
Archive of SID

(Email: hadi_memarian@yahoo.com)

TM

(.)

()

/ / / /

/

/

/

(.)

()

()

()

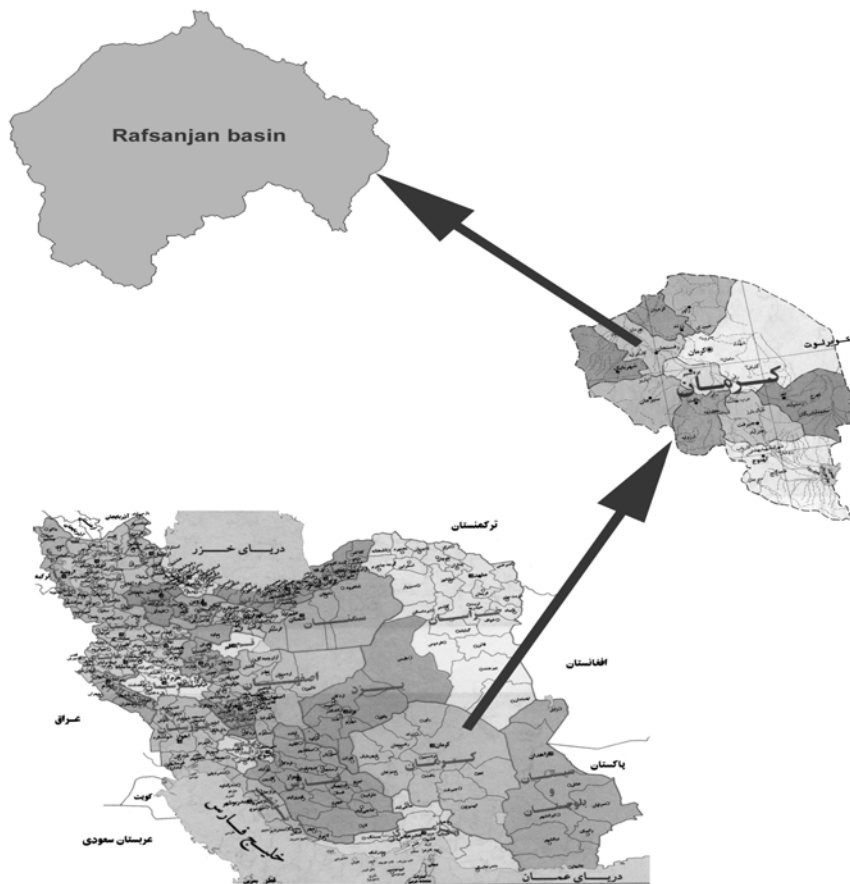
() ()

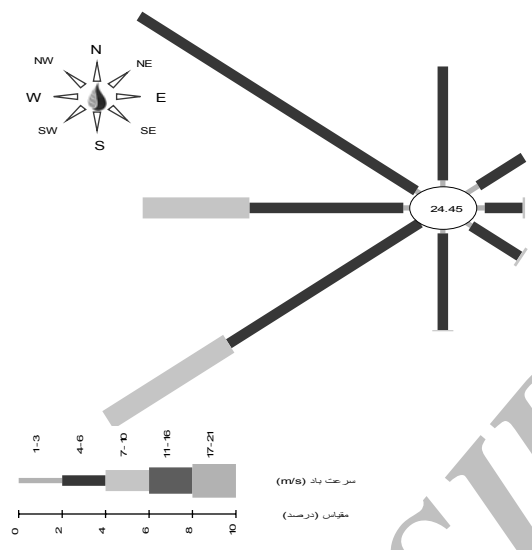
()

()

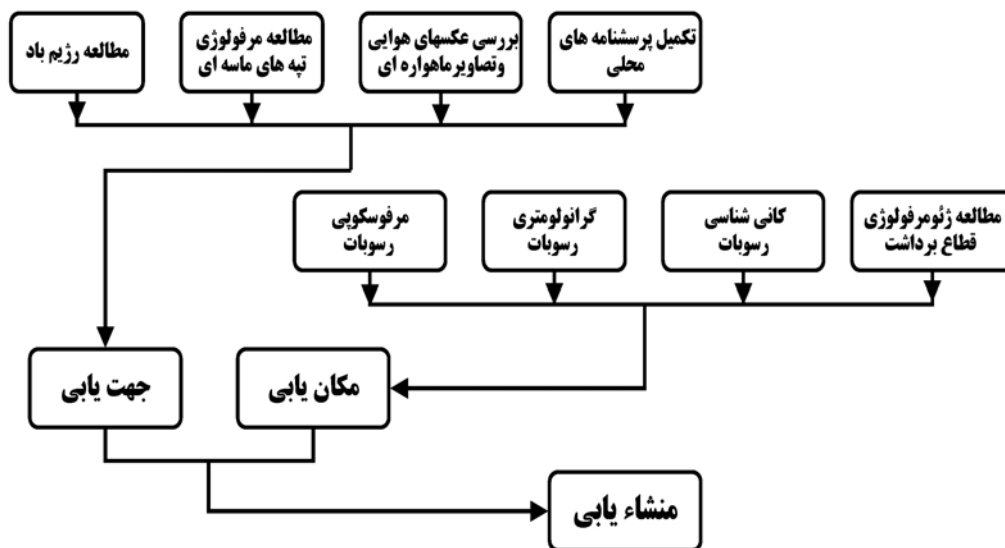
(m/s)

W	/	/	/	SW	/		
W	/	/	/	SW	/		
W	/	/	/	SW	/		
W	/	/	/	SW	/		
W	/	/	/	NW	/		
S	/	/	/	NW	/		
W	/	/	/	NW	/		
W	/	/	/	NW	/		
E	/	/	/	NW	/		
W	/	/	/	SW	/		
W	/	/	/	SW	/		
W	/	/	/	SW	/		
W	/	/	/	NW	/		





Archive of SID



ETM+

TM

()

()

ETM+

TM

ETM+

ETM+

TM

PAN

(PCA)

- Merging

-Principal Component Analysis

()

(XRD) X
()

Archive of SID

() ()

* *

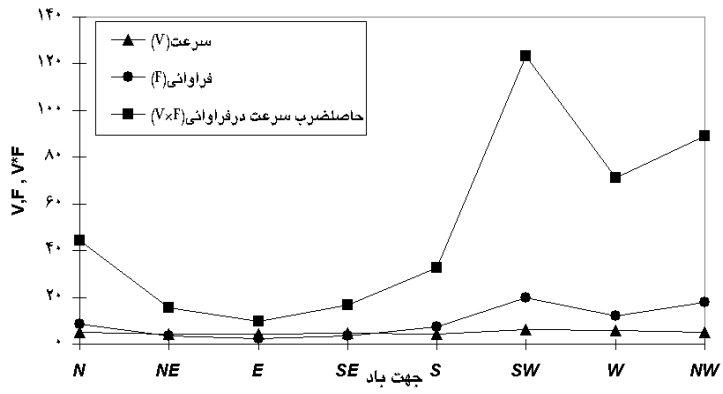
()

()

()
() ()

Archive of SID

	()			
/	/			
/	/			
/	/			()
/	/			()
/	/			()
/	/			
/	/			
/	/			



/	/	/		/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	
/	/	/	/	/	/	

(۲۱) بسترودخانه شورمرادیه، (۲۰) اراضی دشت سرپوشیده شرق رفسنجان، (۱۹) اراضی دشت سرپوشیده غرب رفسنجان، (۸) باغات پسته دشت سرپوشیده غرب رفسنجان، (۳) اراضی فرسایشی بین باغات پسته، شمال غرب رفسنجان

XRD

	>	>	>	>	>
	>	>	>	>	>

Etrhb : .

Ev . Eta PL . Mda

Eat .

-
-
-

(

:

(

(

(

(

() ()

/	/	/	/	/	/	/	/	/	()
/	/		/	/	/	/	/	/	()
/	/	/	/		/	/	/	/	()
/	/	/	/	/	/	/	/	/	
/	/	/	/	/	/	/	/	/	

Archive of SID

: () : : : :

()

(

()

(

(

(

(

(

-)

(

...

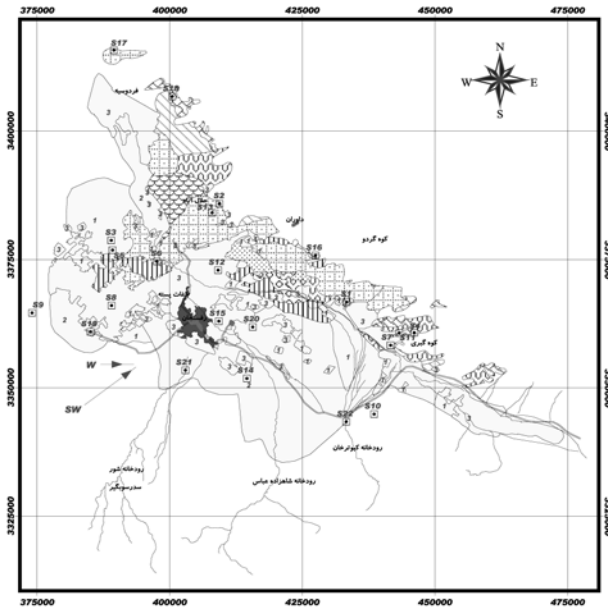
(

(

(

(

hive of SID



()

7-Patrick P.Pease.1999. Mineralogical Characterization and Transport Pathway of Dune Sand Using Landsat TM Data, Geomorphology, Elsevier.

Archive of SID

Source Studying of Eolian Sediments in Rafsanjan Region

H. Memarian Khalilabad¹

H. Ahmadi²

M. R. Ekhtesasi³

S. K. Alavipanah⁴

Abstract

Prevention of sediment movement in the taking area is a fundamental basic task. For source studying of Rafsanjan eolian sediments, step by step method (Ekhtesasi-Ahmadi *et al.*) was employed. This study is carried out in two stages: direction finding and location finding. For direction finding of taking sector, first through questionnaire Fill up informations on local winds were gathered. Then satellite images at two periods were compared through these images as well as field investigations, the erg morphological map was prepared. By studying wind regime and windrose drawing, the erosive winds were recognised. After recognition of taking sector (west and southwest sector), the location-finding phase was started. In this stage through geomorphological studying of taking sector and sampling into facies, the mineralogical and morphoscopical studies of sand dunes and taking sector sediments were done.

At last with due attention to reasonings such as: the direction of Seif and Barkhan dunes (southwest-northeast), the settlement of Zibars in the west and southwest of erg, high intensity of energy for west and southwest winds, the existence of heavy minerals as Hematite and Amphibole in sediment samples, large median of samples (240 microns), the skewness of some samples towards coarse particles as well as low roundness factor (of taking sector samples), it was found that the sources of eolian sediments are close (<20 km) and include the followings:

rangelands, abandoned farmlands and pistachio gardens on the east and southwest plains of Rafsanjan, the barelands or poorly covered grounds on the east pediments of Rafsanjan as well as beds of Shoor, Shahzadeh Abbas and Kabootarkhan rivers.

Keywords: Direction finding, Erg, Location finding, Sand dunes, Source finding, Taking sector, Wind erosion.

¹-Senior Expert, Desert Regions Management (Email: hadi_memarian@yahoo.com)

²-Professor, of Faculty, University of Tehran

³-Assistant Professor, Natural Resources Faculty & Desert studies, Yazd University

⁴-Associate Professor, Geography Faculty, University of Tehran