. This can be done globally, or separating in ascending and descending or in northern and southern hemisphere. In order to assure comparability, statistics are computed using sea level standard calculation (mean per box of 2x2 and weighted by cosine of latitude for the global mean) limited to 66 latitude.

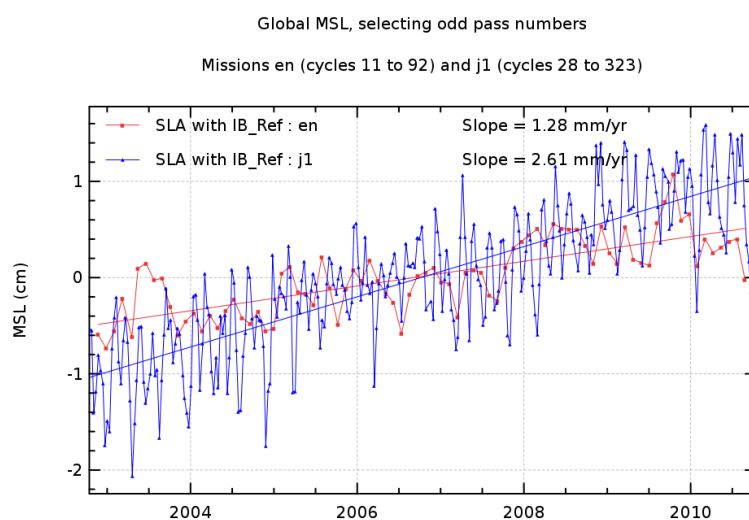
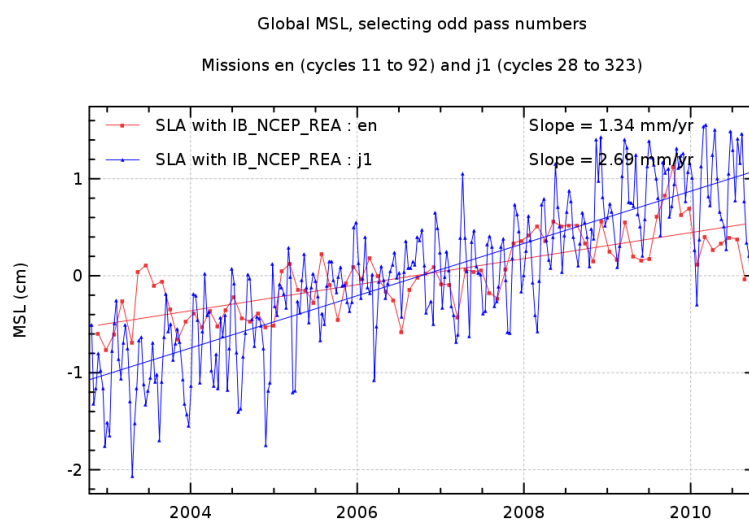


## Diagnostic B001\_c (mission )

**Name :** Temporal evolution of Sea level Anomaly (SLA) for 2 missions over the same period

**Input data :** Along track SLA

**Description :** Temporal evolution of SLA statistics (mean, standard deviation) of 2 or more missions are computed over the same period as longest as possible using successively both components in the SLA calculation. This can be done globally, or separating in ascending and descending or in northern and southern hemisphere. In order to assure comparability, statistics are computed using sea level standard calculation (mean per box of 2x2 and weighted by cosine of latitude for the global mean) limited to 66 latitude.

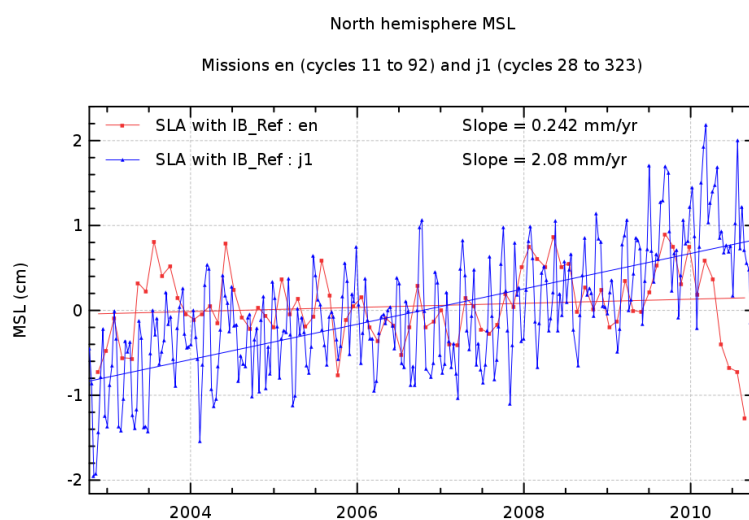
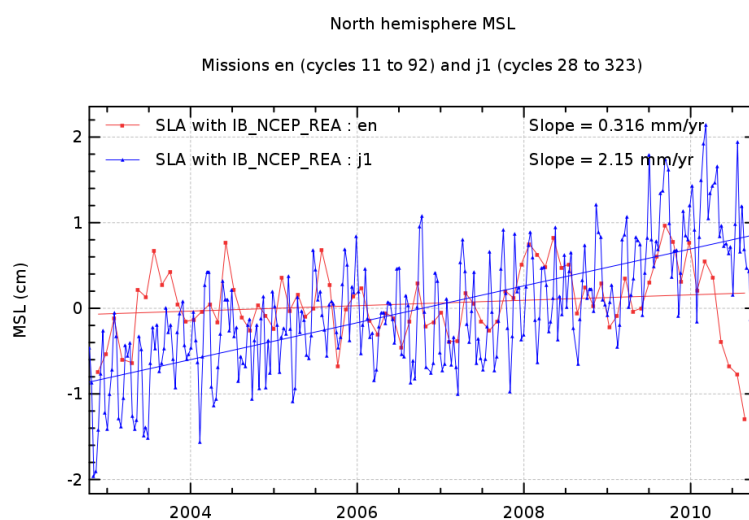


## Diagnostic B001\_d (mission )

**Name :** Temporal evolution of Sea level Anomaly (SLA) for 2 missions over the same period

**Input data :** Along track SLA

**Description :** Temporal evolution of SLA statistics (mean, standard deviation) of 2 or more missions are computed over the same period as longest as possible using successively both components in the SLA calculation. This can be done globally, or separating in ascending and descending or in northern and southern hemisphere. In order to assure comparability, statistics are computed using sea level standard calculation (mean per box of 2x2 and weighted by cosine of latitude for the global mean) limited to 66 latitude.

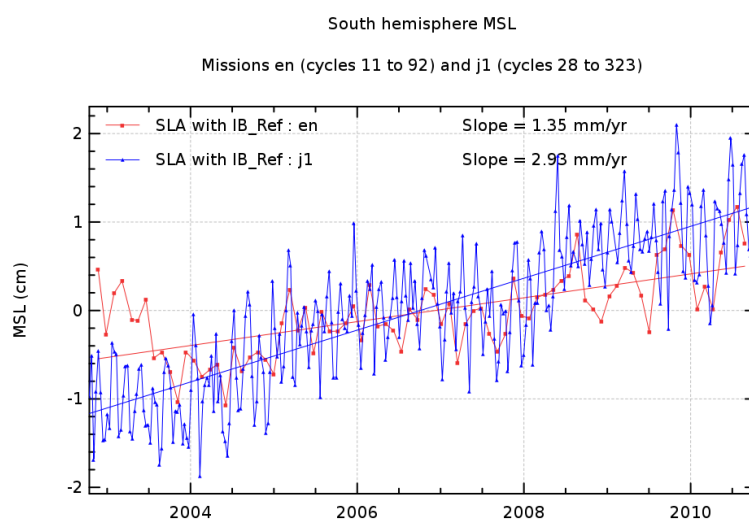
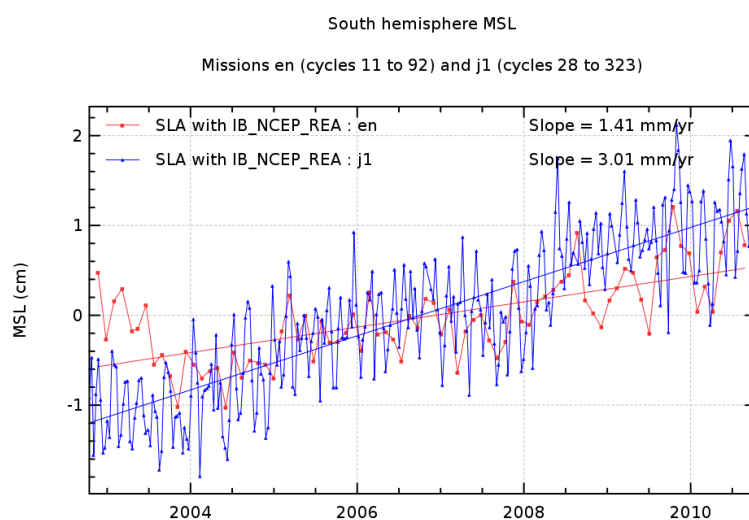


## Diagnostic B001\_e (mission )

**Name :** Temporal evolution of Sea level Anomaly (SLA) for 2 missions over the same period

**Input data :** Along track SLA

**Description :** Temporal evolution of SLA statistics (mean, standard deviation) of 2 or more missions are computed over the same period as longest as possible using successively both components in the SLA calculation. This can be done globally, or separating in ascending and descending or in northern and southern hemisphere. In order to assure comparability, statistics are computed using sea level standard calculation (mean per box of 2x2 and weighted by cosine of latitude for the global mean) limited to 66 latitude.



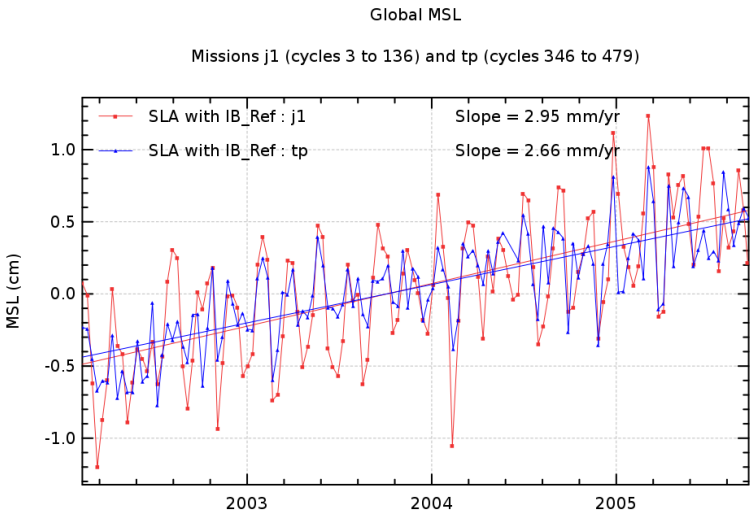
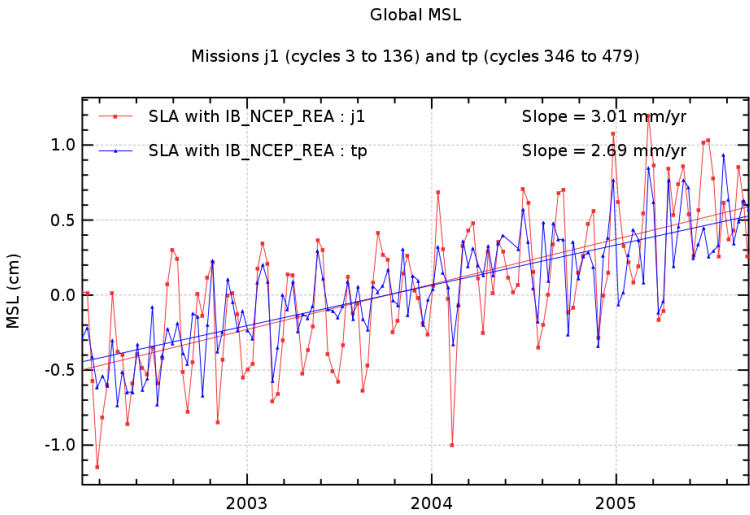
## Diagnostic B001\_a (mission )

**Name :** Temporal evolution of Sea level Anomaly (SLA) for 2 missions over the same period

**Input data :** Along track SLA

**Description :** Temporal evolution of SLA statistics (mean, standard deviation) of 2 or more missions are computed over the same period as longest as possible using successively both components in the SLA calculation. This can be done globally, or separating in ascending and descending or in northern and southern hemisphere. In order to assure comparability, statistics are computed using sea level standard calculation (mean per box of 2x2 and weighted by cosine of latitude for the global mean) limited to 66 latitude.

Diagnostic type : Global multi-mission comparisons





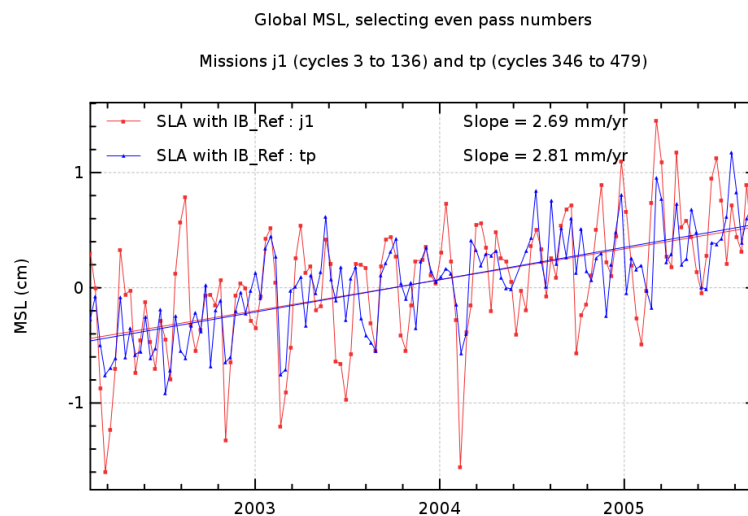
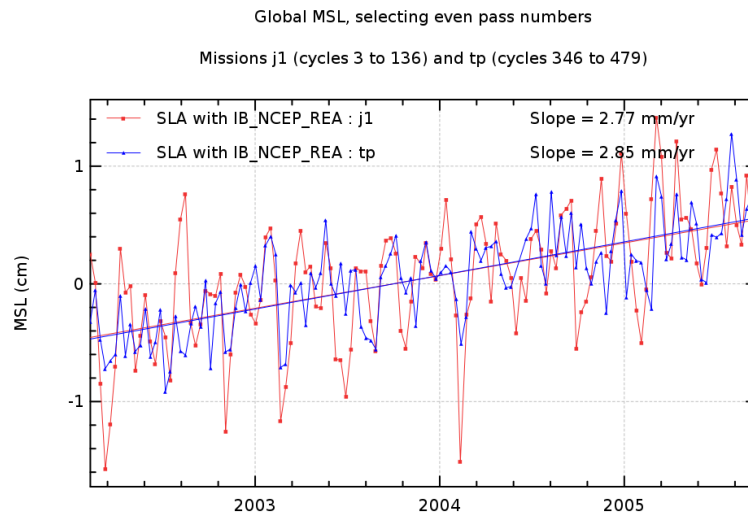
## Diagnostic B001\_b (mission )

**Name :** Temporal evolution of Sea level Anomaly (SLA) for 2 missions over the same period

**Input data :** Along track SLA

**Description :** Temporal evolution of SLA statistics (mean, standard deviation) of 2 or more missions are computed over the same period as longest as possible using successively both components in the SLA calculation. This can be done globally, or separating in ascending and descending or in northern and southern hemisphere. In order to assure comparability, statistics are computed using sea level standard calculation (mean per box of 2x2 and weighted by cosine of latitude for the global mean) limited to 66 latitude.

Diagnostic type : Global multi-mission comparisons



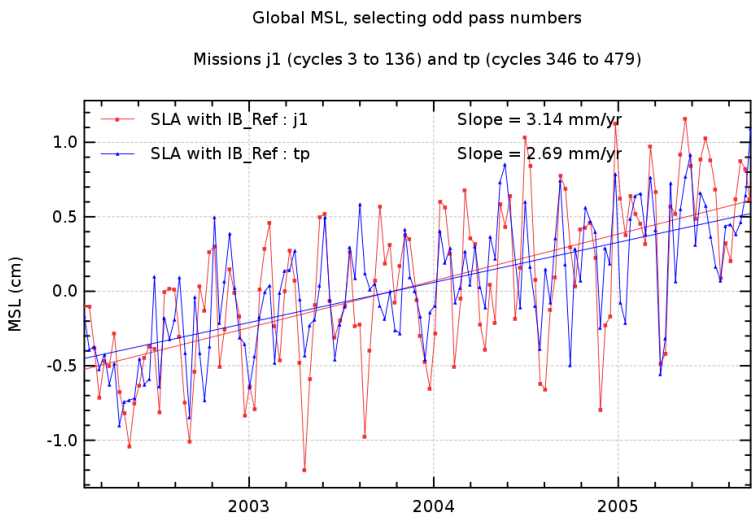
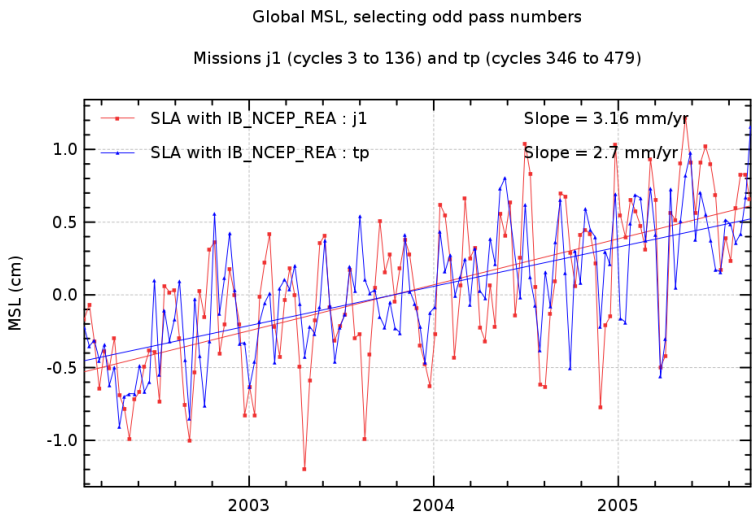
## Diagnostic B001\_c (mission )

**Name :** Temporal evolution of Sea level Anomaly (SLA) for 2 missions over the same period

**Input data :** Along track SLA

**Description :** Temporal evolution of SLA statistics (mean, standard deviation) of 2 or more missions are computed over the same period as longest as possible using successively both components in the SLA calculation. This can be done globally, or separating in ascending and descending or in northern and southern hemisphere. In order to assure comparability, statistics are computed using sea level standard calculation (mean per box of 2x2 and weighted by cosine of latitude for the global mean) limited to 66 latitude.

Diagnostic type : Global multi-mission comparisons

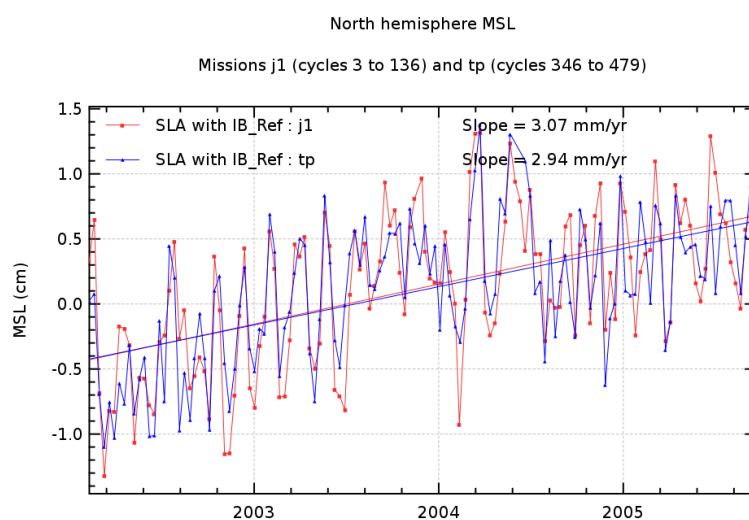
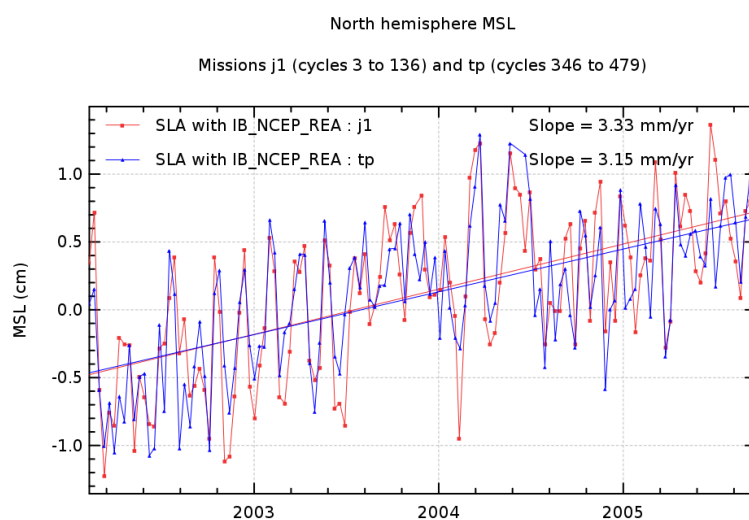


## Diagnostic B001\_d (mission )

**Name :** Temporal evolution of Sea level Anomaly (SLA) for 2 missions over the same period

**Input data :** Along track SLA

**Description :** Temporal evolution of SLA statistics (mean, standard deviation) of 2 or more missions are computed over the same period as longest as possible using successively both components in the SLA calculation. This can be done globally, or separating in ascending and descending or in northern and southern hemisphere. In order to assure comparability, statistics are computed using sea level standard calculation (mean per box of 2x2 and weighted by cosine of latitude for the global mean) limited to 66 latitude.



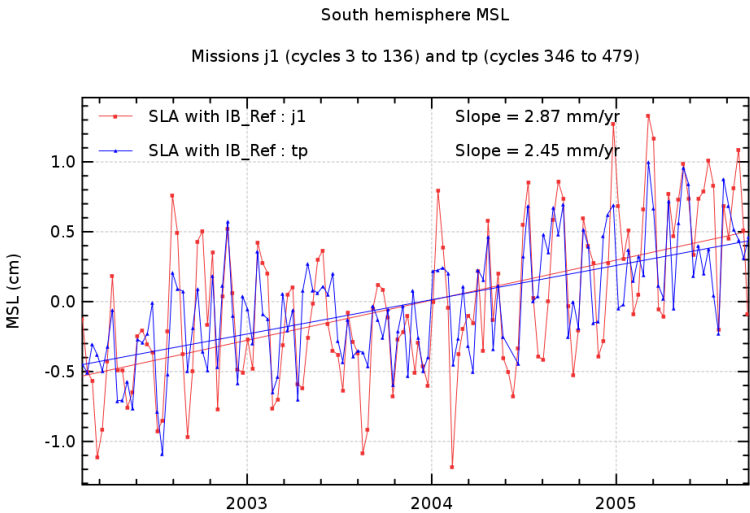
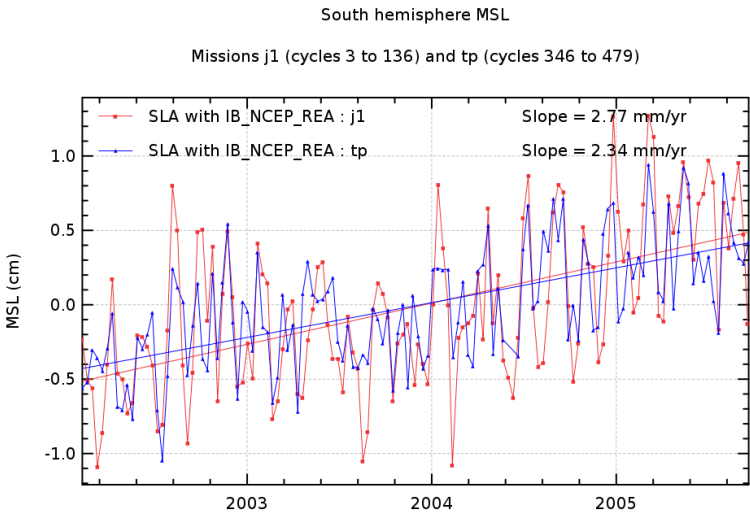
## Diagnostic B001\_e (mission )

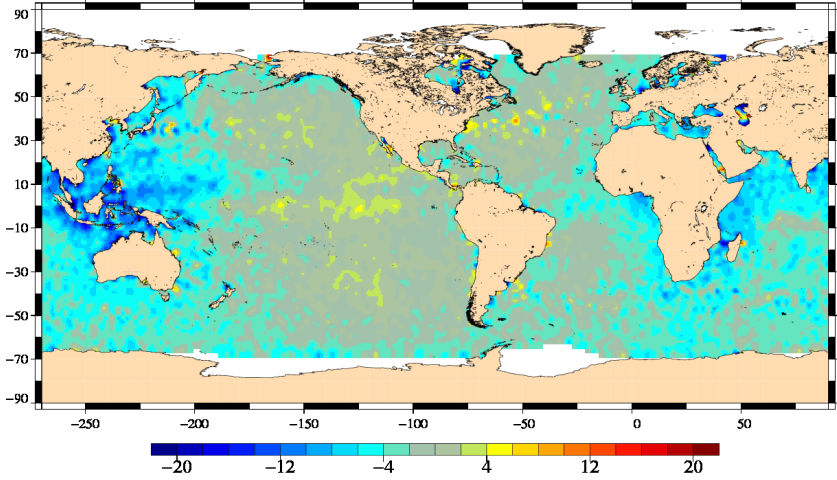
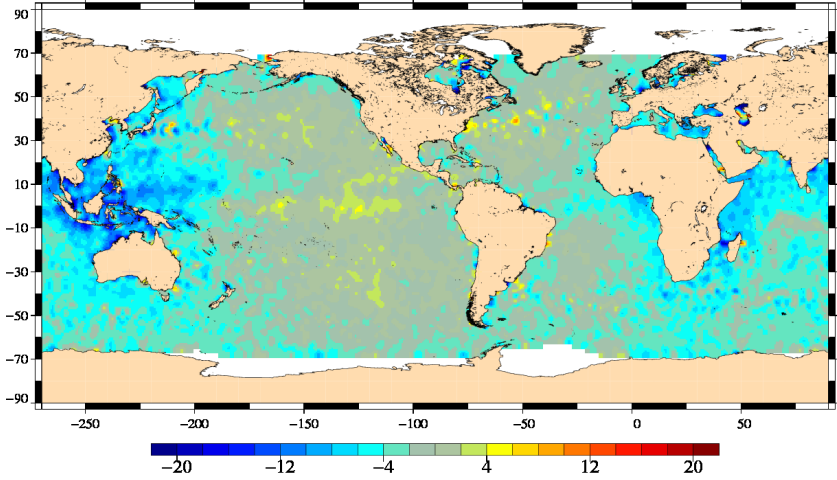
**Name :** Temporal evolution of Sea level Anomaly (SLA) for 2 missions over the same period

**Input data :** Along track SLA

**Description :** Temporal evolution of SLA statistics (mean, standard deviation) of 2 or more missions are computed over the same period as longest as possible using successively both components in the SLA calculation. This can be done globally, or separating in ascending and descending or in northern and southern hemisphere. In order to assure comparability, statistics are computed using sea level standard calculation (mean per box of 2x2 and weighted by cosine of latitude for the global mean) limited to 66 latitude.

Diagnostic type : Global multi-mission comparisons



Diagnostic B002_a (mission )	
Name : Difference between maps of Sea Level Anomaly (SLA) for 2 missions over the same period	
Input data : Along track SLA	
Description : The differences between maps of SLA (mean, variance or slope) derived from 2 altimetric missions are computed over the same period (as long as possible) using successively both altimetric components in the SLA calculation. Maps are calculated globally, they can be also calculated separating ascending and descending passes.	
<div>SLA with IB_NCEP_REA differences : en - j1 Missions en (cycles 11 to 92) and j1 (cycles 28 to 323)</div>  <div>Trends (mm/yr)</div> <div>SLA with IB_Ref differences : en - j1 Missions en (cycles 11 to 92) and j1 (cycles 28 to 323)</div>  <div>Trends (mm/yr)</div>	

## Diagnostic B002\_b (mission )

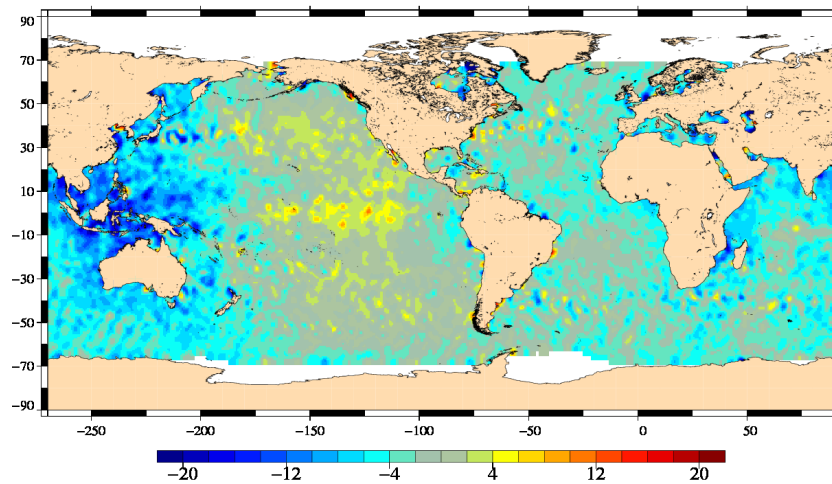
**Name :** Difference between maps of Sea Level Anomaly (SLA) for 2 missions over the same period

**Input data :** Along track SLA

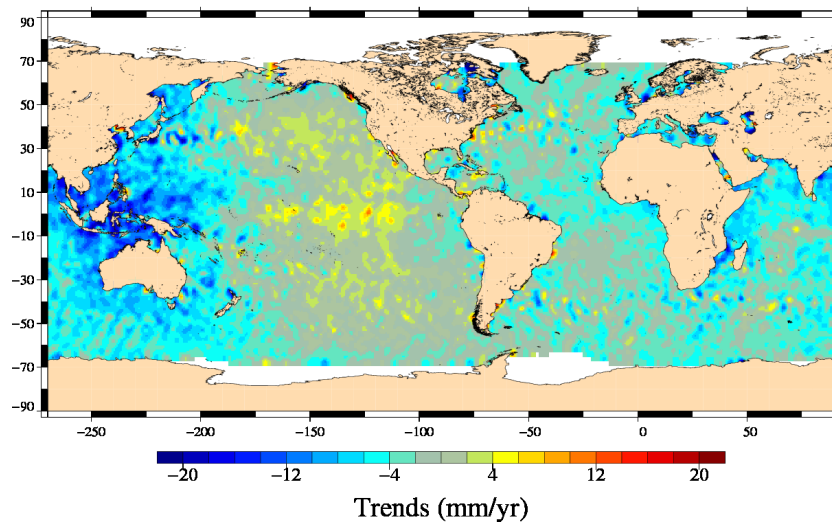
**Description :** The differences between maps of SLA (mean, variance or slope) derived from 2 altimetric missions are computed over the same period (as long as possible) using successively both altimetric components in the SLA calculation. Maps are calculated globally, they can be also calculated separating ascending and descending passes.

Diagnostic type : Global multi-mission comparisons

SLA with IB\_NCEP\_REA differences : en - j1, even pass numbers  
Missions en (cycles 11 to 92) and j1 (cycles 28 to 323)



Trends (mm/yr)  
SLA with IB\_Ref differences : en - j1, even pass numbers  
Missions en (cycles 11 to 92) and j1 (cycles 28 to 323)





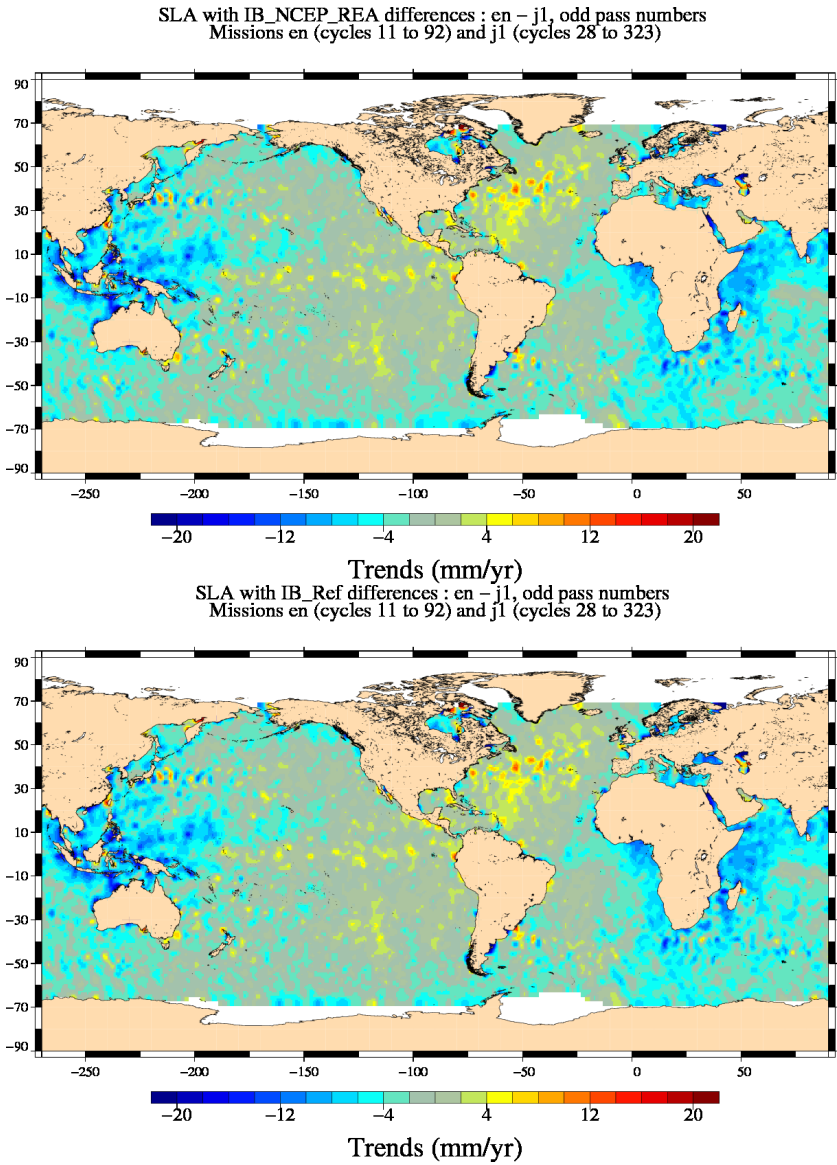
Diagnostic B002\_c (mission )

Name : Difference between maps of Sea Level Anomaly (SLA) for 2 missions over the same period

Input data : Along track SLA

Description : The differences between maps of SLA (mean, variance or slope) derived from 2 altimetric missions are computed over the same period (as long as possible) using successively both altimetric components in the SLA calculation. Maps are calculated globally, they can be also calculated separating ascending and descending passes.

Diagnostic type : Global multi-mission comparisons



## Diagnostic B002\_a (mission )

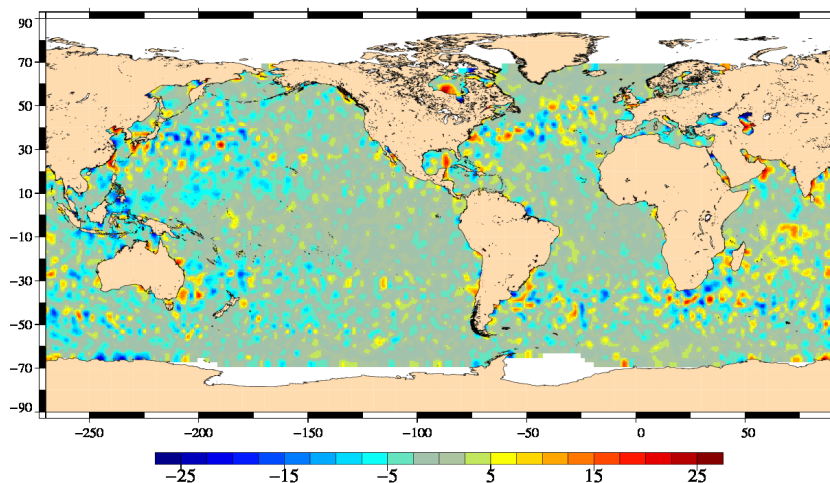
**Name :** Difference between maps of Sea Level Anomaly (SLA) for 2 missions over the same period

**Input data :** Along track SLA

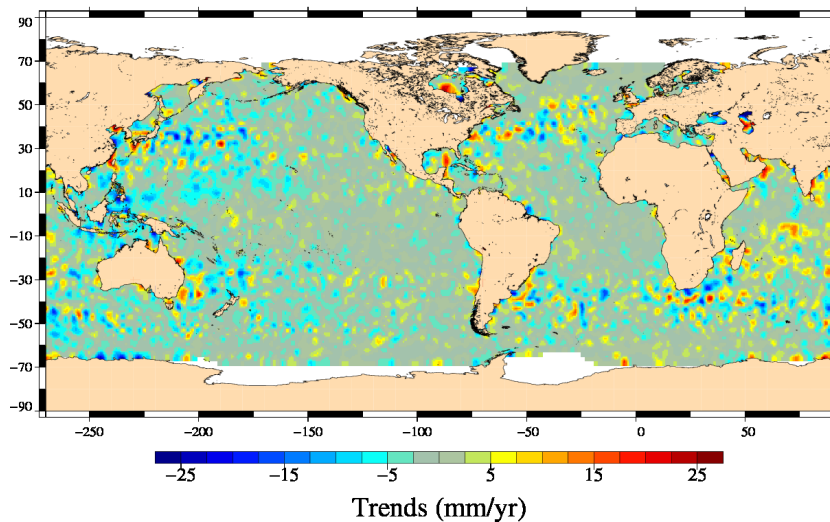
**Description :** The differences between maps of SLA (mean, variance or slope) derived from 2 altimetric missions are computed over the same period (as long as possible) using successively both altimetric components in the SLA calculation. Maps are calculated globally, they can be also calculated separating ascending and descending passes.

Diagnostic type : Global multi-mission comparisons

SLA with IB\_NCEP\_REA differences : j1 - tp  
Missions j1 (cycles 3 to 136) and tp (cycles 346 to 479)



Trends (mm/yr)  
SLA with IB\_Ref differences : j1 - tp  
Missions j1 (cycles 3 to 136) and tp (cycles 346 to 479)





## Diagnostic B002\_b (mission )

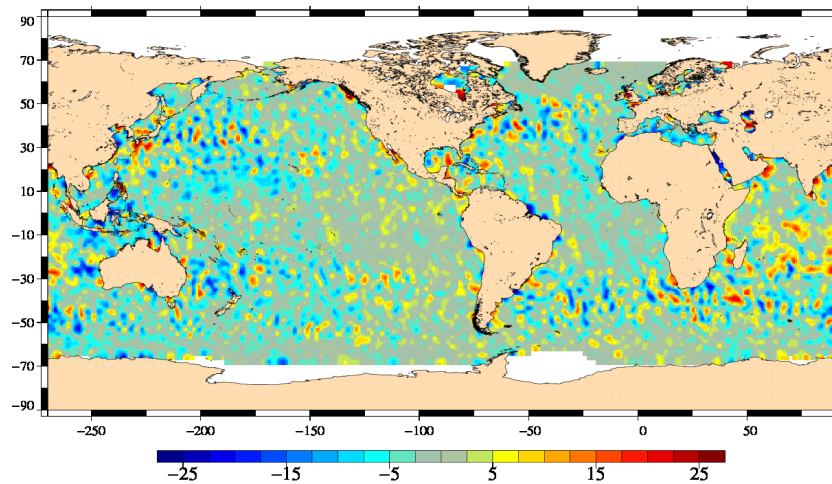
**Name :** Difference between maps of Sea Level Anomaly (SLA) for 2 missions over the same period

**Input data :** Along track SLA

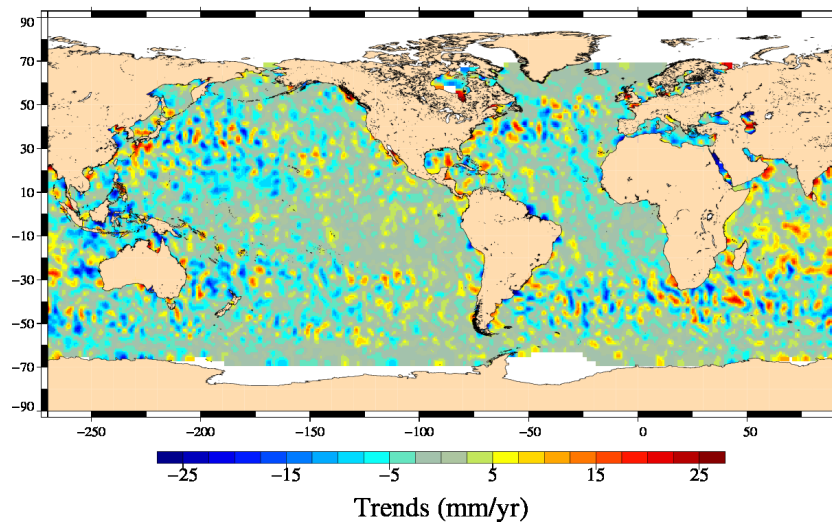
**Description :** The differences between maps of SLA (mean, variance or slope) derived from 2 altimetric missions are computed over the same period (as long as possible) using successively both altimetric components in the SLA calculation. Maps are calculated globally, they can be also calculated separating ascending and descending passes.

Diagnostic type : Global multi-mission comparisons

SLA with IB\_NCEP\_REA differences : j1 - tp, even pass numbers  
Missions j1 (cycles 3 to 136) and tp (cycles 346 to 479)



Trends (mm/yr)  
SLA with IB\_Ref differences : j1 - tp, even pass numbers  
Missions j1 (cycles 3 to 136) and tp (cycles 346 to 479)



## Diagnostic B002\_c (mission )

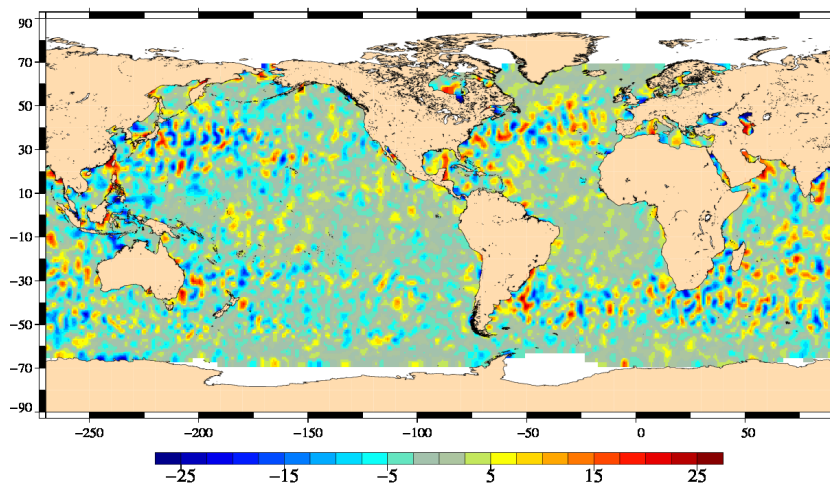
**Name :** Difference between maps of Sea Level Anomaly (SLA) for 2 missions over the same period

**Input data :** Along track SLA

**Description :** The differences between maps of SLA (mean, variance or slope) derived from 2 altimetric missions are computed over the same period (as long as possible) using successively both altimetric components in the SLA calculation. Maps are calculated globally, they can be also calculated separating ascending and descending passes.

Diagnostic type : Global multi-mission comparisons

SLA with IB\_NCEP\_REA differences : j1 - tp, odd pass numbers  
Missions j1 (cycles 3 to 136) and tp (cycles 346 to 479)



Trends (mm/yr)  
SLA with IB\_Ref differences : j1 - tp, odd pass numbers  
Missions j1 (cycles 3 to 136) and tp (cycles 346 to 479)

