



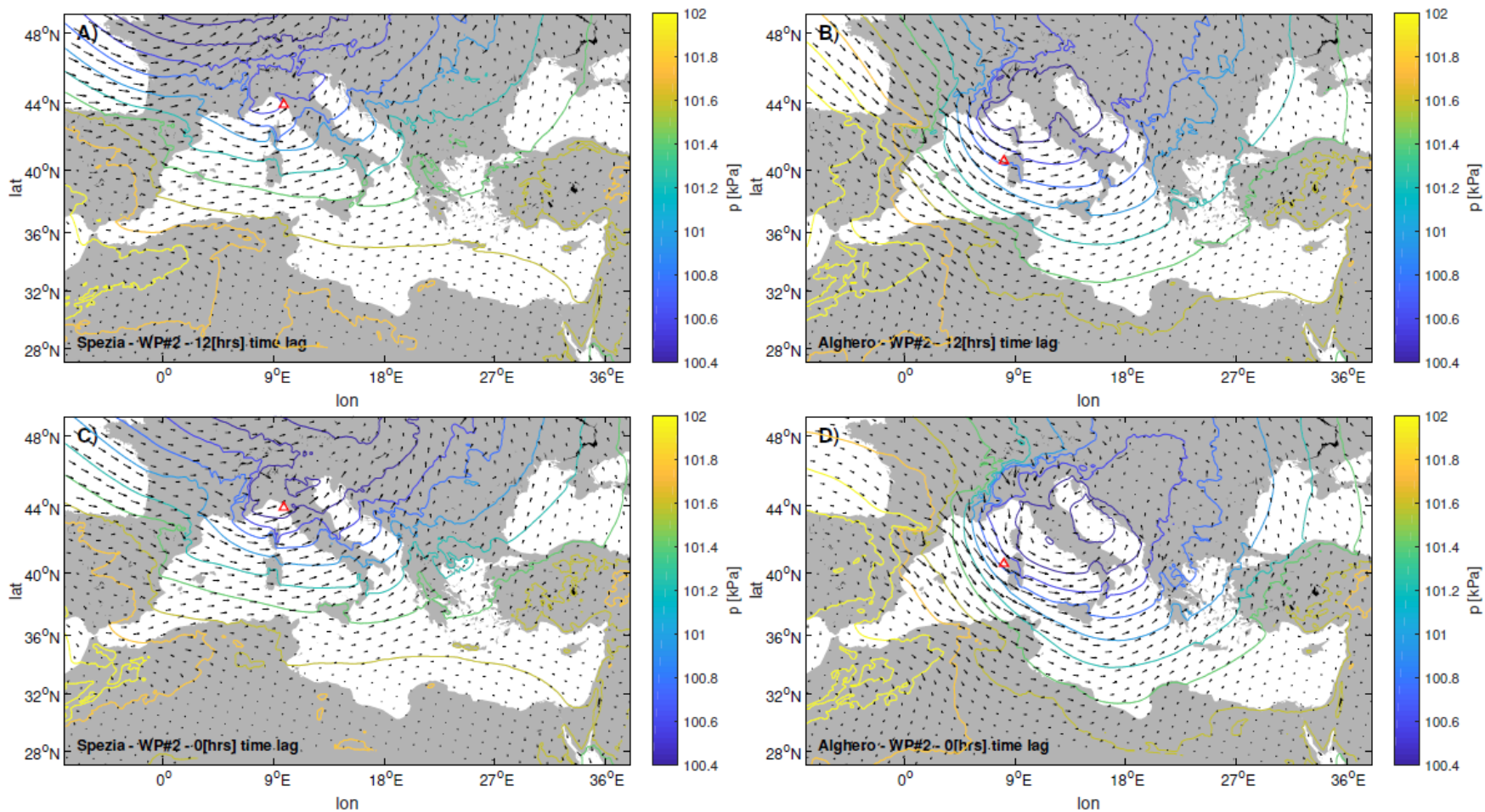
*Supplement of*

## **Extreme wave analysis based on atmospheric pattern classification: an application along the Italian coast**

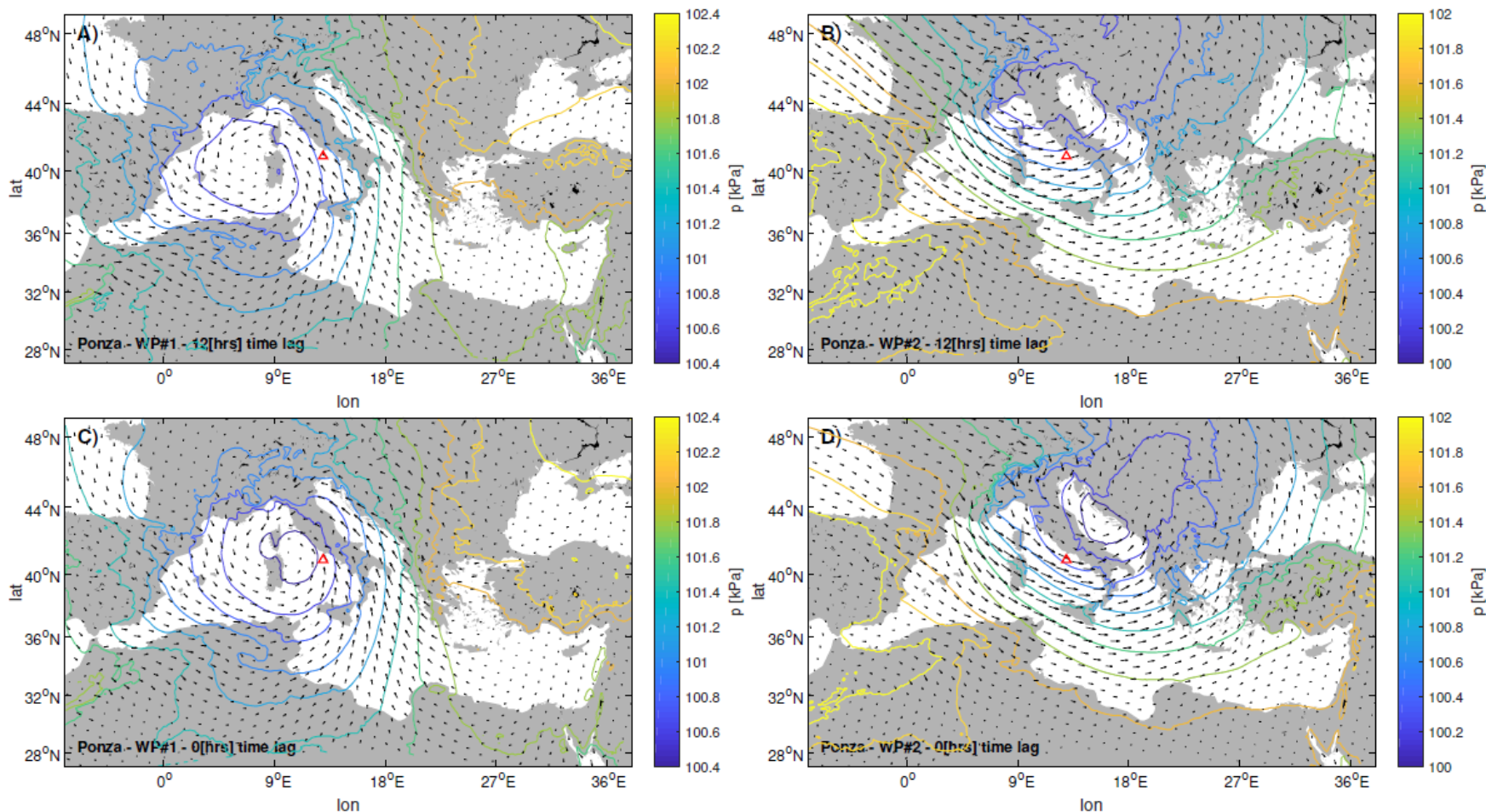
**Francesco De Leo et al.**

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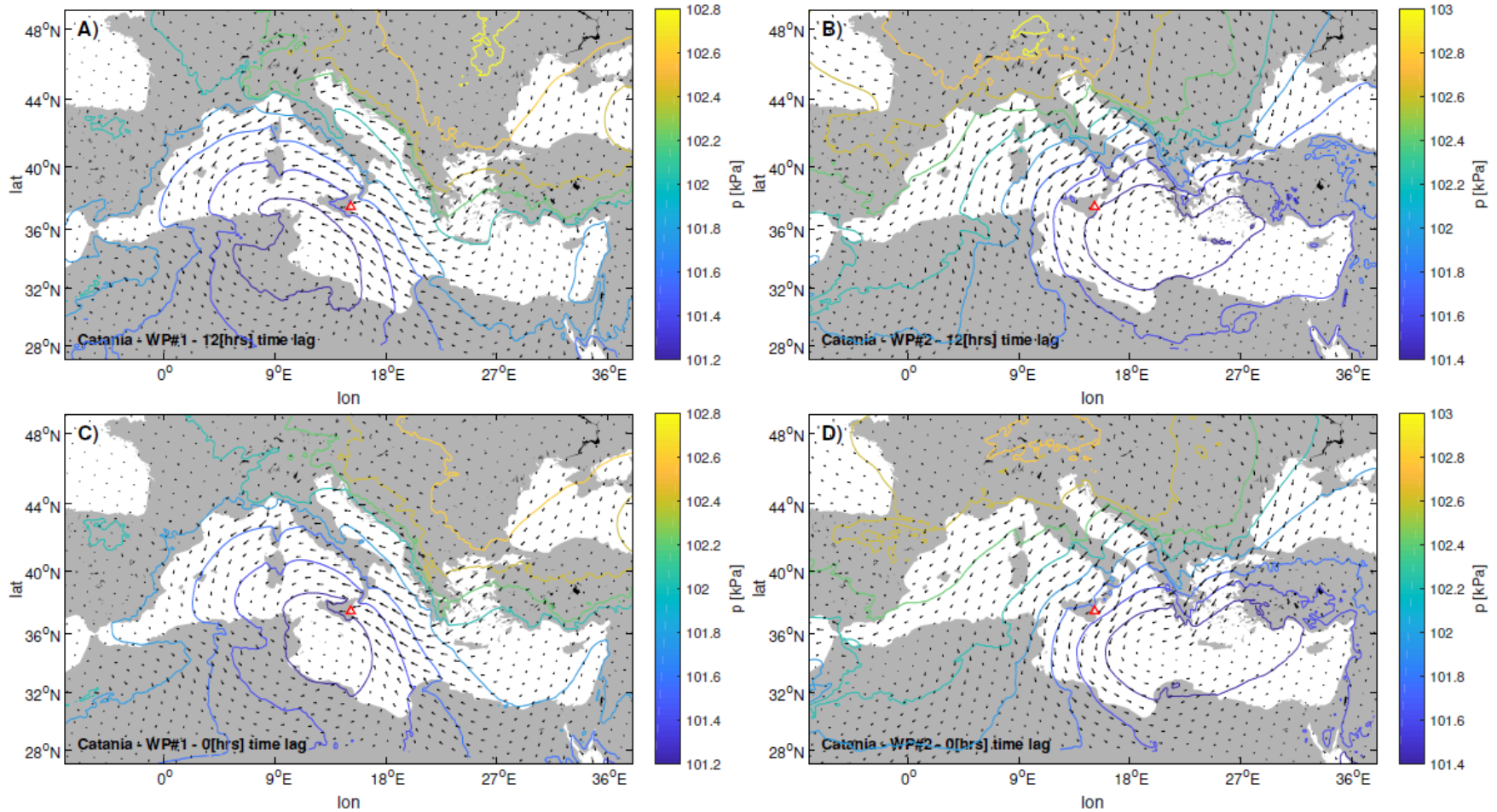
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**S1.** Average MSLP for the  $H_s$  peaks of WP#2. Panel A): La Spezia (B1),  $\Delta t$  equals 12 hours; panel B) Alghero (B2),  $\Delta t$  equals 12 hours; panel C): La Spezia,  $\Delta t$  equals 0 hours; panel D): Alghero,  $\Delta t$  equals 0 hours.

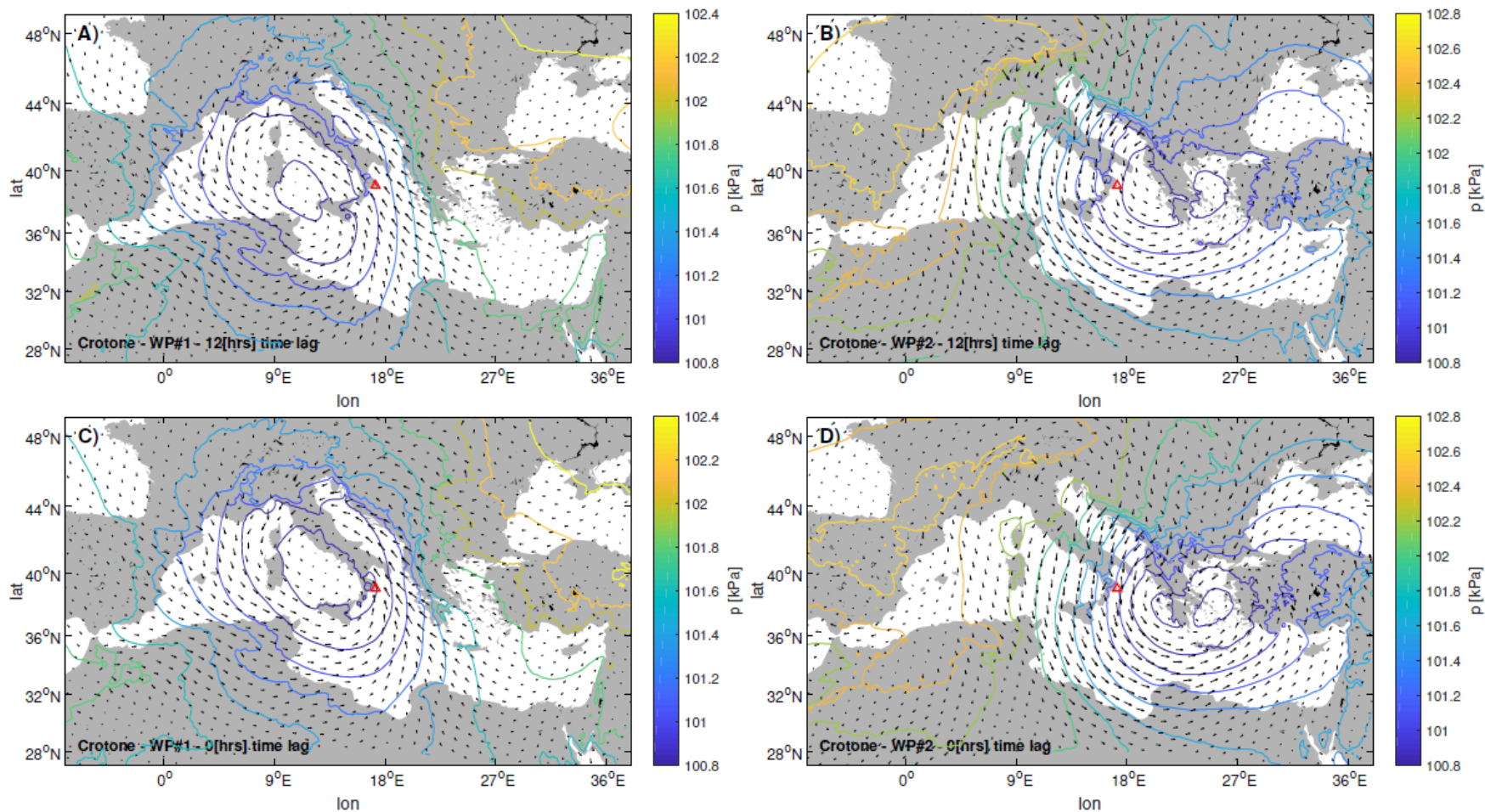


**S2.** Average MSLP for the  $H_s$  peaks in Ponza (B3). Panel A): WP#1,  $\Delta t$  equals 12 hours; panel B) WP#2,  $\Delta t$  equals 12 hours; panel C): WP#1,  $\Delta t$  equals 0 hours; panel D): WP#2,  $\Delta t$  equals 0 hours.

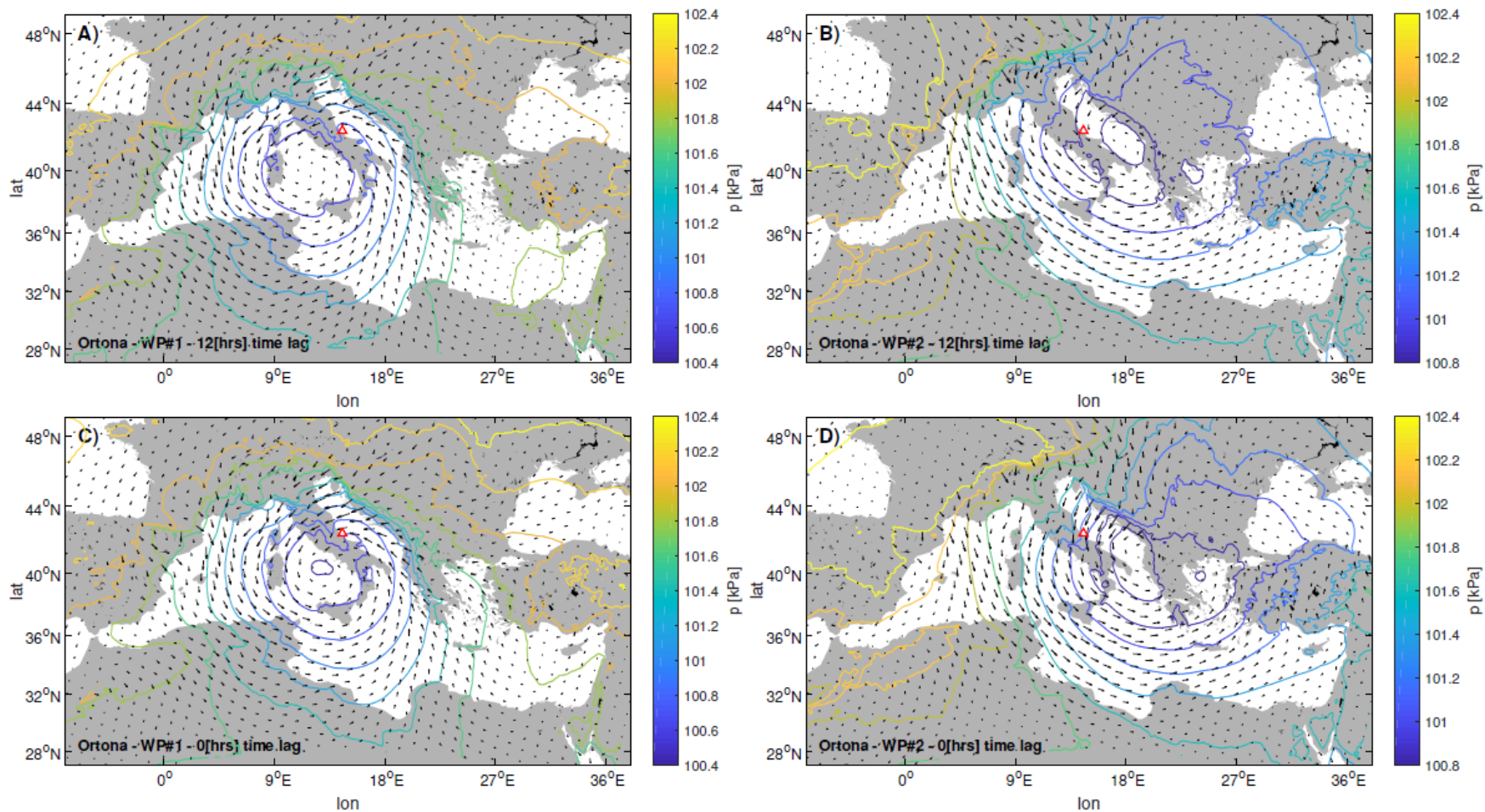


**S3.** Average MSLP for the  $H_s$  peaks in Catania (B5). Panel A): WP#1,  $\Delta t$  equals 12 hours; panel B) WP#2,  $\Delta t$  equals 12 hours; panel C): WP#1,  $\Delta t$  equals 0 hours; panel D): WP#2,  $\Delta t$  equals 0 hours.

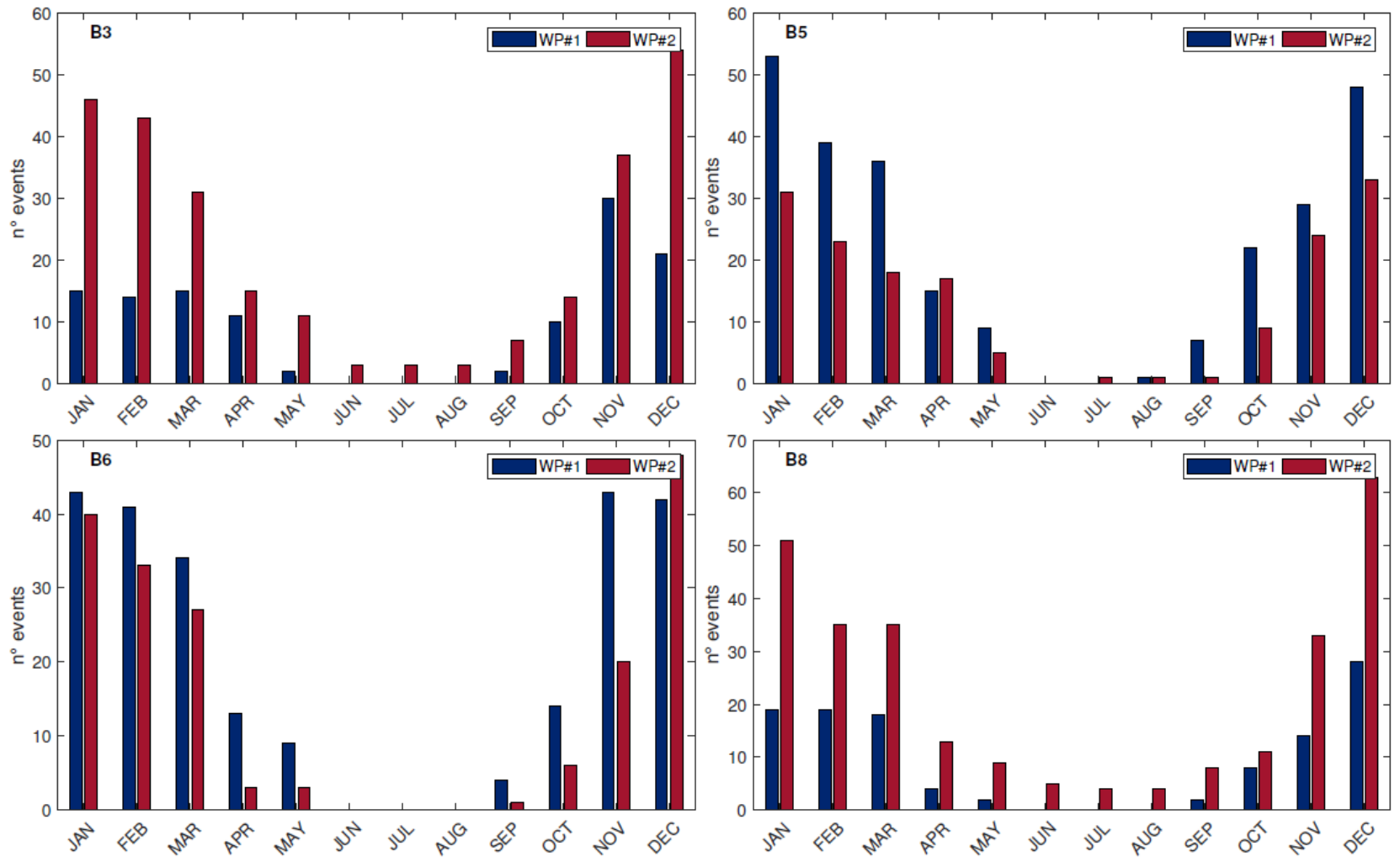




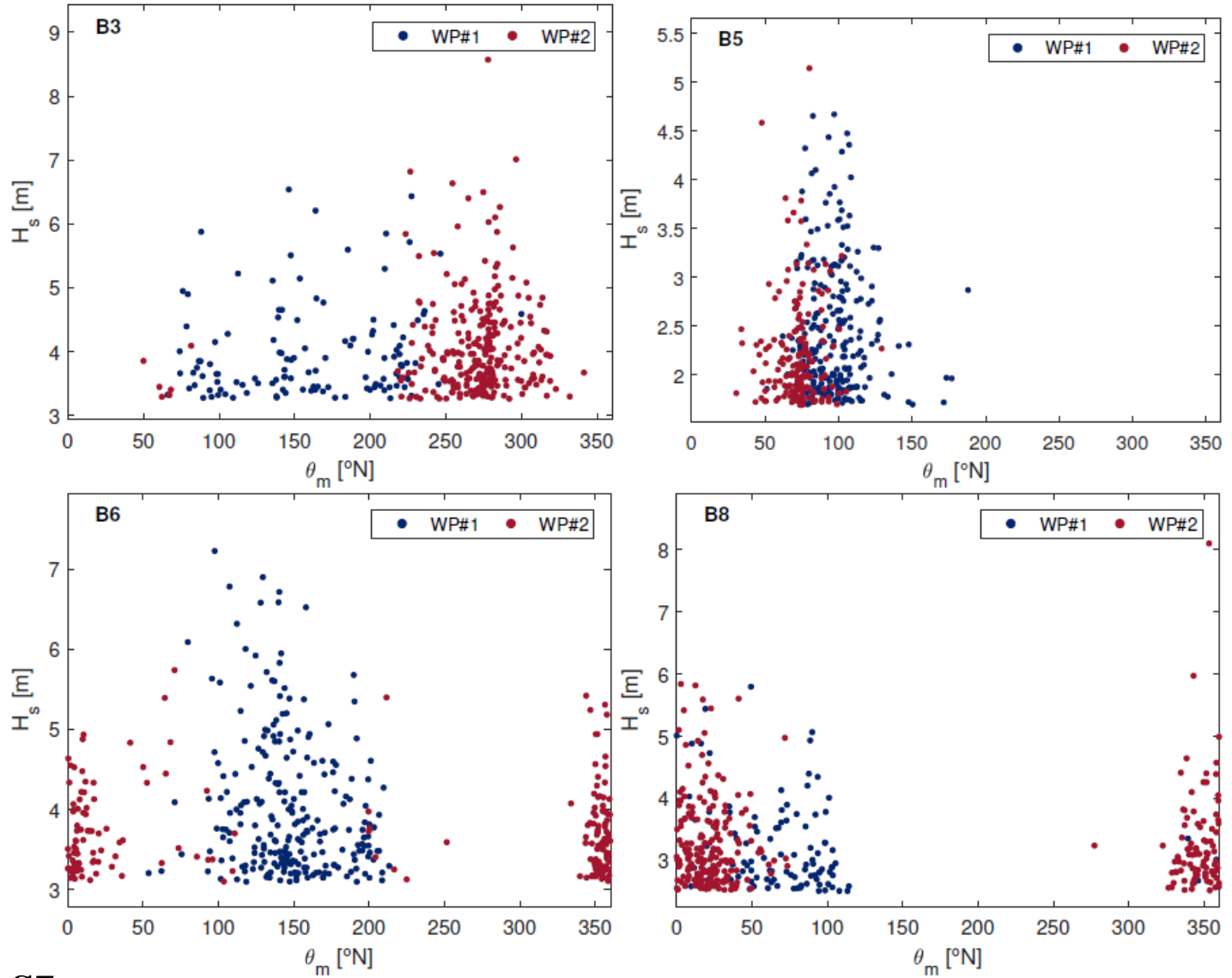
**S4.** Average MSLP for the  $H_s$  peaks in Croton (B6). Panel A): WP#1,  $\Delta t$  equals 12 hours; panel B) WP#2,  $\Delta t$  equals 12 hours; panel C): WP#1,  $\Delta t$  equals 0 hours; panel D): WP#2,  $\Delta t$  equals 0 hours.



**S5.** Average MSLP for the  $H_s$  peaks in Ortona (B8). Panel A): WP#1,  $\Delta t$  equals 12 hours; panel B) WP#2,  $\Delta t$  equals 12 hours; panel C): WP#1,  $\Delta t$  equals 0 hours; panel D): WP#2,  $\Delta t$  equals 0 hours.

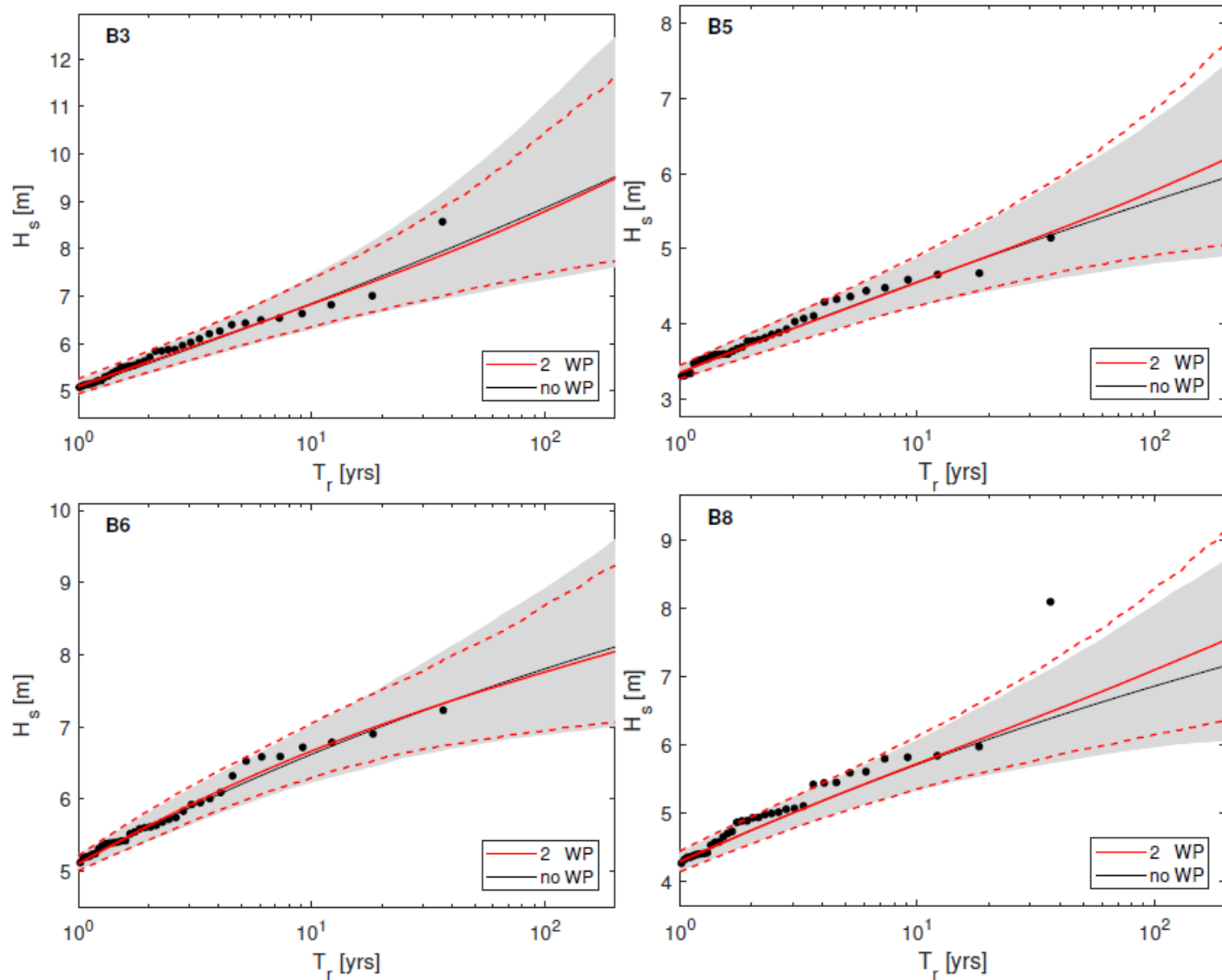


**S6.** Monthly number of events for different WP. The panels show in the upper left corner the code of the location they refer to.



**S7.** Scatter plot of  $H_s$  and  $\theta_m$  due to different WP. The panels show in the upper left corner the code of the location they refer to.





**S8.** Omni-WP extreme value distributions of  $H_s$  obtained from the whole set of peaks (black) and from combining single-WP distributions (red), along with 90% confidence intervals (grey shadow and red dashed lines, respectively). The panels show in the upper left corner the code of the location they refer to.