

## Calculation of Heat Budget in Chabahar and Pozm Bays

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### Abstract

Heat budget is one of the most important issues in sea and ocean researches. Heat budget in the sea involves four components: solar radiation, long wave radiation, direct heat transfer between air and water and heat transfer through evaporation. Meteorological parameters and sea surface temperature are the most effective factors on the Heat budget in sea. In this study, meteorological and sea surface temperature data were used for investigating the heat budget of Chabahar and Pozm bays that have economical impotence in southeast of Iran. Results of this study showed that the annual average of isolation, flux of net long wave radiation, latent heat flux and sensible heat flux in Pozm bay were 231.02, -62.48, -77.74, -6.62 W.m<sup>-2</sup>, respectively and in Chabahar bay were 234, -56.16, -62.43 and -4.98 W.m<sup>-2</sup>, respectively. In both bays, isolation and sensible heat flux have the highest and the lowest portion in the heat budget, respectively. Annual Average of net heat flux in Pozm and Chabahar bays were calculated +84.17 and +111.07 W.m<sup>-2</sup>, respectively. So, in this period, (84.17 and 111.07 W.m<sup>-2</sup>) energy flux flow out by exchanging water of Pozm and Chabahar bays with Gulf of Oman.

Keywords: *Isolation, Net long wave radiation, Latent heat flux, Sensible heat flux.*

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