

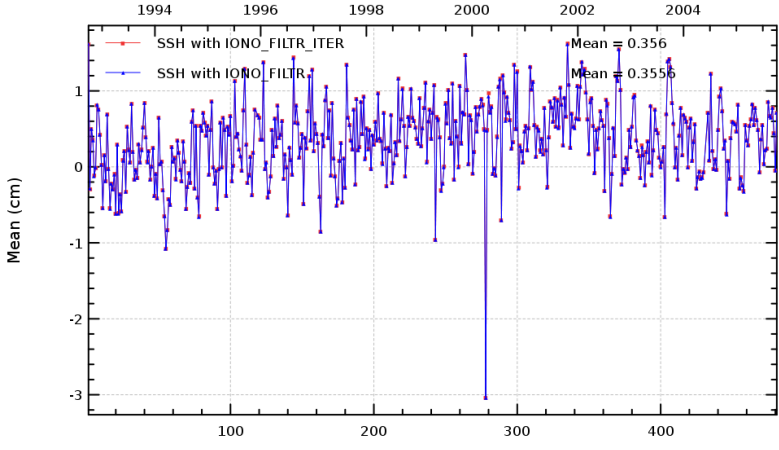
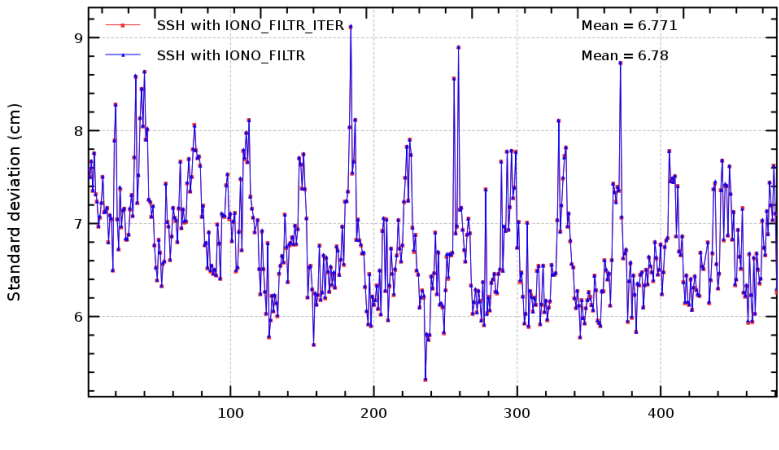
## Iono Comparison: IONO\_FILTR\_ITER VS IONO\_FILTR\_COTIER

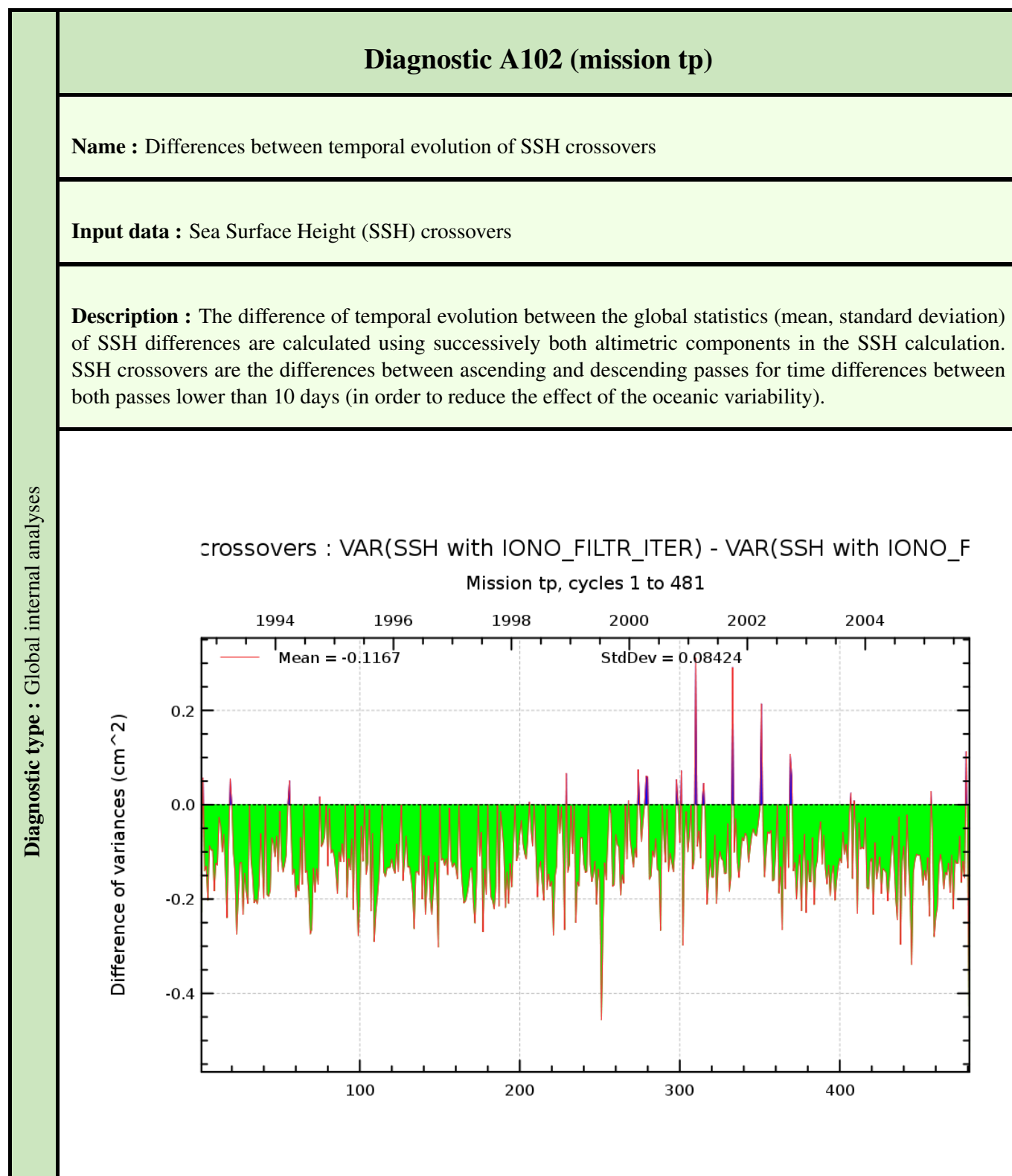
Study variable	<b>IONO_FILTR_ITER</b>
Reference variable	<b>IONO_FILTR</b>
Missions	Topex-Posedon ( <i>tp</i> )
Period	[15608, 20370]

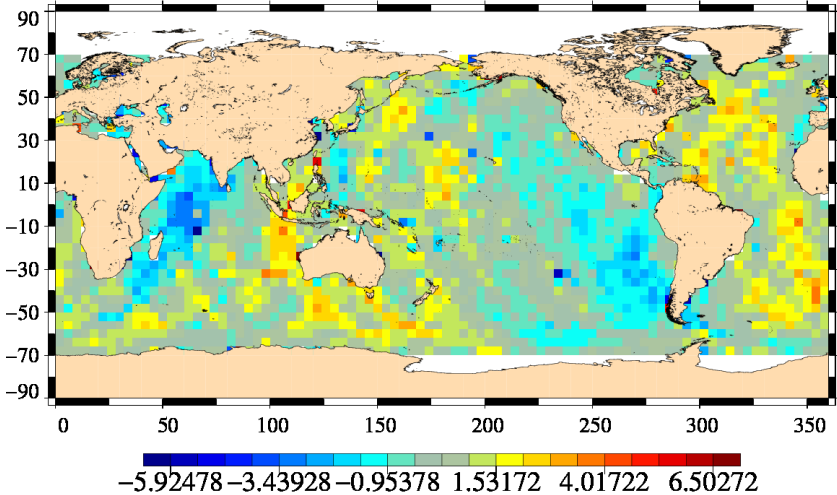
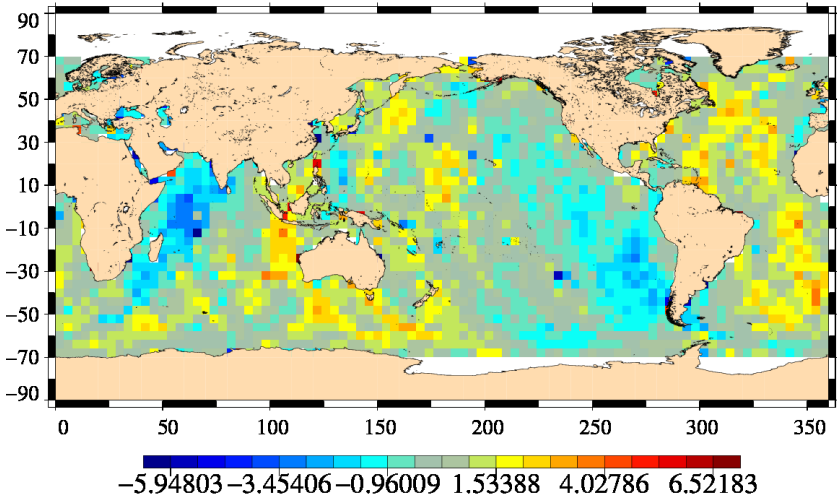
Creation date : 2012/03/17

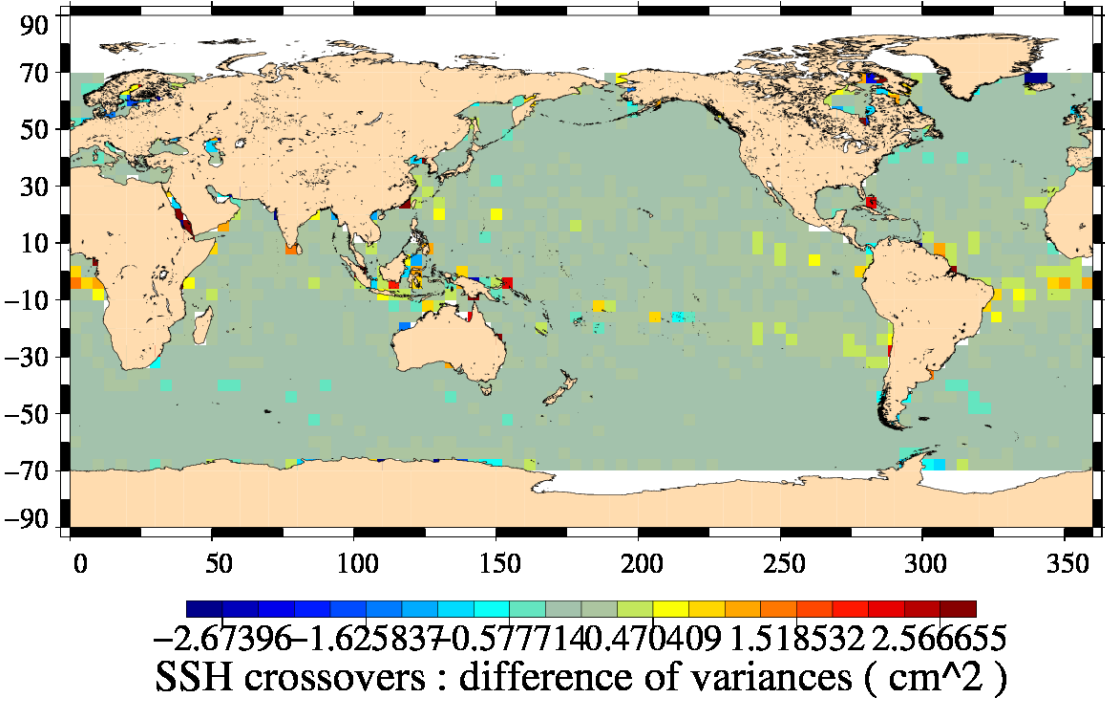
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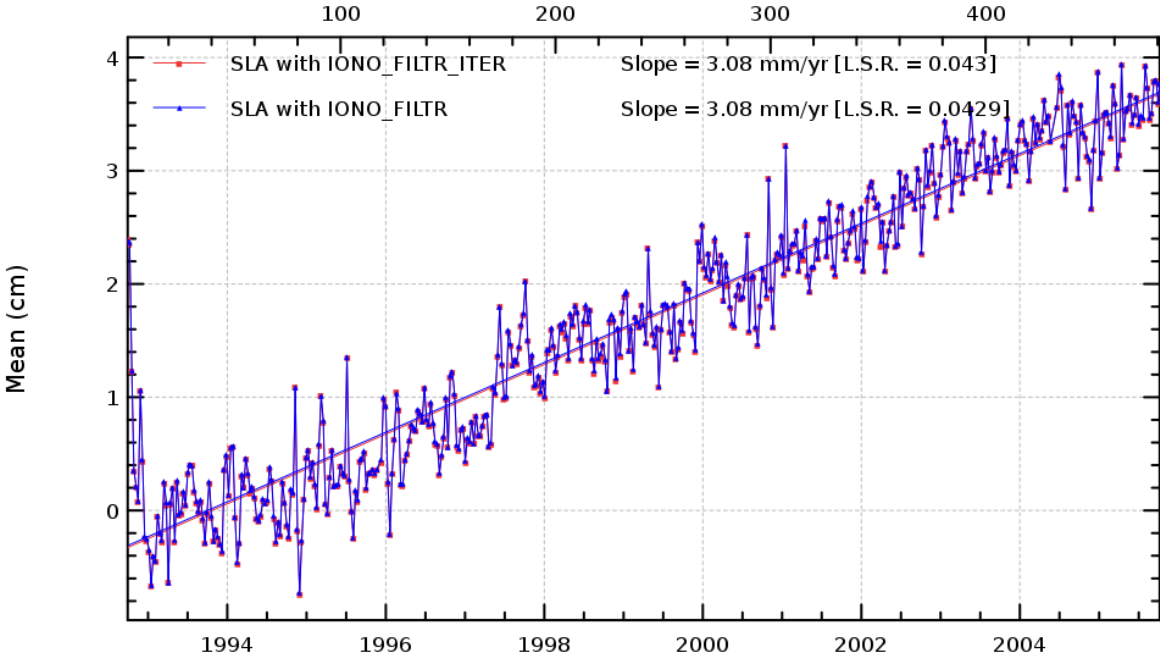
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<b>A103</b>	<b>4</b>
<b>A104</b>	<b>5</b>
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Diagnostic type : Global internal analyses	Diagnostic A101 (mission tp)	
	Name : Temporal evolution of SSH crossovers	
	Input data : Sea Surface Height (SSH) crossovers	
	<p>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).</p>	
	<div><div>Mean of SSH crossovers</div><div>Mission tp, cycles 1 to 481</div><div></div></div> <div><div>Standard deviations of SSH crossovers</div><div>Mission tp, cycles 1 to 481</div><div></div></div>	



Diagnostic A103 (mission tp)	
Name : Map of SSH crossovers	
Input data : Sea Surface Height (SSH) crossovers	
<p><b>Description :</b> 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).</p>	
<div>Mean of SSH with IONO_FILTR_ITER Mission tp, cycles 1 to 481</div>  <div>Mean ( cm )</div> <div>Mean of SSH with IONO_FILTR Mission tp, cycles 1 to 481</div>  <div>Mean ( cm )</div>	

Diagnostic type : Global internal analyses	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).	
	<div>VAR(SSH with IONO_FILTR_ITER) – VAR(SSH with IONO_FILTR)</div> <div>Mission tp, cycles 1 to 481</div> <div></div>	

Diagnostic type : Global internal analyses	Diagnostic A201_a (mission tp)	
	Name : Temporal evolution of Sea Level Anomaly (SLA)	
	Input data : Along track SLA	
	<p><b>Description :</b> 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 tp, cycles 1 to 481</div> 	

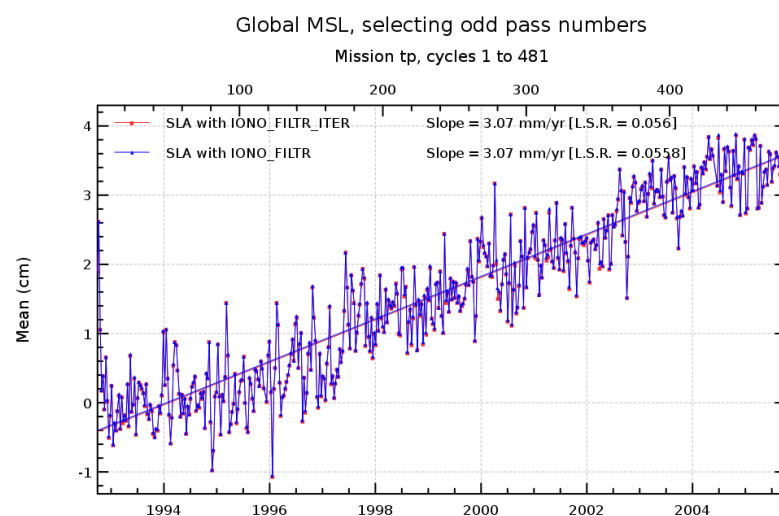
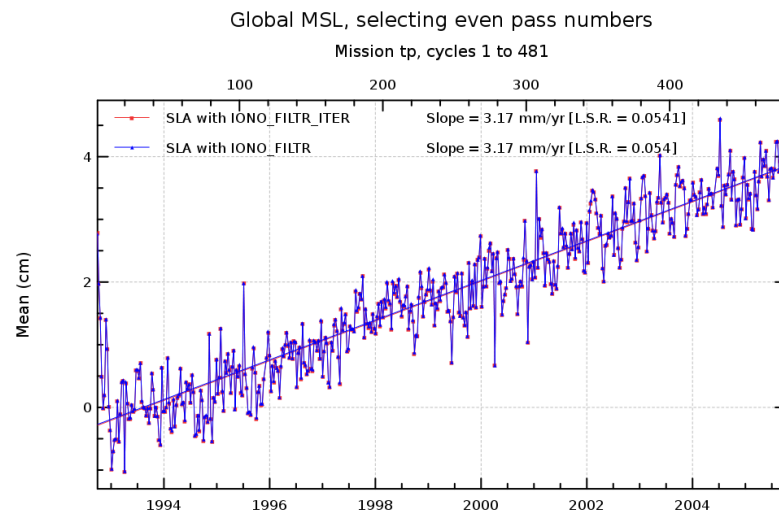
## Diagnostic A201\_b (mission tp)

**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



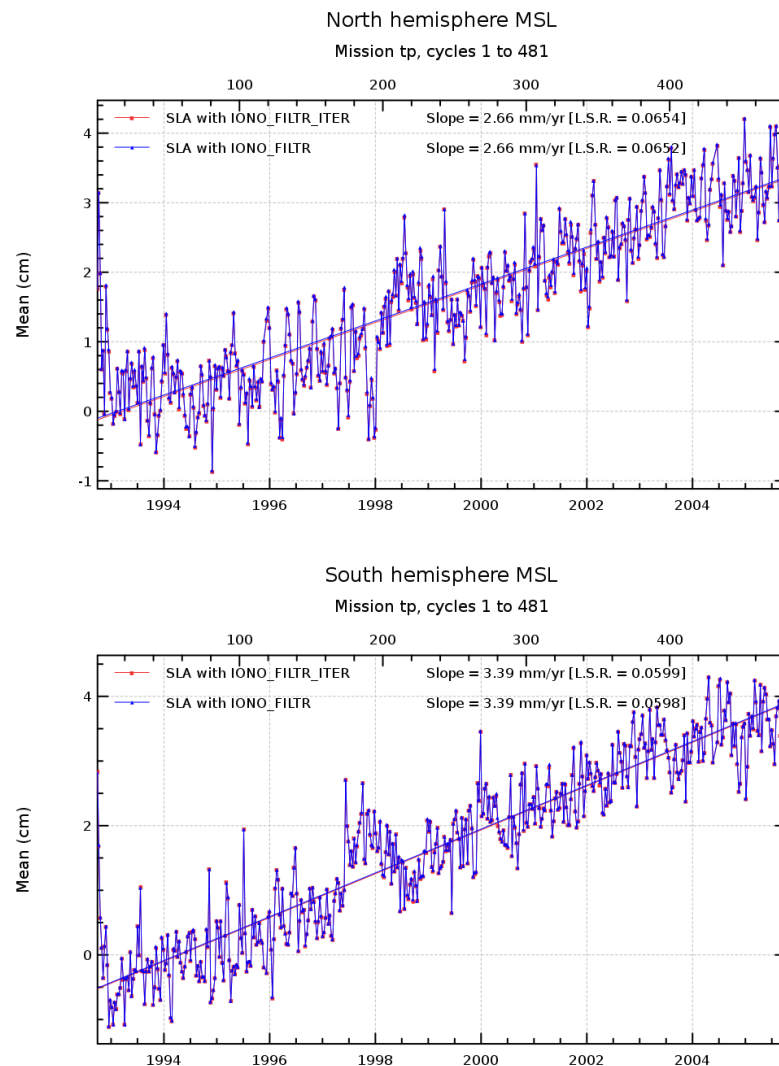
## Diagnostic A201\_c (mission tp)

**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





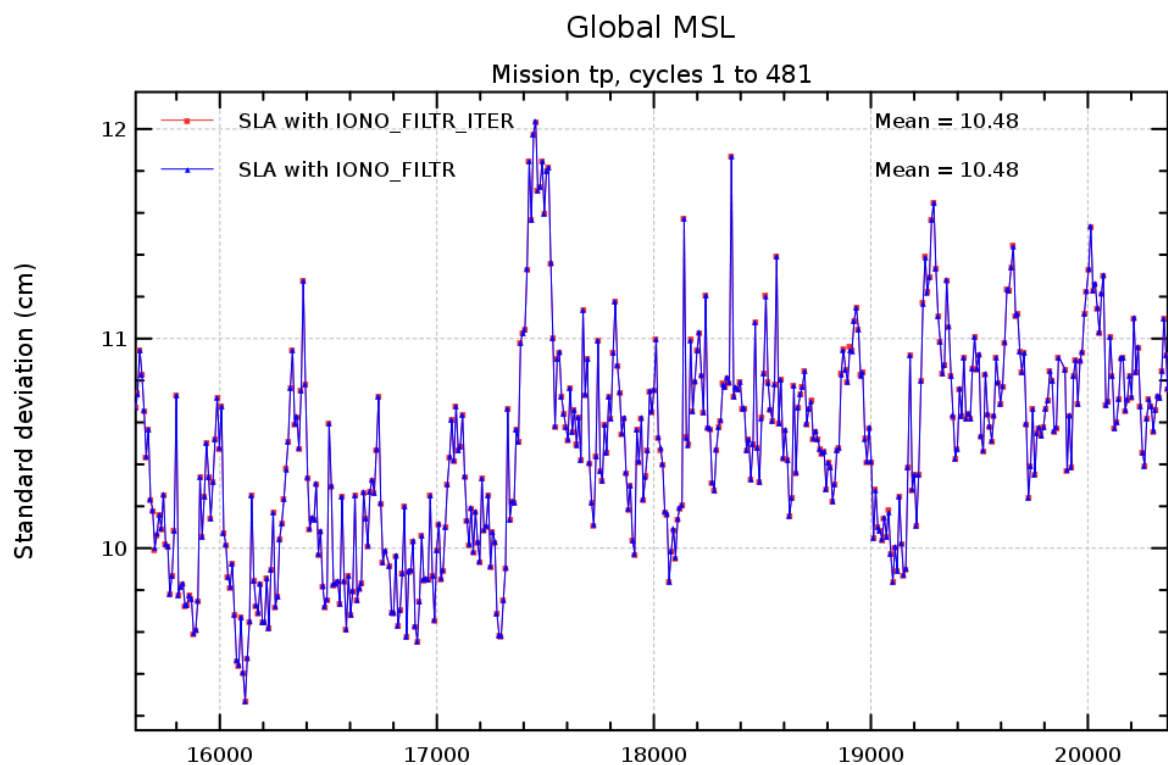
## Diagnostic A201\_d (mission tp)

**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



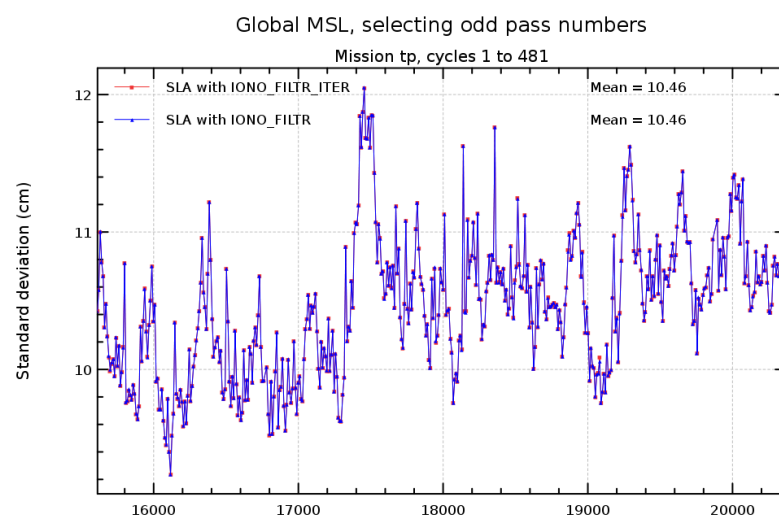
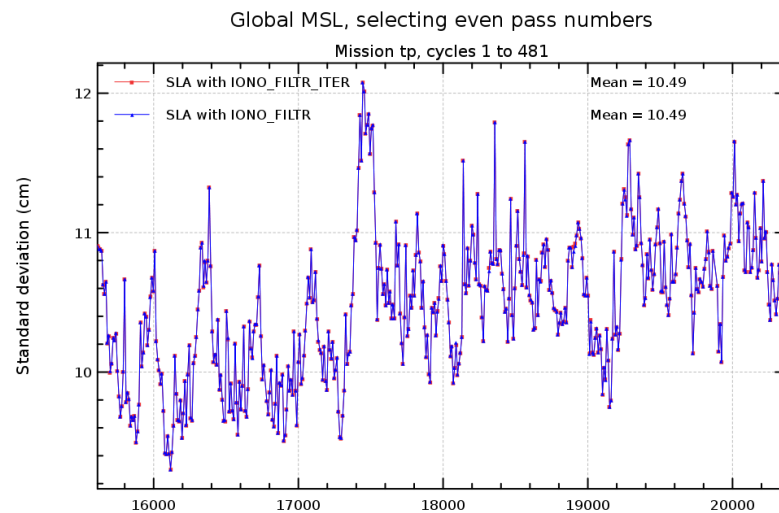
## Diagnostic A201\_e (mission tp)

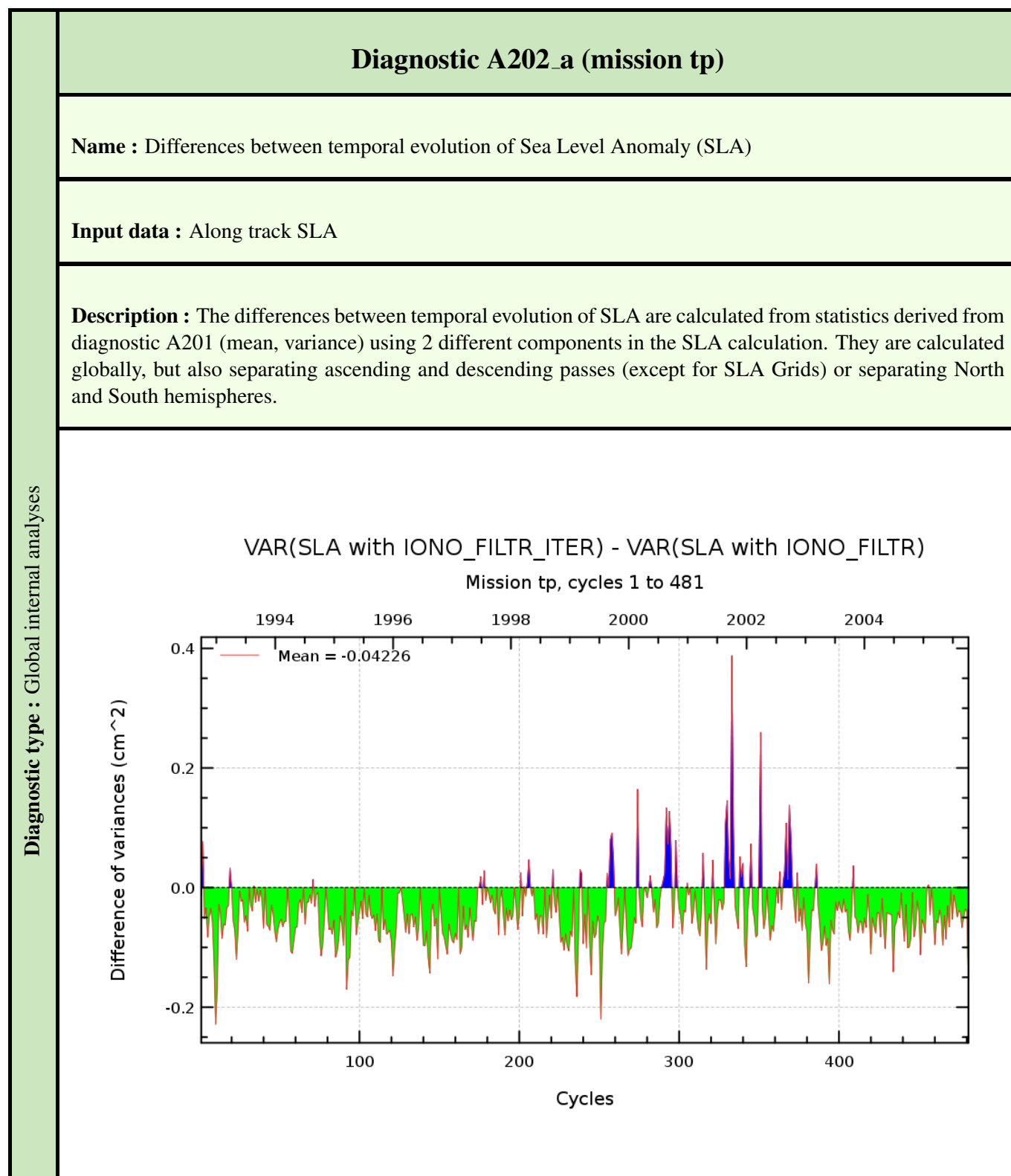
**Name :** Temporal evolution of Sea Level Anomaly (SLA)

**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





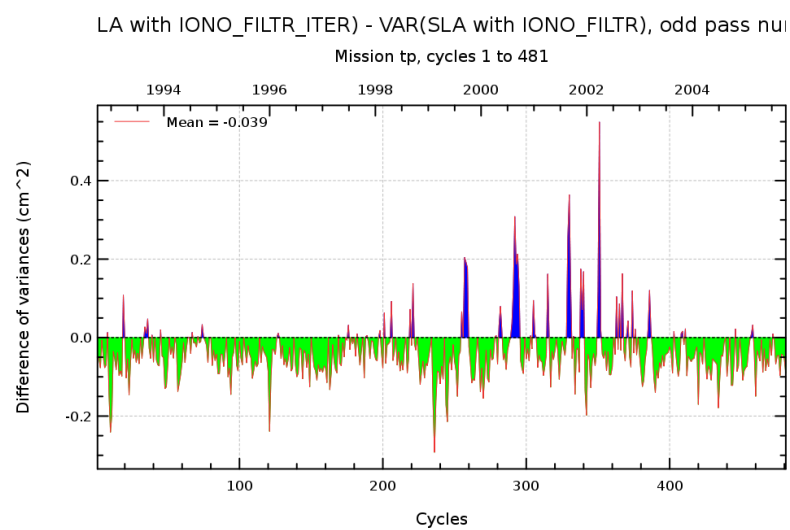
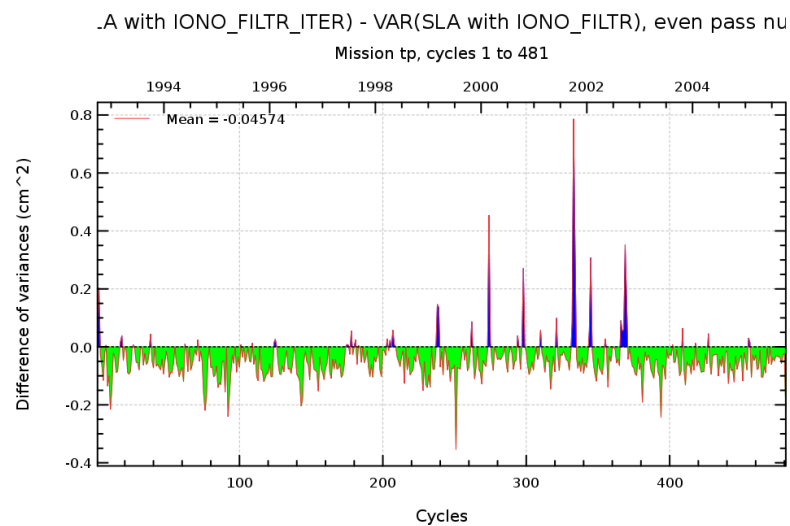
## Diagnostic A202\_b (mission tp)

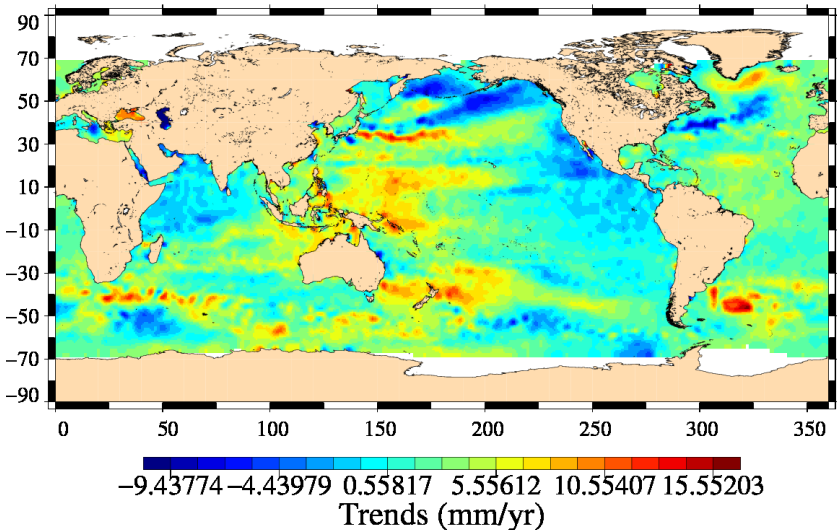
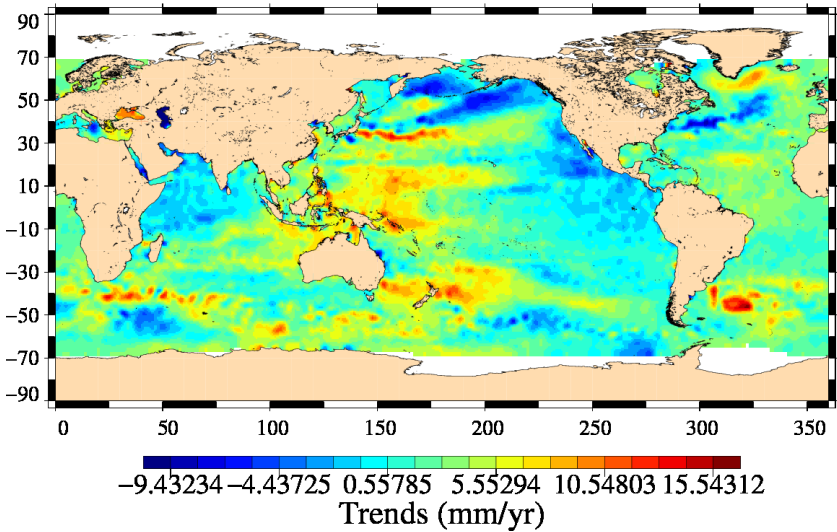
**Name :** Differences between temporal evolution of Sea Level Anomaly (SLA)

**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 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.	
	<div>SLA with IONO_FILTR_ITER trends Mission tp, cycles 1 to 481</div>  <div>SLA with IONO_FILTR trends Mission tp, cycles 1 to 481</div> 	

## Diagnostic A203\_b (mission tp)

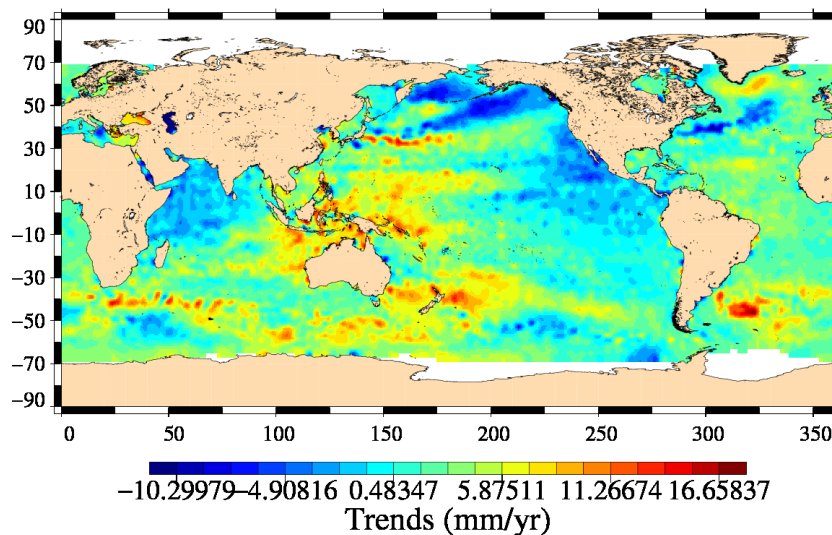
**Name :** Map of Sea Level Anomaly (SLA) over all the period

**Input data :** Along track SLA

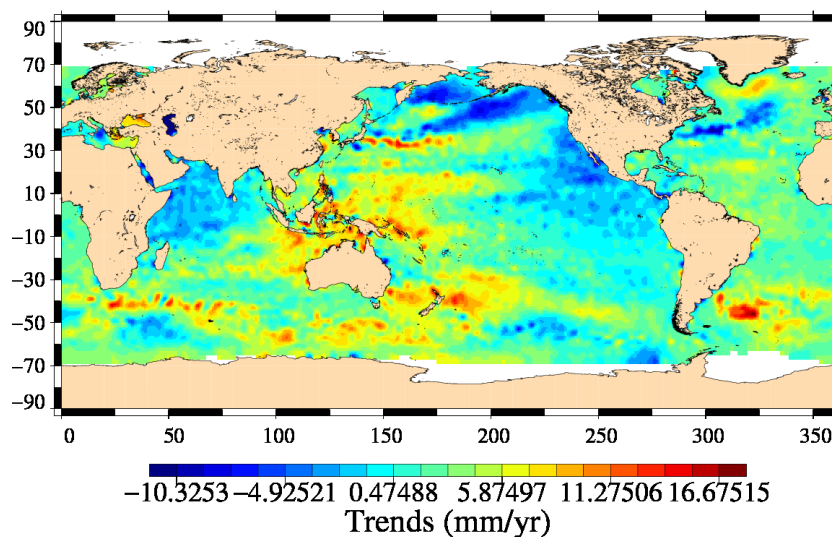
**Description :** The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Global internal analyses

SLA with IONO\_FILTR\_ITER trends : even pass numbers  
Mission tp, cycles 1 to 481



SLA with IONO\_FILTR trends : even pass numbers  
Mission tp, cycles 1 to 481



## Diagnostic A203\_c (mission tp)

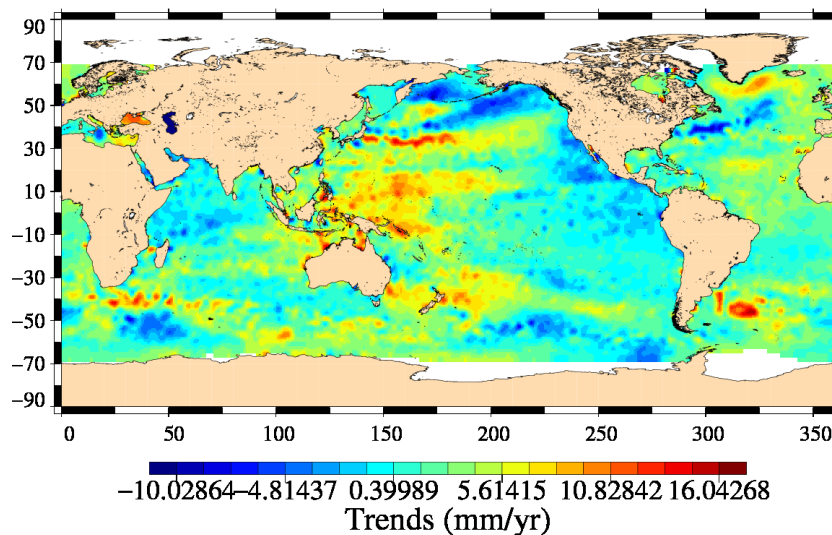
**Name :** Map of Sea Level Anomaly (SLA) over all the period

**Input data :** Along track SLA

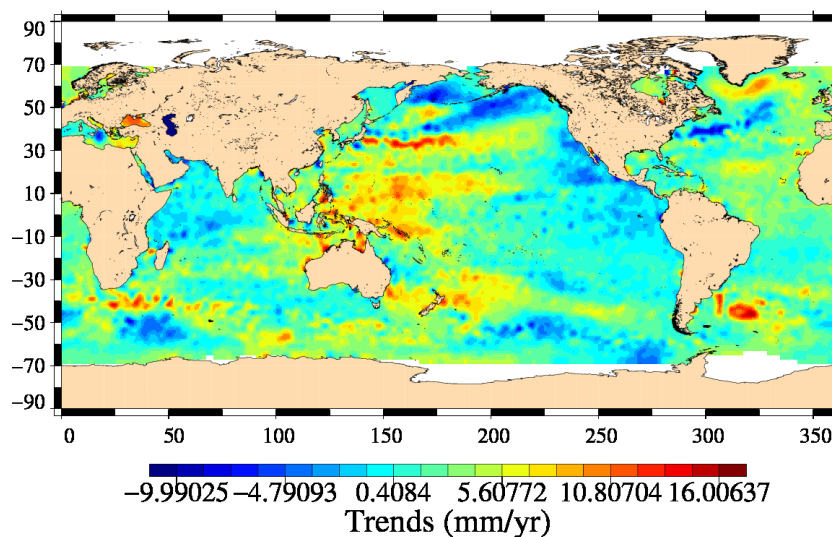
**Description :** The map of global statistics (mean, standard deviation) of SLA are calculated using successively both altimetric components in the SLA calculation over a large period. These statistics are calculated from 1 Hz altimetric measurements after removing spurious sea level measurements.

Diagnostic type : Global internal analyses

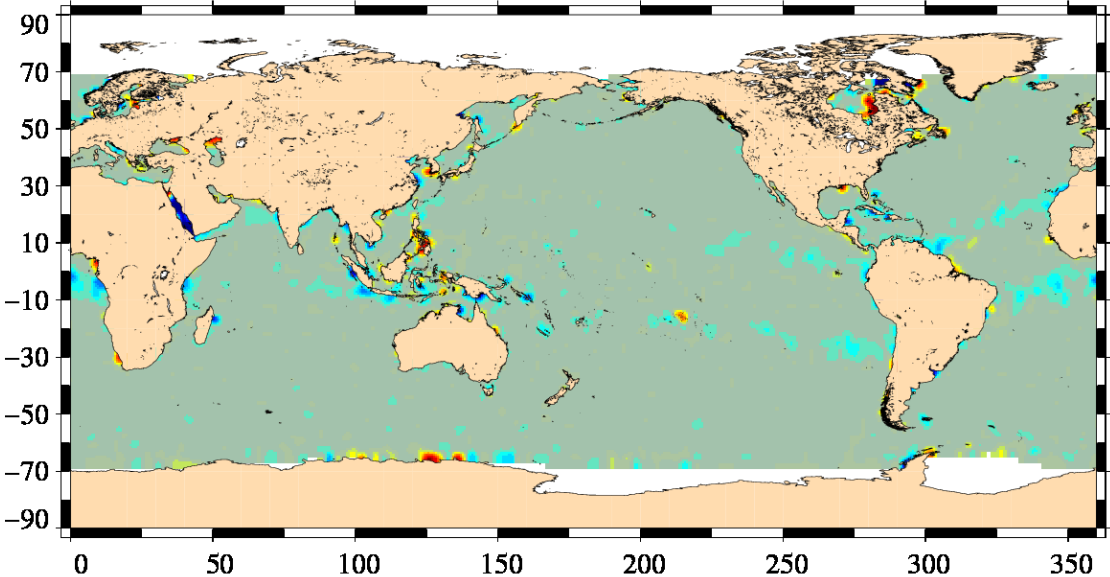
SLA with IONO\_FILTER\_ITER trends : odd pass numbers  
Mission tp, cycles 1 to 481



SLA with IONO\_FILTER trends : odd pass numbers  
Mission tp, cycles 1 to 481





Diagnostic type : Global internal analyses	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).
	<div>SLA with IONO_FILTR_ITER trends – SLA with IONO_FILTR trends</div> <div>Mission tp, cycles 1 to 481</div> <div><p>Trends (mm/yr)</p><p>-0.293228 -0.175237 -0.057246 0.060745 0.178736 0.296727</p></div>



## Diagnostic A204\_b (mission tp)

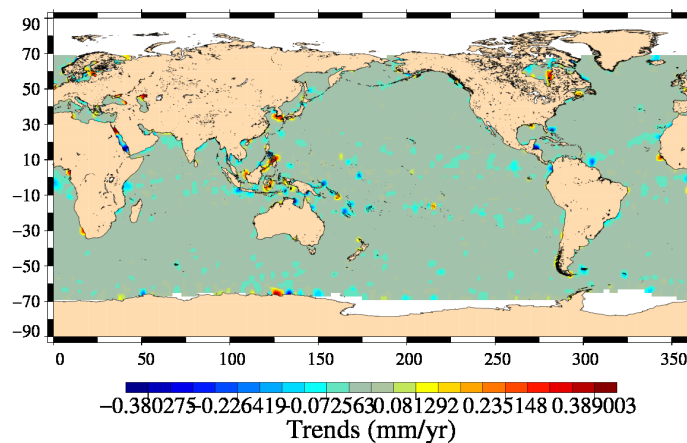
**Name :** Differences between maps of SLA

**Input data :** Along track SLA

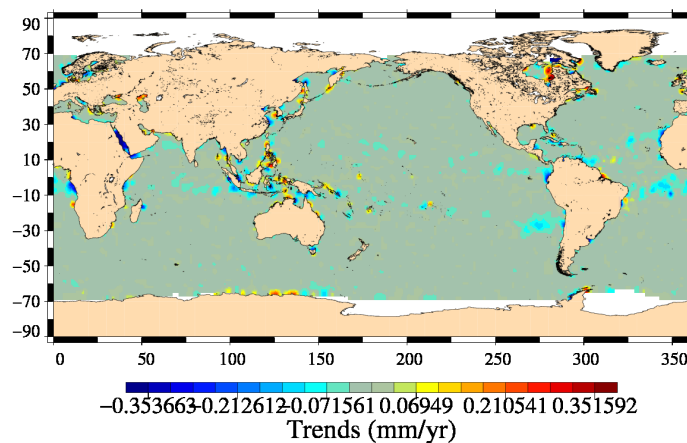
**Description :** The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except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

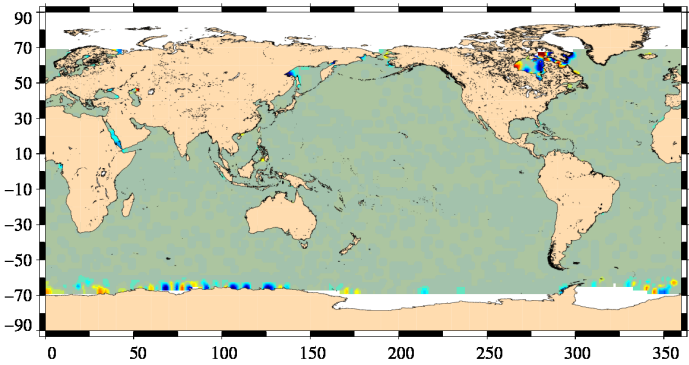
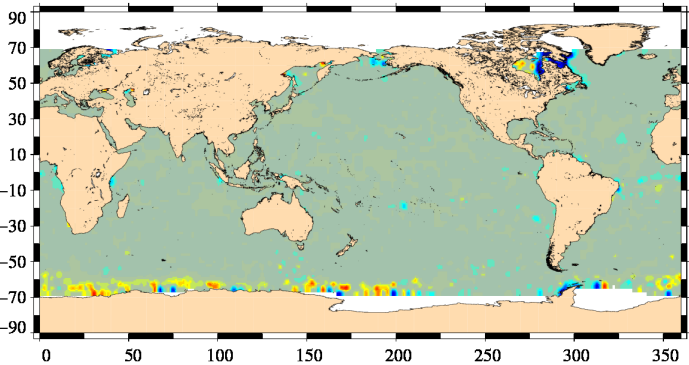
Diagnostic type : Global internal analyses

th IONO\_FILTER\_ITER trends – SLA with IONO\_FILTER trends : even pass r  
Mission tp, cycles 1 to 481



th IONO\_FILTER\_ITER trends – SLA with IONO\_FILTER trends : odd pass n  
Mission tp, cycles 1 to 481



Diagnostic type : Global internal analyses	Diagnostic A205_a (mission tp)	
	Name : Differences between maps of SLA (2)	
	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>1 IONO_FILTR_ITER amplitude – SLA with IONO_FILTR amplitude : annu Mission tp, cycles 1 to 481</div> <div><p>-0.789935-0.475875-0.1618140.152247 0.466308 0.780369 Amplitude (cm)</p></div> <div>with IONO_FILTR_ITER phase – SLA with IONO_FILTR phase : annual si Mission tp, cycles 1 to 481</div> <div><p>-8.520067-5.135393-1.75072 1.633954 5.018628 8.403301 Phase (degree)</p></div>	

## Diagnostic A205\_b (mission tp)

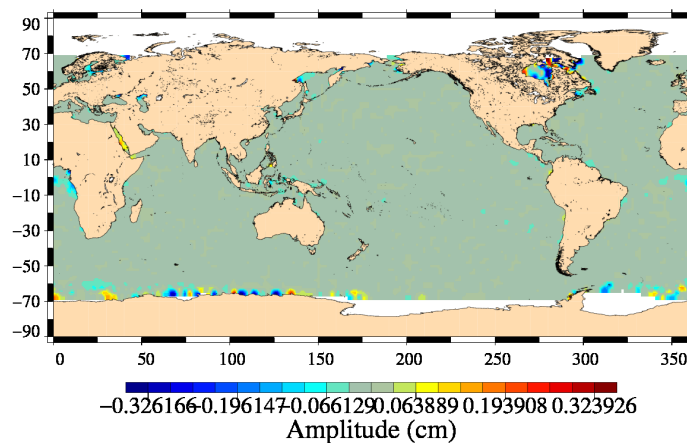
**Name :** Differences between maps of SLA (2)

**Input data :** Along track SLA

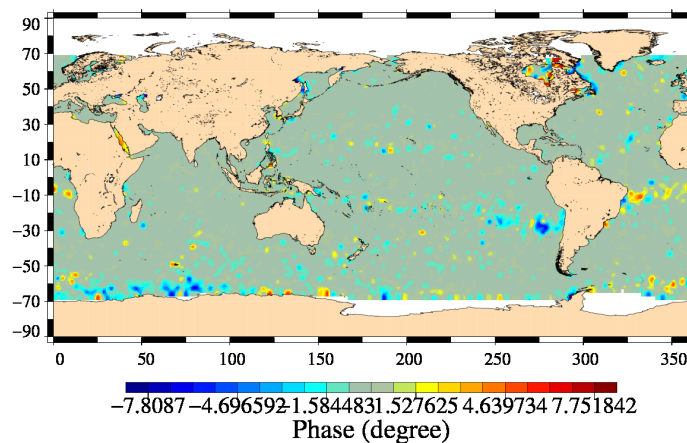
**Description :** The difference of SLA maps (mean, standard deviation, slope) is calculated from maps derived from diagnostic A203 using successively both altimetric components in the SLA calculation over a given period. This can be done globally, or separating in ascending and descending passes (except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

Diagnostic type : Global internal analyses

IONO\_FILTR\_ITER amplitude – SLA with IONO\_FILTR amplitude : semi-annual  
Mission tp, cycles 1 to 481



IONO\_FILTR\_ITER phase – SLA with IONO\_FILTR phase : semi-annual  
Mission tp, cycles 1 to 481

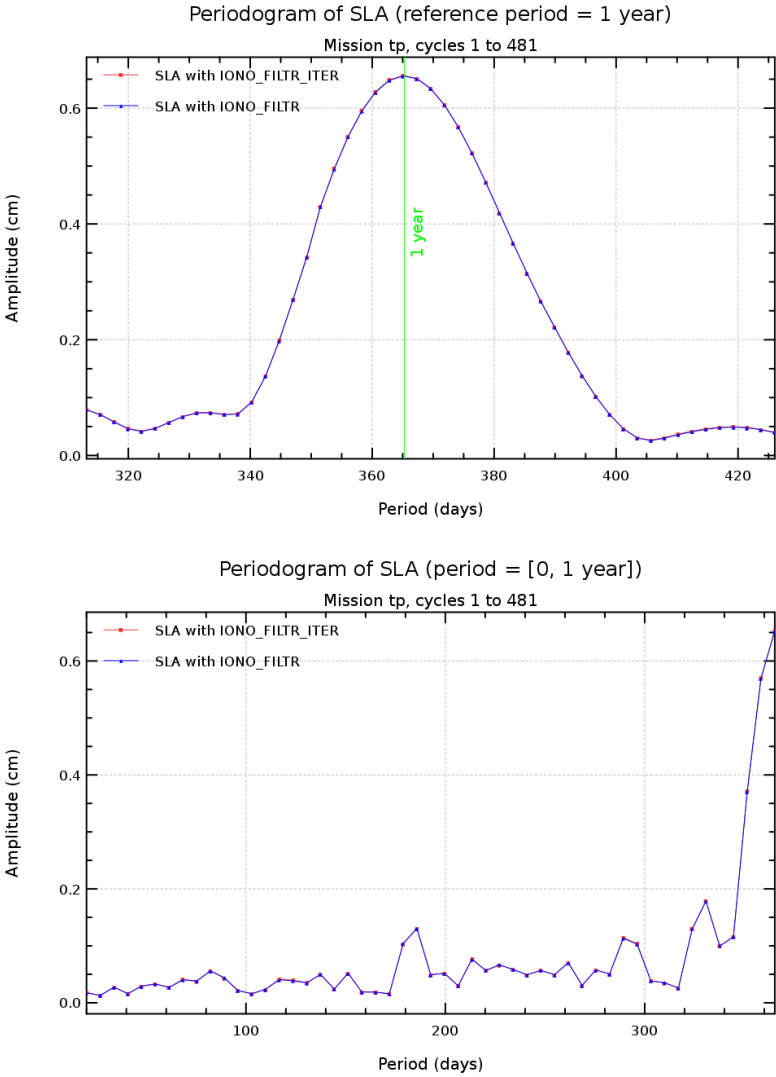


Diagnostic A206\_a (mission tp)

**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.



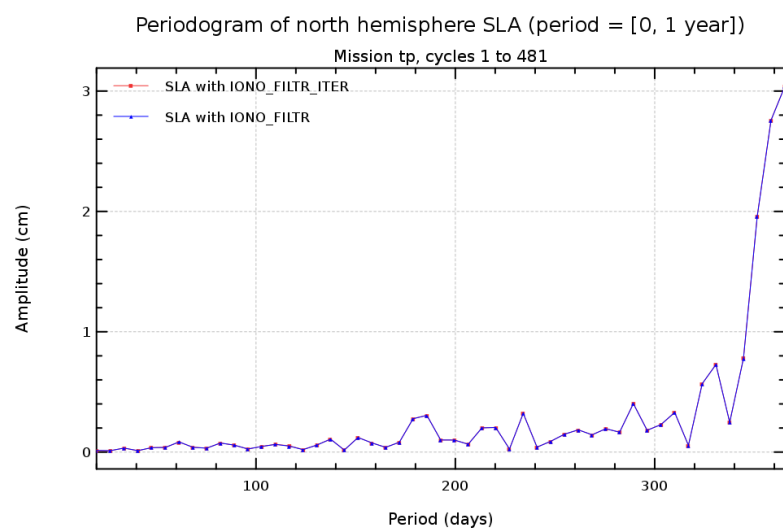
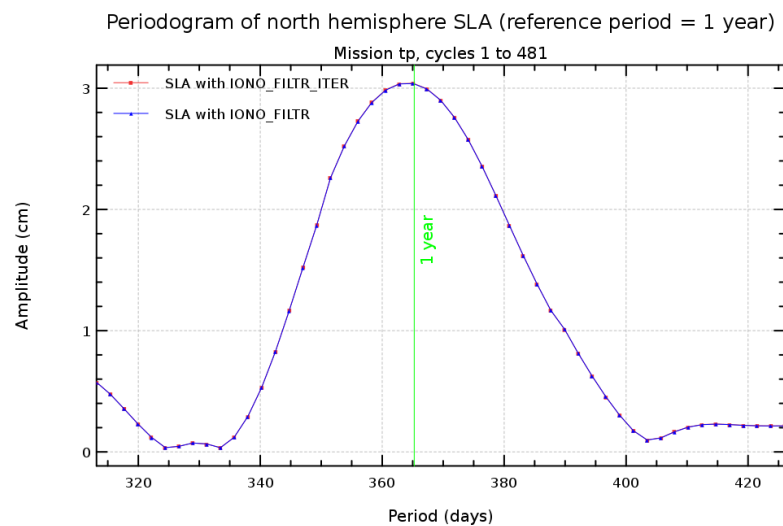
## Diagnostic A206\_b (mission tp)

**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



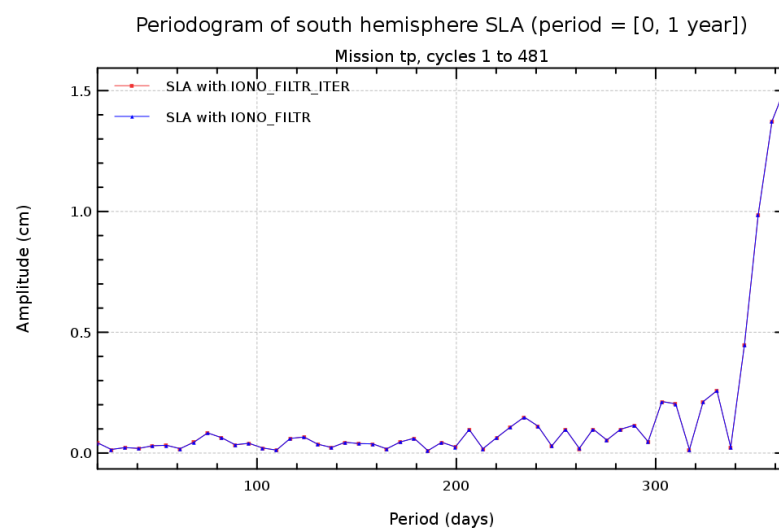
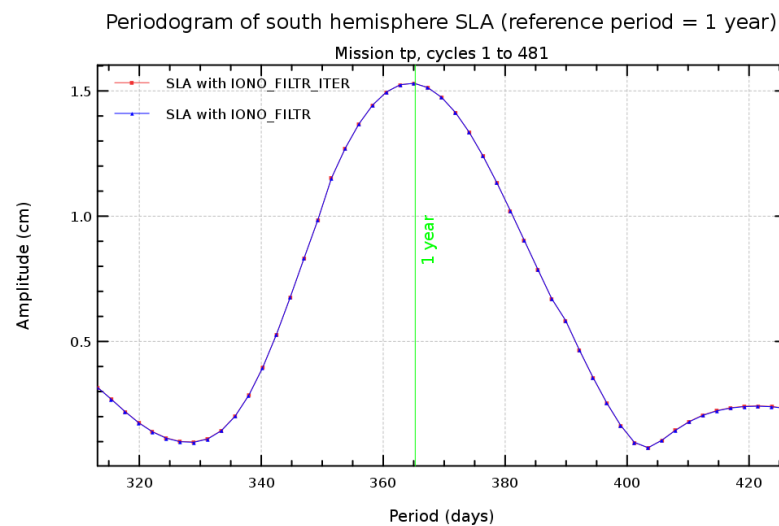
## Diagnostic A206\_c (mission tp)

**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 type : Global internal analyses	Diagnostic A207 (mission tp)	
	Name : Sea Level Anomaly (SLA) versus coastal distance	
	Input data : Along track SLA	
	Description : Mean and standard deviation of SLA - computed by using successively both altimetric components - are plotted in function of coastal distances between 0 and 100 km.	
	<div><div>Global MSL</div><div>Mission tp, cycles 1 to 481</div><div><div>SLA with IONO_FILTER_ITER</div><div>SLA with IONO_FILTER</div></div><div>Mean = 1.863    StdDev = 0.1802</div><div>Mean = 1.899    StdDev = 0.177</div><div>Mean (cm)</div><div>Coastal Distance (km)</div></div> <div><div>Global MSL</div><div>Mission tp, cycles 1 to 481</div><div><div>SLA with IONO_FILTER_ITER</div><div>SLA with IONO_FILTER</div></div><div>Mean = 12.29</div><div>Mean = 12.29</div><div>Standard deviation (cm)</div><div>Coastal Distance (km)</div></div>	

Diagnostic type : Global internal analyses	Diagnostic A208 (mission tp)
	Name : Sea Level Anomaly (SLA) differences versus coastal distance
	Input data : Along track SLA
	Description : The differences of SLA variances - computed by using successively both altimetric components - are plotted in function of coastal distances between 0 and 100 km.
	<div>VAR(SLA with IONO_FILTER_ITER) - VAR(SLA with IONO_FILTER) Mission tp, cycles 1 to 481</div> 