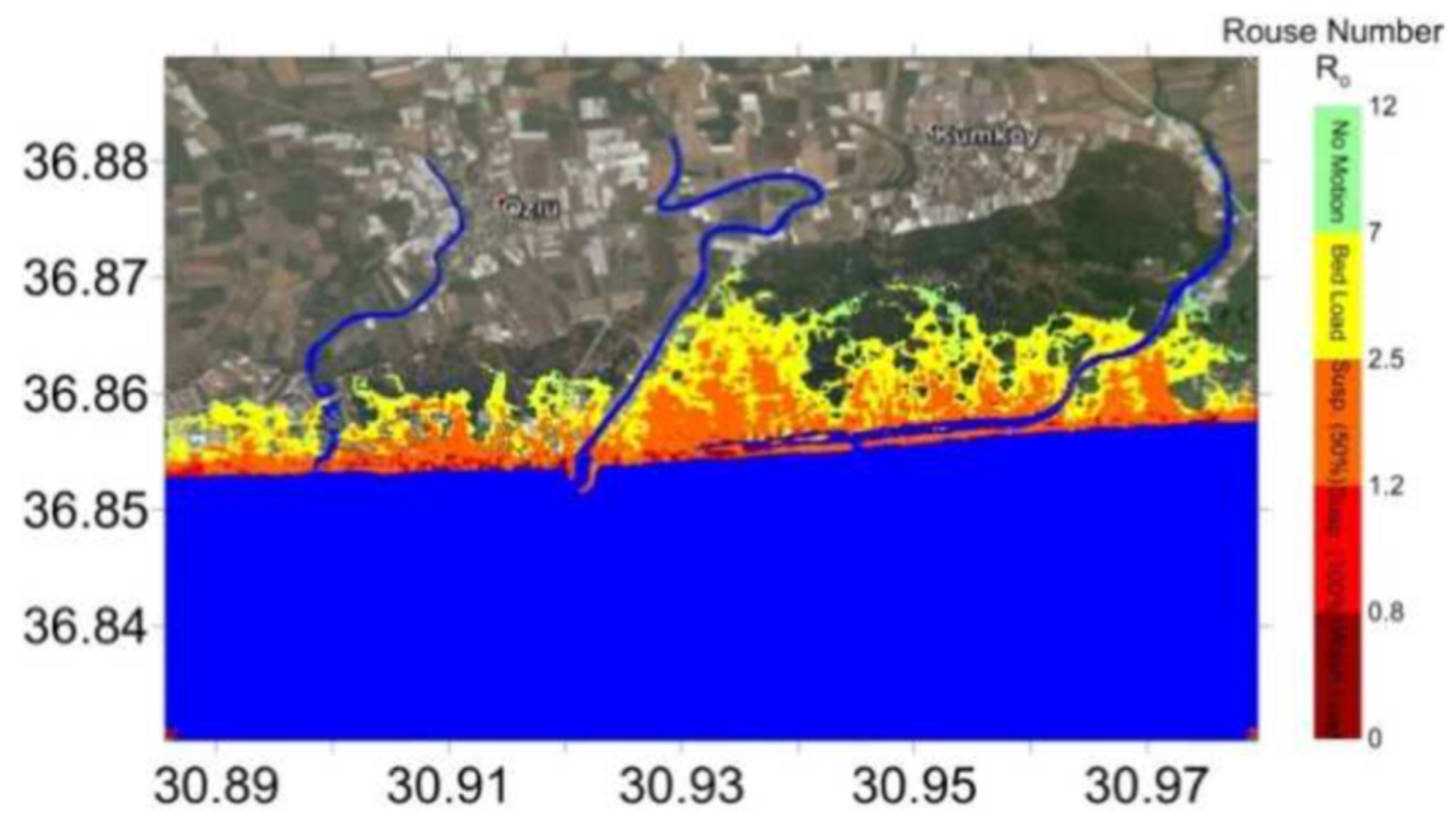
Better physics for coastal dynamics

School of Geosciences

Rouse Number

Mode of Transport	Rouse Number
Bed load	>2.5
Suspended load: 50% Suspended	>1.2, <2.5
Suspended load: 100% Suspended	>0.8, <1.2
Wash load	<0.8


Rouse Number
R_o
12
7
2.5
1.2
0.8
0
No Motion
Bed Load
Susp. (50%)
Susp. (100%)
Kumköy
Ozan
36.88
36.87
36.86
36.85
36.84
30.89
30.91
30.93
30.95
30.97

$$\mathrm{P} = \frac{w_s}{\kappa u_*}$$

where κ is the von Karman constant (0.4) and $u_\star$ is the shear velocity estimated from the wave-induced bed shear stress τ_w. Sand ripples

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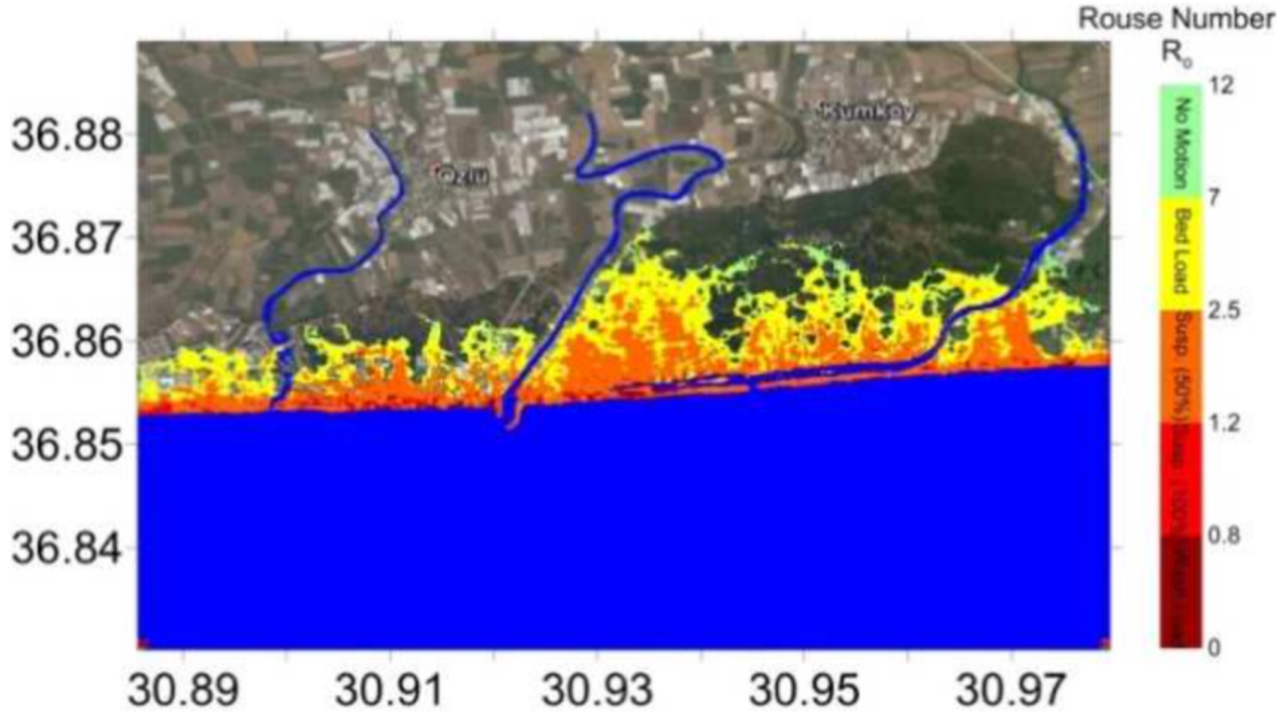

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Sediment transport