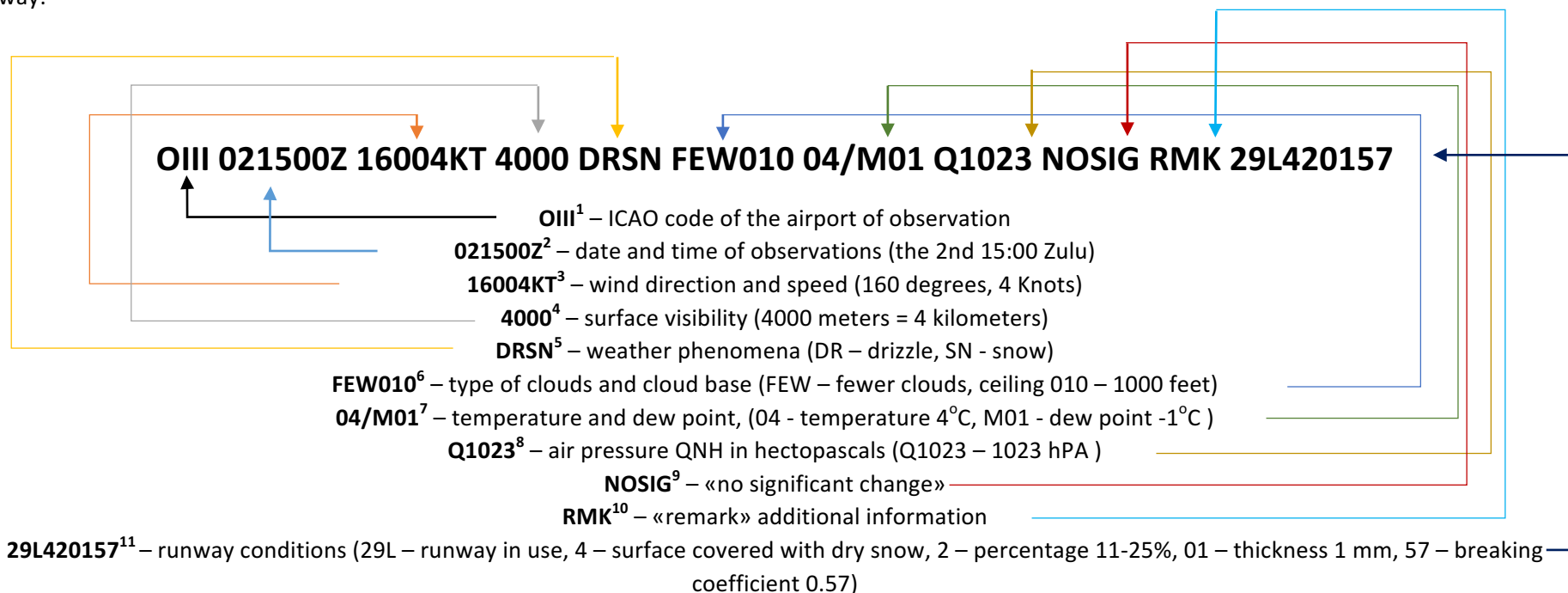


The main source of meteorological information in VATSIM is METAR code, which can be obtained through the ATIS, pilot client or on the web.

METAR is an international code that gives the current weather conditions every half an hour and consist of important weather information. It looks this way:



Here is more information about the code and what it can tell:

1. In the beginning, there is always an ICAO code of the airport, where the observations had taken place (in this case Mehrabad Airport)
2. Next goes date of current month and UTC time (for Iran, it is: in summer, local time – 4.5 hours, in winter, local time – 3.5 hours).
3. One of the crucial information is surface wind direction and wind speed. Usually wind direction rounded to tens, and when the direction of the wind changes rapidly and can't be determined, abbreviation VRB is used (i.e. **VRB04KT**), in this case as an extra information can be indicated in which wind changes its direction, this is stated through **V** sign (**VRB04KT 100V160**). The two digits after the wind direction indicates wind speed followed by measurement unit, for example **KT** – Knots (1 Knot is equal to 1.852 Km/hour). If the wind speed changes from time to time this changes filled through **G** sign that means “gusts” (**VRB04G10KT**). Sometime though the wind is calm and METAR code filled with the next information **0000KT**.
4. Vertical visibility measured in meters, **9999** – stated for visibility more than 10 kilometers.
5. Weather phenomena that can be observed divided into next categories:

CODE	DESCRIPTION	CODE	DESCRIPTION	HOW IT IS USED
Precipitations		Other phenomena		
DZ	Drizzle	TS	Thunderstorm	Used as: TSRA, TSSN, TSPE, TSGR, TSGS etc. If there is a thunder observed, but no precipitations an airfield TS stated.
RA	Rain			
SN	Snow	SH	Shower	SHRA, SHSN, SHPE, SHGR, SHGS etc. Shower rains can be also stated as VCSH.
SG	Snow grains			
PE	Ice pellets	FZ	Freezing	Used only in addition with FG, DZ and RA.
GR	Hail			
GS	Snow pellets	BL	Blowing	Used with DU, SA and SN, bring precipitations up to 2 meters above the ground. BLSN – blizzard.
Visibility deterioration				
FG	Fog	DR	Low drifting	Used with DU, SA and SN up to 2 meters above the ground.
BR	Mist			
SA	Sand	MI	Shallow	MIFG with RVR < 1000 m in the layer below 2 meters and more than 1000 meters outside the layer.
DU	Dust			
HZ	Haze	BC	Patches	Ridge fog or aerodrome is partly covered with fog, RVR < 1000 m till the altitude below 2 m above the ground.
FU	Smoke			
SQ	Squall	+ / -	Heavy / Light	Used with any weather phenomena to indicate the heavy/light state of it.
DS	Dust storm			

6. Clouds are filled by means of type and ceiling altitude. Types of clouds:

- **FEW** –fewer clouds, 1-2 octant
- **SCT** – scattered clouds, 3 – 4 octant
- **BCN** –broken clouds, 5 – 7 octant
- **OVC** –overcast clouds, 8 octant
- **SKC** – clear sky

The type is followed with 3 digits corresponding to the ceiling altitude in hundreds of feet - **FEW010** fewer clouds with the ceiling at the altitude of 1000 feet. If the cumulonimbus clouds are present, the identifier **CB** is used (i.e. **OVC050CB**).

When the sky cannot be seen through the weather phenomena vertical visibility is used and filled by symbols **VV** (i.e. **VV010** – vertical visibility is 1000 feet).

7. Temperature and dew point in degrees of Celsius, the M determine the temperature below 0 degrees.
8. Air pressure in hectopascals.
9. Expected changes of the weather can be stated in the next ways:

- **BECMG** – stable changes of the weather that might become constant.
- **TEMPO** – expected changes in the weather that will take place no more than 1 hour.
- **NOSIG** – no significant changes are expected.

10. **RMK** – extra field that may contain less relevant information.

11. Runway state **29L420157**

Runway in use

Runway deposits:	Extent of contamination:	Depth of deposit:	Friction coefficient:
0 – dry	0 – 0%	00 – below 1 mm	28 – friction coefficient 28%
1 – damp	1 – 10%	01 – 1 mm	35 – friction coefficient 35%
2 – wet	2 – 11-15%	02 – 2 mm	...
3 – rime or frost	3 – 26-50%	...	91 – braking action poor
4 – dry snow	9 – 51-100%	92 – 10 cm	92 – braking action med/poor
5 – wet snow	/ - not reported	93 – 15 cm	93 – braking action medium
6 – slush		94 – RWY is not used	94 – braking action med/good
7 – ice		99 – RWY is closed	95 – braking action good
8 – compacted snow		// - not reported	99 – figures unreliable
9 – frozen ruts or ridges			// – not reported

Additional information:

In case of visibility of more than 10 km and no clouds with ceiling below 5000 feet, no precipitations, fog etc. – instead of visibility group (4), weather phenomena (5), clouds information (6) **CAVOK** is indicated.