## Ref versus TPJ1J2

<table>
<thead>
<tr>
<th>Study variable</th>
<th>TPJ1J2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference variable</td>
<td>REF</td>
</tr>
<tr>
<td>Study serie</td>
<td><code>/home/slcci/RRDP/WP2500_MergPdt/Ref_TPJ1J2/listetpj1j2_92_10.par</code></td>
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Diagnostic A201_a

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.

Global MSL

[Slope calculations and graph]

Diagnostic type: Global internal analyses
**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 A202**

**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 A08 (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 A203

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.

SLA with TP1J2 trends

-5.17206  -0.32612  4.51983  9.36577
Trends (mm/yr)

SLA with REF trends

-5.40797  -0.42326  4.56146  9.54618
Trends (mm/yr)
### Diagnostic A204

**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 A10 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).

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#### SLA with TPJ1J2 trends – SLA with REF trends

![Map of SLA differences](image)

**Trends (mm/yr):**
-1  -0.4  0.2  0.8
Diagnostic A205.a

**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).

![SLA with TPJ1J2 amplitude – SLA with REF amplitude: annual signal](image1)

-1.940328 - 0.834989 0.270349 1.375688

**Amplitude (cm)**

![SLA with TPJ1J2 phase – SLA with REF phase: annual signal](image2)

-36.58473 - 14.63615 7.31242 29.26099

**Phase (degree)**
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).

SLA with TPJ1J2 amplitude – SLA with REF amplitude: semi–annual signal

SLA with TPJ1J2 phase – SLA with REF phase: semi–annual signal
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.
**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.
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.
Name: Differences between maps of SLA (3)

Input data: Along track SLA

Description: The differences between maps of SLA are calculated from the SLA differences (mean, standard deviation) using successively both altimetric components in the SLA calculation.

VAR(SLA with TPJ1J2) – VAR(SLA with REF)